RAPPORT

Moifjellet og Mellomstrand vindkraftverk

OPPDRAGSGIVER

Statkraft Vind Utvikling DA

EMNE

KU - SKYGGEKAST

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Rapport

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SAMMENDRAG

På oppdrag fra Statkraft er det utført en skyggekastanalyse for Moifjellet og Mellomstrand vindkraftverk i Bjerkreim og Time kommuner, Rogaland fylke.

Analysen er gjort i henhold til NVE sin veileder nr. 2/2014 som ble utarbeidet for å vurdere skyggekast fra vindturbiner og følger kravene fastsatt i planprogrammet fra både kommunen og NVE. I tillegg er rapport fra 2022 om oppdatert kunnskapsgrunnlag om skyggekast fra vindturbiner anvendt i fastsettelse av influensområde.

Rapporten kartlegger hvor og i hvilken grad skyggekast kan oppstå fra vindkraftverkene på Moifjellet og Mellomstrand. Rapporten tar for seg to alternativer:

Alternativ 1 inkluderer både Moifjellet og Mellomstrand vindkraftverk.

Alternativ 2 omfatter kun Moifjellet vindkraftverk.

For hvert alternativ er det vurdert hvordan skyggekast påvirker nærliggende boliger, friluftsområder og andre relevante steder. Det er utarbeidet kart som viser omfanget av skyggekast i de ulike scenarioene. I tillegg er det gjort en vurdering på omfanget av sumvirkninger av skyggekast fra flere vindkraftverk på bygg som blir utsatt for skyggekast fra Moifjellet og Mellomstrand vindkraftverk.

Skyggekastanalysen for Moifjellet og Mellomstrand vindkraftverk viser at flere boliger og fritidsbygg i influensområdet vil kunne oppleve skyggekastbelastning. Beregningene viser at skyggekast kan bli en utfordring for flere mottakere, særlig i områdene nord for Moifjellet.

- **Alternativ 1** (Moifjellet og Mellomstrand) gir størst omfang av skyggekast, med 35 mottakere over NVEs anbefalte grenseverdi.
- **Alternativ 2** (kun Moifjellet) gir noe lavere belastning, men fortsatt 28 mottakere over grenseverdien.

Noen mottakere vil kunne oppleve sumvirkninger fra eksisterende vindkraftverk. Disse mottakerne er lokalisert sørøst og sørvest for Moifjellet.

Flere friluftsområder og turruter kan også bli påvirket av skyggekast fra Moifjellet og Mellomstrand vindkraftverk.

For å redusere belastningen av skyggekast på mottakerne kan det derfor være nødvendig med avbøtende tiltak. Skyggekastkalendere kan utarbeides for å vise når skyggekast er forventet å kunne inntreffe. Sammen med automatiserte lyssensorer kan turbinene stoppes dersom det både er klarvær og man ser i skyggekastkalenderen at en mottaker kan være utsatt. Dette vil minimere ulempene for naboer og andre berørte.

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INNHOLDSFORTEGNELSE

1 Bakgrunn 5
2 Skyggekast 5
2.1 Skyggekastmottakere 5
2.2 Anbefalte grenseverdier for vindturbiner 6
2.3 NVEs krav til beregningsmetodikk 6
3 Skyggekastmottakere og analyseområde 7
3.1 Definerte skyggekastmottakere 8
3.2 Skyggekastmottakere som ble utelukket 10
4 Modellering 11
4.1 Hvordan beregningene utføres 11
5 Resultater for alternativ 1: Moifjellet og Mellomstrand 12
5.1 Resultater for Moifjellet og Mellomstrand vindkraftverk 12
5.1.1 Kart – Verst tenkelig scenario 12
5.1.2 Individuelle mottakere – Verst tenkelig scenario 13
5.1.3 Kart – Realistisk scenario 17
5.1.4 Individuelle mottakere – Realistisk scenario 18
5.2 Resultater for Moifjellet og Mellomstrand vindkraftverk med sumvirkninger fra nærliggende vindkraftverk 21
5.2.1 Kart – Verst tenkelig scenario 21
5.2.2 Individuelle mottakere – Verst tenkelig scenario 22
5.2.3 Kart – Realistisk scenario 23
5.2.4 Individuelle mottakere – Realistisk scenario 24
6 Reslultater for alternativ 2: Moifjellet 27
6.1 Resultater for Moifjellet vindkraftverk 27
6.1.1 Kart – Verst tenkelig scenario 27
6.1.2 Individuelle mottakere – Verst tenkelig scenario 27
6.1.3 Kart – Realistisk scenario 31
6.1.4 Individuelle mottakere – Realistisk scenario 32
6.2 Resultater for sumvirkninger fra nærliggende vindkraftverk 35
6.2.1 Kart – Verst tenkelig scenario 35
6.2.2 Individuelle mottakere – Verst tenkelig scenario 36
6.2.3 Kart – Realistisk scenario 37
6.2.4 Individuelle mottakere – Realistisk scenario 38
7 Sammenligning av alternativene 40
8 Avbøtende tiltak 41
9 Påvirkning på bebyggelse og friluftsliv 42
10 Konklusjon 43
11 Vedlegg 44
12 Referanser 45

1 Bakgrunn

I forbindelse med konsekvensutredningen for Moifjellet og Mellomstrand vindkraftverk i Bjerkreim og Time kommuner, Rogaland fylke, er det utført en skyggekastanalyse.

Rapporten tar for seg to alternativer:

Alternativ 1 inkluderer både Moifjellet og Mellomstrand vindkraftverk.

Alternativ 2 omfatter kun Moifjellet vindkraftverk.

For begge alternativene er det analysert hvor skyggekast kan oppstå, samt omfanget av dette på nærliggende boliger, friluftsområder og andre berørte arealer. Det er også gjort vurderinger av sumvirkninger, der bygg påvirkes av skyggekast fra flere vindkraftverk.

I området rundt Moifjellet og Mellomstrand finnes det seks eksisterende vindkraftverk. Ved vurdering av sumvirkninger er det kun de tre nærmeste – Bjerkreim, Stigafjellet og Måkaknuten – som er inkludert. De tre øvrige vindkraftverkene ligger for langt unna til å være aktuelle og er derfor ikke tatt med i analysen. Det er gjennomført egne simuleringer for å sikre at disse tre vindkraftverkene alene ikke bidrar til skyggekastbelastning over gjeldende grenseverdier innenfor influensområdet til Moifjellet og Mellomstrand vindkraftverk.

Analysen er utført i henhold til NVE sin veileder nr. 2/2014 for vurdering av skyggekast fra vindturbiner og følger kravene fastsatt i planprogrammet fra både kommunen og NVE. Utredningen er basert på et eksempelutlegg med 38 turbiner for Moifjellet og 4 turbiner for Mellomstrand. Turbinene har en totalhøyde på 200 meter til vingetipp, en rotordiameter på litt over 160 meter og en kapasitet på rundt 7 MW. Figur 3.1 viser det analyserte turbinutlegget.

2 Skyggekast

Et punkt er skyggelagt dersom det står et legeme mellom punktet og solskiven langs strålen fra solskiven mot punktet. Dersom det skyggende legemet beveger seg vil også den resulterende skyggen bevege seg, og dette vil kunne oppleves som sjenerende.

En vindturbin skiller seg ut fra andre høye byggverk og installasjoner med sine roterende blader. Normalt vil man bare observere den direkte bevegelsen når man ser rett på turbinene. Men under spesielle omstendigheter vil turbinen stå i en posisjon mellom solen og betraktningsstedet. Da vil rotorbladene sveipe foran solskiven og kaste en bevegelig skygge som vil projiseres mot betraktningsstedet i et repeterende mønster. Dels vil man oppleve dette som en sveipende skygge over en flate, dels vil man merke en hurtig veksling mellom direkte lys og korte «glimt» med skygge. Dette kan være sjenerende mens fenomenet pågår. Et slikt betraktningssted, som mottar skyggekast, kalles for en skyggekastmottaker. En skyggekastmottaker er altså eksponert for en roterende skygge i løpet av mer eller mindre avgrensende tidsrom ettersom solen beveger seg gjennom året.

Fordi skyggen kastes lengst når solbanen er lav, er det typisk om morgen og kveld skyggekast inntreffer, og oftere i vintermånedene enn om sommeren. Imidlertid er det nødvendig med eksakte beregninger for å få en klar forståelse av skyggekastutfordringen.

For skyggekast fra vindturbiner er det etablert solide metoder og grenseverdier (Norges vassdrags- og energidirektorat, 2022b) og NVE har publisert en veileder til gjennomføring av slike beregninger (Norges vassdrags- og energidirektorat, 2014).

2.1 Skyggekastmottakere

Flere typer mottakere defineres som følsomme for skyggekastmottak. Det er i stor grad snakk om bygg der mennesker oppholder seg over tid, og i noen grad uteareal med spesielle bruksmønster. NVE definerer følgende typer mottakere som sensitive for skyggekast fra vindturbiner:

- Helårsboliger, samt fritidsboliger i aktiv bruk
- Skoler og barnehager
- Sykehus, samt alders- og sykehjem
- Hoteller og andre overnattingsbygg, kafeer, restauranter og veikroer
- Kontor- og næringslokaler med regelmessige dagaktiviteter som samtidig har eksponerte vindusflater

I tillegg til dette kan NVE trekke inn følgende kategorier som sensitive, etter skjønn:

- Veldefinerte kulturminner/kulturmiljøer med stor opplevelsesverdi/pedagogisk verdi
- Kirker, kirkegårder, parker, idrettsanlegg og lekeplasser
- Definerte turmål, utsiktspunkter og lignende
- Havneanlegg, marinaer

2.2 Anbefalte grenseverdier for vindturbiner

Grenseverdiene NVE oppgir referer til antallet timer i året en skyggekastsensitiv mottaker kan utsettes for skyggekast fra en vindturbin før omfanget av belastningen vil regnes som sjenerende. Verdiene gis for to forskjellige scenarioer: verst tenkelig grad av skyggekast, og realistisk grad av skyggekast. Verdiene er anbefalinger, og grenseverdiene kan fravikes i unntakstilfeller.

Verst tenkelig scenario

En skyggekastmottaker, som f.eks. en helårsbolig, regnes som et slags drivhus, med vinduer i alle retninger, slik at all skygge som faller på boligen også legges til total belastningsgrad. I tillegg regner man at solen alltid skinner i alle timer med dagslys, at turbinen alltid står vinkelrett på mottakerpunktet, og man tar ikke høyde for driftsstans på anlegg (for vindturbiner er det snakk om vedlikehold og dårlige vindforhold, altså at det forutsettes at turbinene er i drift hele året (8760 timer)).

NVEs anbefalinger er at skyggekastmottakere ikke utsettes for mer enn 30 timer verst-tenkelig skyggekast per år, eller mer enn 30 minutter per dag

Realistisk scenario

Samme som for verst tenkelig scenario regnes en skyggekastmottaker som et slags drivhus, med vinduer i alle retninger, slik at all skygge som faller på boligen også legges til total belastningsgrad. Videre vil det realistiske scenarioet utføre beregninger med en viss sannsynlighet for solskinn i løpet av timene med dagslys, som altså reduserer total belastning siden under overskyet vær er lyset fra solskiven altfor diffust til at en skygge regnes som sjenerende. I tillegg tar man hensyn til realistisk driftstid for anlegget, basert på vindrosen for området. Ved å bruke vindrosen blir turbinene orientert slik at de vender mot vindretningen, og de er ikke standard fordelt. En viktig effekt av dette er at når vinden dreier turbinene kan det oppstå perioder der skyggen slutter å flakke over mottakeren og dermed reduseres skyggekastbelastningen til null i en slik periode. Dette skyldes at dersom turbinen roterer i et plan (tilnærmet) parallelt med linjen mellom en mottaker og solskiven, så vil skyggen fra bladene være fast, ikke «blinkende».

For realistisk skyggekastmottak anbefaler NVE at en mottaker ikke utsettes for mer enn 8 timer per år. NVE trekker også inn at i en situasjon der vest tenkelig skyggekast overskrider grenseverdien kan man fravike denne dersom realistisk skyggekast kan reduseres til under 8 timer per år ved avbøtende tiltak.

2.3 NVEs krav til beregningsmetodikk

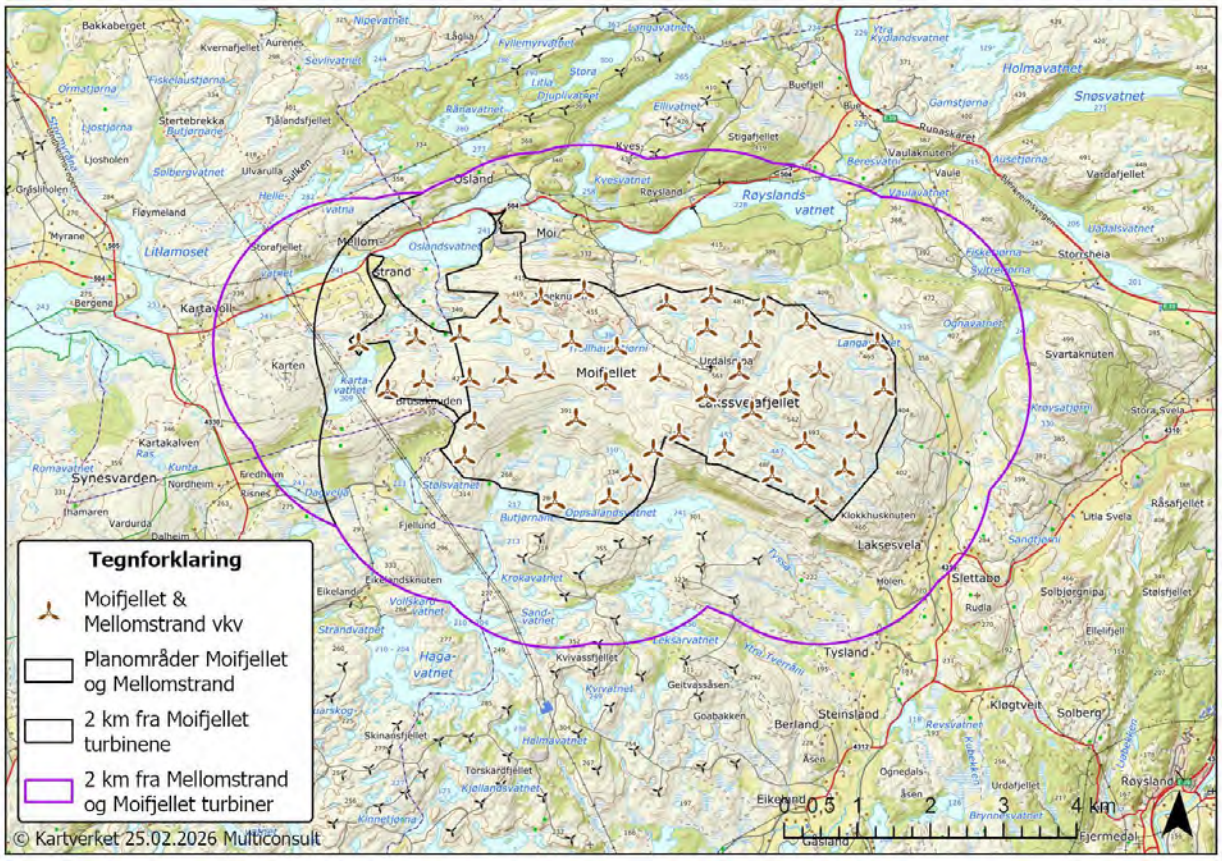
NVEs veileder beskriver noen detaljer rundt fremgangsmåten for skyggekastberegninger.

- Beregningene skal ta hensyn til terrengets høydeprofil i området som vurderes, og dette inkluderer skjermingseffekter av terreng som ligger mellom en mottaker og en kilde til skygge.

- Beregningene av teoretisk skyggekast skal baseres på drivhustilstand, det vil si at bygningene ikke har én bestemt retning mot vindturbinene og at mottakeren har vinduer i alle retninger. Mottakeren skal være en standard vertikal flate på 2 x 2 meter hevet 2 meter over bakken med mindre spesielle forhold tilsier noe annet.
- I det realistiske scenarioet skal en solskinnssannsynlighet på 50% benyttes. Dette er stort sett en overvurdering for de fleste steder i Norge, som forsikrer at man holder seg til et konservativt estimat for skyggekastbelastning. Det skal benyttes en retningsfordeling på vind fordelt på minst 8 sektorer og en årlig driftstid på 7000 timer.
- For beregningene regnes skyggekast fra en kilde som er mer enn 1500[1] m fra en mottaker som så svakt at det ikke bidrar til total belastning.

3 Skyggekastmottakere og analyseområde

NVEs krav til beregningsmetodikk innebærer at ingen områder som er lenger enn 1500 meter fra vindkraftverket er relevante for skyggekastanalysen. Det er planlagt å bruke mer moderne og større turbiner som vil ha bredere blader enn det som ble lagt til grunn for NVEs krav fra 2014. Det vil derfor bli anvendt en radius på 2000 meter etter anbefalinger i rapport utarbeidet av Norconsult på oppdrag fra NVE (Norges vassdrags- og energidirektorat [NVE], 2022). Figur 3-1 viser området som er relevant for skyggekastanalysen, der det er lagt til grunn an avstand på 2000 meter fra turbinene.



Figur 3-1: Området som er relevant for skyggekastanalysen (lilla strek for alternativ 1 og svart strek for alternativ 2), med en avstand på 2000 meter fra turbinene.

[1] Som omtalt i avsnitt 3 vil analysen ta utgangspunkt i et strengere avstandskrav enn det NVE legger opp til, det vil bli benyttet 2000 meter.

På grunn av flere vindkraftverk i området, kan noen mottakere oppleve skyggekast fra ulike vindkraftverk på forskjellige tider av dagen eller året. Selv om hvert enkelt vindkraftverk ikke nødvendigvis overskrider de anbefalte grenseverdiene for skyggekast, kan sumvirkningene føre til at den totale mengden skyggekast i løpet av et år overstiger disse grenseverdiene. Det er derfor gjort simuleringer i to omganger for hvert alternativ. Første omgang tar bare hensyn til vindturbinene i Moifjellet og Mellomstrand vindkraftverk eller Moifjellet vindkraftverk, mens andre omgang inkluderer nærliggende vindkraftverk for å vurdere sumvirkninger av skyggekast.

Det er forventet at utbyggingen vil føre til mest skyggekast oppe på Moifjellet og Lakssvelafjellet, og i grensene mellom Moifjellet vindkraftverk og de allerede etablerte vindkraftverkene nord og sør for Moifjellet vindkraftverk. Det er forventet at boliger nord for vindkraftverket vil kunne oppleve mye skyggekast. Spesielt boligene rundt Røyslandsvatnet og Oslandsvatnet forventes å bli berørt av utbygging av Moifjellet og Mellomstrand vindkraftverk. Disse boligene vil ha de eksisterende vindkraftverkene, Stigafjellet og Måkaknuten nord for seg og få Moifjellet vindkraftverk sør for seg.

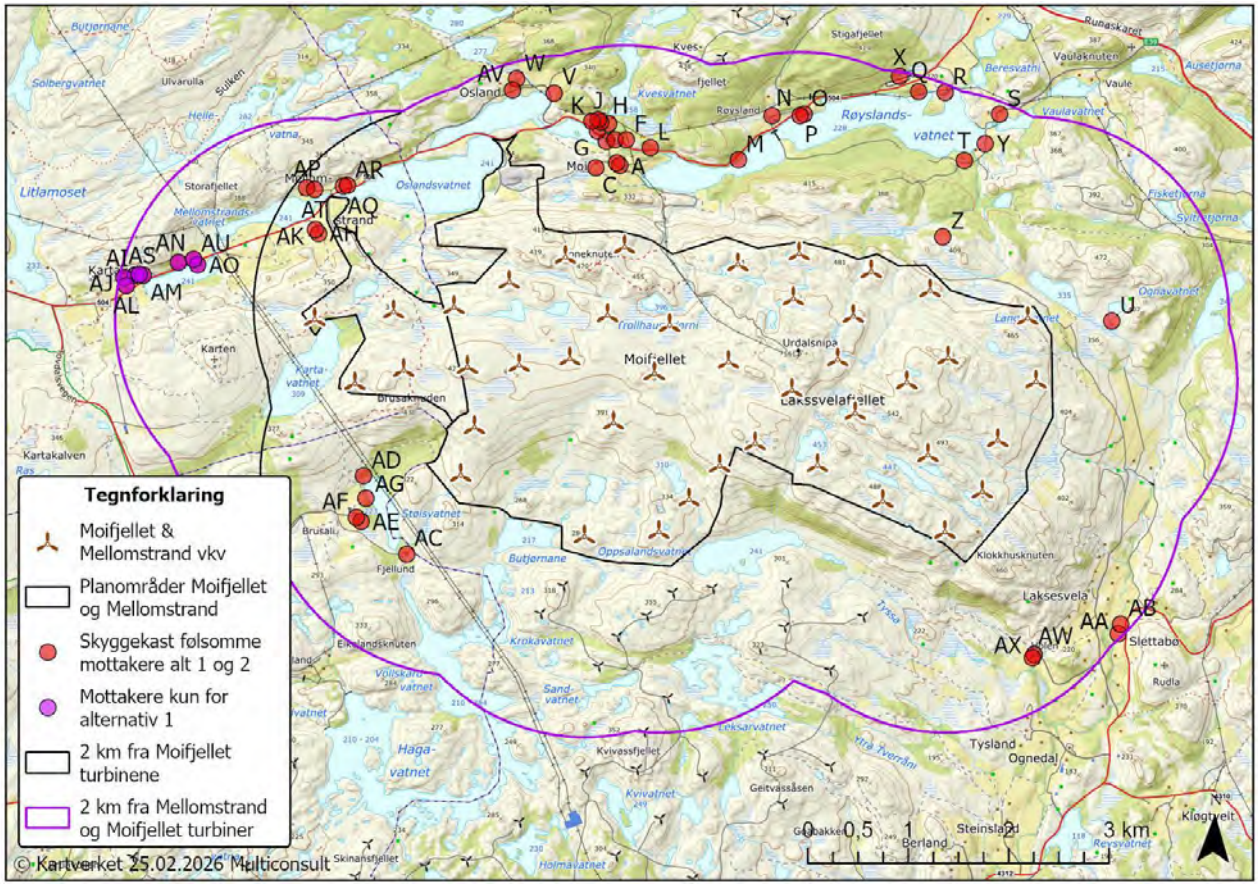
3.1 Definerte skyggekastmottakere

Figur 3-2 viser de identifiserte skyggekastmottakerne som røde og lilla sirkler i området rundt Moifjellet og Mellomstrand. Tabell 3-1 gir en oversikt over boligene, inkludert deres geografiske posisjon og avstand til nærmeste vindturbin. Mottakerne er hovedsakelig spredt i området nord for Moifjellet og Mellomstrand, men enkelte mottakere er også lokalisert på både øst- og vestsiden av planområdet.

Totalt er det identifisert 50 mottakere som er følsomme for skyggekast ved Moifjellet og Mellomstrand vindkraftverk. Av disse er 8 mottakere kun relevante i alternativ 1, ettersom de ligger mer enn 2 km fra nærmeste turbin i alternativ 2. For alternativ 2 er det derfor reelt sett 42 mottakere, men for å sammenligne er alle mottakerne inkludert i samtlige tabeller. Alle mottakerne er illustrert i Figur 3-2. De røde sirklene viser de definerte mottakerne for alternativ 1 og 2, mens de lilla sirklene viser mottakere som bare gjelder for alternativ 1.

Utvalget av mottakere er i praksis gjort ved en iterativ prosess der flere simuleringer er kjørt etter hverandre for å bestemme hvilke mottakere som skal undersøkes i detalj og hvilke mottakere som ikke undersøkes videre. Simuleringene viste at ikke alle boligene innenfor en radius på 2 km blir utsatt for skyggekast. Det kan være på grunn av beliggenhet i forhold til solen og vindkraftverket eller skjerming i terrenget. De mottakerne som ikke undersøkes videre er beskrevet i avsnitt 3.2.

For de skyggekastfølsomme mottakerne som tas med i konsekvensutredningen beregnes skyggekastbelastningen for hver individuell mottaker. NVEs veileder åpner for at analysen kan gruppere lignede mottakere sammen, men dette kan redusere nøyaktigheten, så vi velger å se på hver mottaker individuelt.



Figur 3-2: Definerte skyggekastmottakere.

I tråd med NVE sine krav for beregningsmetodikk (avsnitt 2.3) for verst tenkelig scenario utføres beregningene med skyggekastmottakerne vist i Figur 3-2 definert som «drivhus», hvor hver mottaker er et vindu på 2x2 meter, som alltid peker rett mot skyggekilden. For det realistiske scenarioet, der solskinnsannsynligheten er 50% og driftstiden satt til 7000 timer, brukes samme størrelse og mål på mottakerne som for verst tenkelig scenario.

Tabell 3-1: Oversikt over skyggekastmottakere, deres lokasjon og avstand til nærmeste vindturbin. Koordinatsystemet er EU89, UTM 32. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Plassering		Avstand til nærmeste turbin (m)
		Østlig	Nordlig	
A	Moi 32 – Våningshus	321 454	6 505 063	808
B	Moi 26 – Enebolig	321 420	6 505 084	841
C	Moi 21 – Våningshus	321 215	6 505 041	840
D	Buevegen 1805 – Fritidsbygning	321 315	6 505 303	1 067
E	Buevegen 1816 – Fritidsbygning	321 403	6 505 321	1 076
F	Buevegen 1818 – Fritidsbygning	321 520	6 505 315	1 060
G	Buevegen 1786 – Fritidsbygning	321 226	6 505 404	1 183
H	Buevegen 1784 – Fritidsbygning	321 338	6 505 475	1 230
I	Buevegen 1782 – Fritidsbygning	321 263	6 505 492	1 260
J	Buevegen 1780 – Fritidsbygning	321 239	6 505 515	1 287
K	Buevegen 1778 – Fritidsbygning	321 178	6 505 500	1 289
L	Buevegen 1850 – Fritidsbygning	321 753	6 505 237	1 015

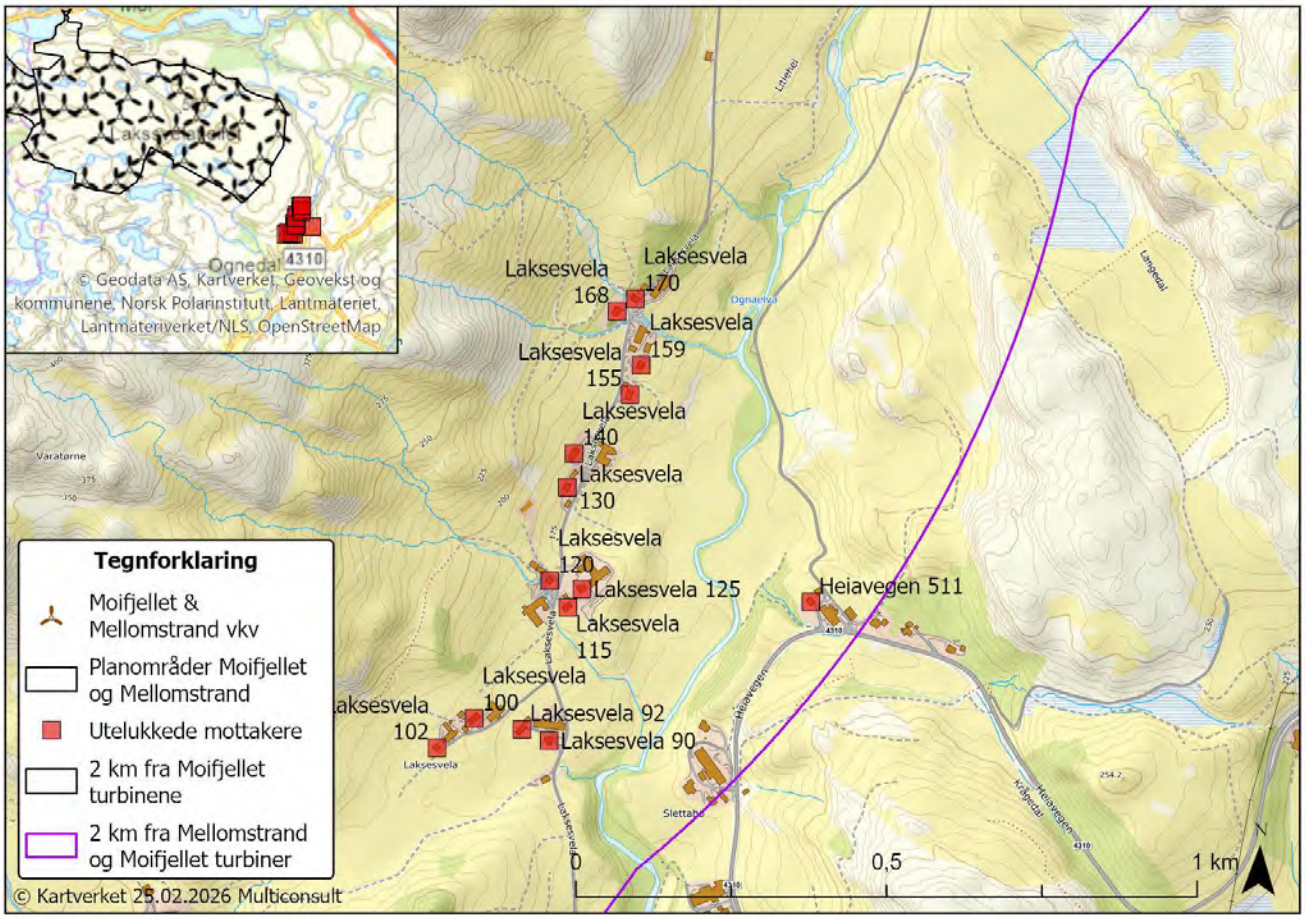
M	Buevegen 1941 – Fritidsbygning	322 631	6 505 117	1 034
N	Buevegen 1988 – Bygning for overnatting	322 968	6 505 553	1 392
O	Buevegen 2023 – Fritidsbygning	323 284	6 505 569	1 383
P	Buevegen 2021 – Fritidsbygning	323 246	6 505 557	1 371
Q	Buevegen 2141 – Fritidsbygning	324 426	6 505 794	1 844
R	Buevegen 2165 – Fritidsbygning	324 693	6 505 786	1 922
S	Vaule 176 – Enebolig	325 238	6 505 571	1 883
T	Vaule 247 – Fritidsbygning	324 881	6 505 111	1 334
U	Store Svela, eiendom 60/5, Bjerkreim kommune – Fritidsbygning	326 356	6 503 511	835
V	Osland 45 – Våningshus	320 801	6 505 783	1 636
W	Osland 65 – Våningshus	320 423	6 505 925	1 837
X	Buevegen 2100 – Gatekjøkken, kioskbygning	324 241	6 505 947	1 956
Y	Vaule 218 – Fritidsbygning	325 098	6 505 291	1 560
Z	Eiendom 57/3, Bjerkreim kommune – Fritidsbygning (ikke ferdig bygd)	324 676	6 504 359	553
AA	Heiavegen 543 – Enebolig	326 420	6 500 403	1 959
AB	Heiavegen 541 – Våningshus	326 443	6 500 501	1 905
AC	Brusalivegen 201 – Våningshus	319 326	6 501 193	961
AD	Eiendom121/8, Hå kommune – Fritidsbygning	318 902	6 501 969	931
AE	Brusalivegen 217 – Enebolig	318 880	6 501 518	1 096
AF	Brusalivegen 215 – Enebolig	318 829	6 501 559	1 129
AG	Brusalivegen 219 – Fritidsbygning	318 928	6 501 743	974
AH	Buevegen 1463 – Våningshus	318 453	6 504 383	849
AI	Buevegen 1288 – Enebolig	316 626	6 503 970	1 844
AJ	Buevegen 1272 - Enebolig	316 516	6 503 946	1 945
AK	Buevegen 1461 – Enebolig	318 418	6 504 425	890
AL	Buevegen 1270 - Våningshus	316 535	6 503 867	1 912
AM	Buevegen 1290 – Enebolig	316 702	6 503 968	1 770
AN	Buevegen 1292 – Våningshus	317 053	6 504 099	1 477
AO	Buevegen 1343 – Fritidsbygning	317 250	6 504 070	1 351
AP	Buevegen 1496 – Våningshus	318 337	6 504 834	1 302
AQ	Buevegen 1500 – Våningshus	318 697	6 504 851	1 341
AR	Buevegen 1502 – Enebolig	318 747	6 504 864	1 336
AS	Buevegen 1286 – Enebolig	316 662	6 503 974	1 810
AT	Buevegen 1498 – Våningshus	318 415	6 594 822	1 286
AU	Buevegen 1340 – Enebolig	317 204	6 504 129	1 285
AV	Osland 85 – Våningshus	320 384	6 505 811	1 740
AW	Laksesvela 60 - Enebolig	325 581	6 500 197	1 507
AX	Laksesvela 58 - Enebolig	325 558	6 500 163	1 522

3.2 Skyggekastmottakere som ble utelukket

Etter flere simuleringer, under både verst tenkelige og realistiske forutsetninger, ble flere boliger ekskludert fra vurderingene til tross for at de ligger innenfor en radius på 2 km fra turbinene. Alle simuleringene viste at disse

boligene ikke ville oppleve belastning fra skyggekast, og de ble derfor utelatt fra resultatene for å forenkle fremstillingen og utregningene.

Bygningene som ble utelukket fra vurderingen ligger sørøst for planområdet ved Laksesvela. De innledende simuleringene indikerte at disse boligene sannsynligvis ikke vil bli påvirket av skyggekast fra vindkraftverkene. Dette skyldes flere faktorer, inkludert bygningenes plassering i forhold til turbinene og solens bane. I tillegg spiller topografien en viktig rolle, da boligene ligger relativt tett oppunder østsida av dalen, som betyr at dersom skyggekast skulle nådd disse mottakerne, så måtte solen ha stått høyt i nordvest. Selv ikke midt på sommeren kommer solen i en slik posisjon, og dermed treffes ikke disse ekskluderte mottakerne av skyggekast. Figur 3-3 viser de utelukkede mottakerne.



Figur 3-3: Utelukkede mottakere.

4 Modellering

Modellen tar inn de planlagte turbinplasseringene, høyde på turbinene, rotordiameter og terrenget i området.

4.1 Hvordan beregningene utføres

Beregningen av skyggekast i programvaren skjer ved en kombinasjon av:

- Kjent geografisk posisjon, for å finne solbanen gjennom året.
- Definert terreng, så man kan bestemme når solens bane er under horisonten sett fra ethvert relevant punkt i simuleringen.
- Turbinenes posisjon og størrelse.

For å sikre en grundig analyse av området rundt Moifjellet, er det lagt til grunn et influensområde som dekker en avstand på omtrent 10 x 10 km. Dette gir tilstrekkelig rom for å inkludere de omkringliggende omgivelsene som

kan ha innvirkning på resultatene. Influensområdet deles inn i et rutenett med 30 x 30 meter oppløsning. Dette rutenettet utgjør en stor samling individuelle punkt (altså små «lapper» á 30 x 30 m), og modellen stiller seg i hvert slikt punkt, og ser mot solen. Dersom en av turbinene står mellom observasjonspunktet og solskiven uten at det er skyggende terreng i veien, tikkes det opp en teller som holder styr på hvor mange minutter skyggekast dette ene punktet mottar per år. Solbanen representeres ved at man hopper tre dager av gangen (dette håndterer årstider), og vurderer hvert døgn oppstykket i 2-minuttersbolker[2]. Etter at alle punkt i rutenettet har gått gjennom en slik solbaneberegning blir det satt sammen kart som beskriver forskjellige karakteristikker ved skyggekastbelastningen.

I tillegg til kartene brukes de spesifikke skyggekastmottakerne, omtalt i avsnitt 3.1, for mer avanserte beregninger.

5 Resultater for alternativ 1: Moifjellet og Mellomstrand

5.1 Resultater for Moifjellet og Mellomstrand vindkraftverk

I dette kapittelet presenteres skyggekastberegningene for Moifjellet og Mellomstrand vindkraftverk. Det er ikke tatt hensyn til sumvirkninger i dette kapittelet, de vises i kapittel 5.2. Resultatene, og diskusjonen rundt disse, som presenteres i dette kapitlet starter med kart over maksimal teoretisk skyggekastbelastning på en flate 1.5 meter over bakkenivå. Dette vil representere den typen skyggekast en person ute på en plen vil kunne motta. Deretter vises skyggekastmottak for mottakerne definert i avsnitt 3.1.

Etter dette presenteres et kart der sannsynligheten for solskinn er satt til 50% og driftstiden til turbinen satt til 7000 timer i tråd med NVEs retningslinjer for beregninger av vindturbiner. For å oppnå en mer realistisk orientering av turbinene, er vindrosen for Mellomstrand (hentet fra Moifjellet) benyttet i fordelingen av driftstid per sektor/vindretning. Vindrosen for Moifjellet er benyttet siden Mellomstrand ligger såpass nært Moifjellet. Det vurderes at vindforholdene er tilnærmet like, og det anses derfor uproblematisk å bruke samme vindrose for begge områdene. Deretter presenteres beregnet realistisk skyggekast for de definerte mottakerne.

Noter at sammenligningen av kartene med de individuelt definerte mottakerne ikke er rett frem; geometrien for modellen er annerledes. Kartene viser skyggekast ned på en tenkt horisontal flate, hvor oppgitt belastning er et gjennomsnitt for en rute på 10 x 10 meter, mens de individuelle beregningene ser på et vertikalt 2 x 2 meter vindu med senter 2 meter over bakken. Kartene vil gi en kvalitativ indikasjon på hvilke deler av et område som er tungt belastet, men ikke nødvendigvis et nøyaktig tall på hvor mange timer skyggekast et kjøkkenvindu utsettes for per år. Generelt viser kartene et lavere antall timer med skyggekastbelastning enn det man finner ved den detaljerte beregningen for mottakere representert med vinduer. Kartene brukes altså for å få en oversikt over belastningen over større areal, mens det er tabeller over individuelle mottakeres skyggekastbelastning som måles opp mot NVEs retningslinjer for maksimal tillatt skyggekastbelastning.

5.1.1 Kart – Verst tenkelig scenario

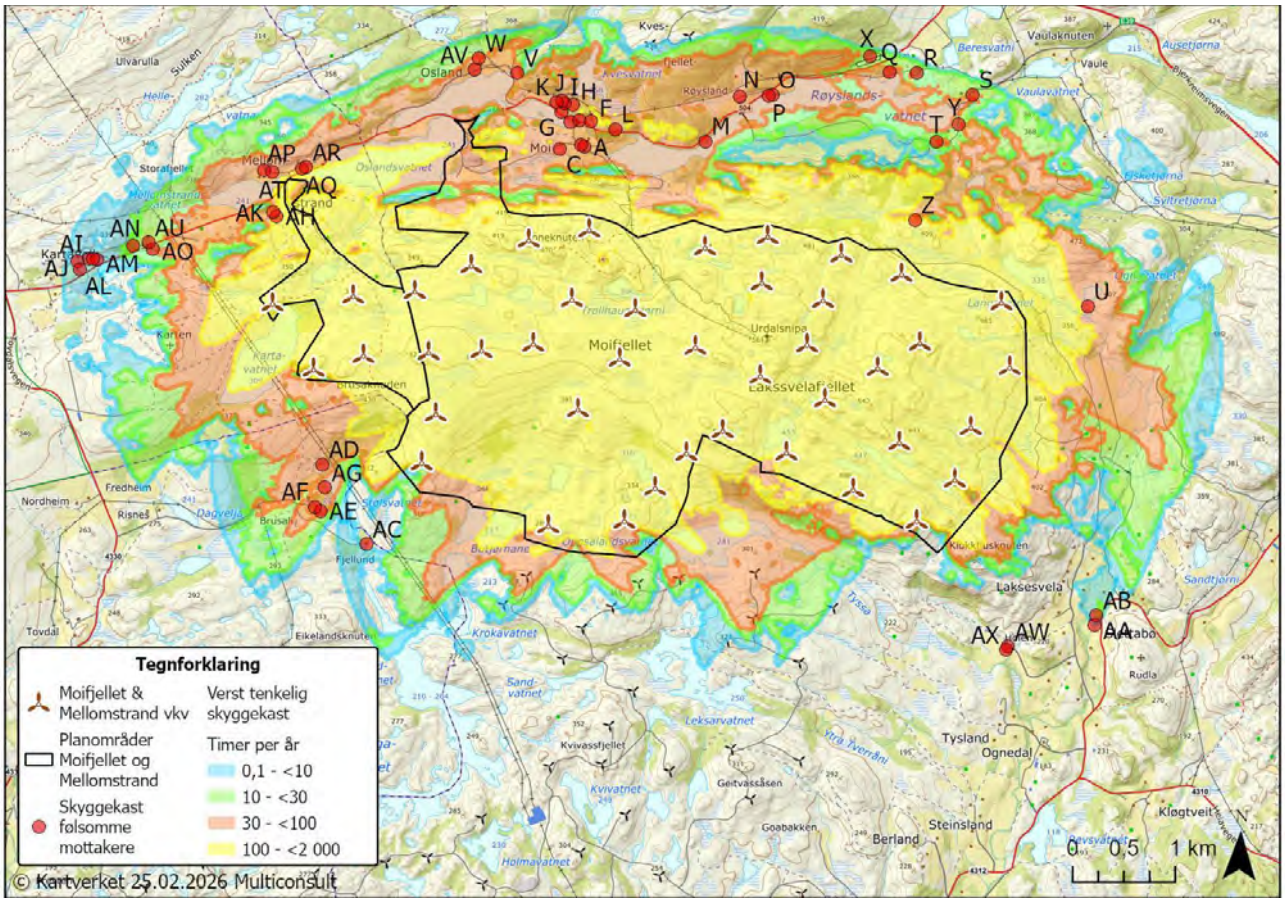
Figur 5-1 viser kartet over teoretisk verst tenkelig skyggekast, målt i antall timer per år. For denne beregningen antas at solen skinner alle timer i løpet av en dag og at turbinen alltid står vinkelrett på mottakerpunktet, og man ender da opp med en beskrivelse av den maksimale skyggekastbelastningen man forventer fra vindkraftverket.

De tykke linjene i kartet representerer koter eller konturlinjer, tilsvarende de som brukes på et terrengkart, men i denne sammenhengen viser de mengden skyggekast i løpet av et år. Innenfor hver konturlinje er skyggekastvarigheten høyere enn verdien angitt i tegnforklaringen. Dette betyr at områdene som befinner seg innenfor en bestemt kontur vil oppleve lengre perioder med skyggekast sammenlignet med områdene utenfor.

[2] Selv om beregningen forenkles ved å hoppe tre dager av gangen og beregnes med 2-minutters oppløsning innenfor hver tredje dag, blir det totale resultatet justert for dette. Analysen antar at dersom det inntreffer 2 minutter skyggekast den ene dagen, så antas det at de to andre dagene, som ikke sjekkes eksplisitt, har samme belastning.

Fargene grønn og blå indikerer akseptable nivåer av skyggekast, som ligger under de anbefalte grenseverdiene for maksimalt teoretisk skyggekast. Fargene rød og gul indikerer områder som er over akseptable nivåer for skyggekast, der gul er områder som er mest utsatt. Kartet gir en klar visualisering av hvor man kan forvente mest skyggekast fra vindkraftverket; som forventet er størst skyggekastbelastning innenfor vindkraftverkets planområde.

Figuren gir en god indikasjon på hvilke områder og mottakere som vil bli meget utsatt for skyggekast. Nord til nordvest for vindkraftverket er det en konsentrasjon av røde områder, med noen gule flekker, som indikerer høy skyggekastpåvirkning. Boliger i disse områdene kan derfor bli betydelig utsatt for skyggekast.



Figur 5-1: Teoretisk verst tenkelig scenario, målt i antall timer per år.

5.1.2 Individuelle mottakere – Verst tenkelig scenario

Tabell 5-1 viser resultatet av beregningene av maksimalt teoretisk skyggekast for alle de definerte mottakerne i avsnitt 3.1. Det kommer tre delresultater fra beregningen. Det første er vist i kolonnen «Timer/år». Dette er antall timer med skyggekast på mottakeren (på format *timer:minutter*). Det andre delresultatet, vist i kolonnen «Dager/år», gir hvor mange dager i løpet av året det inntreffer skyggekast på mottakeren. Det sier ikke i seg selv noe om intensiteten per dag. Demonstrert med for eksempel, Moi 32 (mottaker A), der det kommer omtrent 91 timer skyggekast fordelt over 112 dager. Dette betyr i snitt, ca. 49 minutter skyggekast per dag med skyggekast. Men, som man ser i kolonnen «Timer/dag (verste dag)» (på format *timer:minutter*), som gir belastningen på den verste dagen, ser vi at maksimalt mottak på én dag er 1 time og 42 minutter. Altså er det mange dager med kortere skyggekastmottak enn 49 minutter, og andre dager med mottak opp mot maksimal teoretisk verdi.

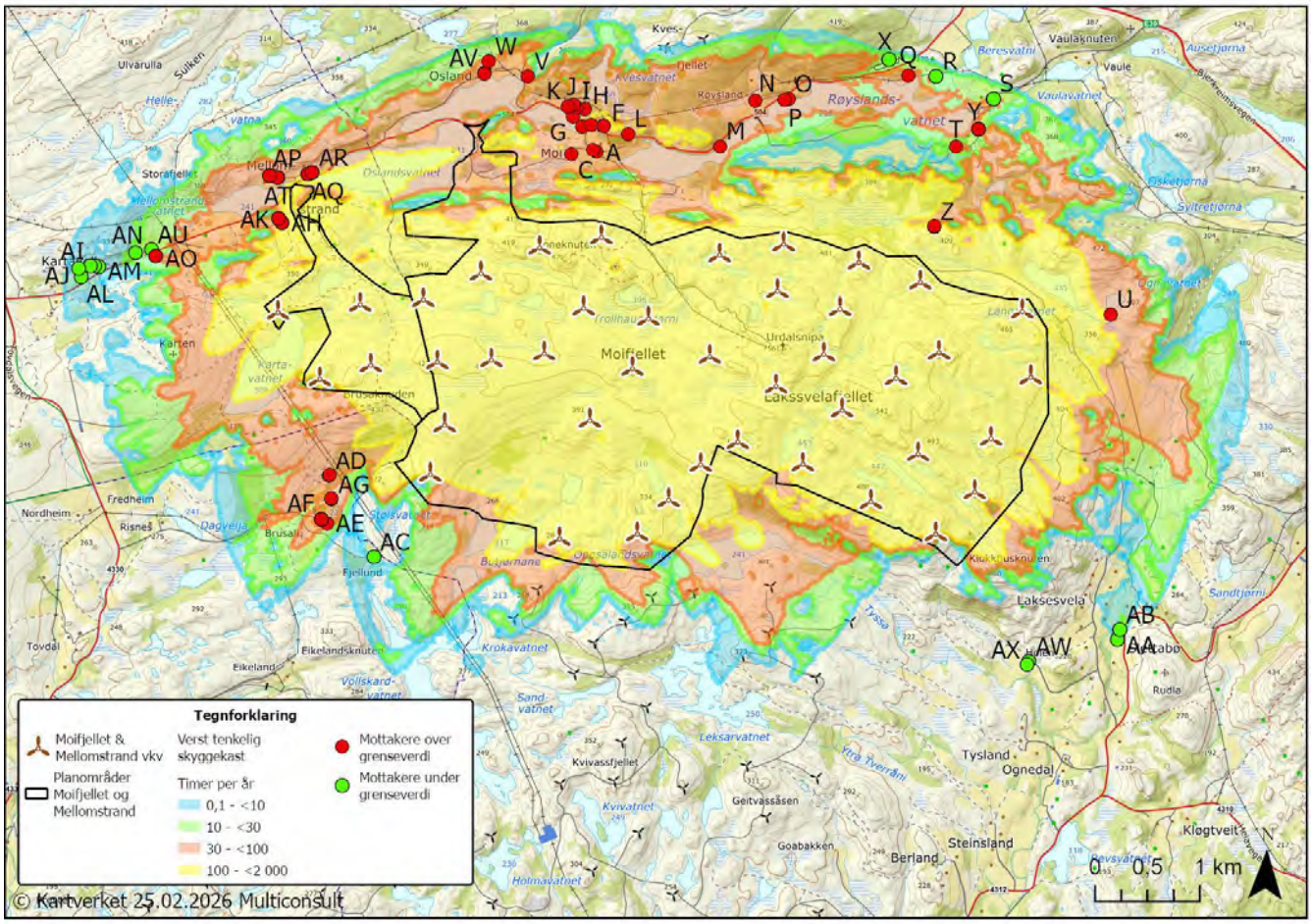
Tabell 5-1: Maksimalt teoretisk skyggekast for skyggekastmottakerne for Moifjellet og Mellomstrand vindkraftverk. Kolonnen «Timer/år» gir totalt antall timer skyggekast på mottakeren per år. Kolonnen «Dager/år» gir antallet dager per år det inntreffer skyggekast i det hele tatt. Kolonnen «Timer/dag (verste dag)» gir antallet

timer skyggekast på den dagen med aller størst belastning. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Timer/år	Dager/år	Timer/dag (verste dag)
A	Moi 32	91:38	112	01:42
B	Moi 26	89:39	100	01:41
C	Moi 21	86:06	91	01:50
D	Buevegen 1805	86:46	113	01:28
E	Buevegen 1816	88:55	117	01:28
F	Buevegen 1818	93:48	136	01:27
G	Buevegen 1786	74:46	111	01:30
H	Buevegen 1784	84:32	122	01:27
I	Buevegen 1782	83:59	124	01:28
J	Buevegen 1780	84:10	121	01:29
K	Buevegen 1778	70:27	91	01:27
L	Buevegen 1850	93:42	157	01:31
M	Buevegen 1941	59:05	78	01:35
N	Buevegen 1988	52:08	72	01:06
O	Buevegen 2023	44:00	60	01:14
P	Buevegen 2021	41:34	54	01:14
Q	Buevegen 2141	38:26	104	00:35
R	Buevegen 2165	27:56	84	00:27
S	Vaule 176	22:57	89	00:22
T	Vaule 247	33:51	96	00:42
U	Store Svela, eiendom 60/5 - Bjerkreim kommune	88:23	178	01:03
V	Osland 45	40:04	74	00:43
W	Osland 65	38:02	93	00:32
X	Buevegen 2100	18:09	68	00:20
Y	Vaule 218	26:05	77	00:41
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 – Bjerkreim kommune	275:29	207	02:12
AA	Heiavegen 543	00:55	23	00:04
AB	Heiavegen 541	08:56	44	00:16
AC	Brusalivegen 201	00:00	0	00:00
AD	Eiendom 1121/8, Hå kommune	51:19	110	00:39
AE	Brusalivegen 217	38:11	72	00:37
AF	Brusalivegen 215	28:44	73	00:33
AG	Brusalivegen 219	48:21	103	00:40
AH	Buevegen 1463	141:02	185	01:16
AI	Buevegen 1288	06:49	26	00:21
AJ	Buevegen 1272	06:04	24	00:20
AK	Buevegen 1461	130:01	182	01:14

AL	Buevegen 1270	05:09	22	00:20
AM	Buevegen 1290	07:22	26	00:22
AN	Buevegen 1292	10:45	32	00:26
AO	Buevegen 1343	26:21	76	00:36
AP	Buevegen 1496	70:50	130	00:51
AQ	Buevegen 1500	100:51	144	01:18
AR	Buevegen 1502	100:26	142	01:18
AS	Buevegen 1286	07:05	26	00:21
AT	Buevegen 1498	85:06	130	01:04
AU	Buevegen 1340	12:49	36	00:28
AV	Osland 85	38:33	102	00:32
AW	Laksesvela 60	00:00	0	00:00
AX	Laksesvela 58	00:00	0	00:00

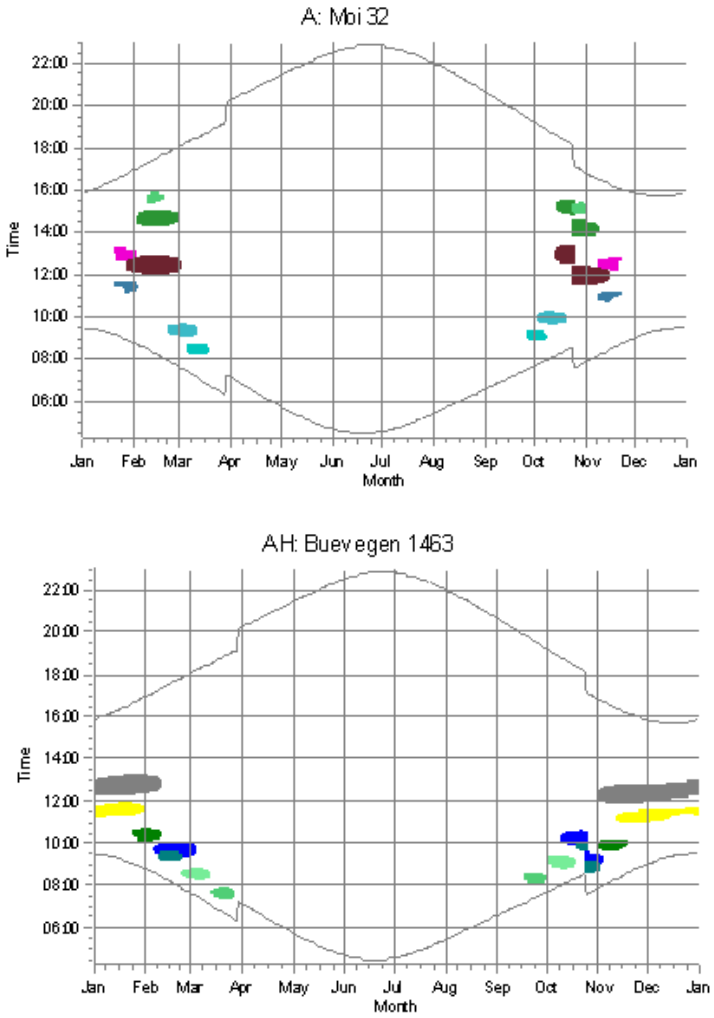
Det er anslått at 15 av 50 mottakere ligger under NVEs anbefalte grenseverdi for teoretisk maksimalt skyggekast, se Figur 5-2 der disse 15 mottakerne er vist med grønne prikker. Tre av disse mottakerne er lokalisert nordøst for planområdet nært Røyslandsvatnet (mottakere R, S og X i tabell), syv mottakere er lokalisert nordvest for planområdet ved Kartavoll (mottakere AI, AJ, AL-AN, AS og AU i tabell), en er lokalisert sørvest for planområdet ved Fjellund (mottaker AC i tabell) og fire er lokalisert sørøst for planområdet ved Slettabø og Holen (mottakere AA, AB, AW og AX i tabell). Den mottakeren som blir mest utsatt for skyggekast er den som ligger nært en turbin, mottakeren er lokalisert nord for planområdet, det er en hytte som er under bygging og er omtrent 553 meter unna en turbin (mottaker Z i tabell).



Figur 5-2: Verst tenkelig skyggekast med mottakere. Mottakere vist i grønt ligger under anbefalt grenseverdi mens mottakere vist i rødt ligger over anbefalt grenseverdi.

Mange av de mest utsatte boligene og fritidsbygningene er lokalisert rett nord for vindkraftverket, noe som gjør det sannsynlig at de vil oppleve skyggekast på samme tid i løpet av dagen. Grunnet boligenes posisjon i forhold til vindkraftverket og solens bane vil de fleste av mottakerne mest sannsynlig oppleve mest skyggekast på dagtid, mellom 9 - 16. Mottakernes lokalisering kombinert med solens bevegelsesmønster gjør at belastningen av skyggekast på mottakerne er høyest rundt midt på dagen når solen står høyest på himmelen i løpet av vinterhalvåret. Da strekker skyggen fra vindturbinene seg lenger og mottakerne i nord opplever skyggekast. De fleste av mottakerne vil kun oppleve skyggekast om vinteren, mens noen få vil kunne merke det også i sen høst og tidlig vår. Seks av mottakerne kan imidlertid oppleve skyggekast om sommeren, men da enten tidlig om morgenen eller sent på kvelden.

Figur 5-3 illustrerer når to mottakere forventes å oppleve skyggekast gjennom året (x-aksen), samt på hvilke tidspunkter av døgnet dette skjer (y-aksen). De ulike fargene representerer de ulike vindturbinene som vil bidra til skyggekast (se vedlagt rapport for info om hvilken turbin som svarer til hvilken farge i figuren). Tynn grå linje representerer solbanen og viser når det er teoretisk mulig å oppleve skyggekast. Mottakerne A og AH er valgt for å illustrere den forventede skyggekastbelastningen for de områdene som ligger nord og nordvest for planområdet, og som trolig vil oppleve ulik belastning fra de to alternativene. En fullstendig oversikt over når hver mottaker kan forvente skyggekast for alle fire scenarioene legges ved rapporten som vedlegg.

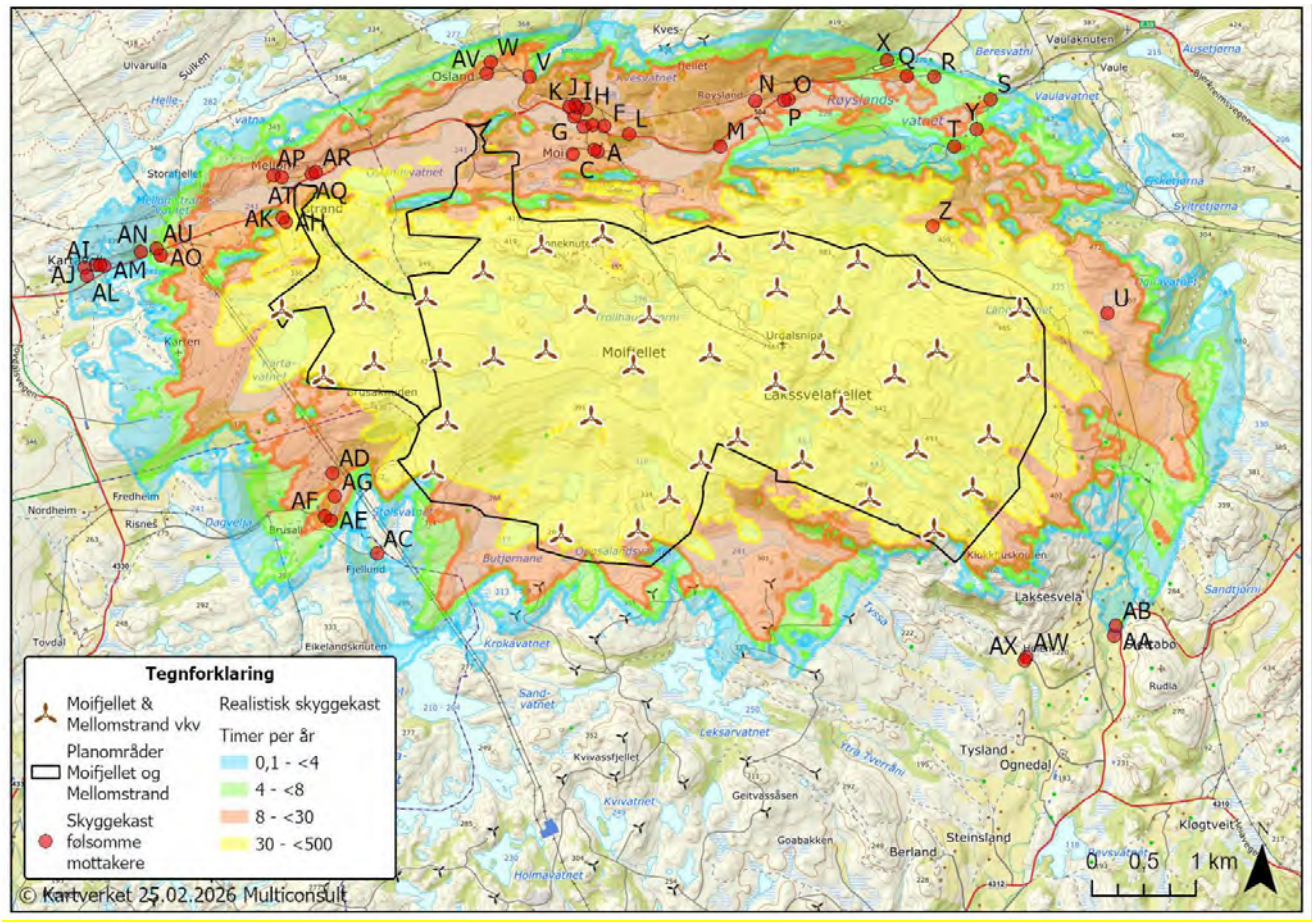


Figur 5-3: Forventet tidspunkt for skyggekast for mottaker A og AH. De ulike fargene representerer de ulike vindturbinene som vil bidra til skyggekast. Tynn grå linje representerer solbanen og viser når det er teoretisk mulig å oppleve skyggekast. Mottaker A er lokalisert nord for planområdet, mens mottaker AH ligger nordvest for planområdet.

5.1.3 Kart – Realistisk scenario

Figur 5-4 viser et tilsvarende kart som Figur 5-1, men nå er en solskinnssannsynlighet på 50% og driftstid basert på vindrosen tatt med. Forskjellen i resultatet er at simuleringen først beregner teoretisk maksimum som om sola skinner hele tiden (nøyaktig på samme vis som vist i Figur 5-1), og deretter reduseres denne teoretiske maksimumsbelastningen med 50%, basert på antakelsen om at faktisk solskinn bare inntreffer halvparten av tiden. I tillegg justeres belastningen med en driftstid på totalt 7000 timer, basert på vindrosen og driftstid per sektor/vindretning.

Sammenlignet med maksimalt teoretisk skyggekast reduseres utstrekningen av skyggekast noe, og områdene som viser verdier over anbefalt nivå krymper. Denne reduksjonen er imidlertid ikke betydelig nok til å være visuelt fremtredende. Kartet indikerer at arealene med høy belastning forblir omfattende, noe som indikerer at de fleste mottakerne fremdeles vil bli eksponert for skyggekast i mengder som overskrider anbefalte verdier.



Figur 5-4: Realistisk scenario med antall timer per år.

5.1.4 Individuelle mottakere – Realistisk scenario

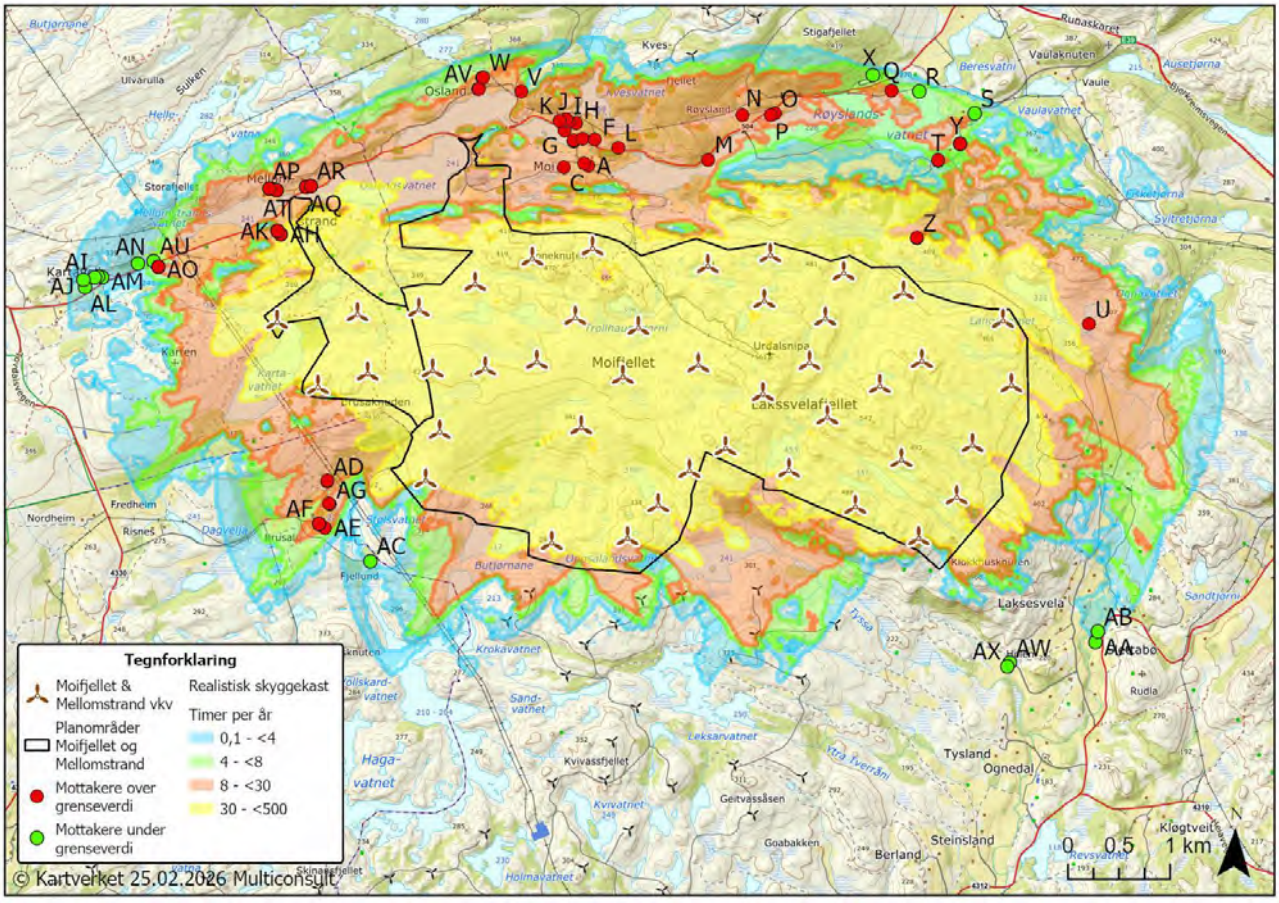
Tabell 5-2 oppsummerer resultatet av denne beregningen. Sammenlignet med tallene for teoretisk maksimum (se *Tabell 5-1*) er disse tallene redusert både på grunn av 50% solskinnssannsynlighet og driftstiden til turbinene.

Tabell 5-2: Realistisk skyggekastberegning for skyggekastmottakerne for Moifjellet og Mellomstrand vindkraftverk definert i avsnitt 3.1. Andre kolonne «Timer/år (verst tenkelig)» er hentet fra Tabell 5-1 for sammenligningsgrunnlag. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Timer/år	*Timer/år (verst tenkelig)*
A	Moi 32	23:03	91:38
B	Moi 26	22:23	89:39
C	Moi 21	21:52	86:06
D	Buevegen 1805	21:39	86:46
E	Buevegen 1816	22:11	88:55
F	Buevegen 1818	23:19	93:48
G	Buevegen 1786	18:42	74:46
H	Buevegen 1784	20:47	84:32
I	Buevegen 1782	20:49	83:59
J	Buevegen 1780	20:55	84:10

K	Buevegen 1778	17:24	70:27
L	Buevegen 1850	23:02	93:42
M	Buevegen 1941	14:26	59:05
N	Buevegen 1988	12:51	52:08
O	Buevegen 2023	10:56	44:00
P	Buevegen 2021	10:19	41:34
Q	Buevegen 2141	09:10	38:26
R	Buevegen 2165	06:35	27:56
S	Vaule 176	05:01	22:57
T	Vaule 247	08:22	33:51
U	Store Svela, eiendom 60/5 - Bjerkreim kommune	21:46	88:23
V	Osland 45	09:51	40:04
W	Osland 65	10:12	38:02
X	Buevegen 2100	04:23	18:09
Y	Vaule 218	05:48	26:05
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 – Bjerkreim kommune	65:33	275:29
AA	Heiavegen 543	00:16	00:55
AB	Heiavegen 541	02:37	08:56
AC	Brusalivegen 201	00:00	00:00
AD	Eiendom 1121/8, Hå kommune	12:38	51:19
AE	Brusalivegen 217	08:48	38:11
AF	Brusalivegen 215	06:42	28:44
AG	Brusalivegen 219	11:28	48:21
AH	Buevegen 1463	37:39	141:02
AI	Buevegen 1288	01:53	06:49
AJ	Buevegen 1272	01:40	06:04
AK	Buevegen 1461	34:46	130:01
AL	Buevegen 1270	01:24	05:09
AM	Buevegen 1290	02:02	07:22
AN	Buevegen 1292	03:03	10:45
AO	Buevegen 1343	07:32	26:21
AP	Buevegen 1496	18:59	70:50
AQ	Buevegen 1500	26:38	100:51
AR	Buevegen 1502	26:23	100:26
AS	Buevegen 1286	01:58	07:05
AT	Buevegen 1498	22:52	85:06
AU	Buevegen 1340	03:41	12:49
AV	Osland 85	10:20	38:33
AW	Laksesvela 60	00:00	00:00
AX	Laksesvela 58	00:00	00:00

Det er estimert at 18 mottakere befinner seg under NVEs anbefalte grenseverdi på 8 timer årlig skyggekast (mottakere R, S, X, Y, AA – AC, AF, AI, AJ, AL – AO, AS, AU, AW og AX), se Figur 5-5. Av disse 18 er 15 de samme som også lå under grenseverdien i det maksimale teoretiske scenarioet. De tre mottakerne, Y, AF og AO, som kun ligger under grenseverdien i det realistiske scenarioet, er lokalisert henholdsvis nordøst, sørvest og vest for planområdet. Alle de tre mottakerne som kommer under grenseverdiene i det realistiske scenarioet var mottakere som i verst tenkelig scenario var under ble redusert var mottakere som i verst tenkelig var under grenseverdien på 30 timer på år, men over grensen på maksimalt 30 minutter per dag.



Figur 5-5: Realistisk skyggekast med mottakere. Mottakere vist i grønt ligger under anbefalt grenseverdi mens mottakere vist i rødt ligger over anbefalt grenseverdi.

Den mottakeren som befinner seg nærmest turbinene, er den som er mest utsatt for skyggekast. Dette antyder at både fysisk avstand fra turbinene og den lokale topografien spiller en sentral rolle i hvor mye skyggekast en mottaker vil oppleve.

For mottakerne som opplever skyggekast rundt midt på dagen, reduseres varigheten av skyggekast primært på grunn av lavere sannsynlighet for solskinn. Dette betyr at selv om skyggekast teoretisk sett kan vare lenger, vil faktiske værforhold, som perioder med overskyet vær, bidra til å korte ned skyggekastets varighet. Dermed oppstår en reduksjon i skyggekastets påvirkning, selv i de mest utsatte periodene, noe som fører til en lavere faktisk eksponering enn beregningene for teoretisk maksimalt skyggekast skulle tilsi. For eksempel Buevegen 2023 (mottaker O) har gått fra 44:00 til 10:56 og Vaule 247 (mottaker Y) har gått fra 22:57 til 05:01. Det er viktig å nevne at Buevegen 2023 fortsatt ikke er under grenseverdiene, mens Vaule 247 er under grenseverdi for begge scenarioene for timer per år, men var målt til over grenseverdi for verst tenkelig på grunn av minutter per dag.

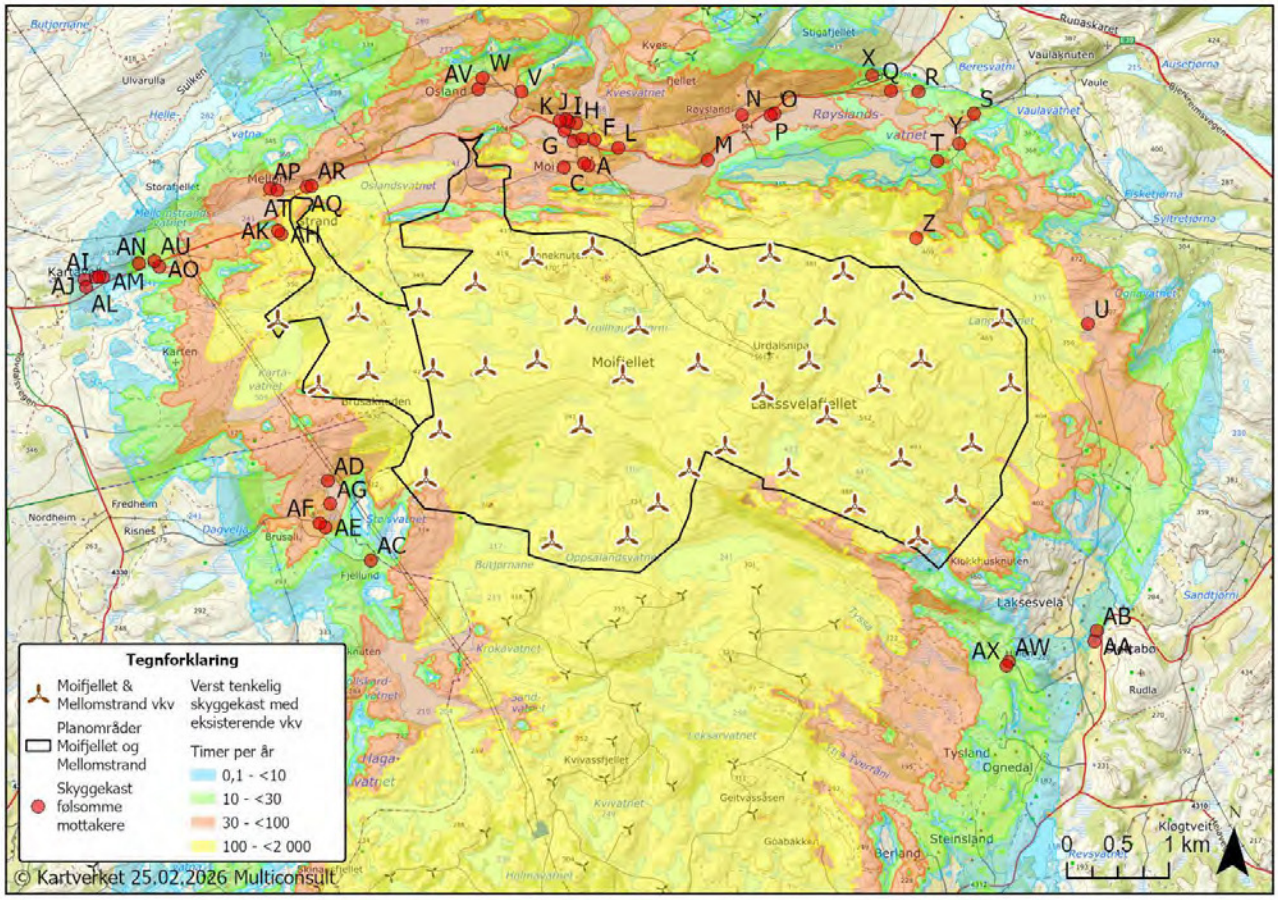
5.2 Resultater for Moifjellet og Mellomstrand vindkraftverk med sumvirkninger fra nærliggende vindkraftverk

I dette kapittelet presenteres skyggekastberegningene for Moifjellet og Mellomstrand vindkraftverk med hensyn til nærliggende vindkraftverk. Resultatene og diskusjonen rundt disse vil ha samme oppsett som i forrige kapittel for å gi et godt sammenligningsgrunnlag, og tydelig vise hvilke skyggekastmottakere som får ekstra belastning på grunn av sumvirkningen av flere vindkraftverk.

For de eksisterende nærliggende vindkraftverkene benyttes Moifjellets vindrose som grunnlag for beregningene i det realistiske scenarioet. Dette medfører en mindre grad av unøyaktighet, mest for vindkraftverket mot nord, fordi mellomliggende terreng vil påvirke den faktiske vindrosen i de andre vindkraftverkene noe. Denne unøyaktigheten er vurdert som liten, siden avstandene mellom vindkraftverkene er små.

5.2.1 Kart – Verst tenkelig scenario

Figur 5-6 viser kartet over teoretisk verst tenkelig skyggekast, målt i antall timer per år. For denne beregningen antas at solen skinner alle timer i løpet av en dag og at turbinen alltid står vinkelrett på mottakerpunktet, og man ender da opp med en beskrivelse av den maksimale skyggekastbelastningen man forventer som følge av alle de tre vindkraftverkene rundt Moifjellet og Mellomstrand vindkraftverk sitt influensområde.



Figur 5-6:Teoretisk verst tenkelig skyggekast med hensyn til nærliggende vindkraftverk med definerte skyggekastmottakere.

Når man tar hensyn til nærliggende vindkraftverk ser man en større utstrekning nord og sør for Moifjellet og Mellomstrand av arealer som ligger over anbefalt grenseverdi, spesielt røde arealer har blitt større. Dette er naturlig siden disse vindkraftverkene hver for seg vil lage skyggekast som nå legges sammen for en større total belastning. Figuren viser at det vil bli mer skyggekast sør for Moifjellet og Mellomstrand vindkraftverk, men der er det ikke registret noen mottakere. Områdene nord for planområdet er i hovedsak fremdeles rød og det forventes av den grunn ikke særlig endring for mottakerne som er lokalisert der.

5.2.2 Individuelle mottakere – Verst tenkelig scenario

Tabell 5-3 viser resultatet av beregningene av maksimalt teoretisk skyggekast for alle de definerte mottakerne i Figur 3-2 og tar hensyn til sumvirkninger fra alle vindkraftverkene. Resultatene er vist med de samme oppsettet som delresultatene i avsnitt 5.1.2, der første er vist i kolonnene «Timer/år». Dette er antall timer med skyggekast på mottakeren (på format *timer:minutter*). Det andre delresultatet, vist i kolonne «Dager/år», gir hvor mange dager i løpet av året det inntreffer skyggekast på mottakeren. Den tredje kolonnen «Timer/dag (verste dag)» (på format *timer:minutter*), gir belastningen på den verste dagen.

Tabell 5-3: Teoretisk skyggekast for skyggekastmottakerne for Moifjellet og Mellomstrand vindkraftverk med hensyn til nærliggende vindkraftverk. Kolonne 6, 7 og 8 (i grått) er hentet fra tabell 5-1 for verst tenkelig skyggekast for Moifjellet og Mellomstrand uten nærliggende vindkraftverk for sammenligningsgrunnlag. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Timer/ år	Dager /år	Timer/ dag (verste dag)	*Timer/ år*	*Dager/ år*	*Timer/ dag (verste dag)*
A	Moi 32	91:38	112	01:42	91:38	112	01:42
B	Moi 26	89:39	100	01:41	89:39	100	01:41
C	Moi 21	86:06	91	01:50	86:06	91	01:50
D	Buevegen 1805	86:46	113	01:28	86:46	113	01:28
E	Buevegen 1816	88:55	117	01:28	88:55	117	01:28
F	Buevegen 1818	93:48	136	01:27	93:48	136	01:27
G	Buevegen 1786	74:46	111	01:30	74:46	111	01:30
H	Buevegen 1784	84:32	122	01:27	84:32	122	01:27
I	Buevegen 1782	83:59	124	01:28	83:59	124	01:28
J	Buevegen 1780	84:10	121	01:29	84:10	121	01:29
K	Buevegen 1778	70:27	91	01:27	70:27	91	01:27
L	Buevegen 1850	93:42	157	01:31	93:42	157	01:31
M	Buevegen 1941	59:05	78	01:35	59:05	78	01:35
N	Buevegen 1988	52:08	72	01:06	52:08	72	01:06
O	Buevegen 2023	44:00	60	01:14	44:00	60	01:14
P	Buevegen 2021	41:34	54	01:14	41:34	54	01:14
Q	Buevegen 2141	38:26	104	00:35	38:26	104	00:35
R	Buevegen 2165	27:56	84	00:27	27:56	84	00:27
S	Vaule 176	22:57	89	00:22	22:57	89	00:22
T	Vaule 247	33:51	96	00:42	33:51	96	00:42
U	Store Svela, eiendom 60/5 - Bjerkreim kommune	88:23	178	01:03	88:23	178	01:03
V	Osland 45	40:04	74	00:43	40:04	74	00:43
W	Osland 65	38:02	93	00:32	38:02	93	00:32
X	Buevegen 2100	18:09	68	00:20	18:09	68	00:20
Y	Vaule 218	26:05	77	00:41	26:05	77	00:41
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 – Bjerkreim kommune	275:29	207	02:12	275:29	207	02:12
AA	Heiavegen 543	00:55	23	00:04	00:55	23	00:04

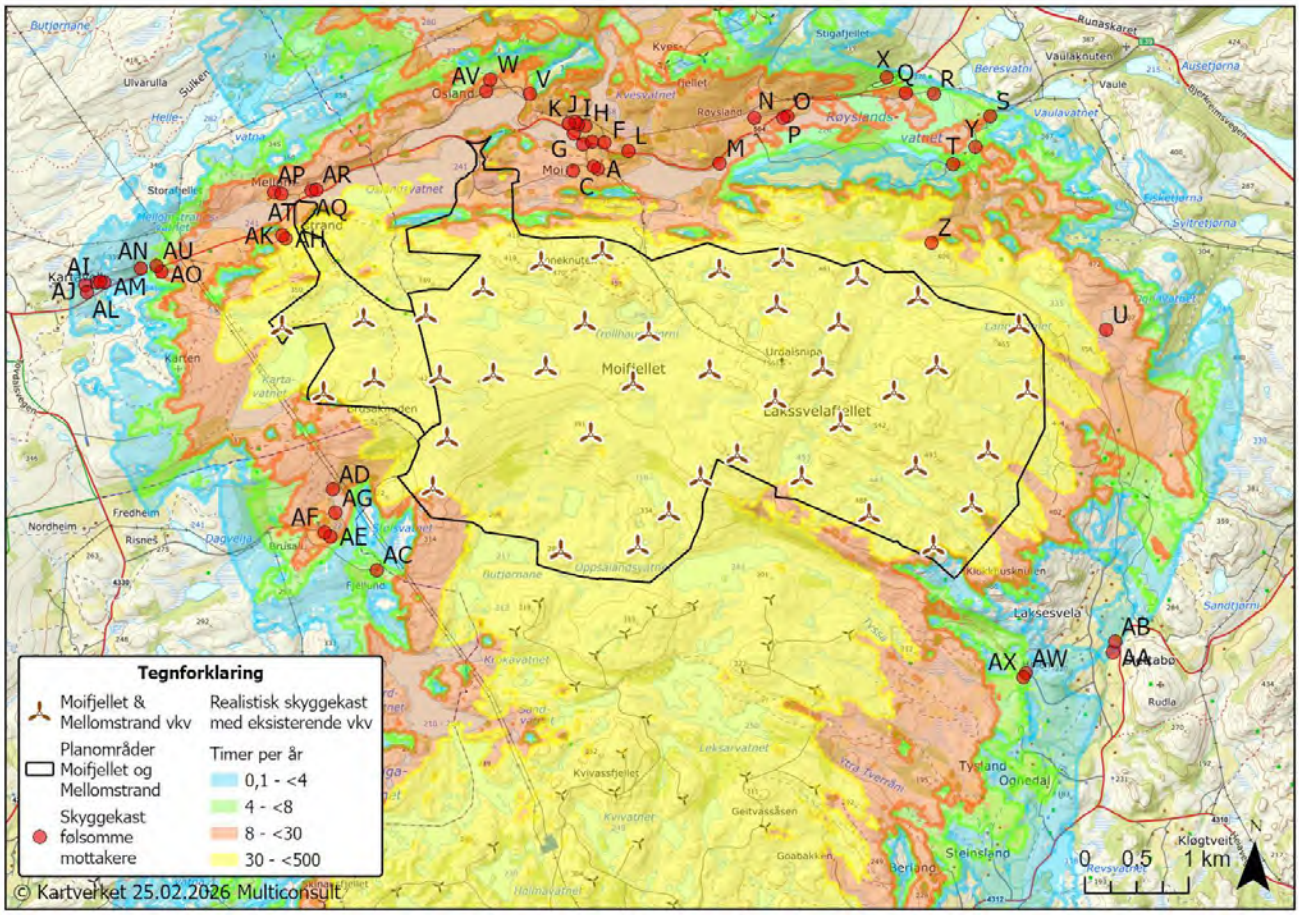
AB	Heiavegen 541	08:56	44	00:16	08:56	44	00:16
AC	**Brusalivegen 201**	**20:48**	**76**	**00:28**	**00:00**	**0**	**00:00**
AD	**Eiendom 1121/8, Hå kommune**	**55:08**	**140**	**00:39**	**51:19**	**110**	**00:39**
AE	**Brusalivegen 217**	**45:46**	**111**	**00:37**	**38:11**	**72**	**00:37**
AF	**Brusalivegen 215**	**35:48**	**111**	**00:33**	**28:44**	**73**	**00:33**
AG	**Brusalivegen 219**	**55:36**	**141**	**00:40**	**48:21**	**103**	**00:40**
AH	Buevegen 1463	141:02	185	01:16	141:02	185	01:16
AI	Buevegen 1288	06:49	26	00:21	06:49	26	00:21
AJ	Buevegen 1272	06:04	24	00:20	06:04	24	00:20
AK	Buevegen 1461	130:01	182	01:14	130:01	182	01:14
AL	Buevegen 1270	05:09	22	00:20	05:09	22	00:20
AM	Buevegen 1290	07:22	26	00:22	07:22	26	00:22
AN	Buevegen 1292	10:45	32	00:26	10:45	32	00:26
AO	Buevegen 1343	26:21	76	00:36	26:21	76	00:36
AP	Buevegen 1496	70:50	130	00:51	70:50	130	00:51
AQ	Buevegen 1500	100:51	144	01:18	100:51	144	01:18
AR	Buevegen 1502	100:26	142	01:18	100:26	142	01:18
AS	Buevegen 1286	07:05	26	00:21	07:05	26	00:21
AT	Buevegen 1498	85:06	130	01:04	85:06	130	01:04
AU	Buevegen 1340	12:49	36	00:28	12:49	36	00:28
AV	Osland 85	38:33	102	00:32	38:33	102	00:32
AW	**Laksesvela 60**	**15:45**	**79**	**00:18**	**00:00**	**0**	**00:00**
AX	**Laksesvela 58**	**16:20**	**82**	**00:18**	**00:00**	**0**	**00:00**

Det er noen forskjeller mellom denne tabellen og tabell 5-1 i avsnitt 5.2. Det er 7 mottakere som kan oppleve en forskjell når man tar til betraktning sumvirkninger. For 4 av de 7 mottakere (AD-AG) er det bare endring i timer per år og antall dager hvor det oppleves skyggekast, men det er ingen forskjell på timer per dag. De tre siste mottakerne (AC, AW og AX) opplever ingenting fra Moifjellet og Mellomstrand men opplever skyggekast fra nærliggende vindkraftverk og har derfor en økning i tabellen. Basert på den maksimerte teoretiske analysen vil det ikke bli stor endring for mottakerne når man ser på sumeffekten av alle aktuelle nærliggende vindkraftverk. Det vil kunne bli en endring på antall timer over et helt år, men ingen endring i hva som maksimalt kan oppleves gjennom en dag, med unntak av mottaker AC, AW og AX. Selv om den verste dagen fortsatt vil ha samme belastning, kan det bli flere dager med høy skyggekastbelastning, noe som kan merkes.

5.2.3 Kart – Realistisk scenario

Figur 5-7 viser et tilsvarende kart som Figur 5-6, men nå er en solskinnssannsynlighet på 50% tatt med og driftstid basert på vindrosen tatt med.

Sammenlignet med maksimalt teoretisk i avsnitt 5.2.2 kan man observere en liten endring. Selv om endringen ikke er svært merkbar, viser kartet at arealene har blitt noe redusert. Spesielt ser man at andelen av røde og gule områder har minsket, og disse strekker seg ikke like langt ut som tidligere.



Figur 5-7: Realistisk skyggekast med hensyn til nærliggende vindkraftverk med definerte skyggekastmottakere.

5.2.4 Individuelle mottakere – Realistisk scenario

Tabell 5-4 oppsummerer resultatet av det realistiske scenarioet. Det er benyttet samme metodikk som i avsnitt 5.1.4. Sammenlignet med tallene for teoretisk maksimum (se Tabell 5-3) er disse tallene redusert både på grunn av 50% solskinnssannsynlighet og driftstiden til turbinene, som tar høyde for vindrosen. Antall timer er betraktelig redusert. Mottakeren som anses å være mest utsatt for skyggekast opplever nesten 65 timer per år (mottaker Z). Denne fritidsboligen er under bygging og ligger i nærhet av planområdet, omtrent 550 meter unna nærmeste turbin og det er derfor forventet at vil ha en stor belastning. Tabellen viser i tillegg økningen av forventet skyggekasttimer per år når man tar med sumvirkninger.

Tabell 5-4: Realistisk skyggekastberegning for skyggekastmottakerne for Moifjellet og Mellomstrand vindkraftverk med hensyn til nærliggende vindkraftverk. Tabellen viser økning i antatt skyggekast for realistisk scenario når det tas hensyn til sumvirkninger (økning fra tabell 5.2). De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Timer/år	Økning
A	Moi 32	23:03	-
B	Moi 26	22:23	-
C	Moi 21	21:52	-
D	Buevegen 1805	21:39	-
E	Buevegen 1816	22:11	-
F	Buevegen 1818	23:19	-

G	Buevegen 1786	18:42	-
H	Buevegen 1784	20:47	-
I	Buevegen 1782	20:49	-
J	Buevegen 1780	20:55	-
K	Buevegen 1778	17:24	-
L	Buevegen 1850	23:02	-
M	Buevegen 1941	14:26	-
N	Buevegen 1988	12:51	-
O	Buevegen 2023	10:56	-
P	Buevegen 2021	10:19	-
Q	Buevegen 2141	09:10	-
R	Buevegen 2165	06:35	-
S	Vaule 176	05:01	-
T	Vaule 247	08:22	-
U	Store Svela, eiendom 60/5 - Bjerkreim kommune	21:46	-
V	Osland 45	09:51	-
W	Osland 65	10:12	-
X	Buevegen 2100	04:23	-
Y	Vaule 218	05:48	-
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 – Bjerkreim kommune	65:33	-
AA	Heiavegen 543	00:16	-
AB	Heiavegen 541	02:37	-
AC	Brusalivegen 201	05:52	05:52
AD	Eiendom 1121/8, Hå kommune	13:45	01:07
AE	Brusalivegen 217	10:58	02:10
AF	Brusalivegen 215	08:43	02:01
AG	Brusalivegen 219	13:34	02:06
AH	Buevegen 1463	37:39	-
AI	Buevegen 1288	01:53	-
AJ	Buevegen 1272	01:40	-
AK	Buevegen 1461	34:46	-
AL	Buevegen 1270	01:24	-
AM	Buevegen 1290	02:02	-
AN	Buevegen 1292	03:03	-
AO	Buevegen 1343	07:32	-
AP	Buevegen 1496	18:59	-
AQ	Buevegen 1500	26:38	-
AR	Buevegen 1502	26:23	-
AS	Buevegen 1286	01:58	-

AT	Buevegen 1498	22:52	-
AU	Buevegen 1340	03:41	-
AV	Osland 85	10:20	-
AW	Laksesvela 60	4:04	04:04
AX	Laksesvela 58	4:14	04:14

Når nærliggende vindkraftverk tas med i vurderingen, endres resultatene slik at én mottaker som tidligere lå under NVEs anbefalte grenseverdi på 8 timer årlig skyggekast, nå får et beregnet skyggekast som overstiger grenseverdien (mottaker AF). Det er 17 mottakere som er under anbefalt grenseverdi (mottakere R, S, X, Y, AA – AC, AI, AJ, AL – AO, AS, AU, AW og AX). Åtte av mottakerne er lokalisert ved Kartavoll, en sørvest for området, fire sørøst for området og fire nordøst for området. Resultatene fra Tabell 5-4 viser at skyggekast fra flere vindkraftverk kan forekomme, det er en mottaker (mottaker AF) som går over anbefalt grenseverdi når man tar betraktning av nærliggende vindkraftverk. Det vil si at de nærliggende vindkraftverkene fører til en økning i den totale skyggekastbelastningen for enkelte mottakere.

Basert på hvilke mottakere som opplever en økning i skyggekast, kan vi konkludere med at det er Bjerkreim vindkraftverk, som ligger sør for Moifjellet og Mellomstrand som fører til økt skyggekastbelastning.

Det vil si at for kun Moifellet og Mellomstrand vindkraftverk er det hovedsakelig mottakerne nord for vindkraftverket som belastes over anbefalt grenseverdi. Mens når man tar hensyn til nærliggende vindkraftverk vil noen av mottakere til øst og til vest merke en større belastning, over anbefalt grenseverdi.

Det er ingen av mottakerne som opplever skyggekast over anbefalt grenseverdi fra de eksisterende vindkraftverkene. De mottakerne som merker en belastning fra eksisterende, opplever det i hovedsak tidlig på morgenen eller sent på kvelden i sommerhalvåret. Det er ulike tidspunkt og på ulike tider av året enn hva det forventes Moifjellet og Mellomstrand vindkraftverk vil bidra med. Det vil si at det vil bidra med mer skyggekast på flere tidspunkt igjennom dagen. En oversikt over når hver mottaker opplever skyggekast ligger i vedlegg.

6 Reslultater for alternativ 2: Moifjellet

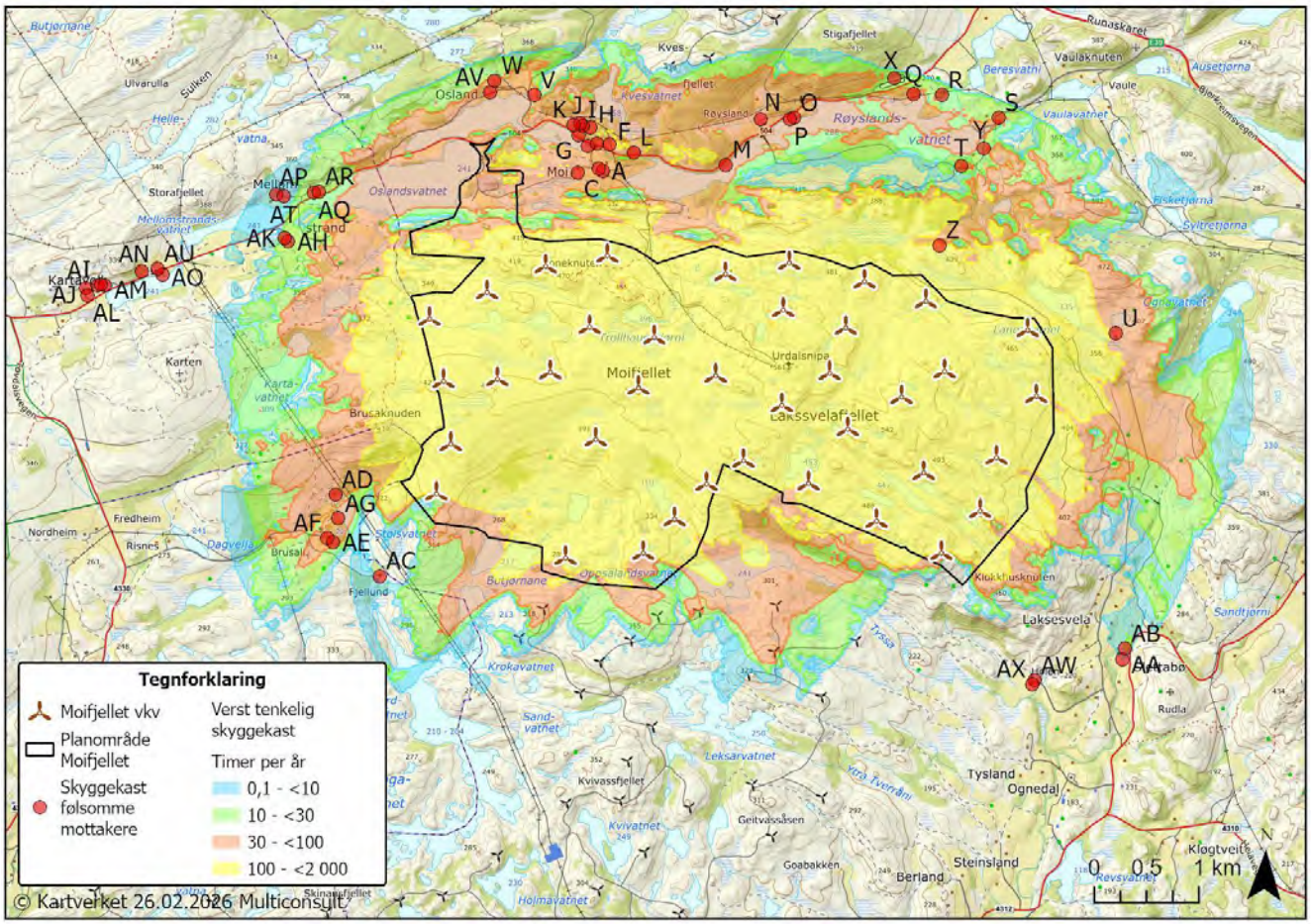
6.1 Resultater for Moifjellet vindkraftverk

I dette kapittelet presenteres skyggekastberegningene for Moifjellet vindkraftverk. Det er ikke tatt hensyn til sumvirkninger i dette kapittelet, de vises i kapittel 6.2.

6.1.1 Kart – Verst tenkelig scenario

Figur 6-1 viser kartet over teoretisk verst tenkelig skyggekast, målt i antall timer per år. For denne beregningen antas at solen skinner alle timer i løpet av en dag og at turbinen alltid står vinkelrett på mottakerpunktet, og man ender da opp med en beskrivelse av den maksimale skyggekastbelastningen man forventer fra vindkraftverket.

Figuren gir en god indikasjon på hvilke områder og mottakere som vil bli utsatt for skyggekast. Nord til nordvest for vindkraftverket er det en konsentrasjon av røde områder, med noen gule flekker, som indikerer høy skyggekastpåvirkning. Boliger i disse områdene kan derfor bli betydelig utsatt for skyggekast.



Figur 6-1: Teoretisk verst tenkelig scenario, målt i antall timer per år.

6.1.2 Individuelle mottakere – Verst tenkelig scenario

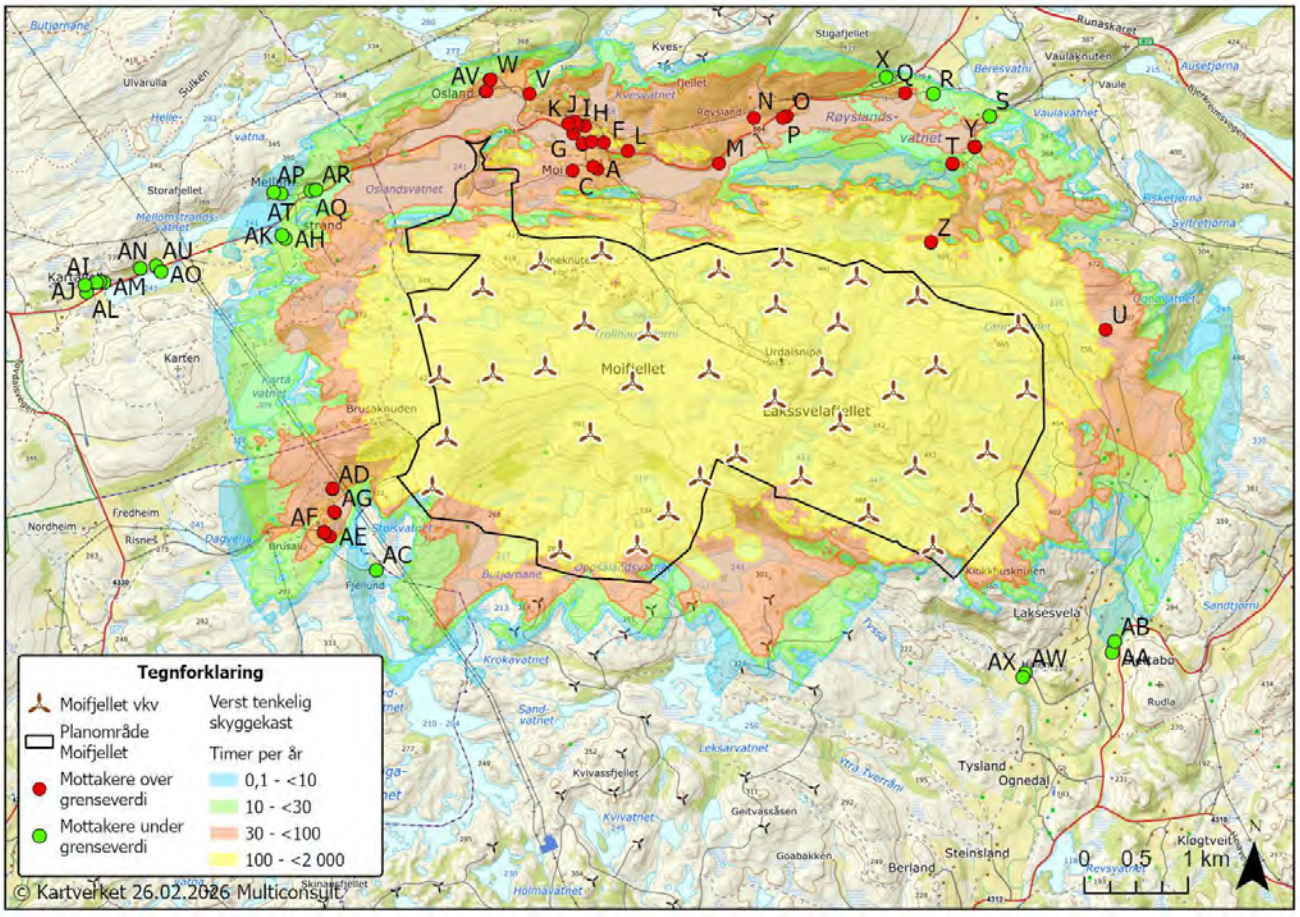
Tabell 6-1 viser resultatet av beregningene av maksimalt teoretisk skyggekast for alle de definerte mottakerne i avsnitt 3.1. Det kommer tre delresultater fra beregningen. Det første er vist i kolonnen «Timer/år». Dette er antall timer med skyggekast på mottakeren (på format *timer:minutter*). Det andre delresultatet, vist i kolonnen «Dager/år», gir hvor mange dager i løpet av året det inntreffer skyggekast på mottakeren. Den tredje kolonnen «Timer/dag (verste dag)» (på format *timer:minutter*), gir belastningen på den verste dagen.

Tabell 6-1: Maksimalt teoretisk skyggekast for skyggekastmottakerne for Moifjellet vindkraftverk. Kolonnen «Timer/år» gir totalt antall timer skyggekast på mottakeren per år. Kolonnen «Dager/år» gir antallet dager per år det inntreffer skyggekast i det hele tatt. Kolonnen «Timer/dag (verste dag)» gir antallet timer skyggekast på den dagen med aller størst belastning. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Timer/år	Dager/år	Timer/dag (verste dag)
A	Moi 32	91:38	112	1:42
B	Moi 26	89:39	100	1:41
C	Moi 21	86:06	91	1:50
D	Buevegen 1805	86:46	113	1:28
E	Buevegen 1816	88:55	117	1:28
F	Buevegen 1818	93:48	136	1:27
G	Buevegen 1786	74:46	111	1:30
H	Buevegen 1784	84:32	122	1:27
I	Buevegen 1782	83:59	124	1:28
J	Buevegen 1780	84:10	121	1:29
K	Buevegen 1778	70:27	91	1:27
L	Buevegen 1850	93:42	157	1:31
M	Buevegen 1941	59:05	78	1:35
N	Buevegen 1988	52:08	72	1:06
O	Buevegen 2023	44:00	60	1:14
P	Buevegen 2021	41:34	54	1:14
Q	Buevegen 2141	38:26	104	0:35
R	Buevegen 2165	27:56	84	0:27
S	Vaule 176	22:57	89	0:22
T	Vaule 247	33:51	96	0:42
U	Store Svela, eiendom 60/5, Bjerkreim kommune	88:23	178	1:03
V	Osland 45	40:04	74	0:43
W	Osland 65	38:02	93	0:32
X	Buevegen 2100	18:09	68	0:20
Y	Vaule 218	26:05	77	0:41
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune	275:29	207	2:12
AA	Heiavegen 543	0:55	23	0:04
AB	Heiavegen 541	8:56	44	0:16
AC	Brusalivegen 201	0:00	0	0:00
AD	Eiendom 121/8, Hå kommune	51:19	110	0:39
AE	Brusalivegen 217	38:11	72	0:37
AF	Brusalivegen 215	28:44	73	0:33
AG	Brusalivegen 219	48:21	103	0:40
AH	Buevegen 1463	22:57	83	0:25
AI	Buevegen 1288	0:00	0	0:00

AJ	Buevegen 1272	0:00	0	0:00
AK	Buevegen 1461	15:23	55	0:24
AL	Buevegen 1270	0:00	0	0:00
AM	Buevegen 1290	0:00	0	0:00
AN	Buevegen 1292	0:00	0	0:00
AO	Buevegen 1343	0:00	0	0:00
AP	Buevegen 1496	7:33	28	0:21
AQ	Buevegen 1500	17:35	62	0:24
AR	Buevegen 1502	18:16	62	0:24
AS	Buevegen 1286	0:00	0	0:00
AT	Buevegen 1498	8:10	30	0:21
AU	Buevegen 1340	0:00	0	0:00
AV	Osland 85	38:33	102	0:32
AW	Laksesvela 60	0:00	0	0:00
AX	Laksesvela 58	0:00	0	0:00

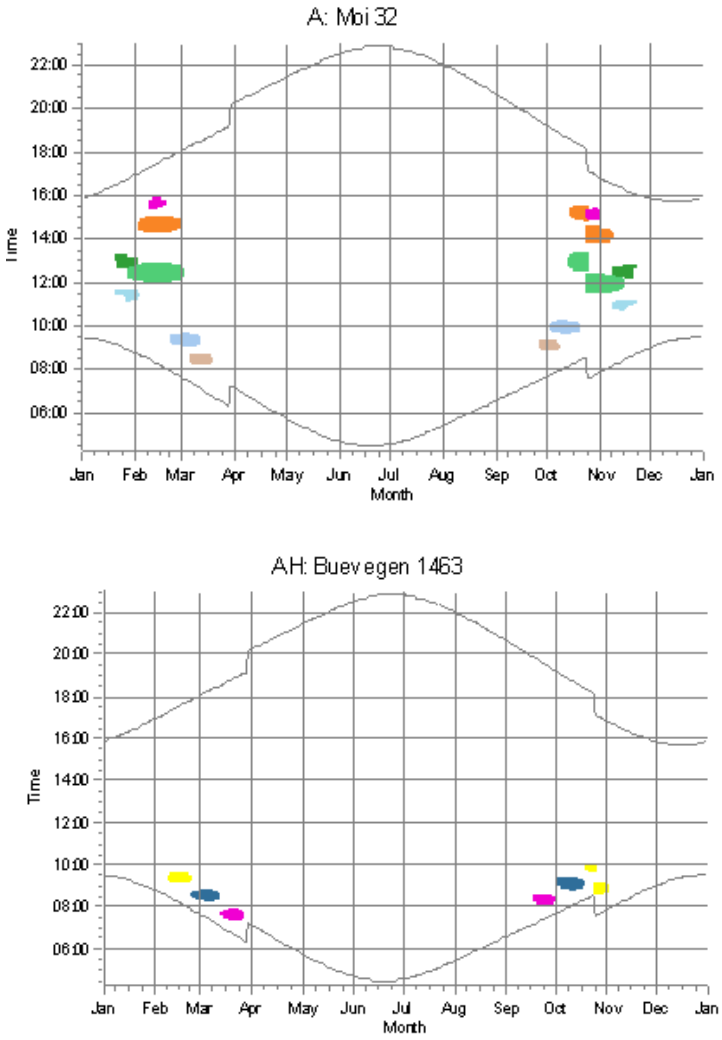
Det er anslått at 22 av 50 mottakere ligger under NVEs anbefalte grenseverdi for teoretisk maksimalt skyggekast. Det er 14 mottakere som er under hvis man bare ser på mottakere innenfor 2 km av Moifjellet vindkraftverk, men for sammenligning er alle mottakerne fra alternativ 1 tatt med. Se Figur 6-2 der disse 22 mottakerne er vist med grønne prikker. Tre av disse mottakerne er lokalisert nordøst for planområdet nært Røyslandsvatnet (mottakere R, S og X i tabell), 14 mottakere er lokalisert nordvest for planområdet ved Mellomstrand/Kartavoll (mottakere AH – AU i tabell), en er lokalisert sørvest for planområdet ved Fjellund (mottaker AC i tabell) og fire er lokalisert sørøst for planområdet ved Slettabø og Holen (mottakere AA, AB, AW og AX i tabell). Den mottakeren som blir mest utsatt for skyggekast er omtrent 553 meter unna en turbin (mottaker Z i tabell).



Figur 6-2: Verst tenkelig skyggekast med mottakere. Mottakere vist i grønt ligger under anbefalt grenseverdi mens mottakere vist i rødt ligger over anbefalt grenseverdi.

Mange av de mest utsatte boligene og fritidsbygningene er lokalisert rett nord for vindkraftverket, noe som gjør det sannsynlig at de vil oppleve skyggekast på samme tid i løpet av dagen. Grunnet boligenes posisjon i forhold til vindkraftverket og solens bane vil de fleste av mottakerne mest sannsynlig oppleve mest skyggekast på dagtid, mellom 9 - 16. Mottakernes lokalisering kombinert med solens bevegelsesmønster gjør at belastningen av skyggekast på mottakerne er høyest når solen står høyest på himmelen i løpet av vinterhalvåret. Da strekker skyggen fra vindturbinene seg lenger og mottakerne i nord opplever skyggekast. De fleste av mottakerne vil kun oppleve skyggekast om vinteren, mens noen få vil kunne merke det også i sen høst og tidlig vår. Seks av mottakerne kan imidlertid oppleve skyggekast om sommeren, men da enten tidlig om morgenen eller sent på kvelden.

Figur 6-3 illustrerer når to mottakere forventes å oppleve skyggekast gjennom året (x-aksen), samt på hvilke tidspunkter av døgnet dette skjer (y-aksen). De ulike fargene representerer de ulike vindturbinene som vil bidra til skyggekast. Tynn grå linje representerer solbanen og viser når det er teoretisk mulig å oppleve skyggekast. Mottakerne A og AH er valgt for å illustrere den forventede skyggekastbelastningen for de områdene som ligger nord og nordvest for planområdet, og som trolig vil oppleve ulik belastning fra de to alternativene. En fullstendig oversikt over når hver mottaker kan forvente skyggekast for alle fire scenarioene legges ved rapporten som vedlegg.

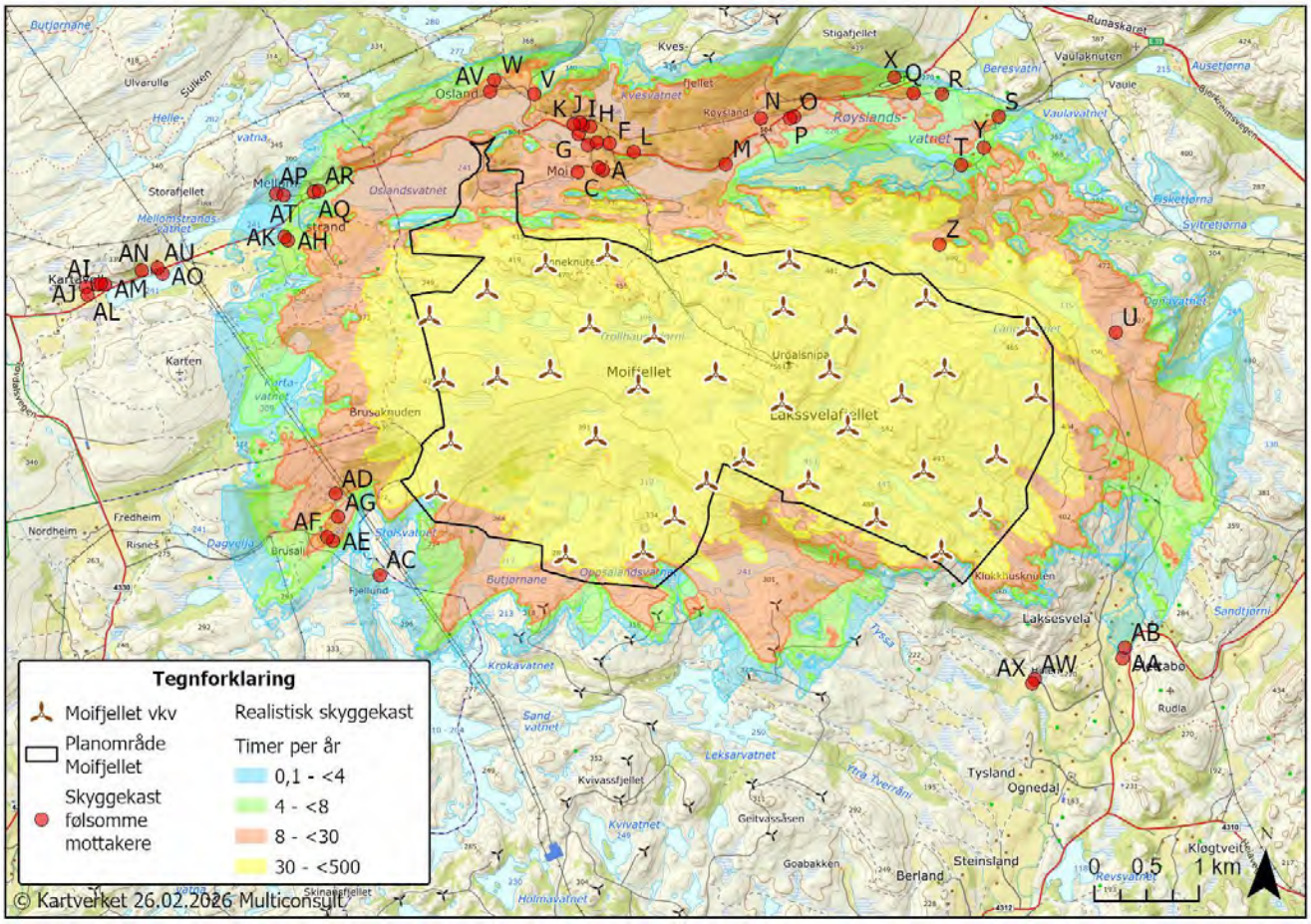


Figur 6-3: Forventet tidspunkt for skyggekast for mottaker A og AH. De ulike fargene representerer de ulike vindturbinene som vil bidra til skyggekast. Tynn grå linje representerer solbanen og viser når det er teoretisk mulig å oppleve skyggekast Mottaker A er lokalisert nord for planområdet, mens mottaker AH ligger nordvest for planområdet.

6.1.3 Kart – Realistisk scenario

Figur 6-4 viser et tilsvarende kart som Figur 6-1, men nå er en solskinnssannsynlighet på 50% og driftstid basert på vindrosen tatt med. Forskjellen i resultatet er at simuleringen først beregner teoretisk maksimum som om sola skinner hele tiden (nøyaktig på samme vis som vist i Figur 6-1), og deretter reduseres denne teoretiske maksimumsbelastningen med 50%, basert på antakelsen om at faktisk solskinn bare inntreffer halvparten av tiden. I tillegg justeres belastningen med en driftstid på totalt 7000 timer, basert på vindrosen og driftstid per sektor/vindretning.

Sammenlignet med maksimalt teoretisk skyggekast reduseres utstrekningen av skyggekast noe, og områdene som viser verdier over anbefalt nivå krymper. Denne reduksjonen er imidlertid ikke betydelig nok til å være visuelt fremtredende. Kartet indikerer at arealene med høy belastning forblir omfattende, noe som indikerer at de fleste mottakerne fremdeles vil bli eksponert for skyggekast i mengder som overskrider anbefalte verdier.



Figur 6-4: Realistisk scenario med antall timer per år.

6.1.4 Individuelle mottakere – Realistisk scenario

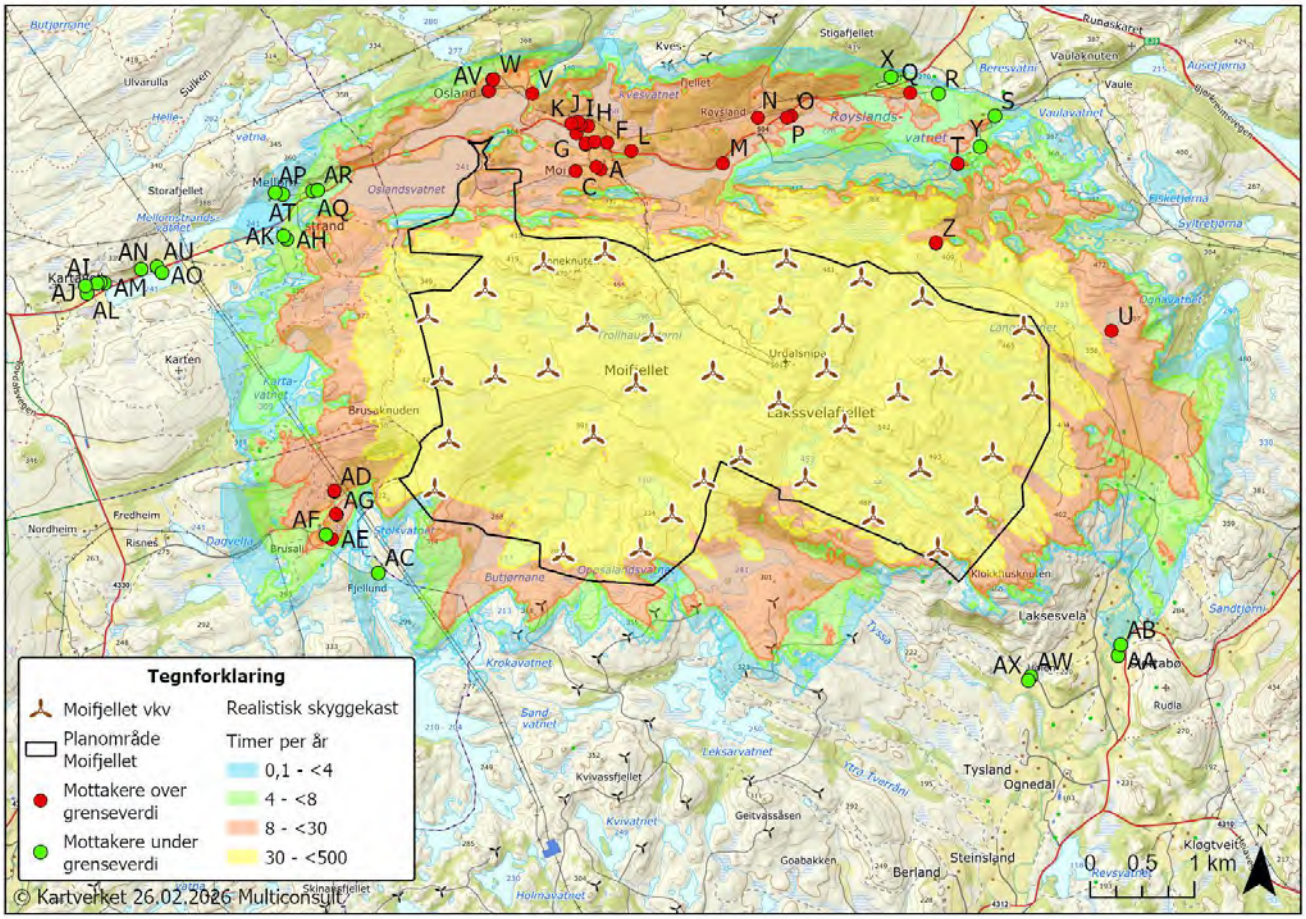
Tabell 6-2 oppsummerer resultatet av den realistiske skyggekastbelastningen. Sammenlignet med tallene for teoretisk maksimum (se Tabell 6-1) er disse tallene redusert både på grunn av 50% solskinnssannsynlighet og driftstiden til turbinene.

Tabell 6-2: Realistisk skyggekastberegning for skyggekastmottakerne for Moifjellet vindkraftverk definert i avsnitt 3.1. Tredje kolonne «Timer/dag (verste dag)» er hentet fra Tabell 6-1 for sammenligningsgrunnlag. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Timer/år	*Timer/år (verst tenkelig)*
A	Moi 32	23:03	91:38
B	Moi 26	22:23	89:39
C	Moi 21	21:52	86:06
D	Buevegen 1805	21:39	86:46
E	Buevegen 1816	22:11	88:55
F	Buevegen 1818	23:19	93:48
G	Buevegen 1786	18:42	74:46
H	Buevegen 1784	20:47	84:32
I	Buevegen 1782	20:49	83:59
J	Buevegen 1780	20:55	84:10

K	Buevegen 1778	17:24	70:27
L	Buevegen 1850	23:02	93:42
M	Buevegen 1941	14:26	59:05
N	Buevegen 1988	12:51	52:08
O	Buevegen 2023	10:56	44:00
P	Buevegen 2021	10:19	41:34
Q	Buevegen 2141	9:10	38:26
R	Buevegen 2165	6:35	27:56
S	Vaule 176	5:01	22:57
T	Vaule 247	8:22	33:51
U	Store Svela, eiendom 60/5, Bjerkreim kommune	21:46	88:23
V	Osland 45	9:51	40:04
W	Osland 65	10:12	38:02
X	Buevegen 2100	4:23	18:09
Y	Vaule 218	5:48	26:05
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune	65:33	275:29
AA	Heiavegen 543	0:16	0:55
AB	Heiavegen 541	2:37	8:56
AC	Brusalivegen 201	0:00	0:00
AD	Eiendom 121/8, Hå kommune	12:38	51:19
AE	Brusalivegen 217	8:48	38:11
AF	Brusalivegen 215	6:42	28:44
AG	Brusalivegen 219	11:28	48:21
AH	Buevegen 1463	6:36	22:57
AI	Buevegen 1288	0:00	0:00
AJ	Buevegen 1272	0:00	0:00
AK	Buevegen 1461	4:24	15:23
AL	Buevegen 1270	0:00	0:00
AM	Buevegen 1290	0:00	0:00
AN	Buevegen 1292	0:00	0:00
AO	Buevegen 1343	0:00	0:00
AP	Buevegen 1496	2:13	7:33
AQ	Buevegen 1500	5:06	17:35
AR	Buevegen 1502	5:18	18:16
AS	Buevegen 1286	0:00	0:00
AT	Buevegen 1498	2:24	8:10
AU	Buevegen 1340	0:00	0:00
AV	Osland 85	10:20	38:33
AW	Laksesvela 60	0:00	0:00
AX	Laksesvela 58	0:00	0:00

Det er estimert at 24 mottakere befinner seg under NVEs anbefalte grenseverdi på 8 timer årlig skyggekast (mottakere R, S, X, Y, AA – AC, AF, AH – AU, AW og AU), se Figur 6-5. Av disse 24 er 22 de samme som også lå under grenseverdien i det maksimale teoretiske scenarioet. De to mottakerne, Y og AF, som kun ligger under grenseverdien i det realistiske scenarioet, er lokalisert sørvest og nordøst for planområdet.



Figur 6-5: Realistisk skyggekast med mottakere. Mottakere vist i grønt ligger under anbefalt grenseverdi mens mottakere vist i rødt ligger over anbefalt grenseverdi

Den mottakeren som befinner seg nærmest turbinene, er den som er mest utsatt for skyggekast. Dette antyder at både fysisk avstand fra turbinene og den lokale topografien spiller en sentral rolle i hvor mye skyggekast en mottaker vil oppleve.

For mottakerne som opplever skyggekast rundt midt på dagen, reduseres varigheten av skyggekast primært på grunn av lavere sannsynlighet for solskinn. Dette betyr at selv om skyggekast teoretisk sett kan vare lenger, vil faktiske værforhold, som perioder med overskyet vær, bidra til å korte ned skyggekastets varighet. Dermed oppstår en reduksjon i skyggekastets påvirkning, selv i de mest utsatte periodene, noe som fører til en lavere faktisk eksponering enn beregningene for teoretisk maksimalt skyggekast skulle tilsi. For eksempel Buevegen 2023 (mottaker O) har gått fra 44:00 til 10:56 og Brusalivegen 215 (mottaker AF) har gått fra 28:44 til 7:23. Det er viktig å nevne at Buevegen 2023 fortsatt ikke er under grenseverdiene, mens Brusalivegen 215 er under grenseverdi for begge scenarioene for timer per år, men var målt til over grenseverdi for verst tenkelig på grunn av timer per dag.

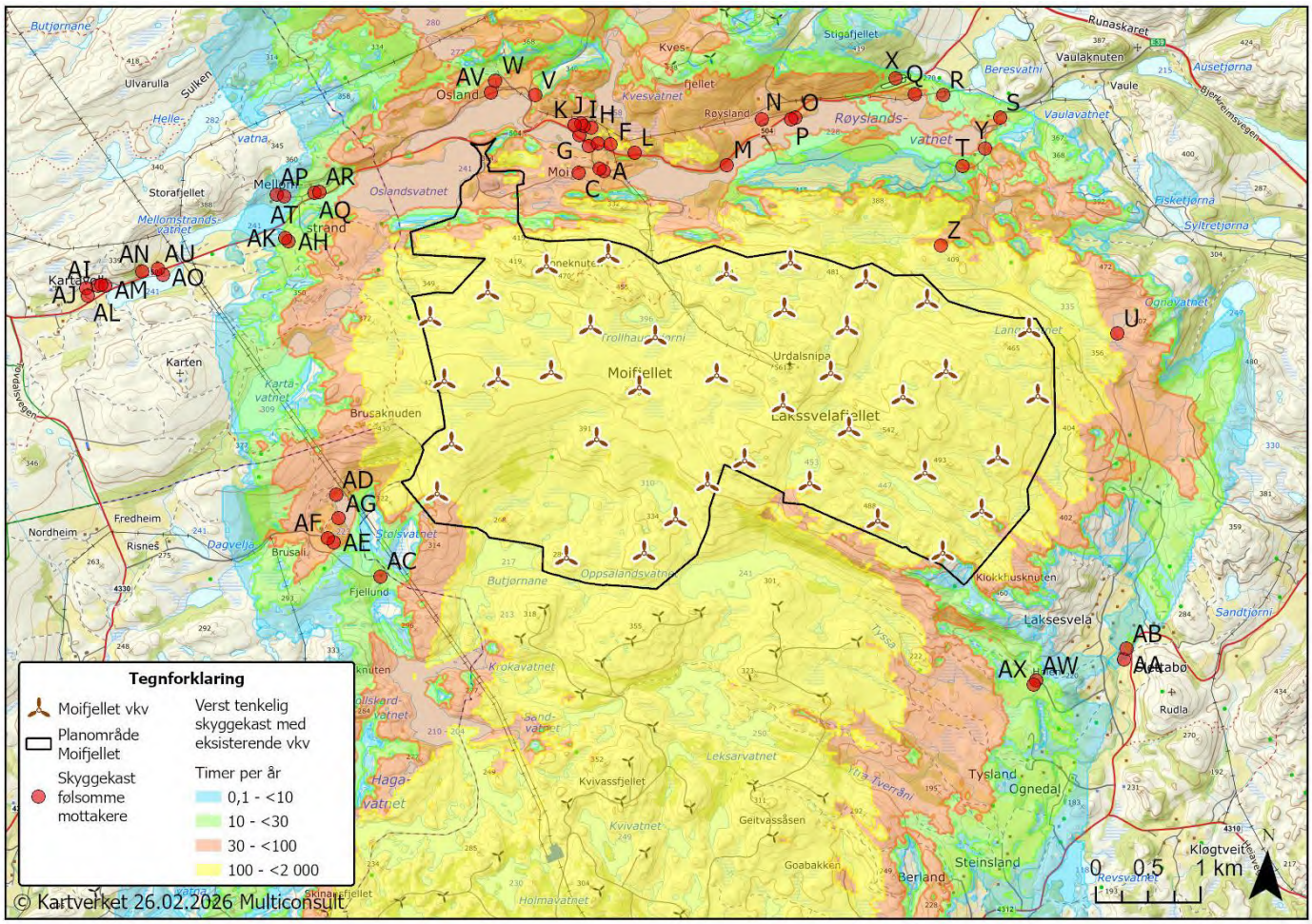
6.2 Resultater for sumvirkninger fra nærliggende vindkraftverk

I dette kapittelet presenteres skyggekastberegningene for Moifjellet vindkraftverk med hensyn til nærliggende vindkraftverk. Resultatene og diskusjonen rundt disse vil ha samme oppsett som i forrige kapittel for å gi et godt sammenligningsgrunnlag, og tydelig vise hvilke skyggekastmottakere som får ekstra belastning på grunn av sumvirkningen av flere vindkraftverk.

Noter at for realistisk skyggekastberegning er vindrosen for Moifjellet benyttet. Dette kan medføre en viss unøyaktighet når den anvendes på de andre vindkraftverkene, da vindrosen spesifikt representerer vindforholdene ved Moifjellet og ikke nødvendigvis de eksakte forholdene ved de andre lokasjonene.

6.2.1 Kart – Verst tenkelig scenario

Figur 6-6 viser kartet over teoretisk verst tenkelig skyggekast, målt i antall timer per år. For denne beregningen antas at solen skinner alle timer i løpet av en dag og at turbinen alltid står vinkelrett på mottakerpunktet, og man ender da opp med en beskrivelse av den maksimale skyggekastbelastningen man forventer som følge av alle de tre vindkraftverkene rundt Moifjellet vindkraftverk sitt influensområde.



Figur 6-6:Teoretisk verst tenkelig skyggekast med hensyn til nærliggende vindkraftverk med definerte skyggekastmottakere.

Når man tar hensyn til nærliggende vindkraftverk ser man en større utstrekning nord og sør for Moifjellet av arealer som ligger over anbefalt grenseverdi, spesielt røde arealer har blitt større. Dette er naturlig siden disse vindkraftverkene hver for seg vil lage skyggekast som nå legges sammen for en større total belastning. Figuren viser at det vil bli mer skyggekast sør for Moifjellet vindkraftverk, men der er det ikke registret noen mottakere. Områdene nord for planområdet er i hovedsak fremdeles rød og det forventes av den grunn ikke særlig endring for mottakerne som er lokalisert der.

6.2.2 Individuelle mottakere – Verst tenkelig scenario

Tabell 6-3 viser resultatet av beregningene av maksimalt teoretisk skyggekast for alle de definerte mottakerne i Figur 3-2 og tar hensyn til sumvirkninger fra alle vindkraftverkene. Resultatene er vist med de samme oppsettet som delresultatene i avsnitt , der første er vist i kolonnene «Timer/år». Dette er antall timer med skyggekast på mottakeren (på format *timer:minutter*). Det andre delresultatet, vist i kolonne «Dager/år», gir hvor mange dager i løpet av året det inntreffer skyggekast på mottakeren. Den tredje kolonnen «Timer/dag (verste dag)» (på format *timer:minutter*), gir belastningen på den verste dagen.

Tabell 6-3: Teoretisk skyggekast for skyggekastmottakerne for Moifjellet vindkraftverk med hensyn til nærliggende vindkraftverk. Kolonne 6, 7 og 8 (i grått) er hentet fra Tabell 6-1 for skyggekast for Moifjellet uten nærliggende vindkraftverk for sammenligningsgrunnlag. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	**Timer/år**	**Dager/ år**	**Timer/ dag (verste dag)**	*Timer/år*	*Dager /år*	*Timer/ dag (verste dag)*
A	Moi 32	91:38	112	1:42	91:38	112	1:42
B	Moi 26	89:39	100	1:41	89:39	100	1:41
C	Moi 21	86:06	91	1:50	86:06	91	1:50
D	Buevegen 1805	86:46	113	1:28	86:46	113	1:28
E	Buevegen 1816	88:55	117	1:28	88:55	117	1:28
F	Buevegen 1818	93:48	136	1:27	93:48	136	1:27
G	Buevegen 1786	74:46	111	1:30	74:46	111	1:30
H	Buevegen 1784	84:32	122	1:27	84:32	122	1:27
I	Buevegen 1782	83:59	124	1:28	83:59	124	1:28
J	Buevegen 1780	84:10	121	1:29	84:10	121	1:29
K	Buevegen 1778	70:27	91	1:27	70:27	91	1:27
L	Buevegen 1850	93:42	157	1:31	93:42	157	1:31
M	Buevegen 1941	59:05	78	1:35	59:05	78	1:35
N	Buevegen 1988	52:08	72	1:06	52:08	72	1:06
O	Buevegen 2023	44:00	60	1:14	44:00	60	1:14
P	Buevegen 2021	41:34	54	1:14	41:34	54	1:14
Q	Buevegen 2141	38:26	104	0:35	38:26	104	0:35
R	Buevegen 2165	27:56	84	0:27	27:56	84	0:27
S	Vaule 176	22:57	89	0:22	22:57	89	0:22
T	Vaule 247	33:51	96	0:42	33:51	96	0:42
U	Store Svela, eiendom 60/5, Bjerkreim kommune	88:23	178	1:03	88:23	178	1:03
V	Osland 45	40:04	74	0:43	40:04	74	0:43
W	Osland 65	38:02	93	0:32	38:02	93	0:32
X	Buevegen 2100	18:09	68	0:20	18:09	68	0:20
Y	Vaule 218	26:05	77	0:41	26:05	77	0:41
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune	275:29	207	2:12	275:29	207	2:12
AA	Heiavegen 543	0:55	23	0:04	0:55	23	0:04
AB	Heiavegen 541	8:56	44	0:16	8:56	44	0:16

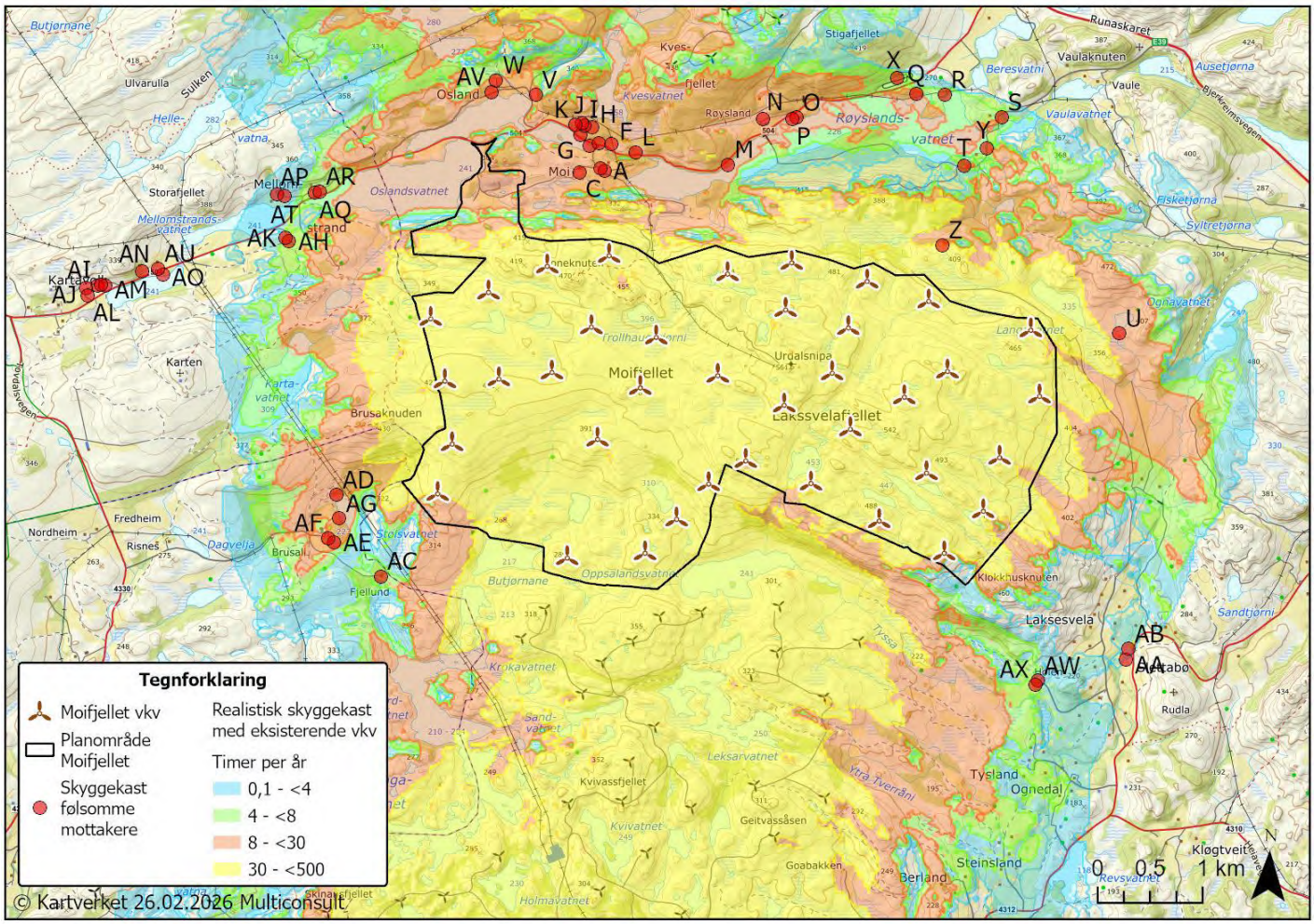
AC	**Brusalivegen 201**	**20:48**	**76**	**0:28**	**0:00**	**0**	**0:00**
AD	**Eiendom 121/8, Hå kommune**	**55:08**	**140**	**0:39**	**51:19**	**110**	**0:39**
AE	**Brusalivegen 217**	**45:46**	**111**	**0:37**	**38:11**	**72**	**0:37**
AF	**Brusalivegen 215**	**35:48**	**111**	**0:33**	**28:44**	**73**	**0:33**
AG	**Brusalivegen 219**	**55:36**	**141**	**0:40**	**48:21**	**103**	**0:40**
AH	Buevegen 1463	22:57	83	0:25	22:57	83	0:25
AI	Buevegen 1288	0:00	0	0:00	0:00	0	0:00
AJ	Buevegen 1272	0:00	0	0:00	0:00	0	0:00
AK	Buevegen 1461	15:23	55	0:24	15:23	55	0:24
AL	Buevegen 1270	0:00	0	0:00	0:00	0	0:00
AM	Buevegen 1290	0:00	0	0:00	0:00	0	0:00
AN	Buevegen 1292	0:00	0	0:00	0:00	0	0:00
AO	Buevegen 1343	0:00	0	0:00	0:00	0	0:00
AP	Buevegen 1496	7:33	28	0:21	7:33	28	0:21
AQ	Buevegen 1500	17:35	62	0:24	17:35	62	0:24
AR	Buevegen 1502	18:16	62	0:24	18:16	62	0:24
AS	Buevegen 1286	0:00	0	0:00	0:00	0	0:00
AT	Buevegen 1498	8:10	30	0:21	8:10	30	0:21
AU	Buevegen 1340	0:00	0	0:00	0:00	0	0:00
AV	Osland 85	38:33	102	0:32	38:33	102	0:32
AW	**Laksesvela 60**	**15:45**	**79**	**0:18**	**0:00**	**0**	**0:00**
AX	**Laksesvela 58**	**16:20**	**82**	**0:18**	**0:00**	**0**	**0:00**

Det er noen forskjeller mellom denne tabellen og Tabell 6-1 i avsnitt 6.1. Samme som for alternativ 1 er det 7 mottakere er det en endring i antall når man tar til betraktning sumvirkninger (mottakerne er markert med fet skrift i tabell). For 4 mottakere (AD-AG) er det bare endring i timer per år og antall dager hvor det oppleves skyggekast, men det er ingen forskjell på timer per dag. De tre siste mottakerne (AC, AW og AX) opplever ingenting fra Moifjellet men opplever skyggekast fra nærliggende vindkraftverk og har derfor en økning i tabellen. Basert på den maksimerte teoretiske analysen vil det ikke bli stor endring for mottakerne når man ser på sumeffekten av alle aktuelle nærliggende vindkraftverk. Det vil kunne bli en endring på antall timer over et helt år, men ingen endring i hva som maksimalt kan oppleves gjennom en dag, med unntak av mottaker AC, AW og AX. Dette betyr at når man vurderer sumvirkninger fra nærliggende vindkraftverk, kan det oppstå endringer i forholdene for mottakerne. Selv om den verste dagen fortsatt vil ha samme belastning, kan det bli flere dager med høy skyggekastbelastning, noe som kan merkes av enkelte mottakere.

6.2.3 Kart – Realistisk scenario

Figur 6-7 viser et tilsvarende kart som Figur 6-6, men nå er en solskinnssannsynlighet på 50% tatt med og driftstid basert på vindrosen tatt med.

Sammenlignet med maksimalt teoretisk i avsnitt 6.2.1 kan man observere en liten endring. Selv om endringen ikke er svært merkbar, viser kartet at arealene har blitt noe redusert. Spesielt ser man at andelen av røde og gule områder har minsket, og disse strekker seg ikke like langt ut som tidligere.



Figur 6-7: Realistisk skyggekast med hensyn til nærliggende vindkraftverk med definerte skyggekastmottakere.

6.2.4 Individuelle mottakere – Realistisk scenario

Tabell 6-4 oppsummerer resultatet av det realistiske scenarioet. Det er benyttet samme metodikk som i avsnitt 6.1.4. Mottakeren som anses å være mest utsatt for skyggekast opplever nesten 65 timer per år (mottaker Z). Denne fritidsboligen er under bygging og ligger i nærhet av planområdet, omtrent 550 meter unna nærmeste turbin og det er derfor forventet at vil ha en stor belastning. Tabellen viser i tillegg økningen av forventet skyggekasttimer per år når man tar med sumvirkninger.

Tabell 6-4: Realistisk skyggekastberegning for skyggekastmottakerne for Moifjellet vindkraftverk med hensyn til nærliggende vindkraftverk. Tabellen viser økning i antatt skyggekast når det tas hensyn til sumvirkninger. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Mottaker	Timer/år	Økning
A	Moi 32	23:03	-
B	Moi 26	22:23	-
C	Moi 21	21:52	-
D	Buevegen 1805	21:39	-
E	Buevegen 1816	22:11	-
F	Buevegen 1818	23:19	-
G	Buevegen 1786	18:42	-

H	Buevegen 1784	20:47	-
I	Buevegen 1782	20:49	-
J	Buevegen 1780	20:55	-
K	Buevegen 1778	17:24	-
L	Buevegen 1850	23:02	-
M	Buevegen 1941	14:26	-
N	Buevegen 1988	12:51	-
O	Buevegen 2023	10:56	-
P	Buevegen 2021	10:19	-
Q	Buevegen 2141	9:10	-
R	Buevegen 2165	6:35	-
S	Vaule 176	5:01	-
T	Vaule 247	8:22	-
U	Store Svela, eiendom 60/5, Bjerkreim kommune	21:46	-
V	Osland 45	9:51	-
W	Osland 65	10:12	-
X	Buevegen 2100	4:23	-
Y	Vaule 218	5:48	-
Z	Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune	65:33	-
AA	Heiavegen 543	0:16	-
AB	Heiavegen 541	2:37	-
AC	Brusalivegen 201	5:52	05:52
AD	Eiendom 121/8, Hå kommune	13:45	01:07
AE	Brusalivegen 217	10:58	02:10
AF	Brusalivegen 215	8:43	02:01
AG	Brusalivegen 219	13:34	02:06
AH	Buevegen 1463	6:36	-
AI	Buevegen 1288	0:00	-
AJ	Buevegen 1272	0:00	-
AK	Buevegen 1461	4:24	-
AL	Buevegen 1270	0:00	-
AM	Buevegen 1290	0:00	-
AN	Buevegen 1292	0:00	-
AO	Buevegen 1343	0:00	-
AP	Buevegen 1496	2:13	-
AQ	Buevegen 1500	5:06	-
AR	Buevegen 1502	5:18	-
AS	Buevegen 1286	0:00	-
AT	Buevegen 1498	2:24	-
AU	Buevegen 1340	0:00	-
AV	Osland 85	10:20	-
AW	Laksesvela 60	4:04	04:04

AX	Laksesvela 58	4:14	04:14

I motsetning til teoretisk skyggekast, tar realistisk skyggekast mer hensyn til realistiske forhold som vær og solskinnsvariasjoner, og gir dermed et mer nøyaktig bilde av hvordan mottakerne vil bli påvirket av nærliggende vindkraftverk. Mens teoretisk skyggekast antar maksimal påvirkning basert på ideelle solforhold, reflekterer realistisk skyggekast hvordan mottakerne faktisk vil oppleve skyggekast under varierende værforhold, noe som ofte resulterer i kortere varighet og mindre intensitet enn de maksimale beregningene tilsier. Det er derfor ulike resultater mellom de to scenarioene.

Når man tar hensyn til nærliggende vindkraftverk, endres resultatene slik at færre mottakere ligger under NVEs anbefalte grenseverdi på 8 timer årlig skyggekast. Det er nå 23 mottakere som er under anbefalt grenseverdi (mottakere R, S, X, Y, AA-AC, AH-AU, AW OG AX). Likt som verst tenkelige scenario er det 7 mottakere som opplever endring som følge av eksisterende vindkraftverk. Den mottakeren som får en størst endring, som går fra under grenseverdi til over grenseverdi er mottaker AF, den går fra 6:42 til 8:43. Det er tre mottakere (AC, AW og AX) som går fra null til å oppleve skyggekast som følge av Bjerkreim vindkraftverk. Det vil si at de nærliggende vindkraftverkene fører til en økning i den totale skyggekastbelastningen for enkelte mottakere.

Basert på hvilke mottakere som opplever en økning i skyggekast, kan vi konkludere med at flere mottakere sørøst og sørvest for Moifjellet vindkraftverk opplever økt skyggekastbelastning fra Bjerkreim vindkraftverk.

Det vil si at for kun Moifellet vindkraftverk er det hovedsakelig mottakerne nord for vindkraftverket som belastes over anbefalt grenseverdi. Mens når man tar hensyn til nærliggende vindkraftverk vil noen av mottakere til øst og til vest merke en større belastning.

Det er ingen av mottakerne som opplever skyggekast over anbefalt grenseverdi fra de eksisterende vindkraftverkene. De mottakerne som merker en belastning fra eksisterende, opplever det i hovedsak tidlig på morgenen eller sent på kvelden i sommerhalvåret. Det er ulike tidspunkt og på ulike tider av året enn hva det forventes Moifjellet vindkraftverk vil bidra med. Det vil si at det vil bidra med mer skyggekast på flere tidspunkt igjennom dagen. En oversikt over når hver mottaker opplever skyggekast ligger i vedlegg.

7 Sammenligning av alternativene

Ved vurdering av hvor mange mottakere som overskrider grenseverdiene for skyggekast, må både teoretiske og realistiske beregninger legges til grunn. Basert på resultatene i kapittel 5.2 og 6.2, som er inkludert sumvirkninger fra eksisterende vindkraftverk, viser beregningene at:

- Alternativ 1 medfører at 35 mottakere havner over anbefalt grenseverdi for skyggekast
- Alternativ 2 medfører at 28 mottakere havner over anbefalt grenseverdi for skyggekast

De realistiske beregningene viste at for alternativ 1 havner 33 mottakere over grenseverdien, men for alternativ 2 havner 27 mottakere over grenseverdien.

For å sammenligne alternativene er det utarbeidet en tabell som viser realistisk skyggekast med sumvirkninger fra eksisterende vindkraftverk (resultater fra avsnitt 5.2.4 og 6.2.4). Tabell 7-1 omfatter de 14 mottakerne som vil oppleve en forskjell mellom alternativene.

Tabell 7-1. Realistisk skyggekastbelasting for de mottakerne som vil oppleve en forskjell mellom alternativ 1 og alternativ 2. De 8 mottakerne som kun er utsatt for skyggekast i alternativ 1 med både Moifjellet og Mellomstrand er markert med blå rad.

	Adresse	Alternativ 1	Alternativ 2	Forskjell
		Timer/år (realistisk)	Timer/år (realistisk)	
AH	Buevegen 1463	37:39	6:36	31:03
AI	Buevegen 1288	01:53	0:00	01:53
AJ	Buevegen 1272	01:40	0:00	01:40
AK	Buevegen 1461	34:46	4:24	30:22
AL	Buevegen 1270	01:24	0:00	01:24
AM	Buevegen 1290	02:02	0:00	02:02
AN	Buevegen 1292	03:03	0:00	03:03
AO	Buevegen 1343	07:32	0:00	07:32
AP	Buevegen 1496	18:59	2:13	16:46
AQ	Buevegen 1500	26:38	5:06	21:32
AR	Buevegen 1502	26:23	5:18	21:05
AS	Buevegen 1286	01:58	0:00	01:58
AT	Buevegen 1498	22:52	2:24	20:28
AU	Buevegen 1340	03:41	0:00	03:41

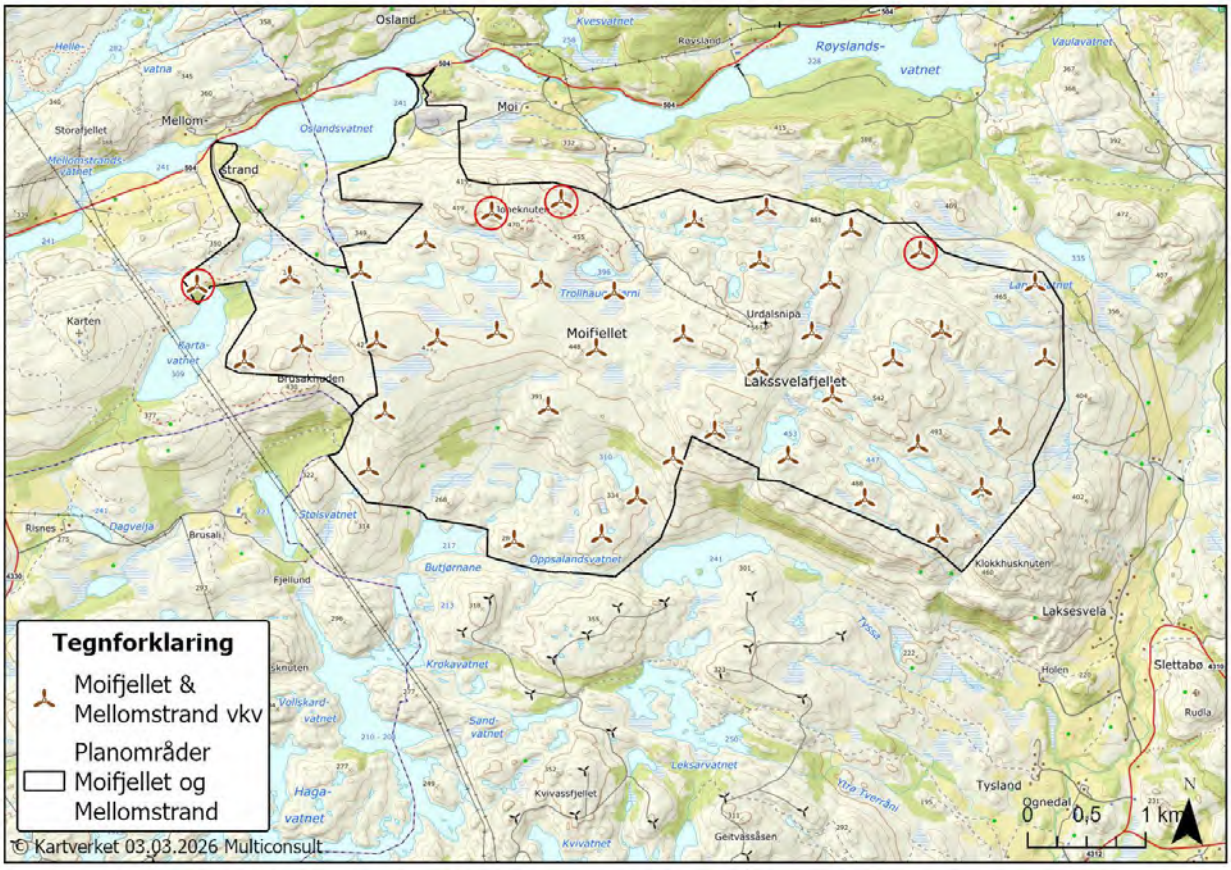
Det er tydelig at alternativ 1 gir mest skyggekast for flest mottakere, noe som henger sammen med at det fire mer turbiner i alternativ 1. Åtte av mottakerne (AI, AJ, AL-AO, AS og AU) i tabellen påvirkes kun av alternativ 1, da de ligger utenfor influensområdet til alternativ 2.

I tillegg er det seks mottakere (AH, AK, AP-AR og AT) som vil oppleve betydelig mer skyggekast med alternativ 1. Dette skyldes at de fire turbinene ved Mellomstrand kommer nær disse mottakerne. For alle seks fører alternativ 1 til at de overskrider grenseverdiene, mens de med alternativ 2 ligger under. Ved utbygging av alternativ 1 må det derfor vurderes tiltak for disse seks mottakerne i tillegg.

8 Avbøtende tiltak

For å sikre at ingen mottakere blir utsatt for skyggekast over anbefalt grenseverdi er det noen aktuelle tiltak som kan gjøres. Før utbygging burde det utarbeides skyggekastkalendere. Skyggekastkalendere viser når skyggekast er forventet å kunne inntreffe. Sammen med automatiserte lyssensorer kan turbinene stoppes dersom det både er klarvær og man ser i skyggekastkalenderen at en mottaker kan være utsatt. Dette vil minimere ulempene for naboer og andre berørte.

Et annet tiltak kan være endring av turbinlayout. Det er spesielt fire turbiner som bidrar med mye skyggekast, en liten justering i layout kan bidra til mindre skyggekastbelastning for mottakerne. I Figur 8-1 er de fire turbinene som bidrar med mest skyggekast markert med en røs sirkel.



Figur 8-1: Kart med det utredningsutlegget. De turbinene som bidrar med mest skyggekast er markert med rød ring rundt.

9 Påvirkning på bebyggelse og friluftsliv

Siden det er flere boliger i nærheten av vindkraftverket, forventes det at bebyggelsen kan påvirkes av skyggekast. Også friluftsområder kan bli utsatt. Det er registrert et viktig friluftsområde på Moifjellet og vannene nord for Moifjellet, og et viktig friluftsområde ved Brusaknuden og Karten[3]. Det er i tillegg registrert en turrute opp til Urdalsnipa og en turrute til Brusaknuden og Karten. Både turrutene og friluftsområdene vil være i hovedsakelig innenfor både de «gule» og «røde» områdene. Dette kan føre til at turgåere opplever skyggekast i perioder med sollys, noe som kan påvirke brukervennligheten av områdene. Alternativ 1 vil føre til den største utbredelsen av skyggekast og vil dermed føre til en større belastning på friluftsliv.

[3] For utdypende informasjon om friluftsområdene se egen utredning om friluftsliv, *Moifjellet og Mellomstrand – Konsekvensutredning Friluftsliv*

10 Konklusjon

Skyggekastanalysen for Moifjellet og Mellomstrand vindkraftverk viser at flere boliger og fritidsbygg i influensområdet vil kunne oppleve betydelig skyggekastbelastning, og i tillegg vil skyggekast kunne berøre viktige friluftsområder. Beregningene viser at skyggekast kan bli en betydelig utfordring for flere mottakere, særlig i områdene nord for Moifjellet.

- **Alternativ 1** (Moifjellet + Mellomstrand) gir størst omfang av skyggekast, med 35 mottakere over NVEs anbefalte grenseverdi.
- **Alternativ 2** (kun Moifjellet) gir noe lavere belastning, men fortsatt 28 mottakere over grenseverdien.

Noen mottakere vil kunne oppleve sumvirkninger fra eksisterende vindkraftverk, de mottakerne er lokalisert sørøst og sørvest for Moifjellet.

Skyggekast forekommer hovedsakelig i vinterhalvåret når solbanen er lav, og belastningen er størst midt på dagen. Enkelte mottakere vil også oppleve skyggekast tidlig morgen og sen kveld i sommerhalvåret.

Viktige friluftsområder og turruter, blant annet ved Moifjellet, Brusaknuden og Karten, ligger innenfor områder med høy skyggekastbelastning. Dette kan redusere opplevelseskvaliteten og brukervennligheten for turgåere.

Det er anbefales avbøtende tiltak for å redusere skyggekast. Skyggekastkalendere kan utarbeides for å vise når skyggekast er forventet å kunne inntreffe. Sammen med automatiserte lyssensorer kan turbinene stoppes dersom det både er klarvær og man ser i skyggekastkalenderen at en mottaker kan være utsatt. Dette vil minimere ulempene for naboer og andre berørte. Et annet tiltak kan være endring av turbinlayout. Det er spesielt fire turbiner som bidrar med mye skyggekast, en liten justering i layout kan bidra til mindre skyggekastbelastning for mottakerne.

Samlet vurdering

Alternativ 2 gir minst skyggekast og lavest påvirkning på friluftsliv, men uansett valg av alternativ må tiltak implementeres for å sikre at belastningen holdes innenfor akseptable nivåer. Det anbefales at avbøtende tiltak planlegges allerede i prosjekteringsfasen for å minimere ulemper for naboer og berørte områder.

11 Vedlegg

1.1 Skyggekastkalender – Tabell – Verst tenkelig scenario Moifjellet og Mellomstrand vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-1.1_Tabell-Moifjellet og Mellomstrand-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

1.2 Skyggekastkalender – Grafisk – Verst tenkelig scenario Moifjellet og Mellomstrand vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-1.2_Grafisk-Moifjellet og Mellomstrand-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 5-3.

2.1 Skyggekastkalender – Tabell – Realistisk scenario Moifjellet og Mellomstrand vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-2.1_Tabell-Moifjellet og Mellomstrand-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

2.2 Skyggekastkalender – Grafisk – Realistisk scenario Moifjellet og Mellomstrand vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-2.2_Grafisk-Moifjellet og Mellomstrand-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 5-3.

3.1 Skyggekastkalender – Tabell – Verst tenkelig scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-3.1_Tabell-Moifjellet og Mellomstrand-med-nærliggende-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

3.2 Skyggekastkalender – Grafisk – Verst tenkelig scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-3.2_Grafisk- Moifjellet og Mellomstrand-med-nærliggende-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 5-3.

4.1 Skyggekastkalender – Tabell – Realistisk scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-4.1_Tabell- Moifjellet og Mellomstrand-med-nærliggende-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

4.2 Skyggekastkalender – Grafisk – Realistisk scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-4.2_Grafisk- Moifjellet og Mellomstrand-med-nærliggende-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 5-3.

5.1 Skyggekastkalender – Tabell – Verst tenkelig scenario kun Moifjellet vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-5.1_Tabell-Moifjellet-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

5.2 Skyggekastkalender – Grafisk – Verst tenkelig scenario kun Moifjellet vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-5.2_Grafisk-Moifjellet-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 6-3.

6.1 Skyggekastkalender – Tabell – Realistisk scenario kun Moifjellet vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-6.1_Tabell-Moifjellet-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

6.2 Skyggekastkalender – Grafisk – Realistisk scenario kun Moifjellet vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-6.2_Grafisk-Moifjellet-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 6-3.

7.1 Skyggekastkalender – Tabell – Verst tenkelig scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-7.1_Tabell- Moifjellet-med-nærliggende-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

7.2 Skyggekastkalender – Grafisk – Verst tenkelig scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-7.2_Grafisk- Moifjellet-med-nærliggende-worst-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 6-3.

8.1 Skyggekastkalender – Tabell – Realistisk scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-8.1_Tabell- Moifjellet-med-nærliggende-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen kalender.

8.2 Skyggekastkalender – Grafisk – Realistisk scenario med nærliggende vindkraftverk
Dokument: *10265688-01-RIEn-RAP-001-Vedlegg-8.2_Grafisk- Moifjellet-med-nærliggende-realistic-case*
Vedlegget representerer råresultatet fra WindPRO sin SHADOW-modul der hver skyggekastmottaker har sin egen belastningsfigur som eksempelvis vist i Figur 6-3.

12 Referanser

Norges vassdrags- og energidirektorat. (2014). *Skyggekast fra vindkraftverk: Veileder for beregning av skyggekast og presentasjon av NVEs forvaltningspraksis* (Veileder nr. 2/2014). NVE. https://publikasjoner.nve.no/veileder/2014/veileder2014_02.pdf

Norges vassdrags- og energidirektorat. (2022a). *Oppdatert kunnskapsgrunnlag om skyggekast fra vindturbiner* (Ekstern rapport nr. 4/2022). NVE. https://publikasjoner.nve.no/eksternrapport/2022/eksternrapport2022_04.pdf

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Vedlegg 1.1

Tabell Moifjellet og Mellomstrand vindkraftverk

worst case

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:19 (33)	07:35		09:10 (15)	07:07	05:44	04:40
	15:53			16:56	51	13:02 (20)	18:05	24	09:34 (15)	20:17	21:26	22:30
2	09:27			08:43		11:24 (33)	07:33		09:10 (15)	07:04	05:41	04:38
	15:54			16:58	34	12:41 (28)	18:07	25	09:35 (15)	20:19	21:28	22:32
3	09:27			08:41		12:08 (28)	07:30		09:10 (15)	07:01	05:39	04:37
	15:55			17:01	43	14:41 (23)	18:09	24	09:34 (15)	20:21	21:30	22:34
4	09:26			08:39		12:07 (28)	07:27		09:10 (15)	06:58	05:36	04:36
	15:57			17:03	56	14:50 (23)	18:12	24	09:34 (15)	20:24	21:33	22:35
5	09:26			08:37		12:06 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	61	14:52 (23)	18:14	23	09:33 (15)	20:26	21:35	22:37
6	09:25			08:34		12:06 (28)	07:21		08:24 (17)	06:52	05:31	04:34
	16:00			17:08	66	14:54 (23)	18:17	28	09:32 (15)	20:28	21:37	22:38
7	09:24			08:32		12:05 (28)	07:19		08:21 (17)	06:50	05:29	04:33
	16:02			17:11	69	14:54 (23)	18:19	32	09:30 (15)	20:30	21:40	22:39
8	09:24			08:30		12:05 (28)	07:16		08:19 (17)	06:47	05:26	04:32
	16:03			17:13	72	14:56 (23)	18:21	32	09:28 (15)	20:33	21:42	22:40
9	09:23			08:27		12:04 (28)	07:13		08:18 (17)	06:44	05:24	04:31
	16:05			17:16	75	14:57 (23)	18:24	29	09:26 (15)	20:35	21:44	22:42
10	09:22			08:25		12:04 (28)	07:10		08:17 (17)	06:41	05:22	04:30
	16:07			17:18	80	15:35 (24)	18:26	18	08:35 (17)	20:37	21:46	22:43
11	09:21			08:23		12:04 (28)	07:07		08:17 (17)	06:38	05:19	04:29
	16:09			17:21	91	15:40 (24)	18:28	18	08:35 (17)	20:40	21:49	22:44
12	09:20			08:20		12:04 (28)	07:04		08:17 (17)	06:35	05:17	04:29
	16:11			17:23	99	15:47 (24)	18:31	19	08:36 (17)	20:42	21:51	22:45
13	09:18			08:18		12:03 (28)	07:01		08:17 (17)	06:32	05:15	04:28
	16:13			17:26	101	15:48 (24)	18:33	18	08:35 (17)	20:44	21:53	22:46
14	09:17			08:15		12:04 (28)	06:59		08:17 (17)	06:30	05:13	04:28
	16:15			17:28	99	15:48 (24)	18:35	17	08:34 (17)	20:47	21:55	22:47
15	09:16			08:13		12:04 (28)	06:56		08:18 (17)	06:27	05:10	04:27
	16:17			17:31	96	15:46 (24)	18:38	15	08:33 (17)	20:49	21:58	22:47
16	09:15			08:10		12:03 (28)	06:53		08:19 (17)	06:24	05:08	04:27
	16:19			17:33	92	15:44 (24)	18:40	12	08:31 (17)	20:51	22:00	22:48
17	09:13			08:07		12:03 (28)	06:50		08:22 (17)	06:21	05:06	04:27
	16:21			17:36	86	15:41 (24)	18:42	5	08:27 (17)	20:53	22:02	22:49
18	09:12			08:05		12:04 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	78	14:58 (23)	18:45			20:56	22:04	22:49
19	09:10			08:02		12:05 (28)	06:44			06:16	05:02	04:27
	16:25			17:40	76	14:58 (23)	18:47			20:58	22:06	22:50
20	09:08			08:00		12:05 (28)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:57 (23)	18:49			21:00	22:08	22:50
21	09:07		11:29 (33)	07:57		12:05 (28)	06:38			06:10	04:58	04:27
	16:30	8	13:08 (20)	17:45	71	14:56 (23)	18:51			21:03	22:10	22:50
22	09:05		11:28 (33)	07:54		12:06 (28)	06:36			06:08	04:56	04:27
	16:32	22	13:07 (20)	17:48	66	14:55 (23)	18:54			21:05	22:12	22:50
23	09:03		11:29 (33)	07:52		09:20 (15)	06:33			06:05	04:54	04:27
	16:34	21	13:08 (20)	17:50	69	14:54 (23)	18:56			21:07	22:14	22:50
24	09:02		11:28 (33)	07:49		09:16 (15)	06:30			06:02	04:52	04:27
	16:37	33	13:08 (20)	17:53	69	14:52 (23)	18:58			21:10	22:16	22:51
25	09:00		11:27 (33)	07:46		09:14 (15)	06:27			05:59	04:51	04:28
	16:39	33	13:08 (20)	17:55	64	14:49 (23)	19:01			21:12	22:18	22:50
26	08:58		11:22 (33)	07:44		09:13 (15)	06:24			05:57	04:49	04:28
	16:41	37	13:08 (20)	17:57	54	14:45 (23)	19:03			21:14	22:20	22:50
27	08:56		11:14 (33)	07:41		09:12 (15)	06:21			05:54	04:47	04:29
	16:44	43	13:07 (20)	18:00	41	12:35 (28)	19:05			21:17	22:22	22:50
28	08:54		11:14 (33)	07:38		09:11 (15)	06:18			05:52	04:46	04:30
	16:46	52	13:07 (20)	18:02	33	12:29 (28)	19:07			21:19	22:24	22:50
29	08:52		11:15 (33)				07:15			05:49	04:44	04:30
	16:49	56	13:07 (20)				20:10			21:21	22:25	22:50
30	08:50		11:15 (33)				07:12			05:46	04:43	04:31
	16:51	59	13:06 (20)				20:12			21:24	22:27	22:49
31	08:48		11:17 (33)				07:10				04:41	
	16:54	57	13:05 (20)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		421			1966			363				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,64			0,61			0,73				
Total reduction		0,26			0,24			0,29				
Total, real		108			479			106				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September			October		November			December	
1	04:32		05:24		06:33			07:39		08:56 (17)	07:51		11:33 (28)	09:00
	22:49		22:01		20:40			19:13	19	09:15 (17)	16:49	78	14:57 (24)	15:51
2	04:33		05:26		06:35			07:42		08:56 (17)	07:54		11:34 (28)	09:02
	22:48		21:58		20:37			19:10	18	09:14 (17)	16:46	74	14:26 (23)	15:50
3	04:34		05:28		06:37			07:44		08:55 (17)	07:56		11:35 (28)	09:03
	22:47		21:56		20:34			19:07	19	09:14 (17)	16:44	71	14:25 (23)	15:49
4	04:35		05:31		06:40			07:46		08:55 (17)	07:59		11:35 (28)	09:05
	22:47		21:54		20:31			19:04	26	10:01 (15)	16:41	69	14:24 (23)	15:48
5	04:36		05:33		06:42			07:48		08:56 (17)	08:01		11:36 (28)	09:07
	22:46		21:51		20:28			19:02	31	10:05 (15)	16:39	64	14:23 (23)	15:47
6	04:37		05:35		06:44			07:51		08:57 (17)	08:03		11:37 (28)	09:09
	22:45		21:49		20:25			18:59	32	10:06 (15)	16:37	61	14:22 (23)	15:46
7	04:39		05:37		06:46			07:53		08:58 (17)	08:06		11:37 (28)	09:10
	22:44		21:47		20:22			18:56	31	10:07 (15)	16:34	53	14:17 (23)	15:45
8	04:40		05:39		06:49			07:55		09:03 (17)	08:08		11:39 (28)	09:12
	22:43		21:44		20:20			18:53	23	10:08 (15)	16:32	42	14:11 (23)	15:45
9	04:41		05:42		06:51			07:57		09:45 (15)	08:11		10:53 (33)	09:13
	22:42		21:42		20:17			18:50	23	10:08 (15)	16:30	37	12:12 (28)	15:44
10	04:43		05:44		06:53			08:00		09:45 (15)	08:13		10:50 (33)	09:15
	22:40		21:39		20:14			18:47	24	10:09 (15)	16:28	52	12:34 (20)	15:44
11	04:44		05:46		06:55			08:02		09:44 (15)	08:15		10:48 (33)	09:16
	22:39		21:37		20:11			18:45	24	10:08 (15)	16:25	57	12:36 (20)	15:43
12	04:46		05:48		06:57			08:04		09:43 (15)	08:18		10:47 (33)	09:18
	22:38		21:34		20:08			18:42	24	10:07 (15)	16:23	58	12:37 (20)	15:43
13	04:47		05:51		07:00			08:07		09:44 (15)	08:20		10:47 (33)	09:19
	22:37		21:31		20:05			18:39	23	10:07 (15)	16:21	57	12:39 (20)	15:42
14	04:49		05:53		07:02			08:09		09:44 (15)	08:22		10:46 (33)	09:20
	22:35		21:29		20:02			18:36	37	13:05 (28)	16:19	52	12:39 (20)	15:42
15	04:51		05:55		07:04			08:11		09:45 (15)	08:25		10:47 (33)	09:21
	22:34		21:26		19:59			18:33	44	13:09 (28)	16:17	43	12:40 (20)	15:42
16	04:52		05:57		07:06			08:13		09:45 (15)	08:27		10:55 (33)	09:22
	22:32		21:24		19:56			18:31	59	15:19 (23)	16:15	37	12:41 (20)	15:42
17	04:54		06:00		07:08			08:16		09:47 (15)	08:29		11:00 (33)	09:23
	22:30		21:21		19:54			18:28	66	15:22 (23)	16:13	33	12:41 (20)	15:42
18	04:56		06:02		07:11			08:18		09:48 (15)	08:32		11:02 (33)	09:24
	22:29		21:18		19:51			18:25	71	15:24 (23)	16:11	33	12:42 (20)	15:42
19	04:58		06:04		07:13			08:20		09:52 (15)	08:34		11:04 (33)	09:25
	22:27		21:16		19:48			18:22	70	15:26 (23)	16:09	21	12:43 (20)	15:42
20	05:00		06:06		07:15			08:23		12:37 (28)	08:36		11:03 (33)	09:26
	22:25		21:13		19:45			18:20	68	15:26 (23)	16:08	22	12:42 (20)	15:43
21	05:01		06:08		07:17			08:25		12:36 (28)	08:39		11:04 (33)	09:26
	22:24		21:10		19:42			18:17	71	15:27 (23)	16:06	8	12:43 (20)	15:43
22	05:03		06:11		07:19			08:27		12:35 (28)	08:41			09:27
	22:22		21:08		19:39			18:14	74	15:27 (23)	16:04			15:43
23	05:05		06:13		07:22			08:30		12:35 (28)	08:43			09:27
	22:20		21:05		19:36			18:12	76	15:28 (23)	16:02			15:44
24	05:07		06:15		07:24			08:32		12:34 (28)	08:45			09:28
	22:18		21:02		19:33			18:09	78	15:28 (23)	16:01			15:44
25	05:09		06:17		07:26			07:35		11:34 (28)	08:47			09:28
	22:16		20:59		19:30			17:06	86	15:12 (24)	15:59			15:45
26	05:11		06:20		07:28			07:37		11:33 (28)	08:50			09:28
	22:14		20:56		19:27			17:04	94	15:14 (24)	15:58			15:46
27	05:13		06:22		07:30		09:02 (17)	07:39		11:33 (28)	08:52			09:28
	22:12		20:54		19:25	10	09:12 (17)	17:01	97	15:16 (24)	15:56			15:47
28	05:16		06:24		07:33		09:00 (17)	07:42		11:33 (28)	08:54			09:28
	22:10		20:51		19:22	13	09:13 (17)	16:59	101	15:18 (24)	15:55			15:48
29	05:18		06:26		07:35		08:58 (17)	07:44		11:33 (28)	08:56			09:28
	22:07		20:48		19:19	16	09:14 (17)	16:56	102	15:18 (24)	15:54			15:49
30	05:20		06:29		07:37		08:56 (17)	07:47		11:33 (28)	08:58			09:28
	22:05		20:45		19:16	18	09:14 (17)	16:54	99	15:15 (24)	15:52			15:50
31	05:22		06:31					07:49		11:34 (28)				09:28
	22:03		20:42					16:51	90	15:09 (24)				15:51
Potential sun hours	546		478		386			319			236			199
Total, worst case						57			1700			1022		
Sun reduction						0,50			0,50			0,50		
Oper. time red.						0,80			0,80			0,80		
Wind dir. red.						0,72			0,63			0,62		
Total reduction						0,29			0,25			0,25		
Total, real						16			428			255		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:16 (33)	07:35		09:09 (15)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (23)	18:05	23	09:32 (15)	20:17	21:26	22:30
2	09:27			08:43		12:00 (28)	07:33		09:09 (15)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (23)	18:07	24	09:33 (15)	20:19	21:28	22:32
3	09:27			08:41		11:58 (28)	07:30		09:09 (15)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (23)	18:09	24	09:33 (15)	20:21	21:30	22:34
4	09:26			08:39		11:58 (28)	07:27		09:09 (15)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (23)	18:12	23	09:32 (15)	20:24	21:33	22:35
5	09:26			08:37		11:57 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (23)	18:14	21	09:31 (15)	20:26	21:35	22:37
6	09:25			08:34		11:57 (28)	07:21		09:10 (15)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (23)	18:17	20	09:30 (15)	20:28	21:37	22:38
7	09:24			08:32		11:56 (28)	07:19		09:11 (15)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (23)	18:19	17	09:28 (15)	20:30	21:40	22:39
8	09:24			08:30		11:56 (28)	07:16		09:13 (15)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (24)	18:21	12	09:25 (15)	20:33	21:42	22:40
9	09:23			08:27		11:56 (28)	07:13		09:16 (15)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (24)	18:24	5	09:21 (15)	20:35	21:44	22:42
10	09:22			08:25		11:55 (28)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (24)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (28)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (24)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (28)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (24)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (24)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (23)	18:45			20:56	22:04	22:49
19	09:10		12:54 (20)	08:02		11:57 (28)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (20)	17:40	70	14:48 (23)	18:47			20:58	22:06	22:50
20	09:08		11:12 (33)	08:00		11:57 (28)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (20)	17:43	68	14:47 (23)	18:49			21:00	22:08	22:50
21	09:07		11:11 (33)	07:57		11:58 (28)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (20)	17:45	64	14:46 (23)	18:51			21:03	22:10	22:50
22	09:05		11:11 (33)	07:54		11:59 (28)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (20)	17:48	58	14:44 (23)	18:54			21:05	22:12	22:50
23	09:03		11:11 (33)	07:52		09:17 (15)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (20)	17:50	62	14:43 (23)	18:56			21:07	22:14	22:50
24	09:02		11:10 (33)	07:49		09:14 (15)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (20)	17:53	57	14:39 (23)	18:58			21:10	22:16	22:51
25	09:00		11:08 (33)	07:46		09:13 (15)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (20)	17:55	42	12:28 (28)	19:01			21:12	22:18	22:50
26	08:58		11:09 (33)	07:44		09:11 (15)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (20)	17:57	38	12:24 (28)	19:03			21:14	22:20	22:50
27	08:56		11:09 (33)	07:41		09:10 (15)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (20)	18:00	22	09:32 (15)	19:05			21:17	22:22	22:50
28	08:54		11:10 (33)	07:38		09:09 (15)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (20)	18:02	23	09:32 (15)	19:07			21:19	22:24	22:50
29	08:52		11:12 (33)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (20)				20:10			21:21	22:25	22:50
30	08:50		11:12 (33)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (20)				20:12			21:24	22:27	22:49
31	08:48		11:14 (33)				07:10				04:41	
	16:54	56	14:29 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,65			0,61			0,74				
Total reduction		0,26			0,24			0,29				
Total, real		151			468			50				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:25 (28)	09:00
	22:49	22:01	20:40	19:13			16:49	96	15:09 (24)	15:51
2	04:33	05:26	06:35	07:42			07:54		11:25 (28)	09:02
	22:48	21:58	20:37	19:10			16:46	90	15:04 (24)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:26 (28)	09:03
	22:47	21:56	20:34	19:07			16:44	82	14:58 (24)	15:49
4	04:35	05:31	06:40	07:46			07:59		11:26 (28)	09:05
	22:47	21:54	20:31	19:04			16:41	72	14:17 (23)	15:48
5	04:36	05:33	06:42	07:48		09:51 (15)	08:01		11:27 (28)	09:07
	22:46	21:51	20:28	19:02	10	10:01 (15)	16:39	70	14:17 (23)	15:47
6	04:37	05:35	06:44	07:51		09:48 (15)	08:03		11:28 (28)	09:09
	22:45	21:49	20:25	18:59	15	10:03 (15)	16:37	65	14:16 (23)	15:46
7	04:39	05:37	06:46	07:53		09:46 (15)	08:06		11:28 (28)	09:10
	22:44	21:47	20:22	18:56	18	10:04 (15)	16:34	62	14:14 (23)	15:45
8	04:40	05:39	06:49	07:55		09:45 (15)	08:08		11:29 (28)	09:12
	22:43	21:44	20:20	18:53	21	10:06 (15)	16:32	57	14:13 (23)	15:45
9	04:41	05:42	06:51	07:57		09:44 (15)	08:11		11:30 (28)	09:13
	22:42	21:42	20:17	18:50	22	10:06 (15)	16:30	53	14:12 (23)	15:44
10	04:43	05:44	06:53	08:00		09:44 (15)	08:13		10:47 (33)	09:15
	22:40	21:39	20:14	18:47	23	10:07 (15)	16:28	58	14:10 (23)	15:44
11	04:44	05:46	06:55	08:02		09:43 (15)	08:15		10:45 (33)	09:16
	22:39	21:37	20:11	18:45	23	10:06 (15)	16:25	55	13:59 (23)	15:43
12	04:46	05:48	06:57	08:04		09:42 (15)	08:18		10:44 (33)	09:18
	22:38	21:34	20:08	18:42	24	10:06 (15)	16:23	57	12:31 (20)	15:43
13	04:47	05:51	07:00	08:07		09:43 (15)	08:20		10:43 (33)	09:19
	22:37	21:31	20:05	18:39	23	10:06 (15)	16:21	59	12:32 (20)	15:42
14	04:49	05:53	07:02	08:09		09:42 (15)	08:22		10:42 (33)	09:20
	22:35	21:29	20:02	18:36	23	10:05 (15)	16:19	58	12:33 (20)	15:42
15	04:51	05:55	07:04	08:11		09:43 (15)	08:25		10:42 (33)	09:21
	22:34	21:26	19:59	18:33	33	12:54 (28)	16:17	53	12:34 (20)	15:42
16	04:52	05:57	07:06	08:13		09:44 (15)	08:27		10:42 (33)	09:22
	22:32	21:24	19:56	18:31	39	12:58 (28)	16:15	45	12:35 (20)	15:42
17	04:54	06:00	07:08	08:16		09:45 (15)	08:29		10:41 (33)	09:23
	22:30	21:21	19:54	18:28	46	15:07 (23)	16:13	47	12:35 (20)	15:42
18	04:56	06:02	07:11	08:18		09:46 (15)	08:32		10:44 (33)	09:24
	22:29	21:18	19:51	18:25	59	15:12 (23)	16:11	46	12:36 (20)	15:42
19	04:58	06:04	07:13	08:20		09:49 (15)	08:34		10:46 (33)	09:25
	22:27	21:16	19:48	18:22	62	15:15 (23)	16:09	45	12:37 (20)	15:42
20	05:00	06:06	07:15	08:23		12:30 (28)	08:36		10:46 (33)	09:26
	22:25	21:13	19:45	18:20	60	15:16 (23)	16:08	45	12:37 (20)	15:43
21	05:01	06:08	07:17	08:25		12:29 (28)	08:39		10:46 (33)	09:26
	22:24	21:10	19:42	18:17	65	15:17 (23)	16:06	36	12:37 (20)	15:43
22	05:03	06:11	07:19	08:27		12:27 (28)	08:41		10:48 (33)	09:27
	22:22	21:08	19:39	18:14	70	15:18 (23)	16:04	30	12:38 (20)	15:43
23	05:05	06:13	07:22	08:30		12:27 (28)	08:43		12:30 (20)	09:27
	22:20	21:05	19:36	18:12	72	15:19 (23)	16:02	5	12:35 (20)	15:44
24	05:07	06:15	07:24	08:32		12:26 (28)	08:45			09:28
	22:18	21:02	19:33	18:09	75	15:19 (23)	16:01			15:44
25	05:09	06:17	07:26	07:35		11:26 (28)	08:47			09:28
	22:16	20:59	19:30	17:06	76	14:20 (23)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:25 (28)	08:50			09:28
	22:14	20:56	19:27	17:04	81	15:04 (24)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:25 (28)	08:52			09:28
	22:12	20:54	19:25	17:01	91	15:08 (24)	15:56			15:47
28	05:16	06:24	07:33	07:42		11:25 (28)	08:54			09:28
	22:10	20:51	19:22	16:59	95	15:10 (24)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:24 (28)	08:56			09:28
	22:07	20:48	19:19	16:56	99	15:11 (24)	15:54			15:49
30	05:20	06:29	07:37	07:47		11:25 (28)	08:58			09:28
	22:05	20:45	19:16	16:54	99	15:12 (24)	15:52			15:50
31	05:22	06:31		07:49		11:25 (28)				09:28
	22:03	20:42		16:51	101	15:13 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1425			1286		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,63			0,62		
Total reduction					0,25			0,25		
Total, real					357			321		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		10:42 (33)	07:35		08:50 (15)	07:07	05:44	04:40
	15:53			16:56	72	14:06 (23)	18:05	39	11:29 (28)	20:17	21:26	22:30
2	09:27			08:43		10:44 (33)	07:33		08:50 (15)	07:04	05:41	04:38
	15:54			16:58	72	14:08 (23)	18:07	31	11:25 (28)	20:19	21:28	22:32
3	09:27			08:41		10:46 (33)	07:30		08:49 (15)	07:01	05:39	04:37
	15:55			17:01	71	14:10 (23)	18:09	21	09:10 (15)	20:21	21:31	22:34
4	09:26			08:39		10:47 (33)	07:27		08:48 (15)	06:58	05:36	04:36
	15:57			17:03	77	15:02 (24)	18:12	22	09:10 (15)	20:24	21:33	22:35
5	09:26			08:37		10:50 (33)	07:24		08:48 (15)	06:55	05:34	04:35
	15:58			17:06	77	15:05 (24)	18:14	21	09:09 (15)	20:26	21:35	22:37
6	09:25			08:34		11:05 (28)	07:21		08:48 (15)	06:52	05:31	04:34
	16:00			17:08	82	15:12 (24)	18:17	21	09:09 (15)	20:28	21:37	22:38
7	09:24			08:32		11:03 (28)	07:19		08:48 (15)	06:50	05:29	04:33
	16:02			17:11	92	15:18 (24)	18:19	20	09:08 (15)	20:30	21:40	22:39
8	09:24			08:30		11:03 (28)	07:16		08:48 (15)	06:47	05:26	04:32
	16:03			17:13	101	15:25 (24)	18:21	19	09:07 (15)	20:33	21:42	22:40
9	09:23			08:27		11:02 (28)	07:13		08:48 (15)	06:44	05:24	04:31
	16:05			17:16	112	15:55 (22)	18:24	18	09:06 (15)	20:35	21:44	22:42
10	09:22			08:25		11:01 (28)	07:10		08:49 (15)	06:41	05:22	04:30
	16:07			17:18	104	15:51 (22)	18:26	15	09:04 (15)	20:37	21:46	22:43
11	09:21			08:23		11:01 (28)	07:07		08:51 (15)	06:38	05:19	04:29
	16:09			17:21	101	15:23 (24)	18:28	10	09:01 (15)	20:40	21:49	22:44
12	09:20			08:20		11:00 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	98	15:21 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		10:59 (28)	07:02			06:33	05:15	04:28
	16:13			17:26	94	15:18 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:00 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	83	14:14 (23)	18:35			20:47	21:55	22:47
15	09:16			08:13		10:59 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	83	14:13 (23)	18:38			20:49	21:58	22:47
16	09:15			08:10		10:59 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	81	14:12 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		10:59 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	81	14:12 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		10:59 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	80	14:12 (23)	18:45			20:56	22:04	22:49
19	09:10			08:02		10:59 (28)	06:44			06:16	05:02	04:27
	16:25			17:40	78	14:11 (23)	18:47			20:58	22:06	22:50
20	09:08			08:00		10:59 (28)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:09 (23)	18:49			21:00	22:08	22:50
21	09:07			07:57		10:59 (28)	06:39			06:10	04:58	04:27
	16:30			17:45	71	14:08 (23)	18:51			21:03	22:10	22:50
22	09:05			07:54		11:00 (28)	06:36			06:08	04:56	04:27
	16:32			17:48	66	14:06 (23)	18:54			21:05	22:12	22:50
23	09:03			07:52		11:01 (28)	06:33			06:05	04:54	04:27
	16:34			17:50	60	14:04 (23)	18:56			21:07	22:14	22:50
24	09:02			07:49		11:01 (28)	06:30			06:02	04:52	04:27
	16:37			17:53	50	14:00 (23)	18:58			21:10	22:16	22:51
25	09:00			07:46		11:02 (28)	06:27			06:00	04:51	04:28
	16:39			17:55	36	11:38 (28)	19:01			21:12	22:18	22:50
26	08:58		12:05 (20)	07:44		08:58 (15)	06:24			05:57	04:49	04:28
	16:41	5	12:10 (20)	17:57	36	11:36 (28)	19:03			21:14	22:20	22:50
27	08:56		12:05 (20)	07:41		08:54 (15)	06:21			05:54	04:47	04:29
	16:44	19	13:53 (23)	18:00	41	11:34 (28)	19:05			21:17	22:22	22:50
28	08:54		11:00 (33)	07:38		08:52 (15)	06:18			05:52	04:46	04:30
	16:46	40	13:59 (23)	18:02	41	11:32 (28)	19:08			21:19	22:24	22:50
29	08:52		10:56 (33)				07:15			05:49	04:44	04:30
	16:49	47	14:02 (23)				20:10			21:21	22:25	22:50
30	08:50		10:50 (33)				07:13			05:46	04:43	04:31
	16:51	55	14:03 (23)				20:12			21:24	22:27	22:49
31	08:48		10:44 (33)				07:10				04:41	
	16:54	62	14:05 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		228			2114			237				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,62			0,63			0,73				
Total reduction		0,25			0,25			0,29				
Total, real		56			530			69				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December
1	04:32		05:24		06:33		07:39			07:51		10:30 (28)	09:00
	22:49		22:01		20:40		19:13			16:49	107	15:21 (22)	15:51
2	04:33		05:26		06:35		07:42		09:32 (15)	07:54		10:32 (28)	09:02
	22:48		21:58		20:37		19:10	7	09:39 (15)	16:46	110	15:25 (22)	15:50
3	04:34		05:28		06:37		07:44		09:28 (15)	07:56		10:33 (28)	09:03
	22:47		21:56		20:34		19:07	13	09:41 (15)	16:44	97	14:53 (24)	15:49
4	04:35		05:31		06:40		07:46		09:26 (15)	07:59		10:33 (28)	09:05
	22:47		21:54		20:31		19:04	16	09:42 (15)	16:41	89	14:46 (24)	15:48
5	04:36		05:33		06:42		07:48		09:25 (15)	08:01		10:35 (28)	09:07
	22:46		21:51		20:28		19:02	19	09:44 (15)	16:39	81	14:41 (24)	15:47
6	04:37		05:35		06:44		07:51		09:24 (15)	08:03		10:20 (33)	09:09
	22:45		21:49		20:25		18:59	20	09:44 (15)	16:37	77	14:35 (24)	15:46
7	04:39		05:37		06:46		07:53		09:23 (15)	08:06		10:16 (33)	09:10
	22:44		21:47		20:22		18:56	21	09:44 (15)	16:34	77	14:32 (24)	15:45
8	04:40		05:39		06:49		07:55		09:23 (15)	08:08		10:15 (33)	09:12
	22:43		21:44		20:20		18:53	22	09:45 (15)	16:32	71	13:39 (23)	15:45
9	04:41		05:42		06:51		07:57		09:22 (15)	08:11		10:15 (33)	09:13
	22:42		21:42		20:17		18:50	22	09:44 (15)	16:30	72	13:39 (23)	15:44
10	04:43		05:44		06:53		08:00		09:23 (15)	08:13		10:14 (33)	09:15
	22:40		21:39		20:14		18:47	21	09:44 (15)	16:28	71	13:38 (23)	15:44
11	04:44		05:46		06:55		08:02		09:23 (15)	08:15		10:15 (33)	09:16
	22:39		21:37		20:11		18:45	20	09:43 (15)	16:25	61	13:36 (23)	15:43
12	04:46		05:48		06:57		08:04		09:23 (15)	08:18		10:24 (33)	09:18
	22:38		21:34		20:08		18:42	36	12:00 (28)	16:23	52	13:35 (23)	15:43
13	04:47		05:51		07:00		08:07		09:24 (15)	08:20		10:28 (33)	09:19
	22:37		21:31		20:05		18:39	40	12:04 (28)	16:21	47	13:33 (23)	15:42
14	04:49		05:53		07:02		08:09		09:25 (15)	08:22		10:32 (33)	09:20
	22:35		21:29		20:02		18:36	42	12:06 (28)	16:19	39	13:30 (23)	15:42
15	04:51		05:55		07:04		08:11		09:28 (15)	08:25		11:38 (20)	09:21
	22:34		21:26		19:59		18:33	40	12:08 (28)	16:17	19	13:26 (23)	15:42
16	04:52		05:57		07:06		08:13		11:35 (28)	08:27		11:38 (20)	09:22
	22:32		21:24		19:56		18:31	34	12:09 (28)	16:15	4	11:42 (20)	15:42
17	04:54		06:00		07:08		08:16		11:34 (28)	08:29			09:23
	22:30		21:21		19:54		18:28	36	12:10 (28)	16:13			15:42
18	04:56		06:02		07:11		08:18		11:32 (28)	08:32			09:24
	22:29		21:18		19:51		18:25	55	14:33 (23)	16:11			15:42
19	04:58		06:04		07:13		08:20		11:32 (28)	08:34			09:25
	22:27		21:16		19:48		18:22	62	14:36 (23)	16:09			15:42
20	05:00		06:06		07:15		08:23		11:31 (28)	08:36			09:26
	22:25		21:13		19:45		18:20	67	14:37 (23)	16:08			15:43
21	05:01		06:09		07:17		08:25		11:30 (28)	08:39			09:26
	22:24		21:10		19:42		18:17	72	14:39 (23)	16:06			15:43
22	05:03		06:11		07:19		08:27		11:29 (28)	08:41			09:27
	22:22		21:08		19:39		18:14	75	14:40 (23)	16:04			15:43
23	05:05		06:13		07:22		08:30		11:29 (28)	08:43			09:27
	22:20		21:05		19:36		18:12	78	14:41 (23)	16:02			15:44
24	05:07		06:15		07:24		08:32		11:29 (28)	08:45			09:28
	22:18		21:02		19:33		18:09	79	14:41 (23)	16:01			15:45
25	05:09		06:17		07:26		07:35		10:29 (28)	08:47			09:28
	22:16		20:59		19:30		17:07	81	13:42 (23)	15:59			15:45
26	05:11		06:20		07:28		07:37		10:29 (28)	08:50			09:28
	22:14		20:57		19:27		17:04	82	13:43 (23)	15:58			15:46
27	05:13		06:22		07:30		07:39		10:29 (28)	08:52			09:28
	22:12		20:54		19:25		17:01	81	13:42 (23)	15:56			15:47
28	05:16		06:24		07:33		07:42		10:29 (28)	08:54			09:28
	22:10		20:51		19:22		16:59	87	14:45 (24)	15:55			15:48
29	05:18		06:26		07:35		07:44		10:29 (28)	08:56			09:28
	22:07		20:48		19:19		16:56	95	14:48 (24)	15:54			15:49
30	05:20		06:29		07:37		07:47		10:30 (28)	08:58			09:28
	22:05		20:45		19:16		16:54	99	14:51 (24)	15:52			15:50
31	05:22		06:31				07:49		10:31 (28)				09:28
	22:03		20:42				16:51	99	14:52 (24)				15:51
Potential sun hours	546		478		386		319			236			199
Total, worst case								1521			1074		
Sun reduction								0,50			0,50		
Oper. time red.								0,80			0,80		
Wind dir. red.								0,65			0,62		
Total reduction								0,26			0,25		
Total, real								396			264		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April		May	June
1	09:28			08:46			11:39 (28)	07:35		09:25 (15)		07:07	05:44	04:40
	15:53			16:56	88		15:12 (24)	18:05	9	09:34 (15)		20:17	21:26	22:31
2	09:27			08:43			11:39 (28)	07:33				07:04	05:41	04:38
	15:54			16:58	88		15:13 (24)	18:07				20:19	21:28	22:32
3	09:27			08:41			11:40 (28)	07:30				07:01	05:39	04:37
	15:55			17:01	85		15:12 (24)	18:09				20:21	21:31	22:34
4	09:27			08:39			11:39 (28)	07:27				06:58	05:36	04:36
	15:57			17:03	83		15:11 (24)	18:12				20:24	21:33	22:35
5	09:26		12:20 (20)	08:37			11:39 (28)	07:24				06:55	05:34	04:35
	15:58	1	12:21 (20)	17:06	80		15:09 (24)	18:14				20:26	21:35	22:37
6	09:25		12:19 (20)	08:34			11:40 (28)	07:21				06:52	05:31	04:34
	16:00	5	12:24 (20)	17:08	74		15:08 (24)	18:17				20:28	21:37	22:38
7	09:24		12:17 (20)	08:32			11:40 (28)	07:19				06:50	05:29	04:33
	16:02	11	12:28 (20)	17:11	62		14:11 (23)	18:19				20:30	21:40	22:39
8	09:24		12:17 (20)	08:30			11:41 (28)	07:16				06:47	05:26	04:32
	16:03	13	12:30 (20)	17:13	61		14:11 (23)	18:21				20:33	21:42	22:40
9	09:23		12:18 (20)	08:27			11:42 (28)	07:13				06:44	05:24	04:31
	16:05	16	12:34 (20)	17:16	57		14:10 (23)	18:24				20:35	21:44	22:42
10	09:22		11:06 (33)	08:25			11:42 (28)	07:10				06:41	05:22	04:30
	16:07	25	12:39 (20)	17:18	54		14:09 (23)	18:26				20:37	21:46	22:43
11	09:21		11:02 (33)	08:23			11:44 (28)	07:07				06:38	05:19	04:29
	16:09	31	12:41 (20)	17:21	48		14:08 (23)	18:28				20:40	21:49	22:44
12	09:20		11:01 (33)	08:20			11:45 (28)	07:04				06:35	05:17	04:29
	16:11	40	12:41 (20)	17:23	42		14:06 (23)	18:31				20:42	21:51	22:45
13	09:18		11:02 (33)	08:18			11:46 (28)	07:02				06:32	05:15	04:28
	16:13	42	12:42 (20)	17:26	32		14:02 (23)	18:33				20:44	21:53	22:46
14	09:17		11:02 (33)	08:15			11:49 (28)	06:59				06:30	05:13	04:28
	16:15	42	12:42 (20)	17:28	18		12:07 (28)	18:35				20:47	21:55	22:47
15	09:16		11:02 (33)	08:13			11:52 (28)	06:56				06:27	05:10	04:27
	16:17	43	12:42 (20)	17:31	12		12:04 (28)	18:38				20:49	21:58	22:47
16	09:15		11:02 (33)	08:10			09:29 (15)	06:53				06:24	05:08	04:27
	16:19	43	12:42 (20)	17:33	5		09:34 (15)	18:40				20:51	22:00	22:48
17	09:13		11:02 (33)	08:07			09:25 (15)	06:50				06:21	05:06	04:27
	16:21	45	12:42 (20)	17:36	12		09:37 (15)	18:42				20:53	22:02	22:49
18	09:12		11:03 (33)	08:05			09:24 (15)	06:47				06:19	05:04	04:27
	16:23	57	13:55 (23)	17:38	16		09:40 (15)	18:45				20:56	22:04	22:49
19	09:10		11:03 (33)	08:02			09:23 (15)	06:44				06:16	05:02	04:27
	16:25	70	13:59 (23)	17:40	17		09:40 (15)	18:47				20:58	22:06	22:50
20	09:08		11:04 (33)	08:00			09:22 (15)	06:41				06:13	05:00	04:27
	16:28	75	14:01 (23)	17:43	19		09:41 (15)	18:49				21:00	22:08	22:50
21	09:07		11:04 (33)	07:57			09:21 (15)	06:39				06:10	04:58	04:27
	16:30	80	14:03 (23)	17:45	20		09:41 (15)	18:51				21:03	22:10	22:50
22	09:05		11:05 (33)	07:54			09:20 (15)	06:36				06:08	04:56	04:27
	16:32	82	14:05 (23)	17:48	21		09:41 (15)	18:54				21:05	22:12	22:50
23	09:03		11:05 (33)	07:52			09:21 (15)	06:33				06:05	04:54	04:27
	16:34	83	14:05 (23)	17:50	21		09:42 (15)	18:56				21:07	22:14	22:51
24	09:02		11:06 (33)	07:49			09:21 (15)	06:30				06:02	04:52	04:27
	16:37	84	14:07 (23)	17:53	20		09:41 (15)	18:58				21:10	22:16	22:51
25	09:00		11:07 (33)	07:46			09:21 (15)	06:27				05:59	04:51	04:28
	16:39	84	14:52 (24)	17:55	20		09:41 (15)	19:01				21:12	22:18	22:51
26	08:58		11:09 (33)	07:44			09:21 (15)	06:24				05:57	04:49	04:28
	16:41	79	14:57 (24)	17:57	19		09:40 (15)	19:03				21:14	22:20	22:50
27	08:56		11:10 (33)	07:41			09:22 (15)	06:21				05:54	04:47	04:29
	16:44	86	15:12 (24)	18:00	16		09:38 (15)	19:05				21:17	22:22	22:50
28	08:54		11:13 (33)	07:38			09:23 (15)	06:18				05:52	04:46	04:30
	16:46	90	15:13 (24)	18:02	14		09:37 (15)	19:08				21:19	22:24	22:50
29	08:52		11:40 (28)					07:15				05:49	04:44	04:30
	16:49	88	15:14 (24)					20:10				21:21	22:25	22:50
30	08:50		11:39 (28)					07:12				05:46	04:42	04:31
	16:51	88	15:13 (24)					20:12				21:24	22:27	22:49
31	08:48		11:39 (28)					07:10					04:41	
	16:54	88	15:13 (24)					20:14					22:29	
Potential sun hours	221			260			365			432		521	547	
Total, worst case		1491			1104			9						
Sun reduction		0,50			0,50			0,50						
Oper. time red.		0,80			0,80			0,80						
Wind dir. red.		0,62			0,63			0,73						
Total reduction		0,25			0,25			0,29						
Total, real		371			276			3						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:12 (28)	09:00		10:44 (33)
	22:49	22:01	20:40	19:13			16:49	53	13:38 (23)	15:51	31	12:23 (20)
2	04:33	05:26	06:35	07:42			07:54		11:11 (28)	09:02		10:48 (33)
	22:48	21:58	20:37	19:10			16:46	58	13:40 (23)	15:50	27	12:23 (20)
3	04:34	05:28	06:37	07:44			07:56		11:11 (28)	09:03		12:01 (20)
	22:47	21:56	20:34	19:07			16:44	60	13:41 (23)	15:49	17	12:18 (20)
4	04:35	05:31	06:40	07:46			07:59		11:10 (28)	09:05		12:01 (20)
	22:47	21:54	20:31	19:04			16:41	63	13:41 (23)	15:48	13	12:14 (20)
5	04:36	05:33	06:42	07:48			08:01		11:10 (28)	09:07		12:02 (20)
	22:46	21:51	20:28	19:02			16:39	75	14:38 (24)	15:47	11	12:13 (20)
6	04:37	05:35	06:44	07:51			08:03		11:10 (28)	09:09		12:05 (20)
	22:45	21:49	20:25	18:59			16:37	79	14:40 (24)	15:46	5	12:10 (20)
7	04:39	05:37	06:46	07:53			08:06		11:09 (28)	09:10		12:07 (20)
	22:44	21:47	20:22	18:56			16:34	84	14:41 (24)	15:45	2	12:09 (20)
8	04:40	05:39	06:49	07:55			08:08		11:09 (28)	09:12		
	22:43	21:44	20:20	18:53			16:32	87	14:42 (24)	15:45		
9	04:41	05:42	06:51	07:57			08:11		11:10 (28)	09:13		
	22:42	21:42	20:17	18:50			16:30	87	14:43 (24)	15:44		
10	04:43	05:44	06:53	08:00			08:13		11:10 (28)	09:15		
	22:41	21:39	20:14	18:47			16:28	88	14:44 (24)	15:43		
11	04:44	05:46	06:55	08:02			08:15		11:10 (28)	09:16		
	22:39	21:37	20:11	18:45			16:25	88	14:44 (24)	15:43		
12	04:46	05:48	06:57	08:04		10:02 (15)	08:18		11:11 (28)	09:18		
	22:38	21:34	20:08	18:42	2	10:04 (15)	16:23	88	14:45 (24)	15:43		
13	04:47	05:51	07:00	08:07		09:58 (15)	08:20		11:12 (28)	09:19		
	22:37	21:32	20:05	18:39	11	10:09 (15)	16:21	86	14:45 (24)	15:42		
14	04:49	05:53	07:02	08:09		09:55 (15)	08:22		10:45 (33)	09:20		
	22:35	21:29	20:02	18:36	15	10:10 (15)	16:19	89	14:45 (24)	15:42		
15	04:51	05:55	07:04	08:11		09:54 (15)	08:25		10:42 (33)	09:21		
	22:34	21:26	19:59	18:33	18	10:12 (15)	16:17	87	14:45 (24)	15:42		
16	04:52	05:57	07:06	08:13		09:53 (15)	08:27		10:41 (33)	09:22		
	22:32	21:24	19:56	18:31	19	10:12 (15)	16:15	81	14:30 (24)	15:42		
17	04:54	06:00	07:08	08:16		09:53 (15)	08:30		10:41 (33)	09:23		
	22:30	21:21	19:54	18:28	20	10:13 (15)	16:13	83	14:25 (24)	15:42		
18	04:56	06:02	07:11	08:18		09:52 (15)	08:32		10:40 (33)	09:24		
	22:29	21:18	19:51	18:25	21	10:13 (15)	16:11	84	13:41 (23)	15:42		
19	04:58	06:04	07:13	08:20		09:52 (15)	08:34		10:40 (33)	09:25		
	22:27	21:16	19:48	18:22	21	10:13 (15)	16:09	83	13:40 (23)	15:42		
20	05:00	06:06	07:15	08:23		09:52 (15)	08:36		10:39 (33)	09:26		
	22:25	21:13	19:45	18:20	20	10:12 (15)	16:08	82	13:39 (23)	15:43		
21	05:01	06:08	07:17	08:25		09:52 (15)	08:39		10:39 (33)	09:26		
	22:24	21:10	19:42	18:17	20	10:12 (15)	16:06	80	13:38 (23)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (15)	08:41		10:40 (33)	09:27		
	22:22	21:08	19:39	18:14	19	10:11 (15)	16:04	75	13:37 (23)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (15)	08:43		10:39 (33)	09:27		
	22:20	21:05	19:36	18:12	17	10:10 (15)	16:02	69	13:35 (23)	15:44		
24	05:07	06:15	07:24	08:32		09:54 (15)	08:45		10:40 (33)	09:28		
	22:18	21:02	19:33	18:09	14	10:08 (15)	16:01	58	13:32 (23)	15:44		
25	05:09	06:17	07:26	07:35		08:56 (15)	08:47		10:40 (33)	09:28		
	22:16	20:59	19:30	17:06	11	09:07 (15)	15:59	45	12:20 (20)	15:45		
26	05:11	06:20	07:28	07:37		09:01 (15)	08:50		10:41 (33)	09:28		
	22:14	20:57	19:27	17:04	2	09:03 (15)	15:58	43	12:21 (20)	15:46		
27	05:13	06:22	07:30	07:39		11:20 (28)	08:52		10:41 (33)	09:28		
	22:12	20:54	19:25	17:01	14	11:34 (28)	15:56	43	12:21 (20)	15:47		
28	05:16	06:24	07:33	07:42		11:18 (28)	08:54		10:42 (33)	09:28		
	22:10	20:51	19:22	16:59	19	11:37 (28)	15:55	42	12:22 (20)	15:48		
29	05:18	06:26	07:35	07:44		11:15 (28)	08:56		10:42 (33)	09:28		
	22:07	20:48	19:19	16:56	34	13:32 (23)	15:54	42	12:22 (20)	15:49		
30	05:20	06:29	07:37	07:47		11:14 (28)	08:58		10:42 (33)	09:28		
	22:05	20:45	19:16	16:54	42	13:35 (23)	15:52	40	12:22 (20)	15:50		
31	05:22	06:31		07:49		11:13 (28)				09:28		
	22:03	20:42		16:51	50	13:38 (23)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					389			2122			106	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,69			0,61			0,64	
Total reduction					0,27			0,25			0,25	
Total, real					107			520			27	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:12 (33)	08:46		11:58 (28)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (33)	16:56	88	15:21 (24)	18:05	20:17	21:26	22:30
2	09:27		11:11 (33)	08:43		11:59 (28)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (33)	16:58	85	15:21 (24)	18:07	20:19	21:28	22:32
3	09:27		11:11 (33)	08:41		12:00 (28)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (20)	17:01	84	15:21 (24)	18:09	20:21	21:31	22:34
4	09:27		11:11 (33)	08:39		11:59 (28)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (20)	17:03	82	15:20 (24)	18:12	20:24	21:33	22:35
5	09:26		11:11 (33)	08:37		11:59 (28)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (20)	17:06	81	15:19 (24)	18:14	20:26	21:35	22:37
6	09:25		11:11 (33)	08:34		12:00 (28)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (20)	17:08	75	15:18 (24)	18:17	20:28	21:37	22:38
7	09:24		11:11 (33)	08:32		12:01 (28)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (20)	17:11	64	15:14 (24)	18:19	20:30	21:40	22:39
8	09:24		11:11 (33)	08:30		12:02 (28)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (20)	17:13	57	14:25 (23)	18:21	20:33	21:42	22:40
9	09:23		11:12 (33)	08:27		12:03 (28)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (20)	17:16	53	14:24 (23)	18:24	20:35	21:44	22:42
10	09:22		11:11 (33)	08:25		12:04 (28)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (20)	17:18	48	14:23 (23)	18:26	20:37	21:46	22:43
11	09:21		11:12 (33)	08:23		12:06 (28)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (20)	17:21	43	14:22 (23)	18:28	20:40	21:49	22:44
12	09:20		11:12 (33)	08:20		12:07 (28)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (20)	17:23	35	14:20 (23)	18:31	20:42	21:51	22:45
13	09:18		11:12 (33)	08:18		12:10 (28)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (20)	17:26	22	14:16 (23)	18:33	20:44	21:53	22:46
14	09:17		11:12 (33)	08:15		09:38 (15)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (20)	17:28	10	12:19 (28)	18:35	20:47	21:55	22:47
15	09:16		11:12 (33)	08:13		09:35 (15)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (20)	17:31	12	09:47 (15)	18:38	20:49	21:58	22:47
16	09:15		11:12 (33)	08:10		09:33 (15)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (20)	17:33	16	09:49 (15)	18:40	20:51	22:00	22:48
17	09:13		11:13 (33)	08:07		09:32 (15)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (20)	17:36	18	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:14 (33)	08:05		09:31 (15)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (20)	17:38	20	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:15 (33)	08:02		09:31 (15)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (20)	17:40	20	09:51 (15)	18:47	20:58	22:06	22:50
20	09:08		11:15 (33)	08:00		09:30 (15)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (23)	17:43	21	09:51 (15)	18:49	21:00	22:08	22:50
21	09:07		11:16 (33)	07:57		09:30 (15)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (23)	17:45	21	09:51 (15)	18:51	21:03	22:10	22:50
22	09:05		11:16 (33)	07:54		09:29 (15)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (23)	17:48	22	09:51 (15)	18:54	21:05	22:12	22:50
23	09:03		11:17 (33)	07:52		09:30 (15)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (23)	17:50	21	09:51 (15)	18:56	21:07	22:14	22:51
24	09:02		11:19 (33)	07:49		09:31 (15)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (23)	17:53	19	09:50 (15)	18:58	21:10	22:16	22:51
25	09:00		11:20 (33)	07:46		09:31 (15)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (23)	17:55	18	09:49 (15)	19:01	21:12	22:18	22:51
26	08:58		11:23 (33)	07:44		09:32 (15)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (24)	17:57	15	09:47 (15)	19:03	21:14	22:20	22:50
27	08:56		11:58 (28)	07:41		09:34 (15)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (24)	18:00	11	09:45 (15)	19:05	21:17	22:22	22:50
28	08:54		11:58 (28)	07:38		09:38 (15)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (24)	18:02	2	09:40 (15)	19:07	21:19	22:24	22:50
29	08:52		11:59 (28)				07:15	05:49	04:44	04:30
	16:49	83	15:18 (24)				20:10	21:21	22:25	22:50
30	08:50		11:58 (28)				07:12	05:46	04:42	04:31
	16:51	86	15:21 (24)				20:12	21:24	22:27	22:49
31	08:48		11:58 (28)				07:10		04:41	
	16:54	88	15:22 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1646			1063					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,63			0,63					
Total reduction		0,25			0,25					
Total, real		411			265					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:33 (28)	09:00		10:54 (33)
	22:49		22:01		20:40		19:13			16:49	50	13:53 (23)	15:51	43	12:35 (20)
2	04:33		05:26		06:35		07:42			07:54		11:32 (28)	09:02		10:54 (33)
	22:48		21:58		20:37		19:10			16:46	54	13:54 (23)	15:50	42	12:35 (20)
3	04:34		05:28		06:37		07:44			07:56		11:32 (28)	09:03		10:55 (33)
	22:47		21:56		20:34		19:07			16:44	57	13:55 (23)	15:49	40	12:35 (20)
4	04:35		05:31		06:40		07:46			07:59		11:30 (28)	09:05		10:56 (33)
	22:47		21:54		20:31		19:04			16:41	68	14:45 (24)	15:48	39	12:35 (20)
5	04:36		05:33		06:42		07:48			08:01		11:30 (28)	09:07		10:56 (33)
	22:46		21:51		20:28		19:02			16:39	76	14:48 (24)	15:47	39	12:36 (20)
6	04:37		05:35		06:44		07:51			08:03		11:30 (28)	09:09		10:57 (33)
	22:45		21:49		20:25		18:59			16:37	78	14:49 (24)	15:46	30	12:36 (20)
7	04:39		05:37		06:46		07:53			08:06		11:29 (28)	09:10		10:58 (33)
	22:44		21:47		20:22		18:56			16:34	83	14:50 (24)	15:45	29	12:36 (20)
8	04:40		05:39		06:49		07:55			08:08		11:29 (28)	09:12		10:59 (33)
	22:43		21:44		20:20		18:53			16:32	86	14:51 (24)	15:45	15	12:33 (20)
9	04:41		05:42		06:51		07:57			08:11		11:29 (28)	09:13		11:00 (33)
	22:42		21:42		20:17		18:50			16:30	87	14:52 (24)	15:44	12	12:34 (20)
10	04:43		05:44		06:53		08:00			08:13		11:30 (28)	09:15		11:00 (33)
	22:41		21:39		20:14		18:47			16:28	88	14:53 (24)	15:43	4	12:31 (20)
11	04:44		05:46		06:55		08:02			08:15		11:29 (28)	09:16		11:02 (33)
	22:39		21:37		20:11		18:45			16:25	87	14:52 (24)	15:43	2	11:04 (33)
12	04:46		05:48		06:57		08:04			08:18		11:30 (28)	09:18		11:02 (33)
	22:38		21:34		20:08		18:42			16:23	87	14:53 (24)	15:43	2	11:04 (33)
13	04:47		05:51		07:00		08:07			08:20		11:30 (28)	09:19		
	22:37		21:31		20:05		18:39			16:21	83	14:50 (24)	15:42		
14	04:49		05:53		07:02		08:09		10:08 (15)	08:22		11:30 (28)	09:20		
	22:35		21:29		20:02		18:36	8	10:16 (15)	16:19	74	14:42 (24)	15:42		
15	04:51		05:55		07:04		08:11		10:06 (15)	08:25		11:31 (28)	09:21		
	22:34		21:26		19:59		18:33	13	10:19 (15)	16:17	68	14:38 (24)	15:42		
16	04:52		05:57		07:06		08:13		10:04 (15)	08:27		10:56 (33)	09:22		
	22:32		21:24		19:56		18:31	16	10:20 (15)	16:15	69	14:36 (24)	15:42		
17	04:54		06:00		07:08		08:16		10:03 (15)	08:30		10:54 (33)	09:23		
	22:30		21:21		19:54		18:28	18	10:21 (15)	16:13	73	13:55 (23)	15:42		
18	04:56		06:02		07:11		08:18		10:02 (15)	08:32		10:52 (33)	09:24		
	22:29		21:18		19:51		18:25	20	10:22 (15)	16:11	78	13:54 (23)	15:42		
19	04:58		06:04		07:13		08:20		10:01 (15)	08:34		10:52 (33)	09:25		
	22:27		21:16		19:48		18:22	21	10:22 (15)	16:09	81	13:54 (23)	15:42		
20	05:00		06:06		07:15		08:23		10:01 (15)	08:36		10:51 (33)	09:26		
	22:25		21:13		19:45		18:20	21	10:22 (15)	16:08	80	13:52 (23)	15:43		
21	05:01		06:08		07:17		08:25		10:01 (15)	08:39		10:51 (33)	09:26		
	22:24		21:10		19:42		18:17	21	10:22 (15)	16:06	78	13:51 (23)	15:43		
22	05:03		06:11		07:19		08:27		10:00 (15)	08:41		10:51 (33)	09:27		
	22:22		21:08		19:39		18:14	21	10:21 (15)	16:04	75	13:50 (23)	15:43		
23	05:05		06:13		07:22		08:30		10:01 (15)	08:43		10:51 (33)	09:27		
	22:20		21:05		19:36		18:12	20	10:21 (15)	16:02	64	12:31 (20)	15:44		
24	05:07		06:15		07:24		08:32		10:01 (15)	08:45		10:51 (33)	09:28		
	22:18		21:02		19:33		18:09	19	10:20 (15)	16:01	63	12:32 (20)	15:44		
25	05:09		06:17		07:26		07:35		09:02 (15)	08:47		10:51 (33)	09:28		
	22:16		20:59		19:30		17:06	18	09:20 (15)	15:59	60	12:32 (20)	15:45		
26	05:11		06:20		07:28		07:37		09:03 (15)	08:50		10:52 (33)	09:28		
	22:14		20:57		19:27		17:04	15	09:18 (15)	15:58	56	12:33 (20)	15:46		
27	05:13		06:22		07:30		07:39		09:05 (15)	08:52		10:51 (33)	09:28		
	22:12		20:54		19:25		17:01	11	09:16 (15)	15:56	53	12:33 (20)	15:47		
28	05:16		06:24		07:33		07:42		09:08 (15)	08:54		10:52 (33)	09:28		
	22:10		20:51		19:22		16:59	13	11:51 (28)	15:55	44	12:34 (20)	15:48		
29	05:18		06:26		07:35		07:44		11:38 (28)	08:56		10:53 (33)	09:28		
	22:07		20:48		19:19		16:56	26	13:46 (23)	15:54	43	12:34 (20)	15:49		
30	05:20		06:29		07:37		07:47		11:36 (28)	08:58		10:53 (33)	09:28		
	22:05		20:45		19:16		16:54	37	13:50 (23)	15:52	43	12:34 (20)	15:50		
31	05:22		06:31				07:49		11:35 (28)				09:28		11:11 (33)
	22:03		20:42				16:51	44	13:52 (23)				15:51	1	11:12 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								362			2086			298	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,69			0,61			0,65	
Total reduction								0,28			0,24			0,26	
Total, real								100			508			77	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:23 (33)	08:46	12:23 (28)	07:35	07:07	05:44	04:40
	15:53	17	11:40 (33)	16:56	82	15:30 (24)	18:05	20:17	21:26	22:30
2	09:27		11:23 (33)	08:43	12:24 (28)	07:33	07:04	05:41	04:38
	15:54	17	11:40 (33)	16:58	86	15:34 (24)	18:07	20:19	21:28	22:32
3	09:27		11:23 (33)	08:41	12:25 (28)	07:30	07:01	05:39	04:37
	15:55	18	11:41 (33)	17:01	84	15:34 (24)	18:09	20:21	21:31	22:34
4	09:26		11:23 (33)	08:39	12:25 (28)	07:27	06:58	05:36	04:36
	15:57	23	12:52 (20)	17:03	85	15:34 (24)	18:12	20:24	21:33	22:35
5	09:26		11:23 (33)	08:37	12:25 (28)	07:24	06:55	05:34	04:35
	15:58	25	12:53 (20)	17:06	82	15:33 (24)	18:14	20:26	21:35	22:37
6	09:25		11:24 (33)	08:34	12:26 (28)	07:21	06:52	05:31	04:34
	16:00	31	13:06 (20)	17:08	79	15:33 (24)	18:17	20:28	21:37	22:38
7	09:24		11:24 (33)	08:32	12:26 (28)	07:19	06:50	05:29	04:33
	16:02	34	13:07 (20)	17:11	74	15:31 (24)	18:19	20:30	21:40	22:39
8	09:24		11:24 (33)	08:30	12:28 (28)	07:16	06:47	05:26	04:32
	16:03	41	13:07 (20)	17:13	68	15:30 (24)	18:21	20:33	21:42	22:40
9	09:23		11:24 (33)	08:27	12:28 (28)	07:13	06:44	05:24	04:31
	16:05	42	13:07 (20)	17:16	60	15:26 (24)	18:24	20:35	21:44	22:42
10	09:22		11:25 (33)	08:25	12:29 (28)	07:10	06:41	05:22	04:30
	16:07	42	13:08 (20)	17:18	51	14:44 (23)	18:26	20:37	21:46	22:43
11	09:21		11:25 (33)	08:23	12:32 (28)	07:07	06:38	05:19	04:29
	16:09	43	13:09 (20)	17:21	45	14:43 (23)	18:28	20:40	21:49	22:44
12	09:20		11:25 (33)	08:20	09:49 (15)	07:04	06:35	05:17	04:29
	16:11	44	13:09 (20)	17:23	45	14:42 (23)	18:31	20:42	21:51	22:45
13	09:18		11:26 (33)	08:18	09:45 (15)	07:01	06:32	05:15	04:28
	16:13	44	13:10 (20)	17:26	43	14:40 (23)	18:33	20:44	21:53	22:46
14	09:17		11:26 (33)	08:15	09:44 (15)	06:59	06:30	05:13	04:28
	16:15	54	13:10 (20)	17:28	27	14:38 (23)	18:35	20:47	21:55	22:47
15	09:16		11:26 (33)	08:13	09:43 (15)	06:56	06:27	05:10	04:27
	16:17	57	13:10 (20)	17:31	18	10:01 (15)	18:38	20:49	21:58	22:47
16	09:15		11:27 (33)	08:10	09:42 (15)	06:53	06:24	05:08	04:27
	16:19	60	13:10 (20)	17:33	20	10:02 (15)	18:40	20:51	22:00	22:48
17	09:13		11:27 (33)	08:07	09:41 (15)	06:50	06:21	05:06	04:27
	16:21	63	13:10 (20)	17:35	21	10:02 (15)	18:42	20:53	22:02	22:49
18	09:12		11:28 (33)	08:05	09:41 (15)	06:47	06:19	05:04	04:27
	16:23	64	13:11 (20)	17:38	22	10:03 (15)	18:45	20:56	22:04	22:49
19	09:10		11:29 (33)	08:02	09:40 (15)	06:44	06:16	05:02	04:27
	16:25	63	13:11 (20)	17:40	23	10:03 (15)	18:47	20:58	22:06	22:50
20	09:08		11:30 (33)	08:00	09:40 (15)	06:41	06:13	05:00	04:27
	16:28	63	13:11 (20)	17:43	23	10:03 (15)	18:49	21:00	22:08	22:50
21	09:07		11:31 (33)	07:57	09:40 (15)	06:38	06:10	04:58	04:27
	16:30	62	13:11 (20)	17:45	22	10:02 (15)	18:51	21:03	22:10	22:50
22	09:05		11:31 (33)	07:54	09:40 (15)	06:36	06:08	04:56	04:27
	16:32	60	13:09 (20)	17:48	22	10:02 (15)	18:54	21:05	22:12	22:50
23	09:03		11:33 (33)	07:52	09:42 (15)	06:33	06:05	04:54	04:27
	16:34	66	14:33 (23)	17:50	20	10:02 (15)	18:56	21:07	22:14	22:50
24	09:02		11:35 (33)	07:49	09:42 (15)	06:30	06:02	04:52	04:27
	16:37	67	14:36 (23)	17:53	18	10:00 (15)	18:58	21:10	22:16	22:51
25	09:00		11:39 (33)	07:46	09:43 (15)	06:27	05:59	04:51	04:28
	16:39	58	14:38 (23)	17:55	16	09:59 (15)	19:01	21:12	22:18	22:50
26	08:58		12:24 (28)	07:44	09:45 (15)	06:24	05:57	04:49	04:28
	16:41	55	14:40 (23)	17:57	11	09:56 (15)	19:03	21:14	22:20	22:50
27	08:56		12:23 (28)	07:41	09:49 (15)	06:21	05:54	04:47	04:29
	16:44	57	14:40 (23)	18:00	2	09:51 (15)	19:05	21:17	22:22	22:50
28	08:54		12:23 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	61	15:15 (24)	18:02		19:07	21:19	22:24	22:50
29	08:52		12:24 (28)			07:15	05:49	04:44	04:30
	16:49	67	15:19 (24)			20:10	21:21	22:25	22:50
30	08:50		12:23 (28)			07:12	05:46	04:42	04:31
	16:51	74	15:23 (24)			20:12	21:24	22:27	22:49
31	08:48		12:24 (28)			07:10		04:41	
	16:53	77	15:26 (24)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1549		1149					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,62		0,62					
Total reduction		0,25		0,25					
Total, real		386		284					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:59 (28)	09:00		11:07 (33)
	22:49		22:01		20:40		19:13			16:49	51	14:13 (23)	15:51	43	12:51 (20)
2	04:33		05:26		06:35		07:42			07:54		11:58 (28)	09:02		11:08 (33)
	22:48		21:58		20:37		19:10			16:46	61	14:57 (24)	15:50	42	12:51 (20)
3	04:34		05:28		06:37		07:44			07:56		11:57 (28)	09:03		11:08 (33)
	22:47		21:56		20:34		19:07			16:44	71	15:00 (24)	15:49	42	12:51 (20)
4	04:35		05:31		06:40		07:46			07:59		11:56 (28)	09:05		11:09 (33)
	22:47		21:54		20:31		19:04			16:41	76	15:01 (24)	15:48	41	12:52 (20)
5	04:36		05:33		06:42		07:48			08:01		11:55 (28)	09:07		11:09 (33)
	22:46		21:51		20:28		19:02			16:39	80	15:02 (24)	15:47	35	12:52 (20)
6	04:37		05:35		06:44		07:51			08:03		11:55 (28)	09:09		11:10 (33)
	22:45		21:49		20:25		18:59			16:37	82	15:03 (24)	15:46	31	12:52 (20)
7	04:38		05:37		06:46		07:53			08:06		11:54 (28)	09:10		11:11 (33)
	22:44		21:47		20:22		18:56			16:34	84	15:03 (24)	15:45	24	12:40 (20)
8	04:40		05:39		06:49		07:55			08:08		11:54 (28)	09:12		11:11 (33)
	22:43		21:44		20:20		18:53			16:32	87	15:04 (24)	15:45	24	12:41 (20)
9	04:41		05:42		06:51		07:57			08:11		11:55 (28)	09:13		11:12 (33)
	22:42		21:42		20:17		18:50			16:30	87	15:05 (24)	15:44	20	12:37 (20)
10	04:43		05:44		06:53		08:00			08:13		11:55 (28)	09:15		11:12 (33)
	22:40		21:39		20:14		18:47			16:28	81	15:01 (24)	15:43	17	11:29 (33)
11	04:44		05:46		06:55		08:02			08:15		11:54 (28)	09:16		11:14 (33)
	22:39		21:37		20:11		18:45			16:25	78	14:57 (24)	15:43	16	11:30 (33)
12	04:46		05:48		06:57		08:04			08:18		11:55 (28)	09:18		11:14 (33)
	22:38		21:34		20:08		18:42			16:23	74	14:55 (24)	15:43	15	11:29 (33)
13	04:47		05:51		07:00		08:07			08:20		11:56 (28)	09:19		11:15 (33)
	22:37		21:31		20:05		18:39			16:21	67	14:51 (24)	15:42	15	11:30 (33)
14	04:49		05:53		07:02		08:09			08:22		11:55 (28)	09:20		11:16 (33)
	22:35		21:29		20:02		18:36			16:19	62	14:47 (24)	15:42	14	11:30 (33)
15	04:51		05:55		07:04		08:11		10:19 (15)	08:25		11:56 (28)	09:21		11:16 (33)
	22:34		21:26		19:59		18:33	8	10:27 (15)	16:17	57	14:13 (23)	15:42	14	11:30 (33)
16	04:52		05:57		07:06		08:13		10:16 (15)	08:27		11:57 (28)	09:22		11:17 (33)
	22:32		21:24		19:56		18:31	13	10:29 (15)	16:15	54	14:12 (23)	15:42	12	11:29 (33)
17	04:54		06:00		07:08		08:16		10:15 (15)	08:29		11:12 (33)	09:23		11:17 (33)
	22:30		21:21		19:54		18:28	16	10:31 (15)	16:13	58	14:11 (23)	15:42	12	11:29 (33)
18	04:56		06:02		07:11		08:18		10:13 (15)	08:32		11:09 (33)	09:24		11:18 (33)
	22:29		21:18		19:51		18:25	19	10:32 (15)	16:11	67	14:10 (23)	15:42	11	11:29 (33)
19	04:58		06:04		07:13		08:20		10:12 (15)	08:34		11:08 (33)	09:25		11:19 (33)
	22:27		21:16		19:48		18:22	21	10:33 (15)	16:09	66	14:08 (23)	15:42	11	11:30 (33)
20	05:00		06:06		07:15		08:23		10:11 (15)	08:36		11:06 (33)	09:26		11:20 (33)
	22:25		21:13		19:45		18:20	22	10:33 (15)	16:08	60	12:44 (20)	15:43	10	11:30 (33)
21	05:01		06:08		07:17		08:25		10:11 (15)	08:39		11:06 (33)	09:26		11:20 (33)
	22:24		21:10		19:42		18:17	23	10:34 (15)	16:06	62	12:46 (20)	15:43	10	11:30 (33)
22	05:03		06:11		07:19		08:27		10:10 (15)	08:41		11:06 (33)	09:27		11:21 (33)
	22:22		21:08		19:39		18:14	23	10:33 (15)	16:04	63	12:47 (20)	15:43	10	11:31 (33)
23	05:05		06:13		07:22		08:30		10:11 (15)	08:43		11:05 (33)	09:27		11:21 (33)
	22:20		21:05		19:36		18:12	22	10:33 (15)	16:02	63	12:47 (20)	15:44	10	11:31 (33)
24	05:07		06:15		07:24		08:32		10:10 (15)	08:45		11:05 (33)	09:28		11:22 (33)
	22:18		21:02		19:33		18:09	22	10:32 (15)	16:01	64	12:48 (20)	15:44	10	11:32 (33)
25	05:09		06:17		07:26		07:35		09:11 (15)	08:47		11:05 (33)	09:28		11:22 (33)
	22:16		20:59		19:30		17:06	21	09:32 (15)	15:59	63	12:48 (20)	15:45	11	11:33 (33)
26	05:11		06:20		07:28		07:37		09:11 (15)	08:50		11:06 (33)	09:28		11:22 (33)
	22:14		20:56		19:27		17:04	20	09:31 (15)	15:58	59	12:49 (20)	15:46	12	11:34 (33)
27	05:13		06:22		07:30		07:39		09:12 (15)	08:52		11:05 (33)	09:28		11:23 (33)
	22:12		20:54		19:25		17:01	18	09:30 (15)	15:56	57	12:49 (20)	15:47	11	11:34 (33)
28	05:16		06:24		07:33		07:42		09:14 (15)	08:54		11:06 (33)	09:28		11:23 (33)
	22:10		20:51		19:22		16:59	28	14:08 (23)	15:55	53	12:50 (20)	15:48	13	11:36 (33)
29	05:18		06:26		07:35		07:44		09:15 (15)	08:56		11:06 (33)	09:28		11:22 (33)
	22:07		20:48		19:19		16:56	44	14:10 (23)	15:54	44	12:50 (20)	15:49	14	11:36 (33)
30	05:20		06:29		07:37		07:47		09:19 (15)	08:58		11:06 (33)	09:28		11:23 (33)
	22:05		20:45		19:16		16:54	44	14:11 (23)	15:52	43	12:50 (20)	15:50	15	11:38 (33)
31	05:22		06:31				07:49		12:01 (28)				09:28		11:23 (33)
	22:03		20:42				16:51	46	14:13 (23)				15:51	15	11:38 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								410			1974			580	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,68			0,61			0,65	
Total reduction								0,27			0,24			0,26	
Total, real								112			477			151	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28			08:46		11:27 (28)	07:35	07:07	05:44	04:40
	15:53			16:56	70	14:51 (24)	18:05	20:17	21:26	22:31
2	09:27		12:04 (20)	08:43		11:27 (28)	07:33	07:04	05:41	04:38
	15:54	1	12:05 (20)	16:58	60	13:50 (23)	18:07	20:19	21:28	22:32
3	09:27		12:04 (20)	08:41		11:28 (28)	07:30	07:01	05:39	04:37
	15:55	4	12:08 (20)	17:01	58	13:50 (23)	18:09	20:21	21:31	22:34
4	09:27		12:04 (20)	08:39		11:28 (28)	07:27	06:58	05:36	04:36
	15:57	7	12:11 (20)	17:03	54	13:48 (23)	18:12	20:24	21:33	22:35
5	09:26		12:04 (20)	08:37		11:28 (28)	07:24	06:55	05:34	04:35
	15:58	17	12:21 (20)	17:06	52	13:47 (23)	18:14	20:26	21:35	22:37
6	09:25		12:05 (20)	08:34		11:29 (28)	07:21	06:52	05:31	04:34
	16:00	16	12:21 (20)	17:08	49	13:47 (23)	18:17	20:28	21:37	22:38
7	09:24		12:05 (20)	08:32		11:29 (28)	07:19	06:50	05:29	04:33
	16:02	19	12:26 (20)	17:11	43	13:44 (23)	18:19	20:30	21:40	22:39
8	09:24		12:05 (20)	08:30		11:31 (28)	07:16	06:47	05:26	04:32
	16:03	22	12:27 (20)	17:13	35	13:42 (23)	18:21	20:33	21:42	22:40
9	09:23		12:06 (20)	08:27		11:32 (28)	07:13	06:44	05:24	04:31
	16:05	22	12:28 (20)	17:16	22	11:54 (28)	18:24	20:35	21:44	22:42
10	09:22		12:06 (20)	08:25		11:34 (28)	07:10	06:41	05:22	04:30
	16:07	22	12:28 (20)	17:18	18	11:52 (28)	18:26	20:37	21:46	22:43
11	09:21		12:07 (20)	08:23		11:37 (28)	07:07	06:38	05:19	04:29
	16:09	22	12:29 (20)	17:21	14	11:51 (28)	18:28	20:40	21:49	22:44
12	09:20		12:07 (20)	08:20		11:41 (28)	07:04	06:35	05:17	04:29
	16:11	28	13:33 (23)	17:23	4	11:45 (28)	18:31	20:42	21:51	22:45
13	09:18		12:08 (20)	08:18			07:02	06:32	05:15	04:28
	16:13	33	13:37 (23)	17:26			18:33	20:44	21:53	22:46
14	09:17		12:08 (20)	08:15		09:30 (15)	06:59	06:30	05:13	04:28
	16:15	36	13:38 (23)	17:28	5	09:35 (15)	18:35	20:47	21:55	22:47
15	09:16		11:34 (28)	08:13		09:27 (15)	06:56	06:27	05:10	04:27
	16:17	47	13:40 (23)	17:31	11	09:38 (15)	18:38	20:49	21:58	22:47
16	09:15		11:32 (28)	08:10		09:25 (15)	06:53	06:24	05:08	04:27
	16:19	54	13:41 (23)	17:33	14	09:39 (15)	18:40	20:51	22:00	22:48
17	09:13		11:31 (28)	08:07		09:23 (15)	06:50	06:21	05:06	04:27
	16:21	57	13:43 (23)	17:36	17	09:40 (15)	18:42	20:53	22:02	22:49
18	09:12		11:30 (28)	08:05		09:23 (15)	06:47	06:19	05:04	04:27
	16:23	72	14:53 (24)	17:38	18	09:41 (15)	18:45	20:56	22:04	22:49
19	09:10		11:29 (28)	08:02		09:22 (15)	06:44	06:16	05:02	04:27
	16:25	85	14:53 (24)	17:40	19	09:41 (15)	18:47	20:58	22:06	22:50
20	09:09		11:28 (28)	08:00		09:22 (15)	06:41	06:13	05:00	04:27
	16:28	88	14:54 (24)	17:43	19	09:41 (15)	18:49	21:00	22:08	22:50
21	09:07		11:28 (28)	07:57		09:22 (15)	06:39	06:10	04:58	04:27
	16:30	88	14:54 (24)	17:45	19	09:41 (15)	18:51	21:03	22:10	22:50
22	09:05		11:28 (28)	07:54		09:22 (15)	06:36	06:08	04:56	04:27
	16:32	89	14:55 (24)	17:48	19	09:41 (15)	18:54	21:05	22:12	22:50
23	09:03		11:26 (28)	07:52		09:23 (15)	06:33	06:05	04:54	04:27
	16:34	87	14:54 (24)	17:50	18	09:41 (15)	18:56	21:07	22:14	22:51
24	09:02		11:26 (28)	07:49		09:23 (15)	06:30	06:02	04:52	04:27
	16:37	81	14:55 (24)	17:53	17	09:40 (15)	18:58	21:10	22:16	22:51
25	09:00		11:26 (28)	07:46		09:24 (15)	06:27	05:59	04:51	04:28
	16:39	82	14:55 (24)	17:55	14	09:38 (15)	19:01	21:12	22:18	22:51
26	08:58		11:26 (28)	07:44		09:25 (15)	06:24	05:57	04:49	04:28
	16:41	83	14:55 (24)	17:57	11	09:36 (15)	19:03	21:14	22:20	22:50
27	08:56		11:25 (28)	07:41		09:30 (15)	06:21	05:54	04:47	04:29
	16:44	83	14:54 (24)	18:00	1	09:31 (15)	19:05	21:17	22:22	22:50
28	08:54		11:26 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	82	14:54 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:26 (28)				07:15	05:49	04:44	04:30
	16:49	80	14:54 (24)				20:10	21:21	22:25	22:50
30	08:50		11:26 (28)				07:13	05:46	04:42	04:31
	16:51	79	14:53 (24)				20:12	21:24	22:27	22:49
31	08:48		11:26 (28)				07:10		04:41	
	16:54	76	14:52 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1562			681					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,61			0,66					
Total reduction		0,24			0,26					
Total, real		382			180					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:03 (28)	09:00		11:49 (20)
	22:49		22:01		20:40		19:13			16:49	19	11:22 (28)	15:51	22	12:11 (20)
2	04:33		05:26		06:35		07:42			07:54		11:01 (28)	09:02		11:49 (20)
	22:48		21:59		20:37		19:10			16:46	23	11:24 (28)	15:50	22	12:11 (20)
3	04:34		05:28		06:37		07:44			07:56		11:01 (28)	09:03		11:49 (20)
	22:47		21:56		20:34		19:07			16:44	36	13:12 (23)	15:49	22	12:11 (20)
4	04:35		05:31		06:40		07:46			07:59		10:59 (28)	09:05		11:50 (20)
	22:47		21:54		20:31		19:04			16:41	43	13:14 (23)	15:48	21	12:11 (20)
5	04:36		05:33		06:42		07:48			08:01		10:59 (28)	09:07		11:50 (20)
	22:46		21:51		20:28		19:02			16:39	48	13:16 (23)	15:47	21	12:11 (20)
6	04:37		05:35		06:44		07:51			08:03		10:58 (28)	09:09		11:51 (20)
	22:45		21:49		20:25		18:59			16:37	53	13:18 (23)	15:46	16	12:07 (20)
7	04:39		05:37		06:46		07:53			08:06		10:57 (28)	09:10		11:51 (20)
	22:44		21:47		20:23		18:56			16:34	55	13:18 (23)	15:45	17	12:08 (20)
8	04:40		05:39		06:49		07:55			08:08		10:57 (28)	09:12		11:52 (20)
	22:43		21:44		20:20		18:53			16:32	58	13:19 (23)	15:45	8	12:00 (20)
9	04:41		05:42		06:51		07:57			08:11		10:57 (28)	09:13		11:53 (20)
	22:42		21:42		20:17		18:50			16:30	63	14:18 (24)	15:44	4	11:57 (20)
10	04:43		05:44		06:53		08:00			08:13		10:58 (28)	09:15		11:53 (20)
	22:41		21:39		20:14		18:47			16:28	71	14:22 (24)	15:43	1	11:54 (20)
11	04:44		05:46		06:55		08:02			08:15		10:57 (28)	09:16		
	22:39		21:37		20:11		18:45			16:25	76	14:23 (24)	15:43		
12	04:46		05:48		06:57		08:04			08:18		10:57 (28)	09:18		
	22:38		21:34		20:08		18:42			16:23	80	14:25 (24)	15:43		
13	04:47		05:51		07:00		08:07			08:20		10:58 (28)	09:19		
	22:37		21:32		20:05		18:39			16:21	81	14:26 (24)	15:42		
14	04:49		05:53		07:02		08:09			08:22		10:58 (28)	09:20		
	22:35		21:29		20:02		18:36			16:19	82	14:26 (24)	15:42		
15	04:51		05:55		07:04		08:11		10:00 (15)	08:25		10:58 (28)	09:21		
	22:34		21:26		19:59		18:33	7	10:07 (15)	16:17	83	14:27 (24)	15:42		
16	04:52		05:57		07:06		08:13		09:57 (15)	08:27		10:59 (28)	09:22		
	22:32		21:24		19:56		18:31	12	10:09 (15)	16:15	83	14:28 (24)	15:42		
17	04:54		06:00		07:08		08:16		09:56 (15)	08:30		11:00 (28)	09:23		
	22:31		21:21		19:54		18:28	15	10:11 (15)	16:13	83	14:29 (24)	15:42		
18	04:56		06:02		07:11		08:18		09:54 (15)	08:32		11:00 (28)	09:24		
	22:29		21:18		19:51		18:25	17	10:11 (15)	16:11	81	14:29 (24)	15:42		
19	04:58		06:04		07:13		08:20		09:54 (15)	08:34		11:01 (28)	09:25		
	22:27		21:16		19:48		18:22	18	10:12 (15)	16:09	87	14:29 (24)	15:42		
20	05:00		06:06		07:15		08:23		09:53 (15)	08:36		11:02 (28)	09:26		
	22:25		21:13		19:45		18:20	19	10:12 (15)	16:08	88	14:29 (24)	15:43		
21	05:01		06:08		07:17		08:25		09:53 (15)	08:39		11:03 (28)	09:26		
	22:24		21:10		19:42		18:17	19	10:12 (15)	16:06	88	14:29 (24)	15:43		
22	05:03		06:11		07:19		08:27		09:52 (15)	08:41		11:04 (28)	09:27		
	22:22		21:08		19:39		18:14	20	10:12 (15)	16:04	88	14:30 (24)	15:43		
23	05:05		06:13		07:22		08:30		09:53 (15)	08:43		11:05 (28)	09:27		
	22:20		21:05		19:36		18:12	19	10:12 (15)	16:02	84	14:29 (24)	15:44		
24	05:07		06:15		07:24		08:32		09:53 (15)	08:45		11:07 (28)	09:28		
	22:18		21:02		19:33		18:09	17	10:10 (15)	16:01	72	14:30 (24)	15:44		
25	05:09		06:17		07:26		07:35		08:54 (15)	08:47		11:08 (28)	09:28		
	22:16		20:59		19:30		17:06	16	09:10 (15)	15:59	58	13:20 (23)	15:45		
26	05:11		06:20		07:28		07:37		08:55 (15)	08:50		11:11 (28)	09:28		
	22:14		20:57		19:27		17:04	14	09:09 (15)	15:58	53	13:20 (23)	15:46		
27	05:13		06:22		07:30		07:39		08:56 (15)	08:52		11:13 (28)	09:28		
	22:12		20:54		19:25		17:01	10	09:06 (15)	15:56	47	13:19 (23)	15:47		
28	05:16		06:24		07:33		07:42			08:54		11:48 (20)	09:28		
	22:10		20:51		19:22		16:59			15:55	35	13:18 (23)	15:48		
29	05:18		06:26		07:35		07:44			08:56		11:48 (20)	09:28		
	22:07		20:48		19:19		16:56			15:54	33	13:17 (23)	15:49		
30	05:20		06:29		07:37		07:47		11:09 (28)	08:58		11:48 (20)	09:28		
	22:05		20:45		19:16		16:54	7	11:16 (28)	15:52	30	13:15 (23)	15:50		
31	05:22		06:31				07:49		11:06 (28)				09:28		
	22:03		20:42				16:51	15	11:21 (28)				15:51		
Potential sun hours	546		478		386		319			236			199		
Total, worst case								225			1881			154	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,61			0,64	
Total reduction								0,29			0,25			0,25	
Total, real								65			461			39	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:18 (20)	08:46	11:53 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (20)	16:56	49	14:04 (23)	18:05	20:17	21:26	22:31
2	09:27		12:18 (20)	08:43	11:54 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (20)	16:58	44	14:02 (23)	18:07	20:19	21:28	22:32
3	09:27		11:54 (28)	08:41	11:56 (28)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (20)	17:01	39	14:01 (23)	18:09	20:21	21:31	22:34
4	09:27		11:52 (28)	08:39	11:57 (28)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (20)	17:03	32	13:59 (23)	18:12	20:24	21:33	22:35
5	09:26		11:51 (28)	08:37	11:59 (28)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (20)	17:06	19	13:55 (23)	18:14	20:26	21:35	22:37
6	09:25		11:50 (28)	08:34	12:04 (28)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (20)	17:08	5	12:09 (28)	18:17	20:28	21:37	22:38
7	09:24		11:50 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	42	13:46 (23)	17:11		18:19	20:30	21:40	22:39
8	09:24		11:50 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	48	13:49 (23)	17:13		18:21	20:33	21:42	22:40
9	09:23		11:50 (28)	08:27	09:42 (15)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (23)	17:16	7	09:49 (15)	18:24	20:35	21:44	22:42
10	09:22		11:49 (28)	08:25	09:40 (15)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (23)	17:18	12	09:52 (15)	18:26	20:37	21:46	22:43
11	09:21		11:49 (28)	08:23	09:39 (15)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (23)	17:21	15	09:54 (15)	18:28	20:40	21:49	22:44
12	09:20		11:48 (28)	08:20	09:37 (15)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (23)	17:23	17	09:54 (15)	18:31	20:42	21:51	22:45
13	09:18		11:49 (28)	08:18	09:36 (15)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (23)	17:26	19	09:55 (15)	18:33	20:44	21:53	22:46
14	09:17		11:48 (28)	08:15	09:37 (15)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (23)	17:28	19	09:56 (15)	18:35	20:47	21:55	22:47
15	09:16		11:48 (28)	08:13	09:36 (15)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (24)	17:31	20	09:56 (15)	18:38	20:49	21:58	22:47
16	09:15		11:47 (28)	08:10	09:36 (15)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (24)	17:33	20	09:56 (15)	18:40	20:51	22:00	22:48
17	09:13		11:48 (28)	08:07	09:36 (15)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (24)	17:36	19	09:55 (15)	18:42	20:53	22:02	22:49
18	09:12		11:48 (28)	08:05	09:37 (15)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (24)	17:38	19	09:56 (15)	18:45	20:56	22:04	22:49
19	09:10		11:48 (28)	08:02	09:37 (15)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (24)	17:40	18	09:55 (15)	18:47	20:58	22:06	22:50
20	09:08		11:48 (28)	08:00	09:38 (15)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (24)	17:43	15	09:53 (15)	18:49	21:00	22:08	22:50
21	09:07		11:48 (28)	07:57	09:39 (15)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (24)	17:45	13	09:52 (15)	18:51	21:03	22:10	22:50
22	09:05		11:48 (28)	07:54	09:41 (15)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (24)	17:48	8	09:49 (15)	18:54	21:05	22:12	22:50
23	09:03		11:48 (28)	07:52		06:33	06:05	04:54	04:27
	16:34	80	15:02 (24)	17:50		18:56	21:07	22:14	22:51
24	09:02		11:48 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	80	15:02 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00		11:49 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	80	15:02 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58		11:49 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	79	15:02 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56		11:49 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	75	15:01 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54		11:50 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	73	15:01 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52		11:51 (28)			07:15	05:49	04:44	04:30
	16:49	69	15:00 (24)			20:10	21:21	22:25	22:50
30	08:50		11:51 (28)			07:12	05:46	04:42	04:31
	16:51	64	14:58 (24)			20:12	21:24	22:27	22:49
31	08:48		11:52 (28)			07:10		04:41	
	16:54	55	14:55 (24)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1930		409					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,60		0,67					
Total reduction		0,24		0,27					
Total, real		465		110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (15)	09:00		11:31 (28)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (15)	15:51	60	13:37 (23)
2	04:33	05:26	06:35	07:42			07:54		09:12 (15)	09:02		11:32 (28)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (15)	15:50	56	13:36 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (23)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (28)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (23)
5	04:36	05:33	06:42	07:48			08:01		11:32 (28)	09:07		11:35 (28)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (28)	15:47	43	13:32 (23)
6	04:37	05:35	06:44	07:51			08:03		11:29 (28)	09:09		11:37 (28)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (23)	15:46	36	12:27 (20)
7	04:38	05:37	06:46	07:53			08:06		11:27 (28)	09:10		11:38 (28)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (23)	15:45	34	12:27 (20)
8	04:40	05:39	06:49	07:55			08:08		11:25 (28)	09:12		11:40 (28)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (23)	15:45	32	12:28 (20)
9	04:41	05:42	06:51	07:57			08:11		11:25 (28)	09:13		11:42 (28)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (23)	15:44	28	12:28 (20)
10	04:43	05:44	06:53	08:00			08:13		11:24 (28)	09:15		12:07 (20)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (23)	15:43	21	12:28 (20)
11	04:44	05:46	06:55	08:02			08:15		11:23 (28)	09:16		12:08 (20)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (24)	15:43	21	12:29 (20)
12	04:46	05:48	06:57	08:04			08:18		11:23 (28)	09:18		12:08 (20)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (24)	15:43	21	12:29 (20)
13	04:47	05:51	07:00	08:07			08:20		11:23 (28)	09:19		12:09 (20)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (24)	15:42	21	12:30 (20)
14	04:49	05:53	07:02	08:09			08:22		11:22 (28)	09:20		12:09 (20)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (24)	15:42	21	12:30 (20)
15	04:51	05:55	07:04	08:11			08:25		11:22 (28)	09:21		12:09 (20)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (24)	15:42	21	12:30 (20)
16	04:52	05:57	07:06	08:13			08:27		11:22 (28)	09:22		12:10 (20)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (24)	15:42	20	12:30 (20)
17	04:54	06:00	07:08	08:16			08:30		11:23 (28)	09:23		12:10 (20)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (24)	15:42	21	12:31 (20)
18	04:56	06:02	07:11	08:18			08:32		11:22 (28)	09:24		12:11 (20)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (24)	15:42	20	12:31 (20)
19	04:58	06:04	07:13	08:20			08:34		11:23 (28)	09:25		12:12 (20)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (24)	15:42	20	12:32 (20)
20	05:00	06:06	07:15	08:23		10:11 (15)	08:36		11:22 (28)	09:26		12:12 (20)
	22:25	21:13	19:45	18:20	10	10:21 (15)	16:08	82	14:37 (24)	15:43	20	12:32 (20)
21	05:01	06:08	07:17	08:25		10:10 (15)	08:39		11:23 (28)	09:26		12:12 (20)
	22:24	21:10	19:42	18:17	13	10:23 (15)	16:06	80	14:37 (24)	15:43	20	12:32 (20)
22	05:03	06:11	07:19	08:27		10:08 (15)	08:41		11:24 (28)	09:27		12:13 (20)
	22:22	21:08	19:39	18:14	16	10:24 (15)	16:04	79	14:38 (24)	15:43	20	12:33 (20)
23	05:05	06:13	07:22	08:30		10:07 (15)	08:43		11:24 (28)	09:27		12:13 (20)
	22:20	21:05	19:36	18:12	18	10:25 (15)	16:02	84	14:38 (24)	15:44	20	12:33 (20)
24	05:07	06:15	07:24	08:32		10:06 (15)	08:45		11:25 (28)	09:28		12:14 (20)
	22:18	21:02	19:33	18:09	19	10:25 (15)	16:01	88	14:38 (24)	15:44	21	12:35 (20)
25	05:09	06:17	07:26	07:35		09:06 (15)	08:47		11:25 (28)	09:28		12:15 (20)
	22:16	20:59	19:30	17:06	20	09:26 (15)	15:59	88	14:38 (24)	15:45	20	12:35 (20)
26	05:11	06:20	07:28	07:37		09:06 (15)	08:50		11:26 (28)	09:28		12:15 (20)
	22:14	20:57	19:27	17:04	20	09:26 (15)	15:58	81	14:37 (24)	15:46	20	12:35 (20)
27	05:13	06:22	07:30	07:39		09:06 (15)	08:52		11:27 (28)	09:28		12:16 (20)
	22:12	20:54	19:25	17:01	19	09:25 (15)	15:56	73	14:26 (24)	15:47	20	12:36 (20)
28	05:16	06:24	07:33	07:42		09:06 (15)	08:54		11:28 (28)	09:28		12:16 (20)
	22:10	20:51	19:22	16:59	19	09:25 (15)	15:55	65	13:38 (23)	15:48	21	12:37 (20)
29	05:18	06:26	07:35	07:44		09:06 (15)	08:56		11:29 (28)	09:28		12:16 (20)
	22:07	20:48	19:19	16:56	18	09:24 (15)	15:54	64	13:37 (23)	15:49	20	12:36 (20)
30	05:20	06:29	07:37	07:47		09:07 (15)	08:58		11:29 (28)	09:28		12:17 (20)
	22:05	20:45	19:16	16:54	17	09:24 (15)	15:52	62	13:37 (23)	15:50	20	12:37 (20)
31	05:22	06:31		07:49		09:08 (15)				09:28		12:16 (20)
	22:03	20:42		16:51	15	09:23 (15)				15:51	21	12:37 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,60			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			410			210	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:08 (20)	08:46	11:39 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:29 (20)	16:56	49	13:50 (23)	18:05	20:17	21:26	22:31
2	09:27		12:08 (20)	08:43	11:40 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:29 (20)	16:58	44	13:48 (23)	18:07	20:19	21:28	22:32
3	09:27		12:09 (20)	08:41	11:41 (28)	07:30	07:01	05:39	04:37
	15:55	20	12:29 (20)	17:01	39	13:47 (23)	18:09	20:21	21:31	22:34
4	09:27		12:09 (20)	08:39	11:42 (28)	07:27	06:58	05:36	04:36
	15:57	21	12:30 (20)	17:03	32	13:45 (23)	18:12	20:24	21:33	22:35
5	09:26		12:09 (20)	08:37	11:43 (28)	07:24	06:55	05:34	04:35
	15:58	21	12:30 (20)	17:06	19	12:02 (28)	18:14	20:26	21:35	22:37
6	09:25		12:10 (20)	08:34	11:46 (28)	07:21	06:52	05:31	04:34
	16:00	25	13:32 (23)	17:08	14	12:00 (28)	18:17	20:28	21:37	22:38
7	09:24		11:43 (28)	08:32	11:50 (28)	07:19	06:50	05:29	04:33
	16:02	33	13:35 (23)	17:11	6	11:56 (28)	18:19	20:30	21:40	22:39
8	09:24		11:41 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	41	13:37 (23)	17:13		18:21	20:33	21:42	22:41
9	09:23		11:40 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	47	13:39 (23)	17:16		18:24	20:35	21:44	22:42
10	09:22		11:38 (28)	08:25		09:39 (15)	07:10	06:41	05:22	04:30
	16:07	51	13:40 (23)	17:18	3	09:42 (15)	18:26	20:37	21:46	22:43
11	09:21		11:38 (28)	08:23		09:36 (15)	07:07	06:38	05:19	04:29
	16:09	55	13:42 (23)	17:21	10	09:46 (15)	18:28	20:40	21:49	22:44
12	09:20		11:37 (28)	08:20		09:34 (15)	07:04	06:35	05:17	04:29
	16:11	60	14:46 (24)	17:23	14	09:48 (15)	18:31	20:42	21:51	22:45
13	09:18		11:37 (28)	08:18		09:33 (15)	07:02	06:32	05:15	04:28
	16:13	72	14:49 (24)	17:26	16	09:49 (15)	18:33	20:44	21:53	22:46
14	09:17		11:36 (28)	08:15		09:33 (15)	06:59	06:30	05:13	04:28
	16:15	83	14:49 (24)	17:28	17	09:50 (15)	18:35	20:47	21:55	22:47
15	09:16		11:36 (28)	08:13		09:32 (15)	06:56	06:27	05:10	04:27
	16:17	87	14:50 (24)	17:31	18	09:50 (15)	18:38	20:49	21:58	22:47
16	09:15		11:35 (28)	08:10		09:31 (15)	06:53	06:24	05:08	04:27
	16:19	86	14:50 (24)	17:33	19	09:50 (15)	18:40	20:51	22:00	22:48
17	09:13		11:36 (28)	08:07		09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87	14:51 (24)	17:36	19	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:36 (28)	08:05		09:32 (15)	06:47	06:19	05:04	04:27
	16:23	89	14:52 (24)	17:38	19	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:36 (28)	08:02		09:32 (15)	06:44	06:16	05:02	04:27
	16:25	87	14:52 (24)	17:40	18	09:50 (15)	18:47	20:58	22:06	22:50
20	09:09		11:35 (28)	08:00		09:32 (15)	06:41	06:13	05:00	04:27
	16:28	85	14:53 (24)	17:43	17	09:49 (15)	18:49	21:00	22:08	22:50
21	09:07		11:35 (28)	07:57		09:33 (15)	06:39	06:10	04:58	04:27
	16:30	79	14:53 (24)	17:45	15	09:48 (15)	18:51	21:03	22:10	22:50
22	09:05		11:36 (28)	07:54		09:34 (15)	06:36	06:08	04:56	04:27
	16:32	79	14:53 (24)	17:48	12	09:46 (15)	18:54	21:05	22:12	22:50
23	09:03		11:35 (28)	07:52		09:38 (15)	06:33	06:05	04:54	04:27
	16:34	79	14:52 (24)	17:50	6	09:44 (15)	18:56	21:07	22:14	22:51
24	09:02		11:35 (28)	07:49			06:30	06:02	04:52	04:27
	16:37	79	14:52 (24)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:35 (28)	07:46			06:27	05:59	04:51	04:28
	16:39	78	14:52 (24)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:36 (28)	07:44			06:24	05:57	04:49	04:28
	16:41	77	14:52 (24)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:36 (28)	07:41			06:21	05:54	04:47	04:29
	16:44	74	14:51 (24)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:36 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	71	14:50 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:37 (28)				07:15	05:49	04:44	04:30
	16:49	66	14:49 (24)				20:10	21:21	22:25	22:50
30	08:50		11:37 (28)				07:13	05:46	04:42	04:31
	16:51	56	14:45 (24)				20:12	21:24	22:27	22:49
31	08:48		11:38 (28)				07:10		04:41	
	16:54	51	13:50 (23)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1881			406					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,61			0,68					
Total reduction		0,24			0,27					
Total, real		457			110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (28)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (23)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (28)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (23)
4	04:35	05:31	06:40	07:46			07:59		11:18 (28)	09:05		11:25 (28)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (28)	15:48	42	13:22 (23)
5	04:36	05:33	06:42	07:48			08:01		11:15 (28)	09:07		11:28 (28)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (28)	15:47	34	13:21 (23)
6	04:37	05:35	06:44	07:51			08:03		11:14 (28)	09:09		11:56 (20)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (28)	15:46	26	13:19 (23)
7	04:38	05:37	06:46	07:53			08:06		11:12 (28)	09:10		11:56 (20)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (23)	15:45	21	12:17 (20)
8	04:40	05:39	06:49	07:55			08:08		11:11 (28)	09:12		11:57 (20)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (23)	15:45	21	12:18 (20)
9	04:41	05:42	06:51	07:57			08:11		11:10 (28)	09:13		11:58 (20)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (23)	15:44	20	12:18 (20)
10	04:43	05:44	06:53	08:00			08:13		11:10 (28)	09:15		11:58 (20)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (23)	15:43	20	12:18 (20)
11	04:44	05:46	06:55	08:02			08:15		11:09 (28)	09:16		11:58 (20)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (23)	15:43	21	12:19 (20)
12	04:46	05:48	06:57	08:04			08:18		11:09 (28)	09:18		11:58 (20)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (24)	15:43	21	12:19 (20)
13	04:47	05:51	07:00	08:07			08:20		11:09 (28)	09:19		12:00 (20)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (24)	15:42	20	12:20 (20)
14	04:49	05:53	07:02	08:09			08:23		11:08 (28)	09:20		12:00 (20)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (24)	15:42	20	12:20 (20)
15	04:51	05:55	07:04	08:11			08:25		11:08 (28)	09:21		12:00 (20)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (24)	15:42	20	12:20 (20)
16	04:52	05:57	07:06	08:13			08:27		11:09 (28)	09:22		12:01 (20)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (24)	15:42	19	12:20 (20)
17	04:54	06:00	07:08	08:16			08:30		11:09 (28)	09:23		12:01 (20)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (24)	15:42	20	12:21 (20)
18	04:56	06:02	07:11	08:18			08:32		11:09 (28)	09:24		12:02 (20)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (24)	15:42	19	12:21 (20)
19	04:58	06:04	07:13	08:20		10:07 (15)	08:34		11:10 (28)	09:25		12:02 (20)
	22:27	21:16	19:48	18:22	9	10:16 (15)	16:09	79	14:27 (24)	15:42	20	12:22 (20)
20	05:00	06:06	07:15	08:23		10:05 (15)	08:36		11:10 (28)	09:26		12:03 (20)
	22:25	21:13	19:45	18:20	13	10:18 (15)	16:08	79	14:27 (24)	15:43	19	12:22 (20)
21	05:01	06:08	07:17	08:25		10:04 (15)	08:39		11:10 (28)	09:26		12:03 (20)
	22:24	21:10	19:42	18:17	15	10:19 (15)	16:06	79	14:28 (24)	15:43	19	12:22 (20)
22	05:03	06:11	07:19	08:27		10:02 (15)	08:41		11:11 (28)	09:27		12:04 (20)
	22:22	21:08	19:39	18:14	17	10:19 (15)	16:04	84	14:29 (24)	15:43	19	12:23 (20)
23	05:05	06:13	07:22	08:30		10:02 (15)	08:43		11:12 (28)	09:27		12:04 (20)
	22:20	21:05	19:36	18:12	18	10:20 (15)	16:02	86	14:28 (24)	15:44	19	12:23 (20)
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		11:13 (28)	09:28		12:05 (20)
	22:18	21:02	19:33	18:09	19	10:20 (15)	16:01	88	14:29 (24)	15:44	19	12:24 (20)
25	05:09	06:17	07:26	07:35		09:01 (15)	08:47		11:13 (28)	09:28		12:06 (20)
	22:16	20:59	19:30	17:06	19	09:20 (15)	15:59	88	14:29 (24)	15:45	19	12:25 (20)
26	05:11	06:20	07:28	07:37		09:02 (15)	08:50		11:14 (28)	09:28		12:06 (20)
	22:14	20:57	19:27	17:04	19	09:21 (15)	15:58	87	14:29 (24)	15:46	19	12:25 (20)
27	05:13	06:22	07:30	07:39		09:01 (15)	08:52		11:15 (28)	09:28		12:06 (20)
	22:12	20:54	19:25	17:01	19	09:20 (15)	15:56	86	14:29 (24)	15:47	20	12:26 (20)
28	05:16	06:24	07:33	07:42		09:02 (15)	08:54		11:16 (28)	09:28		12:07 (20)
	22:10	20:51	19:22	16:59	17	09:19 (15)	15:55	82	14:29 (24)	15:48	20	12:27 (20)
29	05:18	06:26	07:35	07:44		09:02 (15)	08:56		11:17 (28)	09:28		12:07 (20)
	22:07	20:48	19:19	16:56	16	09:18 (15)	15:54	72	14:29 (24)	15:49	19	12:26 (20)
30	05:20	06:29	07:37	07:47		09:04 (15)	08:58		11:18 (28)	09:28		12:07 (20)
	22:05	20:45	19:16	16:54	13	09:17 (15)	15:52	60	14:28 (24)	15:50	20	12:27 (20)
31	05:22	06:31		07:49		09:06 (15)				09:28		12:07 (20)
	22:03	20:42		16:51	9	09:15 (15)				15:51	20	12:27 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			420			190	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:05 (20)	08:46	11:36 (28)	07:35	07:07	05:44	04:40
	15:53	21 12:26 (20)	16:56	45 13:44 (23)	18:05	20:17	21:26	22:31
2	09:27	12:06 (20)	08:43	11:37 (28)	07:33	07:04	05:41	04:38
	15:54	20 12:26 (20)	16:58	40 13:42 (23)	18:07	20:19	21:28	22:32
3	09:27	12:06 (20)	08:41	11:38 (28)	07:30	07:01	05:39	04:37
	15:55	20 12:26 (20)	17:01	34 13:40 (23)	18:09	20:21	21:31	22:34
4	09:27	12:06 (20)	08:39	11:39 (28)	07:27	06:58	05:36	04:36
	15:57	21 12:27 (20)	17:03	20 11:59 (28)	18:12	20:24	21:33	22:35
5	09:26	12:06 (20)	08:37	11:41 (28)	07:24	06:55	05:34	04:35
	15:58	28 13:28 (23)	17:06	16 11:57 (28)	18:14	20:26	21:35	22:37
6	09:25	12:07 (20)	08:34	11:44 (28)	07:21	06:52	05:31	04:34
	16:00	32 13:31 (23)	17:08	11 11:55 (28)	18:17	20:28	21:37	22:38
7	09:24	11:39 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	38 13:32 (23)	17:11		18:19	20:30	21:40	22:39
8	09:24	11:37 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	46 13:34 (23)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:36 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	50 13:36 (23)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:35 (28)	08:25	09:37 (15)	07:10	06:41	05:22	04:30
	16:07	58 14:41 (24)	17:18	6 09:43 (15)	18:26	20:37	21:46	22:43
11	09:21	11:34 (28)	08:23	09:35 (15)	07:07	06:38	05:19	04:29
	16:09	71 14:43 (24)	17:21	11 09:46 (15)	18:28	20:40	21:49	22:44
12	09:20	11:33 (28)	08:20	09:33 (15)	07:04	06:35	05:17	04:29
	16:11	79 14:44 (24)	17:23	15 09:48 (15)	18:31	20:42	21:51	22:45
13	09:18	11:34 (28)	08:18	09:32 (15)	07:02	06:32	05:15	04:28
	16:13	81 14:45 (24)	17:26	16 09:48 (15)	18:33	20:44	21:53	22:46
14	09:17	11:33 (28)	08:15	09:32 (15)	06:59	06:30	05:13	04:28
	16:15	84 14:45 (24)	17:28	18 09:50 (15)	18:35	20:47	21:55	22:47
15	09:16	11:32 (28)	08:13	09:31 (15)	06:56	06:27	05:10	04:27
	16:17	86 14:46 (24)	17:31	19 09:50 (15)	18:38	20:49	21:58	22:47
16	09:15	11:32 (28)	08:10	09:31 (15)	06:53	06:24	05:08	04:27
	16:19	87 14:46 (24)	17:33	19 09:50 (15)	18:40	20:51	22:00	22:48
17	09:13	11:32 (28)	08:07	09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87 14:47 (24)	17:36	19 09:50 (15)	18:42	20:53	22:02	22:49
18	09:12	11:32 (28)	08:05	09:32 (15)	06:47	06:19	05:04	04:27
	16:23	88 14:48 (24)	17:38	18 09:50 (15)	18:45	20:56	22:04	22:49
19	09:10	11:32 (28)	08:02	09:32 (15)	06:44	06:16	05:02	04:27
	16:25	86 14:48 (24)	17:40	17 09:49 (15)	18:47	20:58	22:06	22:50
20	09:09	11:32 (28)	08:00	09:32 (15)	06:41	06:13	05:00	04:27
	16:28	79 14:48 (24)	17:43	16 09:48 (15)	18:49	21:00	22:08	22:50
21	09:07	11:32 (28)	07:57	09:33 (15)	06:39	06:10	04:58	04:27
	16:30	77 14:48 (24)	17:45	14 09:47 (15)	18:51	21:03	22:10	22:50
22	09:05	11:32 (28)	07:54	09:35 (15)	06:36	06:08	04:56	04:27
	16:32	79 14:49 (24)	17:48	10 09:45 (15)	18:54	21:05	22:12	22:50
23	09:03	11:31 (28)	07:52		06:33	06:05	04:54	04:27
	16:34	78 14:48 (24)	17:50		18:56	21:07	22:14	22:51
24	09:02	11:32 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	77 14:48 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:32 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	75 14:47 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:33 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	73 14:47 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:32 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	70 14:45 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:33 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	66 14:44 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:34 (28)			07:15	05:49	04:44	04:30
	16:49	57 14:41 (24)			20:10	21:21	22:25	22:50
30	08:50	11:34 (28)			07:13	05:46	04:42	04:31
	16:51	52 13:45 (23)			20:12	21:24	22:27	22:49
31	08:48	11:35 (28)			07:10		04:41	
	16:54	48 13:44 (23)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1914		364				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,61		0,69				
Total reduction		0,24		0,27				
Total, real		467		100				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:08 (15)	09:00		11:16 (28)
	22:49	22:01	20:40	19:13			16:49	4	09:12 (15)	15:51	74	14:26 (24)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:18 (28)
	22:48	21:59	20:37	19:10			16:46			15:50	58	14:24 (24)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:19 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	51	13:19 (23)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:21 (28)
	22:47	21:54	20:31	19:04			16:41			15:48	46	13:18 (23)
5	04:36	05:33	06:42	07:48			08:01		11:13 (28)	09:07		11:23 (28)
	22:46	21:51	20:28	19:02			16:39	12	11:25 (28)	15:47	39	13:18 (23)
6	04:37	05:35	06:44	07:51			08:03		11:11 (28)	09:09		11:53 (20)
	22:45	21:49	20:25	18:59			16:37	17	11:28 (28)	15:46	32	13:17 (23)
7	04:38	05:37	06:46	07:53			08:06		11:10 (28)	09:10		11:54 (20)
	22:44	21:47	20:23	18:56			16:34	22	13:06 (23)	15:45	28	13:16 (23)
8	04:40	05:39	06:49	07:55			08:08		11:08 (28)	09:12		11:54 (20)
	22:43	21:44	20:20	18:53			16:32	34	13:10 (23)	15:45	22	13:13 (23)
9	04:41	05:42	06:51	07:57			08:11		11:07 (28)	09:13		11:55 (20)
	22:42	21:42	20:17	18:50			16:30	41	13:13 (23)	15:44	20	12:15 (20)
10	04:43	05:44	06:53	08:00			08:13		11:07 (28)	09:15		11:55 (20)
	22:41	21:39	20:14	18:47			16:28	46	13:15 (23)	15:43	20	12:15 (20)
11	04:44	05:46	06:55	08:02			08:15		11:06 (28)	09:16		11:56 (20)
	22:39	21:37	20:11	18:45			16:25	48	13:15 (23)	15:43	20	12:16 (20)
12	04:46	05:48	06:57	08:04			08:18		11:06 (28)	09:18		11:56 (20)
	22:38	21:34	20:08	18:42			16:23	52	13:17 (23)	15:43	20	12:16 (20)
13	04:47	05:51	07:00	08:07			08:20		11:06 (28)	09:19		11:57 (20)
	22:37	21:32	20:05	18:39			16:21	58	14:14 (24)	15:42	20	12:17 (20)
14	04:49	05:53	07:02	08:09			08:23		11:05 (28)	09:20		11:57 (20)
	22:35	21:29	20:02	18:36			16:19	66	14:16 (24)	15:42	20	12:17 (20)
15	04:51	05:55	07:04	08:11			08:25		11:05 (28)	09:21		11:57 (20)
	22:34	21:26	19:59	18:33			16:17	70	14:18 (24)	15:42	20	12:17 (20)
16	04:52	05:57	07:06	08:13			08:27		11:06 (28)	09:22		11:58 (20)
	22:32	21:24	19:56	18:31			16:15	73	14:20 (24)	15:42	19	12:17 (20)
17	04:54	06:00	07:08	08:16			08:30		11:06 (28)	09:23		11:58 (20)
	22:31	21:21	19:54	18:28			16:13	75	14:21 (24)	15:42	19	12:17 (20)
18	04:56	06:02	07:11	08:18			08:32		11:06 (28)	09:24		11:59 (20)
	22:29	21:18	19:51	18:25			16:11	77	14:22 (24)	15:42	19	12:18 (20)
19	04:58	06:04	07:13	08:20		10:09 (15)	08:34		11:06 (28)	09:25		11:59 (20)
	22:27	21:16	19:48	18:22	5	10:14 (15)	16:09	78	14:23 (24)	15:42	20	12:19 (20)
20	05:00	06:06	07:15	08:23		10:05 (15)	08:36		11:06 (28)	09:26		12:00 (20)
	22:25	21:13	19:45	18:20	11	10:16 (15)	16:08	79	14:23 (24)	15:43	19	12:19 (20)
21	05:01	06:08	07:17	08:25		10:04 (15)	08:39		11:07 (28)	09:26		12:00 (20)
	22:24	21:10	19:42	18:17	14	10:18 (15)	16:06	77	14:23 (24)	15:43	19	12:19 (20)
22	05:03	06:11	07:19	08:27		10:02 (15)	08:41		11:08 (28)	09:27		12:01 (20)
	22:22	21:08	19:39	18:14	17	10:19 (15)	16:04	77	14:24 (24)	15:43	19	12:20 (20)
23	05:05	06:13	07:22	08:30		10:02 (15)	08:43		11:08 (28)	09:27		12:01 (20)
	22:20	21:05	19:36	18:12	18	10:20 (15)	16:02	86	14:24 (24)	15:44	19	12:20 (20)
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		11:09 (28)	09:28		12:02 (20)
	22:18	21:02	19:33	18:09	18	10:19 (15)	16:01	87	14:25 (24)	15:44	19	12:21 (20)
25	05:09	06:17	07:26	07:35		09:01 (15)	08:47		11:10 (28)	09:28		12:03 (20)
	22:16	20:59	19:30	17:06	19	09:20 (15)	15:59	87	14:25 (24)	15:45	19	12:22 (20)
26	05:11	06:20	07:28	07:37		09:01 (15)	08:50		11:11 (28)	09:28		12:03 (20)
	22:14	20:57	19:27	17:04	19	09:20 (15)	15:58	87	14:25 (24)	15:46	19	12:22 (20)
27	05:13	06:22	07:30	07:39		09:01 (15)	08:52		11:11 (28)	09:28		12:03 (20)
	22:12	20:54	19:25	17:01	18	09:19 (15)	15:56	86	14:25 (24)	15:47	20	12:23 (20)
28	05:16	06:24	07:33	07:42		09:02 (15)	08:54		11:13 (28)	09:28		12:04 (20)
	22:10	20:51	19:22	16:59	17	09:19 (15)	15:55	85	14:26 (24)	15:48	20	12:24 (20)
29	05:18	06:26	07:35	07:44		09:02 (15)	08:56		11:14 (28)	09:28		12:04 (20)
	22:07	20:48	19:19	16:56	16	09:18 (15)	15:54	82	14:25 (24)	15:49	19	12:23 (20)
30	05:20	06:29	07:37	07:47		09:03 (15)	08:58		11:14 (28)	09:28		12:04 (20)
	22:05	20:45	19:16	16:54	14	09:17 (15)	15:52	80	14:25 (24)	15:50	20	12:24 (20)
31	05:22	06:31		07:49		09:05 (15)				09:28		12:04 (20)
	22:03	20:42		16:51	11	09:16 (15)				15:51	20	12:24 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					197			1686			799	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					57			411			201	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28		11:58 (20)	08:46	11:24 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:44 (20)
	15:53	16	12:14 (20)	16:56	49	13:35 (23)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	57	14:20 (24)
2	09:28		11:58 (20)	08:43	11:24 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:44 (20)
	15:54	18	12:16 (20)	16:58	47	13:34 (23)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	50	14:19 (24)
3	09:27		11:58 (20)	08:41	11:25 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56		11:02 (28)	09:03		11:44 (20)
	15:55	20	12:18 (20)	17:01	42	13:33 (23)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	12	11:14 (28)	15:49	40	14:19 (24)
4	09:27		11:58 (20)	08:39	11:26 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		10:59 (28)	09:05		11:44 (20)
	15:57	21	12:19 (20)	17:03	35	13:30 (23)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17	11:16 (28)	15:48	34	14:19 (24)
5	09:26		11:59 (20)	08:37	11:26 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		10:58 (28)	09:07		11:45 (20)
	15:58	20	12:19 (20)	17:06	23	11:49 (28)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39	20	11:18 (28)	15:47	31	13:06 (23)
6	09:25		11:59 (20)	08:34	11:28 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		10:57 (28)	09:09		11:45 (20)
	16:00	26	13:18 (23)	17:08	20	11:48 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	23	11:20 (28)	15:46	27	13:05 (23)
7	09:25		12:00 (20)	08:32	11:30 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		10:56 (28)	09:10		11:46 (20)
	16:02	30	13:21 (23)	17:11	16	11:46 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34	37	13:01 (23)	15:45	20	12:06 (20)
8	09:24		12:00 (20)	08:30	11:33 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		10:55 (28)	09:12		11:47 (20)
	16:03	34	14:35 (24)	17:13	11	11:44 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	43	13:03 (23)	15:45	20	12:07 (20)
9	09:23		12:01 (20)	08:27			07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		10:54 (28)	09:13		11:47 (20)
	16:05	41	14:36 (24)	17:16			18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	48	13:05 (23)	15:44	20	12:07 (20)
10	09:22		12:01 (20)	08:25			07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		10:54 (28)	09:15		11:47 (20)
	16:07	50	14:36 (24)	17:18			18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28	51	13:06 (23)	15:43	19	12:07 (20)
11	09:21		12:02 (20)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		10:54 (28)	09:16		11:48 (20)
	16:09	57	14:37 (24)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25	52	13:06 (23)	15:43	16	12:04 (20)
12	09:20		11:28 (28)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		10:54 (28)	09:18		11:48 (20)
	16:11	68	14:38 (24)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	55	13:08 (23)	15:43	11	11:59 (20)
13	09:18		11:26 (28)	08:18			07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20		10:54 (28)	09:19		11:49 (20)
	16:13	75	14:39 (24)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	62	14:08 (24)	15:42	11	12:00 (20)
14	09:17		11:25 (28)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		10:53 (28)	09:20		11:50 (20)
	16:15	78	14:39 (24)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	69	14:10 (24)	15:42	7	12:00 (20)
15	09:16		11:24 (28)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		10:54 (28)	09:21		11:50 (20)
	16:17	82	14:40 (24)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	71	14:12 (24)	15:42	3	11:53 (20)
16	09:15		11:23 (28)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		10:54 (28)	09:22		11:50 (20)
	16:19	85	14:40 (24)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	75	14:14 (24)	15:42	3	11:53 (20)
17	09:13		11:23 (28)	08:07			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		10:55 (28)	09:23		11:51 (20)
	16:21	86	14:41 (24)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	77	14:15 (24)	15:42	1	11:52 (20)
18	09:12		11:23 (28)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		10:55 (28)	09:24		
	16:23	87	14:42 (24)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	76	14:15 (24)	15:42		
19	09:10		11:22 (28)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		10:56 (28)	09:25		
	16:25	88	14:42 (24)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	77	14:16 (24)	15:42		
20	09:09		11:22 (28)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		10:56 (28)	09:26		
	16:28	86	14:42 (24)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	77	14:16 (24)	15:43		
21	09:07		11:22 (28)	07:57			06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39		10:57 (28)	09:26		
	16:30	83	14:42 (24)	17:45			18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	83	14:17 (24)	15:43		
22	09:05		11:22 (28)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41		10:58 (28)	09:27		
	16:32	77	14:42 (24)	17:48			18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	86	14:18 (24)	15:43		
23	09:03		11:21 (28)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		10:58 (28)	09:27		
	16:34	77	14:41 (24)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	88	14:18 (24)	15:44		
24	09:02		11:21 (28)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:00 (28)	09:28		
	16:37	76	14:41 (24)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	87	14:19 (24)	15:44		
25	09:00		11:21 (28)	07:46			06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47		11:00 (28)	09:28		
	16:39	77	14:41 (24)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59	86	14:18 (24)	15:45		
26	08:58		11:22 (28)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:02 (28)	09:28		
	16:41	74	14:41 (24)	17:57			19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	85	14:19 (24)	15:46		
27	08:56		11:21 (28)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:03 (28)	09:28		11:56 (20)
	16:44	71	14:39 (24)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	83	14:19 (24)	15:47	3	11:59 (20)
28	08:54		11:21 (28)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:05 (28)	09:28		11:57 (20)
	16:46	69	14:38 (24)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	79	14:19 (24)	15:48	3	12:00 (20)
29	08:52		11:22 (28)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:07 (28)	09:28		11:56 (20)
	16:49	61	14:36 (24)				20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54	73	14:19 (24)	15:49	5	12:07 (20)
30	08:50		11:22 (28)				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:08 (28)	09:28		11:57 (20)
	16:51	55	13:36 (23)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	69	14:19 (24)	15:50	11	12:08 (20)
31	08:48		11:23 (28)				07:10		04:41		05:22	06:31		07:49				09:28		11:57 (20)
	16:54	53	13:36 (23)				20:14		22:29		22:03	20:42		16:51				15:51	11	12:08 (20)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	1841		243											1761		403	
Sun reduction	0,50		0,50											0,50		0,50	
Oper. time red.	0,80		0,80											0,80		0,80	
Wind dir. red.	0,62		0,65											0,62		0,62	
Total reduction	0,25		0,26											0,25		0,25	
Total, real	452		63											435		100	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:52 (33)	08:46	13:17 (28)	07:35	08:53 (17)	07:07	05:44	04:40
	15:53 17	12:09 (33)	16:56 36	13:53 (28)	18:05 19	09:12 (17)	20:17	21:26	22:30
2	09:27	11:51 (33)	08:43	13:18 (28)	07:32	08:53 (17)	07:04	05:41	04:38
	15:54 19	12:10 (33)	16:58 43	15:13 (23)	18:07 20	09:13 (17)	20:19	21:28	22:32
3	09:27	11:51 (33)	08:41	13:17 (28)	07:30	08:52 (17)	07:01	05:39	04:37
	15:55 19	12:10 (33)	17:01 52	15:18 (23)	18:09 21	09:13 (17)	20:21	21:30	22:34
4	09:26	11:51 (33)	08:39	13:18 (28)	07:27	08:52 (17)	06:58	05:36	04:36
	15:57 20	12:11 (33)	17:03 54	15:20 (23)	18:12 20	09:12 (17)	20:24	21:33	22:35
5	09:26	11:52 (33)	08:37	13:17 (28)	07:24	08:52 (17)	06:55	05:34	04:35
	15:58 20	12:12 (33)	17:06 58	15:21 (23)	18:14 20	09:12 (17)	20:26	21:35	22:37
6	09:25	11:52 (33)	08:34	13:18 (28)	07:21	08:52 (17)	06:52	05:31	04:34
	16:00 20	12:12 (33)	17:08 62	15:43 (24)	18:16 19	09:11 (17)	20:28	21:37	22:38
7	09:24	11:52 (33)	08:32	13:17 (28)	07:19	08:53 (17)	06:49	05:29	04:33
	16:02 21	12:13 (33)	17:11 68	15:46 (24)	18:19 17	09:10 (17)	20:30	21:40	22:39
8	09:24	11:53 (33)	08:30	13:18 (28)	07:16	08:54 (17)	06:47	05:26	04:32
	16:03 21	12:14 (33)	17:13 72	15:51 (24)	18:21 14	09:08 (17)	20:33	21:42	22:40
9	09:23	11:52 (33)	08:27	13:18 (28)	07:13	08:55 (17)	06:44	05:24	04:31
	16:05 22	12:14 (33)	17:16 78	15:59 (24)	18:24 10	09:05 (17)	20:35	21:44	22:42
10	09:22	11:53 (33)	08:25	13:18 (28)	07:10		06:41	05:22	04:30
	16:07 22	12:15 (33)	17:18 82	16:00 (24)	18:26		20:37	21:46	22:43
11	09:21	11:54 (33)	08:23	10:11 (15)	07:07		06:38	05:19	04:29
	16:09 22	12:16 (33)	17:21 84	16:00 (24)	18:28		20:40	21:49	22:44
12	09:20	11:53 (33)	08:20	10:06 (15)	07:04		06:35	05:17	04:29
	16:11 23	12:16 (33)	17:23 89	15:59 (24)	18:31		20:42	21:51	22:45
13	09:18	11:53 (33)	08:18	10:04 (15)	07:01		06:32	05:15	04:28
	16:13 29	13:27 (20)	17:26 90	15:58 (24)	18:33		20:44	21:53	22:46
14	09:17	11:54 (33)	08:15	10:03 (15)	06:59		06:30	05:13	04:28
	16:15 38	13:37 (20)	17:28 87	15:57 (24)	18:35		20:47	21:55	22:46
15	09:16	11:55 (33)	08:13	10:02 (15)	06:56		06:27	05:10	04:27
	16:17 44	13:43 (20)	17:31 81	15:54 (24)	18:38		20:49	21:57	22:47
16	09:15	11:55 (33)	08:10	10:01 (15)	06:53		06:24	05:08	04:27
	16:19 45	13:44 (20)	17:33 72	15:24 (23)	18:40		20:51	22:00	22:48
17	09:13	11:55 (33)	08:07	10:00 (15)	06:50		06:21	05:06	04:27
	16:21 45	13:44 (20)	17:35 67	15:23 (23)	18:42		20:53	22:02	22:49
18	09:12	11:57 (33)	08:05	10:00 (15)	06:47		06:19	05:04	04:27
	16:23 44	13:46 (20)	17:38 61	15:23 (23)	18:45		20:56	22:04	22:49
19	09:10	11:57 (33)	08:02	10:00 (15)	06:44		06:16	05:02	04:27
	16:25 44	13:46 (20)	17:40 43	15:21 (23)	18:47		20:58	22:06	22:50
20	09:08	11:58 (33)	08:00	09:59 (15)	06:41		06:13	05:00	04:27
	16:28 43	13:46 (20)	17:43 41	15:19 (23)	18:49		21:00	22:08	22:50
21	09:07	11:59 (33)	07:57	09:59 (15)	06:38		06:10	04:58	04:27
	16:30 40	13:46 (20)	17:45 32	15:15 (23)	18:51		21:03	22:10	22:50
22	09:05	11:59 (33)	07:54	09:59 (15)	06:36		06:08	04:56	04:27
	16:32 40	13:46 (20)	17:48 25	10:24 (15)	18:54		21:05	22:12	22:50
23	09:03	12:01 (33)	07:52	10:00 (15)	06:33		06:05	04:54	04:27
	16:34 36	13:46 (20)	17:50 24	10:24 (15)	18:56		21:07	22:14	22:50
24	09:02	12:03 (33)	07:49	10:01 (15)	06:30		06:02	04:52	04:27
	16:37 34	13:46 (20)	17:53 22	10:23 (15)	18:58		21:10	22:16	22:51
25	09:00	12:05 (33)	07:46	09:00 (17)	06:27		05:59	04:51	04:28
	16:39 32	13:46 (28)	17:55 27	10:22 (15)	19:01		21:12	22:18	22:50
26	08:58	13:21 (28)	07:43	08:57 (17)	06:24		05:57	04:49	04:28
	16:41 27	13:48 (28)	17:57 30	10:20 (15)	19:03		21:14	22:20	22:50
27	08:56	13:20 (28)	07:41	08:55 (17)	06:21		05:54	04:47	04:29
	16:44 28	13:48 (28)	18:00 28	10:17 (15)	19:05		21:17	22:22	22:50
28	08:54	13:19 (28)	07:38	08:54 (17)	06:18		05:52	04:46	04:30
	16:46 31	13:50 (28)	18:02 22	10:13 (15)	19:07		21:19	22:24	22:50
29	08:52	13:19 (28)			07:15		05:49	04:44	04:30
	16:49 32	13:51 (28)			20:10		21:21	22:25	22:50
30	08:50	13:18 (28)			07:12		05:46	04:42	04:31
	16:51 33	13:51 (28)			20:12		21:24	22:27	22:49
31	08:48	13:18 (28)			07:10			04:41	
	16:53 34	13:52 (28)			20:14			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	945		1530		160				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,61		0,61		0,74				
Total reduction	0,24		0,24		0,29				
Total, real	230		370		47				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		12:48 (28)	09:00		11:36 (33)
	22:49		22:01		20:40		19:13			16:49	83	15:30 (24)	15:51	22	11:58 (33)
2	04:33		05:26		06:35		07:42			07:54		12:48 (28)	09:02		11:36 (33)
	22:48		21:58		20:37		19:10			16:46	76	15:28 (24)	15:50	22	11:58 (33)
3	04:34		05:28		06:37		07:44			07:56		12:48 (28)	09:03		11:36 (33)
	22:47		21:56		20:34		19:07			16:44	71	15:20 (24)	15:49	22	11:58 (33)
4	04:35		05:31		06:40		07:46		09:34 (17)	07:59		12:47 (28)	09:05		11:37 (33)
	22:47		21:54		20:31		19:04	7	09:41 (17)	16:41	66	15:15 (24)	15:48	21	11:58 (33)
5	04:36		05:33		06:42		07:48		09:32 (17)	08:01		12:47 (28)	09:07		11:37 (33)
	22:46		21:51		20:28		19:01	12	09:44 (17)	16:39	62	15:13 (24)	15:47	21	11:58 (33)
6	04:37		05:35		06:44		07:51		09:30 (17)	08:03		12:48 (28)	09:09		11:38 (33)
	22:45		21:49		20:25		18:59	15	09:45 (17)	16:37	57	14:51 (23)	15:46	21	11:59 (33)
7	04:38		05:37		06:46		07:53		09:28 (17)	08:06		12:47 (28)	09:10		11:39 (33)
	22:44		21:47		20:22		18:56	18	09:46 (17)	16:34	55	14:50 (23)	15:45	20	11:59 (33)
8	04:40		05:39		06:48		07:55		09:28 (17)	08:08		12:48 (28)	09:12		11:40 (33)
	22:43		21:44		20:20		18:53	19	09:47 (17)	16:32	50	14:48 (23)	15:45	19	11:59 (33)
9	04:41		05:42		06:51		07:57		09:27 (17)	08:11		12:48 (28)	09:13		11:41 (33)
	22:42		21:42		20:17		18:50	20	09:47 (17)	16:30	42	14:43 (23)	15:44	19	12:00 (33)
10	04:43		05:44		06:53		08:00		09:27 (17)	08:13		12:49 (28)	09:15		11:41 (33)
	22:40		21:39		20:14		18:47	20	09:47 (17)	16:28	35	13:24 (28)	15:43	18	11:59 (33)
11	04:44		05:46		06:55		08:02		09:26 (17)	08:15		12:49 (28)	09:16		11:42 (33)
	22:39		21:37		20:11		18:45	20	09:46 (17)	16:25	34	13:23 (28)	15:43	18	12:00 (33)
12	04:46		05:48		06:57		08:04		09:26 (17)	08:18		12:50 (28)	09:18		11:42 (33)
	22:38		21:34		20:08		18:42	19	09:45 (17)	16:23	33	13:23 (28)	15:43	17	11:59 (33)
13	04:47		05:51		07:00		08:06		09:27 (17)	08:20		12:51 (28)	09:19		11:43 (33)
	22:37		21:31		20:05		18:39	18	09:45 (17)	16:21	32	13:23 (28)	15:42	17	12:00 (33)
14	04:49		05:53		07:02		08:09		09:27 (17)	08:22		12:51 (28)	09:20		11:44 (33)
	22:35		21:29		20:02		18:36	26	10:48 (15)	16:19	31	13:22 (28)	15:42	16	12:00 (33)
15	04:51		05:55		07:04		08:11		09:29 (17)	08:25		12:53 (28)	09:21		11:44 (33)
	22:34		21:26		19:59		18:33	29	10:51 (15)	16:17	28	13:21 (28)	15:42	16	12:00 (33)
16	04:52		05:57		07:06		08:13		09:30 (17)	08:27		12:54 (28)	09:22		11:45 (33)
	22:32		21:24		19:56		18:31	28	10:52 (15)	16:15	27	13:21 (28)	15:42	15	12:00 (33)
17	04:54		05:59		07:08		08:16		10:33 (15)	08:29		11:38 (33)	09:23		11:45 (33)
	22:30		21:21		19:54		18:28	21	10:54 (15)	16:13	32	13:19 (28)	15:42	15	12:00 (33)
18	04:56		06:02		07:10		08:18		10:31 (15)	08:32		11:36 (33)	09:24		11:46 (33)
	22:29		21:18		19:51		18:25	23	10:54 (15)	16:11	35	13:20 (20)	15:42	15	12:01 (33)
19	04:58		06:04		07:13		08:20		10:31 (15)	08:34		11:36 (33)	09:25		11:47 (33)
	22:27		21:16		19:48		18:22	24	10:55 (15)	16:09	36	13:21 (20)	15:42	14	12:01 (33)
20	05:00		06:06		07:15		08:23		10:30 (15)	08:36		11:34 (33)	09:26		11:48 (33)
	22:25		21:13		19:45		18:20	25	10:55 (15)	16:08	40	13:21 (20)	15:42	14	12:02 (33)
21	05:01		06:08		07:17		08:25		10:30 (15)	08:39		11:34 (33)	09:26		11:48 (33)
	22:24		21:10		19:42		18:17	37	15:48 (23)	16:06	40	13:21 (20)	15:43	14	12:02 (33)
22	05:03		06:11		07:19		08:27		10:29 (15)	08:41		11:34 (33)	09:27		11:49 (33)
	22:22		21:08		19:39		18:14	42	15:50 (23)	16:04	43	13:22 (20)	15:43	14	12:03 (33)
23	05:05		06:13		07:22		08:30		10:30 (15)	08:43		11:33 (33)	09:27		11:49 (33)
	22:20		21:05		19:36		18:12	50	15:52 (23)	16:02	44	13:22 (20)	15:44	14	12:03 (33)
24	05:07		06:15		07:24		08:32		10:29 (15)	08:45		11:34 (33)	09:28		11:50 (33)
	22:18		21:02		19:33		18:09	63	15:52 (23)	16:01	44	13:23 (20)	15:44	14	12:04 (33)
25	05:09		06:17		07:26		07:35		09:30 (15)	08:47		11:33 (33)	09:28		11:50 (33)
	22:16		20:59		19:30		17:06	69	14:54 (23)	15:59	44	13:22 (20)	15:45	14	12:04 (33)
26	05:11		06:20		07:28		07:37		09:30 (15)	08:50		11:34 (33)	09:28		11:50 (33)
	22:14		20:56		19:27		17:04	74	14:54 (23)	15:58	44	13:23 (20)	15:46	15	12:05 (33)
27	05:13		06:22		07:30		07:39		09:31 (15)	08:52		11:34 (33)	09:28		11:50 (33)
	22:12		20:54		19:24		17:01	82	15:24 (24)	15:56	44	13:23 (20)	15:47	16	12:06 (33)
28	05:16		06:24		07:33		07:42		09:33 (15)	08:54		11:35 (33)	09:28		11:50 (33)
	22:10		20:51		19:22		16:59	89	15:27 (24)	15:55	37	13:17 (20)	15:48	16	12:06 (33)
29	05:18		06:26		07:35		07:44		09:34 (15)	08:56		11:35 (33)	09:28		11:50 (33)
	22:07		20:48		19:19		16:56	90	15:28 (24)	15:54	29	13:09 (20)	15:49	16	12:06 (33)
30	05:20		06:29		07:37		07:47		09:36 (15)	08:58		11:35 (33)	09:28		11:51 (33)
	22:05		20:45		19:16		16:54	90	15:29 (24)	15:52	23	13:03 (20)	15:50	17	12:08 (33)
31	05:22		06:31				07:49		12:49 (28)				09:28		11:51 (33)
	22:03		20:42				16:51	81	15:30 (24)				15:51	17	12:08 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								1111			1317			529	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,64			0,59			0,64	
Total reduction								0,26			0,23			0,26	
Total, real								286			308			135	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		14:11 (33)	07:35		10:14 (17)	07:07	05:44	04:40
	15:53			16:56	18	15:31 (20)	18:05	73	16:49 (23)	20:17	21:26	22:30
2	09:27			08:43		15:15 (20)	07:32		10:15 (17)	07:04	05:41	04:38
	15:54			16:58	17	15:32 (20)	18:07	70	16:50 (23)	20:19	21:28	22:32
3	09:27			08:41		15:14 (20)	07:30		10:16 (17)	07:01	05:39	04:37
	15:55			17:01	19	15:33 (20)	18:09	63	16:48 (23)	20:21	21:30	22:34
4	09:26			08:39		12:33 (15)	07:27		10:16 (17)	06:58	05:36	04:36
	15:57			17:03	32	15:33 (20)	18:12	54	16:47 (23)	20:23	21:33	22:35
5	09:26			08:37		12:30 (15)	07:24		09:25 (12)	06:55	05:34	04:35
	15:58			17:06	37	15:33 (20)	18:14	37	16:44 (23)	20:26	21:35	22:36
6	09:25			08:34		12:29 (15)	07:21		09:21 (12)	06:52	05:31	04:34
	16:00			17:08	40	15:34 (20)	18:16	27	10:42 (17)	20:28	21:37	22:38
7	09:24			08:32		12:27 (15)	07:18		10:19 (17)	06:49	05:29	04:33
	16:02			17:11	43	15:33 (20)	18:19	20	10:39 (17)	20:30	21:40	22:39
8	09:24			08:30		12:26 (15)	07:16		10:21 (17)	06:47	05:26	04:32
	16:03			17:13	46	15:34 (20)	18:21	15	10:36 (17)	20:33	21:42	22:40
9	09:23			08:27		12:25 (15)	07:13		10:24 (17)	06:44	05:24	04:31
	16:05			17:16	46	15:33 (20)	18:24	8	10:32 (17)	20:35	21:44	22:42
10	09:22			08:25		12:24 (15)	07:10			06:41	05:22	04:30
	16:07			17:18	45	15:31 (20)	18:26			20:37	21:46	22:43
11	09:21			08:22		12:24 (15)	07:07			06:38	05:19	04:29
	16:09			17:21	43	15:30 (20)	18:28			20:40	21:49	22:44
12	09:20			08:20		12:23 (15)	07:04			06:35	05:17	04:29
	16:11			17:23	38	15:27 (20)	18:31			20:42	21:51	22:45
13	09:18			08:18		12:22 (15)	07:01			06:32	05:15	04:28
	16:13			17:26	35	12:57 (15)	18:33			20:44	21:53	22:46
14	09:17			08:15		12:23 (15)	06:59			06:30	05:12	04:28
	16:15			17:28	35	12:58 (15)	18:35			20:46	21:55	22:46
15	09:16			08:12		12:22 (15)	06:56			06:27	05:10	04:27
	16:17			17:30	35	12:57 (15)	18:38			20:49	21:57	22:47
16	09:14			08:10		12:22 (15)	06:53			06:24	05:08	04:27
	16:19			17:33	43	16:12 (28)	18:40			20:51	22:00	22:48
17	09:13			08:07		12:22 (15)	06:50			06:21	05:06	04:27
	16:21			17:35	49	16:15 (28)	18:42			20:53	22:02	22:48
18	09:12			08:05		12:23 (15)	06:47			06:18	05:04	04:27
	16:23			17:38	51	16:17 (28)	18:44			20:56	22:04	22:49
19	09:10			08:02		12:23 (15)	06:44			06:16	05:02	04:27
	16:25			17:40	54	16:18 (28)	18:47			20:58	22:06	22:49
20	09:08			08:00		12:23 (15)	06:41			06:13	05:00	04:27
	16:28			17:43	55	16:19 (28)	18:49			21:00	22:08	22:50
21	09:07			07:57		12:23 (15)	06:38			06:10	04:58	04:27
	16:30			17:45	56	16:20 (28)	18:51			21:03	22:10	22:50
22	09:05			07:54		12:24 (15)	06:36			06:07	04:56	04:27
	16:32			17:48	61	16:42 (23)	18:54			21:05	22:12	22:50
23	09:03			07:52		12:26 (15)	06:33			06:05	04:54	04:27
	16:34			17:50	66	16:48 (23)	18:56			21:07	22:14	22:50
24	09:01			07:49		10:20 (17)	06:30			06:02	04:52	04:27
	16:37			17:52	68	16:49 (23)	18:58			21:10	22:16	22:50
25	09:00			07:46		10:16 (17)	06:27			05:59	04:51	04:28
	16:39			17:55	89	16:50 (23)	19:01			21:12	22:18	22:50
26	08:58			07:43		10:15 (17)	06:24			05:57	04:49	04:28
	16:41			17:57	92	16:50 (23)	19:03			21:14	22:20	22:50
27	08:56			07:41		10:15 (17)	06:21			05:54	04:47	04:29
	16:44			18:00	77	16:50 (23)	19:05			21:17	22:22	22:50
28	08:54			07:38		10:15 (17)	06:18			05:51	04:45	04:29
	16:46			18:02	75	16:50 (23)	19:07			21:19	22:24	22:50
29	08:52						07:15			05:49	04:44	04:30
	16:49						20:10			21:21	22:25	22:49
30	08:50		14:16 (33)				07:12			05:46	04:42	04:31
	16:51	3	14:19 (33)				20:12			21:23	22:27	22:49
31	08:48		14:08 (33)				07:10				04:41	
	16:53	21	15:27 (20)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		24			1365			367				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,55			0,60			0,65				
Total reduction		0,22			0,24			0,26				
Total, real		5			328			96				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:53 (15)	09:00
	22:48	22:01	20:40	19:13			16:49	46	15:01 (20)	15:51
2	04:33	05:26	06:35	07:41			07:54		11:55 (15)	09:01
	22:48	21:58	20:37	19:10			16:46	45	15:02 (20)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:56 (15)	09:03
	22:47	21:56	20:34	19:07			16:44	45	15:03 (20)	15:49
4	04:35	05:31	06:40	07:46			07:58		11:57 (15)	09:05
	22:46	21:54	20:31	19:04			16:41	43	15:03 (20)	15:48
5	04:36	05:33	06:42	07:48		10:59 (17)	08:01		11:58 (15)	09:07
	22:46	21:51	20:28	19:01	13	11:12 (17)	16:39	41	15:03 (20)	15:47
6	04:37	05:35	06:44	07:50		10:56 (17)	08:03		12:01 (15)	09:09
	22:45	21:49	20:25	18:59	19	11:15 (17)	16:37	36	15:04 (20)	15:46
7	04:38	05:37	06:46	07:53		09:54 (12)	08:06		12:03 (15)	09:10
	22:44	21:47	20:22	18:56	24	11:16 (17)	16:34	31	15:03 (20)	15:45
8	04:40	05:39	06:48	07:55		09:58 (12)	08:08		14:45 (20)	09:12
	22:43	21:44	20:20	18:53	33	17:18 (23)	16:32	18	15:03 (20)	15:45
9	04:41	05:42	06:51	07:57		10:01 (12)	08:10		14:46 (20)	09:13
	22:42	21:42	20:17	18:50	49	17:20 (23)	16:30	17	15:03 (20)	15:44
10	04:43	05:44	06:53	08:00		10:49 (17)	08:13		13:42 (33)	09:15
	22:40	21:39	20:14	18:47	59	17:21 (23)	16:28	20	15:03 (20)	15:43
11	04:44	05:46	06:55	08:02		10:49 (17)	08:15		13:39 (33)	09:16
	22:39	21:37	20:11	18:44	67	17:23 (23)	16:25	20	14:58 (20)	15:43
12	04:46	05:48	06:57	08:04		10:48 (17)	08:18		13:48 (33)	09:17
	22:38	21:34	20:08	18:42	72	17:23 (23)	16:23	3	13:51 (33)	15:43
13	04:47	05:50	06:59	08:06		10:48 (17)	08:20			09:19
	22:36	21:31	20:05	18:39	73	17:23 (23)	16:21			15:42
14	04:49	05:53	07:02	08:09		10:47 (17)	08:22			09:20
	22:35	21:29	20:02	18:36	77	17:23 (23)	16:19			15:42
15	04:50	05:55	07:04	08:11		10:48 (17)	08:25			09:21
	22:34	21:26	19:59	18:33	86	17:23 (23)	16:17			15:42
16	04:52	05:57	07:06	08:13		10:47 (17)	08:27			09:22
	22:32	21:24	19:56	18:31	93	17:22 (23)	16:15			15:42
17	04:54	05:59	07:08	08:16		10:48 (17)	08:29			09:23
	22:30	21:21	19:53	18:28	85	17:22 (23)	16:13			15:42
18	04:56	06:02	07:10	08:18		12:58 (15)	08:32			09:24
	22:29	21:18	19:51	18:25	66	17:20 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		12:57 (15)	08:34			09:25
	22:27	21:16	19:48	18:22	64	17:17 (23)	16:09			15:42
20	04:59	06:06	07:15	08:23		12:55 (15)	08:36			09:25
	22:25	21:13	19:45	18:20	58	17:12 (23)	16:07			15:42
21	05:01	06:08	07:17	08:25		12:54 (15)	08:39			09:26
	22:23	21:10	19:42	18:17	56	16:51 (28)	16:06			15:43
22	05:03	06:11	07:19	08:27		12:53 (15)	08:41			09:27
	22:22	21:07	19:39	18:14	55	16:49 (28)	16:04			15:43
23	05:05	06:13	07:21	08:30		12:53 (15)	08:43			09:27
	22:20	21:05	19:36	18:12	53	16:48 (28)	16:02			15:44
24	05:07	06:15	07:24	08:32		12:52 (15)	08:45			09:28
	22:18	21:02	19:33	18:09	52	16:46 (28)	16:01			15:44
25	05:09	06:17	07:26	07:34		11:52 (15)	08:47			09:28
	22:16	20:59	19:30	17:06	47	15:44 (28)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:51 (15)	08:49			09:28
	22:14	20:56	19:27	17:04	39	15:39 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:52 (15)	08:52			09:28
	22:12	20:54	19:24	17:01	35	12:27 (15)	15:56			15:47
28	05:15	06:24	07:33	07:42		11:52 (15)	08:54			09:28
	22:10	20:51	19:22	16:59	35	12:27 (15)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:52 (15)	08:56			09:28
	22:07	20:48	19:19	16:56	34	12:26 (15)	15:53			15:49
30	05:20	06:29	07:37	07:46		11:53 (15)	08:58			09:28
	22:05	20:45	19:16	16:54	40	14:58 (20)	15:52			15:50
31	05:22	06:31		07:49		11:53 (15)				09:28
	22:03	20:42		16:51	44	15:00 (20)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1428			365		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,62			0,58		
Total reduction					0,25			0,23		
Total, real					353			85		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		11:38 (17)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		09:44 (12)	09:00
	15:53		16:56	63	13:43 (15)	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	56	15:37 (28)	15:51
2	09:27		08:43		11:39 (17)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		09:56 (12)	09:01
	15:54		16:58	59	13:43 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	51	15:37 (28)	15:50
3	09:27		08:41		11:38 (17)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		09:57 (12)	09:03
	15:55		17:01	51	13:42 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	55	15:36 (28)	15:49
4	09:26		08:39		11:39 (17)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:02 (12)	09:05
	15:57		17:03	51	15:59 (28)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	56	15:35 (28)	15:48
5	09:26		08:37		11:39 (17)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:04 (12)	09:07
	15:58		17:06	56	16:02 (28)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	58	15:34 (28)	15:47
6	09:25		08:34		10:34 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		11:10 (17)	09:09
	16:00		17:08	57	16:05 (28)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	55	15:33 (28)	15:46
7	09:24		08:32		10:32 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		11:09 (17)	09:10
	16:02		17:11	55	16:05 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56		16:34	49	13:12 (15)	15:45
8	09:24		08:30		10:27 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		11:09 (17)	09:12
	16:03		17:13	53	16:07 (28)	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53		16:32	50	13:13 (15)	15:45
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	16:05		17:16	49	16:07 (28)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	60	13:14 (15)	15:44
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	16:07		17:18	58	16:07 (28)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	61	13:14 (15)	15:43
11	09:21		08:22		10:16 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		11:10 (17)	09:16
	16:09		17:21	55	16:08 (28)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	63	13:14 (15)	15:43
12	09:20		08:20		10:17 (12)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		11:10 (17)	09:17
	16:11		17:23	48	16:08 (28)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	66	13:15 (15)	15:43
13	09:18		08:17		10:18 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		11:11 (17)	09:19
	16:13		17:26	33	16:07 (28)	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	65	13:15 (15)	15:42
14	09:17	12:02 (9)	08:15		10:21 (12)	06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:11 (17)	09:20
	16:15	8 12:10 (9)	17:28	28	16:08 (28)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	66	13:15 (15)	15:42
15	09:16	12:02 (9)	08:12		15:50 (28)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:13 (17)	09:21
	16:17	9 12:11 (9)	17:30	17	16:07 (28)	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	64	13:15 (15)	15:42
16	09:14	12:02 (9)	08:10		15:51 (28)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:14 (17)	09:22
	16:19	11 12:13 (9)	17:33	14	16:05 (28)	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	62	13:15 (15)	15:42
17	09:13	12:02 (9)	08:07		15:52 (28)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		11:15 (17)	09:23
	16:21	20 13:30 (15)	17:35	12	16:04 (28)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	61	13:14 (15)	15:42
18	09:12	11:58 (9)	08:05		15:56 (28)	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		11:16 (17)	09:24
	16:23	30 13:34 (15)	17:38	6	16:02 (28)	18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	60	13:14 (15)	15:42
19	09:10	11:58 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		11:19 (17)	09:25
	16:25	33 13:35 (15)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	55	13:14 (15)	15:42
20	09:08	11:58 (9)	08:00			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		11:21 (17)	09:25
	16:27	36 13:37 (15)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	47	13:13 (15)	15:42
21	09:07	11:58 (9)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		11:33 (9)	09:26
	16:30	39 13:38 (15)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	39	13:13 (15)	15:43
22	09:05	11:46 (17)	07:54			06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		11:34 (9)	09:27
	16:32	47 13:38 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	36	13:13 (15)	15:43
23	09:03	11:44 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		11:34 (9)	09:27
	16:34	55 13:39 (15)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	33	13:12 (15)	15:44
24	09:01	11:42 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	16:24 (28)	08:45		11:35 (9)	09:28
	16:37	60 13:40 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	8 16:32 (28)	16:01	30	13:11 (15)	15:44
25	09:00	11:42 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	15:22 (28)	08:47		11:41 (9)	09:28
	16:39	61 13:41 (15)	17:55			19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06	12 15:34 (28)	15:59	20	13:09 (15)	15:45
26	08:58	11:41 (17)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	15:20 (28)	08:49		11:41 (9)	09:28
	16:41	62 13:42 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15 15:35 (28)	15:58	11	11:52 (9)	15:46
27	08:56	11:40 (17)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	15:19 (28)	08:52		11:41 (9)	09:28
	16:44	64 13:42 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01	17 15:36 (28)	15:56	10	11:51 (9)	15:47
28	08:54	11:40 (17)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42	09:50 (12)	08:54		11:42 (9)	09:28
	16:46	65 13:43 (15)	18:02			19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59	28 15:37 (28)	15:55	8	11:50 (9)	15:48
29	08:52	11:39 (17)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	09:47 (12)	08:56			09:28
	16:49	65 13:43 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	37 15:37 (28)	15:53			15:49
30	08:50	11:39 (17)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	09:46 (12)	08:58			09:28
	16:51	65 13:43 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	49 15:37 (28)	15:52			15:50
31	08:48	11:39 (17)				07:09		04:41		05:22	06:31		07:49	09:46 (12)				09:28
	16:53	63 13:43 (15)				20:14		22:29		22:03	20:42		16:51	55 15:38 (28)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236				199
Total, worst case		793		765									221		1347			
Sun reduction		0,50		0,50									0,50		0,50			
Oper. time red.		0,80		0,80									0,80		0,80			
Wind dir. red.		0,62		0,61									0,60		0,62			
Total reduction		0,25		0,24									0,24		0,25			
Total, real		197		187									53		334			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:50 (12)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39		07:51	10:27 (12)	09:00
	15:53		16:56	74	14:26 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	30 13:49 (15)	15:51
2	09:27		08:43		10:51 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:25 (12)	09:01
	15:54		16:58	73	14:27 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	45 13:52 (15)	15:50
3	09:27		08:41		10:50 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:24 (12)	09:03
	15:55		17:01	74	14:27 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	54 13:54 (15)	15:49
4	09:26		08:39		10:51 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:22 (12)	09:05
	15:57		17:03	71	14:27 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	61 13:55 (15)	15:48
5	09:26		08:37		10:51 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:22 (12)	09:07
	15:58		17:06	68	14:26 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	65 13:56 (15)	15:47
6	09:25		08:34		10:53 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:22 (12)	09:09
	16:00		17:08	64	14:26 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	69 13:57 (15)	15:46
7	09:24		08:32		10:53 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:21 (12)	09:10
	16:02		17:11	59	14:25 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	72 13:57 (15)	15:45
8	09:24		08:30		10:55 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:21 (12)	09:12
	16:03		17:13	52	14:24 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73 13:57 (15)	15:45
9	09:23		08:27		10:56 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:21 (12)	09:13
	16:05		17:16	43	14:22 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75 13:58 (15)	15:44
10	09:22		08:25		10:58 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:22 (12)	09:15
	16:07		17:18	26	14:18 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	72 13:58 (15)	15:43
11	09:21		08:22		12:44 (17)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:21 (12)	09:16
	16:09		17:21	5	12:49 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	75 13:58 (15)	15:43
12	09:20		08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:22 (12)	09:17
	16:11		17:23			18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	72 13:58 (15)	15:42
13	09:18	12:39 (9)	08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:23 (12)	09:19
	16:13	5 12:44 (9)	17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	72 13:58 (15)	15:42
14	09:17	12:39 (9)	08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	10:23 (12)	09:20
	16:15	7 12:46 (9)	17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	68 13:57 (15)	15:42
15	09:16	12:39 (9)	08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	10:24 (12)	09:21
	16:17	15 12:54 (9)	17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	63 13:57 (15)	15:42
16	09:14	12:38 (9)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	10:30 (12)	09:22
	16:19	17 12:55 (9)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	50 13:57 (15)	15:42
17	09:13	12:38 (9)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:05 (17)	09:23
	16:21	18 12:56 (9)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45 13:55 (15)	15:42
18	09:12	12:37 (9)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:07 (17)	09:24
	16:23	19 12:56 (9)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	42 13:55 (15)	15:42
19	09:10	12:38 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:08 (17)	09:25
	16:25	20 12:58 (9)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	39 13:54 (15)	15:42
20	09:08	12:37 (17)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:09 (17)	09:25
	16:27	22 12:59 (9)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	33 13:51 (15)	15:42
21	09:07	12:35 (17)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:11 (17)	09:26
	16:30	23 12:58 (9)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	23 12:34 (9)	15:43
22	09:05	12:34 (17)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:13 (17)	09:27
	16:32	33 14:16 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	22 12:35 (9)	15:43
23	09:03	12:33 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:14 (9)	09:27
	16:34	39 14:19 (15)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	20 12:34 (9)	15:44
24	09:01	12:33 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:15 (9)	09:28
	16:37	42 14:21 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	20 12:35 (9)	15:44
25	09:00	12:32 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:16 (9)	09:28
	16:39	45 14:22 (15)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	18 12:34 (9)	15:45
26	08:58	10:57 (12)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49	12:17 (9)	09:28
	16:41	50 14:24 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58	17 12:34 (9)	15:46
27	08:56	10:51 (12)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52	12:18 (9)	09:28
	16:44	64 14:24 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56	15 12:33 (9)	15:47
28	08:54	10:51 (12)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54	12:19 (9)	09:28
	16:46	69 14:25 (15)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59		15:55	7 12:26 (9)	15:48
29	08:52	10:51 (12)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56	12:20 (9)	09:28
	16:49	70 14:26 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53	5 12:25 (9)	15:49
30	08:50	10:50 (12)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		08:58		09:28
	16:51	72 14:26 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54		15:52		15:50
31	08:48	10:51 (12)				07:09		04:41		05:22	06:31		07:49	12:13 (17)			09:28
	16:53	74 14:27 (15)				20:14		22:29		22:03	20:42		16:51	7 12:20 (17)			15:51
Potential sun hours	221		260			365	432	521	547	546	478	386	319		236		199
Total, worst case		704		609										7		1322	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,62		0,63										0,63		0,62	
Total reduction		0,25		0,25										0,25		0,25	
Total, real		174		153										2		328	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:45 (12)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		10:19 (12)	09:00
	15:53		16:56	73	14:22 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	43	13:46 (15)	15:51
2	09:27		08:43		10:46 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		10:18 (12)	09:01
	15:54		16:58	74	14:23 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	53	13:48 (15)	15:50
3	09:27		08:41		10:45 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		10:18 (12)	09:03
	15:55		17:01	74	14:22 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	59	13:50 (15)	15:49
4	09:26		08:39		10:46 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:16 (12)	09:05
	15:57		17:03	73	14:23 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	65	13:51 (15)	15:48
5	09:26		08:37		10:46 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:16 (12)	09:07
	15:58		17:06	71	14:22 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	70	13:52 (15)	15:47
6	09:25		08:34		10:47 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		10:16 (12)	09:09
	16:00		17:08	68	14:22 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	73	13:53 (15)	15:46
7	09:24		08:32		10:47 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		10:16 (12)	09:10
	16:02		17:11	65	14:21 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	73	13:52 (15)	15:45
8	09:24		08:30		10:48 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		10:16 (12)	09:12
	16:03		17:13	58	14:20 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73	13:53 (15)	15:45
9	09:23		08:27		10:49 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10		10:16 (12)	09:13
	16:05		17:16	50	14:18 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75	13:53 (15)	15:44
10	09:22		08:25		10:50 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13		10:17 (12)	09:15
	16:07		17:18	40	14:16 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	74	13:54 (15)	15:43
11	09:21		08:22		10:53 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		10:17 (12)	09:16
	16:09		17:21	22	12:47 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	69	13:53 (15)	15:43
12	09:20		08:20		12:38 (17)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		10:18 (12)	09:17
	16:11		17:23	4	12:42 (17)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	54	13:53 (15)	15:42
13	09:18		08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		10:20 (12)	09:19
	16:13		17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	53	13:53 (15)	15:42
14	09:17		08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:57 (17)	09:20
	16:15		17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	51	13:52 (15)	15:42
15	09:16		08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:58 (17)	09:21
	16:17		17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	50	13:52 (15)	15:42
16	09:14		08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:59 (17)	09:22
	16:19		17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	49	13:52 (15)	15:42
17	09:13		08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		12:00 (17)	09:23
	16:21	5	12:50 (9)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45	13:50 (15)	15:42
18	09:12		12:33 (9)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		12:01 (17)	09:24
	16:23	18	12:51 (9)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	43	13:50 (15)	15:42
19	09:10		12:34 (9)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		12:03 (17)	09:25
	16:25	19	12:53 (9)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	38	13:49 (15)	15:42
20	09:08		12:34 (9)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		12:04 (17)	09:25
	16:27	20	12:54 (9)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	27	13:41 (15)	15:42
21	09:07		12:31 (17)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		12:07 (17)	09:26
	16:30	22	12:53 (9)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	22	12:29 (9)	15:43
22	09:05		12:29 (17)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		12:10 (9)	09:27
	16:32	27	14:06 (15)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	20	12:30 (9)	15:43
23	09:03		12:28 (17)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		12:10 (9)	09:27
	16:34	38	14:14 (15)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	19	12:29 (9)	15:44
24	09:01		12:27 (17)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45		12:11 (9)	09:28
	16:37	43	14:16 (15)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	18	12:29 (9)	15:44
25	09:00		12:27 (17)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47		12:11 (9)	09:28
	16:39	45	14:17 (15)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	5	12:28 (9)	15:45
26	08:58		12:26 (17)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49			09:28
	16:41	49	14:19 (15)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58			15:46
27	08:56		12:25 (17)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52			09:28
	16:44	50	14:19 (15)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56			15:47
28	08:54		12:25 (17)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54			09:28
	16:46	51	14:20 (15)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59		15:55			15:48
29	08:52		10:48 (12)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56			09:28
	16:49	53	14:21 (15)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53			15:49
30	08:50		10:46 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	12:06 (17)	08:58			09:28
	16:51	55	14:21 (15)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	7 12:13 (17)	15:52			15:50
31	08:48		10:46 (12)			07:09		04:41		05:22	06:31		07:49	10:22 (12)				09:28
	16:53	69	14:22 (15)			20:14		22:29		22:03	20:42		16:51	25 12:17 (17)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236				199
Total, worst case		564		672									32		1221			
Sun reduction		0,50		0,50									0,50		0,50			
Oper. time red.		0,80		0,80									0,80		0,80			
Wind dir. red.		0,61		0,63									0,66		0,62			
Total reduction		0,24		0,25									0,26		0,25			
Total, real		138		169									8		303			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:03 (26)	08:45	14:59 (17)	07:35	07:07	05:44	04:39
	15:52 20	12:23 (26)	16:56 18	15:17 (17)	18:04	20:16	21:26	22:30
2	09:27	12:03 (26)	08:43	14:59 (17)	07:32	07:04	05:41	04:38
	15:54 20	12:23 (26)	16:58 19	15:18 (17)	18:07	20:19	21:28	22:32
3	09:27	12:03 (26)	08:41	14:58 (17)	07:30	07:01	05:38	04:37
	15:55 20	12:23 (26)	17:01 19	15:17 (17)	18:09	20:21	21:30	22:33
4	09:26	12:03 (26)	08:39	14:59 (17)	07:27	06:58	05:36	04:36
	15:57 21	12:24 (26)	17:03 19	15:18 (17)	18:12	20:23	21:33	22:35
5	09:26	12:04 (26)	08:37	14:59 (17)	07:24	06:55	05:33	04:34
	15:58 26	13:33 (12)	17:06 19	15:18 (17)	18:14	20:26	21:35	22:36
6	09:25	12:04 (26)	08:34	15:00 (17)	07:21	06:52	05:31	04:33
	16:00 29	13:35 (12)	17:08 18	15:18 (17)	18:16	20:28	21:37	22:38
7	09:24	12:05 (26)	08:32	15:00 (17)	07:18	06:49	05:29	04:32
	16:01 31	13:37 (12)	17:11 17	15:17 (17)	18:19	20:30	21:39	22:39
8	09:23	12:06 (26)	08:30	15:00 (17)	07:16	06:46	05:26	04:31
	16:03 33	13:39 (12)	17:13 16	15:16 (17)	18:21	20:33	21:42	22:40
9	09:23	12:06 (26)	08:27	15:02 (17)	07:13	06:44	05:24	04:31
	16:05 33	13:39 (12)	17:15 14	15:16 (17)	18:23	20:35	21:44	22:42
10	09:22	12:07 (26)	08:25	15:03 (17)	07:10	06:41	05:21	04:30
	16:07 35	13:41 (12)	17:18 11	15:14 (17)	18:26	20:37	21:46	22:43
11	09:21	12:07 (26)	08:22	15:07 (17)	07:07	06:38	05:19	04:29
	16:09 35	13:41 (12)	17:20 5	15:12 (17)	18:28	20:39	21:49	22:44
12	09:19	12:08 (26)	08:20		07:04	06:35	05:17	04:29
	16:11 35	13:42 (12)	17:23		18:30	20:42	21:51	22:45
13	09:18	12:09 (26)	08:17		07:01	06:32	05:15	04:28
	16:12 35	13:43 (12)	17:25		18:33	20:44	21:53	22:46
14	09:17	12:10 (26)	08:15		06:58	06:29	05:12	04:28
	16:14 35	13:44 (12)	17:28		18:35	20:46	21:55	22:46
15	09:16	12:11 (26)	08:12		06:56	06:27	05:10	04:27
	16:17 34	13:45 (12)	17:30		18:37	20:49	21:57	22:47
16	09:14	12:12 (26)	08:10		06:53	06:24	05:08	04:27
	16:19 32	13:45 (12)	17:33		18:40	20:51	22:00	22:48
17	09:13	12:14 (26)	08:07		06:50	06:21	05:06	04:27
	16:21 29	13:45 (12)	17:35		18:42	20:53	22:02	22:48
18	09:11	12:16 (26)	08:05		06:47	06:18	05:04	04:26
	16:23 26	13:46 (12)	17:38		18:44	20:56	22:04	22:49
19	09:10	13:25 (12)	08:02		06:44	06:16	05:02	04:26
	16:25 21	13:46 (12)	17:40		18:47	20:58	22:06	22:49
20	09:08	13:25 (12)	07:59		06:41	06:13	05:00	04:26
	16:27 22	13:47 (12)	17:43		18:49	21:00	22:08	22:50
21	09:07	13:26 (12)	07:57		06:38	06:10	04:58	04:26
	16:30 21	13:47 (12)	17:45		18:51	21:03	22:10	22:50
22	09:05	13:26 (12)	07:54		06:35	06:07	04:56	04:27
	16:32 21	13:47 (12)	17:48		18:54	21:05	22:12	22:50
23	09:03	13:27 (12)	07:51		06:33	06:05	04:54	04:27
	16:34 20	13:47 (12)	17:50		18:56	21:07	22:14	22:50
24	09:01	13:28 (12)	07:49		06:30	06:02	04:52	04:27
	16:37 19	13:47 (12)	17:52		18:58	21:09	22:16	22:50
25	09:00	13:29 (12)	07:46		06:27	05:59	04:50	04:28
	16:39 18	13:47 (12)	17:55		19:00	21:12	22:18	22:50
26	08:58	13:30 (12)	07:43		06:24	05:57	04:49	04:28
	16:41 17	13:47 (12)	17:57		19:03	21:14	22:20	22:50
27	08:56	13:30 (12)	07:41		06:21	05:54	04:47	04:29
	16:44 20	15:09 (17)	18:00		19:05	21:16	22:22	22:50
28	08:54	13:32 (12)	07:38		06:18	05:51	04:45	04:29
	16:46 23	15:12 (17)	18:02		19:07	21:19	22:23	22:50
29	08:52	13:35 (12)			07:15	05:49	04:44	04:30
	16:48 21	15:14 (17)			20:10	21:21	22:25	22:49
30	08:50	15:00 (17)			07:12	05:46	04:42	04:31
	16:51 15	15:15 (17)			20:12	21:23	22:27	22:49
31	08:48	15:00 (17)			07:09		04:41	
	16:53 16	15:16 (17)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case	783		175					
Sun reduction	0,50		0,50					
Oper. time red.	0,80		0,80					
Wind dir. red.	0,60		0,55					
Total reduction	0,24		0,22					
Total, real	187		39					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (17)	08:59		11:49 (26)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (17)	15:51	35	13:23 (12)
2	04:33	05:26	06:35	07:41			07:54		14:31 (17)	09:01		11:50 (26)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (17)	15:50	35	13:24 (12)
3	04:34	05:28	06:37	07:44			07:56		14:31 (17)	09:03		11:50 (26)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (17)	15:49	33	13:23 (12)
4	04:35	05:30	06:39	07:46			07:58		14:29 (17)	09:05		11:50 (26)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (17)	15:48	33	13:23 (12)
5	04:36	05:33	06:42	07:48			08:01		14:29 (17)	09:07		11:50 (26)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (17)	15:47	31	13:22 (12)
6	04:37	05:35	06:44	07:50			08:03		14:29 (17)	09:08		11:50 (26)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (17)	15:46	30	13:22 (12)
7	04:38	05:37	06:46	07:53			08:06		14:29 (17)	09:10		11:51 (26)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (17)	15:45	27	13:21 (12)
8	04:40	05:39	06:48	07:55			08:08		14:29 (17)	09:12		11:51 (26)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (17)	15:44	21	12:12 (26)
9	04:41	05:41	06:51	07:57			08:10		14:30 (17)	09:13		11:51 (26)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (17)	15:44	21	12:12 (26)
10	04:42	05:44	06:53	07:59			08:13		14:29 (17)	09:15		11:52 (26)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (17)	15:43	20	12:12 (26)
11	04:44	05:46	06:55	08:02			08:15		14:30 (17)	09:16		11:53 (26)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (17)	15:43	20	12:13 (26)
12	04:45	05:48	06:57	08:04			08:18		14:32 (17)	09:17		11:53 (26)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (17)	15:42	20	12:13 (26)
13	04:47	05:50	06:59	08:06			08:20		13:07 (12)	09:19		11:54 (26)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (17)	15:42	20	12:14 (26)
14	04:49	05:53	07:02	08:09			08:22		13:04 (12)	09:20		11:54 (26)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (17)	15:42	20	12:14 (26)
15	04:50	05:55	07:04	08:11			08:25		13:03 (12)	09:21		11:54 (26)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (17)	15:42	20	12:14 (26)
16	04:52	05:57	07:06	08:13			08:27		13:03 (12)	09:22		11:55 (26)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (12)	15:42	20	12:15 (26)
17	04:54	05:59	07:08	08:16			08:29		13:02 (12)	09:23		11:55 (26)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (12)	15:42	20	12:15 (26)
18	04:56	06:02	07:10	08:18			08:32		13:02 (12)	09:24		11:56 (26)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (12)	15:42	19	12:15 (26)
19	04:57	06:04	07:13	08:20			08:34		13:02 (12)	09:25		11:56 (26)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (12)	15:42	20	12:16 (26)
20	04:59	06:06	07:15	08:23			08:36		13:01 (12)	09:25		11:57 (26)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (12)	15:42	20	12:17 (26)
21	05:01	06:08	07:17	08:25			08:38		13:02 (12)	09:26		11:57 (26)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (12)	15:43	20	12:17 (26)
22	05:03	06:10	07:19	08:27			08:41		13:02 (12)	09:27		11:58 (26)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (12)	15:43	20	12:18 (26)
23	05:05	06:13	07:21	08:30			08:43		13:02 (12)	09:27		11:58 (26)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (12)	15:44	20	12:18 (26)
24	05:07	06:15	07:24	08:32			08:45		11:55 (26)	09:27		11:58 (26)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (12)	15:44	20	12:18 (26)
25	05:09	06:17	07:26	07:34			08:47		11:52 (26)	09:28		11:59 (26)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (12)	15:45	20	12:19 (26)
26	05:11	06:19	07:28	07:37			08:49		11:51 (26)	09:28		12:00 (26)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (12)	15:46	20	12:20 (26)
27	05:13	06:22	07:30	07:39			08:51		11:50 (26)	09:28		12:00 (26)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (12)	15:47	20	12:20 (26)
28	05:15	06:24	07:32	07:42			08:54		11:49 (26)	09:28		12:00 (26)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (12)	15:48	20	12:20 (26)
29	05:17	06:26	07:35	07:44			08:56		11:50 (26)	09:28		12:01 (26)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (12)	15:49	20	12:21 (26)
30	05:20	06:28	07:37	07:46			08:58		11:49 (26)	09:28		12:01 (26)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (12)	15:50	21	12:22 (26)
31	05:22	06:31		07:49		14:35 (17)				09:28		12:01 (26)
	22:03	20:42		16:51	6	14:41 (17)				15:51	21	12:22 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,58			0,63	
Total reduction					0,22			0,23			0,25	
Total, real					1			151			178	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:35 (26)	08:45	14:09 (12)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51		08:59		12:23 (26)
	15:52 20	12:55 (26)	16:56 5	14:14 (12)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51	18	12:41 (26)
2	09:27	12:36 (26)	08:43		07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01		12:23 (26)
	15:54 21	12:57 (26)	16:58		18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50	19	12:42 (26)
3	09:27	12:36 (26)	08:41		07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03		12:23 (26)
	15:55 21	12:57 (26)	17:01		18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49	20	12:43 (26)
4	09:26	12:37 (26)	08:39		07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05		12:23 (26)
	15:57 20	12:57 (26)	17:03		18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48	20	12:43 (26)
5	09:26	12:37 (26)	08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07		12:24 (26)
	15:58 20	12:57 (26)	17:06		18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47	20	12:44 (26)
6	09:25	12:38 (26)	08:34		07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:08		12:24 (26)
	16:00 20	12:58 (26)	17:08		18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46	20	12:44 (26)
7	09:24	12:38 (26)	08:32		07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10		12:24 (26)
	16:01 20	12:58 (26)	17:11		18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34		15:45	21	12:45 (26)
8	09:23	12:39 (26)	08:30		07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12		12:25 (26)
	16:03 20	12:59 (26)	17:13		18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44	20	12:45 (26)
9	09:23	12:39 (26)	08:27		07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10		09:13		12:24 (26)
	16:05 19	12:58 (26)	17:15		18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30		15:44	21	12:45 (26)
10	09:22	12:40 (26)	08:25		07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	13:40 (12)	09:15		12:25 (26)
	16:07 19	12:59 (26)	17:18		18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27 5	13:45 (12)	15:43	21	12:46 (26)
11	09:21	12:40 (26)	08:22		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	13:37 (12)	09:16		12:26 (26)
	16:09 19	12:59 (26)	17:20		18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25 11	13:48 (12)	15:43	21	12:47 (26)
12	09:19	12:42 (26)	08:20		07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	13:36 (12)	09:17		12:26 (26)
	16:10 24	14:10 (12)	17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 14	13:50 (12)	15:42	20	12:46 (26)
13	09:18	12:42 (26)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	13:35 (12)	09:19		12:27 (26)
	16:12 27	14:11 (12)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 17	13:52 (12)	15:42	20	12:47 (26)
14	09:17	12:44 (26)	08:15		06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22	13:34 (12)	09:20		12:27 (26)
	16:14 27	14:13 (12)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 18	13:52 (12)	15:42	21	12:48 (26)
15	09:16	12:45 (26)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	13:34 (12)	09:21		12:27 (26)
	16:17 27	14:14 (12)	17:30		18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17 19	13:53 (12)	15:42	21	12:48 (26)
16	09:14	12:46 (26)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	13:34 (12)	09:22		12:28 (26)
	16:19 27	14:15 (12)	17:33		18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15 20	13:54 (12)	15:42	20	12:48 (26)
17	09:13	12:48 (26)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	13:33 (12)	09:23		12:28 (26)
	16:21 25	14:16 (12)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 20	13:53 (12)	15:42	20	12:48 (26)
18	09:11	13:59 (12)	08:05		06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	13:34 (12)	09:24		12:29 (26)
	16:23 18	14:17 (12)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11 20	13:54 (12)	15:42	20	12:49 (26)
19	09:10	13:59 (12)	08:02		06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34	13:34 (12)	09:25		12:30 (26)
	16:25 19	14:18 (12)	17:40		18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 21	13:55 (12)	15:42	20	12:50 (26)
20	09:08	13:59 (12)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	13:34 (12)	09:25		12:30 (26)
	16:27 19	14:18 (12)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 20	13:54 (12)	15:42	20	12:50 (26)
21	09:07	13:59 (12)	07:57		06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	13:35 (12)	09:26		12:30 (26)
	16:30 20	14:19 (12)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 20	13:55 (12)	15:43	20	12:50 (26)
22	09:05	13:59 (12)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41	13:35 (12)	09:27		12:31 (26)
	16:32 20	14:19 (12)	17:47		18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04 19	13:54 (12)	15:43	20	12:51 (26)
23	09:03	13:59 (12)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	13:36 (12)	09:27		12:31 (26)
	16:34 21	14:20 (12)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02 19	13:55 (12)	15:44	20	12:51 (26)
24	09:01	14:00 (12)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	13:37 (12)	09:27		12:31 (26)
	16:36 20	14:20 (12)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	13:55 (12)	15:44	21	12:52 (26)
25	09:00	14:00 (12)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:26 (26)	09:28		12:33 (26)
	16:39 21	14:21 (12)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 25	13:54 (12)	15:45	20	12:53 (26)
26	08:58	14:01 (12)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:25 (26)	09:28		12:33 (26)
	16:41 20	14:21 (12)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 26	13:54 (12)	15:46	20	12:53 (26)
27	08:56	14:01 (12)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	12:24 (26)	09:28		12:34 (26)
	16:44 19	14:20 (12)	18:00		19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 28	13:54 (12)	15:47	20	12:54 (26)
28	08:54	14:02 (12)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:23 (26)	09:28		12:33 (26)
	16:46 18	14:20 (12)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55 28	13:53 (12)	15:47	21	12:54 (26)
29	08:52	14:04 (12)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:23 (26)	09:28		12:34 (26)
	16:48 16	14:20 (12)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 27	13:52 (12)	15:49	20	12:54 (26)
30	08:50	14:04 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:23 (26)	09:28		12:35 (26)
	16:51 14	14:18 (12)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 24	13:51 (12)	15:50	20	12:55 (26)
31	08:48	14:07 (12)			07:09		04:41		05:22	06:31		07:49			09:28		12:35 (26)
	16:53 10	14:17 (12)			20:14		22:29		22:03	20:42		16:51			15:51	20	12:55 (26)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	631		5										419		625		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,58		0,55										0,56		0,62		
Total reduction	0,23		0,22										0,23		0,25		
Total, real	147		1										94		154		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	13:54 (26)	08:45	15:12 (12)	07:35	07:06	05:43	04:39
	15:52 9	14:03 (26)	16:56 14	15:26 (12)	18:04	20:16	21:26	22:30
2	09:27	13:54 (26)	08:43	15:12 (12)	07:32	07:04	05:41	04:38
	15:54 11	14:05 (26)	16:58 16	15:28 (12)	18:07	20:19	21:28	22:32
3	09:27	13:54 (26)	08:41	15:11 (12)	07:29	07:01	05:38	04:37
	15:55 12	14:06 (26)	17:01 17	15:28 (12)	18:09	20:21	21:30	22:33
4	09:26	13:54 (26)	08:39	15:11 (12)	07:27	06:58	05:36	04:36
	15:57 13	14:07 (26)	17:03 18	15:29 (12)	18:12	20:23	21:33	22:35
5	09:26	13:53 (26)	08:37	15:11 (12)	07:24	06:55	05:33	04:34
	15:58 15	14:08 (26)	17:06 18	15:29 (12)	18:14	20:26	21:35	22:36
6	09:25	13:53 (26)	08:34	15:11 (12)	07:21	06:52	05:31	04:33
	16:00 16	14:09 (26)	17:08 19	15:30 (12)	18:16	20:28	21:37	22:38
7	09:24	13:54 (26)	08:32	15:11 (12)	07:18	06:49	05:29	04:32
	16:01 16	14:10 (26)	17:10 19	15:30 (12)	18:19	20:30	21:39	22:39
8	09:23	13:54 (26)	08:30	15:11 (12)	07:15	06:46	05:26	04:31
	16:03 17	14:11 (26)	17:13 18	15:29 (12)	18:21	20:32	21:42	22:40
9	09:23	13:53 (26)	08:27	15:12 (12)	07:13	06:44	05:24	04:31
	16:05 18	14:11 (26)	17:15 18	15:30 (12)	18:23	20:35	21:44	22:41
10	09:22	13:53 (26)	08:25	15:12 (12)	07:10	06:41	05:21	04:30
	16:07 19	14:12 (26)	17:18 17	15:29 (12)	18:26	20:37	21:46	22:43
11	09:20	13:53 (26)	08:22	15:13 (12)	07:07	06:38	05:19	04:29
	16:09 19	14:12 (26)	17:20 14	15:27 (12)	18:28	20:39	21:48	22:44
12	09:19	13:54 (26)	08:20	15:16 (12)	07:04	06:35	05:17	04:28
	16:10 19	14:13 (26)	17:23 11	15:27 (12)	18:30	20:42	21:51	22:45
13	09:18	13:53 (26)	08:17	15:18 (12)	07:01	06:32	05:14	04:28
	16:12 21	14:14 (26)	17:25 5	15:23 (12)	18:33	20:44	21:53	22:45
14	09:17	13:54 (26)	08:15		06:58	06:29	05:12	04:27
	16:14 21	14:15 (26)	17:28		18:35	20:46	21:55	22:46
15	09:16	13:54 (26)	08:12		06:56	06:27	05:10	04:27
	16:16 21	14:15 (26)	17:30		18:37	20:49	21:57	22:47
16	09:14	13:54 (26)	08:10		06:53	06:24	05:08	04:27
	16:19 21	14:15 (26)	17:33		18:40	20:51	21:59	22:48
17	09:13	13:54 (26)	08:07		06:50	06:21	05:06	04:27
	16:21 22	14:16 (26)	17:35		18:42	20:53	22:02	22:48
18	09:11	13:55 (26)	08:05		06:47	06:18	05:04	04:26
	16:23 21	14:16 (26)	17:38		18:44	20:56	22:04	22:49
19	09:10	13:55 (26)	08:02		06:44	06:15	05:02	04:26
	16:25 21	14:16 (26)	17:40		18:47	20:58	22:06	22:49
20	09:08	13:56 (26)	07:59		06:41	06:13	05:00	04:26
	16:27 20	14:16 (26)	17:43		18:49	21:00	22:08	22:50
21	09:07	13:56 (26)	07:57		06:38	06:10	04:58	04:26
	16:30 20	14:16 (26)	17:45		18:51	21:02	22:10	22:50
22	09:05	13:57 (26)	07:54		06:35	06:07	04:56	04:27
	16:32 19	14:16 (26)	17:47		18:53	21:05	22:12	22:50
23	09:03	13:58 (26)	07:51		06:32	06:05	04:54	04:27
	16:34 18	14:16 (26)	17:50		18:56	21:07	22:14	22:50
24	09:01	13:59 (26)	07:49		06:30	06:02	04:52	04:27
	16:36 17	14:16 (26)	17:52		18:58	21:09	22:16	22:50
25	08:59	14:01 (26)	07:46		06:27	05:59	04:50	04:28
	16:39 14	14:15 (26)	17:55		19:00	21:12	22:18	22:50
26	08:58	14:02 (26)	07:43		06:24	05:57	04:49	04:28
	16:41 11	14:13 (26)	17:57		19:03	21:14	22:20	22:50
27	08:56	14:05 (26)	07:41		06:21	05:54	04:47	04:29
	16:44 6	14:11 (26)	18:00		19:05	21:16	22:22	22:50
28	08:54		07:38		06:18	05:51	04:45	04:29
	16:46		18:02		19:07	21:19	22:23	22:50
29	08:52				07:15	05:49	04:44	04:30
	16:48				20:10	21:21	22:25	22:49
30	08:50	15:15 (12)			07:12	05:46	04:42	04:31
	16:51 8	15:23 (12)			20:12	21:23	22:27	22:49
31	08:48	15:14 (12)			07:09		04:41	
	16:53 11	15:25 (12)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case	476		204					
Sun reduction	0,50		0,50					
Oper. time red.	0,80		0,80					
Wind dir. red.	0,55		0,55					
Total reduction	0,22		0,22					
Total, real	104		45					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:42 (12)	08:59		13:35 (26)
	22:48	22:01	20:39	19:13			16:48	16	14:58 (12)	15:51	19	13:54 (26)
2	04:33	05:26	06:35	07:41			07:53		14:41 (12)	09:01		13:37 (26)
	22:48	21:58	20:37	19:10			16:46	18	14:59 (12)	15:50	18	13:55 (26)
3	04:34	05:28	06:37	07:44			07:56		14:40 (12)	09:03		13:37 (26)
	22:47	21:56	20:34	19:07			16:44	19	14:59 (12)	15:49	18	13:55 (26)
4	04:35	05:30	06:39	07:46			07:58		14:40 (12)	09:05		13:38 (26)
	22:46	21:54	20:31	19:04			16:41	20	15:00 (12)	15:48	17	13:55 (26)
5	04:36	05:32	06:42	07:48			08:01		14:41 (12)	09:07		13:39 (26)
	22:45	21:51	20:28	19:01			16:39	19	15:00 (12)	15:47	16	13:55 (26)
6	04:37	05:35	06:44	07:50			08:03		14:41 (12)	09:08		13:40 (26)
	22:45	21:49	20:25	18:58			16:36	19	15:00 (12)	15:46	15	13:55 (26)
7	04:38	05:37	06:46	07:53			08:06		14:41 (12)	09:10		13:41 (26)
	22:44	21:46	20:22	18:56			16:34	18	14:59 (12)	15:45	14	13:55 (26)
8	04:40	05:39	06:48	07:55			08:08		14:42 (12)	09:12		13:42 (26)
	22:43	21:44	20:19	18:53			16:32	17	14:59 (12)	15:44	13	13:55 (26)
9	04:41	05:41	06:50	07:57			08:10		14:43 (12)	09:13		13:42 (26)
	22:41	21:41	20:16	18:50			16:30	16	14:59 (12)	15:44	12	13:54 (26)
10	04:42	05:44	06:53	07:59			08:13		14:43 (12)	09:15		13:43 (26)
	22:40	21:39	20:14	18:47			16:27	14	14:57 (12)	15:43	11	13:54 (26)
11	04:44	05:46	06:55	08:02			08:15		14:45 (12)	09:16		13:45 (26)
	22:39	21:36	20:11	18:44			16:25	11	14:56 (12)	15:43	9	13:54 (26)
12	04:45	05:48	06:57	08:04			08:18		14:47 (12)	09:17		13:46 (26)
	22:38	21:34	20:08	18:41			16:23	7	14:54 (12)	15:42	7	13:53 (26)
13	04:47	05:50	06:59	08:06			08:20			09:19		13:48 (26)
	22:36	21:31	20:05	18:39			16:21			15:42	5	13:53 (26)
14	04:49	05:53	07:01	08:09			08:22			09:20		13:49 (26)
	22:35	21:29	20:02	18:36			16:19			15:42	3	13:52 (26)
15	04:50	05:55	07:04	08:11			08:25		13:37 (26)	09:21		
	22:33	21:26	19:59	18:33			16:17	7	13:44 (26)	15:42		
16	04:52	05:57	07:06	08:13			08:27		13:36 (26)	09:22		
	22:32	21:23	19:56	18:30			16:15	11	13:47 (26)	15:42		
17	04:54	05:59	07:08	08:16			08:29		13:34 (26)	09:23		
	22:30	21:21	19:53	18:28			16:13	14	13:48 (26)	15:42		
18	04:56	06:01	07:10	08:18			08:32		13:33 (26)	09:24		
	22:29	21:18	19:50	18:25			16:11	17	13:50 (26)	15:42		
19	04:57	06:04	07:12	08:20			08:34		13:33 (26)	09:25		
	22:27	21:15	19:47	18:22			16:09	18	13:51 (26)	15:42		
20	04:59	06:06	07:15	08:23			08:36		13:32 (26)	09:25		
	22:25	21:13	19:45	18:19			16:07	19	13:51 (26)	15:42		
21	05:01	06:08	07:17	08:25			08:38		13:32 (26)	09:26		
	22:23	21:10	19:42	18:17			16:06	20	13:52 (26)	15:43		
22	05:03	06:10	07:19	08:27			08:41		13:32 (26)	09:27		
	22:21	21:07	19:39	18:14			16:04	20	13:52 (26)	15:43		
23	05:05	06:13	07:21	08:30			08:43		13:32 (26)	09:27		
	22:20	21:05	19:36	18:11			16:02	21	13:53 (26)	15:44		
24	05:07	06:15	07:23	08:32			08:45		13:33 (26)	09:27		
	22:18	21:02	19:33	18:09			16:00	21	13:54 (26)	15:44		
25	05:09	06:17	07:26	07:34			08:47		13:33 (26)	09:28		
	22:16	20:59	19:30	17:06			15:59	21	13:54 (26)	15:45		
26	05:11	06:19	07:28	07:37			08:49		13:33 (26)	09:28		
	22:14	20:56	19:27	17:04			15:57	21	13:54 (26)	15:46		
27	05:13	06:22	07:30	07:39			08:51		13:33 (26)	09:28		
	22:11	20:53	19:24	17:01			15:56	21	13:54 (26)	15:47		
28	05:15	06:24	07:32	07:41			08:53		13:33 (26)	09:28		
	22:09	20:51	19:21	16:58			15:55	21	13:54 (26)	15:47		
29	05:17	06:26	07:35	07:44		14:47 (12)	08:55		13:35 (26)	09:28		
	22:07	20:48	19:18	16:56	7	14:54 (12)	15:53	20	13:55 (26)	15:48		
30	05:19	06:28	07:37	07:46		14:45 (12)	08:57		13:35 (26)	09:28		13:56 (26)
	22:05	20:45	19:16	16:53	11	14:56 (12)	15:52	20	13:55 (26)	15:50	4	14:00 (26)
31	05:22	06:31		07:49		14:42 (12)				09:28		13:55 (26)
	22:03	20:42		16:51	15	14:57 (12)				15:51	6	14:01 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					33			486			187	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,55			0,55	
Total reduction					0,22			0,22			0,22	
Total, real					7			107			41	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:45	10:57 (37)	07:35	16:28 (17)	07:06	05:44	04:39
	15:52		16:56 40	13:50 (26)	18:04 11	16:39 (17)	20:16	21:26	22:30
2	09:27		08:43	10:59 (37)	07:32	16:27 (17)	07:04	05:41	04:38
	15:54		16:58 37	13:51 (26)	18:07 13	16:40 (17)	20:19	21:28	22:32
3	09:27		08:41	11:02 (37)	07:30	16:27 (17)	07:01	05:38	04:37
	15:55		17:01 28	13:49 (26)	18:09 14	16:41 (17)	20:21	21:30	22:33
4	09:26		08:39	13:29 (26)	07:27	16:27 (17)	06:58	05:36	04:36
	15:57		17:03 20	13:49 (26)	18:12 17	16:44 (17)	20:23	21:33	22:35
5	09:26		08:37	13:30 (26)	07:24	16:27 (17)	06:55	05:33	04:34
	15:58		17:06 17	13:47 (26)	18:14 19	16:46 (17)	20:26	21:35	22:36
6	09:25		08:34	13:33 (26)	07:21	16:28 (17)	06:52	05:31	04:33
	16:00		17:08 12	13:45 (26)	18:16 17	16:45 (17)	20:28	21:37	22:38
7	09:24		08:32		07:18	16:29 (17)	06:49	05:29	04:32
	16:01		17:11		18:19 15	16:44 (17)	20:30	21:39	22:39
8	09:23		08:30		07:15	16:30 (17)	06:46	05:26	04:32
	16:03		17:13		18:21 12	16:42 (17)	20:32	21:42	22:40
9	09:23		08:27		07:13	16:33 (17)	06:44	05:24	04:31
	16:05		17:15		18:23 6	16:39 (17)	20:35	21:44	22:41
10	09:22		08:25		07:10		06:41	05:21	04:30
	16:07		17:18		18:26		20:37	21:46	22:43
11	09:20		08:22		07:07		06:38	05:19	04:29
	16:09		17:20		18:28		20:39	21:48	22:44
12	09:19		08:20	14:57 (7)	07:04		06:35	05:17	04:29
	16:11		17:23 8	15:05 (7)	18:30		20:42	21:51	22:45
13	09:18		08:17	14:59 (7)	07:01		06:32	05:15	04:28
	16:12		17:25 11	15:10 (7)	18:33		20:44	21:53	22:45
14	09:17	11:05 (37)	08:15	15:02 (7)	06:58		06:29	05:12	04:28
	16:14 3	11:08 (37)	17:28 12	15:14 (12)	18:35		20:46	21:55	22:46
15	09:16	10:59 (37)	08:12	15:06 (12)	06:56		06:27	05:10	04:27
	16:17 10	11:09 (37)	17:30 12	15:18 (12)	18:37		20:49	21:57	22:47
16	09:14	10:52 (37)	08:10	15:06 (12)	06:53		06:24	05:08	04:27
	16:19 18	11:10 (37)	17:33 15	15:21 (12)	18:40		20:51	21:59	22:48
17	09:13	10:51 (37)	08:07	15:05 (12)	06:50		06:21	05:06	04:27
	16:21 19	11:10 (37)	17:35 16	15:21 (12)	18:42		20:53	22:02	22:48
18	09:11	10:51 (37)	08:05	15:05 (12)	06:47		06:18	05:04	04:26
	16:23 20	11:11 (37)	17:38 15	15:20 (12)	18:44		20:56	22:04	22:49
19	09:10	10:51 (37)	08:02	15:06 (12)	06:44		06:16	05:02	04:26
	16:25 21	11:12 (37)	17:40 16	15:22 (12)	18:47		20:58	22:06	22:49
20	09:08	10:51 (37)	07:59	15:07 (12)	06:41		06:13	05:00	04:26
	16:27 22	11:13 (37)	17:43 17	15:24 (12)	18:49		21:00	22:08	22:50
21	09:07	10:51 (37)	07:57	15:07 (12)	06:38		06:10	04:58	04:26
	16:30 22	11:13 (37)	17:45 20	15:27 (12)	18:51		21:02	22:10	22:50
22	09:05	10:51 (37)	07:54	15:08 (12)	06:35		06:07	04:56	04:27
	16:32 27	12:49 (32)	17:47 20	15:28 (12)	18:53		21:05	22:12	22:50
23	09:03	10:51 (37)	07:51	15:09 (12)	06:32		06:05	04:54	04:27
	16:34 39	13:02 (32)	17:50 18	15:27 (12)	18:56		21:07	22:14	22:50
24	09:01	10:52 (37)	07:49	15:12 (12)	06:30		06:02	04:52	04:27
	16:37 40	13:04 (32)	17:52 13	15:25 (12)	18:58		21:09	22:16	22:50
25	08:59	10:52 (37)	07:46	15:16 (12)	06:27		05:59	04:50	04:28
	16:39 39	13:04 (32)	17:55 5	15:21 (12)	19:00		21:12	22:18	22:50
26	08:58	10:52 (37)	07:43		06:24		05:57	04:49	04:28
	16:41 39	13:24 (26)	17:57		19:03		21:14	22:20	22:50
27	08:56	10:53 (37)	07:41		06:21		05:54	04:47	04:29
	16:44 39	13:28 (26)	18:00		19:05		21:16	22:22	22:50
28	08:54	10:53 (37)	07:38	16:32 (17)	06:18		05:51	04:45	04:29
	16:46 41	13:35 (26)	18:02 4	16:36 (17)	19:07		21:19	22:23	22:50
29	08:52	10:54 (37)			07:15		05:49	04:44	04:30
	16:48 41	13:44 (26)			20:10		21:21	22:25	22:49
30	08:50	10:55 (37)			07:12		05:46	04:42	04:31
	16:51 42	13:47 (26)			20:12		21:23	22:27	22:49
31	08:48	10:56 (37)			07:09			04:41	
	16:53 42	13:49 (26)			20:14			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	524		356		124				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,67		0,57		0,57				
Total reduction	0,27		0,23		0,23				
Total, real	139		81		28				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51			08:59
	22:48	22:01	20:39	19:13			16:48			15:51
2	04:33	05:26	06:35	07:41			07:54			09:01
	22:48	21:58	20:37	19:10			16:46			15:50
3	04:34	05:28	06:37	07:44			07:56			09:03
	22:47	21:56	20:34	19:07			16:44			15:49
4	04:35	05:30	06:39	07:46			07:58		13:07 (26)	09:05
	22:46	21:54	20:31	19:04			16:41	4	13:11 (26)	15:48
5	04:36	05:33	06:42	07:48		17:09 (17)	08:01		13:02 (26)	09:07
	22:45	21:51	20:28	19:01	9	17:18 (17)	16:39	13	13:15 (26)	15:47
6	04:37	05:35	06:44	07:50		17:06 (17)	08:03		13:01 (26)	09:08
	22:45	21:49	20:25	18:58	14	17:20 (17)	16:36	17	13:18 (26)	15:46
7	04:38	05:37	06:46	07:53		17:04 (17)	08:06		12:58 (26)	09:10
	22:44	21:46	20:22	18:56	16	17:20 (17)	16:34	21	13:19 (26)	15:45
8	04:40	05:39	06:48	07:55		17:03 (17)	08:08		10:32 (37)	09:12
	22:43	21:44	20:19	18:53	18	17:21 (17)	16:32	29	13:20 (26)	15:44
9	04:41	05:41	06:50	07:57		17:02 (17)	08:10		10:30 (37)	09:13
	22:41	21:41	20:16	18:50	18	17:20 (17)	16:30	37	13:22 (26)	15:44
10	04:42	05:44	06:53	07:59		17:01 (17)	08:13		10:28 (37)	09:15
	22:40	21:39	20:14	18:47	16	17:17 (17)	16:27	40	13:21 (26)	15:43
11	04:44	05:46	06:55	08:02		17:01 (17)	08:15		10:27 (37)	09:16
	22:39	21:36	20:11	18:44	14	17:15 (17)	16:25	41	13:19 (26)	15:43
12	04:45	05:48	06:57	08:04		17:01 (17)	08:18		10:27 (37)	09:17
	22:38	21:34	20:08	18:41	12	17:13 (17)	16:23	42	13:19 (26)	15:42
13	04:47	05:50	06:59	08:06		17:02 (17)	08:20		10:25 (37)	09:19
	22:36	21:31	20:05	18:39	10	17:12 (17)	16:21	41	13:15 (26)	15:42
14	04:49	05:53	07:01	08:09		17:06 (17)	08:22		10:25 (37)	09:20
	22:35	21:29	20:02	18:36	2	17:08 (17)	16:19	41	13:07 (26)	15:42
15	04:50	05:55	07:04	08:11			08:25		10:25 (37)	09:21
	22:33	21:26	19:59	18:33			16:17	40	13:01 (26)	15:42
16	04:52	05:57	07:06	08:13			08:27		10:26 (37)	09:22
	22:32	21:23	19:56	18:30			16:15	39	12:58 (26)	15:42
17	04:54	05:59	07:08	08:16		15:45 (12)	08:29		10:25 (37)	09:23
	22:30	21:21	19:53	18:28	9	15:54 (12)	16:13	39	12:37 (32)	15:42
18	04:56	06:02	07:10	08:18		15:42 (12)	08:32		10:26 (37)	09:24
	22:29	21:18	19:50	18:25	15	15:57 (12)	16:11	40	12:38 (32)	15:42
19	04:57	06:04	07:12	08:20		15:40 (12)	08:34		10:26 (37)	09:25
	22:27	21:15	19:47	18:22	18	15:58 (12)	16:09	39	12:37 (32)	15:42
20	04:59	06:06	07:15	08:23		15:39 (12)	08:36		10:26 (37)	09:25
	22:25	21:13	19:45	18:20	21	16:00 (12)	16:07	28	12:25 (32)	15:42
21	05:01	06:08	07:17	08:25		15:37 (12)	08:38		10:27 (37)	09:26
	22:23	21:10	19:42	18:17	18	15:55 (12)	16:06	22	10:49 (37)	15:43
22	05:03	06:10	07:19	08:27		15:37 (12)	08:41		10:27 (37)	09:27
	22:21	21:07	19:39	18:14	16	15:53 (12)	16:04	22	10:49 (37)	15:43
23	05:05	06:13	07:21	08:30		15:36 (12)	08:43		10:28 (37)	09:27
	22:20	21:05	19:36	18:12	16	15:52 (12)	16:02	21	10:49 (37)	15:44
24	05:07	06:15	07:24	08:32		15:35 (12)	08:45		10:29 (37)	09:27
	22:18	21:02	19:33	18:09	16	15:51 (12)	16:01	20	10:49 (37)	15:44
25	05:09	06:17	07:26	07:34		14:36 (12)	08:47		10:29 (37)	09:28
	22:16	20:59	19:30	17:06	15	14:51 (12)	15:59	19	10:48 (37)	15:45
26	05:11	06:19	07:28	07:37		14:35 (12)	08:49		10:31 (37)	09:28
	22:14	20:56	19:27	17:04	14	14:49 (12)	15:57	18	10:49 (37)	15:46
27	05:13	06:22	07:30	07:39		14:35 (12)	08:51		10:38 (37)	09:28
	22:11	20:53	19:24	17:01	12	14:47 (12)	15:56	10	10:48 (37)	15:47
28	05:15	06:24	07:32	07:41		14:30 (7)	08:53		10:44 (37)	09:28
	22:09	20:51	19:21	16:58	12	14:42 (12)	15:55	3	10:47 (37)	15:48
29	05:17	06:26	07:35	07:44		14:27 (7)	08:55			09:28
	22:07	20:48	19:19	16:56	11	14:38 (7)	15:53			15:49
30	05:20	06:28	07:37	07:46		14:26 (7)	08:57			09:28
	22:05	20:45	19:16	16:53	8	14:34 (7)	15:52			15:50
31	05:22	06:31		07:49						09:28
	22:03	20:42		16:51						15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					330			686		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,56			0,65		
Total reduction					0,22			0,26		
Total, real					73			178		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

Shadow receptor: U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April			May			June		
1	09:27			08:45		15:29 (8)	07:35		15:43 (13)	07:06			05:43		18:54 (37)	04:39		
	15:52			16:56	22	15:51 (8)	18:04	38	16:21 (13)	20:16			21:25	25	19:19 (37)	22:30		
2	09:27			08:43		15:29 (8)	07:32		15:44 (13)	07:04			05:41		18:56 (37)	04:38		
	15:54			16:58	23	15:52 (8)	18:07	36	16:20 (13)	20:19			21:28	20	19:16 (37)	22:32		
3	09:27			08:41		15:29 (8)	07:29		15:44 (13)	07:01		19:08 (37)	05:38		18:59 (37)	04:37		
	15:55			17:01	23	15:52 (8)	18:09	35	16:19 (13)	20:21	9	19:17 (37)	21:30	15	19:14 (37)	22:33		
4	09:26			08:39		15:29 (8)	07:27		15:45 (13)	06:58		19:03 (37)	05:36		19:04 (37)	04:36		
	15:57			17:03	24	15:53 (8)	18:11	33	16:18 (13)	20:23	18	19:21 (37)	21:32	5	19:09 (37)	22:35		
5	09:25			08:36		15:29 (8)	07:24		15:46 (13)	06:55		18:59 (37)	05:33			04:35		
	15:58			17:06	23	15:52 (8)	18:14	32	16:18 (13)	20:25	24	19:23 (37)	21:35			22:36		
6	09:25			08:34		15:28 (8)	07:21		15:48 (13)	06:52		18:57 (37)	05:31			04:33		
	16:00			17:08	24	15:52 (8)	18:16	28	16:16 (13)	20:28	28	19:25 (37)	21:37			22:37		
7	09:24			08:32		15:29 (8)	07:18		15:49 (13)	06:49		18:55 (37)	05:29			04:32		
	16:01			17:10	24	15:53 (8)	18:19	25	16:14 (13)	20:30	31	19:26 (37)	21:39			22:39		
8	09:23			08:29		15:29 (8)	07:15		15:51 (13)	06:46		18:53 (37)	05:26			04:32		
	16:03			17:13	23	15:52 (8)	18:21	21	16:12 (13)	20:32	35	19:42 (26)	21:42			22:40		
9	09:22			08:27		15:31 (8)	07:13		15:54 (13)	06:43		18:52 (37)	05:24			04:31		
	16:05			17:15	21	15:52 (8)	18:23	15	16:09 (13)	20:35	54	19:59 (26)	21:44			22:41		
10	09:21			08:25		15:31 (8)	07:10			06:41		18:51 (37)	05:21			04:30		
	16:07			17:18	20	15:51 (8)	18:26			20:37	57	19:59 (26)	21:46			22:42		
11	09:20			08:22		15:32 (8)	07:07			06:38		18:49 (37)	05:19			04:29		
	16:09			17:20	18	15:50 (8)	18:28			20:39	60	19:59 (26)	21:48			22:43		
12	09:19			08:20		15:34 (8)	07:04			06:35		18:48 (37)	05:17			04:29		
	16:11			17:23	15	15:49 (8)	18:30			20:42	62	19:58 (26)	21:50			22:44		
13	09:18			08:17		15:36 (8)	07:01			06:32		18:48 (37)	05:15			04:28		
	16:12			17:25	22	16:09 (13)	18:33			20:44	64	19:59 (26)	21:53			22:45		
14	09:17			08:15		15:54 (13)	06:58			06:29		18:47 (37)	05:12			04:28		
	16:14			17:28	18	16:12 (13)	18:35			20:46	63	19:58 (26)	21:55			22:46		
15	09:15			08:12		15:52 (13)	06:55			06:27		18:46 (37)	05:10			04:27		
	16:17			17:30	22	16:14 (13)	18:37			20:48	63	19:57 (26)	21:57			22:47		
16	09:14			08:10		15:51 (13)	06:53		17:30 (32)	06:24		18:47 (37)	05:08			04:27		
	16:19			17:33	26	16:17 (13)	18:40	8	17:38 (32)	20:51	62	19:57 (26)	21:59			22:47		
17	09:13			08:07		15:49 (13)	06:50		17:27 (32)	06:21		18:46 (37)	05:06			04:27		
	16:21			17:35	29	16:18 (13)	18:42	13	17:40 (32)	20:53	60	19:55 (26)	22:01			22:48		
18	09:11			08:04		15:47 (13)	06:47		17:25 (32)	06:18		18:45 (37)	05:04			04:26		
	16:23			17:38	32	16:19 (13)	18:44	17	17:42 (32)	20:55	58	19:53 (26)	22:04			22:49		
19	09:10			08:02		15:46 (13)	06:44		17:23 (32)	06:15		18:46 (37)	05:02			04:26		
	16:25			17:40	33	16:19 (13)	18:46	19	17:42 (32)	20:58	53	19:52 (26)	22:06			22:49		
20	09:08			07:59		15:46 (13)	06:41		17:22 (32)	06:13		18:45 (37)	05:00			04:26		
	16:27			17:43	35	16:21 (13)	18:49	21	17:43 (32)	21:00	44	19:29 (37)	22:08			22:49		
21	09:06			07:57		15:45 (13)	06:38		17:21 (32)	06:10		18:45 (37)	04:58			04:26		
	16:30			17:45	36	16:21 (13)	18:51	22	17:43 (32)	21:02	43	19:28 (37)	22:10			22:50		
22	09:05			07:54		15:44 (13)	06:35		17:21 (32)	06:07		18:46 (37)	04:56			04:27		
	16:32			17:47	37	16:21 (13)	18:53	22	17:43 (32)	21:05	43	19:29 (37)	22:12			22:50		
23	09:03			07:51		15:44 (13)	06:32		17:20 (32)	06:05		18:46 (37)	04:54			04:27		
	16:34			17:50	38	16:22 (13)	18:56	22	17:42 (32)	21:07	41	19:27 (37)	22:14			22:50		
24	09:01			07:49		15:43 (13)	06:29		17:20 (32)	06:02		18:47 (37)	04:52			04:27		
	16:36			17:52	39	16:22 (13)	18:58	22	17:42 (32)	21:09	40	19:27 (37)	22:16			22:50		
25	08:59			07:46		15:44 (13)	06:27		17:20 (32)	05:59		18:47 (37)	04:50			04:28		
	16:39			17:55	38	16:22 (13)	19:00	21	17:41 (32)	21:12	39	19:26 (37)	22:18			22:50		
26	08:57			07:43		15:43 (13)	06:24		17:20 (32)	05:57		18:48 (37)	04:49			04:28		
	16:41			17:57	39	16:22 (13)	19:03	20	17:40 (32)	21:14	37	19:25 (37)	22:20			22:50		
27	08:55		15:34 (8)	07:40		15:43 (13)	06:21		17:22 (32)	05:54		18:48 (37)	04:47			04:29		
	16:44	10	15:44 (8)	18:00	39	16:22 (13)	19:05	17	17:39 (32)	21:16	36	19:24 (37)	22:21			22:50		
28	08:54		15:33 (8)	07:38		15:43 (13)	06:18		17:24 (32)	05:51		18:50 (37)	04:45			04:29		
	16:46	13	15:46 (8)	18:02	38	16:21 (13)	19:07	13	17:37 (32)	21:19	33	19:23 (37)	22:23			22:49		
29	08:51		15:31 (8)				07:15		18:26 (32)	05:49		18:50 (37)	04:44			04:30		
	16:48	16	15:47 (8)				20:09	8	18:34 (32)	21:21	31	19:21 (37)	22:25			22:49		
30	08:49		15:31 (8)				07:12			05:46		18:52 (37)	04:42			04:31		
	16:51	18	15:49 (8)				20:12			21:23	28	19:20 (37)	22:27			22:49		
31	08:47		15:29 (8)				07:09						04:41					
	16:53	20	15:49 (8)				20:14						22:28					
Potential sun hours	221			260			365			432			521			547		
Total, worst case		77			781			508			1216			65				
Sun reduction		0,50			0,50			0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80			0,80			0,80				
Wind dir. red.		0,53			0,54			0,58			0,68			0,68				
Total reduction		0,21			0,22			0,23			0,27			0,27				
Total, real		16			169			118			331			18				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Nedre Skøyen vei 2 .
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

Shadow receptor: U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August			September			October			November			December
1	04:32	05:24			06:33		18:48 (37)	07:39			07:51		15:00 (8)	08:59
	22:48	22:00			20:39	60	19:58 (26)	19:13			16:48	21	15:21 (8)	15:51
2	04:33	05:26			06:35		18:49 (37)	07:41			07:53		15:00 (8)	09:01
	22:47	21:58			20:36	57	19:57 (26)	19:10			16:46	22	15:22 (8)	15:50
3	04:34	05:28			06:37		18:49 (37)	07:43			07:56		14:59 (8)	09:03
	22:47	21:56			20:34	54	19:56 (26)	19:07			16:44	23	15:22 (8)	15:49
4	04:35	05:30			06:39		18:51 (37)	07:46		16:33 (13)	07:58		14:59 (8)	09:05
	22:46	21:53			20:31	35	19:40 (26)	19:04	11	16:44 (13)	16:41	23	15:22 (8)	15:48
5	04:36	05:33			06:42		18:52 (37)	07:48		16:29 (13)	08:01		14:59 (8)	09:07
	22:45	21:51			20:28	31	19:23 (37)	19:01	18	16:47 (13)	16:39	24	15:23 (8)	15:47
6	04:37	05:35			06:44		18:53 (37)	07:50		16:26 (13)	08:03		14:58 (8)	09:08
	22:44	21:49			20:25	28	19:21 (37)	18:58	24	16:50 (13)	16:36	24	15:22 (8)	15:46
7	04:38	05:37			06:46		18:54 (37)	07:52		16:24 (13)	08:05		14:59 (8)	09:10
	22:43	21:46			20:22	25	19:19 (37)	18:55	27	16:51 (13)	16:34	23	15:22 (8)	15:45
8	04:40	05:39			06:48		18:57 (37)	07:55		16:21 (13)	08:08		14:59 (8)	09:11
	22:42	21:44			20:19	18	19:15 (37)	18:53	30	16:51 (13)	16:32	23	15:22 (8)	15:44
9	04:41	05:41		19:10 (37)	06:50		19:00 (37)	07:57		16:21 (13)	08:10		14:59 (8)	09:13
	22:41	21:41	10	19:20 (37)	20:16	11	19:11 (37)	18:50	32	16:53 (13)	16:30	23	15:22 (8)	15:44
10	04:42	05:44		19:07 (37)	06:53			07:59		16:19 (13)	08:13		15:00 (8)	09:14
	22:40	21:39	17	19:24 (37)	20:13			18:47	34	16:53 (13)	16:27	21	15:21 (8)	15:43
11	04:44	05:46		19:04 (37)	06:55			08:02		16:18 (13)	08:15		15:01 (8)	09:16
	22:39	21:36	22	19:26 (37)	20:11			18:44	36	16:54 (13)	16:25	20	15:21 (8)	15:43
12	04:45	05:48		19:02 (37)	06:57			08:04		16:17 (13)	08:17		15:02 (8)	09:17
	22:37	21:34	26	19:28 (37)	20:08			18:41	37	16:54 (13)	16:23	19	15:21 (8)	15:42
13	04:47	05:50		19:00 (37)	06:59			08:06		16:16 (13)	08:20		15:03 (8)	09:18
	22:36	21:31	29	19:29 (37)	20:05			18:39	38	16:54 (13)	16:21	16	15:19 (8)	15:42
14	04:49	05:53		18:58 (37)	07:01		18:17 (32)	08:08		16:16 (13)	08:22		15:05 (8)	09:20
	22:35	21:28	32	19:30 (37)	20:02	7	18:24 (32)	18:36	38	16:54 (13)	16:19	13	15:18 (8)	15:42
15	04:50	05:55		18:57 (37)	07:04		18:13 (32)	08:11		16:15 (13)	08:24		15:07 (8)	09:21
	22:33	21:26	34	19:31 (37)	19:59	13	18:26 (32)	18:33	39	16:54 (13)	16:17	10	15:17 (8)	15:42
16	04:52	05:57		18:56 (37)	07:06		18:11 (32)	08:13		16:15 (13)	08:27			09:22
	22:32	21:23	36	19:32 (37)	19:56	16	18:27 (32)	18:30	39	16:54 (13)	16:15			15:42
17	04:54	05:59		18:54 (37)	07:08		18:09 (32)	08:15		16:15 (13)	08:29			09:23
	22:30	21:21	38	19:32 (37)	19:53	19	18:28 (32)	18:28	38	16:53 (13)	16:13			15:42
18	04:56	06:01		18:53 (37)	07:10		18:08 (32)	08:18		16:15 (13)	08:31			09:24
	22:28	21:18	40	19:33 (37)	19:50	20	18:28 (32)	18:25	39	16:54 (13)	16:11			15:42
19	04:57	06:04		18:52 (37)	07:12		18:08 (32)	08:20		16:15 (13)	08:34			09:24
	22:27	21:15	41	19:33 (37)	19:47	21	18:29 (32)	18:22	38	16:53 (13)	16:09			15:42
20	04:59	06:06		18:51 (37)	07:15		18:07 (32)	08:22		16:16 (13)	08:36			09:25
	22:25	21:13	42	19:33 (37)	19:44	22	18:29 (32)	18:19	36	16:52 (13)	16:07			15:42
21	05:01	06:08		18:50 (37)	07:17		18:06 (32)	08:25		16:16 (13)	08:38			09:26
	22:23	21:10	43	19:33 (37)	19:42	22	18:28 (32)	18:17	35	16:51 (13)	16:06			15:43
22	05:03	06:10		18:50 (37)	07:19		18:06 (32)	08:27		16:17 (13)	08:40			09:26
	22:21	21:07	43	19:33 (37)	19:39	22	18:28 (32)	18:14	34	16:51 (13)	16:04			15:43
23	05:05	06:13		18:49 (37)	07:21		18:06 (32)	08:29		16:17 (13)	08:43			09:27
	22:19	21:04	44	19:33 (37)	19:36	21	18:27 (32)	18:11	32	16:49 (13)	16:02			15:44
24	05:07	06:15		18:49 (37)	07:23		18:07 (32)	08:32		16:18 (13)	08:45			09:27
	22:17	21:02	54	19:55 (26)	19:33	19	18:26 (32)	18:09	31	16:49 (13)	16:01			15:44
25	05:09	06:17		18:49 (37)	07:26		18:07 (32)	07:34		15:18 (13)	08:47			09:28
	22:15	20:59	58	19:57 (26)	19:30	18	18:25 (32)	17:06	29	15:47 (13)	15:59			15:45
26	05:11	06:19		18:49 (37)	07:28		18:08 (32)	07:37		15:20 (13)	08:49			09:28
	22:13	20:56	60	19:58 (26)	19:27	15	18:23 (32)	17:04	25	15:45 (13)	15:57			15:46
27	05:13	06:22		18:48 (37)	07:30		18:09 (32)	07:39		15:22 (13)	08:51			09:28
	22:11	20:53	63	19:59 (26)	19:24	11	18:20 (32)	17:01	22	15:44 (13)	15:56			15:47
28	05:15	06:24		18:48 (37)	07:32			07:41		15:08 (8)	08:53			09:28
	22:09	20:51	63	19:59 (26)	19:21			16:58	22	15:41 (13)	15:55			15:48
29	05:17	06:26		18:48 (37)	07:34			07:44		15:05 (8)	08:55			09:28
	22:07	20:48	63	19:59 (26)	19:18			16:56	21	15:37 (13)	15:53			15:49
30	05:20	06:28		18:48 (37)	07:37			07:46		15:03 (8)	08:57			09:28
	22:05	20:45	63	19:59 (26)	19:16			16:53	16	15:19 (8)	15:52			15:50
31	05:22	06:30		18:48 (37)				07:49		15:01 (8)				09:28
	22:03	20:42	62	19:58 (26)				16:51	18	15:19 (8)				15:51
Potential sun hours	545	478			386			319			236			200
Total, worst case			983			565			839			305		
Sun reduction			0,50			0,50			0,50			0,50		
Oper. time red.			0,80			0,80			0,80			0,80		
Wind dir. red.			0,68			0,65			0,55			0,53		
Total reduction			0,27			0,26			0,22			0,21		
Total, real			268			147			184			64		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (23)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (23)
	15:53	39	13:36 (24)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (24)
2	09:28		12:01 (23)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (23)
	15:54	41	13:36 (24)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (24)
3	09:27		12:01 (23)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (23)
	15:55	41	13:36 (24)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (24)
4	09:27		12:01 (23)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (23)
	15:57	41	13:36 (24)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (24)
5	09:26		12:01 (23)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (23)
	15:58	43	13:37 (24)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (24)
6	09:25		12:02 (23)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (23)
	16:00	41	13:37 (24)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (24)
7	09:25		12:02 (23)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (23)
	16:02	41	13:37 (24)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (24)
8	09:24		12:02 (23)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (23)
	16:03	42	13:38 (24)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (24)
9	09:23		12:03 (23)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (23)
	16:05	41	13:38 (24)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (24)
10	09:22		12:03 (23)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (23)
	16:07	40	13:37 (24)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (24)
11	09:21		12:03 (23)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (23)
	16:09	41	13:38 (24)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (24)
12	09:20		12:03 (23)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (23)
	16:11	39	13:37 (24)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (24)
13	09:19		12:04 (23)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (23)
	16:13	37	13:37 (24)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (24)
14	09:17		12:04 (23)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (23)
	16:15	35	13:36 (24)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (24)
15	09:16		12:04 (23)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (23)	09:21		11:54 (23)
	16:17	32	13:35 (24)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (23)	15:42	38	13:27 (24)
16	09:15		12:04 (23)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (23)	09:22		11:55 (23)
	16:19	24	12:28 (23)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (23)	15:42	37	13:28 (24)
17	09:13		12:06 (23)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (23)	09:23		11:55 (23)
	16:21	24	12:30 (23)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (23)	15:42	37	13:28 (24)
18	09:12		12:06 (23)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (23)	09:24		11:56 (23)
	16:23	24	12:30 (23)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (23)	15:42	36	13:29 (24)
19	09:10		12:06 (23)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (23)	09:25		11:57 (23)
	16:25	24	12:30 (23)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (23)	15:42	36	13:29 (24)
20	09:09		12:07 (23)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (23)	09:26		11:58 (23)
	16:28	23	12:30 (23)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (23)	15:43	36	13:30 (24)
21	09:07		12:08 (23)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (23)	09:26		11:59 (23)
	16:30	21	12:29 (23)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (23)	15:43	35	13:31 (24)
22	09:05		12:09 (23)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (23)	09:27		11:58 (23)
	16:32	20	12:29 (23)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (23)	15:43	36	13:31 (24)
23	09:03		12:09 (23)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (23)	09:27		11:59 (23)
	16:34	19	12:28 (23)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (23)	15:44	36	13:31 (24)
24	09:02		12:10 (23)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (23)	09:28		12:00 (23)
	16:37	17	12:27 (23)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (23)	15:44	36	13:32 (24)
25	09:00		12:12 (23)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (23)	09:28		12:00 (23)
	16:39	15	12:27 (23)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (23)	15:45	37	13:33 (24)
26	08:58		12:14 (23)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (23)	09:28		12:00 (23)
	16:41	11	12:25 (23)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (23)	15:46	37	13:33 (24)
27	08:56		12:17 (23)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (23)	09:28		12:00 (23)
	16:44	4	12:21 (23)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (24)	15:47	38	13:33 (24)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (23)	09:29		12:01 (23)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (24)	15:48	37	13:34 (24)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (23)	09:28		12:00 (23)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (24)	15:49	38	13:34 (24)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (23)	09:28		12:01 (23)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (24)	15:50	39	13:35 (24)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (23)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (24)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,62												0,63			0,61	
Total reduction		0,25												0,25			0,24	
Total, real		203												93			290	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	11:14 (23)	08:46	10:11 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (23)
	15:53 31	12:43 (24)	16:56 18	10:29 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (23)
2	09:28	11:14 (23)	08:44	10:11 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (23)
	15:54 30	12:43 (24)	16:58 17	10:28 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (23)
3	09:27	11:13 (23)	08:41	10:13 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (23)
	15:55 31	12:43 (24)	17:01 14	10:27 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (23)
4	09:27	11:13 (23)	08:39	10:14 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (23)
	15:57 30	12:43 (24)	17:03 11	10:25 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (23)
5	09:26	11:14 (23)	08:37	10:17 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (23)
	15:58 28	12:42 (24)	17:06 7	10:24 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (24)
6	09:25	11:14 (23)	08:35		07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:47 (28)	09:09		11:00 (23)
	16:00 28	12:42 (24)	17:08		18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 7	09:54 (28)	15:46	28	12:28 (24)
7	09:25	11:14 (23)	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:45 (28)	09:10		11:01 (23)
	16:02 26	12:41 (24)	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34 11	09:56 (28)	15:45	29	12:30 (24)
8	09:24	11:14 (23)	08:30		07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:43 (28)	09:12		11:02 (23)
	16:03 21	11:35 (23)	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 14	09:57 (28)	15:45	30	12:31 (24)
9	09:23	11:15 (23)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:42 (28)	09:14		11:03 (23)
	16:05 21	11:36 (23)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 17	09:59 (28)	15:44	30	12:32 (24)
10	09:22	11:15 (23)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:42 (28)	09:15		11:03 (23)
	16:07 21	11:36 (23)	17:18		18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28 18	10:00 (28)	15:44	30	12:32 (24)
11	09:21	11:15 (23)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:41 (28)	09:16		11:04 (23)
	16:09 22	11:37 (23)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26 19	10:00 (28)	15:43	30	12:33 (24)
12	09:20	11:15 (23)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:41 (28)	09:18		11:04 (23)
	16:11 22	11:37 (23)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 19	10:00 (28)	15:43	31	12:34 (24)
13	09:19	11:16 (23)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:41 (28)	09:19		11:05 (23)
	16:13 22	11:38 (23)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 20	10:01 (28)	15:42	31	12:35 (24)
14	09:17	11:16 (23)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:42 (28)	09:20		11:06 (23)
	16:15 22	11:38 (23)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 19	10:01 (28)	15:42	30	12:35 (24)
15	09:16	11:16 (23)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:41 (28)	09:21		11:06 (23)
	16:17 22	11:38 (23)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 20	10:01 (28)	15:42	31	12:36 (24)
16	09:15	11:16 (23)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:42 (28)	09:22		11:08 (23)
	16:19 22	11:38 (23)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15 19	10:01 (28)	15:42	30	12:37 (24)
17	09:13	11:18 (23)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:43 (28)	09:23		11:09 (23)
	16:21 21	11:39 (23)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 26	11:08 (23)	15:42	30	12:38 (24)
18	09:12	11:18 (23)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:43 (28)	09:24		11:08 (23)
	16:23 21	11:39 (23)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 29	11:10 (23)	15:42	30	12:37 (24)
19	09:10	10:13 (28)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:44 (28)	09:25		11:09 (23)
	16:25 27	11:39 (23)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09 31	11:12 (23)	15:42	29	12:38 (24)
20	09:09	10:12 (28)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	09:45 (28)	09:26		11:10 (23)
	16:28 30	11:39 (23)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08 32	11:13 (23)	15:43	30	12:39 (24)
21	09:07	10:11 (28)	07:57		06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39	09:46 (28)	09:26		11:11 (23)
	16:30 32	11:39 (23)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 32	11:14 (23)	15:43	29	12:40 (24)
22	09:05	10:10 (28)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	09:48 (28)	09:27		11:11 (23)
	16:32 32	11:38 (23)	17:48		18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04 29	11:15 (23)	15:43	29	12:40 (24)
23	09:03	10:09 (28)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	09:49 (28)	09:27		11:11 (23)
	16:34 31	11:37 (23)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 27	11:15 (23)	15:44	30	12:40 (24)
24	09:02	10:09 (28)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:55 (23)	09:28		11:12 (23)
	16:37 29	11:36 (23)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 21	11:16 (23)	15:45	30	12:41 (24)
25	09:00	10:09 (28)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:55 (23)	09:28		11:12 (23)
	16:39 26	11:34 (23)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59 21	11:16 (23)	15:45	29	12:41 (24)
26	08:58	10:09 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:55 (23)	09:28		11:13 (23)
	16:41 19	10:28 (28)	17:57		19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58 22	11:17 (23)	15:46	30	12:42 (24)
27	08:56	10:09 (28)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:55 (23)	09:28		11:13 (23)
	16:44 20	10:29 (28)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 22	11:17 (23)	15:47	30	12:42 (24)
28	08:54	10:09 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:56 (23)	09:29		11:13 (23)
	16:46 19	10:28 (28)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 22	11:18 (23)	15:48	31	12:43 (24)
29	08:52	10:09 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:56 (23)	09:29		11:13 (23)
	16:49 20	10:29 (28)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54 22	11:18 (23)	15:49	30	12:42 (24)
30	08:50	10:09 (28)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:56 (23)	09:28		11:13 (23)
	16:51 19	10:28 (28)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 22	11:18 (23)	15:50	31	12:43 (24)
31	08:48	10:10 (28)			07:10		04:41		05:22	06:31		07:49			09:28		11:14 (23)
	16:54 19	10:29 (28)			20:14		22:29		22:03	20:43		16:51			15:51	30	12:43 (24)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	764		67										541		888		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,68		0,72										0,70		0,65		
Total reduction	0,27		0,29										0,28		0,26		
Total, real	208		19										151		231		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:55 (12)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51			09:00		12:38 (12)
	15:52	16	13:11 (12)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48			15:51	20	12:58 (12)
2	09:27		12:55 (12)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54			09:01		12:39 (12)
	15:54	16	13:11 (12)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46			15:50	20	12:59 (12)
3	09:27		12:55 (12)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56			09:03		12:40 (12)
	15:55	17	13:12 (12)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44			15:49	20	13:00 (12)
4	09:26		12:55 (12)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58			09:05		12:40 (12)
	15:57	17	13:12 (12)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41			15:48	20	13:00 (12)
5	09:26		12:55 (12)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01			09:07		12:41 (12)
	15:58	18	13:13 (12)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39			15:47	19	13:00 (12)
6	09:25		12:55 (12)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03			09:09		12:41 (12)
	16:00	19	13:14 (12)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36			15:46	19	13:00 (12)
7	09:24		12:55 (12)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06			09:10		12:42 (12)
	16:01	20	13:15 (12)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34			15:45	18	13:00 (12)
8	09:24		12:56 (12)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08			09:12		12:43 (12)
	16:03	19	13:15 (12)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32			15:44	18	13:01 (12)
9	09:23		12:55 (12)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10			09:13		12:43 (12)
	16:05	20	13:15 (12)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	17	13:00 (12)
10	09:22		12:56 (12)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13			09:15		12:44 (12)
	16:07	20	13:16 (12)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27			15:43	17	13:01 (12)
11	09:21		12:57 (12)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		12:45 (12)
	16:09	20	13:17 (12)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25			15:43	16	13:01 (12)
12	09:19		12:57 (12)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18			09:17		12:45 (12)
	16:11	20	13:17 (12)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:42	16	13:01 (12)
13	09:18		12:57 (12)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20			09:19		12:46 (12)
	16:12	20	13:17 (12)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21			15:42	16	13:02 (12)
14	09:17		12:58 (12)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22			09:20		12:47 (12)
	16:14	20	13:18 (12)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19			15:42	14	13:01 (12)
15	09:16		12:58 (12)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25			09:21		12:47 (12)
	16:17	20	13:18 (12)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17			15:42	14	13:01 (12)
16	09:14		12:58 (12)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27			09:22		12:48 (12)
	16:19	20	13:18 (12)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15			15:42	13	13:01 (12)
17	09:13		12:59 (12)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29			09:23		12:48 (12)
	16:21	19	13:18 (12)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13			15:42	14	13:02 (12)
18	09:11		12:59 (12)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32			09:24		12:49 (12)
	16:23	19	13:18 (12)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11			15:42	13	13:02 (12)
19	09:10		13:01 (12)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34		12:41 (12)	09:25		12:50 (12)
	16:25	18	13:19 (12)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09	9	12:50 (12)	15:42	13	13:03 (12)
20	09:08		13:02 (12)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36		12:39 (12)	09:25		12:51 (12)
	16:27	16	13:18 (12)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07	12	12:51 (12)	15:42	12	13:03 (12)
21	09:07		13:02 (12)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38		12:38 (12)	09:26		12:51 (12)
	16:30	15	13:17 (12)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15	12:53 (12)	15:43	12	13:03 (12)
22	09:05		13:04 (12)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41		12:38 (12)	09:27		12:52 (12)
	16:32	12	13:16 (12)	17:48	18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04	16	12:54 (12)	15:43	12	13:04 (12)
23	09:03		13:06 (12)	07:51	06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43		12:37 (12)	09:27		12:52 (12)
	16:34	9	13:15 (12)	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02	18	12:55 (12)	15:44	12	13:04 (12)
24	09:01			07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		12:38 (12)	09:28		12:52 (12)
	16:37			17:52	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	18	12:56 (12)	15:44	12	13:04 (12)
25	09:00			07:46	06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47		12:37 (12)	09:28		12:53 (12)
	16:39			17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59	19	12:56 (12)	15:45	13	13:06 (12)
26	08:58			07:43	06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49		12:37 (12)	09:28		12:53 (12)
	16:41			17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57	20	12:57 (12)	15:46	13	13:06 (12)
27	08:56			07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		12:37 (12)	09:28		12:54 (12)
	16:44			18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56	20	12:57 (12)	15:47	13	13:07 (12)
28	08:54			07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54		12:37 (12)	09:28		12:53 (12)
	16:46			18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55	20	12:57 (12)	15:48	14	13:07 (12)
29	08:52				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56		12:38 (12)	09:28		12:53 (12)
	16:48				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53	20	12:58 (12)	15:49	15	13:08 (12)
30	08:50				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58		12:38 (12)	09:28		12:54 (12)
	16:51				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52	20	12:58 (12)	15:50	15	13:09 (12)
31	08:48				07:09		04:41		05:22	06:31		07:49				09:28		12:54 (12)
	16:53				20:14		22:29		22:03	20:42		16:51				15:51	15	13:09 (12)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		410												207			475	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,61												0,61			0,61	
Total reduction		0,24												0,24			0,24	
Total, real		99												50			115	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:45	13:54 (26)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39		07:51	14:48 (12)	08:59
	15:52		16:56 19	14:13 (26)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13		16:48 19	15:07 (12)	15:51
2	09:27		08:43	13:56 (26)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:53	14:49 (12)	09:01
	15:54		16:58 16	14:12 (26)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 17	15:06 (12)	15:50
3	09:27		08:41	13:58 (26)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44		07:56	14:49 (12)	09:03
	15:55		17:01 12	14:10 (26)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07		16:44 15	15:04 (12)	15:49
4	09:26		08:39	14:02 (26)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46		07:58	14:52 (12)	09:05
	15:57		17:03 5	14:07 (26)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 10	15:02 (12)	15:48
5	09:26		08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48		08:01	14:56 (12)	09:07
	15:58		17:06		18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01		16:39 2	14:58 (12)	15:47
6	09:25		08:34	15:25 (12)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50		08:03		09:08
	16:00		17:08 4	15:29 (12)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58		16:36		15:46
7	09:24		08:32	15:22 (12)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53		08:06	13:31 (26)	09:10
	16:01		17:11 11	15:33 (12)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56		16:34 7	13:38 (26)	15:45
8	09:23		08:30	15:20 (12)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55		08:08	13:28 (26)	09:12
	16:03		17:13 15	15:35 (12)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53		16:32 13	13:41 (26)	15:44
9	09:23		08:27	15:19 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57		08:10	13:27 (26)	09:13
	16:05		17:15 18	15:37 (12)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50		16:30 16	13:43 (26)	15:44
10	09:22		08:25	15:18 (12)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59		08:13	13:25 (26)	09:15
	16:07		17:18 19	15:37 (12)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:27 19	13:44 (26)	15:43
11	09:20		08:22	15:17 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	13:24 (26)	09:16
	16:09		17:20 21	15:38 (12)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44		16:25 21	13:45 (26)	15:43
12	09:19		08:20	15:17 (12)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04		08:17	13:24 (26)	09:17
	16:10		17:23 22	15:39 (12)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41		16:23 22	13:46 (26)	15:42
13	09:18	13:53 (26)	08:17	15:17 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	13:23 (26)	09:19
	16:12 5	13:58 (26)	17:25 22	15:39 (12)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39		16:21 23	13:46 (26)	15:42
14	09:17	13:51 (26)	08:15	15:16 (12)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09		08:22	13:23 (26)	09:20
	16:14 9	14:00 (26)	17:28 23	15:39 (12)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 24	13:47 (26)	15:42
15	09:16	13:50 (26)	08:12	15:17 (12)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:07 (37)	09:21
	16:17 11	14:01 (26)	17:30 22	15:39 (12)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33		16:17 33	13:48 (26)	15:42
16	09:14	13:50 (26)	08:10	15:17 (12)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:06 (37)	09:22
	16:19 17	14:07 (26)	17:33 22	15:39 (12)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30		16:15 36	13:48 (26)	15:42
17	09:13	13:49 (26)	08:07	15:17 (12)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	11:04 (37)	09:23
	16:21 21	14:10 (26)	17:35 21	15:38 (12)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 40	13:48 (26)	15:42
18	09:11	11:38 (37)	08:05	15:18 (12)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18		08:32	11:03 (37)	09:24
	16:23 27	14:11 (26)	17:38 19	15:37 (12)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25		16:11 42	13:49 (26)	15:42
19	09:10	11:35 (37)	08:02	15:20 (12)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20		08:34	11:03 (37)	09:25
	16:25 32	14:12 (26)	17:40 17	15:37 (12)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22		16:09 44	13:49 (26)	15:42
20	09:08	11:32 (37)	07:59	15:21 (12)	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	11:02 (37)	09:25
	16:27 36	14:12 (26)	17:43 14	15:35 (12)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19		16:07 45	13:49 (26)	15:42
21	09:07	11:29 (37)	07:57	15:24 (12)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	15:53 (12)	08:38	11:05 (37)	09:26
	16:30 42	14:13 (26)	17:45 8	15:32 (12)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17 10	16:03 (12)	16:06 42	13:49 (26)	15:43
22	09:05	11:27 (37)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	15:51 (12)	08:41	11:08 (37)	09:27
	16:32 45	14:14 (26)	17:47		18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14 15	16:06 (12)	16:04 36	13:48 (26)	15:43
23	09:03	11:28 (37)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	15:49 (12)	08:43	11:12 (37)	09:27
	16:34 44	14:14 (26)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11 17	16:06 (12)	16:02 32	13:49 (26)	15:44
24	09:01	11:29 (37)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:23	08:32	15:48 (12)	08:45	11:16 (37)	09:27
	16:36 42	14:15 (26)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09 19	16:07 (12)	16:01 28	13:49 (26)	15:44
25	08:59	11:31 (37)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	14:48 (12)	08:47	13:27 (26)	09:28
	16:39 40	14:15 (26)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06 20	15:08 (12)	15:59 21	13:48 (26)	15:45
26	08:58	11:32 (37)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	14:46 (12)	08:49	13:29 (26)	09:28
	16:41 37	14:15 (26)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 22	15:08 (12)	15:57 17	13:46 (26)	15:46
27	08:56	11:34 (37)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	14:46 (12)	08:51	13:29 (26)	09:28
	16:44 33	14:15 (26)	18:00		19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01 23	15:09 (12)	15:56 12	13:41 (26)	15:47
28	08:54	13:51 (26)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41	14:46 (12)	08:53	13:30 (26)	09:28
	16:46 24	14:15 (26)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58 22	15:08 (12)	15:55 9	13:39 (26)	15:47
29	08:52	13:51 (26)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	14:46 (12)	08:55	13:35 (26)	09:28
	16:48 23	14:14 (26)			20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56 22	15:08 (12)	15:53 5	13:40 (26)	15:49
30	08:50	13:52 (26)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	14:47 (12)	08:57		09:28
	16:51 22	14:14 (26)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53 21	15:08 (12)	15:52		15:50
31	08:48	13:54 (26)			07:09		04:41		05:22	06:31		07:49	14:47 (12)			09:28
	16:53 20	14:14 (26)			20:14		22:29		22:03	20:42		16:51 20	15:07 (12)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		530		330									211		650	
Sun reduction		0,50		0,50									0,50		0,50	
Oper. time red.		0,80		0,80									0,80		0,80	
Wind dir. red.		0,58		0,55									0,54		0,57	
Total reduction		0,23		0,22									0,22		0,23	
Total, real		122		72									46		148	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April		May	June
1	09:28		12:11 (32) | 08:45		10:15 (13) | 07:35		13:26 (26) | 07:07		18:42 (17) | 05:44	| 04:39
	15:52	47	14:26 (14) | 16:56	119	15:37 (35) | 18:04	35	17:05 (9) | 20:16	19	19:01 (17) | 21:26	| 22:30
2	09:27		12:11 (32) | 08:43		12:16 (32) | 07:32		15:45 (7) | 07:04		18:43 (17) | 05:41	| 04:38
	15:54	53	14:28 (14) | 16:58	114	15:38 (35) | 18:07	27	17:09 (9) | 20:19	16	18:59 (17) | 21:28	| 22:32
3	09:27		12:10 (32) | 08:41		12:17 (32) | 07:30		16:34 (12) | 07:01		18:46 (17) | 05:38	| 04:37
	15:55	58	14:29 (14) | 17:01	113	15:38 (35) | 18:09	33	17:12 (9) | 20:21	11	18:57 (17) | 21:30	| 22:33
4	09:26		12:10 (32) | 08:39		09:39 (37) | 07:27		16:31 (12) | 06:58			| 05:36	| 04:36
	15:57	61	14:29 (14) | 17:03	109	15:39 (35) | 18:12	43	17:15 (9) | 20:23			| 21:33	| 22:35
5	09:26		12:10 (32) | 08:36		09:39 (37) | 07:24		16:29 (12) | 06:55			| 05:34	| 04:35
	15:58	64	14:30 (14) | 17:06	105	15:39 (35) | 18:14	46	17:15 (9) | 20:26			| 21:35	| 22:36
6	09:25		12:09 (32) | 08:34		09:40 (37) | 07:21		16:26 (12) | 06:52			| 05:31	| 04:34
	16:00	70	14:31 (14) | 17:08	95	15:39 (35) | 18:16	49	17:15 (9) | 20:28			| 21:37	| 22:38
7	09:24		10:10 (13) | 08:32		09:40 (37) | 07:18		16:25 (12) | 06:49			| 05:29	| 04:33
	16:01	78	14:32 (14) | 17:11	96	15:39 (35) | 18:19	50	17:15 (9) | 20:30			| 21:39	| 22:39
8	09:23		10:10 (13) | 08:30		09:38 (37) | 07:15		16:23 (12) | 06:46			| 05:26	| 04:32
	16:03	84	14:33 (14) | 17:13	96	15:38 (35) | 18:21	52	17:15 (9) | 20:32			| 21:42	| 22:40
9	09:22		10:10 (13) | 08:27		09:36 (37) | 07:13		16:22 (12) | 06:44			| 05:24	| 04:31
	16:05	86	14:33 (14) | 17:16	98	15:38 (35) | 18:23	53	17:15 (9) | 20:35			| 21:44	| 22:41
10	09:21		10:11 (13) | 08:25		09:33 (37) | 07:10		16:20 (12) | 06:41			| 05:21	| 04:30
	16:07	91	14:34 (14) | 17:18	107	15:57 (7) | 18:26	54	17:14 (9) | 20:37			| 21:46	| 22:42
11	09:20		10:10 (13) | 08:22		09:29 (37) | 07:07		16:19 (12) | 06:38			| 05:19	| 04:29
	16:09	97	14:34 (14) | 17:20	114	16:00 (7) | 18:28	54	17:13 (9) | 20:39			| 21:48	| 22:44
12	09:19		10:09 (13) | 08:20		09:27 (37) | 07:04		16:18 (12) | 06:35			| 05:17	| 04:29
	16:11	102	14:35 (14) | 17:23	118	16:03 (7) | 18:30	54	17:12 (9) | 20:42			| 21:51	| 22:44
13	09:18		10:09 (13) | 08:17		09:24 (37) | 07:01		16:18 (12) | 06:32			| 05:15	| 04:28
	16:13	105	14:35 (14) | 17:25	118	16:04 (7) | 18:33	52	17:10 (9) | 20:44			| 21:53	| 22:45
14	09:17		10:10 (13) | 08:15		09:21 (37) | 06:58		16:17 (12) | 06:29			| 05:12	| 04:28
	16:15	107	14:36 (14) | 17:28	114	16:05 (7) | 18:35	51	17:08 (9) | 20:46			| 21:55	| 22:46
15	09:16		10:10 (13) | 08:12		09:18 (37) | 06:56		16:17 (12) | 06:27			| 05:10	| 04:27
	16:17	112	14:37 (14) | 17:30	120	16:07 (7) | 18:37	47	17:04 (9) | 20:49			| 21:57	| 22:47
16	09:14		10:02 (13) | 08:10		09:13 (37) | 06:53		16:17 (12) | 06:24			| 05:08	| 04:27
	16:19	119	14:37 (14) | 17:33	125	16:08 (7) | 18:40	46	17:03 (12) | 20:51			| 21:59	| 22:48
17	09:13		10:02 (13) | 08:07		09:13 (37) | 06:50		16:17 (12) | 06:21			| 05:06	| 04:27
	16:21	126	14:37 (14) | 17:35	123	16:08 (7) | 18:42	46	17:03 (12) | 20:53			| 22:02	| 22:48
18	09:11		10:02 (13) | 08:05		09:13 (37) | 06:47		16:16 (12) | 06:18			| 05:04	| 04:27
	16:23	127	14:37 (14) | 17:38	121	16:08 (7) | 18:44	46	17:02 (12) | 20:56			| 22:04	| 22:49
19	09:10		10:02 (13) | 08:02		09:15 (37) | 06:44		16:16 (12) | 06:16			| 05:02	| 04:26
	16:25	129	14:37 (14) | 17:40	118	16:09 (7) | 18:47	56	18:01 (17) | 20:58			| 22:06	| 22:49
20	09:08		10:02 (13) | 07:59		09:16 (37) | 06:41		16:16 (12) | 06:13			| 05:00	| 04:26
	16:27	130	14:37 (14) | 17:43	114	16:09 (7) | 18:49	60	18:03 (17) | 21:00			| 22:08	| 22:50
21	09:07		10:03 (13) | 07:57		09:17 (37) | 06:38		16:16 (12) | 06:10			| 04:58	| 04:27
	16:30	131	14:37 (14) | 17:45	110	16:09 (7) | 18:51	64	18:05 (17) | 21:02			| 22:10	| 22:50
22	09:05		10:03 (13) | 07:54		09:18 (37) | 06:35		16:17 (12) | 06:07			| 04:56	| 04:27
	16:32	129	14:36 (14) | 17:48	104	16:08 (7) | 18:54	63	18:05 (17) | 21:05			| 22:12	| 22:50
23	09:03		10:04 (13) | 07:51		09:20 (37) | 06:32		16:17 (12) | 06:05			| 04:54	| 04:27
	16:34	131	14:36 (14) | 17:50	95	16:08 (7) | 18:56	64	18:06 (17) | 21:07			| 22:14	| 22:50
24	09:01		10:04 (13) | 07:49		13:09 (26) | 06:30		16:18 (12) | 06:02			| 04:52	| 04:27
	16:37	128	14:35 (14) | 17:52	77	16:08 (7) | 18:58	64	18:06 (17) | 21:09			| 22:16	| 22:50
25	08:59		10:05 (13) | 07:46		13:11 (26) | 06:27		16:18 (12) | 05:59			| 04:50	| 04:28
	16:39	125	14:34 (14) | 17:55	71	16:07 (7) | 19:00	62	18:06 (17) | 21:12			| 22:18	| 22:50
26	08:58		10:05 (13) | 07:43		13:13 (26) | 06:24		16:20 (12) | 05:57			| 04:49	| 04:28
	16:41	124	15:28 (35) | 17:57	66	16:06 (7) | 19:03	61	18:07 (17) | 21:14			| 22:20	| 22:50
27	08:56		10:06 (13) | 07:41		13:16 (26) | 06:21		16:22 (12) | 05:54			| 04:47	| 04:29
	16:44	127	15:30 (35) | 18:00	58	16:05 (7) | 19:05	57	18:07 (17) | 21:16			| 22:22	| 22:50
28	08:54		10:07 (13) | 07:38		13:19 (26) | 06:18		16:23 (12) | 05:51			| 04:45	| 04:29
	16:46	130	15:33 (35) | 18:02	49	16:04 (7) | 19:07	54	18:06 (17) | 21:19			| 22:23	| 22:50
29	08:52		10:08 (13) |		| 07:15		17:26 (12) | 05:49			| 04:44	| 04:30
	16:48	131	15:35 (35) |		| 20:10	47	19:05 (17) | 21:21			| 22:25	| 22:49
30	08:50		10:09 (13) |		| 07:12		17:29 (12) | 05:46			| 04:42	| 04:31
	16:51	129	15:36 (35) |		| 20:12	38	19:04 (17) | 21:23			| 22:27	| 22:49
31	08:47		10:12 (13) |		| 07:09		18:41 (17) |			| 04:41	|
	16:53	126	15:37 (35) |		| 20:14	22	19:03 (17) |			| 22:29	|
Potential sun hours	221		260		365		432		521	547
Total, worst case		3257		2867		1550		46		
Sun reduction		0,50		0,50		0,50		0,50		
Oper. time red.		0,80		0,80		0,80		0,80		
Wind dir. red.		0,60		0,59		0,58		0,62		
Total reduction		0,24		0,24		0,23		0,25		
Total, real		786		675		361		11		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

Shadow receptor: Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December	
1	04:32	05:24	06:33		07:39	16:57 (12)	07:51	09:03 (37)	08:59	09:52 (13)
	22:48	22:01	20:39		19:13	53 17:50 (9)	16:49	107 15:26 (7)	15:51	96 14:16 (14)
2	04:33	05:26	06:35		07:41	16:58 (12)	07:53	09:06 (37)	09:01	09:53 (13)
	22:48	21:58	20:37		19:10	54 17:52 (9)	16:46	98 15:08 (35)	15:50	91 14:16 (14)
3	04:34	05:28	06:37		07:44	16:58 (12)	07:56	09:08 (37)	09:03	09:54 (13)
	22:47	21:56	20:34		19:07	54 17:52 (9)	16:44	96 15:08 (35)	15:49	88 14:17 (14)
4	04:35	05:30	06:39		07:46	16:58 (12)	07:58	09:10 (37)	09:05	09:54 (13)
	22:46	21:54	20:31		19:04	54 17:52 (9)	16:41	94 15:08 (35)	15:48	83 14:17 (14)
5	04:36	05:33	06:42		07:48	17:00 (12)	08:01	09:10 (37)	09:07	09:55 (13)
	22:45	21:51	20:28		19:01	52 17:52 (9)	16:39	95 15:09 (35)	15:47	77 14:17 (14)
6	04:37	05:35	06:44		07:50	17:00 (12)	08:03	09:10 (37)	09:08	09:57 (13)
	22:45	21:49	20:25		18:58	52 17:52 (9)	16:37	105 15:09 (35)	15:46	71 14:17 (14)
7	04:38	05:37	06:46		07:53	17:01 (12)	08:06	09:08 (37)	09:10	11:57 (32)
	22:44	21:46	20:22		18:56	50 17:51 (9)	16:34	111 15:09 (35)	15:45	64 14:17 (14)
8	04:40	05:39	06:48		07:55	17:03 (12)	08:08	11:48 (32)	09:12	11:57 (32)
	22:43	21:44	20:19		18:53	48 17:51 (9)	16:32	112 15:09 (35)	15:44	62 14:17 (14)
9	04:41	05:41	06:51	18:40 (17)	07:57	17:04 (12)	08:10	11:47 (32)	09:13	11:59 (32)
	22:41	21:41	20:16	10 18:50 (17)	18:50	46 17:50 (9)	16:30	113 15:09 (35)	15:44	57 14:17 (14)
10	04:42	05:44	06:53	18:37 (17)	07:59	17:06 (12)	08:13	09:45 (13)	09:15	12:00 (32)
	22:40	21:39	20:14	15 18:52 (17)	18:47	40 17:48 (9)	16:27	121 15:08 (35)	15:43	53 14:17 (14)
11	04:44	05:46	06:55	18:35 (17)	08:02	16:22 (7)	08:15	09:42 (13)	09:16	12:01 (32)
	22:39	21:36	20:11	19 18:54 (17)	18:44	36 17:45 (9)	16:25	127 15:08 (35)	15:43	47 14:16 (14)
12	04:45	05:48	06:57	18:34 (17)	08:04	16:18 (7)	08:17	09:41 (13)	09:17	12:03 (32)
	22:38	21:34	20:08	21 18:55 (17)	18:42	25 17:41 (9)	16:23	130 15:08 (35)	15:42	44 14:17 (14)
13	04:47	05:50	06:59	17:21 (12)	08:06	13:56 (26)	08:20	09:39 (13)	09:19	12:04 (32)
	22:36	21:31	20:05	37 18:55 (17)	18:39	42 17:38 (9)	16:21	131 15:06 (35)	15:42	39 14:17 (14)
14	04:49	05:53	07:02	17:17 (12)	08:09	13:50 (26)	08:22	09:39 (13)	09:20	12:07 (32)
	22:35	21:29	20:02	45 18:55 (17)	18:36	53 16:37 (7)	16:19	131 15:05 (35)	15:42	34 14:17 (14)
15	04:50	05:55	07:04	17:13 (12)	08:11	13:46 (26)	08:25	09:39 (13)	09:21	13:06 (26)
	22:33	21:26	19:59	52 18:55 (17)	18:33	62 16:37 (7)	16:17	128 15:03 (35)	15:42	26 14:16 (14)
16	04:52	05:57	07:06	17:11 (12)	08:13	13:44 (26)	08:27	09:39 (13)	09:22	13:08 (26)
	22:32	21:23	19:56	56 18:55 (17)	18:30	69 16:39 (7)	16:15	124 15:02 (35)	15:42	22 14:15 (14)
17	04:54	05:59	07:08	17:08 (12)	08:16	13:41 (26)	08:29	09:38 (13)	09:23	13:10 (26)
	22:30	21:21	19:53	59 18:54 (17)	18:28	75 16:39 (7)	16:13	125 14:07 (14)	15:42	18 14:15 (14)
18	04:56	06:02	07:10	17:07 (12)	08:18	09:55 (37)	08:32	09:38 (13)	09:24	13:12 (26)
	22:29	21:18	19:50	63 18:55 (17)	18:25	86 16:39 (7)	16:11	129 14:09 (14)	15:42	16 14:15 (14)
19	04:58	06:04	07:12	17:06 (12)	08:20	09:51 (37)	08:34	09:39 (13)	09:25	13:16 (3)
	22:27	21:15	19:47	63 18:54 (17)	18:22	98 16:39 (7)	16:09	131 14:11 (14)	15:42	11 14:15 (14)
20	04:59	06:06	07:15	17:04 (12)	08:23	09:49 (37)	08:36	09:38 (13)	09:25	13:16 (3)
	22:25	21:13	19:45	65 18:53 (17)	18:20	106 16:40 (7)	16:07	129 14:11 (14)	15:42	9 14:14 (14)
21	05:01	06:08	07:17	17:03 (12)	08:25	09:46 (37)	08:38	09:39 (13)	09:26	13:17 (3)
	22:23	21:10	19:42	64 18:51 (17)	18:17	113 16:39 (7)	16:06	131 14:13 (14)	15:43	9 14:15 (14)
22	05:03	06:11	07:19	17:01 (12)	08:27	09:45 (37)	08:41	09:38 (13)	09:26	13:18 (3)
	22:21	21:07	19:39	64 18:50 (17)	18:14	116 16:39 (7)	16:04	131 14:13 (14)	15:43	9 14:16 (14)
23	05:05	06:13	07:21	17:00 (12)	08:30	09:44 (37)	08:43	09:39 (13)	09:27	13:18 (3)
	22:19	21:05	19:36	62 18:48 (17)	18:12	119 16:38 (7)	16:02	128 14:14 (14)	15:44	9 14:16 (14)
24	05:07	06:15	07:24	17:00 (12)	08:32	09:43 (37)	08:45	09:39 (13)	09:27	13:18 (3)
	22:18	21:02	19:33	58 18:46 (17)	18:09	122 16:38 (7)	16:01	127 14:14 (14)	15:44	11 14:17 (14)
25	05:09	06:17	07:26	16:59 (12)	07:34	08:43 (37)	08:47	09:40 (13)	09:28	13:15 (26)
	22:16	20:59	19:30	46 17:45 (12)	17:06	123 15:38 (7)	15:59	124 14:15 (14)	15:45	14 14:17 (14)
26	05:11	06:19	07:28	16:58 (12)	07:37	08:44 (37)	08:49	09:40 (13)	09:28	13:14 (26)
	22:14	20:56	19:27	47 17:45 (12)	17:04	122 15:37 (7)	15:58	119 14:15 (14)	15:46	17 14:18 (14)
27	05:13	06:22	07:30	16:58 (12)	07:39	08:48 (37)	08:51	09:49 (13)	09:28	13:13 (26)
	22:11	20:53	19:24	46 17:44 (12)	17:01	118 15:36 (7)	15:56	112 14:16 (14)	15:47	20 14:19 (14)
28	05:15	06:24	07:32	16:58 (12)	07:41	08:51 (37)	08:53	09:49 (13)	09:28	13:12 (26)
	22:09	20:51	19:21	46 17:44 (12)	16:59	115 15:35 (7)	15:55	109 14:16 (14)	15:48	24 14:21 (14)
29	05:17	06:26	07:35	16:58 (12)	07:44	08:54 (37)	08:55	09:50 (13)	09:28	12:14 (32)
	22:07	20:48	19:19	50 17:48 (9)	16:56	119 15:34 (7)	15:53	106 14:16 (14)	15:49	31 14:23 (14)
30	05:20	06:28	07:37	16:57 (12)	07:46	08:57 (37)	08:57	09:50 (13)	09:28	12:13 (32)
	22:05	20:45	19:16	52 17:49 (9)	16:53	117 15:32 (7)	15:52	103 14:16 (14)	15:50	37 14:25 (14)
31	05:22	06:31			07:49	08:59 (37)			09:28	12:12 (32)
	22:03	20:42			16:51	115 15:29 (7)			15:51	41 14:25 (14)
Potential sun hours	546	478	386		319		236		199	
Total, worst case				1040		2454		3527		1230
Sun reduction				0,50		0,50		0,50		0,50
Oper. time red.				0,80		0,80		0,80		0,80
Wind dir. red.				0,59		0,59		0,60		0,59
Total reduction				0,24		0,24		0,24		0,24
Total, real				245		577		846		289

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (1)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	1 20:40 (1)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (1)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	1 20:41 (1)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (1)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	1 20:40 (1)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (1)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	1 20:41 (1)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	2 20:42 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	2 20:42 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	2 20:42 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	2 20:43 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (1)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	2 20:43 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	2 20:43 (1)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	2 20:43 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	2 20:43 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	2 20:44 (1)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	2 20:44 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	2 20:44 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	2 20:44 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	2 20:44 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	1 20:44 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	2 20:45 (1)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	1 20:44 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case						34		1						
Sun reduction						0,50		0,50						
Oper. time red.						0,80		0,80						
Wind dir. red.						0,74		0,74						
Total reduction						0,29		0,29						
Total, real						10		0						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	20:27 (1) 04:32	20:33 (1) 05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30 8	20:35 (1) 22:48 15	20:48 (1) 22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	20:27 (1) 04:33	20:33 (1) 05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31 11	20:38 (1) 22:47 15	20:48 (1) 21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	20:27 (1) 04:34	20:33 (1) 05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33 12	20:39 (1) 22:47 15	20:48 (1) 21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36	20:27 (1) 04:35	20:33 (1) 05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34 12	20:39 (1) 22:46 14	20:47 (1) 21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	20:27 (1) 04:36	20:33 (1) 05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36 13	20:40 (1) 22:45 14	20:47 (1) 21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	20:27 (1) 04:37	20:34 (1) 05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37 13	20:40 (1) 22:44 13	20:47 (1) 21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	20:28 (1) 04:39	20:34 (1) 05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38 14	20:42 (1) 22:43 12	20:46 (1) 21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	20:28 (1) 04:40	20:34 (1) 05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40 14	20:42 (1) 22:42 12	20:46 (1) 21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31	20:28 (1) 04:41	20:35 (1) 05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41 14	20:42 (1) 22:41 11	20:46 (1) 21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	20:29 (1) 04:43	20:35 (1) 05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42 14	20:43 (1) 22:40 11	20:46 (1) 21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:28 (1) 04:44	20:35 (1) 05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43 16	20:44 (1) 22:39 9	20:44 (1) 21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:29 (1) 04:46	20:35 (1) 05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44 16	20:45 (1) 22:37 4	20:39 (1) 21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:29 (1) 04:47	20:35 (1) 05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45 16	20:45 (1) 22:36 3	20:38 (1) 21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:29 (1) 04:49	20:35 (1) 05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46 17	20:46 (1) 22:34 2	20:37 (1) 21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:30 (1) 04:51	05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47 17	20:47 (1) 22:33	21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:30 (1) 04:52	05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47 17	20:47 (1) 22:31	21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:30 (1) 04:54	05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48 18	20:48 (1) 22:30	21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:31 (1) 04:56	06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48 17	20:48 (1) 22:28	21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:31 (1) 04:58	06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05	22:49 18	20:49 (1) 22:26	21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:31 (1) 05:00	06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49 18	20:49 (1) 22:25	21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58	04:27	20:31 (1) 05:01	06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49 18	20:49 (1) 22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:31 (1) 05:03	06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50 18	20:49 (1) 22:21	21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:31 (1) 05:05	06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50 18	20:49 (1) 22:19	21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:32 (1) 05:07	06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50 17	20:49 (1) 22:17	21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:32 (1) 05:09	06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50 17	20:49 (1) 22:15	20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:32 (1) 05:11	06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50 18	20:50 (1) 22:13	20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:32 (1) 05:13	06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49 17	20:49 (1) 22:11	20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:32 (1) 05:15	06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49 17	20:49 (1) 22:09	20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:33 (1) 05:18	06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49 17	20:50 (1) 22:07	20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42 20:27 (1)	04:31	20:32 (1) 05:20	06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26 2 20:29 (1)	22:48 17	20:49 (1) 22:05	20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41 20:27 (1)		05:22	06:31		07:48		09:27
	16:53		20:14		22:28 3 20:30 (1)		22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case					5	469	150					
Sun reduction					0,50	0,50	0,50					
Oper. time red.					0,80	0,80	0,80					
Wind dir. red.					0,73	0,73	0,73					
Total reduction					0,29	0,29	0,29					
Total, real					1	138	44					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42	04:39	04:33	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:46	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34	04:35	04:37	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:03	09:08
	16:00	17:09	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:23	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44	22:41	22:41	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:19	08:20	07:04	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55	22:46	22:35	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57	22:47	22:33	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:13	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06	04:27	04:54	06:00	07:08	08:16	08:29	09:23
	16:21	17:36	18:42	20:53	22:02	22:48	22:30	21:21	19:54	18:28	16:13	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56	04:27	05:04	06:11	07:19	08:27	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:03	15:44
24	09:01	07:49	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	08:45	09:27
	16:37	17:53	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	22:50	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48	04:29	05:14	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:23	22:50	22:09	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:14		22:29		22:03	20:43		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April			May			June		
1	09:28	08:46	07:35	07:07			05:44		07:31 (38)	04:40		06:17 (36)
	15:53	16:56	18:05	20:17			21:26	31	08:02 (38)	22:30	23	06:40 (36)
2	09:27	08:43	07:33	07:04			05:42		07:32 (38)	04:39		06:16 (36)
	15:54	16:59	18:07	20:19			21:28	29	08:01 (38)	22:32	24	06:40 (36)
3	09:27	08:41	07:30	07:01			05:39		07:32 (38)	04:37		06:16 (36)
	15:56	17:01	18:10	20:21			21:31	27	07:59 (38)	22:34	25	06:41 (36)
4	09:26	08:39	07:27	06:58			05:36		07:34 (38)	04:36		06:16 (36)
	15:57	17:04	18:12	20:24			21:33	24	07:58 (38)	22:35	26	06:42 (36)
5	09:26	08:37	07:24	06:55			05:34		07:36 (38)	04:35		06:16 (36)
	15:59	17:06	18:14	20:26			21:35	20	07:56 (38)	22:36	27	06:43 (36)
6	09:25	08:34	07:21	06:53			05:32		07:38 (38)	04:34		06:16 (36)
	16:00	17:09	18:17	20:28			21:37	16	07:54 (38)	22:38	27	06:43 (36)
7	09:24	08:32	07:19	06:50			05:29		07:40 (38)	04:33		06:16 (36)
	16:02	17:11	18:19	20:31			21:40	10	07:50 (38)	22:39	27	06:43 (36)
8	09:24	08:30	07:16	06:47			05:27			04:32		06:15 (36)
	16:04	17:14	18:21	20:33			21:42			22:40	29	06:44 (36)
9	09:23	08:27	07:13	06:44			05:24			04:31		06:16 (36)
	16:06	17:16	18:24	20:35			21:44			22:42	29	06:45 (36)
10	09:22	08:25	07:10	06:41		07:48 (38)	05:22			04:31		06:15 (36)
	16:07	17:18	18:26	20:37	10	07:58 (38)	21:46			22:43	30	06:45 (36)
11	09:21	08:23	07:07	06:38		07:45 (38)	05:20			04:30		06:16 (36)
	16:09	17:21	18:28	20:40	17	08:02 (38)	21:49			22:44	29	06:45 (36)
12	09:20	08:20	07:04	06:36		07:41 (38)	05:17			04:29		06:15 (36)
	16:11	17:23	18:31	20:42	22	08:03 (38)	21:51			22:45	30	06:45 (36)
13	09:18	08:18	07:02	06:33		07:37 (38)	05:15			04:29		06:16 (36)
	16:13	17:26	18:33	20:44	27	08:04 (38)	21:53			22:46	30	06:46 (36)
14	09:17	08:15	06:59	06:30		07:35 (38)	05:13			04:28		06:16 (36)
	16:15	17:28	18:35	20:47	30	08:05 (38)	21:55			22:46	30	06:46 (36)
15	09:16	08:13	06:56	06:27		07:34 (38)	05:11			04:28		06:15 (36)
	16:17	17:31	18:38	20:49	33	08:07 (38)	21:57			22:47	31	06:46 (36)
16	09:14	08:10	06:53	06:24		07:33 (38)	05:09			04:28		06:16 (36)
	16:19	17:33	18:40	20:51	34	08:07 (38)	22:00			22:48	30	06:46 (36)
17	09:13	08:07	06:50	06:22		07:32 (38)	05:06			04:27		06:16 (36)
	16:21	17:36	18:42	20:54	35	08:07 (38)	22:02			22:48	31	06:47 (36)
18	09:12	08:05	06:47	06:19		07:31 (38)	05:04			04:27		06:16 (36)
	16:24	17:38	18:45	20:56	37	08:08 (38)	22:04			22:49	31	06:47 (36)
19	09:10	08:02	06:44	06:16		07:30 (38)	05:02			04:27		06:16 (36)
	16:26	17:41	18:47	20:58	38	08:08 (38)	22:06			22:49	31	06:47 (36)
20	09:08	08:00	06:42	06:13		07:30 (38)	05:00			04:27		06:16 (36)
	16:28	17:43	18:49	21:00	39	08:09 (38)	22:08			22:50	31	06:47 (36)
21	09:07	07:57	06:39	06:11		07:30 (38)	04:58			04:27		06:16 (36)
	16:30	17:46	18:52	21:03	38	08:08 (38)	22:10			22:50	31	06:47 (36)
22	09:05	07:54	06:36	06:08		07:29 (38)	04:56			04:27		06:17 (36)
	16:32	17:48	18:54	21:05	39	08:08 (38)	22:12			22:50	31	06:48 (36)
23	09:03	07:52	06:33	06:05		07:29 (38)	04:55			04:28		06:17 (36)
	16:35	17:50	18:56	21:07	39	08:08 (38)	22:14			22:50	31	06:48 (36)
24	09:02	07:49	06:30	06:02		07:29 (38)	04:53			04:28		06:17 (36)
	16:37	17:53	18:58	21:10	38	08:07 (38)	22:16			22:50	31	06:48 (36)
25	09:00	07:46	06:27	06:00		07:29 (38)	04:51			04:28		06:18 (36)
	16:39	17:55	19:01	21:12	38	08:07 (38)	22:18			22:50	31	06:49 (36)
26	08:58	07:44	06:24	05:57		07:29 (38)	04:49		06:24 (36)	04:29		06:18 (36)
	16:42	17:58	19:03	21:14	37	08:06 (38)	22:20	8	06:32 (36)	22:50	31	06:49 (36)
27	08:56	07:41	06:21	05:54		07:29 (38)	04:48		06:21 (36)	04:29		06:19 (36)
	16:44	18:00	19:05	21:17	37	08:06 (38)	22:22	13	06:34 (36)	22:50	30	06:49 (36)
28	08:54	07:38	06:18	05:52		07:29 (38)	04:46		06:20 (36)	04:30		06:18 (36)
	16:47	18:02	19:08	21:19	36	08:05 (38)	22:24	16	06:36 (36)	22:50	31	06:49 (36)
29	08:52		07:16	05:49		07:30 (38)	04:44		06:19 (36)	04:31		06:19 (36)
	16:49		20:10	21:21	34	08:04 (38)	22:25	18	06:37 (36)	22:49	30	06:49 (36)
30	08:50		07:13	05:47		07:30 (38)	04:43		06:19 (36)	04:31		06:19 (36)
	16:51		20:12	21:24	33	08:03 (38)	22:27	20	06:39 (36)	22:49	30	06:49 (36)
31	08:48		07:10				04:41		06:17 (36)			
	16:54		20:14				22:29	22	06:39 (36)			
Potential sun hours	221	260	365	432			521			547		
Total, worst case					691			254			878	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,65			0,62			0,58	
Total reduction					0,26			0,25			0,23	
Total, real					178			63			204	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July			August			September			October	November	December
1	04:32		06:20 (36)	05:24			06:33		07:44 (38)	07:39	07:51	09:00
	22:48	30	06:50 (36)	22:01			20:40	17	08:01 (38)	19:13	16:49	15:51
2	04:33		06:20 (36)	05:27			06:35		07:47 (38)	07:42	07:54	09:01
	22:48	30	06:50 (36)	21:58			20:37	10	07:57 (38)	19:10	16:47	15:50
3	04:34		06:20 (36)	05:29			06:38			07:44	07:56	09:03
	22:47	29	06:49 (36)	21:56			20:34			19:07	16:44	15:49
4	04:35		06:20 (36)	05:31			06:40			07:46	07:59	09:05
	22:46	29	06:49 (36)	21:54			20:31			19:05	16:42	15:48
5	04:36		06:21 (36)	05:33			06:42			07:48	08:01	09:07
	22:46	28	06:49 (36)	21:51			20:28			19:02	16:39	15:47
6	04:38		06:21 (36)	05:35		07:49 (38)	06:44			07:51	08:03	09:09
	22:45	28	06:49 (36)	21:49	13	08:02 (38)	20:25			18:59	16:37	15:47
7	04:39		06:23 (36)	05:38		07:46 (38)	06:47			07:53	08:06	09:10
	22:44	27	06:50 (36)	21:47	18	08:04 (38)	20:23			18:56	16:35	15:46
8	04:40		06:23 (36)	05:40		07:44 (38)	06:49			07:55	08:08	09:12
	22:43	26	06:49 (36)	21:44	22	08:06 (38)	20:20			18:53	16:32	15:45
9	04:42		06:23 (36)	05:42		07:43 (38)	06:51			07:57	08:11	09:13
	22:42	26	06:49 (36)	21:42	25	08:08 (38)	20:17			18:50	16:30	15:44
10	04:43		06:24 (36)	05:44		07:41 (38)	06:53			08:00	08:13	09:15
	22:40	24	06:48 (36)	21:39	28	08:09 (38)	20:14			18:48	16:28	15:44
11	04:45		06:25 (36)	05:46		07:40 (38)	06:55			08:02	08:15	09:16
	22:39	23	06:48 (36)	21:37	30	08:10 (38)	20:11			18:45	16:26	15:43
12	04:46		06:25 (36)	05:49		07:39 (38)	06:58			08:04	08:18	09:17
	22:38	23	06:48 (36)	21:34	32	08:11 (38)	20:08			18:42	16:24	15:43
13	04:48		06:26 (36)	05:51		07:38 (38)	07:00			08:07	08:20	09:19
	22:36	21	06:47 (36)	21:32	33	08:11 (38)	20:05			18:39	16:22	15:43
14	04:49		06:28 (36)	05:53		07:37 (38)	07:02			08:09	08:22	09:20
	22:35	18	06:46 (36)	21:29	35	08:12 (38)	20:02			18:36	16:19	15:43
15	04:51		06:28 (36)	05:55		07:36 (38)	07:04			08:11	08:25	09:21
	22:34	17	06:45 (36)	21:26	36	08:12 (38)	19:59			18:34	16:17	15:42
16	04:53		06:30 (36)	05:58		07:36 (38)	07:06			08:14	08:27	09:22
	22:32	14	06:44 (36)	21:24	37	08:13 (38)	19:57			18:31	16:15	15:42
17	04:54		06:31 (36)	06:00		07:35 (38)	07:09			08:16	08:29	09:23
	22:30	11	06:42 (36)	21:21	38	08:13 (38)	19:54			18:28	16:13	15:42
18	04:56		06:35 (36)	06:02		07:36 (38)	07:11			08:18	08:32	09:24
	22:29	5	06:40 (36)	21:18	38	08:14 (38)	19:51			18:25	16:12	15:42
19	04:58			06:04		07:35 (38)	07:13			08:21	08:34	09:25
	22:27			21:16	39	08:14 (38)	19:48			18:23	16:10	15:43
20	05:00			06:07		07:35 (38)	07:15			08:23	08:36	09:25
	22:25			21:13	38	08:13 (38)	19:45			18:20	16:08	15:43
21	05:02			06:09		07:34 (38)	07:17			08:25	08:39	09:26
	22:23			21:10	39	08:13 (38)	19:42			18:17	16:06	15:43
22	05:04			06:11		07:34 (38)	07:20			08:28	08:41	09:27
	22:22			21:08	39	08:13 (38)	19:39			18:15	16:04	15:44
23	05:06			06:13		07:34 (38)	07:22			08:30	08:43	09:27
	22:20			21:05	38	08:12 (38)	19:36			18:12	16:03	15:44
24	05:08			06:15		07:34 (38)	07:24			08:32	08:45	09:28
	22:18			21:02	37	08:11 (38)	19:33			18:09	16:01	15:45
25	05:10			06:18		07:34 (38)	07:26			07:35	08:47	09:28
	22:16			20:59	37	08:11 (38)	19:30			17:07	16:00	15:46
26	05:12			06:20		07:34 (38)	07:28			07:37	08:50	09:28
	22:14			20:57	36	08:10 (38)	19:28			17:04	15:58	15:46
27	05:14			06:22		07:35 (38)	07:31			07:39	08:52	09:28
	22:12			20:54	34	08:09 (38)	19:25			17:02	15:57	15:47
28	05:16			06:24		07:35 (38)	07:33			07:42	08:54	09:28
	22:10			20:51	32	08:07 (38)	19:22			16:59	15:55	15:48
29	05:18			06:27		07:36 (38)	07:35			07:44	08:56	09:28
	22:07			20:48	30	08:06 (38)	19:19			16:56	15:54	15:49
30	05:20			06:29		07:38 (38)	07:37			07:47	08:58	09:28
	22:05			20:45	27	08:05 (38)	19:16			16:54	15:53	15:50
31	05:22			06:31		07:41 (38)				07:49		09:28
	22:03			20:43	22	08:03 (38)				16:51		15:51
Potential sun hours	545			478			386			319	236	200
Total, worst case		409			833			27				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,58			0,65			0,65				
Total reduction		0,23			0,26			0,26				
Total, real		95			215			7				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44	04:40	06:01 (38) 04:32	06:06 (38) 05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26	22:30 34	06:35 (38) 22:48 37	06:43 (38) 22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42	04:39	06:01 (38) 04:33	06:07 (38) 05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28	22:32 35	06:36 (38) 22:48 36	06:43 (38) 21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:38	06:01 (38) 04:34	06:06 (38) 05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:30	22:33 35	06:36 (38) 22:47 37	06:43 (38) 21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37	04:36	06:00 (38) 04:35	06:06 (38) 05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35 36	06:36 (38) 22:46 37	06:43 (38) 21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34	04:35	06:01 (38) 04:37	06:06 (38) 05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:36 36	06:37 (38) 22:46 37	06:43 (38) 21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32	04:34	06:01 (38) 04:38	06:08 (38) 05:35	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37	22:38 36	06:37 (38) 22:45 36	06:44 (38) 21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29	04:33	06:01 (38) 04:39	06:08 (38) 05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39 36	06:37 (38) 22:44 36	06:44 (38) 21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	06:01 (38) 04:40	06:08 (38) 05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42	22:40 36	06:37 (38) 22:43 36	06:44 (38) 21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24	04:31	06:02 (38) 04:42	06:08 (38) 05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44	22:41 36	06:38 (38) 22:42 36	06:44 (38) 21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	06:01 (38) 04:43	06:08 (38) 05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:37	21:46	22:43 37	06:38 (38) 22:40 35	06:43 (38) 21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	06:02 (38) 04:45	06:09 (38) 05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49	22:44 37	06:39 (38) 22:39 35	06:44 (38) 21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17	04:29	06:02 (38) 04:46	06:09 (38) 05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51	22:45 36	06:38 (38) 22:38 35	06:44 (38) 21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15	04:29	06:02 (38) 04:48	06:09 (38) 05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:46 37	06:39 (38) 22:36 34	06:43 (38) 21:31	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	06:03 (38) 04:49	06:10 (38) 05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55	22:46 36	06:39 (38) 22:35 33	06:43 (38) 21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	06:02 (38) 04:51	06:10 (38) 05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57	22:47 37	06:39 (38) 22:34 33	06:43 (38) 21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09	04:28	06:02 (38) 04:53	06:11 (38) 05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48 37	06:39 (38) 22:32 32	06:43 (38) 21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06 06:12 (38)	04:27	06:03 (38) 04:54	06:11 (38) 06:00	07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02 10 06:22 (38)	22:48 37	06:40 (38) 22:30 31	06:42 (38) 21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04 06:11 (38)	04:27	06:03 (38) 04:56	06:12 (38) 06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04 14 06:25 (38)	22:49 37	06:40 (38) 22:29 30	06:42 (38) 21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02 06:09 (38)	04:27	06:03 (38) 04:58	06:13 (38) 06:04	07:13	08:20	08:34	09:25
	16:26	17:41	18:47	20:58	22:06 18 06:27 (38)	22:49 37	06:40 (38) 22:27 29	06:42 (38) 21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00 06:08 (38)	04:27	06:03 (38) 05:00	06:13 (38) 06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08 20 06:28 (38)	22:50 37	06:40 (38) 22:25 28	06:41 (38) 21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58 06:06 (38)	04:27	06:03 (38) 05:02	06:14 (38) 06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10 23 06:29 (38)	22:50 37	06:40 (38) 22:23 27	06:41 (38) 21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56 06:05 (38)	04:27	06:04 (38) 05:04	06:16 (38) 06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12 25 06:30 (38)	22:50 37	06:41 (38) 22:22 24	06:40 (38) 21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55 06:03 (38)	04:28	06:04 (38) 05:06	06:17 (38) 06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14 28 06:31 (38)	22:50 37	06:41 (38) 22:20 21	06:38 (38) 21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53 06:03 (38)	04:28	06:04 (38) 05:08	06:18 (38) 06:15	07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16 29 06:32 (38)	22:50 37	06:41 (38) 22:18 19	06:37 (38) 21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51 06:02 (38)	04:28	06:05 (38) 05:10	06:20 (38) 06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18 30 06:32 (38)	22:50 37	06:42 (38) 22:16 16	06:36 (38) 20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49 06:02 (38)	04:29	06:05 (38) 05:12	06:22 (38) 06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20 31 06:33 (38)	22:50 36	06:41 (38) 22:14 12	06:34 (38) 20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48 06:01 (38)	04:29	06:05 (38) 05:14	06:25 (38) 06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22 32 06:33 (38)	22:50 37	06:42 (38) 22:12 6	06:31 (38) 20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46 06:01 (38)	04:30	06:05 (38) 05:16	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24 33 06:34 (38)	22:50 37	06:42 (38) 22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44 06:01 (38)	04:31	06:05 (38) 05:18	06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25 34 06:35 (38)	22:49 37	06:42 (38) 22:07	20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43 06:01 (38)	04:32	06:06 (38) 05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27 34 06:35 (38)	22:49 37	06:43 (38) 22:05	20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41 06:01 (38)		05:22	06:31		07:49		09:28
	16:54		20:14		22:29 34 06:35 (38)		22:03	20:43		16:51		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case					395	1094	808					
Sun reduction					0,50	0,50	0,50					
Oper. time red.					0,80	0,80	0,80					
Wind dir. red.					0,58	0,58	0,58					
Total reduction					0,23	0,23	0,23					
Total, real					91	252	186					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44		04:40		04:32		05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26		22:30	28	06:18 (38)	33	06:46 (38)	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		04:39		06:18 (38)		04:33	06:19 (38)	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28		22:32	28	06:46 (38)	33	22:48	06:52 (38)	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39		04:38		06:17 (38)		04:34	06:18 (38)	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:31		22:33	29	06:46 (38)	33	22:47	06:51 (38)	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37		04:36		06:16 (38)		04:35	06:18 (38)	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33		22:35	30	06:46 (38)	33	22:46	06:51 (38)	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34		04:35		06:16 (38)		04:37	06:19 (38)	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35		22:36	31	06:47 (38)	33	22:46	06:52 (38)	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32		04:34		06:15 (38)		04:38	06:21 (38)	05:35	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37		22:38	32	06:47 (38)	32	22:45	06:53 (38)	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29		04:33		06:14 (38)		04:39	06:22 (38)	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40		22:39	32	06:46 (38)	31	22:44	06:53 (38)	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27		04:32		06:13 (38)		04:40	06:23 (38)	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42		22:40	33	06:46 (38)	30	22:43	06:53 (38)	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24		04:31		06:14 (38)		04:42	06:24 (38)	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44		22:41	33	06:47 (38)	29	22:42	06:53 (38)	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22		04:31		06:13 (38)		04:43	06:25 (38)	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:37	21:46		22:43	33	06:46 (38)	28	22:40	06:53 (38)	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20		04:30		06:14 (38)		04:45	06:26 (38)	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49		22:44	33	06:47 (38)	28	22:39	06:54 (38)	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17		04:29		06:14 (38)		04:46	06:27 (38)	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51		22:45	32	06:46 (38)	27	22:38	06:54 (38)	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15		04:29		06:14 (38)		04:48	06:28 (38)	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53		22:46	33	06:47 (38)	26	22:36	06:54 (38)	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13		04:28		06:15 (38)		04:49	06:30 (38)	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55		22:46	32	06:47 (38)	24	22:35	06:54 (38)	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11		04:28		06:15 (38)		04:51	06:31 (38)	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57		22:47	32	06:47 (38)	23	22:34	06:54 (38)	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09		06:39 (38)		04:28		06:15 (38)	04:53	06:33 (38)	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	2	06:41 (38)		22:48	32	06:47 (38)	22:32	06:55 (38)	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06		06:37 (38)		04:27		06:15 (38)	04:54	06:33 (38)	06:00	07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02	4	06:41 (38)		22:48	32	06:47 (38)	22:30	06:54 (38)	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04		06:36 (38)		04:27		06:16 (38)	04:56	06:35 (38)	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	7	06:43 (38)		22:49	31	06:47 (38)	22:29	06:55 (38)	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02		06:35 (38)		04:27		06:16 (38)	04:58	06:37 (38)	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	8	06:43 (38)		22:49	31	06:47 (38)	22:27	06:55 (38)	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00		06:33 (38)		04:27		06:16 (38)	05:00	06:38 (38)	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	10	06:43 (38)		22:50	31	06:47 (38)	22:25	06:54 (38)	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58		06:31 (38)		04:27		06:16 (38)	05:02	06:39 (38)	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	12	06:43 (38)		22:50	31	06:47 (38)	22:23	06:54 (38)	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56		06:30 (38)		04:27		06:17 (38)	05:04	06:41 (38)	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	14	06:44 (38)		22:50	31	06:48 (38)	22:22	06:54 (38)	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55		06:29 (38)		04:28		06:17 (38)	05:06	06:42 (38)	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	15	06:44 (38)		22:50	31	06:48 (38)	22:20	06:53 (38)	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53		06:28 (38)		04:28		06:17 (38)	05:08	06:44 (38)	06:15	07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16	17	06:45 (38)		22:50	31	06:48 (38)	22:18	06:53 (38)	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51		06:26 (38)		04:28		06:18 (38)	05:10	06:45 (38)	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	19	06:45 (38)		22:50	31	06:49 (38)	22:16	06:53 (38)	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49		06:25 (38)		04:29		06:17 (38)	05:12	06:47 (38)	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	20	06:45 (38)		22:50	32	06:49 (38)	22:14	06:53 (38)	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48		06:23 (38)		04:29		06:18 (38)	05:14	06:49 (38)	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	22	06:45 (38)		22:50	32	06:50 (38)	22:12	06:52 (38)	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46		06:23 (38)		04:30		06:17 (38)	05:16	06:51 (38)	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24	22	06:45 (38)		22:50	32	06:49 (38)	22:10	06:52 (38)	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44		06:22 (38)		04:31		06:18 (38)	05:18		06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	24	06:46 (38)		22:49	32	06:50 (38)	22:07		20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43		06:21 (38)		04:32		06:18 (38)	05:20		06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	25	06:46 (38)		22:49	33	06:51 (38)	22:05		20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		06:19 (38)					05:22		06:31		07:49		09:28
	16:54		20:14		22:29	26	06:45 (38)					22:03		20:43		16:51		15:51
Potential sun hours	221	260	365	432	521			547			545		478	386	319	236	200
Total, worst case						247			944			606						
Sun reduction						0,50			0,50			0,50						
Oper. time red.						0,80			0,80			0,80						
Wind dir. red.						0,58			0,58			0,58						
Total reduction						0,23			0,23			0,23						
Total, real						58			220			141						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28 15:53	08:46 16:56	07:35 18:05	07:07 20:17	05:44 21:26 1	07:08 (38) | 04:40 07:09 (38) | 22:30 32	06:45 (38) | 04:32 07:17 (38) | 22:48 23	06:56 (38) | 05:24 07:19 (38) | 22:01 33	06:57 (38) | 06:33 07:30 (38) | 20:40	07:39 19:13	07:51 16:49	09:00 15:52
2	09:27 15:54	08:43 16:59	07:33 18:07	07:04 20:19	05:42 21:28 6	07:06 (38) | 04:39 07:12 (38) | 22:32 31	06:46 (38) | 04:33 07:17 (38) | 22:48 24	06:56 (38) | 05:27 07:20 (38) | 21:58 31	06:59 (38) | 06:35 07:30 (38) | 20:37	07:42 19:10	07:54 16:47	09:01 15:50
3	09:27 15:56	08:41 17:01	07:30 18:10	07:01 20:21	05:39 21:31 9	07:04 (38) | 04:38 07:13 (38) | 22:33 31	06:46 (38) | 04:34 07:17 (38) | 22:47 25	06:55 (38) | 05:29 07:20 (38) | 21:56 28	07:01 (38) | 06:38 07:29 (38) | 20:34	07:44 19:07	07:56 16:44	09:03 15:49
4	09:26 15:57	08:39 17:04	07:27 18:12	06:58 20:24	05:37 21:33 13	07:02 (38) | 04:36 07:15 (38) | 22:35 29	06:47 (38) | 04:35 07:16 (38) | 22:46 25	06:55 (38) | 05:31 07:20 (38) | 21:54 26	07:03 (38) | 06:40 07:29 (38) | 20:31	07:46 19:05	07:59 16:42	09:05 15:48
5	09:26 15:59	08:37 17:06	07:24 18:14	06:55 20:26	05:34 21:35 16	07:00 (38) | 04:35 07:16 (38) | 22:36 29	06:48 (38) | 04:37 07:17 (38) | 22:46 27	06:54 (38) | 05:33 07:21 (38) | 21:51 23	07:05 (38) | 06:42 07:28 (38) | 20:28	07:48 19:02	08:01 16:39	09:07 15:47
6	09:25 16:00	08:34 17:09	07:21 18:17	06:53 20:28	05:32 21:37 19	06:58 (38) | 04:34 07:17 (38) | 22:38 27	06:49 (38) | 04:38 07:16 (38) | 22:45 28	06:55 (38) | 05:35 07:23 (38) | 21:49 21	07:06 (38) | 06:44 07:27 (38) | 20:25	07:51 18:59	08:03 16:37	09:09 15:47
7	09:24 16:02	08:32 17:11	07:19 18:19	06:50 20:31	05:29 21:40 22	06:55 (38) | 04:33 07:17 (38) | 22:39 27	06:49 (38) | 04:39 07:16 (38) | 22:44 28	06:55 (38) | 05:38 07:23 (38) | 21:47 18	07:08 (38) | 06:47 07:26 (38) | 20:23	07:53 18:56	08:06 16:35	09:10 15:46
8	09:24 16:04	08:30 17:14	07:16 18:21	06:47 20:33	05:27 21:42 24	06:54 (38) | 04:32 07:18 (38) | 22:40 26	06:49 (38) | 04:40 07:15 (38) | 22:43 30	06:54 (38) | 05:40 07:24 (38) | 21:44 15	07:10 (38) | 06:49 07:25 (38) | 20:20	07:55 18:53	08:08 16:32	09:12 15:45
9	09:23 16:06	08:27 17:16	07:13 18:24	06:44 20:35	05:24 21:44 27	06:52 (38) | 04:31 07:19 (38) | 22:42 26	06:50 (38) | 04:42 07:16 (38) | 22:42 30	06:54 (38) | 05:42 07:24 (38) | 21:42 12	07:12 (38) | 06:51 07:24 (38) | 20:17	07:57 18:50	08:11 16:30	09:13 15:44
10	09:22 16:07	08:25 17:18	07:10 18:26	06:41 20:37	05:22 21:46 29	06:50 (38) | 04:31 07:19 (38) | 22:43 24	06:51 (38) | 04:43 07:15 (38) | 22:40 31	06:53 (38) | 05:44 07:24 (38) | 21:39 9	07:13 (38) | 06:53 07:22 (38) | 20:14	08:00 18:48	08:13 16:28	09:15 15:44
11	09:21 16:09	08:23 17:21	07:07 18:28	06:38 20:40	05:20 21:49 32	06:48 (38) | 04:30 07:20 (38) | 22:44 23	06:52 (38) | 04:45 07:15 (38) | 22:39 32	06:54 (38) | 05:46 07:26 (38) | 21:37 5	07:15 (38) | 06:55 07:20 (38) | 20:11	08:02 18:45	08:15 16:26	09:16 15:43
12	09:20 16:11	08:20 17:23	07:04 18:31	06:36 20:42	05:17 21:51 34	06:46 (38) | 04:29 07:20 (38) | 22:45 22	06:52 (38) | 04:46 07:14 (38) | 22:38 33	06:53 (38) | 05:49 07:26 (38) | 21:34	06:58 20:08	08:04 18:42	08:18 16:24	09:17 15:43
13	09:18 16:13	08:18 17:26	07:02 18:33	06:33 20:44	05:15 21:53 35	06:45 (38) | 04:29 07:20 (38) | 22:46 21	06:53 (38) | 04:48 07:14 (38) | 22:36 33	06:53 (38) | 05:51 07:26 (38) | 21:32	07:00 20:05	08:07 18:39	08:20 16:22	09:19 15:43
14	09:17 16:15	08:15 17:28	06:59 18:35	06:30 20:47	05:13 21:55 37	06:43 (38) | 04:28 07:20 (38) | 22:46 22	06:53 (38) | 04:49 07:15 (38) | 22:35 34	06:53 (38) | 05:53 07:27 (38) | 21:29	07:02 20:02	08:09 18:36	08:22 16:19	09:20 15:43
15	09:16 16:17	08:13 17:31	06:56 18:38	06:27 20:49	05:11 21:57 39	06:41 (38) | 04:28 07:20 (38) | 22:47 21	06:53 (38) | 04:51 07:14 (38) | 22:34 35	06:52 (38) | 05:55 07:27 (38) | 21:26	07:04 19:59	08:11 18:34	08:25 16:17	09:21 15:42
16	09:14 16:19	08:10 17:33	06:53 18:40	06:24 20:51	05:09 22:00 39	06:41 (38) | 04:28 07:20 (38) | 22:48 20	06:54 (38) | 04:53 07:14 (38) | 22:32 36	06:52 (38) | 05:58 07:28 (38) | 21:24	07:06 19:57	08:14 18:31	08:27 16:15	09:22 15:42
17	09:13 16:21	08:07 17:36	06:50 18:42	06:22 20:54	05:06 22:02 40	06:40 (38) | 04:27 07:20 (38) | 22:48 20	06:54 (38) | 04:54 07:14 (38) | 22:30 36	06:52 (38) | 06:00 07:28 (38) | 21:21	07:09 19:54	08:16 18:28	08:29 16:13	09:23 15:42
18	09:12 16:24	08:05 17:38	06:47 18:45	06:19 20:56	05:04 22:04 40	06:41 (38) | 04:27 07:21 (38) | 22:49 19	06:55 (38) | 04:56 07:14 (38) | 22:29 37	06:52 (38) | 06:02 07:29 (38) | 21:18	07:11 19:51	08:18 18:25	08:32 16:12	09:24 15:42
19	09:10 16:26	08:02 17:41	06:44 18:47	06:16 20:58	05:02 22:06 40	06:41 (38) | 04:27 07:21 (38) | 22:49 19	06:55 (38) | 04:58 07:14 (38) | 22:27 38	06:52 (38) | 06:04 07:30 (38) | 21:16	07:13 19:48	08:21 18:23	08:34 16:10	09:25 15:43
20	09:08 16:28	08:00 17:43	06:42 18:49	06:13 21:00	05:00 22:08 39	06:41 (38) | 04:27 07:20 (38) | 22:50 19	06:55 (38) | 05:00 07:14 (38) | 22:25 38	06:51 (38) | 06:07 07:29 (38) | 21:13	07:15 19:45	08:23 18:20	08:36 16:08	09:25 15:43
21	09:07 16:30	07:57 17:46	06:39 18:52	06:11 21:03	04:58 22:10 39	06:41 (38) | 04:27 07:20 (38) | 22:50 19	06:55 (38) | 05:02 07:14 (38) | 22:23 39	06:51 (38) | 06:09 07:30 (38) | 21:10	07:17 19:42	08:25 18:17	08:39 16:06	09:26 15:43
22	09:05 16:32	07:54 17:48	06:36 18:54	06:08 21:05	04:56 22:12 39	06:41 (38) | 04:27 07:20 (38) | 22:50 19	06:56 (38) | 05:04 07:15 (38) | 22:22 39	06:52 (38) | 06:11 07:31 (38) | 21:08	07:19 19:39	08:28 18:15	08:41 16:04	09:27 15:44
23	09:03 16:35	07:52 17:50	06:33 18:56	06:05 21:07	04:55 22:14 39	06:41 (38) | 04:28 07:20 (38) | 22:50 19	06:56 (38) | 05:06 07:15 (38) | 22:20 39	06:51 (38) | 06:13 07:30 (38) | 21:05	07:22 19:36	08:30 18:12	08:43 16:03	09:27 15:44
24	09:02 16:37	07:49 17:53	06:30 18:58	06:02 21:10	04:53 22:16 38	06:42 (38) | 04:28 07:20 (38) | 22:50 19	06:56 (38) | 05:08 07:15 (38) | 22:18 40	06:51 (38) | 06:15 07:31 (38) | 21:02	07:24 19:33	08:32 18:09	08:45 16:01	09:28 15:45
25	09:00 16:39	07:46 17:55	06:27 19:01	06:00 21:12	04:51 22:18 37	06:42 (38) | 04:28 07:19 (38) | 22:50 19	06:57 (38) | 05:10 07:16 (38) | 22:16 40	06:51 (38) | 06:18 07:31 (38) | 20:59	07:26 19:30	08:35 17:07	08:47 16:00	09:28 15:46
26	08:58 16:42	07:44 17:58	06:24 19:03	05:57 21:14	04:49 22:20 37	06:43 (38) | 04:29 07:20 (38) | 22:50 20	06:56 (38) | 05:12 07:16 (38) | 22:14 40	06:51 (38) | 06:20 07:31 (38) | 20:57	07:28 19:28	08:37 17:04	08:49 15:58	09:28 15:46
27	08:56 16:44	07:41 18:00	06:21 19:05	05:54 21:17	04:48 22:22 36	06:43 (38) | 04:29 07:19 (38) | 22:50 21	06:56 (38) | 05:14 07:17 (38) | 22:12 39	06:52 (38) | 06:22 07:31 (38) | 20:54	07:31 19:25	08:39 17:02	08:52 15:57	09:28 15:47
28	08:54 16:47	07:38 18:02	06:18 19:08	05:52 21:19	04:46 22:24 36	06:43 (38) | 04:30 07:19 (38) | 22:50 21	06:56 (38) | 05:16 07:17 (38) | 22:10 39	06:52 (38) | 06:24 07:31 (38) | 20:51	07:33 19:22	08:42 16:59	08:54 15:55	09:28 15:48
29	08:52 16:49		07:16 20:10	05:49 21:21	04:44 22:25 35	06:44 (38) | 04:31 07:19 (38) | 22:49 21	06:56 (38) | 05:18 07:17 (38) | 22:07 38	06:52 (38) | 06:27 07:30 (38) | 20:48	07:35 19:19	08:44 16:56	08:56 15:54	09:28 15:49
30	08:50 16:51		07:13 20:12	05:47 21:24	04:43 22:27 34	06:45 (38) | 04:32 07:19 (38) | 22:49 22	06:56 (38) | 05:20 07:18 (38) | 22:05 36	06:54 (38) | 06:29 07:30 (38) | 20:45	07:37 19:16	08:47 16:54	08:58 15:53	09:28 15:50
31	08:48 16:54		07:10 20:14		04:41 22:29 34	06:44 (38) | 07:18 (38) |	05:22 22:03 35	06:55 (38) | 06:31 07:30 (38) | 20:43		07:49 16:51		09:28 15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case					945	688	1047	221				
Sun reduction					0,50	0,50	0,50	0,50				
Oper. time red.					0,80	0,80	0,80	0,80				
Wind dir. red.					0,59	0,59	0,59	0,59				
Total reduction					0,24	0,24	0,24	0,24				
Total, real					224	163	248	52				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June
1	09:28	08:46		07:35		08:22 (22)	07:07	05:44	04:40
	15:53	16:56		18:05	23	08:45 (22)	20:17	21:26	22:31
2	09:28	08:44		07:33		08:21 (22)	07:04	05:41	04:39
	15:54	16:59		18:07	24	08:45 (22)	20:19	21:28	22:32
3	09:27	08:41		07:30		08:21 (22)	07:01	05:39	04:37
	15:56	17:01		18:10	24	08:45 (22)	20:21	21:31	22:34
4	09:27	08:39		07:27		08:20 (22)	06:58	05:36	04:36
	15:57	17:04		18:12	25	08:45 (22)	20:24	21:33	22:35
5	09:26	08:37		07:24		08:20 (22)	06:55	05:34	04:35
	15:59	17:06		18:14	24	08:44 (22)	20:26	21:35	22:37
6	09:25	08:35		07:22		08:20 (22)	06:53	05:31	04:34
	16:00	17:09		18:17	24	08:44 (22)	20:28	21:38	22:38
7	09:25	08:32		07:19		08:20 (22)	06:50	05:29	04:33
	16:02	17:11		18:19	23	08:43 (22)	20:31	21:40	22:39
8	09:24	08:30		07:16		08:21 (22)	06:47	05:27	04:32
	16:04	17:13		18:21	20	08:41 (22)	20:33	21:42	22:41
9	09:23	08:28	09:21 (2)	07:13		08:22 (22)	06:44	05:24	04:31
	16:05	17:16	2 09:23 (2)	18:24	19	08:41 (22)	20:35	21:44	22:42
10	09:22	08:25	09:18 (2)	07:10		08:24 (22)	06:41	05:22	04:30
	16:07	17:18	10 09:28 (2)	18:26	15	08:39 (22)	20:38	21:47	22:43
11	09:21	08:23	09:16 (2)	07:07		08:26 (22)	06:38	05:20	04:30
	16:09	17:21	13 09:29 (2)	18:28	10	08:36 (22)	20:40	21:49	22:44
12	09:20	08:20	09:14 (2)	07:05			06:36	05:17	04:29
	16:11	17:23	16 09:30 (2)	18:31			20:42	21:51	22:45
13	09:19	08:18	09:13 (2)	07:02			06:33	05:15	04:29
	16:13	17:26	17 09:30 (2)	18:33			20:44	21:53	22:46
14	09:17	08:15	09:13 (2)	06:59		07:37 (24)	06:30	05:13	04:28
	16:15	17:28	19 09:32 (2)	18:35	4	07:41 (24)	20:47	21:55	22:47
15	09:16	08:13	09:13 (2)	06:56		07:33 (24)	06:27	05:11	04:28
	16:17	17:31	19 09:32 (2)	18:38	11	07:44 (24)	20:49	21:58	22:47
16	09:15	08:10	09:12 (2)	06:53		07:31 (24)	06:24	05:08	04:27
	16:19	17:33	19 09:31 (2)	18:40	15	07:46 (24)	20:51	22:00	22:48
17	09:13	08:08	09:13 (2)	06:50		07:30 (24)	06:22	05:06	04:27
	16:21	17:36	19 09:32 (2)	18:42	16	07:46 (24)	20:54	22:02	22:49
18	09:12	08:05	09:13 (2)	06:47		07:29 (24)	06:19	05:04	04:27
	16:23	17:38	18 09:31 (2)	18:45	18	07:47 (24)	20:56	22:04	22:49
19	09:10	08:02	09:14 (2)	06:44		07:28 (24)	06:16	05:02	04:27
	16:26	17:41	16 09:30 (2)	18:47	19	07:47 (24)	20:58	22:06	22:50
20	09:09	08:00	09:14 (2)	06:42		07:27 (24)	06:13	05:00	04:27
	16:28	17:43	15 09:29 (2)	18:49	19	07:46 (24)	21:01	22:08	22:50
21	09:07	07:57	09:15 (2)	06:39		07:28 (24)	06:11	04:58	04:27
	16:30	17:46	12 09:27 (2)	18:52	19	07:47 (24)	21:03	22:10	22:50
22	09:05	07:54	09:19 (2)	06:36		07:28 (24)	06:08	04:56	04:27
	16:32	17:48	6 09:25 (2)	18:54	18	07:46 (24)	21:05	22:12	22:50
23	09:04	07:52		06:33		07:28 (24)	06:05	04:54	04:27
	16:35	17:50		18:56	17	07:45 (24)	21:08	22:14	22:51
24	09:02	07:49	08:32 (22)	06:30		07:29 (24)	06:02	04:53	04:28
	16:37	17:53	3 08:35 (22)	18:59	14	07:43 (24)	21:10	22:16	22:51
25	09:00	07:46	08:28 (22)	06:27		07:31 (24)	06:00	04:51	04:28
	16:39	17:55	12 08:40 (22)	19:01	10	07:41 (24)	21:12	22:18	22:51
26	08:58	07:44	08:25 (22)	06:24			05:57	04:49	04:29
	16:42	17:58	16 08:41 (22)	19:03			21:14	22:20	22:50
27	08:56	07:41	08:23 (22)	06:21			05:54	04:47	04:29
	16:44	18:00	19 08:42 (22)	19:05			21:17	22:22	22:50
28	08:54	07:38	08:23 (22)	06:18			05:52	04:46	04:30
	16:46	18:02	21 08:44 (22)	19:08			21:19	22:24	22:50
29	08:52			07:16			05:49	04:44	04:31
	16:49			20:10			21:21	22:26	22:50
30	08:50			07:13			05:47	04:43	04:31
	16:51			20:12			21:24	22:27	22:49
31	08:48			07:10				04:41	
	16:54			20:15				22:29	
Potential sun hours	221	260		365			432	521	547
Total, worst case			272		411				
Sun reduction			0,50		0,50				
Oper. time red.			0,80		0,80				
Wind dir. red.			0,73		0,71				
Total reduction			0,29		0,28				
Total, real			80		117				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December
1	04:32	05:24	06:33		07:40		07:52	08:47 (2)	09:00
	22:49	22:01	20:40		19:13		16:49	9 08:56 (2)	15:51
2	04:33	05:26	06:35		07:42	09:06 (22)	07:54		09:02
	22:48	21:59	20:37		19:10	6 09:12 (22)	16:46		15:50
3	04:34	05:29	06:38		07:44	09:02 (22)	07:56		09:04
	22:47	21:56	20:34		19:07	13 09:15 (22)	16:44		15:49
4	04:35	05:31	06:40		07:46	09:00 (22)	07:59		09:05
	22:47	21:54	20:31		19:05	17 09:17 (22)	16:42		15:48
5	04:36	05:33	06:42		07:48	08:58 (22)	08:01		09:07
	22:46	21:52	20:28		19:02	20 09:18 (22)	16:39		15:47
6	04:38	05:35	06:44		07:51	08:57 (22)	08:04		09:09
	22:45	21:49	20:26		18:59	22 09:19 (22)	16:37		15:46
7	04:39	05:37	06:47		07:53	08:57 (22)	08:06		09:10
	22:44	21:47	20:23		18:56	23 09:20 (22)	16:35		15:46
8	04:40	05:40	06:49		07:55	08:55 (22)	08:08		09:12
	22:43	21:44	20:20		18:53	24 09:19 (22)	16:32		15:45
9	04:41	05:42	06:51		07:58	08:55 (22)	08:11		09:14
	22:42	21:42	20:17		18:50	24 09:19 (22)	16:30		15:44
10	04:43	05:44	06:53		08:00	08:55 (22)	08:13		09:15
	22:41	21:39	20:14		18:48	24 09:19 (22)	16:28		15:44
11	04:44	05:46	06:55		08:02	08:54 (22)	08:16		09:16
	22:39	21:37	20:11		18:45	25 09:19 (22)	16:26		15:43
12	04:46	05:49	06:58		08:04	08:55 (22)	08:18		09:18
	22:38	21:34	20:08		18:42	23 09:18 (22)	16:24		15:43
13	04:48	05:51	07:00		08:07	08:55 (22)	08:20		09:19
	22:37	21:32	20:05		18:39	22 09:17 (22)	16:21		15:43
14	04:49	05:53	07:02		08:09	08:55 (22)	08:23		09:20
	22:35	21:29	20:02		18:36	21 09:16 (22)	16:19		15:42
15	04:51	05:55	07:04		08:11	08:57 (22)	08:25		09:21
	22:34	21:26	20:00		18:34	18 09:15 (22)	16:17		15:42
16	04:53	05:58	07:06		08:14	08:58 (22)	08:27		09:22
	22:32	21:24	19:57		18:31	15 09:13 (22)	16:15		15:42
17	04:54	06:00	07:09		08:16	09:01 (22)	08:30		09:23
	22:31	21:21	19:54		18:28	10 09:11 (22)	16:13		15:42
18	04:56	06:02	07:11	08:19 (24)	08:18		08:32		09:24
	22:29	21:19	19:51	9 08:28 (24)	18:25		16:11		15:42
19	04:58	06:04	07:13	08:16 (24)	08:21		08:34		09:25
	22:27	21:16	19:48	13 08:29 (24)	18:23		16:10		15:43
20	05:00	06:06	07:15	08:14 (24)	08:23	09:48 (2)	08:37		09:26
	22:25	21:13	19:45	16 08:30 (24)	18:20	9 09:57 (2)	16:08		15:43
21	05:02	06:09	07:17	08:14 (24)	08:25	09:46 (2)	08:39		09:26
	22:24	21:10	19:42	17 08:31 (24)	18:17	13 09:59 (2)	16:06		15:43
22	05:04	06:11	07:20	08:13 (24)	08:28	09:44 (2)	08:41		09:27
	22:22	21:08	19:39	18 08:31 (24)	18:15	16 10:00 (2)	16:04		15:44
23	05:06	06:13	07:22	08:12 (24)	08:30	09:44 (2)	08:43		09:27
	22:20	21:05	19:36	19 08:31 (24)	18:12	17 10:01 (2)	16:03		15:44
24	05:08	06:15	07:24	08:12 (24)	08:32	09:42 (2)	08:45		09:28
	22:18	21:02	19:33	19 08:31 (24)	18:09	19 10:01 (2)	16:01		15:45
25	05:10	06:18	07:26	08:11 (24)	07:35	08:42 (2)	08:48		09:28
	22:16	20:59	19:31	19 08:30 (24)	17:07	19 09:01 (2)	15:59		15:45
26	05:12	06:20	07:28	08:12 (24)	07:37	08:43 (2)	08:50		09:28
	22:14	20:57	19:28	17 08:29 (24)	17:04	19 09:02 (2)	15:58		15:46
27	05:14	06:22	07:31	08:13 (24)	07:40	08:42 (2)	08:52		09:28
	22:12	20:54	19:25	15 08:28 (24)	17:02	19 09:01 (2)	15:57		15:47
28	05:16	06:24	07:33	08:14 (24)	07:42	08:43 (2)	08:54		09:29
	22:10	20:51	19:22	12 08:26 (24)	16:59	18 09:01 (2)	15:55		15:48
29	05:18	06:27	07:35	08:15 (24)	07:44	08:44 (2)	08:56		09:29
	22:08	20:48	19:19	8 08:23 (24)	16:56	17 09:01 (2)	15:54		15:49
30	05:20	06:29	07:37		07:47	08:44 (2)	08:58		09:28
	22:05	20:45	19:16		16:54	15 08:59 (2)	15:53		15:50
31	05:22	06:31			07:49	08:45 (2)			09:28
	22:03	20:43			16:51	13 08:58 (2)			15:51
Potential sun hours	545	478	386		319		236		200
Total, worst case				182		501		9	
Sun reduction				0,50		0,50		0,50	
Oper. time red.				0,80		0,80		0,80	
Wind dir. red.				0,70		0,73		0,74	
Total reduction				0,28		0,29		0,29	
Total, real				51		146		3	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:06	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	08:24 (22)	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05 23	08:47 (22)	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	08:23 (22)	07:04	05:41	04:39	04:33	05:26	06:35	07:42	07:54	09:02
	15:54	16:59	18:07 24	08:47 (22)	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	15:50
3	09:27	08:41	07:30	08:23 (22)	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10 24	08:47 (22)	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	15:49
4	09:27	08:39	07:27	08:23 (22)	06:58	05:36	04:36	04:35	05:31	06:40	07:46 09:05 (22)	07:59	09:05
	15:57	17:04	18:12 23	08:46 (22)	20:24	21:33	22:35	22:47	21:54	20:31	19:05 11 09:16 (22)	16:42	15:48
5	09:26	08:37	07:24	08:23 (22)	06:55	05:34	04:35	04:36	05:33	06:42	07:48 09:02 (22)	08:01	09:07
	15:59	17:06	18:14 22	08:45 (22)	20:26	21:35	22:37	22:46	21:52	20:28	19:02 16 09:18 (22)	16:39	15:47
6	09:25	08:35	07:22	08:23 (22)	06:53	05:31	04:34	04:38	05:35	06:44	07:51 09:00 (22)	08:04	09:09
	16:00	17:09	18:17 22	08:45 (22)	20:28	21:38	22:38	22:45	21:49	20:26	18:59 19 09:19 (22)	16:37	15:46
7	09:25	08:32	07:19	08:24 (22)	06:50	05:29	04:33	04:39	05:37	06:47	07:53 09:00 (22)	08:06	09:10
	16:02	17:11	18:19 19	08:43 (22)	20:31	21:40	22:39	22:44	21:47	20:23	18:56 20 09:20 (22)	16:35	15:46
8	09:24	08:30	07:16	08:24 (22)	06:47	05:27	04:32	04:40	05:40	06:49	07:55 08:58 (22)	08:08	09:12
	16:04	17:13	18:21 18	08:42 (22)	20:33	21:42	22:41	22:43	21:44	20:20	18:53 23 09:21 (22)	16:32	15:45
9	09:23	08:28	07:13	08:27 (22)	06:44	05:24	04:31	04:41	05:42	06:51	07:58 08:57 (22)	08:11	09:14
	16:05	17:16	18:24 13	08:40 (22)	20:35	21:44	22:42	22:42	21:42	20:17	18:50 23 09:20 (22)	16:30	15:44
10	09:22	08:25	07:10	08:30 (22)	06:41	05:22	04:30	04:43	05:44	06:53	08:00 08:57 (22)	08:13	09:15
	16:07	17:18	18:26 7	08:37 (22)	20:38	21:47	22:43	22:41	21:39	20:14	18:48 24 09:21 (22)	16:28	15:44
11	09:21	08:23	07:07		06:38	05:20	04:30	04:44	05:46	06:55	08:02 08:57 (22)	08:16	09:16
	16:09	17:21	18:28		20:40	21:49	22:44	22:39	21:37	20:11	18:45 23 09:20 (22)	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58	08:04 08:57 (22)	08:18	09:18
	16:11	17:23	18:31		20:42	21:51	22:45	22:38	21:34	20:08	18:42 24 09:21 (22)	16:24	15:43
13	09:19	08:18	07:02	07:40 (24)	06:33	05:15	04:29	04:48	05:51	07:00	08:07 08:57 (22)	08:20	09:19
	16:13	17:26	18:33 5	07:45 (24)	20:44	21:53	22:46	22:37	21:32	20:05	18:39 23 09:20 (22)	16:21	15:43
14	09:17	08:15	06:59	07:36 (24)	06:30	05:13	04:28	04:49	05:53	07:02	08:09 08:57 (22)	08:23	09:20
	16:15	17:28	18:35 11	07:47 (24)	20:47	21:55	22:47	22:35	21:29	20:02	18:36 21 09:18 (22)	16:19	15:42
15	09:16	08:13	06:56	07:34 (24)	06:27	05:11	04:28	04:51	05:55	07:04	08:11 08:58 (22)	08:25	09:21
	16:17	17:31	18:38 15	07:49 (24)	20:49	21:58	22:47	22:34	21:26	20:00	18:34 20 09:18 (22)	16:17	15:42
16	09:15	08:10	06:53	07:33 (24)	06:24	05:08	04:27	04:53	05:58	07:06	08:14 08:58 (22)	08:27	09:22
	16:19	17:33	18:40 16	07:49 (24)	20:51	22:00	22:48	22:32	21:24	19:57	18:31 18 09:16 (22)	16:15	15:42
17	09:13	08:08	06:50	07:32 (24)	06:22	05:06	04:27	04:54	06:00	07:09	08:16 09:00 (22)	08:30	09:23
	16:21	17:36	18:42 18	07:50 (24)	20:54	22:02	22:49	22:31	21:21	19:54	18:28 15 09:15 (22)	16:13	15:42
18	09:12	08:05	06:47	07:31 (24)	06:19	05:04	04:27	04:56	06:02	07:11	08:18 09:02 (22)	08:32	09:24
	16:23	17:38	18:45 19	07:50 (24)	20:56	22:04	22:49	22:29	21:19	19:51	18:25 10 09:12 (22)	16:11	15:42
19	09:10	08:02	06:44	07:31 (24)	06:16	05:02	04:27	04:58	06:04	07:13 08:22 (24)	08:21	08:34	09:25
	16:26	17:41	18:47 18	07:49 (24)	20:58	22:06	22:50	22:27	21:16	19:48 7 08:29 (24)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:30 (24)	06:13	05:00	04:27	05:00	06:06	07:15 08:19 (24)	08:23	08:37	09:26
	16:28	17:43	18:49 19	07:49 (24)	21:01	22:08	22:50	22:25	21:13	19:45 12 08:31 (24)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:32 (24)	06:11	04:58	04:27	05:02	06:09	07:17 08:18 (24)	08:25	08:39	09:26
	16:30	17:46	18:52 17	07:49 (24)	21:03	22:10	22:50	22:24	21:10	19:42 15 08:33 (24)	18:17	16:06	15:43
22	09:05	07:54	06:36	07:32 (24)	06:08	04:56	04:27	05:04	06:11	07:20 08:16 (24)	08:28	08:41	09:27
	16:32	17:48	18:54 15	07:47 (24)	21:05	22:12	22:50	22:22	21:08	19:39 17 08:33 (24)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:33 (24)	06:05	04:54	04:27	05:06	06:13	07:22 08:15 (24)	08:30	08:43	09:27
	16:35	17:50	18:56 13	07:46 (24)	21:08	22:14	22:51	22:20	21:05	19:36 18 08:33 (24)	18:12	16:03	15:44
24	09:02	07:49 08:30 (22)	06:30	07:35 (24)	06:02	04:53	04:28	05:08	06:15	07:24 08:14 (24)	08:32	08:45	09:28
	16:37	17:53 12 08:42 (22)	18:59 8	07:43 (24)	21:10	22:16	22:51	22:18	21:02	19:33 19 08:33 (24)	18:09	16:01	15:45
25	09:00	07:46 08:28 (22)	06:27		06:00	04:51	04:28	05:10	06:18	07:26 08:14 (24)	07:35	08:48	09:28
	16:39	17:55 15 08:43 (22)	19:01		21:12	22:18	22:51	22:16	20:59	19:31 18 08:32 (24)	17:07	15:59	15:45
26	08:58	07:44 08:26 (22)	06:24		05:57	04:49	04:29	05:12	06:20	07:28 08:14 (24)	07:37	08:50	09:28
	16:42	17:58 19 08:45 (22)	19:03		21:14	22:20	22:50	22:14	20:57	19:28 19 08:33 (24)	17:04	15:58	15:46
27	08:56	07:41 08:25 (22)	06:21		05:54	04:47	04:29	05:14	06:22	07:31 08:14 (24)	07:40	08:52	09:28
	16:44	18:00 20 08:45 (22)	19:05		21:17	22:22	22:50	22:12	20:54	19:25 18 08:32 (24)	17:02	15:57	15:47
28	08:54	07:38 08:25 (22)	06:18		05:52	04:46	04:30	05:16	06:24	07:33 08:15 (24)	07:42	08:54	09:29
	16:46	18:02 22 08:47 (22)	19:08		21:19	22:24	22:50	22:10	20:51	19:22 15 08:30 (24)	16:59	15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35 08:15 (24)	07:44	08:56	09:29
	16:49		20:10		21:21	22:26	22:50	22:08	20:48	19:19 13 08:28 (24)	16:56	15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37 08:18 (24)	07:47	08:58	09:28
	16:51		20:12		21:24	22:27	22:49	22:05	20:45	19:16 8 08:26 (24)	16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31		07:49		09:28
	16:54		20:15			22:29		22:03	20:43		16:51		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200	
Total, worst case		88	369						179	290			
Sun reduction		0,50	0,50						0,50	0,50			
Oper. time red.		0,80	0,80						0,80	0,80			
Wind dir. red.		0,73	0,71						0,70	0,73			
Total reduction		0,29	0,29						0,28	0,29			
Total, real		26	105						50	84			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:52
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
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	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
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14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
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	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
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	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:

19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April	May	June	July	August	September	October		November	December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54	09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56	09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59	09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:49		08:01	09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39	15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:38	05:35	06:44	07:51		08:04	09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37	15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06	09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35	15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08	09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32	15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11	09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	15:44
10	09:22	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13	09:15
	16:07	17:18		18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28	15:44
11	09:21	08:23	09:07 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16	09:16
	16:09	17:21	7 09:14 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26	15:43
12	09:20	08:20	09:04 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18	09:18
	16:11	17:23	12 09:16 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24	15:43
13	09:19	08:18	09:03 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20	09:19
	16:13	17:26	16 09:19 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21	15:43
14	09:17	08:15	09:02 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23	09:20
	16:15	17:28	17 09:19 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19	15:42
15	09:16	08:13	09:01 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25	09:21
	16:17	17:31	19 09:20 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17	15:42
16	09:15	08:10	09:00 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27	09:22
	16:19	17:33	20 09:20 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15	15:42
17	09:13	08:08	09:01 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30	09:23
	16:21	17:36	20 09:21 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13	15:42
18	09:12	08:05	09:00 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:36 (22)	08:32	09:24
	16:23	17:38	21 09:21 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	10 09:46 (22)	16:11	15:42
19	09:10	08:02	09:00 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:34 (22)	08:34	09:25
	16:26	17:41	20 09:20 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	14 09:48 (22)	16:10	15:42
20	09:09	08:00	09:00 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:32 (22)	08:37	09:26
	16:28	17:43	19 09:19 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	17 09:49 (22)	16:08	15:43
21	09:07	07:57	09:01 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:32 (22)	08:39	09:26
	16:30	17:46	17 09:18 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:50 (22)	16:06	15:43
22	09:05	07:55	09:02 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:30 (22)	08:41	09:27
	16:32	17:48	16 09:18 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	20 09:50 (22)	16:04	15:44
23	09:04	07:52	09:04 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:30 (22)	08:43	09:27
	16:35	17:50	12 09:16 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:50 (22)	16:03	15:44
24	09:02	07:49	09:06 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:31 (22)	08:45	09:28
	16:37	17:53	7 09:13 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	20 09:51 (22)	16:01	15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:30 (22)	08:48	09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	20 08:50 (22)	15:59	15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:31 (22)	08:50	09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	19 08:50 (22)	15:58	15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:30 (22)	08:52	09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	19 08:49 (22)	15:57	15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:31 (22)	08:54	09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	17 08:48 (22)	15:55	15:48
29	08:52			07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:33 (22)	08:56	09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15 08:48 (22)	15:54	15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:34 (22)	08:58	09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	11 08:45 (22)	15:53	15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:37 (22)		09:28
	16:54			20:15		22:29		22:03	20:43		16:51	6 08:43 (22)		15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236	199
Total, worst case			223									226		
Sun reduction			0,50									0,50		
Oper. time red.			0,80									0,80		
Wind dir. red.			0,74									0,74		
Total reduction			0,29									0,29		
Total, real			66									67		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June	July	August	September	October		November		December
1	09:28	08:46		09:41 (22)		08:28 (24)	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:52		09:00 (22)	09:00
	15:53	16:56	3	09:44 (22)	19	08:47 (24)	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	24	09:24 (22)	15:51
2	09:28	08:44		09:37 (22)		08:27 (24)	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54		09:01 (22)	09:02
	15:54	16:59	10	09:47 (22)	20	08:47 (24)	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	23	09:24 (22)	15:50
3	09:27	08:41		09:35 (22)		08:27 (24)	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56		09:01 (22)	09:04
	15:56	17:01	15	09:50 (22)	20	08:47 (24)	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	23	09:24 (22)	15:49
4	09:27	08:39		09:34 (22)		08:27 (24)	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59		09:02 (22)	09:05
	15:57	17:04	17	09:51 (22)	19	08:46 (24)	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	22	09:24 (22)	15:48
5	09:26	08:37		09:33 (22)		08:28 (24)	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		09:02 (22)	09:07
	15:59	17:06	20	09:53 (22)	17	08:45 (24)	20:26	21:35	22:37	22:46	21:52	20:28	19:02	3	09:14 (24)	21	09:23 (22)	15:47
6	09:25	08:35		09:32 (22)		08:28 (24)	06:53	05:31	04:34	04:37	05:35	06:44	07:51		09:06 (24)		09:03 (22)	09:09
	16:00	17:08	21	09:53 (22)	16	08:44 (24)	20:28	21:38	22:38	22:45	21:49	20:26	18:59	11	09:17 (24)	19	09:22 (22)	15:46
7	09:25	08:32		09:31 (22)		08:29 (24)	06:50	05:29	04:33	04:39	05:37	06:47	07:53		09:05 (24)		09:05 (22)	09:10
	16:02	17:11	22	09:53 (22)	13	08:42 (24)	20:31	21:40	22:39	22:44	21:47	20:23	18:56	15	09:20 (24)	17	09:22 (22)	15:46
8	09:24	08:30		09:32 (22)		08:31 (24)	06:47	05:27	04:32	04:40	05:40	06:49	07:55		09:03 (24)		09:05 (22)	09:12
	16:04	17:13	22	09:54 (22)	8	08:39 (24)	20:33	21:42	22:41	22:43	21:44	20:20	18:53	17	09:20 (24)	15	09:20 (22)	15:45
9	09:23	08:28		09:31 (22)			06:44	05:24	04:31	04:41	05:42	06:51	07:58		09:02 (24)		09:08 (22)	09:14
	16:05	17:16	23	09:54 (22)			20:35	21:44	22:42	22:42	21:42	20:17	18:50	18	09:20 (24)	10	09:18 (22)	15:44
10	09:22	08:25		09:32 (22)			06:41	05:22	04:30	04:43	05:44	06:53	08:00		09:02 (24)		09:13 (22)	09:15
	16:07	17:18	23	09:55 (22)			20:38	21:47	22:43	22:41	21:39	20:14	18:48	19	09:21 (24)	1	09:14 (22)	15:44
11	09:21	08:23		09:31 (22)			06:38	05:20	04:30	04:44	05:46	06:55	08:02		09:01 (24)			09:16
	16:09	17:21	24	09:55 (22)			20:40	21:49	22:44	22:39	21:37	20:11	18:45	20	09:21 (24)			15:43
12	09:20	08:20		09:31 (22)			06:36	05:17	04:29	04:46	05:49	06:58	08:04		09:01 (24)			09:18
	16:11	17:23	23	09:54 (22)			20:42	21:51	22:45	22:38	21:34	20:08	18:42	20	09:21 (24)			15:43
13	09:19	08:18		09:31 (22)			06:33	05:15	04:28	04:47	05:51	07:00	08:07		09:01 (24)			09:19
	16:13	17:26	23	09:54 (22)			20:44	21:53	22:46	22:37	21:32	20:05	18:39	19	09:20 (24)			15:43
14	09:17	08:15		09:33 (22)			06:30	05:13	04:28	04:49	05:53	07:02	08:09		09:01 (24)			09:20
	16:15	17:28	21	09:54 (22)			20:47	21:55	22:47	22:35	21:29	20:02	18:36	18	09:19 (24)			15:42
15	09:16	08:13		09:33 (22)			06:27	05:11	04:28	04:51	05:55	07:04	08:11		09:02 (24)			09:21
	16:17	17:31	20	09:53 (22)			20:49	21:58	22:47	22:34	21:26	20:00	18:34	16	09:18 (24)			15:42
16	09:15	08:10		09:34 (22)			06:24	05:08	04:27	04:53	05:57	07:06	08:14		09:03 (24)			09:22
	16:19	17:33	17	09:51 (22)			20:51	22:00	22:48	22:32	21:24	19:57	18:31	13	09:16 (24)			15:42
17	09:13	08:08		09:36 (22)			06:22	05:06	04:27	04:54	06:00	07:09	08:16		09:05 (24)			09:23
	16:21	17:36	14	09:50 (22)			20:54	22:02	22:49	22:31	21:21	19:54	18:28	10	09:15 (24)			15:42
18	09:12	08:05		09:39 (22)			06:19	05:04	04:27	04:56	06:02	07:11	08:18					09:24
	16:23	17:38	8	09:47 (22)			20:56	22:04	22:49	22:29	21:19	19:51	18:25					15:42
19	09:10	08:02			06:44		06:16	05:02	04:27	04:58	06:04	07:13	08:21					09:25
	16:26	17:41			18:47		20:58	22:06	22:50	22:27	21:16	19:48	18:23					15:42
20	09:09	08:00			06:42		06:13	05:00	04:27	05:00	06:06	07:15	08:23					09:26
	16:28	17:43			18:49		21:01	22:08	22:50	22:25	21:13	19:45	18:20					15:43
21	09:07	07:57			06:39		06:10	04:58	04:27	05:02	06:09	07:17	08:25					09:26
	16:30	17:45			18:52		21:03	22:10	22:50	22:24	21:10	19:42	18:17					15:43
22	09:05	07:54			06:36		06:08	04:56	04:27	05:04	06:11	07:20	08:28					09:27
	16:32	17:48			18:54		21:05	22:12	22:51	22:22	21:08	19:39	18:15					15:44
23	09:04	07:52			06:33		06:05	04:54	04:27	05:06	06:13	07:22	08:30					09:27
	16:35	17:50			18:56		21:08	22:14	22:51	22:20	21:05	19:36	18:12					15:44
24	09:02	07:49		08:36 (24)	06:30		06:02	04:53	04:28	05:08	06:15	07:24	08:32		10:07 (22)		08:45	09:28
	16:37	17:53	5	08:41 (24)	18:59		21:10	22:16	22:51	22:18	21:02	19:33	18:09	10	10:17 (22)		16:01	15:45
25	09:00	07:46		08:32 (24)	06:27		06:00	04:51	04:28	05:10	06:18	07:26	07:35		09:05 (22)		08:48	09:28
	16:39	17:55	12	08:44 (24)	19:01		21:12	22:18	22:51	22:16	20:59	19:30	17:07	15	09:20 (22)		15:59	15:45
26	08:58	07:44		08:30 (24)	06:24		05:57	04:49	04:29	05:12	06:20	07:28	07:37		09:04 (22)		08:50	09:28
	16:42	17:58	15	08:45 (24)	19:03		21:14	22:20	22:51	22:14	20:57	19:28	17:04	18	09:22 (22)		15:58	15:46
27	08:56	07:41		08:29 (24)	06:21		05:54	04:47	04:29	05:14	06:22	07:31	07:40		09:02 (22)		08:52	09:28
	16:44	18:00	17	08:46 (24)	19:05		21:17	22:22	22:50	22:12	20:54	19:25	17:02	20	09:22 (22)		15:56	15:47
28	08:54	07:38		08:29 (24)	06:18		05:52	04:46	04:30	05:16	06:24	07:33	07:42		09:02 (22)		08:54	09:29
	16:46	18:02	18	08:47 (24)	19:08		21:19	22:24	22:50	22:10	20:51	19:22	16:59	21	09:23 (22)		15:55	15:48
29	08:52				07:16		05:49	04:44	04:30	05:18	06:27	07:35	07:44		09:02 (22)		08:56	09:29
	16:49				20:10		21:21	22:26	22:50	22:08	20:48	19:19	16:56	22	09:24 (22)		15:54	15:49
30	08:50				07:13		05:47	04:43	04:31	05:20	06:29	07:37	07:47		09:01 (22)		08:58	09:28
	16:51				20:12		21:24	22:27	22:49	22:05	20:45	19:16	16:54	23	09:24 (22)		15:53	15:50
31	08:48				07:10			04:41		05:22	06:31		07:49		09:01 (22)			09:28
	16:54				20:15			22:29		22:03	20:43		16:51	23	09:24 (22)			15:51
Potential sun hours	221	260			365		432	521	547	546	478	386	319			236		199
Total, worst case			393		132									351		175		
Sun reduction			0,50		0,50									0,50		0,50		
Oper. time red.			0,80		0,80									0,80		0,80		
Wind dir. red.			0,73		0,73									0,73		0,73		
Total reduction			0,29		0,29									0,29		0,29		
Total, real			114		38									102		51		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:46	09:41 (22)	07:35	08:31 (24)	07:07	05:44	04:40
	15:53		16:56	14 09:55 (22)	18:05	20 08:51 (24)	20:17	21:26	22:31
2	09:28		08:44	09:40 (22)	07:33	08:31 (24)	07:04	05:41	04:39
	15:54		16:59	16 09:56 (22)	18:07	20 08:51 (24)	20:19	21:28	22:32
3	09:27		08:41	09:39 (22)	07:30	08:31 (24)	07:01	05:39	04:37
	15:56		17:01	19 09:58 (22)	18:10	19 08:50 (24)	20:21	21:31	22:34
4	09:27		08:39	09:38 (22)	07:27	08:31 (24)	06:58	05:36	04:36
	15:57		17:04	20 09:58 (22)	18:12	19 08:50 (24)	20:24	21:33	22:35
5	09:26		08:37	09:38 (22)	07:24	08:32 (24)	06:55	05:34	04:35
	15:59		17:06	22 10:00 (22)	18:14	16 08:48 (24)	20:26	21:35	22:37
6	09:25		08:35	09:37 (22)	07:22	08:33 (24)	06:53	05:31	04:34
	16:00		17:08	23 10:00 (22)	18:17	14 08:47 (24)	20:28	21:38	22:38
7	09:25		08:32	09:36 (22)	07:19	08:35 (24)	06:50	05:29	04:33
	16:02		17:11	24 10:00 (22)	18:19	9 08:44 (24)	20:31	21:40	22:39
8	09:24		08:30	09:37 (22)	07:16		06:47	05:27	04:32
	16:04		17:13	24 10:01 (22)	18:21		20:33	21:42	22:41
9	09:23		08:28	09:36 (22)	07:13		06:44	05:24	04:31
	16:05		17:16	24 10:00 (22)	18:24		20:35	21:44	22:42
10	09:22		08:25	09:37 (22)	07:10		06:41	05:22	04:30
	16:07		17:18	24 10:01 (22)	18:26		20:38	21:47	22:43
11	09:21		08:23	09:37 (22)	07:07		06:38	05:20	04:30
	16:09		17:21	23 10:00 (22)	18:28		20:40	21:49	22:44
12	09:20		08:20	09:37 (22)	07:05		06:36	05:17	04:29
	16:11		17:23	23 10:00 (22)	18:31		20:42	21:51	22:45
13	09:19		08:18	09:38 (22)	07:02		06:33	05:15	04:28
	16:13		17:26	21 09:59 (22)	18:33		20:44	21:53	22:46
14	09:17		08:15	09:39 (22)	06:59		06:30	05:13	04:28
	16:15		17:28	20 09:59 (22)	18:35		20:47	21:55	22:47
15	09:16		08:13	09:40 (22)	06:56		06:27	05:11	04:28
	16:17		17:31	17 09:57 (22)	18:38		20:49	21:58	22:47
16	09:15		08:10	09:42 (22)	06:53		06:24	05:08	04:27
	16:19		17:33	13 09:55 (22)	18:40		20:51	22:00	22:48
17	09:13		08:08	09:45 (22)	06:50		06:21	05:06	04:27
	16:21		17:36	8 09:53 (22)	18:42		20:54	22:02	22:49
18	09:12		08:05		06:47		06:19	05:04	04:27
	16:23		17:38		18:45		20:56	22:04	22:49
19	09:10		08:02		06:44		06:16	05:02	04:27
	16:26		17:41		18:47		20:58	22:06	22:50
20	09:09		08:00		06:42		06:13	05:00	04:27
	16:28		17:43		18:49		21:01	22:08	22:50
21	09:07		07:57		06:39		06:10	04:58	04:27
	16:30		17:45		18:52		21:03	22:10	22:50
22	09:05		07:54		06:36		06:08	04:56	04:27
	16:32		17:48		18:54		21:05	22:12	22:51
23	09:04		07:52	08:40 (24)	06:33		06:05	04:54	04:27
	16:35		17:50	5 08:45 (24)	18:56		21:08	22:14	22:51
24	09:02		07:49	08:36 (24)	06:30		06:02	04:53	04:28
	16:37		17:53	12 08:48 (24)	18:59		21:10	22:16	22:51
25	09:00		07:46	08:34 (24)	06:27		06:00	04:51	04:28
	16:39		17:55	15 08:49 (24)	19:01		21:12	22:18	22:51
26	08:58		07:44	08:33 (24)	06:24		05:57	04:49	04:29
	16:42		17:58	17 08:50 (24)	19:03		21:14	22:20	22:51
27	08:56		07:41	08:32 (24)	06:21		05:54	04:47	04:29
	16:44		18:00	18 08:50 (24)	19:05		21:17	22:22	22:50
28	08:54		07:38	08:32 (24)	06:18		05:52	04:46	04:30
	16:46		18:02	19 08:51 (24)	19:08		21:19	22:24	22:50
29	08:52				07:16		05:49	04:44	04:30
	16:49				20:10		21:21	22:26	22:50
30	08:50				07:13		05:47	04:43	04:31
	16:51				20:12		21:24	22:27	22:49
31	08:48	09:43 (22)			07:10			04:41	
	16:54	9 09:52 (22)			20:15			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case		9		421		117			
Sun reduction		0,50		0,50		0,50			
Oper. time red.		0,80		0,80		0,80			
Wind dir. red.		0,72		0,73		0,73			
Total reduction		0,29		0,29		0,29			
Total, real		3		122		34			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		09:06 (22)	09:00
	22:49	22:01	20:40	19:13			16:49	24	09:30 (22)	15:51
2	04:33	05:26	06:35	07:42			07:54		09:06 (22)	09:02
	22:48	21:59	20:37	19:10			16:46	24	09:30 (22)	15:50
3	04:34	05:29	06:38	07:44			07:56		09:06 (22)	09:04
	22:47	21:56	20:34	19:07			16:44	24	09:30 (22)	15:49
4	04:35	05:31	06:40	07:46			07:59		09:07 (22)	09:05
	22:47	21:54	20:31	19:05			16:42	23	09:30 (22)	15:48
5	04:36	05:33	06:42	07:48			08:01		09:07 (22)	09:07
	22:46	21:52	20:28	19:02			16:39	22	09:29 (22)	15:47
6	04:37	05:35	06:44	07:51		09:12 (24)	08:04		09:08 (22)	09:09
	22:45	21:49	20:26	18:59	7	09:19 (24)	16:37	21	09:29 (22)	15:46
7	04:39	05:37	06:47	07:53		09:10 (24)	08:06		09:09 (22)	09:10
	22:44	21:47	20:23	18:56	12	09:22 (24)	16:35	20	09:29 (22)	15:46
8	04:40	05:40	06:49	07:55		09:08 (24)	08:08		09:09 (22)	09:12
	22:43	21:44	20:20	18:53	15	09:23 (24)	16:32	18	09:27 (22)	15:45
9	04:41	05:42	06:51	07:58		09:06 (24)	08:11		09:10 (22)	09:14
	22:42	21:42	20:17	18:50	18	09:24 (24)	16:30	17	09:27 (22)	15:44
10	04:43	05:44	06:53	08:00		09:06 (24)	08:13		09:12 (22)	09:15
	22:41	21:39	20:14	18:48	19	09:25 (24)	16:28	13	09:25 (22)	15:44
11	04:44	05:46	06:55	08:02		09:05 (24)	08:16		09:14 (22)	09:16
	22:39	21:37	20:11	18:45	19	09:24 (24)	16:26	9	09:23 (22)	15:43
12	04:46	05:49	06:58	08:04		09:05 (24)	08:18			09:18
	22:38	21:34	20:08	18:42	20	09:25 (24)	16:24			15:43
13	04:47	05:51	07:00	08:07		09:04 (24)	08:20			09:19
	22:37	21:32	20:05	18:39	20	09:24 (24)	16:21			15:43
14	04:49	05:53	07:02	08:09		09:04 (24)	08:23			09:20
	22:35	21:29	20:02	18:36	19	09:23 (24)	16:19			15:42
15	04:51	05:55	07:04	08:11		09:05 (24)	08:25			09:21
	22:34	21:26	20:00	18:34	18	09:23 (24)	16:17			15:42
16	04:53	05:57	07:06	08:14		09:05 (24)	08:27			09:22
	22:32	21:24	19:57	18:31	16	09:21 (24)	16:15			15:42
17	04:54	06:00	07:09	08:16		09:07 (24)	08:30			09:23
	22:31	21:21	19:54	18:28	14	09:21 (24)	16:13			15:42
18	04:56	06:02	07:11	08:18		09:08 (24)	08:32			09:24
	22:29	21:19	19:51	18:25	10	09:18 (24)	16:11			15:42
19	04:58	06:04	07:13	08:21			08:34			09:25
	22:27	21:16	19:48	18:23			16:10			15:42
20	05:00	06:06	07:15	08:23			08:37			09:26
	22:25	21:13	19:45	18:20			16:08			15:43
21	05:02	06:09	07:17	08:25			08:39			09:26
	22:24	21:10	19:42	18:17			16:06			15:43
22	05:04	06:11	07:20	08:28			08:41			09:27
	22:22	21:08	19:39	18:15			16:04			15:44
23	05:06	06:13	07:22	08:30			08:43			09:27
	22:20	21:05	19:36	18:12			16:03			15:44
24	05:08	06:15	07:24	08:32			08:45			09:28
	22:18	21:02	19:33	18:09			16:01			15:45
25	05:10	06:18	07:26	07:35		09:13 (22)	08:48			09:28
	22:16	20:59	19:30	17:07	10	09:23 (22)	15:59			15:45
26	05:12	06:20	07:28	07:37		09:11 (22)	08:50			09:28
	22:14	20:57	19:28	17:04	15	09:26 (22)	15:58			15:46
27	05:14	06:22	07:31	07:40		09:09 (22)	08:52			09:28
	22:12	20:54	19:25	17:01	18	09:27 (22)	15:56			15:47
28	05:16	06:24	07:33	07:42		09:08 (22)	08:54			09:29
	22:10	20:51	19:22	16:59	20	09:28 (22)	15:55			15:48
29	05:18	06:27	07:35	07:44		09:08 (22)	08:56			09:29
	22:08	20:48	19:19	16:56	21	09:29 (22)	15:54			15:49
30	05:20	06:29	07:37	07:47		09:07 (22)	08:58			09:28
	22:05	20:45	19:16	16:54	22	09:29 (22)	15:53			15:50
31	05:22	06:31		07:49		09:07 (22)				09:28
	22:03	20:43		16:51	23	09:30 (22)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					336			215		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,73			0,72		
Total reduction					0,29			0,29		
Total, real					98			62		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April	May	June	July	August	September	October		November		December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	08:41 (22)	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	7 08:48 (22)	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54		09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46		15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56		09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44		15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59		09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42		15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39		15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:37	05:35	06:44	07:51		08:04		09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37		15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06		09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35		15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08		09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32		15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11		09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30		15:44
10	09:22	08:25	09:11 (22)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13		09:15
	16:07	17:18	8 09:19 (22)	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28		15:44
11	09:21	08:23	09:09 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16		09:16
	16:09	17:21	12 09:21 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26		15:43
12	09:20	08:20	09:07 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18		09:18
	16:11	17:23	15 09:22 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24		15:43
13	09:19	08:18	09:06 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20		09:19
	16:13	17:26	18 09:24 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21		15:43
14	09:17	08:15	09:05 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23		09:20
	16:15	17:28	20 09:25 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19		15:42
15	09:16	08:13	09:05 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25		09:21
	16:17	17:31	20 09:25 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17		15:42
16	09:15	08:10	09:04 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27		09:22
	16:19	17:33	21 09:25 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15		15:42
17	09:13	08:08	09:05 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30		09:23
	16:21	17:36	21 09:26 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13		15:42
18	09:12	08:05	09:05 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:42 (22)	08:32		09:24
	16:23	17:38	20 09:25 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	7 09:49 (22)	16:11		15:42
19	09:10	08:02	09:05 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:39 (22)	08:34		09:25
	16:26	17:41	20 09:25 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	13 09:52 (22)	16:10		15:42
20	09:09	08:00	09:05 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:37 (22)	08:37		09:26
	16:28	17:43	19 09:24 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16 09:53 (22)	16:08		15:43
21	09:07	07:57	09:05 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:36 (22)	08:39		09:26
	16:30	17:46	18 09:23 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:54 (22)	16:06		15:43
22	09:05	07:54	09:07 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:35 (22)	08:41		09:27
	16:32	17:48	15 09:22 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	19 09:54 (22)	16:04		15:44
23	09:04	07:52	09:09 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:35 (22)	08:43		09:27
	16:35	17:50	11 09:20 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:55 (22)	16:03		15:44
24	09:02	07:49	09:13 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:34 (22)	08:45		09:28
	16:37	17:53	3 09:16 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	21 09:55 (22)	16:01		15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:34 (22)	08:48		09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	21 08:55 (22)	15:59		15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:34 (22)	08:50		09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	21 08:55 (22)	15:58		15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:34 (22)	08:52		09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	20 08:54 (22)	15:57		15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:35 (22)	08:54		09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	19 08:54 (22)	15:55		15:48
29	08:52			07:16	05:49	04:44	04:30	05:18	06:27	07:35	07:44	08:36 (22)	08:56		09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	17 08:53 (22)	15:54		15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:36 (22)	08:58		09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	16 08:52 (22)	15:53		15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:38 (22)			09:28
	16:54			20:15		22:29		22:03	20:43		16:51	12 08:50 (22)			15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236		199
Total, worst case			241									240		7	
Sun reduction			0,50									0,50		0,50	
Oper. time red.			0,80									0,80		0,80	
Wind dir. red.			0,74									0,74		0,74	
Total reduction			0,29									0,29		0,29	
Total, real			71									71		2	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:21 (24)	08:46	10:00 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:36 (28)	09:00	10:51 (23)	
	15:53	20 12:41 (24)	16:56	20 10:20 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6 09:42 (28)	15:51	28 12:23 (24)	
2	09:28	12:22 (24)	08:44	09:59 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54	09:34 (28)	09:02	10:51 (23)	
	15:54	19 12:41 (24)	16:58	21 10:20 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11 09:45 (28)	15:50	30 12:24 (24)	
3	09:27	12:22 (24)	08:41	10:00 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56	09:33 (28)	09:04	10:52 (23)	
	15:55	19 12:41 (24)	17:01	20 10:20 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14 09:47 (28)	15:49	29 12:25 (24)	
4	09:27	11:12 (23)	08:39	10:00 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:31 (28)	09:05	10:53 (23)	
	15:57	22 12:41 (24)	17:03	20 10:20 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17 09:48 (28)	15:48	30 12:26 (24)	
5	09:26	11:11 (23)	08:37	10:01 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	09:31 (28)	09:07	10:54 (23)	
	15:58	26 12:42 (24)	17:06	19 10:20 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18 09:49 (28)	15:47	29 12:27 (24)	
6	09:25	11:10 (23)	08:35	10:01 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:30 (28)	09:09	10:56 (23)	
	16:00	28 12:42 (24)	17:08	18 10:19 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20 09:50 (28)	15:46	28 12:28 (24)	
7	09:25	11:09 (23)	08:32	10:01 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:30 (28)	09:10	10:58 (23)	
	16:02	29 12:42 (24)	17:11	17 10:18 (28)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20 09:50 (28)	15:45	26 12:29 (24)	
8	09:24	11:09 (23)	08:30	10:03 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:30 (28)	09:12	11:00 (23)	
	16:03	30 12:42 (24)	17:13	15 10:18 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20 09:50 (28)	15:45	23 12:30 (24)	
9	09:23	11:09 (23)	08:27	10:04 (28)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:30 (28)	09:13	12:11 (24)	
	16:05	30 12:42 (24)	17:16	12 10:16 (28)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20 09:50 (28)	15:44	19 12:30 (24)	
10	09:22	11:08 (23)	08:25	10:07 (28)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:31 (28)	09:15	12:11 (24)	
	16:07	30 12:41 (24)	17:18	5 10:12 (28)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20 09:51 (28)	15:44	19 12:30 (24)	
11	09:21	11:09 (23)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:30 (28)	09:16	12:11 (24)	
	16:09	28 12:41 (24)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20 09:50 (28)	15:43	20 12:31 (24)	
12	09:20	11:08 (23)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:31 (28)	09:18	12:11 (24)	
	16:11	27 12:40 (24)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27 10:58 (23)	15:43	20 12:31 (24)	
13	09:19	11:08 (23)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:32 (28)	09:19	12:12 (24)	
	16:13	25 12:39 (24)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31 11:01 (23)	15:42	21 12:33 (24)	
14	09:17	11:08 (23)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:33 (28)	09:20	12:12 (24)	
	16:15	20 11:28 (23)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32 11:03 (23)	15:42	21 12:33 (24)	
15	09:16	11:08 (23)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:34 (28)	09:21	12:12 (24)	
	16:17	21 11:29 (23)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31 11:03 (23)	15:42	21 12:33 (24)	
16	09:15	11:08 (23)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:36 (28)	09:22	12:13 (24)	
	16:19	21 11:29 (23)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31 11:05 (23)	15:42	20 12:33 (24)	
17	09:13	11:09 (23)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:38 (28)	09:23	12:14 (24)	
	16:21	22 11:31 (23)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28 11:06 (23)	15:42	21 12:35 (24)	
18	09:12	11:09 (23)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:44 (23)	09:24	12:14 (24)	
	16:23	22 11:31 (23)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22 11:06 (23)	15:42	21 12:35 (24)	
19	09:10	11:09 (23)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	10:45 (23)	09:25	12:14 (24)	
	16:25	22 11:31 (23)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22 11:07 (23)	15:42	21 12:35 (24)	
20	09:09	11:09 (23)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:45 (23)	09:26	12:15 (24)	
	16:28	23 11:32 (23)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22 11:07 (23)	15:43	21 12:36 (24)	
21	09:07	11:09 (23)	07:57		06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39	10:45 (23)	09:26	12:16 (24)	
	16:30	23 11:32 (23)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22 11:07 (23)	15:43	21 12:37 (24)	
22	09:05	11:10 (23)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	10:45 (23)	09:27	12:16 (24)	
	16:32	22 11:32 (23)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23 11:08 (23)	15:43	21 12:37 (24)	
23	09:03	11:10 (23)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:45 (23)	09:27	12:16 (24)	
	16:34	22 11:32 (23)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23 11:08 (23)	15:44	21 12:37 (24)	
24	09:02	11:10 (23)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:46 (23)	09:28	12:17 (24)	
	16:37	22 11:32 (23)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22 11:08 (23)	15:45	21 12:38 (24)	
25	09:00	10:04 (28)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:46 (23)	09:28	12:17 (24)	
	16:39	28 11:32 (23)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22 11:08 (23)	15:45	21 12:38 (24)	
26	08:58	10:03 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:47 (23)	09:28	12:18 (24)	
	16:42	31 11:32 (23)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21 11:08 (23)	15:46	21 12:39 (24)	
27	08:56	10:02 (28)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:47 (23)	09:28	12:18 (24)	
	16:44	31 11:31 (23)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21 11:08 (23)	15:47	21 12:39 (24)	
28	08:54	10:00 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:48 (23)	09:29	12:19 (24)	
	16:46	32 11:30 (23)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21 11:09 (23)	15:48	21 12:40 (24)	
29	08:52	10:00 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:49 (23)	09:29	12:19 (24)	
	16:49	31 11:29 (23)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22 12:18 (24)	15:49	21 12:40 (24)	
30	08:50	09:59 (28)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:49 (23)	09:28	12:20 (24)	
	16:51	27 11:26 (23)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28 12:21 (24)	15:50	20 12:40 (24)	
31	08:48	09:59 (28)			07:10		04:41		05:22	06:31		07:49			09:28	12:21 (24)	
	16:54	20 10:19 (28)			20:14		22:29		22:03	20:43		16:51			15:51	20 12:41 (24)	
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case		773		167										657		697	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,67		0,72										0,70		0,64	
Total reduction		0,27		0,29										0,28		0,25	
Total, real		208		48										183		177	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	22:47	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	04:34	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:39	07:46	07:58	09:05
	15:57	17:03	18:12	20:23	21:32	22:34	22:46	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	22:45	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	22:44	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	04:39	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:39	22:43	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	04:40	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	22:42	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	04:43	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	22:40	21:39	20:13	18:47	16:28	15:44
11	09:20	08:22	07:07	06:38	05:19	04:30	04:44	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:39	21:48	22:43	22:39	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:42	21:50	22:44	22:37	21:34	20:08	18:42	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:13	04:28	04:49	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	22:34	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	22:33	21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	22:31	21:23	19:56	18:30	16:15	15:42
17	09:13	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	22:30	21:21	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	22:28	21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:47	20:58	22:05	22:49	22:26	21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:22	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:49	22:25	21:12	19:44	18:20	16:08	15:43
21	09:06	07:57	06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:38	09:26
	16:30	17:45	18:51	21:02	22:10	22:49	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:40	09:26
	16:32	17:48	18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:29	08:43	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	22:19	21:04	19:36	18:12	16:02	15:44
24	09:01	07:49	06:30	06:02	04:52	04:28	05:07	06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:16	22:50	22:17	21:02	19:33	18:09	16:01	15:45
25	08:59	07:46	06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:12	22:17	22:50	22:15	20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:49	09:28
	16:41	17:57	19:03	21:14	22:19	22:50	22:13	20:56	19:27	17:04	15:58	15:46
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	16:44	18:00	19:05	21:16	22:21	22:49	22:11	20:53	19:24	17:01	15:56	15:47
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31	08:47		07:09		04:41		05:22	06:31		07:48		09:27
	16:53		20:14		22:28		22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
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SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	22:47	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	04:34	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:39	07:46	07:58	09:05
	15:57	17:03	18:12	20:23	21:32	22:34	22:46	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	22:45	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	22:44	21:48	20:25	18:58	16:37	15:46
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	16:03	17:13	18:21	20:32	21:41	22:40	22:42	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:50	07:57	08:10	09:13
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31	08:47		07:09		04:41		05:22	06:31		07:48		09:27
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Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Vedlegg 1.2

Grafisk Moifjellet og Mellomstrand vindkraftverk

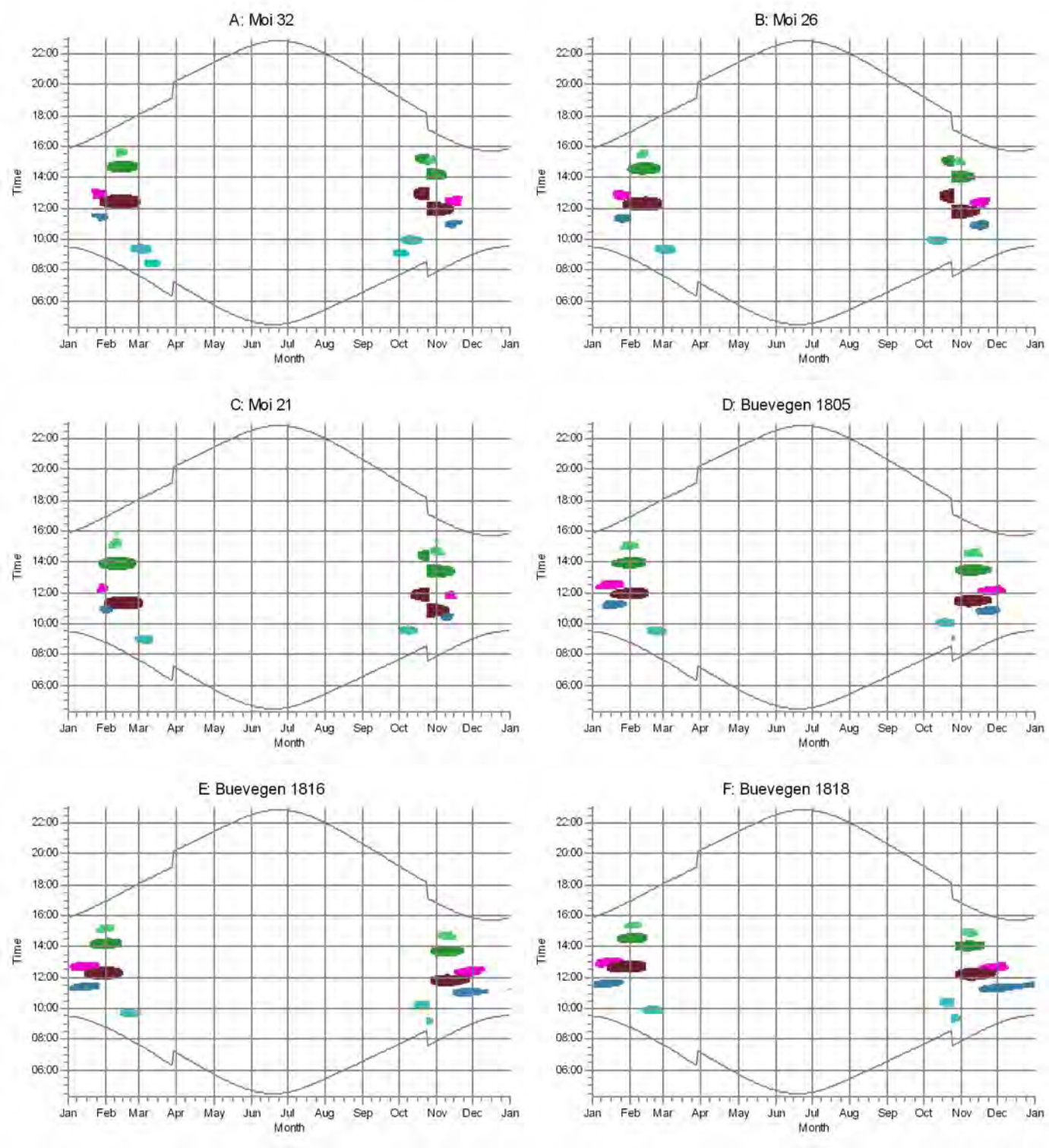
worst case

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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - worst case - mottakere



WTGs

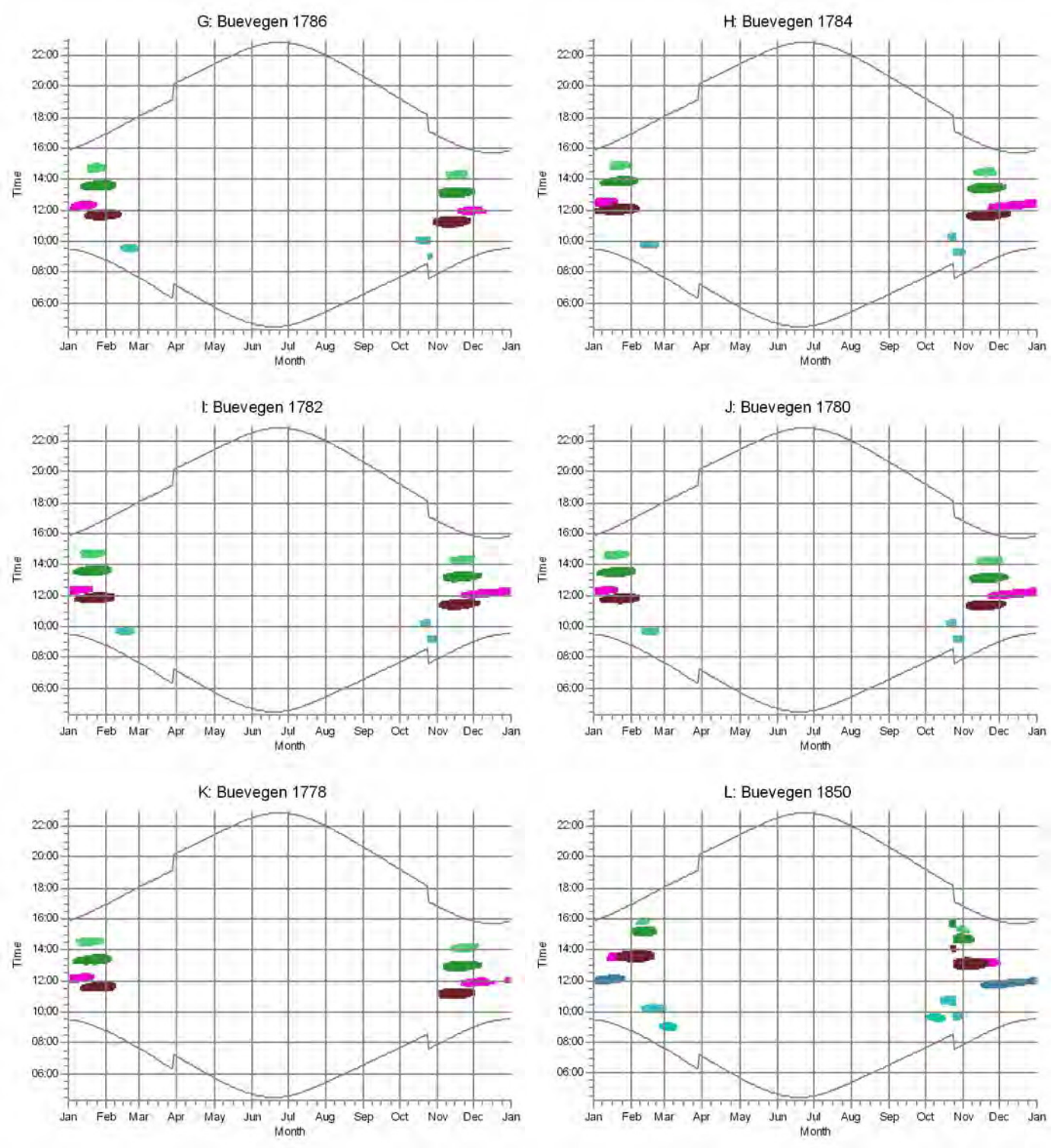
19: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2558
21: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
24: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2563
26: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2565
27: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
32: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
37: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2576

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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - worst case - mottakere

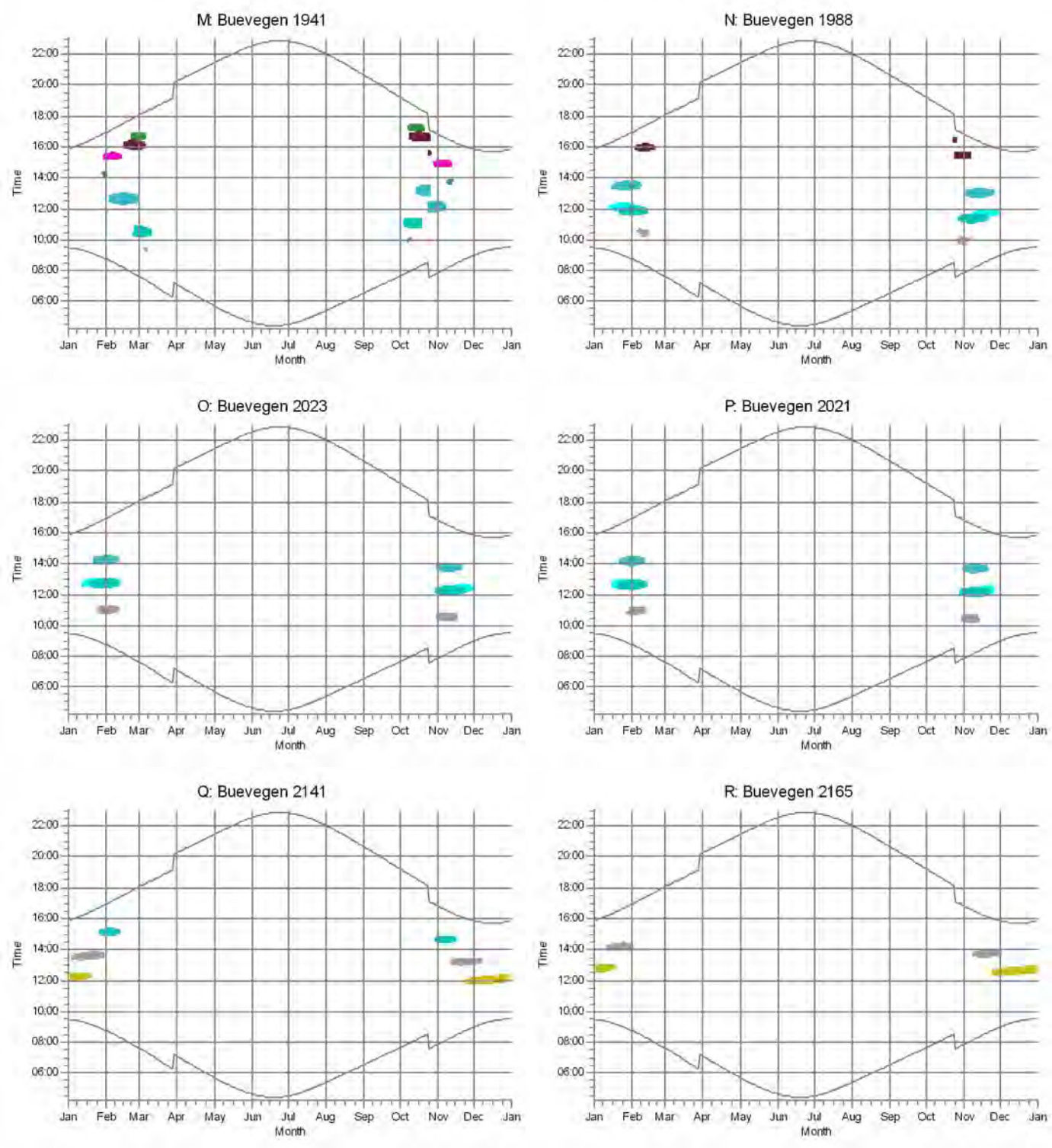


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SHADOW - Calendar, graphical

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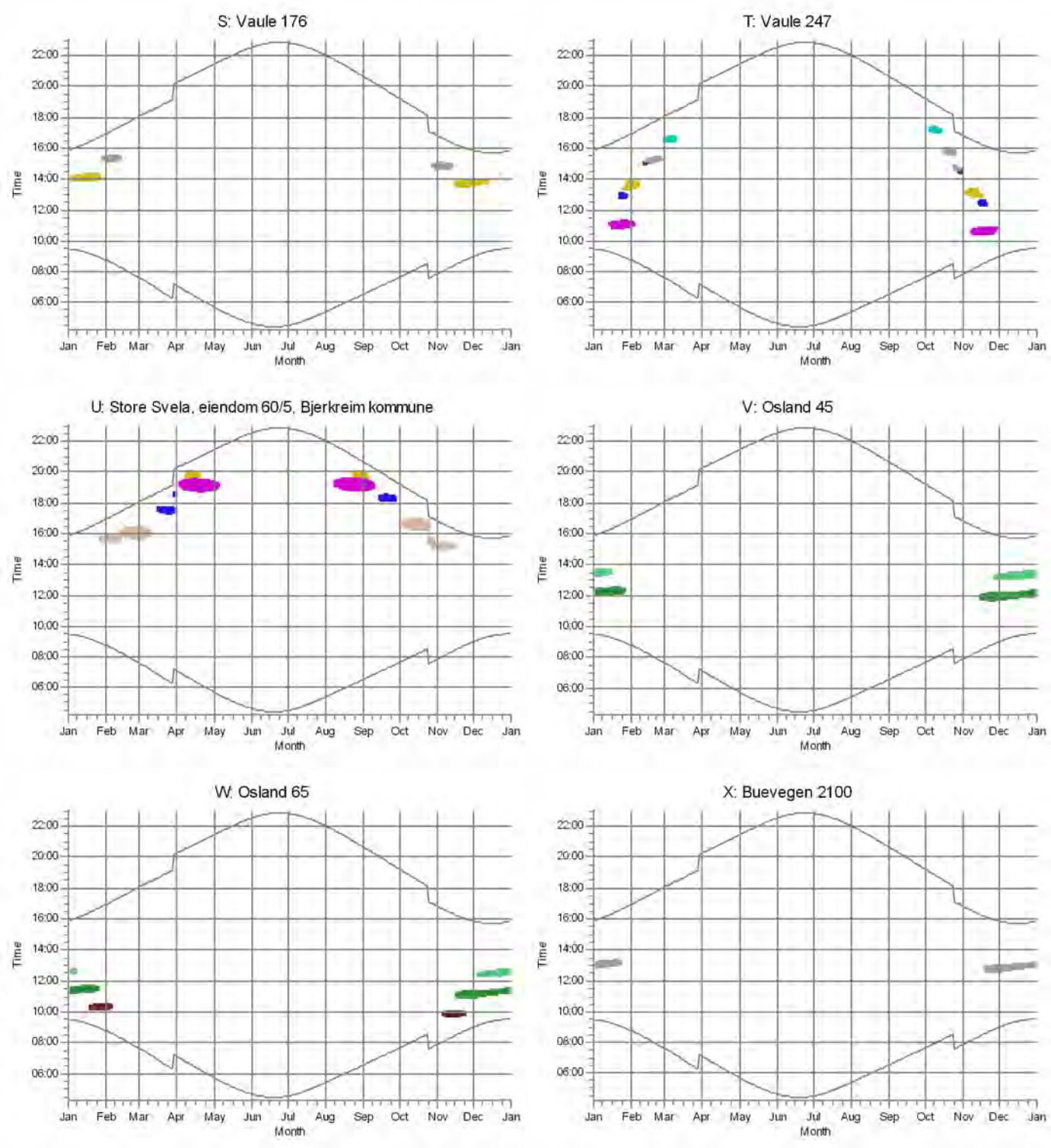


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SHADOW - Calendar, graphical

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WTGs

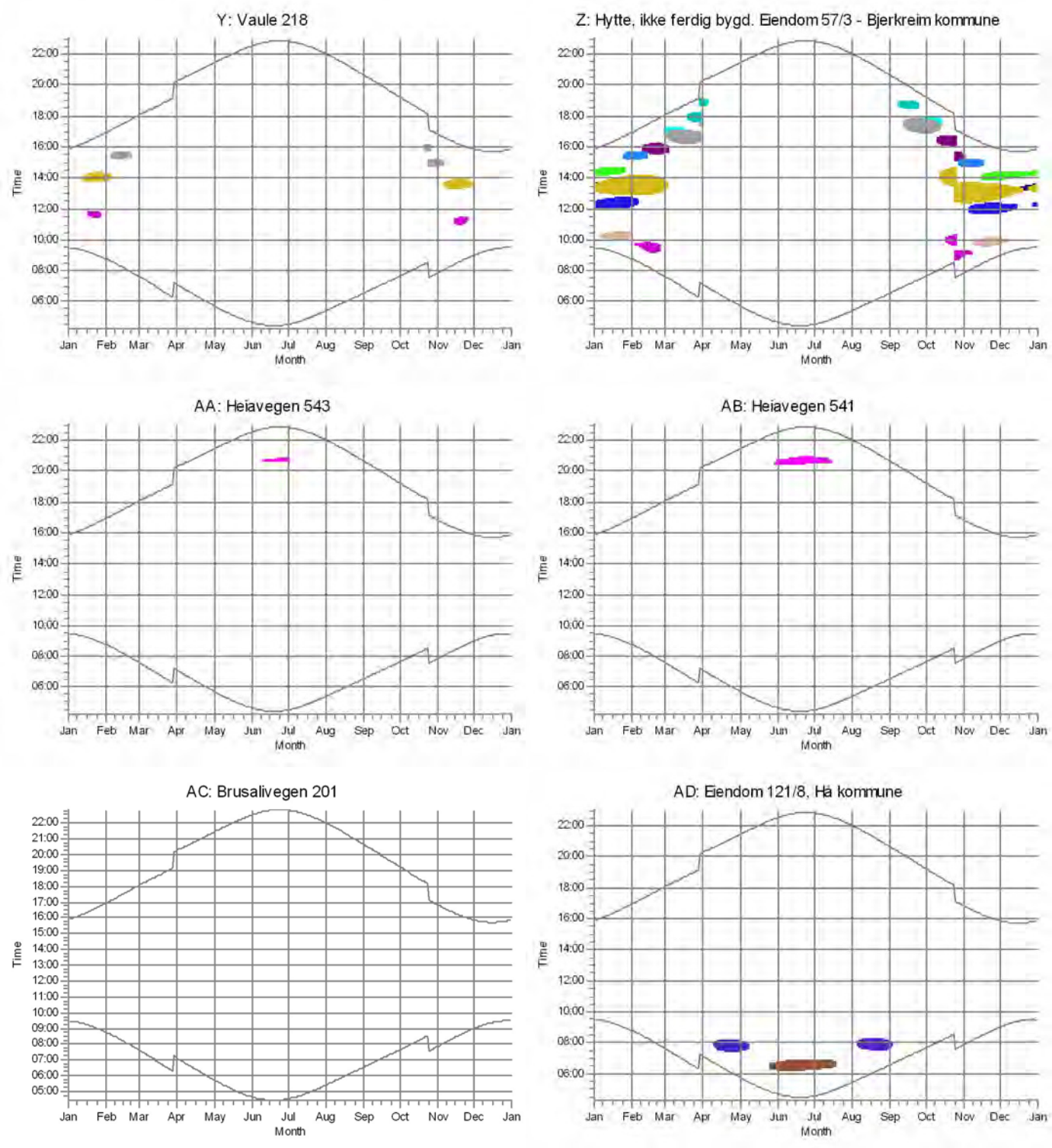
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12: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2551
16: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2556
21: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
27: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
30: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569
32: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
36: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575
41: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2580

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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - worst case - mottakere



WTGs

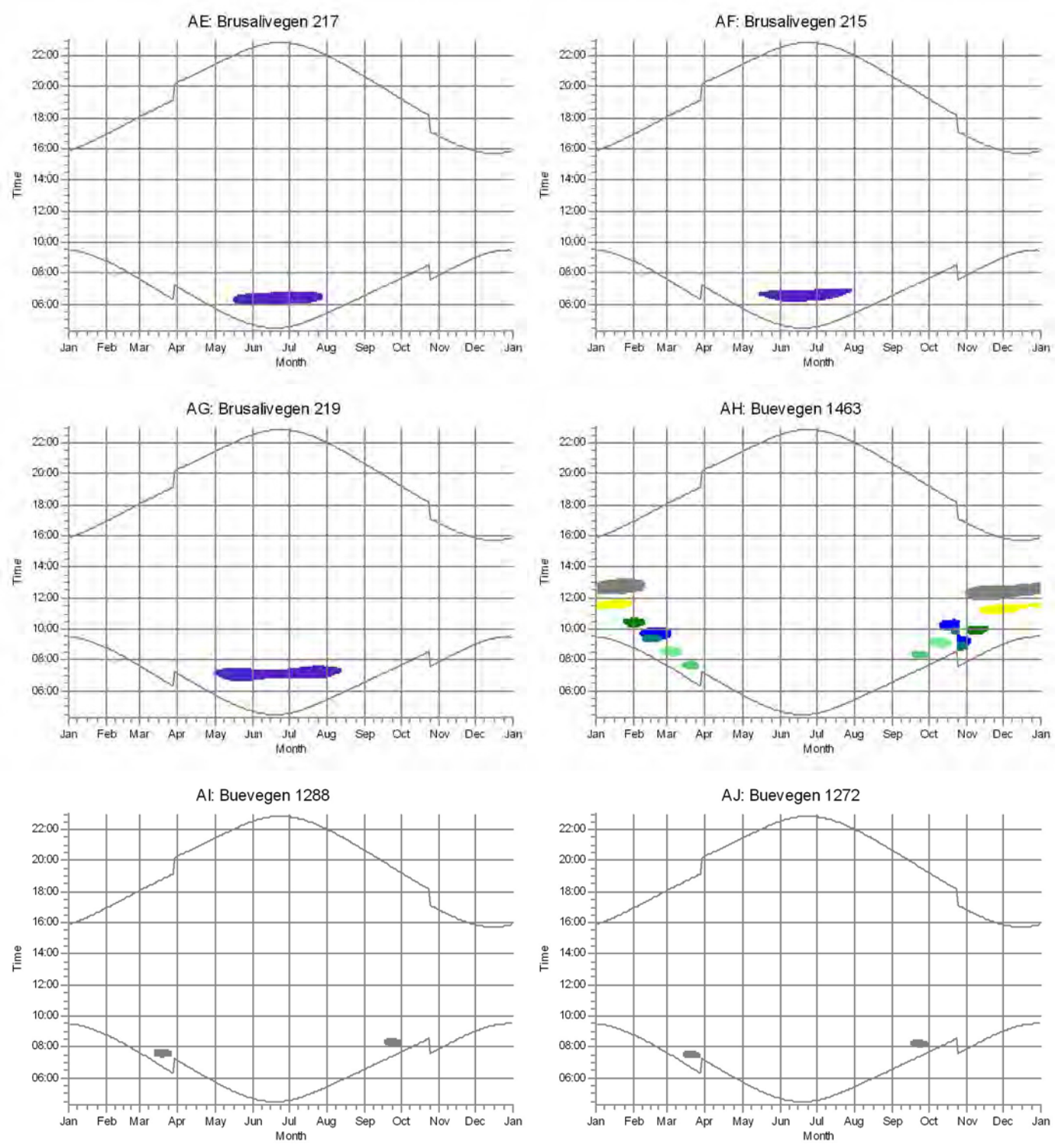
5: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2544	17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2556	39: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2578
7: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2546	18: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2557	40: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2579
11: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2550	21: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560	41: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2580
13: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2552	30: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569	42: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2543
16: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555	36: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575	

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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - worst case - mottakere

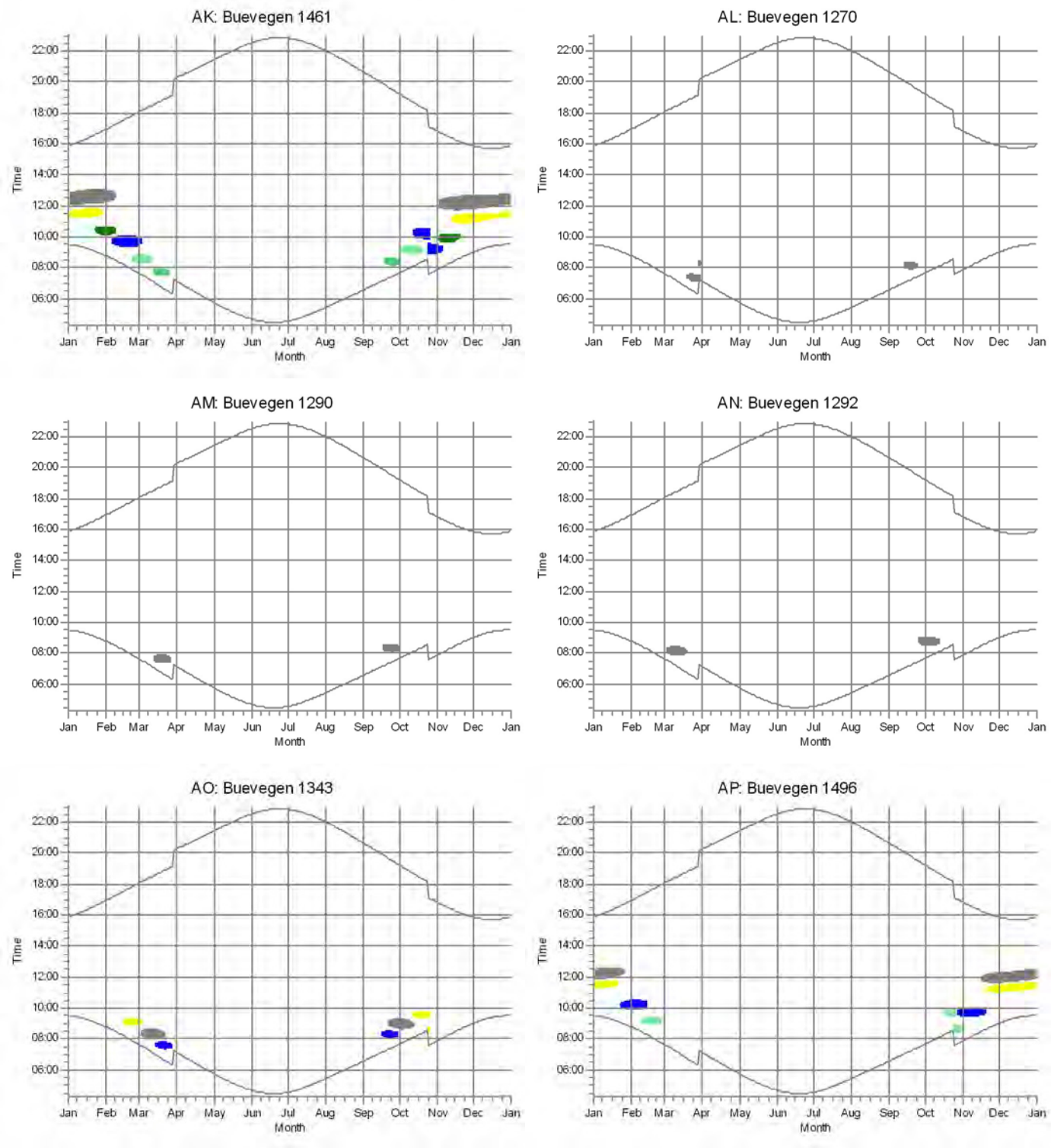


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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - worst case - mottakere

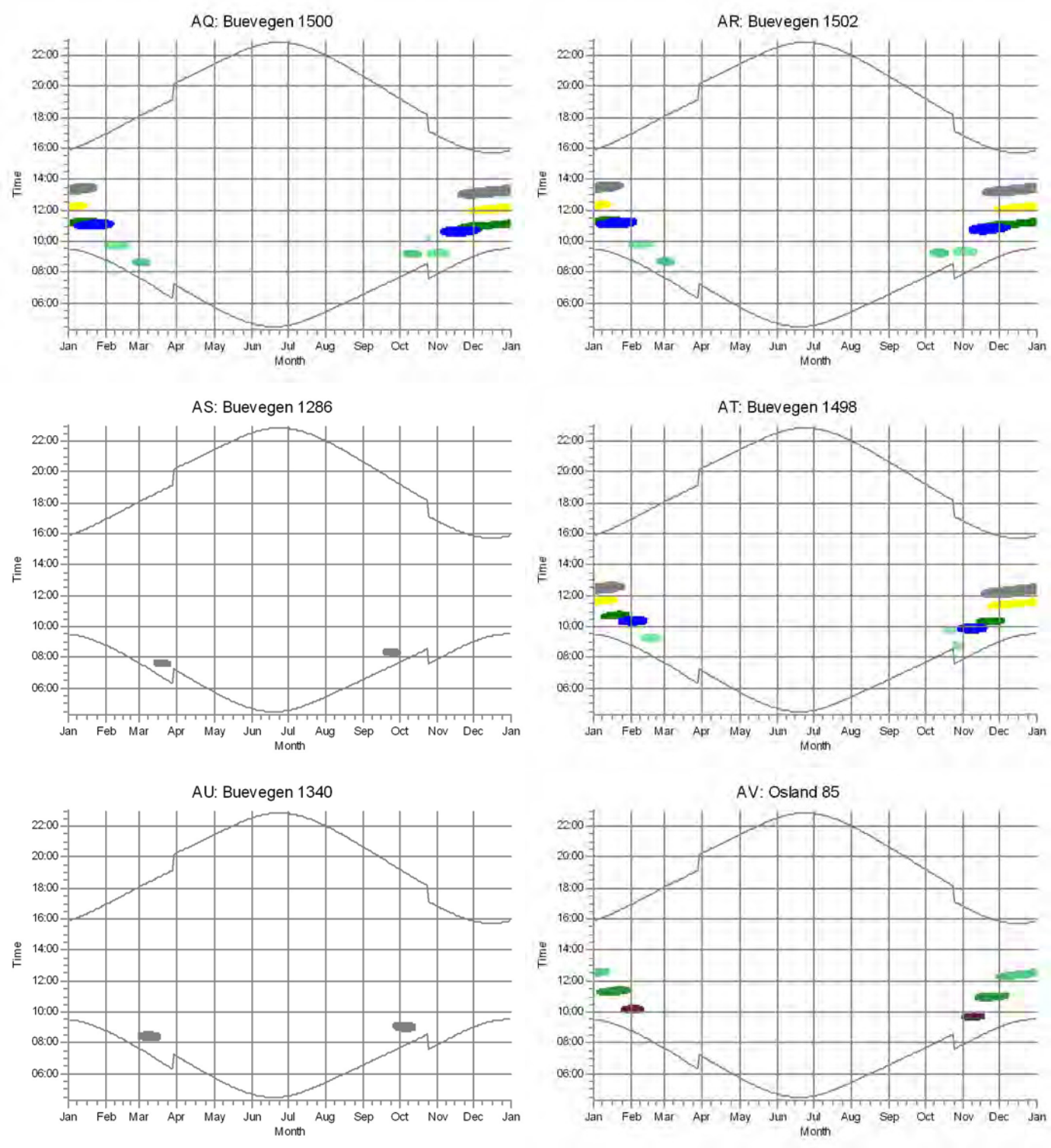


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SHADOW - Calendar, graphical

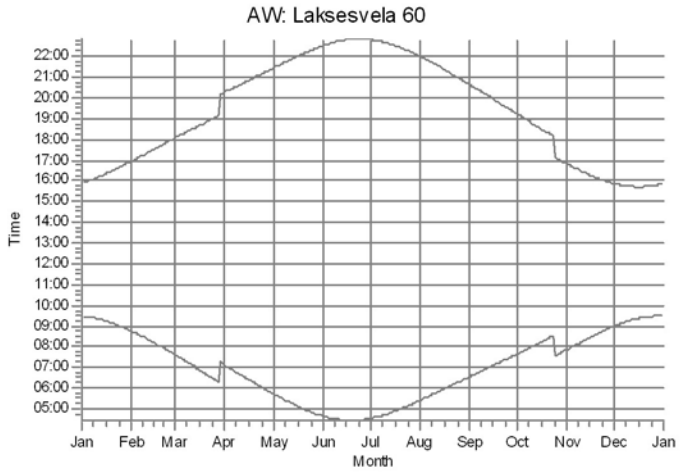
Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - worst case - mottakere

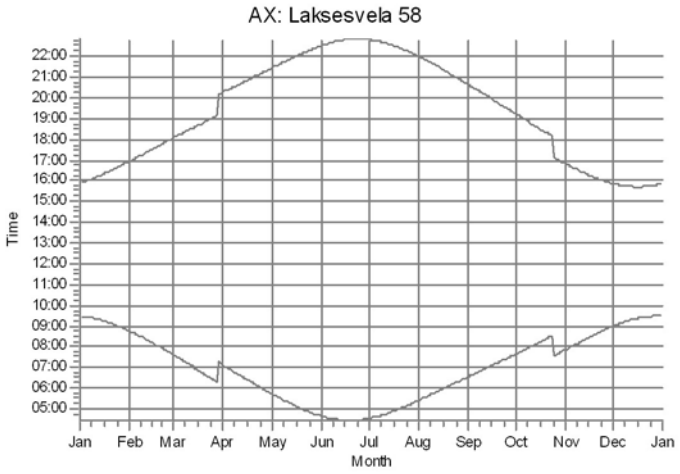


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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - worst case - mottakere





WTGs

Vedlegg 2.1

Tabell Moifjellet og Mellomstrand vindkraftverk

realistic case

Project:

Moifjellet og Mellomstrand vrk

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Calculated:

19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:19 (37)	07:35		09:10 (19)	07:07	05:44	04:40
	15:53			16:56	51	13:02 (24)	18:05	24	09:34 (19)	20:17	21:26	22:30
2	09:27			08:43		11:24 (37)	07:33		09:10 (19)	07:04	05:41	04:38
	15:54			16:58	34	12:41 (32)	18:07	25	09:35 (19)	20:19	21:28	22:32
3	09:27			08:41		12:08 (32)	07:30		09:10 (19)	07:01	05:39	04:37
	15:55			17:01	43	14:41 (27)	18:09	24	09:34 (19)	20:21	21:30	22:34
4	09:26			08:39		12:07 (32)	07:27		09:10 (19)	06:58	05:36	04:36
	15:57			17:03	56	14:50 (27)	18:12	24	09:34 (19)	20:24	21:33	22:35
5	09:26			08:37		12:06 (32)	07:24		09:10 (19)	06:55	05:34	04:35
	15:58			17:06	61	14:52 (27)	18:14	23	09:33 (19)	20:26	21:35	22:37
6	09:25			08:34		12:06 (32)	07:21		08:24 (21)	06:52	05:31	04:34
	16:00			17:08	66	14:54 (27)	18:17	28	09:32 (19)	20:28	21:37	22:38
7	09:24			08:32		12:05 (32)	07:19		08:21 (21)	06:50	05:29	04:33
	16:02			17:11	69	14:54 (27)	18:19	32	09:30 (19)	20:30	21:40	22:39
8	09:24			08:30		12:05 (32)	07:16		08:19 (21)	06:47	05:26	04:32
	16:03			17:13	72	14:56 (27)	18:21	32	09:28 (19)	20:33	21:42	22:40
9	09:23			08:27		12:04 (32)	07:13		08:18 (21)	06:44	05:24	04:31
	16:05			17:16	75	14:57 (27)	18:24	29	09:26 (19)	20:35	21:44	22:42
10	09:22			08:25		12:04 (32)	07:10		08:17 (21)	06:41	05:22	04:30
	16:07			17:18	80	15:35 (28)	18:26	18	08:35 (21)	20:37	21:46	22:43
11	09:21			08:23		12:04 (32)	07:07		08:17 (21)	06:38	05:19	04:29
	16:09			17:21	91	15:40 (28)	18:28	18	08:35 (21)	20:40	21:49	22:44
12	09:20			08:20		12:04 (32)	07:04		08:17 (21)	06:35	05:17	04:29
	16:11			17:23	99	15:47 (28)	18:31	19	08:36 (21)	20:42	21:51	22:45
13	09:18			08:18		12:03 (32)	07:01		08:17 (21)	06:32	05:15	04:28
	16:13			17:26	101	15:48 (28)	18:33	18	08:35 (21)	20:44	21:53	22:46
14	09:17			08:15		12:04 (32)	06:59		08:17 (21)	06:30	05:13	04:28
	16:15			17:28	99	15:48 (28)	18:35	17	08:34 (21)	20:47	21:55	22:47
15	09:16			08:13		12:04 (32)	06:56		08:18 (21)	06:27	05:10	04:27
	16:17			17:31	96	15:46 (28)	18:38	15	08:33 (21)	20:49	21:58	22:47
16	09:15			08:10		12:03 (32)	06:53		08:19 (21)	06:24	05:08	04:27
	16:19			17:33	92	15:44 (28)	18:40	12	08:31 (21)	20:51	22:00	22:48
17	09:13			08:07		12:03 (32)	06:50		08:22 (21)	06:21	05:06	04:27
	16:21			17:36	86	15:41 (28)	18:42	5	08:27 (21)	20:53	22:02	22:49
18	09:12			08:05		12:04 (32)	06:47			06:19	05:04	04:27
	16:23			17:38	78	14:58 (27)	18:45			20:56	22:04	22:49
19	09:10			08:02		12:05 (32)	06:44			06:16	05:02	04:27
	16:25			17:40	76	14:58 (27)	18:47			20:58	22:06	22:50
20	09:08			08:00		12:05 (32)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:57 (27)	18:49			21:00	22:08	22:50
21	09:07		11:29 (37)	07:57		12:05 (32)	06:38			06:10	04:58	04:27
	16:30	8	13:08 (24)	17:45	71	14:56 (27)	18:51			21:03	22:10	22:50
22	09:05		11:28 (37)	07:54		12:06 (32)	06:36			06:08	04:56	04:27
	16:32	22	13:07 (24)	17:48	66	14:55 (27)	18:54			21:05	22:12	22:50
23	09:03		11:29 (37)	07:52		09:20 (19)	06:33			06:05	04:54	04:27
	16:34	21	13:08 (24)	17:50	69	14:54 (27)	18:56			21:07	22:14	22:50
24	09:02		11:28 (37)	07:49		09:16 (19)	06:30			06:02	04:52	04:27
	16:37	33	13:08 (24)	17:53	69	14:52 (27)	18:58			21:10	22:16	22:51
25	09:00		11:27 (37)	07:46		09:14 (19)	06:27			05:59	04:51	04:28
	16:39	33	13:08 (24)	17:55	64	14:49 (27)	19:01			21:12	22:18	22:50
26	08:58		11:22 (37)	07:44		09:13 (19)	06:24			05:57	04:49	04:28
	16:41	37	13:08 (24)	17:57	54	14:45 (27)	19:03			21:14	22:20	22:50
27	08:56		11:14 (37)	07:41		09:12 (19)	06:21			05:54	04:47	04:29
	16:44	43	13:07 (24)	18:00	41	12:35 (32)	19:05			21:17	22:22	22:50
28	08:54		11:14 (37)	07:38		09:11 (19)	06:18			05:52	04:46	04:30
	16:46	52	13:07 (24)	18:02	33	12:29 (32)	19:07			21:19	22:24	22:50
29	08:52		11:15 (37)				07:15			05:49	04:44	04:30
	16:49	56	13:07 (24)				20:10			21:21	22:25	22:50
30	08:50		11:15 (37)				07:12			05:46	04:43	04:31
	16:51	59	13:06 (24)				20:12			21:24	22:27	22:49
31	08:48		11:17 (37)				07:10				04:41	
	16:54	57	13:05 (24)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		421			1966			363				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,64			0,61			0,73				
Total reduction		0,26			0,24			0,29				
Total, real		108			479			106				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September			October		November			December	
1	04:32		05:24		06:33			07:39		08:56 (21)	07:51		11:33 (32)	09:00
	22:49		22:01		20:40			19:13	19	09:15 (21)	16:49	78	14:57 (28)	15:51
2	04:33		05:26		06:35			07:42		08:56 (21)	07:54		11:34 (32)	09:02
	22:48		21:58		20:37			19:10	18	09:14 (21)	16:46	74	14:26 (27)	15:50
3	04:34		05:28		06:37			07:44		08:55 (21)	07:56		11:35 (32)	09:03
	22:47		21:56		20:34			19:07	19	09:14 (21)	16:44	71	14:25 (27)	15:49
4	04:35		05:31		06:40			07:46		08:55 (21)	07:59		11:35 (32)	09:05
	22:47		21:54		20:31			19:04	26	10:01 (19)	16:41	69	14:24 (27)	15:48
5	04:36		05:33		06:42			07:48		08:56 (21)	08:01		11:36 (32)	09:07
	22:46		21:51		20:28			19:02	31	10:05 (19)	16:39	64	14:23 (27)	15:47
6	04:37		05:35		06:44			07:51		08:57 (21)	08:03		11:37 (32)	09:09
	22:45		21:49		20:25			18:59	32	10:06 (19)	16:37	61	14:22 (27)	15:46
7	04:39		05:37		06:46			07:53		08:58 (21)	08:06		11:37 (32)	09:10
	22:44		21:47		20:22			18:56	31	10:07 (19)	16:34	53	14:17 (27)	15:45
8	04:40		05:39		06:49			07:55		09:03 (21)	08:08		11:39 (32)	09:12
	22:43		21:44		20:20			18:53	23	10:08 (19)	16:32	42	14:11 (27)	15:45
9	04:41		05:42		06:51			07:57		09:45 (19)	08:11		10:53 (37)	09:13
	22:42		21:42		20:17			18:50	23	10:08 (19)	16:30	37	12:12 (32)	15:44
10	04:43		05:44		06:53			08:00		09:45 (19)	08:13		10:50 (37)	09:15
	22:40		21:39		20:14			18:47	24	10:09 (19)	16:28	52	12:34 (24)	15:44
11	04:44		05:46		06:55			08:02		09:44 (19)	08:15		10:48 (37)	09:16
	22:39		21:37		20:11			18:45	24	10:08 (19)	16:25	57	12:36 (24)	15:43
12	04:46		05:48		06:57			08:04		09:43 (19)	08:18		10:47 (37)	09:18
	22:38		21:34		20:08			18:42	24	10:07 (19)	16:23	58	12:37 (24)	15:43
13	04:47		05:51		07:00			08:07		09:44 (19)	08:20		10:47 (37)	09:19
	22:37		21:31		20:05			18:39	23	10:07 (19)	16:21	57	12:39 (24)	15:42
14	04:49		05:53		07:02			08:09		09:44 (19)	08:22		10:46 (37)	09:20
	22:35		21:29		20:02			18:36	37	13:05 (32)	16:19	52	12:39 (24)	15:42
15	04:51		05:55		07:04			08:11		09:45 (19)	08:25		10:47 (37)	09:21
	22:34		21:26		19:59			18:33	44	13:09 (32)	16:17	43	12:40 (24)	15:42
16	04:52		05:57		07:06			08:13		09:45 (19)	08:27		10:55 (37)	09:22
	22:32		21:24		19:56			18:31	59	15:19 (27)	16:15	37	12:41 (24)	15:42
17	04:54		06:00		07:08			08:16		09:47 (19)	08:29		11:00 (37)	09:23
	22:30		21:21		19:54			18:28	66	15:22 (27)	16:13	33	12:41 (24)	15:42
18	04:56		06:02		07:11			08:18		09:48 (19)	08:32		11:02 (37)	09:24
	22:29		21:18		19:51			18:25	71	15:24 (27)	16:11	33	12:42 (24)	15:42
19	04:58		06:04		07:13			08:20		09:52 (19)	08:34		11:04 (37)	09:25
	22:27		21:16		19:48			18:22	70	15:26 (27)	16:09	21	12:43 (24)	15:42
20	05:00		06:06		07:15			08:23		12:37 (32)	08:36		11:03 (37)	09:26
	22:25		21:13		19:45			18:20	68	15:26 (27)	16:08	22	12:42 (24)	15:43
21	05:01		06:08		07:17			08:25		12:36 (32)	08:39		11:04 (37)	09:26
	22:24		21:10		19:42			18:17	71	15:27 (27)	16:06	8	12:43 (24)	15:43
22	05:03		06:11		07:19			08:27		12:35 (32)	08:41			09:27
	22:22		21:08		19:39			18:14	74	15:27 (27)	16:04			15:43
23	05:05		06:13		07:22			08:30		12:35 (32)	08:43			09:27
	22:20		21:05		19:36			18:12	76	15:28 (27)	16:02			15:44
24	05:07		06:15		07:24			08:32		12:34 (32)	08:45			09:28
	22:18		21:02		19:33			18:09	78	15:28 (27)	16:01			15:44
25	05:09		06:17		07:26			07:35		11:34 (32)	08:47			09:28
	22:16		20:59		19:30			17:06	86	15:12 (28)	15:59			15:45
26	05:11		06:20		07:28			07:37		11:33 (32)	08:50			09:28
	22:14		20:56		19:27			17:04	94	15:14 (28)	15:58			15:46
27	05:13		06:22		07:30		09:02 (21)	07:39		11:33 (32)	08:52			09:28
	22:12		20:54		19:25	10	09:12 (21)	17:01	97	15:16 (28)	15:56			15:47
28	05:16		06:24		07:33		09:00 (21)	07:42		11:33 (32)	08:54			09:28
	22:10		20:51		19:22	13	09:13 (21)	16:59	101	15:18 (28)	15:55			15:48
29	05:18		06:26		07:35		08:58 (21)	07:44		11:33 (32)	08:56			09:28
	22:07		20:48		19:19	16	09:14 (21)	16:56	102	15:18 (28)	15:54			15:49
30	05:20		06:29		07:37		08:56 (21)	07:47		11:33 (32)	08:58			09:28
	22:05		20:45		19:16	18	09:14 (21)	16:54	99	15:15 (28)	15:52			15:50
31	05:22		06:31					07:49		11:34 (32)				09:28
	22:03		20:42					16:51	90	15:09 (28)				15:51
Potential sun hours	546		478		386			319			236			199
Total, worst case						57			1700			1022		
Sun reduction						0,50			0,50			0,50		
Oper. time red.						0,80			0,80			0,80		
Wind dir. red.						0,72			0,63			0,62		
Total reduction						0,29			0,25			0,25		
Total, real						16			428			255		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:16 (37)	07:35		09:09 (19)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (27)	18:05	23	09:32 (19)	20:17	21:26	22:30
2	09:27			08:43		12:00 (32)	07:33		09:09 (19)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (27)	18:07	24	09:33 (19)	20:19	21:28	22:32
3	09:27			08:41		11:58 (32)	07:30		09:09 (19)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (27)	18:09	24	09:33 (19)	20:21	21:30	22:34
4	09:26			08:39		11:58 (32)	07:27		09:09 (19)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (27)	18:12	23	09:32 (19)	20:24	21:33	22:35
5	09:26			08:37		11:57 (32)	07:24		09:10 (19)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (27)	18:14	21	09:31 (19)	20:26	21:35	22:37
6	09:25			08:34		11:57 (32)	07:21		09:10 (19)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (27)	18:17	20	09:30 (19)	20:28	21:37	22:38
7	09:24			08:32		11:56 (32)	07:19		09:11 (19)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (27)	18:19	17	09:28 (19)	20:30	21:40	22:39
8	09:24			08:30		11:56 (32)	07:16		09:13 (19)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (28)	18:21	12	09:25 (19)	20:33	21:42	22:40
9	09:23			08:27		11:56 (32)	07:13		09:16 (19)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (28)	18:24	5	09:21 (19)	20:35	21:44	22:42
10	09:22			08:25		11:55 (32)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (28)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (32)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (28)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (32)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (28)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (32)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (28)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (32)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (28)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (32)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (28)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (32)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (27)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (32)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (27)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (32)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (27)	18:45			20:56	22:04	22:49
19	09:10		12:54 (24)	08:02		11:57 (32)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (24)	17:40	70	14:48 (27)	18:47			20:58	22:06	22:50
20	09:08		11:12 (37)	08:00		11:57 (32)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (24)	17:43	68	14:47 (27)	18:49			21:00	22:08	22:50
21	09:07		11:11 (37)	07:57		11:58 (32)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (24)	17:45	64	14:46 (27)	18:51			21:03	22:10	22:50
22	09:05		11:11 (37)	07:54		11:59 (32)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (24)	17:48	58	14:44 (27)	18:54			21:05	22:12	22:50
23	09:03		11:11 (37)	07:52		09:17 (19)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (24)	17:50	62	14:43 (27)	18:56			21:07	22:14	22:50
24	09:02		11:10 (37)	07:49		09:14 (19)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (24)	17:53	57	14:39 (27)	18:58			21:10	22:16	22:51
25	09:00		11:08 (37)	07:46		09:13 (19)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (24)	17:55	42	12:28 (32)	19:01			21:12	22:18	22:50
26	08:58		11:09 (37)	07:44		09:11 (19)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (24)	17:57	38	12:24 (32)	19:03			21:14	22:20	22:50
27	08:56		11:09 (37)	07:41		09:10 (19)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (24)	18:00	22	09:32 (19)	19:05			21:17	22:22	22:50
28	08:54		11:10 (37)	07:38		09:09 (19)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (24)	18:02	23	09:32 (19)	19:07			21:19	22:24	22:50
29	08:52		11:12 (37)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (24)				20:10			21:21	22:25	22:50
30	08:50		11:12 (37)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (24)				20:12			21:24	22:27	22:49
31	08:48		11:14 (37)				07:10				04:41	
	16:54	56	14:29 (27)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,65			0,61			0,74				
Total reduction		0,26			0,24			0,29				
Total, real		151			468			50				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:25 (32)	09:00
	22:49	22:01	20:40	19:13			16:49	96	15:09 (28)	15:51
2	04:33	05:26	06:35	07:42			07:54		11:25 (32)	09:02
	22:48	21:58	20:37	19:10			16:46	90	15:04 (28)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:26 (32)	09:03
	22:47	21:56	20:34	19:07			16:44	82	14:58 (28)	15:49
4	04:35	05:31	06:40	07:46			07:59		11:26 (32)	09:05
	22:47	21:54	20:31	19:04			16:41	72	14:17 (27)	15:48
5	04:36	05:33	06:42	07:48		09:51 (19)	08:01		11:27 (32)	09:07
	22:46	21:51	20:28	19:02	10	10:01 (19)	16:39	70	14:17 (27)	15:47
6	04:37	05:35	06:44	07:51		09:48 (19)	08:03		11:28 (32)	09:09
	22:45	21:49	20:25	18:59	15	10:03 (19)	16:37	65	14:16 (27)	15:46
7	04:39	05:37	06:46	07:53		09:46 (19)	08:06		11:28 (32)	09:10
	22:44	21:47	20:22	18:56	18	10:04 (19)	16:34	62	14:14 (27)	15:45
8	04:40	05:39	06:49	07:55		09:45 (19)	08:08		11:29 (32)	09:12
	22:43	21:44	20:20	18:53	21	10:06 (19)	16:32	57	14:13 (27)	15:45
9	04:41	05:42	06:51	07:57		09:44 (19)	08:11		11:30 (32)	09:13
	22:42	21:42	20:17	18:50	22	10:06 (19)	16:30	53	14:12 (27)	15:44
10	04:43	05:44	06:53	08:00		09:44 (19)	08:13		10:47 (37)	09:15
	22:40	21:39	20:14	18:47	23	10:07 (19)	16:28	58	14:10 (27)	15:44
11	04:44	05:46	06:55	08:02		09:43 (19)	08:15		10:45 (37)	09:16
	22:39	21:37	20:11	18:45	23	10:06 (19)	16:25	55	13:59 (27)	15:43
12	04:46	05:48	06:57	08:04		09:42 (19)	08:18		10:44 (37)	09:18
	22:38	21:34	20:08	18:42	24	10:06 (19)	16:23	57	12:31 (24)	15:43
13	04:47	05:51	07:00	08:07		09:43 (19)	08:20		10:43 (37)	09:19
	22:37	21:31	20:05	18:39	23	10:06 (19)	16:21	59	12:32 (24)	15:42
14	04:49	05:53	07:02	08:09		09:42 (19)	08:22		10:42 (37)	09:20
	22:35	21:29	20:02	18:36	23	10:05 (19)	16:19	58	12:33 (24)	15:42
15	04:51	05:55	07:04	08:11		09:43 (19)	08:25		10:42 (37)	09:21
	22:34	21:26	19:59	18:33	33	12:54 (32)	16:17	53	12:34 (24)	15:42
16	04:52	05:57	07:06	08:13		09:44 (19)	08:27		10:42 (37)	09:22
	22:32	21:24	19:56	18:31	39	12:58 (32)	16:15	45	12:35 (24)	15:42
17	04:54	06:00	07:08	08:16		09:45 (19)	08:29		10:41 (37)	09:23
	22:30	21:21	19:54	18:28	46	15:07 (27)	16:13	47	12:35 (24)	15:42
18	04:56	06:02	07:11	08:18		09:46 (19)	08:32		10:44 (37)	09:24
	22:29	21:18	19:51	18:25	59	15:12 (27)	16:11	46	12:36 (24)	15:42
19	04:58	06:04	07:13	08:20		09:49 (19)	08:34		10:46 (37)	09:25
	22:27	21:16	19:48	18:22	62	15:15 (27)	16:09	45	12:37 (24)	15:42
20	05:00	06:06	07:15	08:23		12:30 (32)	08:36		10:46 (37)	09:26
	22:25	21:13	19:45	18:20	60	15:16 (27)	16:08	45	12:37 (24)	15:43
21	05:01	06:08	07:17	08:25		12:29 (32)	08:39		10:46 (37)	09:26
	22:24	21:10	19:42	18:17	65	15:17 (27)	16:06	36	12:37 (24)	15:43
22	05:03	06:11	07:19	08:27		12:27 (32)	08:41		10:48 (37)	09:27
	22:22	21:08	19:39	18:14	70	15:18 (27)	16:04	30	12:38 (24)	15:43
23	05:05	06:13	07:22	08:30		12:27 (32)	08:43		12:30 (24)	09:27
	22:20	21:05	19:36	18:12	72	15:19 (27)	16:02	5	12:35 (24)	15:44
24	05:07	06:15	07:24	08:32		12:26 (32)	08:45			09:28
	22:18	21:02	19:33	18:09	75	15:19 (27)	16:01			15:44
25	05:09	06:17	07:26	07:35		11:26 (32)	08:47			09:28
	22:16	20:59	19:30	17:06	76	14:20 (27)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:25 (32)	08:50			09:28
	22:14	20:56	19:27	17:04	81	15:04 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:25 (32)	08:52			09:28
	22:12	20:54	19:25	17:01	91	15:08 (28)	15:56			15:47
28	05:16	06:24	07:33	07:42		11:25 (32)	08:54			09:28
	22:10	20:51	19:22	16:59	95	15:10 (28)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:24 (32)	08:56			09:28
	22:07	20:48	19:19	16:56	99	15:11 (28)	15:54			15:49
30	05:20	06:29	07:37	07:47		11:25 (32)	08:58			09:28
	22:05	20:45	19:16	16:54	99	15:12 (28)	15:52			15:50
31	05:22	06:31		07:49		11:25 (32)				09:28
	22:03	20:42		16:51	101	15:13 (28)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1425			1286		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,63			0,62		
Total reduction					0,25			0,25		
Total, real					357			321		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		10:42 (37)	07:35		08:50 (19)	07:07	05:44	04:40
	15:53			16:56	72	14:06 (27)	18:05	39	11:29 (32)	20:17	21:26	22:30
2	09:27			08:43		10:44 (37)	07:33		08:50 (19)	07:04	05:41	04:38
	15:54			16:58	72	14:08 (27)	18:07	31	11:25 (32)	20:19	21:28	22:32
3	09:27			08:41		10:46 (37)	07:30		08:49 (19)	07:01	05:39	04:37
	15:55			17:01	71	14:10 (27)	18:09	21	09:10 (19)	20:21	21:31	22:34
4	09:26			08:39		10:47 (37)	07:27		08:48 (19)	06:58	05:36	04:36
	15:57			17:03	77	15:02 (28)	18:12	22	09:10 (19)	20:24	21:33	22:35
5	09:26			08:37		10:50 (37)	07:24		08:48 (19)	06:55	05:34	04:35
	15:58			17:06	77	15:05 (28)	18:14	21	09:09 (19)	20:26	21:35	22:37
6	09:25			08:34		11:05 (32)	07:21		08:48 (19)	06:52	05:31	04:34
	16:00			17:08	82	15:12 (28)	18:17	21	09:09 (19)	20:28	21:37	22:38
7	09:24			08:32		11:03 (32)	07:19		08:48 (19)	06:50	05:29	04:33
	16:02			17:11	92	15:18 (28)	18:19	20	09:08 (19)	20:30	21:40	22:39
8	09:24			08:30		11:03 (32)	07:16		08:48 (19)	06:47	05:26	04:32
	16:03			17:13	101	15:25 (28)	18:21	19	09:07 (19)	20:33	21:42	22:40
9	09:23			08:27		11:02 (32)	07:13		08:48 (19)	06:44	05:24	04:31
	16:05			17:16	112	15:55 (26)	18:24	18	09:06 (19)	20:35	21:44	22:42
10	09:22			08:25		11:01 (32)	07:10		08:49 (19)	06:41	05:22	04:30
	16:07			17:18	104	15:51 (26)	18:26	15	09:04 (19)	20:37	21:46	22:43
11	09:21			08:23		11:01 (32)	07:07		08:51 (19)	06:38	05:19	04:29
	16:09			17:21	101	15:23 (28)	18:28	10	09:01 (19)	20:40	21:49	22:44
12	09:20			08:20		11:00 (32)	07:04			06:35	05:17	04:29
	16:11			17:23	98	15:21 (28)	18:31			20:42	21:51	22:45
13	09:18			08:18		10:59 (32)	07:02			06:33	05:15	04:28
	16:13			17:26	94	15:18 (28)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:00 (32)	06:59			06:30	05:13	04:28
	16:15			17:28	83	14:14 (27)	18:35			20:47	21:55	22:47
15	09:16			08:13		10:59 (32)	06:56			06:27	05:10	04:27
	16:17			17:31	83	14:13 (27)	18:38			20:49	21:58	22:47
16	09:15			08:10		10:59 (32)	06:53			06:24	05:08	04:27
	16:19			17:33	81	14:12 (27)	18:40			20:51	22:00	22:48
17	09:13			08:07		10:59 (32)	06:50			06:21	05:06	04:27
	16:21			17:36	81	14:12 (27)	18:42			20:53	22:02	22:49
18	09:12			08:05		10:59 (32)	06:47			06:19	05:04	04:27
	16:23			17:38	80	14:12 (27)	18:45			20:56	22:04	22:49
19	09:10			08:02		10:59 (32)	06:44			06:16	05:02	04:27
	16:25			17:40	78	14:11 (27)	18:47			20:58	22:06	22:50
20	09:08			08:00		10:59 (32)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:09 (27)	18:49			21:00	22:08	22:50
21	09:07			07:57		10:59 (32)	06:39			06:10	04:58	04:27
	16:30			17:45	71	14:08 (27)	18:51			21:03	22:10	22:50
22	09:05			07:54		11:00 (32)	06:36			06:08	04:56	04:27
	16:32			17:48	66	14:06 (27)	18:54			21:05	22:12	22:50
23	09:03			07:52		11:01 (32)	06:33			06:05	04:54	04:27
	16:34			17:50	60	14:04 (27)	18:56			21:07	22:14	22:50
24	09:02			07:49		11:01 (32)	06:30			06:02	04:52	04:27
	16:37			17:53	50	14:00 (27)	18:58			21:10	22:16	22:51
25	09:00			07:46		11:02 (32)	06:27			06:00	04:51	04:28
	16:39			17:55	36	11:38 (32)	19:01			21:12	22:18	22:50
26	08:58		12:05 (24)	07:44		08:58 (19)	06:24			05:57	04:49	04:28
	16:41	5	12:10 (24)	17:57	36	11:36 (32)	19:03			21:14	22:20	22:50
27	08:56		12:05 (24)	07:41		08:54 (19)	06:21			05:54	04:47	04:29
	16:44	19	13:53 (27)	18:00	41	11:34 (32)	19:05			21:17	22:22	22:50
28	08:54		11:00 (37)	07:38		08:52 (19)	06:18			05:52	04:46	04:30
	16:46	40	13:59 (27)	18:02	41	11:32 (32)	19:08			21:19	22:24	22:50
29	08:52		10:56 (37)				07:15			05:49	04:44	04:30
	16:49	47	14:02 (27)				20:10			21:21	22:25	22:50
30	08:50		10:50 (37)				07:13			05:46	04:43	04:31
	16:51	55	14:03 (27)				20:12			21:24	22:27	22:49
31	08:48		10:44 (37)				07:10				04:41	
	16:54	62	14:05 (27)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		228			2114			237				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,62			0,63			0,73				
Total reduction		0,25			0,25			0,29				
Total, real		56			530			69				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December
1	04:32		05:24		06:33		07:39			07:51		10:30 (32)	09:00
	22:49		22:01		20:40		19:13			16:49	107	15:21 (26)	15:51
2	04:33		05:26		06:35		07:42		09:32 (19)	07:54		10:32 (32)	09:02
	22:48		21:58		20:37		19:10	7	09:39 (19)	16:46	110	15:25 (26)	15:50
3	04:34		05:28		06:37		07:44		09:28 (19)	07:56		10:33 (32)	09:03
	22:47		21:56		20:34		19:07	13	09:41 (19)	16:44	97	14:53 (28)	15:49
4	04:35		05:31		06:40		07:46		09:26 (19)	07:59		10:33 (32)	09:05
	22:47		21:54		20:31		19:04	16	09:42 (19)	16:41	89	14:46 (28)	15:48
5	04:36		05:33		06:42		07:48		09:25 (19)	08:01		10:35 (32)	09:07
	22:46		21:51		20:28		19:02	19	09:44 (19)	16:39	81	14:41 (28)	15:47
6	04:37		05:35		06:44		07:51		09:24 (19)	08:03		10:20 (37)	09:09
	22:45		21:49		20:25		18:59	20	09:44 (19)	16:37	77	14:35 (28)	15:46
7	04:39		05:37		06:46		07:53		09:23 (19)	08:06		10:16 (37)	09:10
	22:44		21:47		20:22		18:56	21	09:44 (19)	16:34	77	14:32 (28)	15:45
8	04:40		05:39		06:49		07:55		09:23 (19)	08:08		10:15 (37)	09:12
	22:43		21:44		20:20		18:53	22	09:45 (19)	16:32	71	13:39 (27)	15:45
9	04:41		05:42		06:51		07:57		09:22 (19)	08:11		10:15 (37)	09:13
	22:42		21:42		20:17		18:50	22	09:44 (19)	16:30	72	13:39 (27)	15:44
10	04:43		05:44		06:53		08:00		09:23 (19)	08:13		10:14 (37)	09:15
	22:40		21:39		20:14		18:47	21	09:44 (19)	16:28	71	13:38 (27)	15:44
11	04:44		05:46		06:55		08:02		09:23 (19)	08:15		10:15 (37)	09:16
	22:39		21:37		20:11		18:45	20	09:43 (19)	16:25	61	13:36 (27)	15:43
12	04:46		05:48		06:57		08:04		09:23 (19)	08:18		10:24 (37)	09:18
	22:38		21:34		20:08		18:42	36	12:00 (32)	16:23	52	13:35 (27)	15:43
13	04:47		05:51		07:00		08:07		09:24 (19)	08:20		10:28 (37)	09:19
	22:37		21:31		20:05		18:39	40	12:04 (32)	16:21	47	13:33 (27)	15:42
14	04:49		05:53		07:02		08:09		09:25 (19)	08:22		10:32 (37)	09:20
	22:35		21:29		20:02		18:36	42	12:06 (32)	16:19	39	13:30 (27)	15:42
15	04:51		05:55		07:04		08:11		09:28 (19)	08:25		11:38 (24)	09:21
	22:34		21:26		19:59		18:33	40	12:08 (32)	16:17	19	13:26 (27)	15:42
16	04:52		05:57		07:06		08:13		11:35 (32)	08:27		11:38 (24)	09:22
	22:32		21:24		19:56		18:31	34	12:09 (32)	16:15	4	11:42 (24)	15:42
17	04:54		06:00		07:08		08:16		11:34 (32)	08:29			09:23
	22:30		21:21		19:54		18:28	36	12:10 (32)	16:13			15:42
18	04:56		06:02		07:11		08:18		11:32 (32)	08:32			09:24
	22:29		21:18		19:51		18:25	55	14:33 (27)	16:11			15:42
19	04:58		06:04		07:13		08:20		11:32 (32)	08:34			09:25
	22:27		21:16		19:48		18:22	62	14:36 (27)	16:09			15:42
20	05:00		06:06		07:15		08:23		11:31 (32)	08:36			09:26
	22:25		21:13		19:45		18:20	67	14:37 (27)	16:08			15:43
21	05:01		06:09		07:17		08:25		11:30 (32)	08:39			09:26
	22:24		21:10		19:42		18:17	72	14:39 (27)	16:06			15:43
22	05:03		06:11		07:19		08:27		11:29 (32)	08:41			09:27
	22:22		21:08		19:39		18:14	75	14:40 (27)	16:04			15:43
23	05:05		06:13		07:22		08:30		11:29 (32)	08:43			09:27
	22:20		21:05		19:36		18:12	78	14:41 (27)	16:02			15:44
24	05:07		06:15		07:24		08:32		11:29 (32)	08:45			09:28
	22:18		21:02		19:33		18:09	79	14:41 (27)	16:01			15:45
25	05:09		06:17		07:26		07:35		10:29 (32)	08:47			09:28
	22:16		20:59		19:30		17:07	81	13:42 (27)	15:59			15:45
26	05:11		06:20		07:28		07:37		10:29 (32)	08:50			09:28
	22:14		20:57		19:27		17:04	82	13:43 (27)	15:58			15:46
27	05:13		06:22		07:30		07:39		10:29 (32)	08:52			09:28
	22:12		20:54		19:25		17:01	81	13:42 (27)	15:56			15:47
28	05:16		06:24		07:33		07:42		10:29 (32)	08:54			09:28
	22:10		20:51		19:22		16:59	87	14:45 (28)	15:55			15:48
29	05:18		06:26		07:35		07:44		10:29 (32)	08:56			09:28
	22:07		20:48		19:19		16:56	95	14:48 (28)	15:54			15:49
30	05:20		06:29		07:37		07:47		10:30 (32)	08:58			09:28
	22:05		20:45		19:16		16:54	99	14:51 (28)	15:52			15:50
31	05:22		06:31				07:49		10:31 (32)				09:28
	22:03		20:42				16:51	99	14:52 (28)				15:51
Potential sun hours	546		478		386		319			236			199
Total, worst case								1521			1074		
Sun reduction								0,50			0,50		
Oper. time red.								0,80			0,80		
Wind dir. red.								0,65			0,62		
Total reduction								0,26			0,25		
Total, real								396			264		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:46		11:39 (32)	07:35	09:25 (19)	07:07	05:44	04:40
	15:53		16:56	88	15:12 (28)	18:05	9 09:34 (19)	20:17	21:26	22:31
2	09:27		08:43		11:39 (32)	07:33		07:04	05:41	04:38
	15:54		16:58	88	15:13 (28)	18:07		20:19	21:28	22:32
3	09:27		08:41		11:40 (32)	07:30		07:01	05:39	04:37
	15:55		17:01	85	15:12 (28)	18:09		20:21	21:31	22:34
4	09:27		08:39		11:39 (32)	07:27		06:58	05:36	04:36
	15:57		17:03	83	15:11 (28)	18:12		20:24	21:33	22:35
5	09:26	12:20 (24)	08:37		11:39 (32)	07:24		06:55	05:34	04:35
	15:58	1 12:21 (24)	17:06	80	15:09 (28)	18:14		20:26	21:35	22:37
6	09:25	12:19 (24)	08:34		11:40 (32)	07:21		06:52	05:31	04:34
	16:00	5 12:24 (24)	17:08	74	15:08 (28)	18:17		20:28	21:37	22:38
7	09:24	12:17 (24)	08:32		11:40 (32)	07:19		06:50	05:29	04:33
	16:02	11 12:28 (24)	17:11	62	14:11 (27)	18:19		20:30	21:40	22:39
8	09:24	12:17 (24)	08:30		11:41 (32)	07:16		06:47	05:26	04:32
	16:03	13 12:30 (24)	17:13	61	14:11 (27)	18:21		20:33	21:42	22:40
9	09:23	12:18 (24)	08:27		11:42 (32)	07:13		06:44	05:24	04:31
	16:05	16 12:34 (24)	17:16	57	14:10 (27)	18:24		20:35	21:44	22:42
10	09:22	11:06 (37)	08:25		11:42 (32)	07:10		06:41	05:22	04:30
	16:07	25 12:39 (24)	17:18	54	14:09 (27)	18:26		20:37	21:46	22:43
11	09:21	11:02 (37)	08:23		11:44 (32)	07:07		06:38	05:19	04:29
	16:09	31 12:41 (24)	17:21	48	14:08 (27)	18:28		20:40	21:49	22:44
12	09:20	11:01 (37)	08:20		11:45 (32)	07:04		06:35	05:17	04:29
	16:11	40 12:41 (24)	17:23	42	14:06 (27)	18:31		20:42	21:51	22:45
13	09:18	11:02 (37)	08:18		11:46 (32)	07:02		06:32	05:15	04:28
	16:13	42 12:42 (24)	17:26	32	14:02 (27)	18:33		20:44	21:53	22:46
14	09:17	11:02 (37)	08:15		11:49 (32)	06:59		06:30	05:13	04:28
	16:15	42 12:42 (24)	17:28	18	12:07 (32)	18:35		20:47	21:55	22:47
15	09:16	11:02 (37)	08:13		11:52 (32)	06:56		06:27	05:10	04:27
	16:17	43 12:42 (24)	17:31	12	12:04 (32)	18:38		20:49	21:58	22:47
16	09:15	11:02 (37)	08:10		09:29 (19)	06:53		06:24	05:08	04:27
	16:19	43 12:42 (24)	17:33	5	09:34 (19)	18:40		20:51	22:00	22:48
17	09:13	11:02 (37)	08:07		09:25 (19)	06:50		06:21	05:06	04:27
	16:21	45 12:42 (24)	17:36	12	09:37 (19)	18:42		20:53	22:02	22:49
18	09:12	11:03 (37)	08:05		09:24 (19)	06:47		06:19	05:04	04:27
	16:23	57 13:55 (27)	17:38	16	09:40 (19)	18:45		20:56	22:04	22:49
19	09:10	11:03 (37)	08:02		09:23 (19)	06:44		06:16	05:02	04:27
	16:25	70 13:59 (27)	17:40	17	09:40 (19)	18:47		20:58	22:06	22:50
20	09:08	11:04 (37)	08:00		09:22 (19)	06:41		06:13	05:00	04:27
	16:28	75 14:01 (27)	17:43	19	09:41 (19)	18:49		21:00	22:08	22:50
21	09:07	11:04 (37)	07:57		09:21 (19)	06:39		06:10	04:58	04:27
	16:30	80 14:03 (27)	17:45	20	09:41 (19)	18:51		21:03	22:10	22:50
22	09:05	11:05 (37)	07:54		09:20 (19)	06:36		06:08	04:56	04:27
	16:32	82 14:05 (27)	17:48	21	09:41 (19)	18:54		21:05	22:12	22:50
23	09:03	11:05 (37)	07:52		09:21 (19)	06:33		06:05	04:54	04:27
	16:34	83 14:05 (27)	17:50	21	09:42 (19)	18:56		21:07	22:14	22:51
24	09:02	11:06 (37)	07:49		09:21 (19)	06:30		06:02	04:52	04:27
	16:37	84 14:07 (27)	17:53	20	09:41 (19)	18:58		21:10	22:16	22:51
25	09:00	11:07 (37)	07:46		09:21 (19)	06:27		05:59	04:51	04:28
	16:39	84 14:52 (28)	17:55	20	09:41 (19)	19:01		21:12	22:18	22:51
26	08:58	11:09 (37)	07:44		09:21 (19)	06:24		05:57	04:49	04:28
	16:41	79 14:57 (28)	17:57	19	09:40 (19)	19:03		21:14	22:20	22:50
27	08:56	11:10 (37)	07:41		09:22 (19)	06:21		05:54	04:47	04:29
	16:44	86 15:12 (28)	18:00	16	09:38 (19)	19:05		21:17	22:22	22:50
28	08:54	11:13 (37)	07:38		09:23 (19)	06:18		05:52	04:46	04:30
	16:46	90 15:13 (28)	18:02	14	09:37 (19)	19:08		21:19	22:24	22:50
29	08:52	11:40 (32)				07:15		05:49	04:44	04:30
	16:49	88 15:14 (28)				20:10		21:21	22:25	22:50
30	08:50	11:39 (32)				07:12		05:46	04:42	04:31
	16:51	88 15:13 (28)				20:12		21:24	22:27	22:49
31	08:48	11:39 (32)				07:10			04:41	
	16:54	88 15:13 (28)				20:14			22:29	
Potential sun hours	221		260			365		432	521	547
Total, worst case		1491		1104		9				
Sun reduction		0,50		0,50		0,50				
Oper. time red.		0,80		0,80		0,80				
Wind dir. red.		0,62		0,63		0,73				
Total reduction		0,25		0,25		0,29				
Total, real		371		276		3				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:12 (32)	09:00		10:44 (37)
	22:49	22:01	20:40	19:13			16:49	53	13:38 (27)	15:51	31	12:23 (24)
2	04:33	05:26	06:35	07:42			07:54		11:11 (32)	09:02		10:48 (37)
	22:48	21:58	20:37	19:10			16:46	58	13:40 (27)	15:50	27	12:23 (24)
3	04:34	05:28	06:37	07:44			07:56		11:11 (32)	09:03		12:01 (24)
	22:47	21:56	20:34	19:07			16:44	60	13:41 (27)	15:49	17	12:18 (24)
4	04:35	05:31	06:40	07:46			07:59		11:10 (32)	09:05		12:01 (24)
	22:47	21:54	20:31	19:04			16:41	63	13:41 (27)	15:48	13	12:14 (24)
5	04:36	05:33	06:42	07:48			08:01		11:10 (32)	09:07		12:02 (24)
	22:46	21:51	20:28	19:02			16:39	75	14:38 (28)	15:47	11	12:13 (24)
6	04:37	05:35	06:44	07:51			08:03		11:10 (32)	09:09		12:05 (24)
	22:45	21:49	20:25	18:59			16:37	79	14:40 (28)	15:46	5	12:10 (24)
7	04:39	05:37	06:46	07:53			08:06		11:09 (32)	09:10		12:07 (24)
	22:44	21:47	20:22	18:56			16:34	84	14:41 (28)	15:45	2	12:09 (24)
8	04:40	05:39	06:49	07:55			08:08		11:09 (32)	09:12		
	22:43	21:44	20:20	18:53			16:32	87	14:42 (28)	15:45		
9	04:41	05:42	06:51	07:57			08:11		11:10 (32)	09:13		
	22:42	21:42	20:17	18:50			16:30	87	14:43 (28)	15:44		
10	04:43	05:44	06:53	08:00			08:13		11:10 (32)	09:15		
	22:41	21:39	20:14	18:47			16:28	88	14:44 (28)	15:43		
11	04:44	05:46	06:55	08:02			08:15		11:10 (32)	09:16		
	22:39	21:37	20:11	18:45			16:25	88	14:44 (28)	15:43		
12	04:46	05:48	06:57	08:04		10:02 (19)	08:18		11:11 (32)	09:18		
	22:38	21:34	20:08	18:42	2	10:04 (19)	16:23	88	14:45 (28)	15:43		
13	04:47	05:51	07:00	08:07		09:58 (19)	08:20		11:12 (32)	09:19		
	22:37	21:32	20:05	18:39	11	10:09 (19)	16:21	86	14:45 (28)	15:42		
14	04:49	05:53	07:02	08:09		09:55 (19)	08:22		10:45 (37)	09:20		
	22:35	21:29	20:02	18:36	15	10:10 (19)	16:19	89	14:45 (28)	15:42		
15	04:51	05:55	07:04	08:11		09:54 (19)	08:25		10:42 (37)	09:21		
	22:34	21:26	19:59	18:33	18	10:12 (19)	16:17	87	14:45 (28)	15:42		
16	04:52	05:57	07:06	08:13		09:53 (19)	08:27		10:41 (37)	09:22		
	22:32	21:24	19:56	18:31	19	10:12 (19)	16:15	81	14:30 (28)	15:42		
17	04:54	06:00	07:08	08:16		09:53 (19)	08:30		10:41 (37)	09:23		
	22:30	21:21	19:54	18:28	20	10:13 (19)	16:13	83	14:25 (28)	15:42		
18	04:56	06:02	07:11	08:18		09:52 (19)	08:32		10:40 (37)	09:24		
	22:29	21:18	19:51	18:25	21	10:13 (19)	16:11	84	13:41 (27)	15:42		
19	04:58	06:04	07:13	08:20		09:52 (19)	08:34		10:40 (37)	09:25		
	22:27	21:16	19:48	18:22	21	10:13 (19)	16:09	83	13:40 (27)	15:42		
20	05:00	06:06	07:15	08:23		09:52 (19)	08:36		10:39 (37)	09:26		
	22:25	21:13	19:45	18:20	20	10:12 (19)	16:08	82	13:39 (27)	15:43		
21	05:01	06:08	07:17	08:25		09:52 (19)	08:39		10:39 (37)	09:26		
	22:24	21:10	19:42	18:17	20	10:12 (19)	16:06	80	13:38 (27)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (19)	08:41		10:40 (37)	09:27		
	22:22	21:08	19:39	18:14	19	10:11 (19)	16:04	75	13:37 (27)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (19)	08:43		10:39 (37)	09:27		
	22:20	21:05	19:36	18:12	17	10:10 (19)	16:02	69	13:35 (27)	15:44		
24	05:07	06:15	07:24	08:32		09:54 (19)	08:45		10:40 (37)	09:28		
	22:18	21:02	19:33	18:09	14	10:08 (19)	16:01	58	13:32 (27)	15:44		
25	05:09	06:17	07:26	07:35		08:56 (19)	08:47		10:40 (37)	09:28		
	22:16	20:59	19:30	17:06	11	09:07 (19)	15:59	45	12:20 (24)	15:45		
26	05:11	06:20	07:28	07:37		09:01 (19)	08:50		10:41 (37)	09:28		
	22:14	20:57	19:27	17:04	2	09:03 (19)	15:58	43	12:21 (24)	15:46		
27	05:13	06:22	07:30	07:39		11:20 (32)	08:52		10:41 (37)	09:28		
	22:12	20:54	19:25	17:01	14	11:34 (32)	15:56	43	12:21 (24)	15:47		
28	05:16	06:24	07:33	07:42		11:18 (32)	08:54		10:42 (37)	09:28		
	22:10	20:51	19:22	16:59	19	11:37 (32)	15:55	42	12:22 (24)	15:48		
29	05:18	06:26	07:35	07:44		11:15 (32)	08:56		10:42 (37)	09:28		
	22:07	20:48	19:19	16:56	34	13:32 (27)	15:54	42	12:22 (24)	15:49		
30	05:20	06:29	07:37	07:47		11:14 (32)	08:58		10:42 (37)	09:28		
	22:05	20:45	19:16	16:54	42	13:35 (27)	15:52	40	12:22 (24)	15:50		
31	05:22	06:31		07:49		11:13 (32)				09:28		
	22:03	20:42		16:51	50	13:38 (27)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					389			2122			106	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,69			0,61			0,64	
Total reduction					0,27			0,25			0,25	
Total, real					107			520			27	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:12 (37)	08:46		11:58 (32)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (37)	16:56	88	15:21 (28)	18:05	20:17	21:26	22:30
2	09:27		11:11 (37)	08:43		11:59 (32)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (37)	16:58	85	15:21 (28)	18:07	20:19	21:28	22:32
3	09:27		11:11 (37)	08:41		12:00 (32)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (24)	17:01	84	15:21 (28)	18:09	20:21	21:31	22:34
4	09:27		11:11 (37)	08:39		11:59 (32)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (24)	17:03	82	15:20 (28)	18:12	20:24	21:33	22:35
5	09:26		11:11 (37)	08:37		11:59 (32)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (24)	17:06	81	15:19 (28)	18:14	20:26	21:35	22:37
6	09:25		11:11 (37)	08:34		12:00 (32)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (24)	17:08	75	15:18 (28)	18:17	20:28	21:37	22:38
7	09:24		11:11 (37)	08:32		12:01 (32)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (24)	17:11	64	15:14 (28)	18:19	20:30	21:40	22:39
8	09:24		11:11 (37)	08:30		12:02 (32)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (24)	17:13	57	14:25 (27)	18:21	20:33	21:42	22:40
9	09:23		11:12 (37)	08:27		12:03 (32)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (24)	17:16	53	14:24 (27)	18:24	20:35	21:44	22:42
10	09:22		11:11 (37)	08:25		12:04 (32)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (24)	17:18	48	14:23 (27)	18:26	20:37	21:46	22:43
11	09:21		11:12 (37)	08:23		12:06 (32)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (24)	17:21	43	14:22 (27)	18:28	20:40	21:49	22:44
12	09:20		11:12 (37)	08:20		12:07 (32)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (24)	17:23	35	14:20 (27)	18:31	20:42	21:51	22:45
13	09:18		11:12 (37)	08:18		12:10 (32)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (24)	17:26	22	14:16 (27)	18:33	20:44	21:53	22:46
14	09:17		11:12 (37)	08:15		09:38 (19)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (24)	17:28	10	12:19 (32)	18:35	20:47	21:55	22:47
15	09:16		11:12 (37)	08:13		09:35 (19)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (24)	17:31	12	09:47 (19)	18:38	20:49	21:58	22:47
16	09:15		11:12 (37)	08:10		09:33 (19)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (24)	17:33	16	09:49 (19)	18:40	20:51	22:00	22:48
17	09:13		11:13 (37)	08:07		09:32 (19)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (24)	17:36	18	09:50 (19)	18:42	20:53	22:02	22:49
18	09:12		11:14 (37)	08:05		09:31 (19)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (24)	17:38	20	09:51 (19)	18:45	20:56	22:04	22:49
19	09:10		11:15 (37)	08:02		09:31 (19)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (24)	17:40	20	09:51 (19)	18:47	20:58	22:06	22:50
20	09:08		11:15 (37)	08:00		09:30 (19)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (27)	17:43	21	09:51 (19)	18:49	21:00	22:08	22:50
21	09:07		11:16 (37)	07:57		09:30 (19)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (27)	17:45	21	09:51 (19)	18:51	21:03	22:10	22:50
22	09:05		11:16 (37)	07:54		09:29 (19)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (27)	17:48	22	09:51 (19)	18:54	21:05	22:12	22:50
23	09:03		11:17 (37)	07:52		09:30 (19)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (27)	17:50	21	09:51 (19)	18:56	21:07	22:14	22:51
24	09:02		11:19 (37)	07:49		09:31 (19)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (27)	17:53	19	09:50 (19)	18:58	21:10	22:16	22:51
25	09:00		11:20 (37)	07:46		09:31 (19)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (27)	17:55	18	09:49 (19)	19:01	21:12	22:18	22:51
26	08:58		11:23 (37)	07:44		09:32 (19)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (28)	17:57	15	09:47 (19)	19:03	21:14	22:20	22:50
27	08:56		11:58 (32)	07:41		09:34 (19)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (28)	18:00	11	09:45 (19)	19:05	21:17	22:22	22:50
28	08:54		11:58 (32)	07:38		09:38 (19)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (28)	18:02	2	09:40 (19)	19:07	21:19	22:24	22:50
29	08:52		11:59 (32)				07:15	05:49	04:44	04:30
	16:49	83	15:18 (28)				20:10	21:21	22:25	22:50
30	08:50		11:58 (32)				07:12	05:46	04:42	04:31
	16:51	86	15:21 (28)				20:12	21:24	22:27	22:49
31	08:48		11:58 (32)				07:10		04:41	
	16:54	88	15:22 (28)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1646			1063					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,63			0,63					
Total reduction		0,25			0,25					
Total, real		411			265					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:33 (32)	09:00		10:54 (37)
	22:49		22:01		20:40		19:13			16:49	50	13:53 (27)	15:51	43	12:35 (24)
2	04:33		05:26		06:35		07:42			07:54		11:32 (32)	09:02		10:54 (37)
	22:48		21:58		20:37		19:10			16:46	54	13:54 (27)	15:50	42	12:35 (24)
3	04:34		05:28		06:37		07:44			07:56		11:32 (32)	09:03		10:55 (37)
	22:47		21:56		20:34		19:07			16:44	57	13:55 (27)	15:49	40	12:35 (24)
4	04:35		05:31		06:40		07:46			07:59		11:30 (32)	09:05		10:56 (37)
	22:47		21:54		20:31		19:04			16:41	68	14:45 (28)	15:48	39	12:35 (24)
5	04:36		05:33		06:42		07:48			08:01		11:30 (32)	09:07		10:56 (37)
	22:46		21:51		20:28		19:02			16:39	76	14:48 (28)	15:47	39	12:36 (24)
6	04:37		05:35		06:44		07:51			08:03		11:30 (32)	09:09		10:57 (37)
	22:45		21:49		20:25		18:59			16:37	78	14:49 (28)	15:46	30	12:36 (24)
7	04:39		05:37		06:46		07:53			08:06		11:29 (32)	09:10		10:58 (37)
	22:44		21:47		20:22		18:56			16:34	83	14:50 (28)	15:45	29	12:36 (24)
8	04:40		05:39		06:49		07:55			08:08		11:29 (32)	09:12		10:59 (37)
	22:43		21:44		20:20		18:53			16:32	86	14:51 (28)	15:45	15	12:33 (24)
9	04:41		05:42		06:51		07:57			08:11		11:29 (32)	09:13		11:00 (37)
	22:42		21:42		20:17		18:50			16:30	87	14:52 (28)	15:44	12	12:34 (24)
10	04:43		05:44		06:53		08:00			08:13		11:30 (32)	09:15		11:00 (37)
	22:41		21:39		20:14		18:47			16:28	88	14:53 (28)	15:43	4	12:31 (24)
11	04:44		05:46		06:55		08:02			08:15		11:29 (32)	09:16		11:02 (37)
	22:39		21:37		20:11		18:45			16:25	87	14:52 (28)	15:43	2	11:04 (37)
12	04:46		05:48		06:57		08:04			08:18		11:30 (32)	09:18		11:02 (37)
	22:38		21:34		20:08		18:42			16:23	87	14:53 (28)	15:43	2	11:04 (37)
13	04:47		05:51		07:00		08:07			08:20		11:30 (32)	09:19		
	22:37		21:31		20:05		18:39			16:21	83	14:50 (28)	15:42		
14	04:49		05:53		07:02		08:09		10:08 (19)	08:22		11:30 (32)	09:20		
	22:35		21:29		20:02		18:36	8	10:16 (19)	16:19	74	14:42 (28)	15:42		
15	04:51		05:55		07:04		08:11		10:06 (19)	08:25		11:31 (32)	09:21		
	22:34		21:26		19:59		18:33	13	10:19 (19)	16:17	68	14:38 (28)	15:42		
16	04:52		05:57		07:06		08:13		10:04 (19)	08:27		10:56 (37)	09:22		
	22:32		21:24		19:56		18:31	16	10:20 (19)	16:15	69	14:36 (28)	15:42		
17	04:54		06:00		07:08		08:16		10:03 (19)	08:30		10:54 (37)	09:23		
	22:30		21:21		19:54		18:28	18	10:21 (19)	16:13	73	13:55 (27)	15:42		
18	04:56		06:02		07:11		08:18		10:02 (19)	08:32		10:52 (37)	09:24		
	22:29		21:18		19:51		18:25	20	10:22 (19)	16:11	78	13:54 (27)	15:42		
19	04:58		06:04		07:13		08:20		10:01 (19)	08:34		10:52 (37)	09:25		
	22:27		21:16		19:48		18:22	21	10:22 (19)	16:09	81	13:54 (27)	15:42		
20	05:00		06:06		07:15		08:23		10:01 (19)	08:36		10:51 (37)	09:26		
	22:25		21:13		19:45		18:20	21	10:22 (19)	16:08	80	13:52 (27)	15:43		
21	05:01		06:08		07:17		08:25		10:01 (19)	08:39		10:51 (37)	09:26		
	22:24		21:10		19:42		18:17	21	10:22 (19)	16:06	78	13:51 (27)	15:43		
22	05:03		06:11		07:19		08:27		10:00 (19)	08:41		10:51 (37)	09:27		
	22:22		21:08		19:39		18:14	21	10:21 (19)	16:04	75	13:50 (27)	15:43		
23	05:05		06:13		07:22		08:30		10:01 (19)	08:43		10:51 (37)	09:27		
	22:20		21:05		19:36		18:12	20	10:21 (19)	16:02	64	12:31 (24)	15:44		
24	05:07		06:15		07:24		08:32		10:01 (19)	08:45		10:51 (37)	09:28		
	22:18		21:02		19:33		18:09	19	10:20 (19)	16:01	63	12:32 (24)	15:44		
25	05:09		06:17		07:26		07:35		09:02 (19)	08:47		10:51 (37)	09:28		
	22:16		20:59		19:30		17:06	18	09:20 (19)	15:59	60	12:32 (24)	15:45		
26	05:11		06:20		07:28		07:37		09:03 (19)	08:50		10:52 (37)	09:28		
	22:14		20:57		19:27		17:04	15	09:18 (19)	15:58	56	12:33 (24)	15:46		
27	05:13		06:22		07:30		07:39		09:05 (19)	08:52		10:51 (37)	09:28		
	22:12		20:54		19:25		17:01	11	09:16 (19)	15:56	53	12:33 (24)	15:47		
28	05:16		06:24		07:33		07:42		09:08 (19)	08:54		10:52 (37)	09:28		
	22:10		20:51		19:22		16:59	13	11:51 (32)	15:55	44	12:34 (24)	15:48		
29	05:18		06:26		07:35		07:44		11:38 (32)	08:56		10:53 (37)	09:28		
	22:07		20:48		19:19		16:56	26	13:46 (27)	15:54	43	12:34 (24)	15:49		
30	05:20		06:29		07:37		07:47		11:36 (32)	08:58		10:53 (37)	09:28		
	22:05		20:45		19:16		16:54	37	13:50 (27)	15:52	43	12:34 (24)	15:50		
31	05:22		06:31				07:49		11:35 (32)				09:28		11:11 (37)
	22:03		20:42				16:51	44	13:52 (27)				15:51	1	11:12 (37)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								362			2086			298	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,69			0,61			0,65	
Total reduction								0,28			0,24			0,26	
Total, real								100			508			77	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:23 (37)	08:46	12:23 (32)	07:35	07:07	05:44	04:40
	15:53	17	11:40 (37)	16:56	82	15:30 (28)	18:05	20:17	21:26	22:30
2	09:27		11:23 (37)	08:43	12:24 (32)	07:33	07:04	05:41	04:38
	15:54	17	11:40 (37)	16:58	86	15:34 (28)	18:07	20:19	21:28	22:32
3	09:27		11:23 (37)	08:41	12:25 (32)	07:30	07:01	05:39	04:37
	15:55	18	11:41 (37)	17:01	84	15:34 (28)	18:09	20:21	21:31	22:34
4	09:26		11:23 (37)	08:39	12:25 (32)	07:27	06:58	05:36	04:36
	15:57	23	12:52 (24)	17:03	85	15:34 (28)	18:12	20:24	21:33	22:35
5	09:26		11:23 (37)	08:37	12:25 (32)	07:24	06:55	05:34	04:35
	15:58	25	12:53 (24)	17:06	82	15:33 (28)	18:14	20:26	21:35	22:37
6	09:25		11:24 (37)	08:34	12:26 (32)	07:21	06:52	05:31	04:34
	16:00	31	13:06 (24)	17:08	79	15:33 (28)	18:17	20:28	21:37	22:38
7	09:24		11:24 (37)	08:32	12:26 (32)	07:19	06:50	05:29	04:33
	16:02	34	13:07 (24)	17:11	74	15:31 (28)	18:19	20:30	21:40	22:39
8	09:24		11:24 (37)	08:30	12:28 (32)	07:16	06:47	05:26	04:32
	16:03	41	13:07 (24)	17:13	68	15:30 (28)	18:21	20:33	21:42	22:40
9	09:23		11:24 (37)	08:27	12:28 (32)	07:13	06:44	05:24	04:31
	16:05	42	13:07 (24)	17:16	60	15:26 (28)	18:24	20:35	21:44	22:42
10	09:22		11:25 (37)	08:25	12:29 (32)	07:10	06:41	05:22	04:30
	16:07	42	13:08 (24)	17:18	51	14:44 (27)	18:26	20:37	21:46	22:43
11	09:21		11:25 (37)	08:23	12:32 (32)	07:07	06:38	05:19	04:29
	16:09	43	13:09 (24)	17:21	45	14:43 (27)	18:28	20:40	21:49	22:44
12	09:20		11:25 (37)	08:20	09:49 (19)	07:04	06:35	05:17	04:29
	16:11	44	13:09 (24)	17:23	45	14:42 (27)	18:31	20:42	21:51	22:45
13	09:18		11:26 (37)	08:18	09:45 (19)	07:01	06:32	05:15	04:28
	16:13	44	13:10 (24)	17:26	43	14:40 (27)	18:33	20:44	21:53	22:46
14	09:17		11:26 (37)	08:15	09:44 (19)	06:59	06:30	05:13	04:28
	16:15	54	13:10 (24)	17:28	27	14:38 (27)	18:35	20:47	21:55	22:47
15	09:16		11:26 (37)	08:13	09:43 (19)	06:56	06:27	05:10	04:27
	16:17	57	13:10 (24)	17:31	18	10:01 (19)	18:38	20:49	21:58	22:47
16	09:15		11:27 (37)	08:10	09:42 (19)	06:53	06:24	05:08	04:27
	16:19	60	13:10 (24)	17:33	20	10:02 (19)	18:40	20:51	22:00	22:48
17	09:13		11:27 (37)	08:07	09:41 (19)	06:50	06:21	05:06	04:27
	16:21	63	13:10 (24)	17:35	21	10:02 (19)	18:42	20:53	22:02	22:49
18	09:12		11:28 (37)	08:05	09:41 (19)	06:47	06:19	05:04	04:27
	16:23	64	13:11 (24)	17:38	22	10:03 (19)	18:45	20:56	22:04	22:49
19	09:10		11:29 (37)	08:02	09:40 (19)	06:44	06:16	05:02	04:27
	16:25	63	13:11 (24)	17:40	23	10:03 (19)	18:47	20:58	22:06	22:50
20	09:08		11:30 (37)	08:00	09:40 (19)	06:41	06:13	05:00	04:27
	16:28	63	13:11 (24)	17:43	23	10:03 (19)	18:49	21:00	22:08	22:50
21	09:07		11:31 (37)	07:57	09:40 (19)	06:38	06:10	04:58	04:27
	16:30	62	13:11 (24)	17:45	22	10:02 (19)	18:51	21:03	22:10	22:50
22	09:05		11:31 (37)	07:54	09:40 (19)	06:36	06:08	04:56	04:27
	16:32	60	13:09 (24)	17:48	22	10:02 (19)	18:54	21:05	22:12	22:50
23	09:03		11:33 (37)	07:52	09:42 (19)	06:33	06:05	04:54	04:27
	16:34	66	14:33 (27)	17:50	20	10:02 (19)	18:56	21:07	22:14	22:50
24	09:02		11:35 (37)	07:49	09:42 (19)	06:30	06:02	04:52	04:27
	16:37	67	14:36 (27)	17:53	18	10:00 (19)	18:58	21:10	22:16	22:51
25	09:00		11:39 (37)	07:46	09:43 (19)	06:27	05:59	04:51	04:28
	16:39	58	14:38 (27)	17:55	16	09:59 (19)	19:01	21:12	22:18	22:50
26	08:58		12:24 (32)	07:44	09:45 (19)	06:24	05:57	04:49	04:28
	16:41	55	14:40 (27)	17:57	11	09:56 (19)	19:03	21:14	22:20	22:50
27	08:56		12:23 (32)	07:41	09:49 (19)	06:21	05:54	04:47	04:29
	16:44	57	14:40 (27)	18:00	2	09:51 (19)	19:05	21:17	22:22	22:50
28	08:54		12:23 (32)	07:38		06:18	05:52	04:46	04:30
	16:46	61	15:15 (28)	18:02		19:07	21:19	22:24	22:50
29	08:52		12:24 (32)			07:15	05:49	04:44	04:30
	16:49	67	15:19 (28)			20:10	21:21	22:25	22:50
30	08:50		12:23 (32)			07:12	05:46	04:42	04:31
	16:51	74	15:23 (28)			20:12	21:24	22:27	22:49
31	08:48		12:24 (32)			07:10		04:41	
	16:53	77	15:26 (28)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1549		1149					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,62		0,62					
Total reduction		0,25		0,25					
Total, real		386		284					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:59 (32)	09:00		11:07 (37)
	22:49	22:01	20:40	19:13			16:49	51	14:13 (27)	15:51	43	12:51 (24)
2	04:33	05:26	06:35	07:42			07:54		11:58 (32)	09:02		11:08 (37)
	22:48	21:58	20:37	19:10			16:46	61	14:57 (28)	15:50	42	12:51 (24)
3	04:34	05:28	06:37	07:44			07:56		11:57 (32)	09:03		11:08 (37)
	22:47	21:56	20:34	19:07			16:44	71	15:00 (28)	15:49	42	12:51 (24)
4	04:35	05:31	06:40	07:46			07:59		11:56 (32)	09:05		11:09 (37)
	22:47	21:54	20:31	19:04			16:41	76	15:01 (28)	15:48	41	12:52 (24)
5	04:36	05:33	06:42	07:48			08:01		11:55 (32)	09:07		11:09 (37)
	22:46	21:51	20:28	19:02			16:39	80	15:02 (28)	15:47	35	12:52 (24)
6	04:37	05:35	06:44	07:51			08:03		11:55 (32)	09:09		11:10 (37)
	22:45	21:49	20:25	18:59			16:37	82	15:03 (28)	15:46	31	12:52 (24)
7	04:38	05:37	06:46	07:53			08:06		11:54 (32)	09:10		11:11 (37)
	22:44	21:47	20:22	18:56			16:34	84	15:03 (28)	15:45	24	12:40 (24)
8	04:40	05:39	06:49	07:55			08:08		11:54 (32)	09:12		11:11 (37)
	22:43	21:44	20:20	18:53			16:32	87	15:04 (28)	15:45	24	12:41 (24)
9	04:41	05:42	06:51	07:57			08:11		11:55 (32)	09:13		11:12 (37)
	22:42	21:42	20:17	18:50			16:30	87	15:05 (28)	15:44	20	12:37 (24)
10	04:43	05:44	06:53	08:00			08:13		11:55 (32)	09:15		11:12 (37)
	22:40	21:39	20:14	18:47			16:28	81	15:01 (28)	15:43	17	11:29 (37)
11	04:44	05:46	06:55	08:02			08:15		11:54 (32)	09:16		11:14 (37)
	22:39	21:37	20:11	18:45			16:25	78	14:57 (28)	15:43	16	11:30 (37)
12	04:46	05:48	06:57	08:04			08:18		11:55 (32)	09:18		11:14 (37)
	22:38	21:34	20:08	18:42			16:23	74	14:55 (28)	15:43	15	11:29 (37)
13	04:47	05:51	07:00	08:07			08:20		11:56 (32)	09:19		11:15 (37)
	22:37	21:31	20:05	18:39			16:21	67	14:51 (28)	15:42	15	11:30 (37)
14	04:49	05:53	07:02	08:09			08:22		11:55 (32)	09:20		11:16 (37)
	22:35	21:29	20:02	18:36			16:19	62	14:47 (28)	15:42	14	11:30 (37)
15	04:51	05:55	07:04	08:11		10:19 (19)	08:25		11:56 (32)	09:21		11:16 (37)
	22:34	21:26	19:59	18:33	8	10:27 (19)	16:17	57	14:13 (27)	15:42	14	11:30 (37)
16	04:52	05:57	07:06	08:13		10:16 (19)	08:27		11:57 (32)	09:22		11:17 (37)
	22:32	21:24	19:56	18:31	13	10:29 (19)	16:15	54	14:12 (27)	15:42	12	11:29 (37)
17	04:54	06:00	07:08	08:16		10:15 (19)	08:29		11:12 (37)	09:23		11:17 (37)
	22:30	21:21	19:54	18:28	16	10:31 (19)	16:13	58	14:11 (27)	15:42	12	11:29 (37)
18	04:56	06:02	07:11	08:18		10:13 (19)	08:32		11:09 (37)	09:24		11:18 (37)
	22:29	21:18	19:51	18:25	19	10:32 (19)	16:11	67	14:10 (27)	15:42	11	11:29 (37)
19	04:58	06:04	07:13	08:20		10:12 (19)	08:34		11:08 (37)	09:25		11:19 (37)
	22:27	21:16	19:48	18:22	21	10:33 (19)	16:09	66	14:08 (27)	15:42	11	11:30 (37)
20	05:00	06:06	07:15	08:23		10:11 (19)	08:36		11:06 (37)	09:26		11:20 (37)
	22:25	21:13	19:45	18:20	22	10:33 (19)	16:08	60	12:44 (24)	15:43	10	11:30 (37)
21	05:01	06:08	07:17	08:25		10:11 (19)	08:39		11:06 (37)	09:26		11:20 (37)
	22:24	21:10	19:42	18:17	23	10:34 (19)	16:06	62	12:46 (24)	15:43	10	11:30 (37)
22	05:03	06:11	07:19	08:27		10:10 (19)	08:41		11:06 (37)	09:27		11:21 (37)
	22:22	21:08	19:39	18:14	23	10:33 (19)	16:04	63	12:47 (24)	15:43	10	11:31 (37)
23	05:05	06:13	07:22	08:30		10:11 (19)	08:43		11:05 (37)	09:27		11:21 (37)
	22:20	21:05	19:36	18:12	22	10:33 (19)	16:02	63	12:47 (24)	15:44	10	11:31 (37)
24	05:07	06:15	07:24	08:32		10:10 (19)	08:45		11:05 (37)	09:28		11:22 (37)
	22:18	21:02	19:33	18:09	22	10:32 (19)	16:01	64	12:48 (24)	15:44	10	11:32 (37)
25	05:09	06:17	07:26	07:35		09:11 (19)	08:47		11:05 (37)	09:28		11:22 (37)
	22:16	20:59	19:30	17:06	21	09:32 (19)	15:59	63	12:48 (24)	15:45	11	11:33 (37)
26	05:11	06:20	07:28	07:37		09:11 (19)	08:50		11:06 (37)	09:28		11:22 (37)
	22:14	20:56	19:27	17:04	20	09:31 (19)	15:58	59	12:49 (24)	15:46	12	11:34 (37)
27	05:13	06:22	07:30	07:39		09:12 (19)	08:52		11:05 (37)	09:28		11:23 (37)
	22:12	20:54	19:25	17:01	18	09:30 (19)	15:56	57	12:49 (24)	15:47	11	11:34 (37)
28	05:16	06:24	07:33	07:42		09:14 (19)	08:54		11:06 (37)	09:28		11:23 (37)
	22:10	20:51	19:22	16:59	28	14:08 (27)	15:55	53	12:50 (24)	15:48	13	11:36 (37)
29	05:18	06:26	07:35	07:44		09:15 (19)	08:56		11:06 (37)	09:28		11:22 (37)
	22:07	20:48	19:19	16:56	44	14:10 (27)	15:54	44	12:50 (24)	15:49	14	11:36 (37)
30	05:20	06:29	07:37	07:47		09:19 (19)	08:58		11:06 (37)	09:28		11:23 (37)
	22:05	20:45	19:16	16:54	44	14:11 (27)	15:52	43	12:50 (24)	15:50	15	11:38 (37)
31	05:22	06:31		07:49		12:01 (32)				09:28		11:23 (37)
	22:03	20:42		16:51	46	14:13 (27)				15:51	15	11:38 (37)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					410			1974			580	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,68			0,61			0,65	
Total reduction					0,27			0,24			0,26	
Total, real					112			477			151	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		08:46		11:27 (32)	07:35	07:07	05:44	04:40
	15:53		16:56	70	14:51 (28)	18:05	20:17	21:26	22:31
2	09:27	12:04 (24)	08:43		11:27 (32)	07:33	07:04	05:41	04:38
	15:54	1 12:05 (24)	16:58	60	13:50 (27)	18:07	20:19	21:28	22:32
3	09:27	12:04 (24)	08:41		11:28 (32)	07:30	07:01	05:39	04:37
	15:55	4 12:08 (24)	17:01	58	13:50 (27)	18:09	20:21	21:31	22:34
4	09:27	12:04 (24)	08:39		11:28 (32)	07:27	06:58	05:36	04:36
	15:57	7 12:11 (24)	17:03	54	13:48 (27)	18:12	20:24	21:33	22:35
5	09:26	12:04 (24)	08:37		11:28 (32)	07:24	06:55	05:34	04:35
	15:58	17 12:21 (24)	17:06	52	13:47 (27)	18:14	20:26	21:35	22:37
6	09:25	12:05 (24)	08:34		11:29 (32)	07:21	06:52	05:31	04:34
	16:00	16 12:21 (24)	17:08	49	13:47 (27)	18:17	20:28	21:37	22:38
7	09:24	12:05 (24)	08:32		11:29 (32)	07:19	06:50	05:29	04:33
	16:02	19 12:26 (24)	17:11	43	13:44 (27)	18:19	20:30	21:40	22:39
8	09:24	12:05 (24)	08:30		11:31 (32)	07:16	06:47	05:26	04:32
	16:03	22 12:27 (24)	17:13	35	13:42 (27)	18:21	20:33	21:42	22:40
9	09:23	12:06 (24)	08:27		11:32 (32)	07:13	06:44	05:24	04:31
	16:05	22 12:28 (24)	17:16	22	11:54 (32)	18:24	20:35	21:44	22:42
10	09:22	12:06 (24)	08:25		11:34 (32)	07:10	06:41	05:22	04:30
	16:07	22 12:28 (24)	17:18	18	11:52 (32)	18:26	20:37	21:46	22:43
11	09:21	12:07 (24)	08:23		11:37 (32)	07:07	06:38	05:19	04:29
	16:09	22 12:29 (24)	17:21	14	11:51 (32)	18:28	20:40	21:49	22:44
12	09:20	12:07 (24)	08:20		11:41 (32)	07:04	06:35	05:17	04:29
	16:11	28 13:33 (27)	17:23	4	11:45 (32)	18:31	20:42	21:51	22:45
13	09:18	12:08 (24)	08:18			07:02	06:32	05:15	04:28
	16:13	33 13:37 (27)	17:26			18:33	20:44	21:53	22:46
14	09:17	12:08 (24)	08:15		09:30 (19)	06:59	06:30	05:13	04:28
	16:15	36 13:38 (27)	17:28	5	09:35 (19)	18:35	20:47	21:55	22:47
15	09:16	11:34 (32)	08:13		09:27 (19)	06:56	06:27	05:10	04:27
	16:17	47 13:40 (27)	17:31	11	09:38 (19)	18:38	20:49	21:58	22:47
16	09:15	11:32 (32)	08:10		09:25 (19)	06:53	06:24	05:08	04:27
	16:19	54 13:41 (27)	17:33	14	09:39 (19)	18:40	20:51	22:00	22:48
17	09:13	11:31 (32)	08:07		09:23 (19)	06:50	06:21	05:06	04:27
	16:21	57 13:43 (27)	17:36	17	09:40 (19)	18:42	20:53	22:02	22:49
18	09:12	11:30 (32)	08:05		09:23 (19)	06:47	06:19	05:04	04:27
	16:23	72 14:53 (28)	17:38	18	09:41 (19)	18:45	20:56	22:04	22:49
19	09:10	11:29 (32)	08:02		09:22 (19)	06:44	06:16	05:02	04:27
	16:25	85 14:53 (28)	17:40	19	09:41 (19)	18:47	20:58	22:06	22:50
20	09:09	11:28 (32)	08:00		09:22 (19)	06:41	06:13	05:00	04:27
	16:28	88 14:54 (28)	17:43	19	09:41 (19)	18:49	21:00	22:08	22:50
21	09:07	11:28 (32)	07:57		09:22 (19)	06:39	06:10	04:58	04:27
	16:30	88 14:54 (28)	17:45	19	09:41 (19)	18:51	21:03	22:10	22:50
22	09:05	11:28 (32)	07:54		09:22 (19)	06:36	06:08	04:56	04:27
	16:32	89 14:55 (28)	17:48	19	09:41 (19)	18:54	21:05	22:12	22:50
23	09:03	11:26 (32)	07:52		09:23 (19)	06:33	06:05	04:54	04:27
	16:34	87 14:54 (28)	17:50	18	09:41 (19)	18:56	21:07	22:14	22:51
24	09:02	11:26 (32)	07:49		09:23 (19)	06:30	06:02	04:52	04:27
	16:37	81 14:55 (28)	17:53	17	09:40 (19)	18:58	21:10	22:16	22:51
25	09:00	11:26 (32)	07:46		09:24 (19)	06:27	05:59	04:51	04:28
	16:39	82 14:55 (28)	17:55	14	09:38 (19)	19:01	21:12	22:18	22:51
26	08:58	11:26 (32)	07:44		09:25 (19)	06:24	05:57	04:49	04:28
	16:41	83 14:55 (28)	17:57	11	09:36 (19)	19:03	21:14	22:20	22:50
27	08:56	11:25 (32)	07:41		09:30 (19)	06:21	05:54	04:47	04:29
	16:44	83 14:54 (28)	18:00	1	09:31 (19)	19:05	21:17	22:22	22:50
28	08:54	11:26 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	82 14:54 (28)	18:02			19:08	21:19	22:24	22:50
29	08:52	11:26 (32)				07:15	05:49	04:44	04:30
	16:49	80 14:54 (28)				20:10	21:21	22:25	22:50
30	08:50	11:26 (32)				07:13	05:46	04:42	04:31
	16:51	79 14:53 (28)				20:12	21:24	22:27	22:49
31	08:48	11:26 (32)				07:10		04:41	
	16:54	76 14:52 (28)				20:14		22:29	
Potential sun hours	221		260			365	432	521	547
Total, worst case		1562		681					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,61		0,66					
Total reduction		0,24		0,26					
Total, real		382		180					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:03 (32)	09:00		11:49 (24)
	22:49	22:01	20:40	19:13			16:49	19	11:22 (32)	15:51	22	12:11 (24)
2	04:33	05:26	06:35	07:42			07:54		11:01 (32)	09:02		11:49 (24)
	22:48	21:59	20:37	19:10			16:46	23	11:24 (32)	15:50	22	12:11 (24)
3	04:34	05:28	06:37	07:44			07:56		11:01 (32)	09:03		11:49 (24)
	22:47	21:56	20:34	19:07			16:44	36	13:12 (27)	15:49	22	12:11 (24)
4	04:35	05:31	06:40	07:46			07:59		10:59 (32)	09:05		11:50 (24)
	22:47	21:54	20:31	19:04			16:41	43	13:14 (27)	15:48	21	12:11 (24)
5	04:36	05:33	06:42	07:48			08:01		10:59 (32)	09:07		11:50 (24)
	22:46	21:51	20:28	19:02			16:39	48	13:16 (27)	15:47	21	12:11 (24)
6	04:37	05:35	06:44	07:51			08:03		10:58 (32)	09:09		11:51 (24)
	22:45	21:49	20:25	18:59			16:37	53	13:18 (27)	15:46	16	12:07 (24)
7	04:39	05:37	06:46	07:53			08:06		10:57 (32)	09:10		11:51 (24)
	22:44	21:47	20:23	18:56			16:34	55	13:18 (27)	15:45	17	12:08 (24)
8	04:40	05:39	06:49	07:55			08:08		10:57 (32)	09:12		11:52 (24)
	22:43	21:44	20:20	18:53			16:32	58	13:19 (27)	15:45	8	12:00 (24)
9	04:41	05:42	06:51	07:57			08:11		10:57 (32)	09:13		11:53 (24)
	22:42	21:42	20:17	18:50			16:30	63	14:18 (28)	15:44	4	11:57 (24)
10	04:43	05:44	06:53	08:00			08:13		10:58 (32)	09:15		11:53 (24)
	22:41	21:39	20:14	18:47			16:28	71	14:22 (28)	15:43	1	11:54 (24)
11	04:44	05:46	06:55	08:02			08:15		10:57 (32)	09:16		
	22:39	21:37	20:11	18:45			16:25	76	14:23 (28)	15:43		
12	04:46	05:48	06:57	08:04			08:18		10:57 (32)	09:18		
	22:38	21:34	20:08	18:42			16:23	80	14:25 (28)	15:43		
13	04:47	05:51	07:00	08:07			08:20		10:58 (32)	09:19		
	22:37	21:32	20:05	18:39			16:21	81	14:26 (28)	15:42		
14	04:49	05:53	07:02	08:09			08:22		10:58 (32)	09:20		
	22:35	21:29	20:02	18:36			16:19	82	14:26 (28)	15:42		
15	04:51	05:55	07:04	08:11		10:00 (19)	08:25		10:58 (32)	09:21		
	22:34	21:26	19:59	18:33	7	10:07 (19)	16:17	83	14:27 (28)	15:42		
16	04:52	05:57	07:06	08:13		09:57 (19)	08:27		10:59 (32)	09:22		
	22:32	21:24	19:56	18:31	12	10:09 (19)	16:15	83	14:28 (28)	15:42		
17	04:54	06:00	07:08	08:16		09:56 (19)	08:30		11:00 (32)	09:23		
	22:31	21:21	19:54	18:28	15	10:11 (19)	16:13	83	14:29 (28)	15:42		
18	04:56	06:02	07:11	08:18		09:54 (19)	08:32		11:00 (32)	09:24		
	22:29	21:18	19:51	18:25	17	10:11 (19)	16:11	81	14:29 (28)	15:42		
19	04:58	06:04	07:13	08:20		09:54 (19)	08:34		11:01 (32)	09:25		
	22:27	21:16	19:48	18:22	18	10:12 (19)	16:09	87	14:29 (28)	15:42		
20	05:00	06:06	07:15	08:23		09:53 (19)	08:36		11:02 (32)	09:26		
	22:25	21:13	19:45	18:20	19	10:12 (19)	16:08	88	14:29 (28)	15:43		
21	05:01	06:08	07:17	08:25		09:53 (19)	08:39		11:03 (32)	09:26		
	22:24	21:10	19:42	18:17	19	10:12 (19)	16:06	88	14:29 (28)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (19)	08:41		11:04 (32)	09:27		
	22:22	21:08	19:39	18:14	20	10:12 (19)	16:04	88	14:30 (28)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (19)	08:43		11:05 (32)	09:27		
	22:20	21:05	19:36	18:12	19	10:12 (19)	16:02	84	14:29 (28)	15:44		
24	05:07	06:15	07:24	08:32		09:53 (19)	08:45		11:07 (32)	09:28		
	22:18	21:02	19:33	18:09	17	10:10 (19)	16:01	72	14:30 (28)	15:44		
25	05:09	06:17	07:26	07:35		08:54 (19)	08:47		11:08 (32)	09:28		
	22:16	20:59	19:30	17:06	16	09:10 (19)	15:59	58	13:20 (27)	15:45		
26	05:11	06:20	07:28	07:37		08:55 (19)	08:50		11:11 (32)	09:28		
	22:14	20:57	19:27	17:04	14	09:09 (19)	15:58	53	13:20 (27)	15:46		
27	05:13	06:22	07:30	07:39		08:56 (19)	08:52		11:13 (32)	09:28		
	22:12	20:54	19:25	17:01	10	09:06 (19)	15:56	47	13:19 (27)	15:47		
28	05:16	06:24	07:33	07:42			08:54		11:48 (24)	09:28		
	22:10	20:51	19:22	16:59			15:55	35	13:18 (27)	15:48		
29	05:18	06:26	07:35	07:44			08:56		11:48 (24)	09:28		
	22:07	20:48	19:19	16:56			15:54	33	13:17 (27)	15:49		
30	05:20	06:29	07:37	07:47		11:09 (32)	08:58		11:48 (24)	09:28		
	22:05	20:45	19:16	16:54	7	11:16 (32)	15:52	30	13:15 (27)	15:50		
31	05:22	06:31		07:49		11:06 (32)				09:28		
	22:03	20:42		16:51	15	11:21 (32)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					225			1881			154	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,64	
Total reduction					0,29			0,25			0,25	
Total, real					65			461			39	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:18 (24)	08:46	11:53 (32)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (24)	16:56	49	14:04 (27)	18:05	20:17	21:26	22:31
2	09:27		12:18 (24)	08:43	11:54 (32)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (24)	16:58	44	14:02 (27)	18:07	20:19	21:28	22:32
3	09:27		11:54 (32)	08:41	11:56 (32)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (24)	17:01	39	14:01 (27)	18:09	20:21	21:31	22:34
4	09:27		11:52 (32)	08:39	11:57 (32)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (24)	17:03	32	13:59 (27)	18:12	20:24	21:33	22:35
5	09:26		11:51 (32)	08:37	11:59 (32)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (24)	17:06	19	13:55 (27)	18:14	20:26	21:35	22:37
6	09:25		11:50 (32)	08:34	12:04 (32)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (24)	17:08	5	12:09 (32)	18:17	20:28	21:37	22:38
7	09:24		11:50 (32)	08:32		07:19	06:50	05:29	04:33
	16:02	42	13:46 (27)	17:11		18:19	20:30	21:40	22:39
8	09:24		11:50 (32)	08:30		07:16	06:47	05:26	04:32
	16:03	48	13:49 (27)	17:13		18:21	20:33	21:42	22:40
9	09:23		11:50 (32)	08:27	09:42 (19)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (27)	17:16	7	09:49 (19)	18:24	20:35	21:44	22:42
10	09:22		11:49 (32)	08:25	09:40 (19)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (27)	17:18	12	09:52 (19)	18:26	20:37	21:46	22:43
11	09:21		11:49 (32)	08:23	09:39 (19)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (27)	17:21	15	09:54 (19)	18:28	20:40	21:49	22:44
12	09:20		11:48 (32)	08:20	09:37 (19)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (27)	17:23	17	09:54 (19)	18:31	20:42	21:51	22:45
13	09:18		11:49 (32)	08:18	09:36 (19)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (27)	17:26	19	09:55 (19)	18:33	20:44	21:53	22:46
14	09:17		11:48 (32)	08:15	09:37 (19)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (27)	17:28	19	09:56 (19)	18:35	20:47	21:55	22:47
15	09:16		11:48 (32)	08:13	09:36 (19)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (28)	17:31	20	09:56 (19)	18:38	20:49	21:58	22:47
16	09:15		11:47 (32)	08:10	09:36 (19)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (28)	17:33	20	09:56 (19)	18:40	20:51	22:00	22:48
17	09:13		11:48 (32)	08:07	09:36 (19)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (28)	17:36	19	09:55 (19)	18:42	20:53	22:02	22:49
18	09:12		11:48 (32)	08:05	09:37 (19)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (28)	17:38	19	09:56 (19)	18:45	20:56	22:04	22:49
19	09:10		11:48 (32)	08:02	09:37 (19)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (28)	17:40	18	09:55 (19)	18:47	20:58	22:06	22:50
20	09:08		11:48 (32)	08:00	09:38 (19)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (28)	17:43	15	09:53 (19)	18:49	21:00	22:08	22:50
21	09:07		11:48 (32)	07:57	09:39 (19)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (28)	17:45	13	09:52 (19)	18:51	21:03	22:10	22:50
22	09:05		11:48 (32)	07:54	09:41 (19)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (28)	17:48	8	09:49 (19)	18:54	21:05	22:12	22:50
23	09:03		11:48 (32)	07:52		06:33	06:05	04:54	04:27
	16:34	80	15:02 (28)	17:50		18:56	21:07	22:14	22:51
24	09:02		11:48 (32)	07:49		06:30	06:02	04:52	04:27
	16:37	80	15:02 (28)	17:53		18:58	21:10	22:16	22:51
25	09:00		11:49 (32)	07:46		06:27	05:59	04:51	04:28
	16:39	80	15:02 (28)	17:55		19:01	21:12	22:18	22:51
26	08:58		11:49 (32)	07:44		06:24	05:57	04:49	04:28
	16:41	79	15:02 (28)	17:57		19:03	21:14	22:20	22:50
27	08:56		11:49 (32)	07:41		06:21	05:54	04:47	04:29
	16:44	75	15:01 (28)	18:00		19:05	21:17	22:22	22:50
28	08:54		11:50 (32)	07:38		06:18	05:52	04:46	04:30
	16:46	73	15:01 (28)	18:02		19:08	21:19	22:24	22:50
29	08:52		11:51 (32)			07:15	05:49	04:44	04:30
	16:49	69	15:00 (28)			20:10	21:21	22:25	22:50
30	08:50		11:51 (32)			07:12	05:46	04:42	04:31
	16:51	64	14:58 (28)			20:12	21:24	22:27	22:49
31	08:48		11:52 (32)			07:10		04:41	
	16:54	55	14:55 (28)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1930		409					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,60		0,67					
Total reduction		0,24		0,27					
Total, real		465		110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (19)	09:00		11:31 (32)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (19)	15:51	60	13:37 (27)
2	04:33	05:26	06:35	07:42			07:54		09:12 (19)	09:02		11:32 (32)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (19)	15:50	56	13:36 (27)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (27)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (32)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (27)
5	04:36	05:33	06:42	07:48			08:01		11:32 (32)	09:07		11:35 (32)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (32)	15:47	43	13:32 (27)
6	04:37	05:35	06:44	07:51			08:03		11:29 (32)	09:09		11:37 (32)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (27)	15:46	36	12:27 (24)
7	04:38	05:37	06:46	07:53			08:06		11:27 (32)	09:10		11:38 (32)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (27)	15:45	34	12:27 (24)
8	04:40	05:39	06:49	07:55			08:08		11:25 (32)	09:12		11:40 (32)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (27)	15:45	32	12:28 (24)
9	04:41	05:42	06:51	07:57			08:11		11:25 (32)	09:13		11:42 (32)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (27)	15:44	28	12:28 (24)
10	04:43	05:44	06:53	08:00			08:13		11:24 (32)	09:15		12:07 (24)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (27)	15:43	21	12:28 (24)
11	04:44	05:46	06:55	08:02			08:15		11:23 (32)	09:16		12:08 (24)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (28)	15:43	21	12:29 (24)
12	04:46	05:48	06:57	08:04			08:18		11:23 (32)	09:18		12:08 (24)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (28)	15:43	21	12:29 (24)
13	04:47	05:51	07:00	08:07			08:20		11:23 (32)	09:19		12:09 (24)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (28)	15:42	21	12:30 (24)
14	04:49	05:53	07:02	08:09			08:22		11:22 (32)	09:20		12:09 (24)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (28)	15:42	21	12:30 (24)
15	04:51	05:55	07:04	08:11			08:25		11:22 (32)	09:21		12:09 (24)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (28)	15:42	21	12:30 (24)
16	04:52	05:57	07:06	08:13			08:27		11:22 (32)	09:22		12:10 (24)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (28)	15:42	20	12:30 (24)
17	04:54	06:00	07:08	08:16			08:30		11:23 (32)	09:23		12:10 (24)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (28)	15:42	21	12:31 (24)
18	04:56	06:02	07:11	08:18			08:32		11:22 (32)	09:24		12:11 (24)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (28)	15:42	20	12:31 (24)
19	04:58	06:04	07:13	08:20			08:34		11:23 (32)	09:25		12:12 (24)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (28)	15:42	20	12:32 (24)
20	05:00	06:06	07:15	08:23		10:11 (19)	08:36		11:22 (32)	09:26		12:12 (24)
	22:25	21:13	19:45	18:20	10	10:21 (19)	16:08	82	14:37 (28)	15:43	20	12:32 (24)
21	05:01	06:08	07:17	08:25		10:10 (19)	08:39		11:23 (32)	09:26		12:12 (24)
	22:24	21:10	19:42	18:17	13	10:23 (19)	16:06	80	14:37 (28)	15:43	20	12:32 (24)
22	05:03	06:11	07:19	08:27		10:08 (19)	08:41		11:24 (32)	09:27		12:13 (24)
	22:22	21:08	19:39	18:14	16	10:24 (19)	16:04	79	14:38 (28)	15:43	20	12:33 (24)
23	05:05	06:13	07:22	08:30		10:07 (19)	08:43		11:24 (32)	09:27		12:13 (24)
	22:20	21:05	19:36	18:12	18	10:25 (19)	16:02	84	14:38 (28)	15:44	20	12:33 (24)
24	05:07	06:15	07:24	08:32		10:06 (19)	08:45		11:25 (32)	09:28		12:14 (24)
	22:18	21:02	19:33	18:09	19	10:25 (19)	16:01	88	14:38 (28)	15:44	21	12:35 (24)
25	05:09	06:17	07:26	07:35		09:06 (19)	08:47		11:25 (32)	09:28		12:15 (24)
	22:16	20:59	19:30	17:06	20	09:26 (19)	15:59	88	14:38 (28)	15:45	20	12:35 (24)
26	05:11	06:20	07:28	07:37		09:06 (19)	08:50		11:26 (32)	09:28		12:15 (24)
	22:14	20:57	19:27	17:04	20	09:26 (19)	15:58	81	14:37 (28)	15:46	20	12:35 (24)
27	05:13	06:22	07:30	07:39		09:06 (19)	08:52		11:27 (32)	09:28		12:16 (24)
	22:12	20:54	19:25	17:01	19	09:25 (19)	15:56	73	14:26 (28)	15:47	20	12:36 (24)
28	05:16	06:24	07:33	07:42		09:06 (19)	08:54		11:28 (32)	09:28		12:16 (24)
	22:10	20:51	19:22	16:59	19	09:25 (19)	15:55	65	13:38 (27)	15:48	21	12:37 (24)
29	05:18	06:26	07:35	07:44		09:06 (19)	08:56		11:29 (32)	09:28		12:16 (24)
	22:07	20:48	19:19	16:56	18	09:24 (19)	15:54	64	13:37 (27)	15:49	20	12:36 (24)
30	05:20	06:29	07:37	07:47		09:07 (19)	08:58		11:29 (32)	09:28		12:17 (24)
	22:05	20:45	19:16	16:54	17	09:24 (19)	15:52	62	13:37 (27)	15:50	20	12:37 (24)
31	05:22	06:31		07:49		09:08 (19)				09:28		12:16 (24)
	22:03	20:42		16:51	15	09:23 (19)				15:51	21	12:37 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,60			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			410			210	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:08 (24)	08:46	11:39 (32)	07:35	07:07	05:44	04:40
	15:53	21	12:29 (24)	16:56	49	13:50 (27)	18:05	20:17	21:26	22:31
2	09:27		12:08 (24)	08:43	11:40 (32)	07:33	07:04	05:41	04:38
	15:54	21	12:29 (24)	16:58	44	13:48 (27)	18:07	20:19	21:28	22:32
3	09:27		12:09 (24)	08:41	11:41 (32)	07:30	07:01	05:39	04:37
	15:55	20	12:29 (24)	17:01	39	13:47 (27)	18:09	20:21	21:31	22:34
4	09:27		12:09 (24)	08:39	11:42 (32)	07:27	06:58	05:36	04:36
	15:57	21	12:30 (24)	17:03	32	13:45 (27)	18:12	20:24	21:33	22:35
5	09:26		12:09 (24)	08:37	11:43 (32)	07:24	06:55	05:34	04:35
	15:58	21	12:30 (24)	17:06	19	12:02 (32)	18:14	20:26	21:35	22:37
6	09:25		12:10 (24)	08:34	11:46 (32)	07:21	06:52	05:31	04:34
	16:00	25	13:32 (27)	17:08	14	12:00 (32)	18:17	20:28	21:37	22:38
7	09:24		11:43 (32)	08:32	11:50 (32)	07:19	06:50	05:29	04:33
	16:02	33	13:35 (27)	17:11	6	11:56 (32)	18:19	20:30	21:40	22:39
8	09:24		11:41 (32)	08:30		07:16	06:47	05:26	04:32
	16:03	41	13:37 (27)	17:13		18:21	20:33	21:42	22:41
9	09:23		11:40 (32)	08:27		07:13	06:44	05:24	04:31
	16:05	47	13:39 (27)	17:16		18:24	20:35	21:44	22:42
10	09:22		11:38 (32)	08:25		09:39 (19)	07:10	06:41	05:22	04:30
	16:07	51	13:40 (27)	17:18	3	09:42 (19)	18:26	20:37	21:46	22:43
11	09:21		11:38 (32)	08:23		09:36 (19)	07:07	06:38	05:19	04:29
	16:09	55	13:42 (27)	17:21	10	09:46 (19)	18:28	20:40	21:49	22:44
12	09:20		11:37 (32)	08:20		09:34 (19)	07:04	06:35	05:17	04:29
	16:11	60	14:46 (28)	17:23	14	09:48 (19)	18:31	20:42	21:51	22:45
13	09:18		11:37 (32)	08:18		09:33 (19)	07:02	06:32	05:15	04:28
	16:13	72	14:49 (28)	17:26	16	09:49 (19)	18:33	20:44	21:53	22:46
14	09:17		11:36 (32)	08:15		09:33 (19)	06:59	06:30	05:13	04:28
	16:15	83	14:49 (28)	17:28	17	09:50 (19)	18:35	20:47	21:55	22:47
15	09:16		11:36 (32)	08:13		09:32 (19)	06:56	06:27	05:10	04:27
	16:17	87	14:50 (28)	17:31	18	09:50 (19)	18:38	20:49	21:58	22:47
16	09:15		11:35 (32)	08:10		09:31 (19)	06:53	06:24	05:08	04:27
	16:19	86	14:50 (28)	17:33	19	09:50 (19)	18:40	20:51	22:00	22:48
17	09:13		11:36 (32)	08:07		09:31 (19)	06:50	06:21	05:06	04:27
	16:21	87	14:51 (28)	17:36	19	09:50 (19)	18:42	20:53	22:02	22:49
18	09:12		11:36 (32)	08:05		09:32 (19)	06:47	06:19	05:04	04:27
	16:23	89	14:52 (28)	17:38	19	09:51 (19)	18:45	20:56	22:04	22:49
19	09:10		11:36 (32)	08:02		09:32 (19)	06:44	06:16	05:02	04:27
	16:25	87	14:52 (28)	17:40	18	09:50 (19)	18:47	20:58	22:06	22:50
20	09:09		11:35 (32)	08:00		09:32 (19)	06:41	06:13	05:00	04:27
	16:28	85	14:53 (28)	17:43	17	09:49 (19)	18:49	21:00	22:08	22:50
21	09:07		11:35 (32)	07:57		09:33 (19)	06:39	06:10	04:58	04:27
	16:30	79	14:53 (28)	17:45	15	09:48 (19)	18:51	21:03	22:10	22:50
22	09:05		11:36 (32)	07:54		09:34 (19)	06:36	06:08	04:56	04:27
	16:32	79	14:53 (28)	17:48	12	09:46 (19)	18:54	21:05	22:12	22:50
23	09:03		11:35 (32)	07:52		09:38 (19)	06:33	06:05	04:54	04:27
	16:34	79	14:52 (28)	17:50	6	09:44 (19)	18:56	21:07	22:14	22:51
24	09:02		11:35 (32)	07:49			06:30	06:02	04:52	04:27
	16:37	79	14:52 (28)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:35 (32)	07:46			06:27	05:59	04:51	04:28
	16:39	78	14:52 (28)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:36 (32)	07:44			06:24	05:57	04:49	04:28
	16:41	77	14:52 (28)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:36 (32)	07:41			06:21	05:54	04:47	04:29
	16:44	74	14:51 (28)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:36 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	71	14:50 (28)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:37 (32)				07:15	05:49	04:44	04:30
	16:49	66	14:49 (28)				20:10	21:21	22:25	22:50
30	08:50		11:37 (32)				07:13	05:46	04:42	04:31
	16:51	56	14:45 (28)				20:12	21:24	22:27	22:49
31	08:48		11:38 (32)				07:10		04:41	
	16:54	51	13:50 (27)				20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1881		406					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,61		0,68					
Total reduction		0,24		0,27					
Total, real		457		110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (32)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (27)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (32)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (27)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (27)
4	04:35	05:31	06:40	07:46			07:59		11:18 (32)	09:05		11:25 (32)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (32)	15:48	42	13:22 (27)
5	04:36	05:33	06:42	07:48			08:01		11:15 (32)	09:07		11:28 (32)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (32)	15:47	34	13:21 (27)
6	04:37	05:35	06:44	07:51			08:03		11:14 (32)	09:09		11:56 (24)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (32)	15:46	26	13:19 (27)
7	04:38	05:37	06:46	07:53			08:06		11:12 (32)	09:10		11:56 (24)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (27)	15:45	21	12:17 (24)
8	04:40	05:39	06:49	07:55			08:08		11:11 (32)	09:12		11:57 (24)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (27)	15:45	21	12:18 (24)
9	04:41	05:42	06:51	07:57			08:11		11:10 (32)	09:13		11:58 (24)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (27)	15:44	20	12:18 (24)
10	04:43	05:44	06:53	08:00			08:13		11:10 (32)	09:15		11:58 (24)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (27)	15:43	20	12:18 (24)
11	04:44	05:46	06:55	08:02			08:15		11:09 (32)	09:16		11:58 (24)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (27)	15:43	21	12:19 (24)
12	04:46	05:48	06:57	08:04			08:18		11:09 (32)	09:18		11:58 (24)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (28)	15:43	21	12:19 (24)
13	04:47	05:51	07:00	08:07			08:20		11:09 (32)	09:19		12:00 (24)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (28)	15:42	20	12:20 (24)
14	04:49	05:53	07:02	08:09			08:23		11:08 (32)	09:20		12:00 (24)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (28)	15:42	20	12:20 (24)
15	04:51	05:55	07:04	08:11			08:25		11:08 (32)	09:21		12:00 (24)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (28)	15:42	20	12:20 (24)
16	04:52	05:57	07:06	08:13			08:27		11:09 (32)	09:22		12:01 (24)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (28)	15:42	19	12:20 (24)
17	04:54	06:00	07:08	08:16			08:30		11:09 (32)	09:23		12:01 (24)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (28)	15:42	20	12:21 (24)
18	04:56	06:02	07:11	08:18			08:32		11:09 (32)	09:24		12:02 (24)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (28)	15:42	19	12:21 (24)
19	04:58	06:04	07:13	08:20		10:07 (19)	08:34		11:10 (32)	09:25		12:02 (24)
	22:27	21:16	19:48	18:22	9	10:16 (19)	16:09	79	14:27 (28)	15:42	20	12:22 (24)
20	05:00	06:06	07:15	08:23		10:05 (19)	08:36		11:10 (32)	09:26		12:03 (24)
	22:25	21:13	19:45	18:20	13	10:18 (19)	16:08	79	14:27 (28)	15:43	19	12:22 (24)
21	05:01	06:08	07:17	08:25		10:04 (19)	08:39		11:10 (32)	09:26		12:03 (24)
	22:24	21:10	19:42	18:17	15	10:19 (19)	16:06	79	14:28 (28)	15:43	19	12:22 (24)
22	05:03	06:11	07:19	08:27		10:02 (19)	08:41		11:11 (32)	09:27		12:04 (24)
	22:22	21:08	19:39	18:14	17	10:19 (19)	16:04	84	14:29 (28)	15:43	19	12:23 (24)
23	05:05	06:13	07:22	08:30		10:02 (19)	08:43		11:12 (32)	09:27		12:04 (24)
	22:20	21:05	19:36	18:12	18	10:20 (19)	16:02	86	14:28 (28)	15:44	19	12:23 (24)
24	05:07	06:15	07:24	08:32		10:01 (19)	08:45		11:13 (32)	09:28		12:05 (24)
	22:18	21:02	19:33	18:09	19	10:20 (19)	16:01	88	14:29 (28)	15:44	19	12:24 (24)
25	05:09	06:17	07:26	07:35		09:01 (19)	08:47		11:13 (32)	09:28		12:06 (24)
	22:16	20:59	19:30	17:06	19	09:20 (19)	15:59	88	14:29 (28)	15:45	19	12:25 (24)
26	05:11	06:20	07:28	07:37		09:02 (19)	08:50		11:14 (32)	09:28		12:06 (24)
	22:14	20:57	19:27	17:04	19	09:21 (19)	15:58	87	14:29 (28)	15:46	19	12:25 (24)
27	05:13	06:22	07:30	07:39		09:01 (19)	08:52		11:15 (32)	09:28		12:06 (24)
	22:12	20:54	19:25	17:01	19	09:20 (19)	15:56	86	14:29 (28)	15:47	20	12:26 (24)
28	05:16	06:24	07:33	07:42		09:02 (19)	08:54		11:16 (32)	09:28		12:07 (24)
	22:10	20:51	19:22	16:59	17	09:19 (19)	15:55	82	14:29 (28)	15:48	20	12:27 (24)
29	05:18	06:26	07:35	07:44		09:02 (19)	08:56		11:17 (32)	09:28		12:07 (24)
	22:07	20:48	19:19	16:56	16	09:18 (19)	15:54	72	14:29 (28)	15:49	19	12:26 (24)
30	05:20	06:29	07:37	07:47		09:04 (19)	08:58		11:18 (32)	09:28		12:07 (24)
	22:05	20:45	19:16	16:54	13	09:17 (19)	15:52	60	14:28 (28)	15:50	20	12:27 (24)
31	05:22	06:31		07:49		09:06 (19)				09:28		12:07 (24)
	22:03	20:42		16:51	9	09:15 (19)				15:51	20	12:27 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			420			190	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:05 (24)	08:46	11:36 (32)	07:35	07:07	05:44	04:40
	15:53	21 12:26 (24)	16:56	45 13:44 (27)	18:05	20:17	21:26	22:31
2	09:27	12:06 (24)	08:43	11:37 (32)	07:33	07:04	05:41	04:38
	15:54	20 12:26 (24)	16:58	40 13:42 (27)	18:07	20:19	21:28	22:32
3	09:27	12:06 (24)	08:41	11:38 (32)	07:30	07:01	05:39	04:37
	15:55	20 12:26 (24)	17:01	34 13:40 (27)	18:09	20:21	21:31	22:34
4	09:27	12:06 (24)	08:39	11:39 (32)	07:27	06:58	05:36	04:36
	15:57	21 12:27 (24)	17:03	20 11:59 (32)	18:12	20:24	21:33	22:35
5	09:26	12:06 (24)	08:37	11:41 (32)	07:24	06:55	05:34	04:35
	15:58	28 13:28 (27)	17:06	16 11:57 (32)	18:14	20:26	21:35	22:37
6	09:25	12:07 (24)	08:34	11:44 (32)	07:21	06:52	05:31	04:34
	16:00	32 13:31 (27)	17:08	11 11:55 (32)	18:17	20:28	21:37	22:38
7	09:24	11:39 (32)	08:32		07:19	06:50	05:29	04:33
	16:02	38 13:32 (27)	17:11		18:19	20:30	21:40	22:39
8	09:24	11:37 (32)	08:30		07:16	06:47	05:26	04:32
	16:03	46 13:34 (27)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:36 (32)	08:27		07:13	06:44	05:24	04:31
	16:05	50 13:36 (27)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:35 (32)	08:25	09:37 (19)	07:10	06:41	05:22	04:30
	16:07	58 14:41 (28)	17:18	6 09:43 (19)	18:26	20:37	21:46	22:43
11	09:21	11:34 (32)	08:23	09:35 (19)	07:07	06:38	05:19	04:29
	16:09	71 14:43 (28)	17:21	11 09:46 (19)	18:28	20:40	21:49	22:44
12	09:20	11:33 (32)	08:20	09:33 (19)	07:04	06:35	05:17	04:29
	16:11	79 14:44 (28)	17:23	15 09:48 (19)	18:31	20:42	21:51	22:45
13	09:18	11:34 (32)	08:18	09:32 (19)	07:02	06:32	05:15	04:28
	16:13	81 14:45 (28)	17:26	16 09:48 (19)	18:33	20:44	21:53	22:46
14	09:17	11:33 (32)	08:15	09:32 (19)	06:59	06:30	05:13	04:28
	16:15	84 14:45 (28)	17:28	18 09:50 (19)	18:35	20:47	21:55	22:47
15	09:16	11:32 (32)	08:13	09:31 (19)	06:56	06:27	05:10	04:27
	16:17	86 14:46 (28)	17:31	19 09:50 (19)	18:38	20:49	21:58	22:47
16	09:15	11:32 (32)	08:10	09:31 (19)	06:53	06:24	05:08	04:27
	16:19	87 14:46 (28)	17:33	19 09:50 (19)	18:40	20:51	22:00	22:48
17	09:13	11:32 (32)	08:07	09:31 (19)	06:50	06:21	05:06	04:27
	16:21	87 14:47 (28)	17:36	19 09:50 (19)	18:42	20:53	22:02	22:49
18	09:12	11:32 (32)	08:05	09:32 (19)	06:47	06:19	05:04	04:27
	16:23	88 14:48 (28)	17:38	18 09:50 (19)	18:45	20:56	22:04	22:49
19	09:10	11:32 (32)	08:02	09:32 (19)	06:44	06:16	05:02	04:27
	16:25	86 14:48 (28)	17:40	17 09:49 (19)	18:47	20:58	22:06	22:50
20	09:09	11:32 (32)	08:00	09:32 (19)	06:41	06:13	05:00	04:27
	16:28	79 14:48 (28)	17:43	16 09:48 (19)	18:49	21:00	22:08	22:50
21	09:07	11:32 (32)	07:57	09:33 (19)	06:39	06:10	04:58	04:27
	16:30	77 14:48 (28)	17:45	14 09:47 (19)	18:51	21:03	22:10	22:50
22	09:05	11:32 (32)	07:54	09:35 (19)	06:36	06:08	04:56	04:27
	16:32	79 14:49 (28)	17:48	10 09:45 (19)	18:54	21:05	22:12	22:50
23	09:03	11:31 (32)	07:52		06:33	06:05	04:54	04:27
	16:34	78 14:48 (28)	17:50		18:56	21:07	22:14	22:51
24	09:02	11:32 (32)	07:49		06:30	06:02	04:52	04:27
	16:37	77 14:48 (28)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:32 (32)	07:46		06:27	05:59	04:51	04:28
	16:39	75 14:47 (28)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:33 (32)	07:44		06:24	05:57	04:49	04:28
	16:41	73 14:47 (28)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:32 (32)	07:41		06:21	05:54	04:47	04:29
	16:44	70 14:45 (28)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:33 (32)	07:38		06:18	05:52	04:46	04:30
	16:46	66 14:44 (28)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:34 (32)			07:15	05:49	04:44	04:30
	16:49	57 14:41 (28)			20:10	21:21	22:25	22:50
30	08:50	11:34 (32)			07:13	05:46	04:42	04:31
	16:51	52 13:45 (27)			20:12	21:24	22:27	22:49
31	08:48	11:35 (32)			07:10		04:41	
	16:54	48 13:44 (27)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1914		364				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,61		0,69				
Total reduction		0,24		0,27				
Total, real		467		100				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:08 (19)	09:00		11:16 (32)
	22:49	22:01	20:40	19:13			16:49	4	09:12 (19)	15:51	74	14:26 (28)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:18 (32)
	22:48	21:59	20:37	19:10			16:46			15:50	58	14:24 (28)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:19 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	51	13:19 (27)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:21 (32)
	22:47	21:54	20:31	19:04			16:41			15:48	46	13:18 (27)
5	04:36	05:33	06:42	07:48			08:01		11:13 (32)	09:07		11:23 (32)
	22:46	21:51	20:28	19:02			16:39	12	11:25 (32)	15:47	39	13:18 (27)
6	04:37	05:35	06:44	07:51			08:03		11:11 (32)	09:09		11:53 (24)
	22:45	21:49	20:25	18:59			16:37	17	11:28 (32)	15:46	32	13:17 (27)
7	04:38	05:37	06:46	07:53			08:06		11:10 (32)	09:10		11:54 (24)
	22:44	21:47	20:23	18:56			16:34	22	13:06 (27)	15:45	28	13:16 (27)
8	04:40	05:39	06:49	07:55			08:08		11:08 (32)	09:12		11:54 (24)
	22:43	21:44	20:20	18:53			16:32	34	13:10 (27)	15:45	22	13:13 (27)
9	04:41	05:42	06:51	07:57			08:11		11:07 (32)	09:13		11:55 (24)
	22:42	21:42	20:17	18:50			16:30	41	13:13 (27)	15:44	20	12:15 (24)
10	04:43	05:44	06:53	08:00			08:13		11:07 (32)	09:15		11:55 (24)
	22:41	21:39	20:14	18:47			16:28	46	13:15 (27)	15:43	20	12:15 (24)
11	04:44	05:46	06:55	08:02			08:15		11:06 (32)	09:16		11:56 (24)
	22:39	21:37	20:11	18:45			16:25	48	13:15 (27)	15:43	20	12:16 (24)
12	04:46	05:48	06:57	08:04			08:18		11:06 (32)	09:18		11:56 (24)
	22:38	21:34	20:08	18:42			16:23	52	13:17 (27)	15:43	20	12:16 (24)
13	04:47	05:51	07:00	08:07			08:20		11:06 (32)	09:19		11:57 (24)
	22:37	21:32	20:05	18:39			16:21	58	14:14 (28)	15:42	20	12:17 (24)
14	04:49	05:53	07:02	08:09			08:23		11:05 (32)	09:20		11:57 (24)
	22:35	21:29	20:02	18:36			16:19	66	14:16 (28)	15:42	20	12:17 (24)
15	04:51	05:55	07:04	08:11			08:25		11:05 (32)	09:21		11:57 (24)
	22:34	21:26	19:59	18:33			16:17	70	14:18 (28)	15:42	20	12:17 (24)
16	04:52	05:57	07:06	08:13			08:27		11:06 (32)	09:22		11:58 (24)
	22:32	21:24	19:56	18:31			16:15	73	14:20 (28)	15:42	19	12:17 (24)
17	04:54	06:00	07:08	08:16			08:30		11:06 (32)	09:23		11:58 (24)
	22:31	21:21	19:54	18:28			16:13	75	14:21 (28)	15:42	19	12:17 (24)
18	04:56	06:02	07:11	08:18			08:32		11:06 (32)	09:24		11:59 (24)
	22:29	21:18	19:51	18:25			16:11	77	14:22 (28)	15:42	19	12:18 (24)
19	04:58	06:04	07:13	08:20		10:09 (19)	08:34		11:06 (32)	09:25		11:59 (24)
	22:27	21:16	19:48	18:22	5	10:14 (19)	16:09	78	14:23 (28)	15:42	20	12:19 (24)
20	05:00	06:06	07:15	08:23		10:05 (19)	08:36		11:06 (32)	09:26		12:00 (24)
	22:25	21:13	19:45	18:20	11	10:16 (19)	16:08	79	14:23 (28)	15:43	19	12:19 (24)
21	05:01	06:08	07:17	08:25		10:04 (19)	08:39		11:07 (32)	09:26		12:00 (24)
	22:24	21:10	19:42	18:17	14	10:18 (19)	16:06	77	14:23 (28)	15:43	19	12:19 (24)
22	05:03	06:11	07:19	08:27		10:02 (19)	08:41		11:08 (32)	09:27		12:01 (24)
	22:22	21:08	19:39	18:14	17	10:19 (19)	16:04	77	14:24 (28)	15:43	19	12:20 (24)
23	05:05	06:13	07:22	08:30		10:02 (19)	08:43		11:08 (32)	09:27		12:01 (24)
	22:20	21:05	19:36	18:12	18	10:20 (19)	16:02	86	14:24 (28)	15:44	19	12:20 (24)
24	05:07	06:15	07:24	08:32		10:01 (19)	08:45		11:09 (32)	09:28		12:02 (24)
	22:18	21:02	19:33	18:09	18	10:19 (19)	16:01	87	14:25 (28)	15:44	19	12:21 (24)
25	05:09	06:17	07:26	07:35		09:01 (19)	08:47		11:10 (32)	09:28		12:03 (24)
	22:16	20:59	19:30	17:06	19	09:20 (19)	15:59	87	14:25 (28)	15:45	19	12:22 (24)
26	05:11	06:20	07:28	07:37		09:01 (19)	08:50		11:11 (32)	09:28		12:03 (24)
	22:14	20:57	19:27	17:04	19	09:20 (19)	15:58	87	14:25 (28)	15:46	19	12:22 (24)
27	05:13	06:22	07:30	07:39		09:01 (19)	08:52		11:11 (32)	09:28		12:03 (24)
	22:12	20:54	19:25	17:01	18	09:19 (19)	15:56	86	14:25 (28)	15:47	20	12:23 (24)
28	05:16	06:24	07:33	07:42		09:02 (19)	08:54		11:13 (32)	09:28		12:04 (24)
	22:10	20:51	19:22	16:59	17	09:19 (19)	15:55	85	14:26 (28)	15:48	20	12:24 (24)
29	05:18	06:26	07:35	07:44		09:02 (19)	08:56		11:14 (32)	09:28		12:04 (24)
	22:07	20:48	19:19	16:56	16	09:18 (19)	15:54	82	14:25 (28)	15:49	19	12:23 (24)
30	05:20	06:29	07:37	07:47		09:03 (19)	08:58		11:14 (32)	09:28		12:04 (24)
	22:05	20:45	19:16	16:54	14	09:17 (19)	15:52	80	14:25 (28)	15:50	20	12:24 (24)
31	05:22	06:31		07:49		09:05 (19)				09:28		12:04 (24)
	22:03	20:42		16:51	11	09:16 (19)				15:51	20	12:24 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					197			1686			799	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					57			411			201	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December	
1	09:28	11:58 (24)	08:46	11:24 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00	11:44 (24)
	15:53 16	12:14 (24)	16:56 49	13:35 (27)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51 57	14:20 (28)
2	09:28	11:58 (24)	08:43	11:24 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02	11:44 (24)
	15:54 18	12:16 (24)	16:58 47	13:34 (27)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50 50	14:19 (28)
3	09:27	11:58 (24)	08:41	11:25 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56	11:02 (32)	09:03	11:44 (24)
	15:55 20	12:18 (24)	17:01 42	13:33 (27)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44 12	11:14 (32)	15:49 40	14:19 (28)
4	09:27	11:58 (24)	08:39	11:26 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	10:59 (32)	09:05	11:44 (24)
	15:57 21	12:19 (24)	17:03 35	13:30 (27)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41 17	11:16 (32)	15:48 34	14:19 (28)
5	09:26	11:59 (24)	08:37	11:26 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	10:58 (32)	09:07	11:45 (24)
	15:58 20	12:19 (24)	17:06 23	11:49 (32)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39 20	11:18 (32)	15:47 31	13:06 (27)
6	09:25	11:59 (24)	08:34	11:28 (32)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	10:57 (32)	09:09	11:45 (24)
	16:00 26	13:18 (27)	17:08 20	11:48 (32)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 23	11:20 (32)	15:46 27	13:05 (27)
7	09:25	12:00 (24)	08:32	11:30 (32)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	10:56 (32)	09:10	11:46 (24)
	16:02 30	13:21 (27)	17:11 16	11:46 (32)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34 37	13:01 (27)	15:45 20	12:06 (24)
8	09:24	12:00 (24)	08:30	11:33 (32)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	10:55 (32)	09:12	11:47 (24)
	16:03 34	14:35 (28)	17:13 11	11:44 (32)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 43	13:03 (27)	15:45 20	12:07 (24)
9	09:23	12:01 (24)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	10:54 (32)	09:13	11:47 (24)
	16:05 41	14:36 (28)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 48	13:05 (27)	15:44 20	12:07 (24)
10	09:22	12:01 (24)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	10:54 (32)	09:15	11:47 (24)
	16:07 50	14:36 (28)	17:18		18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28 51	13:06 (27)	15:43 19	12:07 (24)
11	09:21	12:02 (24)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	10:54 (32)	09:16	11:48 (24)
	16:09 57	14:37 (28)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25 52	13:06 (27)	15:43 16	12:04 (24)
12	09:20	11:28 (32)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	10:54 (32)	09:18	11:48 (24)
	16:11 68	14:38 (28)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 55	13:08 (27)	15:43 11	11:59 (24)
13	09:18	11:26 (32)	08:18		07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20	10:54 (32)	09:19	11:49 (24)
	16:13 75	14:39 (28)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 62	14:08 (28)	15:42 11	12:00 (24)
14	09:17	11:25 (32)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	10:53 (32)	09:20	11:50 (24)
	16:15 78	14:39 (28)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 69	14:10 (28)	15:42 7	12:00 (24)
15	09:16	11:24 (32)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	10:54 (32)	09:21	11:50 (24)
	16:17 82	14:40 (28)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 71	14:12 (28)	15:42 3	11:53 (24)
16	09:15	11:23 (32)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	10:54 (32)	09:22	11:50 (24)
	16:19 85	14:40 (28)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15 75	14:14 (28)	15:42 3	11:53 (24)
17	09:13	11:23 (32)	08:07		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	10:55 (32)	09:23	11:51 (24)
	16:21 86	14:41 (28)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 77	14:15 (28)	15:42 1	11:52 (24)
18	09:12	11:23 (32)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:55 (32)	09:24	
	16:23 87	14:42 (28)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 76	14:15 (28)	15:42	
19	09:10	11:22 (32)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	10:56 (32)	09:25	
	16:25 88	14:42 (28)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09 77	14:16 (28)	15:42	
20	09:09	11:22 (32)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:56 (32)	09:26	
	16:28 86	14:42 (28)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08 77	14:16 (28)	15:43	
21	09:07	11:22 (32)	07:57		06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39	10:57 (32)	09:26	
	16:30 83	14:42 (28)	17:45		18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 83	14:17 (28)	15:43	
22	09:05	11:22 (32)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41	10:58 (32)	09:27	
	16:32 77	14:42 (28)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04 86	14:18 (28)	15:43	
23	09:03	11:21 (32)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:58 (32)	09:27	
	16:34 77	14:41 (28)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 88	14:18 (28)	15:44	
24	09:02	11:21 (32)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	11:00 (32)	09:28	
	16:37 76	14:41 (28)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 87	14:19 (28)	15:44	
25	09:00	11:21 (32)	07:46		06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47	11:00 (32)	09:28	
	16:39 77	14:41 (28)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59 86	14:18 (28)	15:45	
26	08:58	11:22 (32)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	11:02 (32)	09:28	
	16:41 74	14:41 (28)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58 85	14:19 (28)	15:46	
27	08:56	11:21 (32)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52	11:03 (32)	09:28	11:56 (24)
	16:44 71	14:39 (28)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 83	14:19 (28)	15:47 3	11:59 (24)
28	08:54	11:21 (32)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	11:05 (32)	09:28	11:57 (24)
	16:46 69	14:38 (28)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 79	14:19 (28)	15:48 3	12:00 (24)
29	08:52	11:22 (32)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	11:07 (32)	09:28	11:56 (24)
	16:49 61	14:36 (28)			20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54 73	14:19 (28)	15:49 5	12:07 (24)
30	08:50	11:22 (32)			07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58	11:08 (32)	09:28	11:57 (24)
	16:51 55	13:36 (27)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 69	14:19 (28)	15:50 11	12:08 (24)
31	08:48	11:23 (32)			07:10		04:41		05:22	06:31		07:49			09:28	11:57 (24)
	16:54 53	13:36 (27)			20:14		22:29		22:03	20:42		16:51			15:51 11	12:08 (24)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199	
Total, worst case	1841		243										1761		403	
Sun reduction	0,50		0,50										0,50		0,50	
Oper. time red.	0,80		0,80										0,80		0,80	
Wind dir. red.	0,62		0,65										0,62		0,62	
Total reduction	0,25		0,26										0,25		0,25	
Total, real	452		63										435		100	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28		11:52 (37)	08:46		13:17 (32)	07:35		08:53 (21)	07:07	05:44	04:40
	15:53	17	12:09 (37)	16:56	36	13:53 (32)	18:05	19	09:12 (21)	20:17	21:26	22:30
2	09:27		11:51 (37)	08:43		13:18 (32)	07:32		08:53 (21)	07:04	05:41	04:38
	15:54	19	12:10 (37)	16:58	43	15:13 (27)	18:07	20	09:13 (21)	20:19	21:28	22:32
3	09:27		11:51 (37)	08:41		13:17 (32)	07:30		08:52 (21)	07:01	05:39	04:37
	15:55	19	12:10 (37)	17:01	52	15:18 (27)	18:09	21	09:13 (21)	20:21	21:30	22:34
4	09:26		11:51 (37)	08:39		13:18 (32)	07:27		08:52 (21)	06:58	05:36	04:36
	15:57	20	12:11 (37)	17:03	54	15:20 (27)	18:12	20	09:12 (21)	20:24	21:33	22:35
5	09:26		11:52 (37)	08:37		13:17 (32)	07:24		08:52 (21)	06:55	05:34	04:35
	15:58	20	12:12 (37)	17:06	58	15:21 (27)	18:14	20	09:12 (21)	20:26	21:35	22:37
6	09:25		11:52 (37)	08:34		13:18 (32)	07:21		08:52 (21)	06:52	05:31	04:34
	16:00	20	12:12 (37)	17:08	62	15:43 (28)	18:16	19	09:11 (21)	20:28	21:37	22:38
7	09:24		11:52 (37)	08:32		13:17 (32)	07:19		08:53 (21)	06:49	05:29	04:33
	16:02	21	12:13 (37)	17:11	68	15:46 (28)	18:19	17	09:10 (21)	20:30	21:40	22:39
8	09:24		11:53 (37)	08:30		13:18 (32)	07:16		08:54 (21)	06:47	05:26	04:32
	16:03	21	12:14 (37)	17:13	72	15:51 (28)	18:21	14	09:08 (21)	20:33	21:42	22:40
9	09:23		11:52 (37)	08:27		13:18 (32)	07:13		08:55 (21)	06:44	05:24	04:31
	16:05	22	12:14 (37)	17:16	78	15:59 (28)	18:24	10	09:05 (21)	20:35	21:44	22:42
10	09:22		11:53 (37)	08:25		13:18 (32)	07:10			06:41	05:22	04:30
	16:07	22	12:15 (37)	17:18	82	16:00 (28)	18:26			20:37	21:46	22:43
11	09:21		11:54 (37)	08:23		10:11 (19)	07:07			06:38	05:19	04:29
	16:09	22	12:16 (37)	17:21	84	16:00 (28)	18:28			20:40	21:49	22:44
12	09:20		11:53 (37)	08:20		10:06 (19)	07:04			06:35	05:17	04:29
	16:11	23	12:16 (37)	17:23	89	15:59 (28)	18:31			20:42	21:51	22:45
13	09:18		11:53 (37)	08:18		10:04 (19)	07:01			06:32	05:15	04:28
	16:13	29	13:27 (24)	17:26	90	15:58 (28)	18:33			20:44	21:53	22:46
14	09:17		11:54 (37)	08:15		10:03 (19)	06:59			06:30	05:13	04:28
	16:15	38	13:37 (24)	17:28	87	15:57 (28)	18:35			20:47	21:55	22:46
15	09:16		11:55 (37)	08:13		10:02 (19)	06:56			06:27	05:10	04:27
	16:17	44	13:43 (24)	17:31	81	15:54 (28)	18:38			20:49	21:57	22:47
16	09:15		11:55 (37)	08:10		10:01 (19)	06:53			06:24	05:08	04:27
	16:19	45	13:44 (24)	17:33	72	15:24 (27)	18:40			20:51	22:00	22:48
17	09:13		11:55 (37)	08:07		10:00 (19)	06:50			06:21	05:06	04:27
	16:21	45	13:44 (24)	17:35	67	15:23 (27)	18:42			20:53	22:02	22:49
18	09:12		11:57 (37)	08:05		10:00 (19)	06:47			06:19	05:04	04:27
	16:23	44	13:46 (24)	17:38	61	15:23 (27)	18:45			20:56	22:04	22:49
19	09:10		11:57 (37)	08:02		10:00 (19)	06:44			06:16	05:02	04:27
	16:25	44	13:46 (24)	17:40	43	15:21 (27)	18:47			20:58	22:06	22:50
20	09:08		11:58 (37)	08:00		09:59 (19)	06:41			06:13	05:00	04:27
	16:28	43	13:46 (24)	17:43	41	15:19 (27)	18:49			21:00	22:08	22:50
21	09:07		11:59 (37)	07:57		09:59 (19)	06:38			06:10	04:58	04:27
	16:30	40	13:46 (24)	17:45	32	15:15 (27)	18:51			21:03	22:10	22:50
22	09:05		11:59 (37)	07:54		09:59 (19)	06:36			06:08	04:56	04:27
	16:32	40	13:46 (24)	17:48	25	10:24 (19)	18:54			21:05	22:12	22:50
23	09:03		12:01 (37)	07:52		10:00 (19)	06:33			06:05	04:54	04:27
	16:34	36	13:46 (24)	17:50	24	10:24 (19)	18:56			21:07	22:14	22:50
24	09:02		12:03 (37)	07:49		10:01 (19)	06:30			06:02	04:52	04:27
	16:37	34	13:46 (24)	17:53	22	10:23 (19)	18:58			21:10	22:16	22:51
25	09:00		12:05 (37)	07:46		09:00 (21)	06:27			05:59	04:51	04:28
	16:39	32	13:46 (32)	17:55	27	10:22 (19)	19:01			21:12	22:18	22:50
26	08:58		13:21 (32)	07:43		08:57 (21)	06:24			05:57	04:49	04:28
	16:41	27	13:48 (32)	17:57	30	10:20 (19)	19:03			21:14	22:20	22:50
27	08:56		13:20 (32)	07:41		08:55 (21)	06:21			05:54	04:47	04:29
	16:44	28	13:48 (32)	18:00	28	10:17 (19)	19:05			21:17	22:22	22:50
28	08:54		13:19 (32)	07:38		08:54 (21)	06:18			05:52	04:46	04:30
	16:46	31	13:50 (32)	18:02	22	10:13 (19)	19:07			21:19	22:24	22:50
29	08:52		13:19 (32)				07:15			05:49	04:44	04:30
	16:49	32	13:51 (32)				20:10			21:21	22:25	22:50
30	08:50		13:18 (32)				07:12			05:46	04:42	04:31
	16:51	33	13:51 (32)				20:12			21:24	22:27	22:49
31	08:48		13:18 (32)				07:10				04:41	
	16:53	34	13:52 (32)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		945			1530			160				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,61			0,61			0,74				
Total reduction		0,24			0,24			0,29				
Total, real		230			370			47				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		12:48 (32)	09:00		11:36 (37)
	22:49		22:01		20:40		19:13			16:49	83	15:30 (28)	15:51	22	11:58 (37)
2	04:33		05:26		06:35		07:42			07:54		12:48 (32)	09:02		11:36 (37)
	22:48		21:58		20:37		19:10			16:46	76	15:28 (28)	15:50	22	11:58 (37)
3	04:34		05:28		06:37		07:44			07:56		12:48 (32)	09:03		11:36 (37)
	22:47		21:56		20:34		19:07			16:44	71	15:20 (28)	15:49	22	11:58 (37)
4	04:35		05:31		06:40		07:46		09:34 (21)	07:59		12:47 (32)	09:05		11:37 (37)
	22:47		21:54		20:31		19:04	7	09:41 (21)	16:41	66	15:15 (28)	15:48	21	11:58 (37)
5	04:36		05:33		06:42		07:48		09:32 (21)	08:01		12:47 (32)	09:07		11:37 (37)
	22:46		21:51		20:28		19:01	12	09:44 (21)	16:39	62	15:13 (28)	15:47	21	11:58 (37)
6	04:37		05:35		06:44		07:51		09:30 (21)	08:03		12:48 (32)	09:09		11:38 (37)
	22:45		21:49		20:25		18:59	15	09:45 (21)	16:37	57	14:51 (27)	15:46	21	11:59 (37)
7	04:38		05:37		06:46		07:53		09:28 (21)	08:06		12:47 (32)	09:10		11:39 (37)
	22:44		21:47		20:22		18:56	18	09:46 (21)	16:34	55	14:50 (27)	15:45	20	11:59 (37)
8	04:40		05:39		06:48		07:55		09:28 (21)	08:08		12:48 (32)	09:12		11:40 (37)
	22:43		21:44		20:20		18:53	19	09:47 (21)	16:32	50	14:48 (27)	15:45	19	11:59 (37)
9	04:41		05:42		06:51		07:57		09:27 (21)	08:11		12:48 (32)	09:13		11:41 (37)
	22:42		21:42		20:17		18:50	20	09:47 (21)	16:30	42	14:43 (27)	15:44	19	12:00 (37)
10	04:43		05:44		06:53		08:00		09:27 (21)	08:13		12:49 (32)	09:15		11:41 (37)
	22:40		21:39		20:14		18:47	20	09:47 (21)	16:28	35	13:24 (32)	15:43	18	11:59 (37)
11	04:44		05:46		06:55		08:02		09:26 (21)	08:15		12:49 (32)	09:16		11:42 (37)
	22:39		21:37		20:11		18:45	20	09:46 (21)	16:25	34	13:23 (32)	15:43	18	12:00 (37)
12	04:46		05:48		06:57		08:04		09:26 (21)	08:18		12:50 (32)	09:18		11:42 (37)
	22:38		21:34		20:08		18:42	19	09:45 (21)	16:23	33	13:23 (32)	15:43	17	11:59 (37)
13	04:47		05:51		07:00		08:06		09:27 (21)	08:20		12:51 (32)	09:19		11:43 (37)
	22:37		21:31		20:05		18:39	18	09:45 (21)	16:21	32	13:23 (32)	15:42	17	12:00 (37)
14	04:49		05:53		07:02		08:09		09:27 (21)	08:22		12:51 (32)	09:20		11:44 (37)
	22:35		21:29		20:02		18:36	26	10:48 (19)	16:19	31	13:22 (32)	15:42	16	12:00 (37)
15	04:51		05:55		07:04		08:11		09:29 (21)	08:25		12:53 (32)	09:21		11:44 (37)
	22:34		21:26		19:59		18:33	29	10:51 (19)	16:17	28	13:21 (32)	15:42	16	12:00 (37)
16	04:52		05:57		07:06		08:13		09:30 (21)	08:27		12:54 (32)	09:22		11:45 (37)
	22:32		21:24		19:56		18:31	28	10:52 (19)	16:15	27	13:21 (32)	15:42	15	12:00 (37)
17	04:54		05:59		07:08		08:16		10:33 (19)	08:29		11:38 (37)	09:23		11:45 (37)
	22:30		21:21		19:54		18:28	21	10:54 (19)	16:13	32	13:19 (32)	15:42	15	12:00 (37)
18	04:56		06:02		07:10		08:18		10:31 (19)	08:32		11:36 (37)	09:24		11:46 (37)
	22:29		21:18		19:51		18:25	23	10:54 (19)	16:11	35	13:20 (24)	15:42	15	12:01 (37)
19	04:58		06:04		07:13		08:20		10:31 (19)	08:34		11:36 (37)	09:25		11:47 (37)
	22:27		21:16		19:48		18:22	24	10:55 (19)	16:09	36	13:21 (24)	15:42	14	12:01 (37)
20	05:00		06:06		07:15		08:23		10:30 (19)	08:36		11:34 (37)	09:26		11:48 (37)
	22:25		21:13		19:45		18:20	25	10:55 (19)	16:08	40	13:21 (24)	15:42	14	12:02 (37)
21	05:01		06:08		07:17		08:25		10:30 (19)	08:39		11:34 (37)	09:26		11:48 (37)
	22:24		21:10		19:42		18:17	37	15:48 (27)	16:06	40	13:21 (24)	15:43	14	12:02 (37)
22	05:03		06:11		07:19		08:27		10:29 (19)	08:41		11:34 (37)	09:27		11:49 (37)
	22:22		21:08		19:39		18:14	42	15:50 (27)	16:04	43	13:22 (24)	15:43	14	12:03 (37)
23	05:05		06:13		07:22		08:30		10:30 (19)	08:43		11:33 (37)	09:27		11:49 (37)
	22:20		21:05		19:36		18:12	50	15:52 (27)	16:02	44	13:22 (24)	15:44	14	12:03 (37)
24	05:07		06:15		07:24		08:32		10:29 (19)	08:45		11:34 (37)	09:28		11:50 (37)
	22:18		21:02		19:33		18:09	63	15:52 (27)	16:01	44	13:23 (24)	15:44	14	12:04 (37)
25	05:09		06:17		07:26		07:35		09:30 (19)	08:47		11:33 (37)	09:28		11:50 (37)
	22:16		20:59		19:30		17:06	69	14:54 (27)	15:59	44	13:22 (24)	15:45	14	12:04 (37)
26	05:11		06:20		07:28		07:37		09:30 (19)	08:50		11:34 (37)	09:28		11:50 (37)
	22:14		20:56		19:27		17:04	74	14:54 (27)	15:58	44	13:23 (24)	15:46	15	12:05 (37)
27	05:13		06:22		07:30		07:39		09:31 (19)	08:52		11:34 (37)	09:28		11:50 (37)
	22:12		20:54		19:24		17:01	82	15:24 (28)	15:56	44	13:23 (24)	15:47	16	12:06 (37)
28	05:16		06:24		07:33		07:42		09:33 (19)	08:54		11:35 (37)	09:28		11:50 (37)
	22:10		20:51		19:22		16:59	89	15:27 (28)	15:55	37	13:17 (24)	15:48	16	12:06 (37)
29	05:18		06:26		07:35		07:44		09:34 (19)	08:56		11:35 (37)	09:28		11:50 (37)
	22:07		20:48		19:19		16:56	90	15:28 (28)	15:54	29	13:09 (24)	15:49	16	12:06 (37)
30	05:20		06:29		07:37		07:47		09:36 (19)	08:58		11:35 (37)	09:28		11:51 (37)
	22:05		20:45		19:16		16:54	90	15:29 (28)	15:52	23	13:03 (24)	15:50	17	12:08 (37)
31	05:22		06:31				07:49		12:49 (32)				09:28		11:51 (37)
	22:03		20:42				16:51	81	15:30 (28)				15:51	17	12:08 (37)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								1111			1317			529	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,64			0,59			0,64	
Total reduction								0,26			0,23			0,26	
Total, real								286			308			135	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		14:11 (37)	07:35		10:14 (21)	07:07	05:44	04:40
	15:53			16:56	18	15:31 (24)	18:05	73	16:49 (27)	20:17	21:26	22:30
2	09:27			08:43		15:15 (24)	07:32		10:15 (21)	07:04	05:41	04:38
	15:54			16:58	17	15:32 (24)	18:07	70	16:50 (27)	20:19	21:28	22:32
3	09:27			08:41		15:14 (24)	07:30		10:16 (21)	07:01	05:39	04:37
	15:55			17:01	19	15:33 (24)	18:09	63	16:48 (27)	20:21	21:30	22:34
4	09:26			08:39		12:33 (19)	07:27		10:16 (21)	06:58	05:36	04:36
	15:57			17:03	32	15:33 (24)	18:12	54	16:47 (27)	20:23	21:33	22:35
5	09:26			08:37		12:30 (19)	07:24		09:25 (16)	06:55	05:34	04:35
	15:58			17:06	37	15:33 (24)	18:14	37	16:44 (27)	20:26	21:35	22:36
6	09:25			08:34		12:29 (19)	07:21		09:21 (16)	06:52	05:31	04:34
	16:00			17:08	40	15:34 (24)	18:16	27	10:42 (21)	20:28	21:37	22:38
7	09:24			08:32		12:27 (19)	07:18		10:19 (21)	06:49	05:29	04:33
	16:02			17:11	43	15:33 (24)	18:19	20	10:39 (21)	20:30	21:40	22:39
8	09:24			08:30		12:26 (19)	07:16		10:21 (21)	06:47	05:26	04:32
	16:03			17:13	46	15:34 (24)	18:21	15	10:36 (21)	20:33	21:42	22:40
9	09:23			08:27		12:25 (19)	07:13		10:24 (21)	06:44	05:24	04:31
	16:05			17:16	46	15:33 (24)	18:24	8	10:32 (21)	20:35	21:44	22:42
10	09:22			08:25		12:24 (19)	07:10			06:41	05:22	04:30
	16:07			17:18	45	15:31 (24)	18:26			20:37	21:46	22:43
11	09:21			08:22		12:24 (19)	07:07			06:38	05:19	04:29
	16:09			17:21	43	15:30 (24)	18:28			20:40	21:49	22:44
12	09:20			08:20		12:23 (19)	07:04			06:35	05:17	04:29
	16:11			17:23	38	15:27 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		12:22 (19)	07:01			06:32	05:15	04:28
	16:13			17:26	35	12:57 (19)	18:33			20:44	21:53	22:46
14	09:17			08:15		12:23 (19)	06:59			06:30	05:12	04:28
	16:15			17:28	35	12:58 (19)	18:35			20:46	21:55	22:46
15	09:16			08:12		12:22 (19)	06:56			06:27	05:10	04:27
	16:17			17:30	35	12:57 (19)	18:38			20:49	21:57	22:47
16	09:14			08:10		12:22 (19)	06:53			06:24	05:08	04:27
	16:19			17:33	43	16:12 (32)	18:40			20:51	22:00	22:48
17	09:13			08:07		12:22 (19)	06:50			06:21	05:06	04:27
	16:21			17:35	49	16:15 (32)	18:42			20:53	22:02	22:48
18	09:12			08:05		12:23 (19)	06:47			06:18	05:04	04:27
	16:23			17:38	51	16:17 (32)	18:44			20:56	22:04	22:49
19	09:10			08:02		12:23 (19)	06:44			06:16	05:02	04:27
	16:25			17:40	54	16:18 (32)	18:47			20:58	22:06	22:49
20	09:08			08:00		12:23 (19)	06:41			06:13	05:00	04:27
	16:28			17:43	55	16:19 (32)	18:49			21:00	22:08	22:50
21	09:07			07:57		12:23 (19)	06:38			06:10	04:58	04:27
	16:30			17:45	56	16:20 (32)	18:51			21:03	22:10	22:50
22	09:05			07:54		12:24 (19)	06:36			06:07	04:56	04:27
	16:32			17:48	61	16:42 (27)	18:54			21:05	22:12	22:50
23	09:03			07:52		12:26 (19)	06:33			06:05	04:54	04:27
	16:34			17:50	66	16:48 (27)	18:56			21:07	22:14	22:50
24	09:01			07:49		10:20 (21)	06:30			06:02	04:52	04:27
	16:37			17:52	68	16:49 (27)	18:58			21:10	22:16	22:50
25	09:00			07:46		10:16 (21)	06:27			05:59	04:51	04:28
	16:39			17:55	89	16:50 (27)	19:01			21:12	22:18	22:50
26	08:58			07:43		10:15 (21)	06:24			05:57	04:49	04:28
	16:41			17:57	92	16:50 (27)	19:03			21:14	22:20	22:50
27	08:56			07:41		10:15 (21)	06:21			05:54	04:47	04:29
	16:44			18:00	77	16:50 (27)	19:05			21:17	22:22	22:50
28	08:54			07:38		10:15 (21)	06:18			05:51	04:45	04:29
	16:46			18:02	75	16:50 (27)	19:07			21:19	22:24	22:50
29	08:52						07:15			05:49	04:44	04:30
	16:49						20:10			21:21	22:25	22:49
30	08:50		14:16 (37)				07:12			05:46	04:42	04:31
	16:51	3	14:19 (37)				20:12			21:23	22:27	22:49
31	08:48		14:08 (37)				07:10				04:41	
	16:53	21	15:27 (24)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		24			1365			367				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,55			0,60			0,65				
Total reduction		0,22			0,24			0,26				
Total, real		5			328			96				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:53 (19)	09:00
	22:48	22:01	20:40	19:13			16:49	46	15:01 (24)	15:51
2	04:33	05:26	06:35	07:41			07:54		11:55 (19)	09:01
	22:48	21:58	20:37	19:10			16:46	45	15:02 (24)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:56 (19)	09:03
	22:47	21:56	20:34	19:07			16:44	45	15:03 (24)	15:49
4	04:35	05:31	06:40	07:46			07:58		11:57 (19)	09:05
	22:46	21:54	20:31	19:04			16:41	43	15:03 (24)	15:48
5	04:36	05:33	06:42	07:48		10:59 (21)	08:01		11:58 (19)	09:07
	22:46	21:51	20:28	19:01	13	11:12 (21)	16:39	41	15:03 (24)	15:47
6	04:37	05:35	06:44	07:50		10:56 (21)	08:03		12:01 (19)	09:09
	22:45	21:49	20:25	18:59	19	11:15 (21)	16:37	36	15:04 (24)	15:46
7	04:38	05:37	06:46	07:53		09:54 (16)	08:06		12:03 (19)	09:10
	22:44	21:47	20:22	18:56	24	11:16 (21)	16:34	31	15:03 (24)	15:45
8	04:40	05:39	06:48	07:55		09:58 (16)	08:08		14:45 (24)	09:12
	22:43	21:44	20:20	18:53	33	17:18 (27)	16:32	18	15:03 (24)	15:45
9	04:41	05:42	06:51	07:57		10:01 (16)	08:10		14:46 (24)	09:13
	22:42	21:42	20:17	18:50	49	17:20 (27)	16:30	17	15:03 (24)	15:44
10	04:43	05:44	06:53	08:00		10:49 (21)	08:13		13:42 (37)	09:15
	22:40	21:39	20:14	18:47	59	17:21 (27)	16:28	20	15:03 (24)	15:43
11	04:44	05:46	06:55	08:02		10:49 (21)	08:15		13:39 (37)	09:16
	22:39	21:37	20:11	18:44	67	17:23 (27)	16:25	20	14:58 (24)	15:43
12	04:46	05:48	06:57	08:04		10:48 (21)	08:18		13:48 (37)	09:17
	22:38	21:34	20:08	18:42	72	17:23 (27)	16:23	3	13:51 (37)	15:43
13	04:47	05:50	06:59	08:06		10:48 (21)	08:20			09:19
	22:36	21:31	20:05	18:39	73	17:23 (27)	16:21			15:42
14	04:49	05:53	07:02	08:09		10:47 (21)	08:22			09:20
	22:35	21:29	20:02	18:36	77	17:23 (27)	16:19			15:42
15	04:50	05:55	07:04	08:11		10:48 (21)	08:25			09:21
	22:34	21:26	19:59	18:33	86	17:23 (27)	16:17			15:42
16	04:52	05:57	07:06	08:13		10:47 (21)	08:27			09:22
	22:32	21:24	19:56	18:31	93	17:22 (27)	16:15			15:42
17	04:54	05:59	07:08	08:16		10:48 (21)	08:29			09:23
	22:30	21:21	19:53	18:28	85	17:22 (27)	16:13			15:42
18	04:56	06:02	07:10	08:18		12:58 (19)	08:32			09:24
	22:29	21:18	19:51	18:25	66	17:20 (27)	16:11			15:42
19	04:58	06:04	07:13	08:20		12:57 (19)	08:34			09:25
	22:27	21:16	19:48	18:22	64	17:17 (27)	16:09			15:42
20	04:59	06:06	07:15	08:23		12:55 (19)	08:36			09:25
	22:25	21:13	19:45	18:20	58	17:12 (27)	16:07			15:42
21	05:01	06:08	07:17	08:25		12:54 (19)	08:39			09:26
	22:23	21:10	19:42	18:17	56	16:51 (32)	16:06			15:43
22	05:03	06:11	07:19	08:27		12:53 (19)	08:41			09:27
	22:22	21:07	19:39	18:14	55	16:49 (32)	16:04			15:43
23	05:05	06:13	07:21	08:30		12:53 (19)	08:43			09:27
	22:20	21:05	19:36	18:12	53	16:48 (32)	16:02			15:44
24	05:07	06:15	07:24	08:32		12:52 (19)	08:45			09:28
	22:18	21:02	19:33	18:09	52	16:46 (32)	16:01			15:44
25	05:09	06:17	07:26	07:34		11:52 (19)	08:47			09:28
	22:16	20:59	19:30	17:06	47	15:44 (32)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:51 (19)	08:49			09:28
	22:14	20:56	19:27	17:04	39	15:39 (32)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:52 (19)	08:52			09:28
	22:12	20:54	19:24	17:01	35	12:27 (19)	15:56			15:47
28	05:15	06:24	07:33	07:42		11:52 (19)	08:54			09:28
	22:10	20:51	19:22	16:59	35	12:27 (19)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:52 (19)	08:56			09:28
	22:07	20:48	19:19	16:56	34	12:26 (19)	15:53			15:49
30	05:20	06:29	07:37	07:46		11:53 (19)	08:58			09:28
	22:05	20:45	19:16	16:54	40	14:58 (24)	15:52			15:50
31	05:22	06:31		07:49		11:53 (19)				09:28
	22:03	20:42		16:51	44	15:00 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1428			365		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,62			0,58		
Total reduction					0,25			0,23		
Total, real					353			85		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	11:38 (21)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:44 (16)	09:00
	15:53	16:56 63	13:43 (19)	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13	16:49 56	15:37 (32)	15:51
2	09:27	08:43	11:39 (21)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54	09:56 (16)	09:01
	15:54	16:58 59	13:43 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46 51	15:37 (32)	15:50
3	09:27	08:41	11:38 (21)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56	09:57 (16)	09:03
	15:55	17:01 51	13:42 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07	16:44 55	15:36 (32)	15:49
4	09:26	08:39	11:39 (21)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46	07:58	10:02 (16)	09:05
	15:57	17:03 51	15:59 (32)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41 56	15:35 (32)	15:48
5	09:26	08:37	11:39 (21)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	10:04 (16)	09:07
	15:58	17:06 56	16:02 (32)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39 58	15:34 (32)	15:47
6	09:25	08:34	10:34 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	11:10 (21)	09:09
	16:00	17:08 57	16:05 (32)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 55	15:33 (32)	15:46
7	09:24	08:32	10:32 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53	08:06	11:09 (21)	09:10
	16:02	17:11 55	16:05 (32)	18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56	16:34 49	13:12 (19)	15:45
8	09:24	08:30	10:27 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55	08:08	11:09 (21)	09:12
	16:03	17:13 53	16:07 (32)	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53	16:32 50	13:13 (19)	15:45
9	09:23	08:27	10:26 (16)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:10	11:09 (21)	09:13
	16:05	17:16 49	16:07 (32)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 60	13:14 (19)	15:44
10	09:22	08:25	10:15 (16)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	11:10 (21)	09:15
	16:07	17:18 58	16:07 (32)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:28 61	13:14 (19)	15:43
11	09:21	08:22	10:16 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	11:10 (21)	09:16
	16:09	17:21 55	16:08 (32)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44	16:25 63	13:14 (19)	15:43
12	09:20	08:20	10:17 (16)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	11:10 (21)	09:17
	16:11	17:23 48	16:08 (32)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 66	13:15 (19)	15:43
13	09:18	08:17	10:18 (16)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	11:11 (21)	09:19
	16:13	17:26 33	16:07 (32)	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 65	13:15 (19)	15:42
14	09:17	12:02 (13) 08:15	10:21 (16)	06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09	08:22	11:11 (21)	09:20
	16:15 8	12:10 (13) 17:28 28	16:08 (32)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 66	13:15 (19)	15:42
15	09:16	12:02 (13) 08:12	15:50 (32)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	11:13 (21)	09:21
	16:17 9	12:11 (13) 17:30 17	16:07 (32)	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17 64	13:15 (19)	15:42
16	09:14	12:02 (13) 08:10	15:51 (32)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	11:14 (21)	09:22
	16:19 11	12:13 (13) 17:33 14	16:05 (32)	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15 62	13:15 (19)	15:42
17	09:13	12:02 (13) 08:07	15:52 (32)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	11:15 (21)	09:23
	16:21 20	13:30 (19) 17:35 12	16:04 (32)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 61	13:14 (19)	15:42
18	09:12	11:58 (13) 08:05	15:56 (32)	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18	08:32	11:16 (21)	09:24
	16:23 30	13:34 (19) 17:38 6	16:02 (32)	18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 60	13:14 (19)	15:42
19	09:10	11:58 (13) 08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20	08:34	11:19 (21)	09:25
	16:25 33	13:35 (19) 17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22	16:09 55	13:14 (19)	15:42
20	09:08	11:58 (13) 08:00		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	11:21 (21)	09:25
	16:27 36	13:37 (19) 17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 47	13:13 (19)	15:42
21	09:07	11:58 (13) 07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39	11:33 (13)	09:26
	16:30 39	13:38 (19) 17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 39	13:13 (19)	15:43
22	09:05	11:46 (21) 07:54		06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41	11:34 (13)	09:27
	16:32 47	13:38 (19) 17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04 36	13:13 (19)	15:43
23	09:03	11:44 (21) 07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	11:34 (13)	09:27
	16:34 55	13:39 (19) 17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02 33	13:12 (19)	15:44
24	09:01	11:42 (21) 07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	16:24 (32) 08:45	11:35 (13)	09:28
	16:37 60	13:40 (19) 17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09 8	16:32 (32) 16:01	30	13:11 (19)	15:44
25	09:00	11:42 (21) 07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	15:22 (32) 08:47	11:41 (13)	09:28
	16:39 61	13:41 (19) 17:55		19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06 12	15:34 (32) 15:59	20	13:09 (19)	15:45
26	08:58	11:41 (21) 07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	15:20 (32) 08:49	11:41 (13)	09:28
	16:41 62	13:42 (19) 17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 15	15:35 (32) 15:58	11	11:52 (13)	15:46
27	08:56	11:40 (21) 07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	15:19 (32) 08:52	11:41 (13)	09:28
	16:44 64	13:42 (19) 18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01 17	15:36 (32) 15:56	10	11:51 (13)	15:47
28	08:54	11:40 (21) 07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42	09:50 (16) 08:54	11:42 (13)	09:28
	16:46 65	13:43 (19) 18:02		19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59 28	15:37 (32) 15:55	8	11:50 (13)	15:48
29	08:52	11:39 (21)		07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	09:47 (16) 08:56		09:28
	16:49 65	13:43 (19)		20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56 37	15:37 (32) 15:53		15:49
30	08:50	11:39 (21)		07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	09:46 (16) 08:58		09:28
	16:51 65	13:43 (19)		20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54 49	15:37 (32) 15:52		15:50
31	08:48	11:39 (21)		07:09		04:41		05:22	06:31		07:49	09:46 (16)		09:28
	16:53 63	13:43 (19)		20:14		22:29		22:03	20:42		16:51 55	15:38 (32)		15:51
Potential sun hours	221	260	365	432	521	547	546	478	386	319	236		199
Total, worst case	793	765								221	1347		
Sun reduction	0,50	0,50								0,50	0,50		
Oper. time red.	0,80	0,80								0,80	0,80		
Wind dir. red.	0,62	0,61								0,60	0,62		
Total reduction	0,25	0,24								0,24	0,25		
Total, real	197	187								53	334		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:50 (16)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39		07:51	10:27 (16)	09:00
	15:53		16:56	74	14:26 (19)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	30 13:49 (19)	15:51
2	09:27		08:43		10:51 (16)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:25 (16)	09:01
	15:54		16:58	73	14:27 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	45 13:52 (19)	15:50
3	09:27		08:41		10:50 (16)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:24 (16)	09:03
	15:55		17:01	74	14:27 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	54 13:54 (19)	15:49
4	09:26		08:39		10:51 (16)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:22 (16)	09:05
	15:57		17:03	71	14:27 (19)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	61 13:55 (19)	15:48
5	09:26		08:37		10:51 (16)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:22 (16)	09:07
	15:58		17:06	68	14:26 (19)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	65 13:56 (19)	15:47
6	09:25		08:34		10:53 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:22 (16)	09:09
	16:00		17:08	64	14:26 (19)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	69 13:57 (19)	15:46
7	09:24		08:32		10:53 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:21 (16)	09:10
	16:02		17:11	59	14:25 (19)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	72 13:57 (19)	15:45
8	09:24		08:30		10:55 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:21 (16)	09:12
	16:03		17:13	52	14:24 (19)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73 13:57 (19)	15:45
9	09:23		08:27		10:56 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:21 (16)	09:13
	16:05		17:16	43	14:22 (19)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75 13:58 (19)	15:44
10	09:22		08:25		10:58 (16)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:22 (16)	09:15
	16:07		17:18	26	14:18 (19)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	72 13:58 (19)	15:43
11	09:21		08:22		12:44 (21)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:21 (16)	09:16
	16:09		17:21	5	12:49 (21)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	75 13:58 (19)	15:43
12	09:20		08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:22 (16)	09:17
	16:11		17:23			18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	72 13:58 (19)	15:42
13	09:18	12:39 (13)	08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:23 (16)	09:19
	16:13	5 12:44 (13)	17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	72 13:58 (19)	15:42
14	09:17	12:39 (13)	08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	10:23 (16)	09:20
	16:15	7 12:46 (13)	17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	68 13:57 (19)	15:42
15	09:16	12:39 (13)	08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	10:24 (16)	09:21
	16:17	15 12:54 (13)	17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	63 13:57 (19)	15:42
16	09:14	12:38 (13)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	10:30 (16)	09:22
	16:19	17 12:55 (13)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	50 13:57 (19)	15:42
17	09:13	12:38 (13)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:05 (21)	09:23
	16:21	18 12:56 (13)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45 13:55 (19)	15:42
18	09:12	12:37 (13)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:07 (21)	09:24
	16:23	19 12:56 (13)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	42 13:55 (19)	15:42
19	09:10	12:38 (13)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:08 (21)	09:25
	16:25	20 12:58 (13)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	39 13:54 (19)	15:42
20	09:08	12:37 (21)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:09 (21)	09:25
	16:27	22 12:59 (13)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	33 13:51 (19)	15:42
21	09:07	12:35 (21)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:11 (21)	09:26
	16:30	23 12:58 (13)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	23 12:34 (13)	15:43
22	09:05	12:34 (21)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:13 (21)	09:27
	16:32	33 14:16 (19)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	22 12:35 (13)	15:43
23	09:03	12:33 (21)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:14 (13)	09:27
	16:34	39 14:19 (19)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	20 12:34 (13)	15:44
24	09:01	12:33 (21)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:15 (13)	09:28
	16:37	42 14:21 (19)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	20 12:35 (13)	15:44
25	09:00	12:32 (21)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:16 (13)	09:28
	16:39	45 14:22 (19)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	18 12:34 (13)	15:45
26	08:58	10:57 (16)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49	12:17 (13)	09:28
	16:41	50 14:24 (19)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58	17 12:34 (13)	15:46
27	08:56	10:51 (16)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52	12:18 (13)	09:28
	16:44	64 14:24 (19)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56	15 12:33 (13)	15:47
28	08:54	10:51 (16)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54	12:19 (13)	09:28
	16:46	69 14:25 (19)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59		15:55	7 12:26 (13)	15:48
29	08:52	10:51 (16)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56	12:20 (13)	09:28
	16:49	70 14:26 (19)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53	5 12:25 (13)	15:49
30	08:50	10:50 (16)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		08:58		09:28
	16:51	72 14:26 (19)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54		15:52		15:50
31	08:48	10:51 (16)				07:09		04:41		05:22	06:31		07:49	12:13 (21)			09:28
	16:53	74 14:27 (19)				20:14		22:29		22:03	20:42		16:51	7 12:20 (21)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236			199
Total, worst case		704		609									7		1322		
Sun reduction		0,50		0,50									0,50		0,50		
Oper. time red.		0,80		0,80									0,80		0,80		
Wind dir. red.		0,62		0,63									0,63		0,62		
Total reduction		0,25		0,25									0,25		0,25		
Total, real		174		153									2		328		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:45 (16)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		10:19 (16)	09:00
	15:53		16:56	73	14:22 (19)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	43	13:46 (19)	15:51
2	09:27		08:43		10:46 (16)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		10:18 (16)	09:01
	15:54		16:58	74	14:23 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	53	13:48 (19)	15:50
3	09:27		08:41		10:45 (16)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		10:18 (16)	09:03
	15:55		17:01	74	14:22 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	59	13:50 (19)	15:49
4	09:26		08:39		10:46 (16)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:16 (16)	09:05
	15:57		17:03	73	14:23 (19)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	65	13:51 (19)	15:48
5	09:26		08:37		10:46 (16)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:16 (16)	09:07
	15:58		17:06	71	14:22 (19)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	70	13:52 (19)	15:47
6	09:25		08:34		10:47 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		10:16 (16)	09:09
	16:00		17:08	68	14:22 (19)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	73	13:53 (19)	15:46
7	09:24		08:32		10:47 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		10:16 (16)	09:10
	16:02		17:11	65	14:21 (19)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	73	13:52 (19)	15:45
8	09:24		08:30		10:48 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		10:16 (16)	09:12
	16:03		17:13	58	14:20 (19)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73	13:53 (19)	15:45
9	09:23		08:27		10:49 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10		10:16 (16)	09:13
	16:05		17:16	50	14:18 (19)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75	13:53 (19)	15:44
10	09:22		08:25		10:50 (16)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13		10:17 (16)	09:15
	16:07		17:18	40	14:16 (19)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	74	13:54 (19)	15:43
11	09:21		08:22		10:53 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		10:17 (16)	09:16
	16:09		17:21	22	12:47 (21)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	69	13:53 (19)	15:43
12	09:20		08:20		12:38 (21)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		10:18 (16)	09:17
	16:11		17:23	4	12:42 (21)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	54	13:53 (19)	15:42
13	09:18		08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		10:20 (16)	09:19
	16:13		17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	53	13:53 (19)	15:42
14	09:17		08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:57 (21)	09:20
	16:15		17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	51	13:52 (19)	15:42
15	09:16		08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:58 (21)	09:21
	16:17		17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	50	13:52 (19)	15:42
16	09:14		08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:59 (21)	09:22
	16:19		17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	49	13:52 (19)	15:42
17	09:13		08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		12:00 (21)	09:23
	16:21	5	12:50 (13)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45	13:50 (19)	15:42
18	09:12		12:33 (13)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		12:01 (21)	09:24
	16:23	18	12:51 (13)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	43	13:50 (19)	15:42
19	09:10		12:34 (13)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		12:03 (21)	09:25
	16:25	19	12:53 (13)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	38	13:49 (19)	15:42
20	09:08		12:34 (13)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		12:04 (21)	09:25
	16:27	20	12:54 (13)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	27	13:41 (19)	15:42
21	09:07		12:31 (21)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		12:07 (21)	09:26
	16:30	22	12:53 (13)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	22	12:29 (13)	15:43
22	09:05		12:29 (21)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		12:10 (13)	09:27
	16:32	27	14:06 (19)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	20	12:30 (13)	15:43
23	09:03		12:28 (21)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		12:10 (13)	09:27
	16:34	38	14:14 (19)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	19	12:29 (13)	15:44
24	09:01		12:27 (21)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45		12:11 (13)	09:28
	16:37	43	14:16 (19)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	18	12:29 (13)	15:44
25	09:00		12:27 (21)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47		12:11 (13)	09:28
	16:39	45	14:17 (19)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	5	12:28 (13)	15:45
26	08:58		12:26 (21)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49			09:28
	16:41	49	14:19 (19)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58			15:46
27	08:56		12:25 (21)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52			09:28
	16:44	50	14:19 (19)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56			15:47
28	08:54		12:25 (21)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54			09:28
	16:46	51	14:20 (19)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59		15:55			15:48
29	08:52		10:48 (16)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56			09:28
	16:49	53	14:21 (19)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53			15:49
30	08:50		10:46 (16)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	12:06 (21)	08:58			09:28
	16:51	55	14:21 (19)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	7 12:13 (21)	15:52			15:50
31	08:48		10:46 (16)			07:09		04:41		05:22	06:31		07:49	10:22 (16)				09:28
	16:53	69	14:22 (19)			20:14		22:29		22:03	20:42		16:51	25 12:17 (21)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319			236			199
Total, worst case		564		672									32			1221		
Sun reduction		0,50		0,50									0,50			0,50		
Oper. time red.		0,80		0,80									0,80			0,80		
Wind dir. red.		0,61		0,63									0,66			0,62		
Total reduction		0,24		0,25									0,26			0,25		
Total, real		138		169									8			303		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:03 (30)	08:45	14:59 (21)	07:35	07:07	05:44	04:39
	15:52	20 12:23 (30)	16:56	18 15:17 (21)	18:04	20:16	21:26	22:30
2	09:27	12:03 (30)	08:43	14:59 (21)	07:32	07:04	05:41	04:38
	15:54	20 12:23 (30)	16:58	19 15:18 (21)	18:07	20:19	21:28	22:32
3	09:27	12:03 (30)	08:41	14:58 (21)	07:30	07:01	05:38	04:37
	15:55	20 12:23 (30)	17:01	19 15:17 (21)	18:09	20:21	21:30	22:33
4	09:26	12:03 (30)	08:39	14:59 (21)	07:27	06:58	05:36	04:36
	15:57	21 12:24 (30)	17:03	19 15:18 (21)	18:12	20:23	21:33	22:35
5	09:26	12:04 (30)	08:37	14:59 (21)	07:24	06:55	05:33	04:34
	15:58	26 13:33 (16)	17:06	19 15:18 (21)	18:14	20:26	21:35	22:36
6	09:25	12:04 (30)	08:34	15:00 (21)	07:21	06:52	05:31	04:33
	16:00	29 13:35 (16)	17:08	18 15:18 (21)	18:16	20:28	21:37	22:38
7	09:24	12:05 (30)	08:32	15:00 (21)	07:18	06:49	05:29	04:32
	16:01	31 13:37 (16)	17:11	17 15:17 (21)	18:19	20:30	21:39	22:39
8	09:23	12:06 (30)	08:30	15:00 (21)	07:16	06:46	05:26	04:31
	16:03	33 13:39 (16)	17:13	16 15:16 (21)	18:21	20:33	21:42	22:40
9	09:23	12:06 (30)	08:27	15:02 (21)	07:13	06:44	05:24	04:31
	16:05	33 13:39 (16)	17:15	14 15:16 (21)	18:23	20:35	21:44	22:42
10	09:22	12:07 (30)	08:25	15:03 (21)	07:10	06:41	05:21	04:30
	16:07	35 13:41 (16)	17:18	11 15:14 (21)	18:26	20:37	21:46	22:43
11	09:21	12:07 (30)	08:22	15:07 (21)	07:07	06:38	05:19	04:29
	16:09	35 13:41 (16)	17:20	5 15:12 (21)	18:28	20:39	21:49	22:44
12	09:19	12:08 (30)	08:20		07:04	06:35	05:17	04:29
	16:11	35 13:42 (16)	17:23		18:30	20:42	21:51	22:45
13	09:18	12:09 (30)	08:17		07:01	06:32	05:15	04:28
	16:12	35 13:43 (16)	17:25		18:33	20:44	21:53	22:46
14	09:17	12:10 (30)	08:15		06:58	06:29	05:12	04:28
	16:14	35 13:44 (16)	17:28		18:35	20:46	21:55	22:46
15	09:16	12:11 (30)	08:12		06:56	06:27	05:10	04:27
	16:17	34 13:45 (16)	17:30		18:37	20:49	21:57	22:47
16	09:14	12:12 (30)	08:10		06:53	06:24	05:08	04:27
	16:19	32 13:45 (16)	17:33		18:40	20:51	22:00	22:48
17	09:13	12:14 (30)	08:07		06:50	06:21	05:06	04:27
	16:21	29 13:45 (16)	17:35		18:42	20:53	22:02	22:48
18	09:11	12:16 (30)	08:05		06:47	06:18	05:04	04:26
	16:23	26 13:46 (16)	17:38		18:44	20:56	22:04	22:49
19	09:10	13:25 (16)	08:02		06:44	06:16	05:02	04:26
	16:25	21 13:46 (16)	17:40		18:47	20:58	22:06	22:49
20	09:08	13:25 (16)	07:59		06:41	06:13	05:00	04:26
	16:27	22 13:47 (16)	17:43		18:49	21:00	22:08	22:50
21	09:07	13:26 (16)	07:57		06:38	06:10	04:58	04:26
	16:30	21 13:47 (16)	17:45		18:51	21:03	22:10	22:50
22	09:05	13:26 (16)	07:54		06:35	06:07	04:56	04:27
	16:32	21 13:47 (16)	17:48		18:54	21:05	22:12	22:50
23	09:03	13:27 (16)	07:51		06:33	06:05	04:54	04:27
	16:34	20 13:47 (16)	17:50		18:56	21:07	22:14	22:50
24	09:01	13:28 (16)	07:49		06:30	06:02	04:52	04:27
	16:37	19 13:47 (16)	17:52		18:58	21:09	22:16	22:50
25	09:00	13:29 (16)	07:46		06:27	05:59	04:50	04:28
	16:39	18 13:47 (16)	17:55		19:00	21:12	22:18	22:50
26	08:58	13:30 (16)	07:43		06:24	05:57	04:49	04:28
	16:41	17 13:47 (16)	17:57		19:03	21:14	22:20	22:50
27	08:56	13:30 (16)	07:41		06:21	05:54	04:47	04:29
	16:44	20 15:09 (21)	18:00		19:05	21:16	22:22	22:50
28	08:54	13:32 (16)	07:38		06:18	05:51	04:45	04:29
	16:46	23 15:12 (21)	18:02		19:07	21:19	22:23	22:50
29	08:52	13:35 (16)			07:15	05:49	04:44	04:30
	16:48	21 15:14 (21)			20:10	21:21	22:25	22:49
30	08:50	15:00 (21)			07:12	05:46	04:42	04:31
	16:51	15 15:15 (21)			20:12	21:23	22:27	22:49
31	08:48	15:00 (21)			07:09		04:41	
	16:53	16 15:16 (21)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		783		175				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,60		0,55				
Total reduction		0,24		0,22				
Total, real		187		39				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (21)	08:59		11:49 (30)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (21)	15:51	35	13:23 (16)
2	04:33	05:26	06:35	07:41			07:54		14:31 (21)	09:01		11:50 (30)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (21)	15:50	35	13:24 (16)
3	04:34	05:28	06:37	07:44			07:56		14:31 (21)	09:03		11:50 (30)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (21)	15:49	33	13:23 (16)
4	04:35	05:30	06:39	07:46			07:58		14:29 (21)	09:05		11:50 (30)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (21)	15:48	33	13:23 (16)
5	04:36	05:33	06:42	07:48			08:01		14:29 (21)	09:07		11:50 (30)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (21)	15:47	31	13:22 (16)
6	04:37	05:35	06:44	07:50			08:03		14:29 (21)	09:08		11:50 (30)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (21)	15:46	30	13:22 (16)
7	04:38	05:37	06:46	07:53			08:06		14:29 (21)	09:10		11:51 (30)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (21)	15:45	27	13:21 (16)
8	04:40	05:39	06:48	07:55			08:08		14:29 (21)	09:12		11:51 (30)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (21)	15:44	21	12:12 (30)
9	04:41	05:41	06:51	07:57			08:10		14:30 (21)	09:13		11:51 (30)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (21)	15:44	21	12:12 (30)
10	04:42	05:44	06:53	07:59			08:13		14:29 (21)	09:15		11:52 (30)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (21)	15:43	20	12:12 (30)
11	04:44	05:46	06:55	08:02			08:15		14:30 (21)	09:16		11:53 (30)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (21)	15:43	20	12:13 (30)
12	04:45	05:48	06:57	08:04			08:18		14:32 (21)	09:17		11:53 (30)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (21)	15:42	20	12:13 (30)
13	04:47	05:50	06:59	08:06			08:20		13:07 (16)	09:19		11:54 (30)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (21)	15:42	20	12:14 (30)
14	04:49	05:53	07:02	08:09			08:22		13:04 (16)	09:20		11:54 (30)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (21)	15:42	20	12:14 (30)
15	04:50	05:55	07:04	08:11			08:25		13:03 (16)	09:21		11:54 (30)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (21)	15:42	20	12:14 (30)
16	04:52	05:57	07:06	08:13			08:27		13:03 (16)	09:22		11:55 (30)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (16)	15:42	20	12:15 (30)
17	04:54	05:59	07:08	08:16			08:29		13:02 (16)	09:23		11:55 (30)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (16)	15:42	20	12:15 (30)
18	04:56	06:02	07:10	08:18			08:32		13:02 (16)	09:24		11:56 (30)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (16)	15:42	19	12:15 (30)
19	04:57	06:04	07:13	08:20			08:34		13:02 (16)	09:25		11:56 (30)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (16)	15:42	20	12:16 (30)
20	04:59	06:06	07:15	08:23			08:36		13:01 (16)	09:25		11:57 (30)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (16)	15:42	20	12:17 (30)
21	05:01	06:08	07:17	08:25			08:38		13:02 (16)	09:26		11:57 (30)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (16)	15:43	20	12:17 (30)
22	05:03	06:10	07:19	08:27			08:41		13:02 (16)	09:27		11:58 (30)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (16)	15:43	20	12:18 (30)
23	05:05	06:13	07:21	08:30			08:43		13:02 (16)	09:27		11:58 (30)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (16)	15:44	20	12:18 (30)
24	05:07	06:15	07:24	08:32			08:45		11:55 (30)	09:27		11:58 (30)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (16)	15:44	20	12:18 (30)
25	05:09	06:17	07:26	07:34			08:47		11:52 (30)	09:28		11:59 (30)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (16)	15:45	20	12:19 (30)
26	05:11	06:19	07:28	07:37			08:49		11:51 (30)	09:28		12:00 (30)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (16)	15:46	20	12:20 (30)
27	05:13	06:22	07:30	07:39			08:51		11:50 (30)	09:28		12:00 (30)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (16)	15:47	20	12:20 (30)
28	05:15	06:24	07:32	07:42			08:54		11:49 (30)	09:28		12:00 (30)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (16)	15:48	20	12:20 (30)
29	05:17	06:26	07:35	07:44			08:56		11:50 (30)	09:28		12:01 (30)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (16)	15:49	20	12:21 (30)
30	05:20	06:28	07:37	07:46			08:58		11:49 (30)	09:28		12:01 (30)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (16)	15:50	21	12:22 (30)
31	05:22	06:31		07:49		14:35 (21)				09:28		12:01 (30)
	22:03	20:42		16:51	6	14:41 (21)				15:51	21	12:22 (30)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,58			0,63	
Total reduction					0,22			0,23			0,25	
Total, real					1			151			178	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:35 (30)	08:45	14:09 (16)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51		08:59		12:23 (30)
	15:52 20	12:55 (30)	16:56 5	14:14 (16)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51	18	12:41 (30)
2	09:27	12:36 (30)	08:43		07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01		12:23 (30)
	15:54 21	12:57 (30)	16:58		18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50	19	12:42 (30)
3	09:27	12:36 (30)	08:41		07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03		12:23 (30)
	15:55 21	12:57 (30)	17:01		18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49	20	12:43 (30)
4	09:26	12:37 (30)	08:39		07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05		12:23 (30)
	15:57 20	12:57 (30)	17:03		18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48	20	12:43 (30)
5	09:26	12:37 (30)	08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07		12:24 (30)
	15:58 20	12:57 (30)	17:06		18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47	20	12:44 (30)
6	09:25	12:38 (30)	08:34		07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:08		12:24 (30)
	16:00 20	12:58 (30)	17:08		18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46	20	12:44 (30)
7	09:24	12:38 (30)	08:32		07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10		12:24 (30)
	16:01 20	12:58 (30)	17:11		18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34		15:45	21	12:45 (30)
8	09:23	12:39 (30)	08:30		07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12		12:25 (30)
	16:03 20	12:59 (30)	17:13		18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44	20	12:45 (30)
9	09:23	12:39 (30)	08:27		07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10		09:13		12:24 (30)
	16:05 19	12:58 (30)	17:15		18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30		15:44	21	12:45 (30)
10	09:22	12:40 (30)	08:25		07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	13:40 (16)	09:15		12:25 (30)
	16:07 19	12:59 (30)	17:18		18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27 5	13:45 (16)	15:43	21	12:46 (30)
11	09:21	12:40 (30)	08:22		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	13:37 (16)	09:16		12:26 (30)
	16:09 19	12:59 (30)	17:20		18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25 11	13:48 (16)	15:43	21	12:47 (30)
12	09:19	12:42 (30)	08:20		07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	13:36 (16)	09:17		12:26 (30)
	16:10 24	14:10 (16)	17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 14	13:50 (16)	15:42	20	12:46 (30)
13	09:18	12:42 (30)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	13:35 (16)	09:19		12:27 (30)
	16:12 27	14:11 (16)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 17	13:52 (16)	15:42	20	12:47 (30)
14	09:17	12:44 (30)	08:15		06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22	13:34 (16)	09:20		12:27 (30)
	16:14 27	14:13 (16)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 18	13:52 (16)	15:42	21	12:48 (30)
15	09:16	12:45 (30)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	13:34 (16)	09:21		12:27 (30)
	16:17 27	14:14 (16)	17:30		18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17 19	13:53 (16)	15:42	21	12:48 (30)
16	09:14	12:46 (30)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	13:34 (16)	09:22		12:28 (30)
	16:19 27	14:15 (16)	17:33		18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15 20	13:54 (16)	15:42	20	12:48 (30)
17	09:13	12:48 (30)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	13:33 (16)	09:23		12:28 (30)
	16:21 25	14:16 (16)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 20	13:53 (16)	15:42	20	12:48 (30)
18	09:11	13:59 (16)	08:05		06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	13:34 (16)	09:24		12:29 (30)
	16:23 18	14:17 (16)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11 20	13:54 (16)	15:42	20	12:49 (30)
19	09:10	13:59 (16)	08:02		06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34	13:34 (16)	09:25		12:30 (30)
	16:25 19	14:18 (16)	17:40		18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 21	13:55 (16)	15:42	20	12:50 (30)
20	09:08	13:59 (16)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	13:34 (16)	09:25		12:30 (30)
	16:27 19	14:18 (16)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 20	13:54 (16)	15:42	20	12:50 (30)
21	09:07	13:59 (16)	07:57		06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	13:35 (16)	09:26		12:30 (30)
	16:30 20	14:19 (16)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 20	13:55 (16)	15:43	20	12:50 (30)
22	09:05	13:59 (16)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41	13:35 (16)	09:27		12:31 (30)
	16:32 20	14:19 (16)	17:47		18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04 19	13:54 (16)	15:43	20	12:51 (30)
23	09:03	13:59 (16)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	13:36 (16)	09:27		12:31 (30)
	16:34 21	14:20 (16)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02 19	13:55 (16)	15:44	20	12:51 (30)
24	09:01	14:00 (16)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	13:37 (16)	09:27		12:31 (30)
	16:36 20	14:20 (16)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	13:55 (16)	15:44	21	12:52 (30)
25	09:00	14:00 (16)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:26 (30)	09:28		12:33 (30)
	16:39 21	14:21 (16)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 25	13:54 (16)	15:45	20	12:53 (30)
26	08:58	14:01 (16)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:25 (30)	09:28		12:33 (30)
	16:41 20	14:21 (16)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 26	13:54 (16)	15:46	20	12:53 (30)
27	08:56	14:01 (16)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	12:24 (30)	09:28		12:34 (30)
	16:44 19	14:20 (16)	18:00		19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 28	13:54 (16)	15:47	20	12:54 (30)
28	08:54	14:02 (16)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:23 (30)	09:28		12:33 (30)
	16:46 18	14:20 (16)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55 28	13:53 (16)	15:47	21	12:54 (30)
29	08:52	14:04 (16)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:23 (30)	09:28		12:34 (30)
	16:48 16	14:20 (16)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 27	13:52 (16)	15:49	20	12:54 (30)
30	08:50	14:04 (16)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:23 (30)	09:28		12:35 (30)
	16:51 14	14:18 (16)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 24	13:51 (16)	15:50	20	12:55 (30)
31	08:48	14:07 (16)			07:09		04:41		05:22	06:31		07:49			09:28		12:35 (30)
	16:53 10	14:17 (16)			20:14		22:29		22:03	20:42		16:51			15:51	20	12:55 (30)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	631		5										419		625		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,58		0,55										0,56		0,62		
Total reduction	0,23		0,22										0,23		0,25		
Total, real	147		1										94		154		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28		13:54 (30)	08:45		15:12 (16)	07:35	07:06	05:43	04:39
	15:52	9	14:03 (30)	16:56	14	15:26 (16)	18:04	20:16	21:26	22:30
2	09:27		13:54 (30)	08:43		15:12 (16)	07:32	07:04	05:41	04:38
	15:54	11	14:05 (30)	16:58	16	15:28 (16)	18:07	20:19	21:28	22:32
3	09:27		13:54 (30)	08:41		15:11 (16)	07:29	07:01	05:38	04:37
	15:55	12	14:06 (30)	17:01	17	15:28 (16)	18:09	20:21	21:30	22:33
4	09:26		13:54 (30)	08:39		15:11 (16)	07:27	06:58	05:36	04:36
	15:57	13	14:07 (30)	17:03	18	15:29 (16)	18:12	20:23	21:33	22:35
5	09:26		13:53 (30)	08:37		15:11 (16)	07:24	06:55	05:33	04:34
	15:58	15	14:08 (30)	17:06	18	15:29 (16)	18:14	20:26	21:35	22:36
6	09:25		13:53 (30)	08:34		15:11 (16)	07:21	06:52	05:31	04:33
	16:00	16	14:09 (30)	17:08	19	15:30 (16)	18:16	20:28	21:37	22:38
7	09:24		13:54 (30)	08:32		15:11 (16)	07:18	06:49	05:29	04:32
	16:01	16	14:10 (30)	17:10	19	15:30 (16)	18:19	20:30	21:39	22:39
8	09:23		13:54 (30)	08:30		15:11 (16)	07:15	06:46	05:26	04:31
	16:03	17	14:11 (30)	17:13	18	15:29 (16)	18:21	20:32	21:42	22:40
9	09:23		13:53 (30)	08:27		15:12 (16)	07:13	06:44	05:24	04:31
	16:05	18	14:11 (30)	17:15	18	15:30 (16)	18:23	20:35	21:44	22:41
10	09:22		13:53 (30)	08:25		15:12 (16)	07:10	06:41	05:21	04:30
	16:07	19	14:12 (30)	17:18	17	15:29 (16)	18:26	20:37	21:46	22:43
11	09:20		13:53 (30)	08:22		15:13 (16)	07:07	06:38	05:19	04:29
	16:09	19	14:12 (30)	17:20	14	15:27 (16)	18:28	20:39	21:48	22:44
12	09:19		13:54 (30)	08:20		15:16 (16)	07:04	06:35	05:17	04:28
	16:10	19	14:13 (30)	17:23	11	15:27 (16)	18:30	20:42	21:51	22:45
13	09:18		13:53 (30)	08:17		15:18 (16)	07:01	06:32	05:14	04:28
	16:12	21	14:14 (30)	17:25	5	15:23 (16)	18:33	20:44	21:53	22:45
14	09:17		13:54 (30)	08:15			06:58	06:29	05:12	04:27
	16:14	21	14:15 (30)	17:28			18:35	20:46	21:55	22:46
15	09:16		13:54 (30)	08:12			06:56	06:27	05:10	04:27
	16:16	21	14:15 (30)	17:30			18:37	20:49	21:57	22:47
16	09:14		13:54 (30)	08:10			06:53	06:24	05:08	04:27
	16:19	21	14:15 (30)	17:33			18:40	20:51	21:59	22:48
17	09:13		13:54 (30)	08:07			06:50	06:21	05:06	04:27
	16:21	22	14:16 (30)	17:35			18:42	20:53	22:02	22:48
18	09:11		13:55 (30)	08:05			06:47	06:18	05:04	04:26
	16:23	21	14:16 (30)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:55 (30)	08:02			06:44	06:15	05:02	04:26
	16:25	21	14:16 (30)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:56 (30)	07:59			06:41	06:13	05:00	04:26
	16:27	20	14:16 (30)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:56 (30)	07:57			06:38	06:10	04:58	04:26
	16:30	20	14:16 (30)	17:45			18:51	21:02	22:10	22:50
22	09:05		13:57 (30)	07:54			06:35	06:07	04:56	04:27
	16:32	19	14:16 (30)	17:47			18:53	21:05	22:12	22:50
23	09:03		13:58 (30)	07:51			06:32	06:05	04:54	04:27
	16:34	18	14:16 (30)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:59 (30)	07:49			06:30	06:02	04:52	04:27
	16:36	17	14:16 (30)	17:52			18:58	21:09	22:16	22:50
25	08:59		14:01 (30)	07:46			06:27	05:59	04:50	04:28
	16:39	14	14:15 (30)	17:55			19:00	21:12	22:18	22:50
26	08:58		14:02 (30)	07:43			06:24	05:57	04:49	04:28
	16:41	11	14:13 (30)	17:57			19:03	21:14	22:20	22:50
27	08:56		14:05 (30)	07:41			06:21	05:54	04:47	04:29
	16:44	6	14:11 (30)	18:00			19:05	21:16	22:22	22:50
28	08:54			07:38			06:18	05:51	04:45	04:29
	16:46			18:02			19:07	21:19	22:23	22:50
29	08:52						07:15	05:49	04:44	04:30
	16:48						20:10	21:21	22:25	22:49
30	08:50		15:15 (16)				07:12	05:46	04:42	04:31
	16:51	8	15:23 (16)				20:12	21:23	22:27	22:49
31	08:48		15:14 (16)				07:09		04:41	
	16:53	11	15:25 (16)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		476			204					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,55			0,55					
Total reduction		0,22			0,22					
Total, real		104			45					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		14:42 (16)	08:59		13:35 (30)
	22:48		22:01		20:39		19:13			16:48	16	14:58 (16)	15:51	19	13:54 (30)
2	04:33		05:26		06:35		07:41			07:53		14:41 (16)	09:01		13:37 (30)
	22:48		21:58		20:37		19:10			16:46	18	14:59 (16)	15:50	18	13:55 (30)
3	04:34		05:28		06:37		07:44			07:56		14:40 (16)	09:03		13:37 (30)
	22:47		21:56		20:34		19:07			16:44	19	14:59 (16)	15:49	18	13:55 (30)
4	04:35		05:30		06:39		07:46			07:58		14:40 (16)	09:05		13:38 (30)
	22:46		21:54		20:31		19:04			16:41	20	15:00 (16)	15:48	17	13:55 (30)
5	04:36		05:32		06:42		07:48			08:01		14:41 (16)	09:07		13:39 (30)
	22:45		21:51		20:28		19:01			16:39	19	15:00 (16)	15:47	16	13:55 (30)
6	04:37		05:35		06:44		07:50			08:03		14:41 (16)	09:08		13:40 (30)
	22:45		21:49		20:25		18:58			16:36	19	15:00 (16)	15:46	15	13:55 (30)
7	04:38		05:37		06:46		07:53			08:06		14:41 (16)	09:10		13:41 (30)
	22:44		21:46		20:22		18:56			16:34	18	14:59 (16)	15:45	14	13:55 (30)
8	04:40		05:39		06:48		07:55			08:08		14:42 (16)	09:12		13:42 (30)
	22:43		21:44		20:19		18:53			16:32	17	14:59 (16)	15:44	13	13:55 (30)
9	04:41		05:41		06:50		07:57			08:10		14:43 (16)	09:13		13:42 (30)
	22:41		21:41		20:16		18:50			16:30	16	14:59 (16)	15:44	12	13:54 (30)
10	04:42		05:44		06:53		07:59			08:13		14:43 (16)	09:15		13:43 (30)
	22:40		21:39		20:14		18:47			16:27	14	14:57 (16)	15:43	11	13:54 (30)
11	04:44		05:46		06:55		08:02			08:15		14:45 (16)	09:16		13:45 (30)
	22:39		21:36		20:11		18:44			16:25	11	14:56 (16)	15:43	9	13:54 (30)
12	04:45		05:48		06:57		08:04			08:18		14:47 (16)	09:17		13:46 (30)
	22:38		21:34		20:08		18:41			16:23	7	14:54 (16)	15:42	7	13:53 (30)
13	04:47		05:50		06:59		08:06			08:20			09:19		13:48 (30)
	22:36		21:31		20:05		18:39			16:21			15:42	5	13:53 (30)
14	04:49		05:53		07:01		08:09			08:22			09:20		13:49 (30)
	22:35		21:29		20:02		18:36			16:19			15:42	3	13:52 (30)
15	04:50		05:55		07:04		08:11			08:25		13:37 (30)	09:21		
	22:33		21:26		19:59		18:33			16:17	7	13:44 (30)	15:42		
16	04:52		05:57		07:06		08:13			08:27		13:36 (30)	09:22		
	22:32		21:23		19:56		18:30			16:15	11	13:47 (30)	15:42		
17	04:54		05:59		07:08		08:16			08:29		13:34 (30)	09:23		
	22:30		21:21		19:53		18:28			16:13	14	13:48 (30)	15:42		
18	04:56		06:01		07:10		08:18			08:32		13:33 (30)	09:24		
	22:29		21:18		19:50		18:25			16:11	17	13:50 (30)	15:42		
19	04:57		06:04		07:12		08:20			08:34		13:33 (30)	09:25		
	22:27		21:15		19:47		18:22			16:09	18	13:51 (30)	15:42		
20	04:59		06:06		07:15		08:23			08:36		13:32 (30)	09:25		
	22:25		21:13		19:45		18:19			16:07	19	13:51 (30)	15:42		
21	05:01		06:08		07:17		08:25			08:38		13:32 (30)	09:26		
	22:23		21:10		19:42		18:17			16:06	20	13:52 (30)	15:43		
22	05:03		06:10		07:19		08:27			08:41		13:32 (30)	09:27		
	22:21		21:07		19:39		18:14			16:04	20	13:52 (30)	15:43		
23	05:05		06:13		07:21		08:30			08:43		13:32 (30)	09:27		
	22:20		21:05		19:36		18:11			16:02	21	13:53 (30)	15:44		
24	05:07		06:15		07:23		08:32			08:45		13:33 (30)	09:27		
	22:18		21:02		19:33		18:09			16:00	21	13:54 (30)	15:44		
25	05:09		06:17		07:26		07:34			08:47		13:33 (30)	09:28		
	22:16		20:59		19:30		17:06			15:59	21	13:54 (30)	15:45		
26	05:11		06:19		07:28		07:37			08:49		13:33 (30)	09:28		
	22:14		20:56		19:27		17:04			15:57	21	13:54 (30)	15:46		
27	05:13		06:22		07:30		07:39			08:51		13:33 (30)	09:28		
	22:11		20:53		19:24		17:01			15:56	21	13:54 (30)	15:47		
28	05:15		06:24		07:32		07:41			08:53		13:33 (30)	09:28		
	22:09		20:51		19:21		16:58			15:55	21	13:54 (30)	15:47		
29	05:17		06:26		07:35		07:44		14:47 (16)	08:55		13:35 (30)	09:28		
	22:07		20:48		19:18		16:56	7	14:54 (16)	15:53	20	13:55 (30)	15:48		
30	05:19		06:28		07:37		07:46		14:45 (16)	08:57		13:35 (30)	09:28		13:56 (30)
	22:05		20:45		19:16		16:53	11	14:56 (16)	15:52	20	13:55 (30)	15:50	4	14:00 (30)
31	05:22		06:31				07:49		14:42 (16)				09:28		13:55 (30)
	22:03		20:42				16:51	15	14:57 (16)				15:51	6	14:01 (30)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								33			486			187	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,55			0,55			0,55	
Total reduction								0,22			0,22			0,22	
Total, real								7			107			41	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:45		10:57 (41)	07:35		16:28 (21)	07:06	05:44	04:39
	15:52			16:56	40	13:50 (30)	18:04	11	16:39 (21)	20:16	21:26	22:30
2	09:27			08:43		10:59 (41)	07:32		16:27 (21)	07:04	05:41	04:38
	15:54			16:58	37	13:51 (30)	18:07	13	16:40 (21)	20:19	21:28	22:32
3	09:27			08:41		11:02 (41)	07:30		16:27 (21)	07:01	05:38	04:37
	15:55			17:01	28	13:49 (30)	18:09	14	16:41 (21)	20:21	21:30	22:33
4	09:26			08:39		13:29 (30)	07:27		16:27 (21)	06:58	05:36	04:36
	15:57			17:03	20	13:49 (30)	18:12	17	16:44 (21)	20:23	21:33	22:35
5	09:26			08:37		13:30 (30)	07:24		16:27 (21)	06:55	05:33	04:34
	15:58			17:06	17	13:47 (30)	18:14	19	16:46 (21)	20:26	21:35	22:36
6	09:25			08:34		13:33 (30)	07:21		16:28 (21)	06:52	05:31	04:33
	16:00			17:08	12	13:45 (30)	18:16	17	16:45 (21)	20:28	21:37	22:38
7	09:24			08:32			07:18		16:29 (21)	06:49	05:29	04:32
	16:01			17:11			18:19	15	16:44 (21)	20:30	21:39	22:39
8	09:23			08:30			07:15		16:30 (21)	06:46	05:26	04:32
	16:03			17:13			18:21	12	16:42 (21)	20:32	21:42	22:40
9	09:23			08:27			07:13		16:33 (21)	06:44	05:24	04:31
	16:05			17:15			18:23	6	16:39 (21)	20:35	21:44	22:41
10	09:22			08:25			07:10			06:41	05:21	04:30
	16:07			17:18			18:26			20:37	21:46	22:43
11	09:20			08:22			07:07			06:38	05:19	04:29
	16:09			17:20			18:28			20:39	21:48	22:44
12	09:19			08:20		14:57 (11)	07:04			06:35	05:17	04:29
	16:11			17:23	8	15:05 (11)	18:30			20:42	21:51	22:45
13	09:18			08:17		14:59 (11)	07:01			06:32	05:15	04:28
	16:12			17:25	11	15:10 (11)	18:33			20:44	21:53	22:45
14	09:17		11:05 (41)	08:15		15:02 (11)	06:58			06:29	05:12	04:28
	16:14	3	11:08 (41)	17:28	12	15:14 (16)	18:35			20:46	21:55	22:46
15	09:16		10:59 (41)	08:12		15:06 (16)	06:56			06:27	05:10	04:27
	16:17	10	11:09 (41)	17:30	12	15:18 (16)	18:37			20:49	21:57	22:47
16	09:14		10:52 (41)	08:10		15:06 (16)	06:53			06:24	05:08	04:27
	16:19	18	11:10 (41)	17:33	15	15:21 (16)	18:40			20:51	21:59	22:48
17	09:13		10:51 (41)	08:07		15:05 (16)	06:50			06:21	05:06	04:27
	16:21	19	11:10 (41)	17:35	16	15:21 (16)	18:42			20:53	22:02	22:48
18	09:11		10:51 (41)	08:05		15:05 (16)	06:47			06:18	05:04	04:26
	16:23	20	11:11 (41)	17:38	15	15:20 (16)	18:44			20:56	22:04	22:49
19	09:10		10:51 (41)	08:02		15:06 (16)	06:44			06:16	05:02	04:26
	16:25	21	11:12 (41)	17:40	16	15:22 (16)	18:47			20:58	22:06	22:49
20	09:08		10:51 (41)	07:59		15:07 (16)	06:41			06:13	05:00	04:26
	16:27	22	11:13 (41)	17:43	17	15:24 (16)	18:49			21:00	22:08	22:50
21	09:07		10:51 (41)	07:57		15:07 (16)	06:38			06:10	04:58	04:26
	16:30	22	11:13 (41)	17:45	20	15:27 (16)	18:51			21:02	22:10	22:50
22	09:05		10:51 (41)	07:54		15:08 (16)	06:35			06:07	04:56	04:27
	16:32	27	12:49 (36)	17:47	20	15:28 (16)	18:53			21:05	22:12	22:50
23	09:03		10:51 (41)	07:51		15:09 (16)	06:32			06:05	04:54	04:27
	16:34	39	13:02 (36)	17:50	18	15:27 (16)	18:56			21:07	22:14	22:50
24	09:01		10:52 (41)	07:49		15:12 (16)	06:30			06:02	04:52	04:27
	16:37	40	13:04 (36)	17:52	13	15:25 (16)	18:58			21:09	22:16	22:50
25	08:59		10:52 (41)	07:46		15:16 (16)	06:27			05:59	04:50	04:28
	16:39	39	13:04 (36)	17:55	5	15:21 (16)	19:00			21:12	22:18	22:50
26	08:58		10:52 (41)	07:43			06:24			05:57	04:49	04:28
	16:41	39	13:24 (30)	17:57			19:03			21:14	22:20	22:50
27	08:56		10:53 (41)	07:41			06:21			05:54	04:47	04:29
	16:44	39	13:28 (30)	18:00			19:05			21:16	22:22	22:50
28	08:54		10:53 (41)	07:38		16:32 (21)	06:18			05:51	04:45	04:29
	16:46	41	13:35 (30)	18:02	4	16:36 (21)	19:07			21:19	22:23	22:50
29	08:52		10:54 (41)				07:15			05:49	04:44	04:30
	16:48	41	13:44 (30)				20:10			21:21	22:25	22:49
30	08:50		10:55 (41)				07:12			05:46	04:42	04:31
	16:51	42	13:47 (30)				20:12			21:23	22:27	22:49
31	08:48		10:56 (41)				07:09				04:41	
	16:53	42	13:49 (30)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		524			356			124				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,67			0,57			0,57				
Total reduction		0,27			0,23			0,23				
Total, real		139			81			28				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51			08:59
	22:48	22:01	20:39	19:13			16:48			15:51
2	04:33	05:26	06:35	07:41			07:54			09:01
	22:48	21:58	20:37	19:10			16:46			15:50
3	04:34	05:28	06:37	07:44			07:56			09:03
	22:47	21:56	20:34	19:07			16:44			15:49
4	04:35	05:30	06:39	07:46			07:58		13:07 (30)	09:05
	22:46	21:54	20:31	19:04			16:41	4	13:11 (30)	15:48
5	04:36	05:33	06:42	07:48		17:09 (21)	08:01		13:02 (30)	09:07
	22:45	21:51	20:28	19:01	9	17:18 (21)	16:39	13	13:15 (30)	15:47
6	04:37	05:35	06:44	07:50		17:06 (21)	08:03		13:01 (30)	09:08
	22:45	21:49	20:25	18:58	14	17:20 (21)	16:36	17	13:18 (30)	15:46
7	04:38	05:37	06:46	07:53		17:04 (21)	08:06		12:58 (30)	09:10
	22:44	21:46	20:22	18:56	16	17:20 (21)	16:34	21	13:19 (30)	15:45
8	04:40	05:39	06:48	07:55		17:03 (21)	08:08		10:32 (41)	09:12
	22:43	21:44	20:19	18:53	18	17:21 (21)	16:32	29	13:20 (30)	15:44
9	04:41	05:41	06:50	07:57		17:02 (21)	08:10		10:30 (41)	09:13
	22:41	21:41	20:16	18:50	18	17:20 (21)	16:30	37	13:22 (30)	15:44
10	04:42	05:44	06:53	07:59		17:01 (21)	08:13		10:28 (41)	09:15
	22:40	21:39	20:14	18:47	16	17:17 (21)	16:27	40	13:21 (30)	15:43
11	04:44	05:46	06:55	08:02		17:01 (21)	08:15		10:27 (41)	09:16
	22:39	21:36	20:11	18:44	14	17:15 (21)	16:25	41	13:19 (30)	15:43
12	04:45	05:48	06:57	08:04		17:01 (21)	08:18		10:27 (41)	09:17
	22:38	21:34	20:08	18:41	12	17:13 (21)	16:23	42	13:19 (30)	15:42
13	04:47	05:50	06:59	08:06		17:02 (21)	08:20		10:25 (41)	09:19
	22:36	21:31	20:05	18:39	10	17:12 (21)	16:21	41	13:15 (30)	15:42
14	04:49	05:53	07:01	08:09		17:06 (21)	08:22		10:25 (41)	09:20
	22:35	21:29	20:02	18:36	2	17:08 (21)	16:19	41	13:07 (30)	15:42
15	04:50	05:55	07:04	08:11			08:25		10:25 (41)	09:21
	22:33	21:26	19:59	18:33			16:17	40	13:01 (30)	15:42
16	04:52	05:57	07:06	08:13			08:27		10:26 (41)	09:22
	22:32	21:23	19:56	18:30			16:15	39	12:58 (30)	15:42
17	04:54	05:59	07:08	08:16		15:45 (16)	08:29		10:25 (41)	09:23
	22:30	21:21	19:53	18:28	9	15:54 (16)	16:13	39	12:37 (36)	15:42
18	04:56	06:02	07:10	08:18		15:42 (16)	08:32		10:26 (41)	09:24
	22:29	21:18	19:50	18:25	15	15:57 (16)	16:11	40	12:38 (36)	15:42
19	04:57	06:04	07:12	08:20		15:40 (16)	08:34		10:26 (41)	09:25
	22:27	21:15	19:47	18:22	18	15:58 (16)	16:09	39	12:37 (36)	15:42
20	04:59	06:06	07:15	08:23		15:39 (16)	08:36		10:26 (41)	09:25
	22:25	21:13	19:45	18:20	21	16:00 (16)	16:07	28	12:25 (36)	15:42
21	05:01	06:08	07:17	08:25		15:37 (16)	08:38		10:27 (41)	09:26
	22:23	21:10	19:42	18:17	18	15:55 (16)	16:06	22	10:49 (41)	15:43
22	05:03	06:10	07:19	08:27		15:37 (16)	08:41		10:27 (41)	09:27
	22:21	21:07	19:39	18:14	16	15:53 (16)	16:04	22	10:49 (41)	15:43
23	05:05	06:13	07:21	08:30		15:36 (16)	08:43		10:28 (41)	09:27
	22:20	21:05	19:36	18:12	16	15:52 (16)	16:02	21	10:49 (41)	15:44
24	05:07	06:15	07:24	08:32		15:35 (16)	08:45		10:29 (41)	09:27
	22:18	21:02	19:33	18:09	16	15:51 (16)	16:01	20	10:49 (41)	15:44
25	05:09	06:17	07:26	07:34		14:36 (16)	08:47		10:29 (41)	09:28
	22:16	20:59	19:30	17:06	15	14:51 (16)	15:59	19	10:48 (41)	15:45
26	05:11	06:19	07:28	07:37		14:35 (16)	08:49		10:31 (41)	09:28
	22:14	20:56	19:27	17:04	14	14:49 (16)	15:57	18	10:49 (41)	15:46
27	05:13	06:22	07:30	07:39		14:35 (16)	08:51		10:38 (41)	09:28
	22:11	20:53	19:24	17:01	12	14:47 (16)	15:56	10	10:48 (41)	15:47
28	05:15	06:24	07:32	07:41		14:30 (11)	08:53		10:44 (41)	09:28
	22:09	20:51	19:21	16:58	12	14:42 (16)	15:55	3	10:47 (41)	15:48
29	05:17	06:26	07:35	07:44		14:27 (11)	08:55			09:28
	22:07	20:48	19:19	16:56	11	14:38 (11)	15:53			15:49
30	05:20	06:28	07:37	07:46		14:26 (11)	08:57			09:28
	22:05	20:45	19:16	16:53	8	14:34 (11)	15:52			15:50
31	05:22	06:31		07:49						09:28
	22:03	20:42		16:51						15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					330			686		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,56			0,65		
Total reduction					0,22			0,26		
Total, real					73			178		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April			May			June
1	09:27			08:45		15:29 (12)	07:35		15:43 (17)	07:06			05:43		18:54 (41)	04:39
	15:52			16:56	22	15:51 (12)	18:04	38	16:21 (17)	20:16			21:25	25	19:19 (41)	22:30
2	09:27			08:43		15:29 (12)	07:32		15:44 (17)	07:04			05:41		18:56 (41)	04:38
	15:54			16:58	23	15:52 (12)	18:07	36	16:20 (17)	20:19			21:28	20	19:16 (41)	22:32
3	09:27			08:41		15:29 (12)	07:29		15:44 (17)	07:01		19:08 (41)	05:38		18:59 (41)	04:37
	15:55			17:01	23	15:52 (12)	18:09	35	16:19 (17)	20:21	9	19:17 (41)	21:30	15	19:14 (41)	22:33
4	09:26			08:39		15:29 (12)	07:27		15:45 (17)	06:58		19:03 (41)	05:36		19:04 (41)	04:36
	15:57			17:03	24	15:53 (12)	18:11	33	16:18 (17)	20:23	18	19:21 (41)	21:32	5	19:09 (41)	22:35
5	09:25			08:36		15:29 (12)	07:24		15:46 (17)	06:55		18:59 (41)	05:33			04:35
	15:58			17:06	23	15:52 (12)	18:14	32	16:18 (17)	20:25	24	19:23 (41)	21:35			22:36
6	09:25			08:34		15:28 (12)	07:21		15:48 (17)	06:52		18:57 (41)	05:31			04:33
	16:00			17:08	24	15:52 (12)	18:16	28	16:16 (17)	20:28	28	19:25 (41)	21:37			22:37
7	09:24			08:32		15:29 (12)	07:18		15:49 (17)	06:49		18:55 (41)	05:29			04:32
	16:01			17:10	24	15:53 (12)	18:19	25	16:14 (17)	20:30	31	19:26 (41)	21:39			22:39
8	09:23			08:29		15:29 (12)	07:15		15:51 (17)	06:46		18:53 (41)	05:26			04:32
	16:03			17:13	23	15:52 (12)	18:21	21	16:12 (17)	20:32	35	19:42 (30)	21:42			22:40
9	09:22			08:27		15:31 (12)	07:13		15:54 (17)	06:43		18:52 (41)	05:24			04:31
	16:05			17:15	21	15:52 (12)	18:23	15	16:09 (17)	20:35	54	19:59 (30)	21:44			22:41
10	09:21			08:25		15:31 (12)	07:10			06:41		18:51 (41)	05:21			04:30
	16:07			17:18	20	15:51 (12)	18:26			20:37	57	19:59 (30)	21:46			22:42
11	09:20			08:22		15:32 (12)	07:07			06:38		18:49 (41)	05:19			04:29
	16:09			17:20	18	15:50 (12)	18:28			20:39	60	19:59 (30)	21:48			22:43
12	09:19			08:20		15:34 (12)	07:04			06:35		18:48 (41)	05:17			04:29
	16:11			17:23	15	15:49 (12)	18:30			20:42	62	19:58 (30)	21:50			22:44
13	09:18			08:17		15:36 (12)	07:01			06:32		18:48 (41)	05:15			04:28
	16:12			17:25	22	16:09 (17)	18:33			20:44	64	19:59 (30)	21:53			22:45
14	09:17			08:15		15:54 (17)	06:58			06:29		18:47 (41)	05:12			04:28
	16:14			17:28	18	16:12 (17)	18:35			20:46	63	19:58 (30)	21:55			22:46
15	09:15			08:12		15:52 (17)	06:55			06:27		18:46 (41)	05:10			04:27
	16:17			17:30	22	16:14 (17)	18:37			20:48	63	19:57 (30)	21:57			22:47
16	09:14			08:10		15:51 (17)	06:53		17:30 (36)	06:24		18:47 (41)	05:08			04:27
	16:19			17:33	26	16:17 (17)	18:40	8	17:38 (36)	20:51	62	19:57 (30)	21:59			22:47
17	09:13			08:07		15:49 (17)	06:50		17:27 (36)	06:21		18:46 (41)	05:06			04:27
	16:21			17:35	29	16:18 (17)	18:42	13	17:40 (36)	20:53	60	19:55 (30)	22:01			22:48
18	09:11			08:04		15:47 (17)	06:47		17:25 (36)	06:18		18:45 (41)	05:04			04:26
	16:23			17:38	32	16:19 (17)	18:44	17	17:42 (36)	20:55	58	19:53 (30)	22:04			22:49
19	09:10			08:02		15:46 (17)	06:44		17:23 (36)	06:15		18:46 (41)	05:02			04:26
	16:25			17:40	33	16:19 (17)	18:46	19	17:42 (36)	20:58	53	19:52 (30)	22:06			22:49
20	09:08			07:59		15:46 (17)	06:41		17:22 (36)	06:13		18:45 (41)	05:00			04:26
	16:27			17:43	35	16:21 (17)	18:49	21	17:43 (36)	21:00	44	19:29 (41)	22:08			22:49
21	09:06			07:57		15:45 (17)	06:38		17:21 (36)	06:10		18:45 (41)	04:58			04:26
	16:30			17:45	36	16:21 (17)	18:51	22	17:43 (36)	21:02	43	19:28 (41)	22:10			22:50
22	09:05			07:54		15:44 (17)	06:35		17:21 (36)	06:07		18:46 (41)	04:56			04:27
	16:32			17:47	37	16:21 (17)	18:53	22	17:43 (36)	21:05	43	19:29 (41)	22:12			22:50
23	09:03			07:51		15:44 (17)	06:32		17:20 (36)	06:05		18:46 (41)	04:54			04:27
	16:34			17:50	38	16:22 (17)	18:56	22	17:42 (36)	21:07	41	19:27 (41)	22:14			22:50
24	09:01			07:49		15:43 (17)	06:29		17:20 (36)	06:02		18:47 (41)	04:52			04:27
	16:36			17:52	39	16:22 (17)	18:58	22	17:42 (36)	21:09	40	19:27 (41)	22:16			22:50
25	08:59			07:46		15:44 (17)	06:27		17:20 (36)	05:59		18:47 (41)	04:50			04:28
	16:39			17:55	38	16:22 (17)	19:00	21	17:41 (36)	21:12	39	19:26 (41)	22:18			22:50
26	08:57			07:43		15:43 (17)	06:24		17:20 (36)	05:57		18:48 (41)	04:49			04:28
	16:41			17:57	39	16:22 (17)	19:03	20	17:40 (36)	21:14	37	19:25 (41)	22:20			22:50
27	08:55		15:34 (12)	07:40		15:43 (17)	06:21		17:22 (36)	05:54		18:48 (41)	04:47			04:29
	16:44	10	15:44 (12)	18:00	39	16:22 (17)	19:05	17	17:39 (36)	21:16	36	19:24 (41)	22:21			22:50
28	08:54		15:33 (12)	07:38		15:43 (17)	06:18		17:24 (36)	05:51		18:50 (41)	04:45			04:29
	16:46	13	15:46 (12)	18:02	38	16:21 (17)	19:07	13	17:37 (36)	21:19	33	19:23 (41)	22:23			22:49
29	08:51		15:31 (12)				07:15		18:26 (36)	05:49		18:50 (41)	04:44			04:30
	16:48	16	15:47 (12)				20:09	8	18:34 (36)	21:21	31	19:21 (41)	22:25			22:49
30	08:49		15:31 (12)				07:12			05:46		18:52 (41)	04:42			04:31
	16:51	18	15:49 (12)				20:12			21:23	28	19:20 (41)	22:27			22:49
31	08:47		15:29 (12)				07:09						04:41			
	16:53	20	15:49 (12)				20:14						22:28			
Potential sun hours	221			260			365			432			521			547
Total, worst case		77			781			508			1216			65		
Sun reduction		0,50			0,50			0,50			0,50			0,50		
Oper. time red.		0,80			0,80			0,80			0,80			0,80		
Wind dir. red.		0,53			0,54			0,58			0,68			0,68		
Total reduction		0,21			0,22			0,23			0,27			0,27		
Total, real		16			169			118			331			18		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August			September			October			November			December
1	04:32	05:24			06:33		18:48 (41)	07:39			07:51		15:00 (12)	08:59
	22:48	22:00			20:39	60	19:58 (30)	19:13			16:48	21	15:21 (12)	15:51
2	04:33	05:26			06:35		18:49 (41)	07:41			07:53		15:00 (12)	09:01
	22:47	21:58			20:36	57	19:57 (30)	19:10			16:46	22	15:22 (12)	15:50
3	04:34	05:28			06:37		18:49 (41)	07:43			07:56		14:59 (12)	09:03
	22:47	21:56			20:34	54	19:56 (30)	19:07			16:44	23	15:22 (12)	15:49
4	04:35	05:30			06:39		18:51 (41)	07:46		16:33 (17)	07:58		14:59 (12)	09:05
	22:46	21:53			20:31	35	19:40 (30)	19:04	11	16:44 (17)	16:41	23	15:22 (12)	15:48
5	04:36	05:33			06:42		18:52 (41)	07:48		16:29 (17)	08:01		14:59 (12)	09:07
	22:45	21:51			20:28	31	19:23 (41)	19:01	18	16:47 (17)	16:39	24	15:23 (12)	15:47
6	04:37	05:35			06:44		18:53 (41)	07:50		16:26 (17)	08:03		14:58 (12)	09:08
	22:44	21:49			20:25	28	19:21 (41)	18:58	24	16:50 (17)	16:36	24	15:22 (12)	15:46
7	04:38	05:37			06:46		18:54 (41)	07:52		16:24 (17)	08:05		14:59 (12)	09:10
	22:43	21:46			20:22	25	19:19 (41)	18:55	27	16:51 (17)	16:34	23	15:22 (12)	15:45
8	04:40	05:39			06:48		18:57 (41)	07:55		16:21 (17)	08:08		14:59 (12)	09:11
	22:42	21:44			20:19	18	19:15 (41)	18:53	30	16:51 (17)	16:32	23	15:22 (12)	15:44
9	04:41	05:41		19:10 (41)	06:50		19:00 (41)	07:57		16:21 (17)	08:10		14:59 (12)	09:13
	22:41	21:41	10	19:20 (41)	20:16	11	19:11 (41)	18:50	32	16:53 (17)	16:30	23	15:22 (12)	15:44
10	04:42	05:44		19:07 (41)	06:53			07:59		16:19 (17)	08:13		15:00 (12)	09:14
	22:40	21:39	17	19:24 (41)	20:13			18:47	34	16:53 (17)	16:27	21	15:21 (12)	15:43
11	04:44	05:46		19:04 (41)	06:55			08:02		16:18 (17)	08:15		15:01 (12)	09:16
	22:39	21:36	22	19:26 (41)	20:11			18:44	36	16:54 (17)	16:25	20	15:21 (12)	15:43
12	04:45	05:48		19:02 (41)	06:57			08:04		16:17 (17)	08:17		15:02 (12)	09:17
	22:37	21:34	26	19:28 (41)	20:08			18:41	37	16:54 (17)	16:23	19	15:21 (12)	15:42
13	04:47	05:50		19:00 (41)	06:59			08:06		16:16 (17)	08:20		15:03 (12)	09:18
	22:36	21:31	29	19:29 (41)	20:05			18:39	38	16:54 (17)	16:21	16	15:19 (12)	15:42
14	04:49	05:53		18:58 (41)	07:01		18:17 (36)	08:08		16:16 (17)	08:22		15:05 (12)	09:20
	22:35	21:28	32	19:30 (41)	20:02	7	18:24 (36)	18:36	38	16:54 (17)	16:19	13	15:18 (12)	15:42
15	04:50	05:55		18:57 (41)	07:04		18:13 (36)	08:11		16:15 (17)	08:24		15:07 (12)	09:21
	22:33	21:26	34	19:31 (41)	19:59	13	18:26 (36)	18:33	39	16:54 (17)	16:17	10	15:17 (12)	15:42
16	04:52	05:57		18:56 (41)	07:06		18:11 (36)	08:13		16:15 (17)	08:27			09:22
	22:32	21:23	36	19:32 (41)	19:56	16	18:27 (36)	18:30	39	16:54 (17)	16:15			15:42
17	04:54	05:59		18:54 (41)	07:08		18:09 (36)	08:15		16:15 (17)	08:29			09:23
	22:30	21:21	38	19:32 (41)	19:53	19	18:28 (36)	18:28	38	16:53 (17)	16:13			15:42
18	04:56	06:01		18:53 (41)	07:10		18:08 (36)	08:18		16:15 (17)	08:31			09:24
	22:28	21:18	40	19:33 (41)	19:50	20	18:28 (36)	18:25	39	16:54 (17)	16:11			15:42
19	04:57	06:04		18:52 (41)	07:12		18:08 (36)	08:20		16:15 (17)	08:34			09:24
	22:27	21:15	41	19:33 (41)	19:47	21	18:29 (36)	18:22	38	16:53 (17)	16:09			15:42
20	04:59	06:06		18:51 (41)	07:15		18:07 (36)	08:22		16:16 (17)	08:36			09:25
	22:25	21:13	42	19:33 (41)	19:44	22	18:29 (36)	18:19	36	16:52 (17)	16:07			15:42
21	05:01	06:08		18:50 (41)	07:17		18:06 (36)	08:25		16:16 (17)	08:38			09:26
	22:23	21:10	43	19:33 (41)	19:42	22	18:28 (36)	18:17	35	16:51 (17)	16:06			15:43
22	05:03	06:10		18:50 (41)	07:19		18:06 (36)	08:27		16:17 (17)	08:40			09:26
	22:21	21:07	43	19:33 (41)	19:39	22	18:28 (36)	18:14	34	16:51 (17)	16:04			15:43
23	05:05	06:13		18:49 (41)	07:21		18:06 (36)	08:29		16:17 (17)	08:43			09:27
	22:19	21:04	44	19:33 (41)	19:36	21	18:27 (36)	18:11	32	16:49 (17)	16:02			15:44
24	05:07	06:15		18:49 (41)	07:23		18:07 (36)	08:32		16:18 (17)	08:45			09:27
	22:17	21:02	54	19:55 (30)	19:33	19	18:26 (36)	18:09	31	16:49 (17)	16:01			15:44
25	05:09	06:17		18:49 (41)	07:26		18:07 (36)	07:34		15:18 (17)	08:47			09:28
	22:15	20:59	58	19:57 (30)	19:30	18	18:25 (36)	17:06	29	15:47 (17)	15:59			15:45
26	05:11	06:19		18:49 (41)	07:28		18:08 (36)	07:37		15:20 (17)	08:49			09:28
	22:13	20:56	60	19:58 (30)	19:27	15	18:23 (36)	17:04	25	15:45 (17)	15:57			15:46
27	05:13	06:22		18:48 (41)	07:30		18:09 (36)	07:39		15:22 (17)	08:51			09:28
	22:11	20:53	63	19:59 (30)	19:24	11	18:20 (36)	17:01	22	15:44 (17)	15:56			15:47
28	05:15	06:24		18:48 (41)	07:32			07:41		15:08 (12)	08:53			09:28
	22:09	20:51	63	19:59 (30)	19:21			16:58	22	15:41 (17)	15:55			15:48
29	05:17	06:26		18:48 (41)	07:34			07:44		15:05 (12)	08:55			09:28
	22:07	20:48	63	19:59 (30)	19:18			16:56	21	15:37 (17)	15:53			15:49
30	05:20	06:28		18:48 (41)	07:37			07:46		15:03 (12)	08:57			09:28
	22:05	20:45	63	19:59 (30)	19:16			16:53	16	15:19 (12)	15:52			15:50
31	05:22	06:30		18:48 (41)				07:49		15:01 (12)				09:28
	22:03	20:42	62	19:58 (30)				16:51	18	15:19 (12)				15:51
Potential sun hours	545	478			386			319			236			200
Total, worst case			983			565			839			305		
Sun reduction			0,50			0,50			0,50			0,50		
Oper. time red.			0,80			0,80			0,80			0,80		
Wind dir. red.			0,68			0,65			0,55			0,53		
Total reduction			0,27			0,26			0,22			0,21		
Total, real			268			147			184			64		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (27)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (27)
	15:53	39	13:36 (28)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (28)
2	09:28		12:01 (27)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (27)
	15:54	41	13:36 (28)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (28)
3	09:27		12:01 (27)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (27)
	15:55	41	13:36 (28)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (28)
4	09:27		12:01 (27)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (27)
	15:57	41	13:36 (28)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (28)
5	09:26		12:01 (27)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (27)
	15:58	43	13:37 (28)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (28)
6	09:25		12:02 (27)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (27)
	16:00	41	13:37 (28)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (28)
7	09:25		12:02 (27)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (27)
	16:02	41	13:37 (28)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (28)
8	09:24		12:02 (27)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (27)
	16:03	42	13:38 (28)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (28)
9	09:23		12:03 (27)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (27)
	16:05	41	13:38 (28)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (28)
10	09:22		12:03 (27)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (27)
	16:07	40	13:37 (28)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (28)
11	09:21		12:03 (27)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (27)
	16:09	41	13:38 (28)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (28)
12	09:20		12:03 (27)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (27)
	16:11	39	13:37 (28)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (28)
13	09:19		12:04 (27)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (27)
	16:13	37	13:37 (28)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (28)
14	09:17		12:04 (27)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (27)
	16:15	35	13:36 (28)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (28)
15	09:16		12:04 (27)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (27)	09:21		11:54 (27)
	16:17	32	13:35 (28)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (27)	15:42	38	13:27 (28)
16	09:15		12:04 (27)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (27)	09:22		11:55 (27)
	16:19	24	12:28 (27)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (27)	15:42	37	13:28 (28)
17	09:13		12:06 (27)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (27)	09:23		11:55 (27)
	16:21	24	12:30 (27)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (27)	15:42	37	13:28 (28)
18	09:12		12:06 (27)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (27)	09:24		11:56 (27)
	16:23	24	12:30 (27)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (27)	15:42	36	13:29 (28)
19	09:10		12:06 (27)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (27)	09:25		11:57 (27)
	16:25	24	12:30 (27)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (27)	15:42	36	13:29 (28)
20	09:09		12:07 (27)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (27)	09:26		11:58 (27)
	16:28	23	12:30 (27)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (27)	15:43	36	13:30 (28)
21	09:07		12:08 (27)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (27)	09:26		11:59 (27)
	16:30	21	12:29 (27)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (27)	15:43	35	13:31 (28)
22	09:05		12:09 (27)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (27)	09:27		11:58 (27)
	16:32	20	12:29 (27)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (27)	15:43	36	13:31 (28)
23	09:03		12:09 (27)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (27)	09:27		11:59 (27)
	16:34	19	12:28 (27)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (27)	15:44	36	13:31 (28)
24	09:02		12:10 (27)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (27)	09:28		12:00 (27)
	16:37	17	12:27 (27)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (27)	15:44	36	13:32 (28)
25	09:00		12:12 (27)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (27)	09:28		12:00 (27)
	16:39	15	12:27 (27)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (27)	15:45	37	13:33 (28)
26	08:58		12:14 (27)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (27)	09:28		12:00 (27)
	16:41	11	12:25 (27)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (27)	15:46	37	13:33 (28)
27	08:56		12:17 (27)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (27)	09:28		12:00 (27)
	16:44	4	12:21 (27)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (28)	15:47	38	13:33 (28)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (27)	09:29		12:01 (27)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (28)	15:48	37	13:34 (28)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (27)	09:28		12:00 (27)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (28)	15:49	38	13:34 (28)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (27)	09:28		12:01 (27)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (28)	15:50	39	13:35 (28)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (27)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (28)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,62												0,63			0,61	
Total reduction		0,25												0,25			0,24	
Total, real		203												93			290	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	11:14 (27)	08:46	10:11 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (27)
	15:53 31	12:43 (28)	16:56 18	10:29 (32)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (27)
2	09:28	11:14 (27)	08:44	10:11 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (27)
	15:54 30	12:43 (28)	16:58 17	10:28 (32)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (27)
3	09:27	11:13 (27)	08:41	10:13 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (27)
	15:55 31	12:43 (28)	17:01 14	10:27 (32)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (27)
4	09:27	11:13 (27)	08:39	10:14 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (27)
	15:57 30	12:43 (28)	17:03 11	10:25 (32)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (27)
5	09:26	11:14 (27)	08:37	10:17 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (27)
	15:58 28	12:42 (28)	17:06 7	10:24 (32)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (28)
6	09:25	11:14 (27)	08:35		07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:47 (32)	09:09		11:00 (27)
	16:00 28	12:42 (28)	17:08		18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 7	09:54 (32)	15:46	28	12:28 (28)
7	09:25	11:14 (27)	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:45 (32)	09:10		11:01 (27)
	16:02 26	12:41 (28)	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34 11	09:56 (32)	15:45	29	12:30 (28)
8	09:24	11:14 (27)	08:30		07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:43 (32)	09:12		11:02 (27)
	16:03 21	11:35 (27)	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 14	09:57 (32)	15:45	30	12:31 (28)
9	09:23	11:15 (27)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:42 (32)	09:14		11:03 (27)
	16:05 21	11:36 (27)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 17	09:59 (32)	15:44	30	12:32 (28)
10	09:22	11:15 (27)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:42 (32)	09:15		11:03 (27)
	16:07 21	11:36 (27)	17:18		18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28 18	10:00 (32)	15:44	30	12:32 (28)
11	09:21	11:15 (27)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:41 (32)	09:16		11:04 (27)
	16:09 22	11:37 (27)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26 19	10:00 (32)	15:43	30	12:33 (28)
12	09:20	11:15 (27)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:41 (32)	09:18		11:04 (27)
	16:11 22	11:37 (27)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 19	10:00 (32)	15:43	31	12:34 (28)
13	09:19	11:16 (27)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:41 (32)	09:19		11:05 (27)
	16:13 22	11:38 (27)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 20	10:01 (32)	15:42	31	12:35 (28)
14	09:17	11:16 (27)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:42 (32)	09:20		11:06 (27)
	16:15 22	11:38 (27)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 19	10:01 (32)	15:42	30	12:35 (28)
15	09:16	11:16 (27)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:41 (32)	09:21		11:06 (27)
	16:17 22	11:38 (27)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 20	10:01 (32)	15:42	31	12:36 (28)
16	09:15	11:16 (27)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:42 (32)	09:22		11:08 (27)
	16:19 22	11:38 (27)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15 19	10:01 (32)	15:42	30	12:37 (28)
17	09:13	11:18 (27)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:43 (32)	09:23		11:09 (27)
	16:21 21	11:39 (27)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 26	11:08 (27)	15:42	30	12:38 (28)
18	09:12	11:18 (27)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:43 (32)	09:24		11:08 (27)
	16:23 21	11:39 (27)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 29	11:10 (27)	15:42	30	12:37 (28)
19	09:10	10:13 (32)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:44 (32)	09:25		11:09 (27)
	16:25 27	11:39 (27)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09 31	11:12 (27)	15:42	29	12:38 (28)
20	09:09	10:12 (32)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	09:45 (32)	09:26		11:10 (27)
	16:28 30	11:39 (27)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08 32	11:13 (27)	15:43	30	12:39 (28)
21	09:07	10:11 (32)	07:57		06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39	09:46 (32)	09:26		11:11 (27)
	16:30 32	11:39 (27)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 32	11:14 (27)	15:43	29	12:40 (28)
22	09:05	10:10 (32)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	09:48 (32)	09:27		11:11 (27)
	16:32 32	11:38 (27)	17:48		18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04 29	11:15 (27)	15:43	29	12:40 (28)
23	09:03	10:09 (32)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	09:49 (32)	09:27		11:11 (27)
	16:34 31	11:37 (27)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 27	11:15 (27)	15:44	30	12:40 (28)
24	09:02	10:09 (32)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:55 (27)	09:28		11:12 (27)
	16:37 29	11:36 (27)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 21	11:16 (27)	15:45	30	12:41 (28)
25	09:00	10:09 (32)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:55 (27)	09:28		11:12 (27)
	16:39 26	11:34 (27)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59 21	11:16 (27)	15:45	29	12:41 (28)
26	08:58	10:09 (32)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:55 (27)	09:28		11:13 (27)
	16:41 19	10:28 (32)	17:57		19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58 22	11:17 (27)	15:46	30	12:42 (28)
27	08:56	10:09 (32)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:55 (27)	09:28		11:13 (27)
	16:44 20	10:29 (32)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 22	11:17 (27)	15:47	30	12:42 (28)
28	08:54	10:09 (32)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:56 (27)	09:29		11:13 (27)
	16:46 19	10:28 (32)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 22	11:18 (27)	15:48	31	12:43 (28)
29	08:52	10:09 (32)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:56 (27)	09:29		11:13 (27)
	16:49 20	10:29 (32)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54 22	11:18 (27)	15:49	30	12:42 (28)
30	08:50	10:09 (32)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:56 (27)	09:28		11:13 (27)
	16:51 19	10:28 (32)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 22	11:18 (27)	15:50	31	12:43 (28)
31	08:48	10:10 (32)			07:10		04:41		05:22	06:31		07:49			09:28		11:14 (27)
	16:54 19	10:29 (32)			20:14		22:29		22:03	20:43		16:51			15:51	30	12:43 (28)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	764		67										541		888		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,68		0,72										0,70		0,65		
Total reduction	0,27		0,29										0,28		0,26		
Total, real	208		19										151		231		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:55 (16)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51			09:00		12:38 (16)
	15:52	16	13:11 (16)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48			15:51	20	12:58 (16)
2	09:27		12:55 (16)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54			09:01		12:39 (16)
	15:54	16	13:11 (16)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46			15:50	20	12:59 (16)
3	09:27		12:55 (16)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56			09:03		12:40 (16)
	15:55	17	13:12 (16)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44			15:49	20	13:00 (16)
4	09:26		12:55 (16)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58			09:05		12:40 (16)
	15:57	17	13:12 (16)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41			15:48	20	13:00 (16)
5	09:26		12:55 (16)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01			09:07		12:41 (16)
	15:58	18	13:13 (16)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39			15:47	19	13:00 (16)
6	09:25		12:55 (16)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03			09:09		12:41 (16)
	16:00	19	13:14 (16)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36			15:46	19	13:00 (16)
7	09:24		12:55 (16)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06			09:10		12:42 (16)
	16:01	20	13:15 (16)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34			15:45	18	13:00 (16)
8	09:24		12:56 (16)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08			09:12		12:43 (16)
	16:03	19	13:15 (16)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32			15:44	18	13:01 (16)
9	09:23		12:55 (16)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10			09:13		12:43 (16)
	16:05	20	13:15 (16)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	17	13:00 (16)
10	09:22		12:56 (16)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13			09:15		12:44 (16)
	16:07	20	13:16 (16)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27			15:43	17	13:01 (16)
11	09:21		12:57 (16)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		12:45 (16)
	16:09	20	13:17 (16)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25			15:43	16	13:01 (16)
12	09:19		12:57 (16)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18			09:17		12:45 (16)
	16:11	20	13:17 (16)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:42	16	13:01 (16)
13	09:18		12:57 (16)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20			09:19		12:46 (16)
	16:12	20	13:17 (16)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21			15:42	16	13:02 (16)
14	09:17		12:58 (16)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22			09:20		12:47 (16)
	16:14	20	13:18 (16)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19			15:42	14	13:01 (16)
15	09:16		12:58 (16)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25			09:21		12:47 (16)
	16:17	20	13:18 (16)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17			15:42	14	13:01 (16)
16	09:14		12:58 (16)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27			09:22		12:48 (16)
	16:19	20	13:18 (16)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15			15:42	13	13:01 (16)
17	09:13		12:59 (16)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29			09:23		12:48 (16)
	16:21	19	13:18 (16)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13			15:42	14	13:02 (16)
18	09:11		12:59 (16)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32			09:24		12:49 (16)
	16:23	19	13:18 (16)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11			15:42	13	13:02 (16)
19	09:10		13:01 (16)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34		12:41 (16)	09:25		12:50 (16)
	16:25	18	13:19 (16)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09	9	12:50 (16)	15:42	13	13:03 (16)
20	09:08		13:02 (16)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36		12:39 (16)	09:25		12:51 (16)
	16:27	16	13:18 (16)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07	12	12:51 (16)	15:42	12	13:03 (16)
21	09:07		13:02 (16)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38		12:38 (16)	09:26		12:51 (16)
	16:30	15	13:17 (16)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15	12:53 (16)	15:43	12	13:03 (16)
22	09:05		13:04 (16)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41		12:38 (16)	09:27		12:52 (16)
	16:32	12	13:16 (16)	17:48	18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04	16	12:54 (16)	15:43	12	13:04 (16)
23	09:03		13:06 (16)	07:51	06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43		12:37 (16)	09:27		12:52 (16)
	16:34	9	13:15 (16)	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02	18	12:55 (16)	15:44	12	13:04 (16)
24	09:01			07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		12:38 (16)	09:28		12:52 (16)
	16:37			17:52	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	18	12:56 (16)	15:44	12	13:04 (16)
25	09:00			07:46	06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47		12:37 (16)	09:28		12:53 (16)
	16:39			17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59	19	12:56 (16)	15:45	13	13:06 (16)
26	08:58			07:43	06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49		12:37 (16)	09:28		12:53 (16)
	16:41			17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57	20	12:57 (16)	15:46	13	13:06 (16)
27	08:56			07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		12:37 (16)	09:28		12:54 (16)
	16:44			18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56	20	12:57 (16)	15:47	13	13:07 (16)
28	08:54			07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54		12:37 (16)	09:28		12:53 (16)
	16:46			18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55	20	12:57 (16)	15:48	14	13:07 (16)
29	08:52				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56		12:38 (16)	09:28		12:53 (16)
	16:48				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53	20	12:58 (16)	15:49	15	13:08 (16)
30	08:50				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58		12:38 (16)	09:28		12:54 (16)
	16:51				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52	20	12:58 (16)	15:50	15	13:09 (16)
31	08:48				07:09		04:41		05:22	06:31		07:49				09:28		12:54 (16)
	16:53				20:14		22:29		22:03	20:42		16:51				15:51	15	13:09 (16)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		410												207			475	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,61												0,61			0,61	
Total reduction		0,24												0,24			0,24	
Total, real		99												50			115	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:45	13:54 (30)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39		07:51	14:48 (16)	08:59
	15:52		16:56 19	14:13 (30)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13		16:48 19	15:07 (16)	15:51
2	09:27		08:43	13:56 (30)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:53	14:49 (16)	09:01
	15:54		16:58 16	14:12 (30)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 17	15:06 (16)	15:50
3	09:27		08:41	13:58 (30)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44		07:56	14:49 (16)	09:03
	15:55		17:01 12	14:10 (30)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07		16:44 15	15:04 (16)	15:49
4	09:26		08:39	14:02 (30)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46		07:58	14:52 (16)	09:05
	15:57		17:03 5	14:07 (30)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 10	15:02 (16)	15:48
5	09:26		08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48		08:01	14:56 (16)	09:07
	15:58		17:06		18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01		16:39 2	14:58 (16)	15:47
6	09:25		08:34	15:25 (16)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50		08:03		09:08
	16:00		17:08 4	15:29 (16)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58		16:36		15:46
7	09:24		08:32	15:22 (16)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53		08:06	13:31 (30)	09:10
	16:01		17:11 11	15:33 (16)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56		16:34 7	13:38 (30)	15:45
8	09:23		08:30	15:20 (16)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55		08:08	13:28 (30)	09:12
	16:03		17:13 15	15:35 (16)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53		16:32 13	13:41 (30)	15:44
9	09:23		08:27	15:19 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57		08:10	13:27 (30)	09:13
	16:05		17:15 18	15:37 (16)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50		16:30 16	13:43 (30)	15:44
10	09:22		08:25	15:18 (16)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59		08:13	13:25 (30)	09:15
	16:07		17:18 19	15:37 (16)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:27 19	13:44 (30)	15:43
11	09:20		08:22	15:17 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	13:24 (30)	09:16
	16:09		17:20 21	15:38 (16)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44		16:25 21	13:45 (30)	15:43
12	09:19		08:20	15:17 (16)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04		08:17	13:24 (30)	09:17
	16:10		17:23 22	15:39 (16)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41		16:23 22	13:46 (30)	15:42
13	09:18	13:53 (30)	08:17	15:17 (16)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	13:23 (30)	09:19
	16:12 5	13:58 (30)	17:25 22	15:39 (16)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39		16:21 23	13:46 (30)	15:42
14	09:17	13:51 (30)	08:15	15:16 (16)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09		08:22	13:23 (30)	09:20
	16:14 9	14:00 (30)	17:28 23	15:39 (16)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 24	13:47 (30)	15:42
15	09:16	13:50 (30)	08:12	15:17 (16)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:07 (41)	09:21
	16:17 11	14:01 (30)	17:30 22	15:39 (16)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33		16:17 33	13:48 (30)	15:42
16	09:14	13:50 (30)	08:10	15:17 (16)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:06 (41)	09:22
	16:19 17	14:07 (30)	17:33 22	15:39 (16)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30		16:15 36	13:48 (30)	15:42
17	09:13	13:49 (30)	08:07	15:17 (16)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	11:04 (41)	09:23
	16:21 21	14:10 (30)	17:35 21	15:38 (16)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 40	13:48 (30)	15:42
18	09:11	11:38 (41)	08:05	15:18 (16)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18		08:32	11:03 (41)	09:24
	16:23 27	14:11 (30)	17:38 19	15:37 (16)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25		16:11 42	13:49 (30)	15:42
19	09:10	11:35 (41)	08:02	15:20 (16)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20		08:34	11:03 (41)	09:25
	16:25 32	14:12 (30)	17:40 17	15:37 (16)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22		16:09 44	13:49 (30)	15:42
20	09:08	11:32 (41)	07:59	15:21 (16)	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	11:02 (41)	09:25
	16:27 36	14:12 (30)	17:43 14	15:35 (16)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19		16:07 45	13:49 (30)	15:42
21	09:07	11:29 (41)	07:57	15:24 (16)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	15:53 (16)	08:38	11:05 (41)	09:26
	16:30 42	14:13 (30)	17:45 8	15:32 (16)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17 10	16:03 (16)	16:06 42	13:49 (30)	15:43
22	09:05	11:27 (41)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	15:51 (16)	08:41	11:08 (41)	09:27
	16:32 45	14:14 (30)	17:47		18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14 15	16:06 (16)	16:04 36	13:48 (30)	15:43
23	09:03	11:28 (41)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	15:49 (16)	08:43	11:12 (41)	09:27
	16:34 44	14:14 (30)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11 17	16:06 (16)	16:02 32	13:49 (30)	15:44
24	09:01	11:29 (41)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:23	08:32	15:48 (16)	08:45	11:16 (41)	09:27
	16:36 42	14:15 (30)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09 19	16:07 (16)	16:01 28	13:49 (30)	15:44
25	08:59	11:31 (41)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	14:48 (16)	08:47	13:27 (30)	09:28
	16:39 40	14:15 (30)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06 20	15:08 (16)	15:59 21	13:48 (30)	15:45
26	08:58	11:32 (41)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	14:46 (16)	08:49	13:29 (30)	09:28
	16:41 37	14:15 (30)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 22	15:08 (16)	15:57 17	13:46 (30)	15:46
27	08:56	11:34 (41)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	14:46 (16)	08:51	13:29 (30)	09:28
	16:44 33	14:15 (30)	18:00		19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01 23	15:09 (16)	15:56 12	13:41 (30)	15:47
28	08:54	13:51 (30)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41	14:46 (16)	08:53	13:30 (30)	09:28
	16:46 24	14:15 (30)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58 22	15:08 (16)	15:55 9	13:39 (30)	15:47
29	08:52	13:51 (30)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	14:46 (16)	08:55	13:35 (30)	09:28
	16:48 23	14:14 (30)			20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56 22	15:08 (16)	15:53 5	13:40 (30)	15:49
30	08:50	13:52 (30)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	14:47 (16)	08:57		09:28
	16:51 22	14:14 (30)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53 21	15:08 (16)	15:52		15:50
31	08:48	13:54 (30)			07:09		04:41		05:22	06:31		07:49	14:47 (16)			09:28
	16:53 20	14:14 (30)			20:14		22:29		22:03	20:42		16:51 20	15:07 (16)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		530		330									211		650	
Sun reduction		0,50		0,50									0,50		0,50	
Oper. time red.		0,80		0,80									0,80		0,80	
Wind dir. red.		0,58		0,55									0,54		0,57	
Total reduction		0,23		0,22									0,22		0,23	
Total, real		122		72									46		148	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

Shadow receptor: Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April		May	June
1	09:28		12:11 (36) | 08:45		10:15 (17) | 07:35		13:26 (30) | 07:07		18:42 (21) | 05:44	| 04:39
	15:52	47	14:26 (18) | 16:56	119	15:37 (39) | 18:04	35	17:05 (13) | 20:16	19	19:01 (21) | 21:26	| 22:30
2	09:27		12:11 (36) | 08:43		12:16 (36) | 07:32		15:45 (11) | 07:04		18:43 (21) | 05:41	| 04:38
	15:54	53	14:28 (18) | 16:58	114	15:38 (39) | 18:07	27	17:09 (13) | 20:19	16	18:59 (21) | 21:28	| 22:32
3	09:27		12:10 (36) | 08:41		12:17 (36) | 07:30		16:34 (16) | 07:01		18:46 (21) | 05:38	| 04:37
	15:55	58	14:29 (18) | 17:01	113	15:38 (39) | 18:09	33	17:12 (13) | 20:21	11	18:57 (21) | 21:30	| 22:33
4	09:26		12:10 (36) | 08:39		09:39 (41) | 07:27		16:31 (16) | 06:58			| 05:36	| 04:36
	15:57	61	14:29 (18) | 17:03	109	15:39 (39) | 18:12	43	17:15 (13) | 20:23			| 21:33	| 22:35
5	09:26		12:10 (36) | 08:36		09:39 (41) | 07:24		16:29 (16) | 06:55			| 05:34	| 04:35
	15:58	64	14:30 (18) | 17:06	105	15:39 (39) | 18:14	46	17:15 (13) | 20:26			| 21:35	| 22:36
6	09:25		12:09 (36) | 08:34		09:40 (41) | 07:21		16:26 (16) | 06:52			| 05:31	| 04:34
	16:00	70	14:31 (18) | 17:08	95	15:39 (39) | 18:16	49	17:15 (13) | 20:28			| 21:37	| 22:38
7	09:24		10:10 (17) | 08:32		09:40 (41) | 07:18		16:25 (16) | 06:49			| 05:29	| 04:33
	16:01	78	14:32 (18) | 17:11	96	15:39 (39) | 18:19	50	17:15 (13) | 20:30			| 21:39	| 22:39
8	09:23		10:10 (17) | 08:30		09:38 (41) | 07:15		16:23 (16) | 06:46			| 05:26	| 04:32
	16:03	84	14:33 (18) | 17:13	96	15:38 (39) | 18:21	52	17:15 (13) | 20:32			| 21:42	| 22:40
9	09:22		10:10 (17) | 08:27		09:36 (41) | 07:13		16:22 (16) | 06:44			| 05:24	| 04:31
	16:05	86	14:33 (18) | 17:16	98	15:38 (39) | 18:23	53	17:15 (13) | 20:35			| 21:44	| 22:41
10	09:21		10:11 (17) | 08:25		09:33 (41) | 07:10		16:20 (16) | 06:41			| 05:21	| 04:30
	16:07	91	14:34 (18) | 17:18	107	15:57 (11) | 18:26	54	17:14 (13) | 20:37			| 21:46	| 22:42
11	09:20		10:10 (17) | 08:22		09:29 (41) | 07:07		16:19 (16) | 06:38			| 05:19	| 04:29
	16:09	97	14:34 (18) | 17:20	114	16:00 (11) | 18:28	54	17:13 (13) | 20:39			| 21:48	| 22:44
12	09:19		10:09 (17) | 08:20		09:27 (41) | 07:04		16:18 (16) | 06:35			| 05:17	| 04:29
	16:11	102	14:35 (18) | 17:23	118	16:03 (11) | 18:30	54	17:12 (13) | 20:42			| 21:51	| 22:44
13	09:18		10:09 (17) | 08:17		09:24 (41) | 07:01		16:18 (16) | 06:32			| 05:15	| 04:28
	16:13	105	14:35 (18) | 17:25	118	16:04 (11) | 18:33	52	17:10 (13) | 20:44			| 21:53	| 22:45
14	09:17		10:10 (17) | 08:15		09:21 (41) | 06:58		16:17 (16) | 06:29			| 05:12	| 04:28
	16:15	107	14:36 (18) | 17:28	114	16:05 (11) | 18:35	51	17:08 (13) | 20:46			| 21:55	| 22:46
15	09:16		10:10 (17) | 08:12		09:18 (41) | 06:56		16:17 (16) | 06:27			| 05:10	| 04:27
	16:17	112	14:37 (18) | 17:30	120	16:07 (11) | 18:37	47	17:04 (13) | 20:49			| 21:57	| 22:47
16	09:14		10:02 (17) | 08:10		09:13 (41) | 06:53		16:17 (16) | 06:24			| 05:08	| 04:27
	16:19	119	14:37 (18) | 17:33	125	16:08 (11) | 18:40	46	17:03 (16) | 20:51			| 21:59	| 22:48
17	09:13		10:02 (17) | 08:07		09:13 (41) | 06:50		16:17 (16) | 06:21			| 05:06	| 04:27
	16:21	126	14:37 (18) | 17:35	123	16:08 (11) | 18:42	46	17:03 (16) | 20:53			| 22:02	| 22:48
18	09:11		10:02 (17) | 08:05		09:13 (41) | 06:47		16:16 (16) | 06:18			| 05:04	| 04:27
	16:23	127	14:37 (18) | 17:38	121	16:08 (11) | 18:44	46	17:02 (16) | 20:56			| 22:04	| 22:49
19	09:10		10:02 (17) | 08:02		09:15 (41) | 06:44		16:16 (16) | 06:16			| 05:02	| 04:26
	16:25	129	14:37 (18) | 17:40	118	16:09 (11) | 18:47	56	18:01 (21) | 20:58			| 22:06	| 22:49
20	09:08		10:02 (17) | 07:59		09:16 (41) | 06:41		16:16 (16) | 06:13			| 05:00	| 04:26
	16:27	130	14:37 (18) | 17:43	114	16:09 (11) | 18:49	60	18:03 (21) | 21:00			| 22:08	| 22:50
21	09:07		10:03 (17) | 07:57		09:17 (41) | 06:38		16:16 (16) | 06:10			| 04:58	| 04:27
	16:30	131	14:37 (18) | 17:45	110	16:09 (11) | 18:51	64	18:05 (21) | 21:02			| 22:10	| 22:50
22	09:05		10:03 (17) | 07:54		09:18 (41) | 06:35		16:17 (16) | 06:07			| 04:56	| 04:27
	16:32	129	14:36 (18) | 17:48	104	16:08 (11) | 18:54	63	18:05 (21) | 21:05			| 22:12	| 22:50
23	09:03		10:04 (17) | 07:51		09:20 (41) | 06:32		16:17 (16) | 06:05			| 04:54	| 04:27
	16:34	131	14:36 (18) | 17:50	95	16:08 (11) | 18:56	64	18:06 (21) | 21:07			| 22:14	| 22:50
24	09:01		10:04 (17) | 07:49		13:09 (30) | 06:30		16:18 (16) | 06:02			| 04:52	| 04:27
	16:37	128	14:35 (18) | 17:52	77	16:08 (11) | 18:58	64	18:06 (21) | 21:09			| 22:16	| 22:50
25	08:59		10:05 (17) | 07:46		13:11 (30) | 06:27		16:18 (16) | 05:59			| 04:50	| 04:28
	16:39	125	14:34 (18) | 17:55	71	16:07 (11) | 19:00	62	18:06 (21) | 21:12			| 22:18	| 22:50
26	08:58		10:05 (17) | 07:43		13:13 (30) | 06:24		16:20 (16) | 05:57			| 04:49	| 04:28
	16:41	124	15:28 (39) | 17:57	66	16:06 (11) | 19:03	61	18:07 (21) | 21:14			| 22:20	| 22:50
27	08:56		10:06 (17) | 07:41		13:16 (30) | 06:21		16:22 (16) | 05:54			| 04:47	| 04:29
	16:44	127	15:30 (39) | 18:00	58	16:05 (11) | 19:05	57	18:07 (21) | 21:16			| 22:22	| 22:50
28	08:54		10:07 (17) | 07:38		13:19 (30) | 06:18		16:23 (16) | 05:51			| 04:45	| 04:29
	16:46	130	15:33 (39) | 18:02	49	16:04 (11) | 19:07	54	18:06 (21) | 21:19			| 22:23	| 22:50
29	08:52		10:08 (17) |		| 07:15		17:26 (16) | 05:49			| 04:44	| 04:30
	16:48	131	15:35 (39) |		| 20:10	47	19:05 (21) | 21:21			| 22:25	| 22:49
30	08:50		10:09 (17) |		| 07:12		17:29 (16) | 05:46			| 04:42	| 04:31
	16:51	129	15:36 (39) |		| 20:12	38	19:04 (21) | 21:23			| 22:27	| 22:49
31	08:47		10:12 (17) |		| 07:09		18:41 (21) |			| 04:41	|
	16:53	126	15:37 (39) |		| 20:14	22	19:03 (21) |			| 22:29	|
Potential sun hours	221		260		365		432		521	547
Total, worst case		3257		2867		1550		46		
Sun reduction		0,50		0,50		0,50		0,50		
Oper. time red.		0,80		0,80		0,80		0,80		
Wind dir. red.		0,60		0,59		0,58		0,62		
Total reduction		0,24		0,24		0,23		0,25		
Total, real		786		675		361		11		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

Shadow receptor: Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September			October			November			December		
1	04:32		05:24		06:33			07:39			16:57 (16)	07:51		09:03 (41)	08:59		09:52 (17)
	22:48		22:01		20:39			19:13	53		17:50 (13)	16:49	107	15:26 (11)	15:51	96	14:16 (18)
2	04:33		05:26		06:35			07:41			16:58 (16)	07:53		09:06 (41)	09:01		09:53 (17)
	22:48		21:58		20:37			19:10	54		17:52 (13)	16:46	98	15:08 (39)	15:50	91	14:16 (18)
3	04:34		05:28		06:37			07:44			16:58 (16)	07:56		09:08 (41)	09:03		09:54 (17)
	22:47		21:56		20:34			19:07	54		17:52 (13)	16:44	96	15:08 (39)	15:49	88	14:17 (18)
4	04:35		05:30		06:39			07:46			16:58 (16)	07:58		09:10 (41)	09:05		09:54 (17)
	22:46		21:54		20:31			19:04	54		17:52 (13)	16:41	94	15:08 (39)	15:48	83	14:17 (18)
5	04:36		05:33		06:42			07:48			17:00 (16)	08:01		09:10 (41)	09:07		09:55 (17)
	22:45		21:51		20:28			19:01	52		17:52 (13)	16:39	95	15:09 (39)	15:47	77	14:17 (18)
6	04:37		05:35		06:44			07:50			17:00 (16)	08:03		09:10 (41)	09:08		09:57 (17)
	22:45		21:49		20:25			18:58	52		17:52 (13)	16:37	105	15:09 (39)	15:46	71	14:17 (18)
7	04:38		05:37		06:46			07:53			17:01 (16)	08:06		09:08 (41)	09:10		11:57 (36)
	22:44		21:46		20:22			18:56	50		17:51 (13)	16:34	111	15:09 (39)	15:45	64	14:17 (18)
8	04:40		05:39		06:48			07:55			17:03 (16)	08:08		11:48 (36)	09:12		11:57 (36)
	22:43		21:44		20:19			18:53	48		17:51 (13)	16:32	112	15:09 (39)	15:44	62	14:17 (18)
9	04:41		05:41		06:51		18:40 (21)	07:57			17:04 (16)	08:10		11:47 (36)	09:13		11:59 (36)
	22:41		21:41		20:16	10	18:50 (21)	18:50	46		17:50 (13)	16:30	113	15:09 (39)	15:44	57	14:17 (18)
10	04:42		05:44		06:53		18:37 (21)	07:59			17:06 (16)	08:13		09:45 (17)	09:15		12:00 (36)
	22:40		21:39		20:14	15	18:52 (21)	18:47	40		17:48 (13)	16:27	121	15:08 (39)	15:43	53	14:17 (18)
11	04:44		05:46		06:55		18:35 (21)	08:02			16:22 (11)	08:15		09:42 (17)	09:16		12:01 (36)
	22:39		21:36		20:11	19	18:54 (21)	18:44	36		17:45 (13)	16:25	127	15:08 (39)	15:43	47	14:16 (18)
12	04:45		05:48		06:57		18:34 (21)	08:04			16:18 (11)	08:17		09:41 (17)	09:17		12:03 (36)
	22:38		21:34		20:08	21	18:55 (21)	18:42	25		17:41 (13)	16:23	130	15:08 (39)	15:42	44	14:17 (18)
13	04:47		05:50		06:59		17:21 (16)	08:06			13:56 (30)	08:20		09:39 (17)	09:19		12:04 (36)
	22:36		21:31		20:05	37	18:55 (21)	18:39	42		17:38 (13)	16:21	131	15:06 (39)	15:42	39	14:17 (18)
14	04:49		05:53		07:02		17:17 (16)	08:09			13:50 (30)	08:22		09:39 (17)	09:20		12:07 (36)
	22:35		21:29		20:02	45	18:55 (21)	18:36	53		16:37 (11)	16:19	131	15:05 (39)	15:42	34	14:17 (18)
15	04:50		05:55		07:04		17:13 (16)	08:11			13:46 (30)	08:25		09:39 (17)	09:21		13:06 (30)
	22:33		21:26		19:59	52	18:55 (21)	18:33	62		16:37 (11)	16:17	128	15:03 (39)	15:42	26	14:16 (18)
16	04:52		05:57		07:06		17:11 (16)	08:13			13:44 (30)	08:27		09:39 (17)	09:22		13:08 (30)
	22:32		21:23		19:56	56	18:55 (21)	18:30	69		16:39 (11)	16:15	124	15:02 (39)	15:42	22	14:15 (18)
17	04:54		05:59		07:08		17:08 (16)	08:16			13:41 (30)	08:29		09:38 (17)	09:23		13:10 (30)
	22:30		21:21		19:53	59	18:54 (21)	18:28	75		16:39 (11)	16:13	125	14:07 (18)	15:42	18	14:15 (18)
18	04:56		06:02		07:10		17:07 (16)	08:18			09:55 (41)	08:32		09:38 (17)	09:24		13:12 (30)
	22:29		21:18		19:50	63	18:55 (21)	18:25	86		16:39 (11)	16:11	129	14:09 (18)	15:42	16	14:15 (18)
19	04:58		06:04		07:12		17:06 (16)	08:20			09:51 (41)	08:34		09:39 (17)	09:25		13:16 (7)
	22:27		21:15		19:47	63	18:54 (21)	18:22	98		16:39 (11)	16:09	131	14:11 (18)	15:42	11	14:15 (18)
20	04:59		06:06		07:15		17:04 (16)	08:23			09:49 (41)	08:36		09:38 (17)	09:25		13:16 (7)
	22:25		21:13		19:45	65	18:53 (21)	18:20	106		16:40 (11)	16:07	129	14:11 (18)	15:42	9	14:14 (18)
21	05:01		06:08		07:17		17:03 (16)	08:25			09:46 (41)	08:38		09:39 (17)	09:26		13:17 (7)
	22:23		21:10		19:42	64	18:51 (21)	18:17	113		16:39 (11)	16:06	131	14:13 (18)	15:43	9	14:15 (18)
22	05:03		06:11		07:19		17:01 (16)	08:27			09:45 (41)	08:41		09:38 (17)	09:26		13:18 (7)
	22:21		21:07		19:39	64	18:50 (21)	18:14	116		16:39 (11)	16:04	131	14:13 (18)	15:43	9	14:16 (18)
23	05:05		06:13		07:21		17:00 (16)	08:30			09:44 (41)	08:43		09:39 (17)	09:27		13:18 (7)
	22:19		21:05		19:36	62	18:48 (21)	18:12	119		16:38 (11)	16:02	128	14:14 (18)	15:44	9	14:16 (18)
24	05:07		06:15		07:24		17:00 (16)	08:32			09:43 (41)	08:45		09:39 (17)	09:27		13:18 (7)
	22:18		21:02		19:33	58	18:46 (21)	18:09	122		16:38 (11)	16:01	127	14:14 (18)	15:44	11	14:17 (18)
25	05:09		06:17		07:26		16:59 (16)	07:34			08:43 (41)	08:47		09:40 (17)	09:28		13:15 (30)
	22:16		20:59		19:30	46	17:45 (16)	17:06	123		15:38 (11)	15:59	124	14:15 (18)	15:45	14	14:17 (18)
26	05:11		06:19		07:28		16:58 (16)	07:37			08:44 (41)	08:49		09:40 (17)	09:28		13:14 (30)
	22:14		20:56		19:27	47	17:45 (16)	17:04	122		15:37 (11)	15:58	119	14:15 (18)	15:46	17	14:18 (18)
27	05:13		06:22		07:30		16:58 (16)	07:39			08:48 (41)	08:51		09:49 (17)	09:28		13:13 (30)
	22:11		20:53		19:24	46	17:44 (16)	17:01	118		15:36 (11)	15:56	112	14:16 (18)	15:47	20	14:19 (18)
28	05:15		06:24		07:32		16:58 (16)	07:41			08:51 (41)	08:53		09:49 (17)	09:28		13:12 (30)
	22:09		20:51		19:21	46	17:44 (16)	16:59	115		15:35 (11)	15:55	109	14:16 (18)	15:48	24	14:21 (18)
29	05:17		06:26		07:35		16:58 (16)	07:44			08:54 (41)	08:55		09:50 (17)	09:28		12:14 (36)
	22:07		20:48		19:19	50	17:48 (13)	16:56	119		15:34 (11)	15:53	106	14:16 (18)	15:49	31	14:23 (18)
30	05:20		06:28		07:37		16:57 (16)	07:46			08:57 (41)	08:57		09:50 (17)	09:28		12:13 (36)
	22:05		20:45		19:16	52	17:49 (13)	16:53	117		15:32 (11)	15:52	103	14:16 (18)	15:50	37	14:25 (18)
31	05:22		06:31					07:49			08:59 (41)				09:28		12:12 (36)
	22:03		20:42					16:51	115		15:29 (11)				15:51	41	14:25 (18)
Potential sun hours	546		478		386			319				236			199		
Total, worst case						1040			2454				3527			1230	
Sun reduction						0,50			0,50				0,50			0,50	
Oper. time red.						0,80			0,80				0,80			0,80	
Wind dir. red.						0,59			0,59				0,60			0,59	
Total reduction						0,24			0,24				0,24			0,24	
Total, real						245			577				846			289	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (5)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (5)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (5)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43 1	20:40 (5)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (5)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44 1	20:41 (5)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (5)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45 1	20:40 (5)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (5)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46 1	20:41 (5)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (5)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47 2	20:42 (5)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (5)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47 2	20:42 (5)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (5)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48 2	20:42 (5)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (5)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48 2	20:43 (5)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (5)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49 2	20:43 (5)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (5)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49 2	20:43 (5)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (5)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49 2	20:43 (5)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (5)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50 2	20:43 (5)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (5)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50 2	20:44 (5)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (5)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50 2	20:44 (5)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (5)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50 2	20:44 (5)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (5)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50 2	20:44 (5)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (5)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49 2	20:44 (5)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (5)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49 1	20:44 (5)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (5)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49 2	20:45 (5)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (5)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48 1	20:44 (5)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case						34		1						
Sun reduction						0,50		0,50						
Oper. time red.						0,80		0,80						
Wind dir. red.						0,74		0,74						
Total reduction						0,29		0,29						
Total, real						10		0						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	20:27 (5) 04:32	20:33 (5) 05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	8 20:35 (5) 22:48	15 20:48 (5) 22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	20:27 (5) 04:33	20:33 (5) 05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	11 20:38 (5) 22:47	15 20:48 (5) 21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	20:27 (5) 04:34	20:33 (5) 05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	12 20:39 (5) 22:47	15 20:48 (5) 21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36	20:27 (5) 04:35	20:33 (5) 05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34	12 20:39 (5) 22:46	14 20:47 (5) 21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	20:27 (5) 04:36	20:33 (5) 05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	13 20:40 (5) 22:45	14 20:47 (5) 21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	20:27 (5) 04:37	20:34 (5) 05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	13 20:40 (5) 22:44	13 20:47 (5) 21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	20:28 (5) 04:39	20:34 (5) 05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38	14 20:42 (5) 22:43	12 20:46 (5) 21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	20:28 (5) 04:40	20:34 (5) 05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	14 20:42 (5) 22:42	12 20:46 (5) 21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31	20:28 (5) 04:41	20:35 (5) 05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	14 20:42 (5) 22:41	11 20:46 (5) 21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	20:29 (5) 04:43	20:35 (5) 05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	14 20:43 (5) 22:40	11 20:46 (5) 21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:28 (5) 04:44	20:35 (5) 05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	16 20:44 (5) 22:39	9 20:44 (5) 21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:29 (5) 04:46	20:35 (5) 05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	16 20:45 (5) 22:37	4 20:39 (5) 21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:29 (5) 04:47	20:35 (5) 05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	16 20:45 (5) 22:36	3 20:38 (5) 21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:29 (5) 04:49	20:35 (5) 05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	17 20:46 (5) 22:34	2 20:37 (5) 21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:30 (5) 04:51	05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	17 20:47 (5) 22:33	21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:30 (5) 04:52	05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	17 20:47 (5) 22:31	21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:30 (5) 04:54	05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	18 20:48 (5) 22:30	21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:31 (5) 04:56	06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	17 20:48 (5) 22:28	21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:31 (5) 04:58	06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	18 20:49 (5) 22:26	21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:31 (5) 05:00	06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	18 20:49 (5) 22:25	21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58	04:27	20:31 (5) 05:01	06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	18 20:49 (5) 22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:31 (5) 05:03	06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	18 20:49 (5) 22:21	21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:31 (5) 05:05	06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	18 20:49 (5) 22:19	21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:32 (5) 05:07	06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	17 20:49 (5) 22:17	21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:32 (5) 05:09	06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	17 20:49 (5) 22:15	20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:32 (5) 05:11	06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	18 20:50 (5) 22:13	20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:32 (5) 05:13	06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	17 20:49 (5) 22:11	20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:32 (5) 05:15	06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	17 20:49 (5) 22:09	20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:33 (5) 05:18	06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	17 20:50 (5) 22:07	20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42	20:27 (5) 04:31	20:32 (5) 05:20	06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	2 20:29 (5) 22:48	17 20:49 (5) 22:05	20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41	20:27 (5)	05:22	06:31		07:48		09:27
	16:53		20:14		22:28	3 20:30 (5)	22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case					5	469	150					
Sun reduction					0,50	0,50	0,50					
Oper. time red.					0,80	0,80	0,80					
Wind dir. red.					0,73	0,73	0,73					
Total reduction					0,29	0,29	0,29					
Total, real					1	138	44					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42	04:39	04:33	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:46	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34	04:35	04:37	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:03	09:08
	16:00	17:09	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:23	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44	22:41	22:41	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:19	08:20	07:04	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55	22:46	22:35	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57	22:47	22:33	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:13	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06	04:27	04:54	06:00	07:08	08:16	08:29	09:23
	16:21	17:36	18:42	20:53	22:02	22:48	22:30	21:21	19:54	18:28	16:13	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56	04:27	05:04	06:11	07:19	08:27	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:03	15:44
24	09:01	07:49	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	08:45	09:27
	16:37	17:53	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	22:50	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48	04:29	05:14	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:23	22:50	22:09	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:14		22:29		22:03	20:43		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April		May		June	
1	09:28	08:46	07:35	07:07		05:44	07:31 (42)	04:40	06:17 (40)
	15:53	16:56	18:05	20:17		21:26	31 08:02 (42)	22:30	23 06:40 (40)
2	09:27	08:43	07:33	07:04		05:42	07:32 (42)	04:39	06:16 (40)
	15:54	16:59	18:07	20:19		21:28	29 08:01 (42)	22:32	24 06:40 (40)
3	09:27	08:41	07:30	07:01		05:39	07:32 (42)	04:37	06:16 (40)
	15:56	17:01	18:10	20:21		21:31	27 07:59 (42)	22:34	25 06:41 (40)
4	09:26	08:39	07:27	06:58		05:36	07:34 (42)	04:36	06:16 (40)
	15:57	17:04	18:12	20:24		21:33	24 07:58 (42)	22:35	26 06:42 (40)
5	09:26	08:37	07:24	06:55		05:34	07:36 (42)	04:35	06:16 (40)
	15:59	17:06	18:14	20:26		21:35	20 07:56 (42)	22:36	27 06:43 (40)
6	09:25	08:34	07:21	06:53		05:32	07:38 (42)	04:34	06:16 (40)
	16:00	17:09	18:17	20:28		21:37	16 07:54 (42)	22:38	27 06:43 (40)
7	09:24	08:32	07:19	06:50		05:29	07:40 (42)	04:33	06:16 (40)
	16:02	17:11	18:19	20:31		21:40	10 07:50 (42)	22:39	27 06:43 (40)
8	09:24	08:30	07:16	06:47		05:27		04:32	06:15 (40)
	16:04	17:14	18:21	20:33		21:42		22:40	29 06:44 (40)
9	09:23	08:27	07:13	06:44		05:24		04:31	06:16 (40)
	16:06	17:16	18:24	20:35		21:44		22:42	29 06:45 (40)
10	09:22	08:25	07:10	06:41	07:48 (42)	05:22		04:31	06:15 (40)
	16:07	17:18	18:26	20:37	10 07:58 (42)	21:46		22:43	30 06:45 (40)
11	09:21	08:23	07:07	06:38	07:45 (42)	05:20		04:30	06:16 (40)
	16:09	17:21	18:28	20:40	17 08:02 (42)	21:49		22:44	29 06:45 (40)
12	09:20	08:20	07:04	06:36	07:41 (42)	05:17		04:29	06:15 (40)
	16:11	17:23	18:31	20:42	22 08:03 (42)	21:51		22:45	30 06:45 (40)
13	09:18	08:18	07:02	06:33	07:37 (42)	05:15		04:29	06:16 (40)
	16:13	17:26	18:33	20:44	27 08:04 (42)	21:53		22:46	30 06:46 (40)
14	09:17	08:15	06:59	06:30	07:35 (42)	05:13		04:28	06:16 (40)
	16:15	17:28	18:35	20:47	30 08:05 (42)	21:55		22:46	30 06:46 (40)
15	09:16	08:13	06:56	06:27	07:34 (42)	05:11		04:28	06:15 (40)
	16:17	17:31	18:38	20:49	33 08:07 (42)	21:57		22:47	31 06:46 (40)
16	09:14	08:10	06:53	06:24	07:33 (42)	05:09		04:28	06:16 (40)
	16:19	17:33	18:40	20:51	34 08:07 (42)	22:00		22:48	30 06:46 (40)
17	09:13	08:07	06:50	06:22	07:32 (42)	05:06		04:27	06:16 (40)
	16:21	17:36	18:42	20:54	35 08:07 (42)	22:02		22:48	31 06:47 (40)
18	09:12	08:05	06:47	06:19	07:31 (42)	05:04		04:27	06:16 (40)
	16:24	17:38	18:45	20:56	37 08:08 (42)	22:04		22:49	31 06:47 (40)
19	09:10	08:02	06:44	06:16	07:30 (42)	05:02		04:27	06:16 (40)
	16:26	17:41	18:47	20:58	38 08:08 (42)	22:06		22:49	31 06:47 (40)
20	09:08	08:00	06:42	06:13	07:30 (42)	05:00		04:27	06:16 (40)
	16:28	17:43	18:49	21:00	39 08:09 (42)	22:08		22:50	31 06:47 (40)
21	09:07	07:57	06:39	06:11	07:30 (42)	04:58		04:27	06:16 (40)
	16:30	17:46	18:52	21:03	38 08:08 (42)	22:10		22:50	31 06:47 (40)
22	09:05	07:54	06:36	06:08	07:29 (42)	04:56		04:27	06:17 (40)
	16:32	17:48	18:54	21:05	39 08:08 (42)	22:12		22:50	31 06:48 (40)
23	09:03	07:52	06:33	06:05	07:29 (42)	04:55		04:28	06:17 (40)
	16:35	17:50	18:56	21:07	39 08:08 (42)	22:14		22:50	31 06:48 (40)
24	09:02	07:49	06:30	06:02	07:29 (42)	04:53		04:28	06:17 (40)
	16:37	17:53	18:58	21:10	38 08:07 (42)	22:16		22:50	31 06:48 (40)
25	09:00	07:46	06:27	06:00	07:29 (42)	04:51		04:28	06:18 (40)
	16:39	17:55	19:01	21:12	38 08:07 (42)	22:18		22:50	31 06:49 (40)
26	08:58	07:44	06:24	05:57	07:29 (42)	04:49	06:24 (40)	04:29	06:18 (40)
	16:42	17:58	19:03	21:14	37 08:06 (42)	22:20	8 06:32 (40)	22:50	31 06:49 (40)
27	08:56	07:41	06:21	05:54	07:29 (42)	04:48	06:21 (40)	04:29	06:19 (40)
	16:44	18:00	19:05	21:17	37 08:06 (42)	22:22	13 06:34 (40)	22:50	30 06:49 (40)
28	08:54	07:38	06:18	05:52	07:29 (42)	04:46	06:20 (40)	04:30	06:18 (40)
	16:47	18:02	19:08	21:19	36 08:05 (42)	22:24	16 06:36 (40)	22:50	31 06:49 (40)
29	08:52		07:16	05:49	07:30 (42)	04:44	06:19 (40)	04:31	06:19 (40)
	16:49		20:10	21:21	34 08:04 (42)	22:25	18 06:37 (40)	22:49	30 06:49 (40)
30	08:50		07:13	05:47	07:30 (42)	04:43	06:19 (40)	04:31	06:19 (40)
	16:51		20:12	21:24	33 08:03 (42)	22:27	20 06:39 (40)	22:49	30 06:49 (40)
31	08:48		07:10			04:41	06:17 (40)		
	16:54		20:14			22:29	22 06:39 (40)		
Potential sun hours	221	260	365	432		521		547	
Total, worst case					691		254		878
Sun reduction					0,50		0,50		0,50
Oper. time red.					0,80		0,80		0,80
Wind dir. red.					0,65		0,62		0,58
Total reduction					0,26		0,25		0,23
Total, real					178		63		204

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July			August			September			October	November	December
1	04:32		06:20 (40)	05:24			06:33		07:44 (42)	07:39	07:51	09:00
	22:48	30	06:50 (40)	22:01			20:40	17	08:01 (42)	19:13	16:49	15:51
2	04:33		06:20 (40)	05:27			06:35		07:47 (42)	07:42	07:54	09:01
	22:48	30	06:50 (40)	21:58			20:37	10	07:57 (42)	19:10	16:47	15:50
3	04:34		06:20 (40)	05:29			06:38			07:44	07:56	09:03
	22:47	29	06:49 (40)	21:56			20:34			19:07	16:44	15:49
4	04:35		06:20 (40)	05:31			06:40			07:46	07:59	09:05
	22:46	29	06:49 (40)	21:54			20:31			19:05	16:42	15:48
5	04:36		06:21 (40)	05:33			06:42			07:48	08:01	09:07
	22:46	28	06:49 (40)	21:51			20:28			19:02	16:39	15:47
6	04:38		06:21 (40)	05:35		07:49 (42)	06:44			07:51	08:03	09:09
	22:45	28	06:49 (40)	21:49	13	08:02 (42)	20:25			18:59	16:37	15:47
7	04:39		06:23 (40)	05:38		07:46 (42)	06:47			07:53	08:06	09:10
	22:44	27	06:50 (40)	21:47	18	08:04 (42)	20:23			18:56	16:35	15:46
8	04:40		06:23 (40)	05:40		07:44 (42)	06:49			07:55	08:08	09:12
	22:43	26	06:49 (40)	21:44	22	08:06 (42)	20:20			18:53	16:32	15:45
9	04:42		06:23 (40)	05:42		07:43 (42)	06:51			07:57	08:11	09:13
	22:42	26	06:49 (40)	21:42	25	08:08 (42)	20:17			18:50	16:30	15:44
10	04:43		06:24 (40)	05:44		07:41 (42)	06:53			08:00	08:13	09:15
	22:40	24	06:48 (40)	21:39	28	08:09 (42)	20:14			18:48	16:28	15:44
11	04:45		06:25 (40)	05:46		07:40 (42)	06:55			08:02	08:15	09:16
	22:39	23	06:48 (40)	21:37	30	08:10 (42)	20:11			18:45	16:26	15:43
12	04:46		06:25 (40)	05:49		07:39 (42)	06:58			08:04	08:18	09:17
	22:38	23	06:48 (40)	21:34	32	08:11 (42)	20:08			18:42	16:24	15:43
13	04:48		06:26 (40)	05:51		07:38 (42)	07:00			08:07	08:20	09:19
	22:36	21	06:47 (40)	21:32	33	08:11 (42)	20:05			18:39	16:22	15:43
14	04:49		06:28 (40)	05:53		07:37 (42)	07:02			08:09	08:22	09:20
	22:35	18	06:46 (40)	21:29	35	08:12 (42)	20:02			18:36	16:19	15:43
15	04:51		06:28 (40)	05:55		07:36 (42)	07:04			08:11	08:25	09:21
	22:34	17	06:45 (40)	21:26	36	08:12 (42)	19:59			18:34	16:17	15:42
16	04:53		06:30 (40)	05:58		07:36 (42)	07:06			08:14	08:27	09:22
	22:32	14	06:44 (40)	21:24	37	08:13 (42)	19:57			18:31	16:15	15:42
17	04:54		06:31 (40)	06:00		07:35 (42)	07:09			08:16	08:29	09:23
	22:30	11	06:42 (40)	21:21	38	08:13 (42)	19:54			18:28	16:13	15:42
18	04:56		06:35 (40)	06:02		07:36 (42)	07:11			08:18	08:32	09:24
	22:29	5	06:40 (40)	21:18	38	08:14 (42)	19:51			18:25	16:12	15:42
19	04:58			06:04		07:35 (42)	07:13			08:21	08:34	09:25
	22:27			21:16	39	08:14 (42)	19:48			18:23	16:10	15:43
20	05:00			06:07		07:35 (42)	07:15			08:23	08:36	09:25
	22:25			21:13	38	08:13 (42)	19:45			18:20	16:08	15:43
21	05:02			06:09		07:34 (42)	07:17			08:25	08:39	09:26
	22:23			21:10	39	08:13 (42)	19:42			18:17	16:06	15:43
22	05:04			06:11		07:34 (42)	07:20			08:28	08:41	09:27
	22:22			21:08	39	08:13 (42)	19:39			18:15	16:04	15:44
23	05:06			06:13		07:34 (42)	07:22			08:30	08:43	09:27
	22:20			21:05	38	08:12 (42)	19:36			18:12	16:03	15:44
24	05:08			06:15		07:34 (42)	07:24			08:32	08:45	09:28
	22:18			21:02	37	08:11 (42)	19:33			18:09	16:01	15:45
25	05:10			06:18		07:34 (42)	07:26			07:35	08:47	09:28
	22:16			20:59	37	08:11 (42)	19:30			17:07	16:00	15:46
26	05:12			06:20		07:34 (42)	07:28			07:37	08:50	09:28
	22:14			20:57	36	08:10 (42)	19:28			17:04	15:58	15:46
27	05:14			06:22		07:35 (42)	07:31			07:39	08:52	09:28
	22:12			20:54	34	08:09 (42)	19:25			17:02	15:57	15:47
28	05:16			06:24		07:35 (42)	07:33			07:42	08:54	09:28
	22:10			20:51	32	08:07 (42)	19:22			16:59	15:55	15:48
29	05:18			06:27		07:36 (42)	07:35			07:44	08:56	09:28
	22:07			20:48	30	08:06 (42)	19:19			16:56	15:54	15:49
30	05:20			06:29		07:38 (42)	07:37			07:47	08:58	09:28
	22:05			20:45	27	08:05 (42)	19:16			16:54	15:53	15:50
31	05:22			06:31		07:41 (42)				07:49		09:28
	22:03			20:43	22	08:03 (42)				16:51		15:51
Potential sun hours	545			478			386			319	236	200
Total, worst case		409			833			27				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,58			0,65			0,65				
Total reduction		0,23			0,26			0,26				
Total, real		95			215			7				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44		04:40		06:01 (42)	04:32	06:06 (42)	05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26		22:30	34	06:35 (42)	22:48	37 06:43 (42)	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		04:39		06:01 (42)	04:33	06:07 (42)	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28		22:32	35	06:36 (42)	22:48	36 06:43 (42)	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39		04:38		06:01 (42)	04:34	06:06 (42)	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:30		22:33	35	06:36 (42)	22:47	37 06:43 (42)	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37		04:36		06:00 (42)	04:35	06:06 (42)	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33		22:35	36	06:36 (42)	22:46	37 06:43 (42)	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34		04:35		06:01 (42)	04:37	06:06 (42)	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35		22:36	36	06:37 (42)	22:46	37 06:43 (42)	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32		04:34		06:01 (42)	04:38	06:08 (42)	05:35	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37		22:38	36	06:37 (42)	22:45	36 06:44 (42)	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29		04:33		06:01 (42)	04:39	06:08 (42)	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40		22:39	36	06:37 (42)	22:44	36 06:44 (42)	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27		04:32		06:01 (42)	04:40	06:08 (42)	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42		22:40	36	06:37 (42)	22:43	36 06:44 (42)	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24		04:31		06:02 (42)	04:42	06:08 (42)	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44		22:41	36	06:38 (42)	22:42	36 06:44 (42)	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22		04:31		06:01 (42)	04:43	06:08 (42)	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:37	21:46		22:43	37	06:38 (42)	22:40	35 06:43 (42)	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20		04:30		06:02 (42)	04:45	06:09 (42)	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49		22:44	37	06:39 (42)	22:39	35 06:44 (42)	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17		04:29		06:02 (42)	04:46	06:09 (42)	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51		22:45	36	06:38 (42)	22:38	35 06:44 (42)	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15		04:29		06:02 (42)	04:48	06:09 (42)	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53		22:46	37	06:39 (42)	22:36	34 06:43 (42)	21:31	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13		04:28		06:03 (42)	04:49	06:10 (42)	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55		22:46	36	06:39 (42)	22:35	33 06:43 (42)	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11		04:28		06:02 (42)	04:51	06:10 (42)	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57		22:47	37	06:39 (42)	22:34	33 06:43 (42)	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09		04:28		06:02 (42)	04:53	06:11 (42)	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00		22:48	37	06:39 (42)	22:32	32 06:43 (42)	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06	06:12 (42)	04:27		06:03 (42)	04:54	06:11 (42)	06:00	07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02	10 06:22 (42)	22:48	37	06:40 (42)	22:30	31 06:42 (42)	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	06:11 (42)	04:27		06:03 (42)	04:56	06:12 (42)	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	14 06:25 (42)	22:49	37	06:40 (42)	22:29	30 06:42 (42)	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02	06:09 (42)	04:27		06:03 (42)	04:58	06:13 (42)	06:04	07:13	08:20	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	18 06:27 (42)	22:49	37	06:40 (42)	22:27	29 06:42 (42)	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00	06:08 (42)	04:27		06:03 (42)	05:00	06:13 (42)	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	20 06:28 (42)	22:50	37	06:40 (42)	22:25	28 06:41 (42)	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	06:06 (42)	04:27		06:03 (42)	05:02	06:14 (42)	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	23 06:29 (42)	22:50	37	06:40 (42)	22:23	27 06:41 (42)	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56	06:05 (42)	04:27		06:04 (42)	05:04	06:16 (42)	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	25 06:30 (42)	22:50	37	06:41 (42)	22:22	24 06:40 (42)	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55	06:03 (42)	04:28		06:04 (42)	05:06	06:17 (42)	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	28 06:31 (42)	22:50	37	06:41 (42)	22:20	21 06:38 (42)	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	06:03 (42)	04:28		06:04 (42)	05:08	06:18 (42)	06:15	07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16	29 06:32 (42)	22:50	37	06:41 (42)	22:18	19 06:37 (42)	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	06:02 (42)	04:28		06:05 (42)	05:10	06:20 (42)	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	30 06:32 (42)	22:50	37	06:42 (42)	22:16	16 06:36 (42)	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	06:02 (42)	04:29		06:05 (42)	05:12	06:22 (42)	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	31 06:33 (42)	22:50	36	06:41 (42)	22:14	12 06:34 (42)	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48	06:01 (42)	04:29		06:05 (42)	05:14	06:25 (42)	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	32 06:33 (42)	22:50	37	06:42 (42)	22:12	6 06:31 (42)	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46	06:01 (42)	04:30		06:05 (42)	05:16		06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24	33 06:34 (42)	22:50	37	06:42 (42)	22:10		20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	06:01 (42)	04:31		06:05 (42)	05:18		06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	34 06:35 (42)	22:49	37	06:42 (42)	22:07		20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43	06:01 (42)	04:32		06:06 (42)	05:20		06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	34 06:35 (42)	22:49	37	06:43 (42)	22:05		20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41	06:01 (42)				05:22		06:31		07:49		09:28
	16:54		20:14		22:29	34 06:35 (42)				22:03		20:43		16:51		15:51
Potential sun hours	221	260	365	432	521		547			545		478	386	319	236	200
Total, worst case						395		1094		808						
Sun reduction						0,50		0,50		0,50						
Oper. time red.						0,80		0,80		0,80						
Wind dir. red.						0,58		0,58		0,58						
Total reduction						0,23		0,23		0,23						
Total, real						91		252		186						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44		04:40		04:32		05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26		22:30	28	06:46 (42)	33	06:51 (42)	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		04:39		06:18 (42)		06:19 (42)	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28		22:32	28	06:46 (42)	33	06:52 (42)	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39		04:38		06:17 (42)		06:18 (42)	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:31		22:33	29	06:46 (42)	33	06:51 (42)	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37		04:36		06:16 (42)		06:18 (42)	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33		22:35	30	06:46 (42)	33	06:51 (42)	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34		04:35		06:16 (42)		06:19 (42)	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35		22:36	31	06:47 (42)	33	06:52 (42)	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32		04:34		06:15 (42)		06:21 (42)	05:35	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37		22:38	32	06:47 (42)	32	06:53 (42)	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29		04:33		06:14 (42)		06:22 (42)	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40		22:39	32	06:46 (42)	31	06:53 (42)	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27		04:32		06:13 (42)		06:23 (42)	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42		22:40	33	06:46 (42)	30	06:53 (42)	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24		04:31		06:14 (42)		06:24 (42)	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44		22:41	33	06:47 (42)	29	06:53 (42)	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22		04:31		06:13 (42)		06:25 (42)	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:37	21:46		22:43	33	06:46 (42)	28	06:53 (42)	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20		04:30		06:14 (42)		06:26 (42)	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49		22:44	33	06:47 (42)	28	06:54 (42)	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17		04:29		06:14 (42)		06:27 (42)	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51		22:45	32	06:46 (42)	27	06:54 (42)	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15		04:29		06:14 (42)		06:28 (42)	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53		22:46	33	06:47 (42)	26	06:54 (42)	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13		04:28		06:15 (42)		06:30 (42)	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55		22:46	32	06:47 (42)	24	06:54 (42)	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11		04:28		06:15 (42)		06:31 (42)	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57		22:47	32	06:47 (42)	23	06:54 (42)	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09		06:39 (42)		04:28		06:15 (42)	04:53	06:33 (42)	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	2	06:41 (42)		22:48	32	06:47 (42)	22:32	22	06:55 (42)	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06		06:37 (42)		04:27		06:15 (42)	04:54	06:33 (42)	06:00	07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02	4	06:41 (42)		22:48	32	06:47 (42)	22:30	21	06:54 (42)	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04		06:36 (42)		04:27		06:16 (42)	04:56	06:35 (42)	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	7	06:43 (42)		22:49	31	06:47 (42)	22:29	20	06:55 (42)	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02		06:35 (42)		04:27		06:16 (42)	04:58	06:37 (42)	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	8	06:43 (42)		22:49	31	06:47 (42)	22:27	18	06:55 (42)	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00		06:33 (42)		04:27		06:16 (42)	05:00	06:38 (42)	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	10	06:43 (42)		22:50	31	06:47 (42)	22:25	16	06:54 (42)	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58		06:31 (42)		04:27		06:16 (42)	05:02	06:39 (42)	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	12	06:43 (42)		22:50	31	06:47 (42)	22:23	15	06:54 (42)	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56		06:30 (42)		04:27		06:17 (42)	05:04	06:41 (42)	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	14	06:44 (42)		22:50	31	06:48 (42)	22:22	13	06:54 (42)	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55		06:29 (42)		04:28		06:17 (42)	05:06	06:42 (42)	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	15	06:44 (42)		22:50	31	06:48 (42)	22:20	11	06:53 (42)	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53		06:28 (42)		04:28		06:17 (42)	05:08	06:44 (42)	06:15	07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16	17	06:45 (42)		22:50	31	06:48 (42)	22:18	9	06:53 (42)	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51		06:26 (42)		04:28		06:18 (42)	05:10	06:45 (42)	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	19	06:45 (42)		22:50	31	06:49 (42)	22:16	8	06:53 (42)	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49		06:25 (42)		04:29		06:17 (42)	05:12	06:47 (42)	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	20	06:45 (42)		22:50	32	06:49 (42)	22:14	6	06:53 (42)	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48		06:23 (42)		04:29		06:18 (42)	05:14	06:49 (42)	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	22	06:45 (42)		22:50	32	06:50 (42)	22:12	3	06:52 (42)	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46		06:23 (42)		04:30		06:17 (42)	05:16	06:51 (42)	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24	22	06:45 (42)		22:50	32	06:49 (42)	22:10	1	06:52 (42)	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44		06:22 (42)		04:31		06:18 (42)	05:18		06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	24	06:46 (42)		22:49	32	06:50 (42)	22:07		20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43		06:21 (42)		04:32		06:18 (42)	05:20		06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	25	06:46 (42)		22:49	33	06:51 (42)	22:05		20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		06:19 (42)					05:22		06:31		07:49		09:28
	16:54		20:14		22:29	26	06:45 (42)					22:03		20:43		16:51		15:51
Potential sun hours	221	260	365	432	521			547		545			478	386	319	236	200
Total, worst case						247			944		606							
Sun reduction						0,50			0,50		0,50							
Oper. time red.						0,80			0,80		0,80							
Wind dir. red.						0,58			0,58		0,58							
Total reduction						0,23			0,23		0,23							
Total, real						58			220		141							

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:

19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44	07:08 (42)	04:40	06:45 (42)	04:32	06:56 (42)	05:24	06:57 (42)	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26	1	07:09 (42)	22:30	32	07:17 (42)	22:48	23	07:19 (42)	22:01	33	07:30 (42)	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		07:06 (42)	04:39		06:46 (42)	04:33		06:56 (42)	05:27		06:59 (42)	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28	6	07:12 (42)	22:32	31	07:17 (42)	22:48	24	07:20 (42)	21:58	31	07:30 (42)	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39		07:04 (42)	04:38		06:46 (42)	04:34		06:55 (42)	05:29		07:01 (42)	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:31	9	07:13 (42)	22:33	31	07:17 (42)	22:47	25	07:20 (42)	21:56	28	07:29 (42)	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37		07:02 (42)	04:36		06:47 (42)	04:35		06:55 (42)	05:31		07:03 (42)	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	13	07:15 (42)	22:35	29	07:16 (42)	22:46	25	07:20 (42)	21:54	26	07:29 (42)	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34		07:00 (42)	04:35		06:48 (42)	04:37		06:54 (42)	05:33		07:05 (42)	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	16	07:16 (42)	22:36	29	07:17 (42)	22:46	27	07:21 (42)	21:51	23	07:28 (42)	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32		06:58 (42)	04:34		06:49 (42)	04:38		06:55 (42)	05:35		07:06 (42)	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37	19	07:17 (42)	22:38	27	07:16 (42)	22:45	28	07:23 (42)	21:49	21	07:27 (42)	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29		06:55 (42)	04:33		06:49 (42)	04:39		06:55 (42)	05:38		07:08 (42)	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22	07:17 (42)	22:39	27	07:16 (42)	22:44	28	07:23 (42)	21:47	18	07:26 (42)	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27		06:54 (42)	04:32		06:49 (42)	04:40		06:54 (42)	05:40		07:10 (42)	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42	24	07:18 (42)	22:40	26	07:15 (42)	22:43	30	07:24 (42)	21:44	15	07:25 (42)	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24		06:52 (42)	04:31		06:50 (42)	04:42		06:54 (42)	05:42		07:12 (42)	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44	27	07:19 (42)	22:42	26	07:16 (42)	22:42	30	07:24 (42)	21:42	12	07:24 (42)	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22		06:50 (42)	04:31		06:51 (42)	04:43		06:53 (42)	05:44		07:13 (42)	06:53	08:00	08:13	09:15
	16:07	17:18	18:26	20:37	21:46	29	07:19 (42)	22:43	24	07:15 (42)	22:40	31	07:24 (42)	21:39	9	07:22 (42)	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20		06:48 (42)	04:30		06:52 (42)	04:45		06:54 (42)	05:46		07:15 (42)	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49	32	07:20 (42)	22:44	23	07:15 (42)	22:39	32	07:26 (42)	21:37	5	07:20 (42)	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17		06:46 (42)	04:29		06:52 (42)	04:46		06:53 (42)	05:49			06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51	34	07:20 (42)	22:45	22	07:14 (42)	22:38	33	07:26 (42)	21:34			20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15		06:45 (42)	04:29		06:53 (42)	04:48		06:53 (42)	05:51			07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	35	07:20 (42)	22:46	21	07:14 (42)	22:36	33	07:26 (42)	21:32			20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13		06:43 (42)	04:28		06:53 (42)	04:49		06:53 (42)	05:53			07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55	37	07:20 (42)	22:46	22	07:15 (42)	22:35	34	07:27 (42)	21:29			20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11		06:41 (42)	04:28		06:53 (42)	04:51		06:52 (42)	05:55			07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57	39	07:20 (42)	22:47	21	07:14 (42)	22:34	35	07:27 (42)	21:26			19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09		06:41 (42)	04:28		06:54 (42)	04:53		06:52 (42)	05:58			07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	39	07:20 (42)	22:48	20	07:14 (42)	22:32	36	07:28 (42)	21:24			19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06		06:40 (42)	04:27		06:54 (42)	04:54		06:52 (42)	06:00			07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02	40	07:20 (42)	22:48	20	07:14 (42)	22:30	36	07:28 (42)	21:21			19:54	18:28	16:13	15:42
18	09:12	08:05	06:47	06:19	05:04		06:41 (42)	04:27		06:55 (42)	04:56		06:52 (42)	06:02			07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	40	07:21 (42)	22:49	19	07:14 (42)	22:29	37	07:29 (42)	21:18			19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02		06:41 (42)	04:27		06:55 (42)	04:58		06:52 (42)	06:04			07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	40	07:21 (42)	22:49	19	07:14 (42)	22:27	38	07:30 (42)	21:16			19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00		06:41 (42)	04:27		06:55 (42)	05:00		06:51 (42)	06:07			07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	39	07:20 (42)	22:50	19	07:14 (42)	22:25	38	07:29 (42)	21:13			19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58		06:41 (42)	04:27		06:55 (42)	05:02		06:51 (42)	06:09			07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	39	07:20 (42)	22:50	19	07:14 (42)	22:23	39	07:30 (42)	21:10			19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56		06:41 (42)	04:27		06:56 (42)	05:04		06:52 (42)	06:11			07:19	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	39	07:20 (42)	22:50	19	07:15 (42)	22:22	39	07:31 (42)	21:08			19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55		06:41 (42)	04:28		06:56 (42)	05:06		06:51 (42)	06:13			07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	39	07:20 (42)	22:50	19	07:15 (42)	22:20	39	07:30 (42)	21:05			19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53		06:42 (42)	04:28		06:56 (42)	05:08		06:51 (42)	06:15			07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16	38	07:20 (42)	22:50	19	07:15 (42)	22:18	40	07:31 (42)	21:02			19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51		06:42 (42)	04:28		06:57 (42)	05:10		06:51 (42)	06:18			07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	37	07:19 (42)	22:50	19	07:16 (42)	22:16	40	07:31 (42)	20:59			19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49		06:43 (42)	04:29		06:56 (42)	05:12		06:51 (42)	06:20			07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	37	07:20 (42)	22:50	20	07:16 (42)	22:14	40	07:31 (42)	20:57			19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48		06:43 (42)	04:29		06:56 (42)	05:14		06:52 (42)	06:22			07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	36	07:19 (42)	22:50	21	07:17 (42)	22:12	39	07:31 (42)	20:54			19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46		06:43 (42)	04:30		06:56 (42)	05:16		06:52 (42)	06:24			07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24	36	07:19 (42)	22:50	21	07:17 (42)	22:10	39	07:31 (42)	20:51			19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44		06:44 (42)	04:31		06:56 (42)	05:18		06:52 (42)	06:27			07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	35	07:19 (42)	22:49	21	07:17 (42)	22:07	38	07:30 (42)	20:48			19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43		06:45 (42)	04:32		06:56 (42)	05:20		06:54 (42)	06:29			07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	34	07:19 (42)	22:49	22	07:18 (42)	22:05	36	07:30 (42)	20:45			19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		06:44 (42)				05:22		06:55 (42)	06:31				07:49		09:28
	16:54		20:14		22:29	34	07:18 (42)				22:03	35	07:30 (42)	20:43				16:51		15:51
Potential sun hours	221	260	365	432	521		547		545		478		386	319	236	200
Total, worst case						945		688		1047		221				
Sun reduction						0,50		0,50		0,50		0,50				
Oper. time red.						0,80		0,80		0,80		0,80				
Wind dir. red.						0,59		0,59		0,59		0,59				
Total reduction						0,24		0,24		0,24		0,24				
Total, real						224		163		248		52				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:24 (2)	08:46	10:12 (1)	07:35	08:22 (26)	07:07	05:44	04:40
	15:53 50	12:55 (4)	16:56 65	13:08 (4)	18:05 42	09:51 (3)	20:17	21:26	22:31
2	09:28	11:22 (2)	08:44	10:12 (1)	07:33	08:21 (26)	07:04	05:41	04:39
	15:54 54	12:56 (4)	16:59 63	13:07 (4)	18:07 37	09:47 (3)	20:19	21:28	22:32
3	09:27	11:20 (2)	08:41	10:13 (1)	07:30	08:21 (26)	07:01	05:39	04:37
	15:56 57	12:56 (4)	17:01 61	13:07 (4)	18:10 24	08:45 (26)	20:21	21:31	22:34
4	09:27	11:20 (2)	08:39	10:13 (1)	07:27	08:20 (26)	06:58	05:36	04:36
	15:57 58	12:57 (4)	17:04 57	13:05 (4)	18:12 25	08:45 (26)	20:24	21:33	22:35
5	09:26	11:20 (2)	08:37	10:14 (1)	07:24	08:20 (26)	06:55	05:34	04:35
	15:59 60	12:58 (4)	17:06 54	13:05 (4)	18:14 24	08:44 (26)	20:26	21:35	22:37
6	09:25	11:20 (2)	08:35	10:15 (1)	07:22	08:20 (26)	06:53	05:31	04:34
	16:00 61	12:58 (4)	17:09 49	13:03 (4)	18:17 24	08:44 (26)	20:28	21:38	22:38
7	09:25	11:20 (2)	08:32	09:40 (3)	07:19	08:20 (26)	06:50	05:29	04:33
	16:02 62	12:59 (4)	17:11 47	13:01 (4)	18:19 23	08:43 (26)	20:31	21:40	22:39
8	09:24	11:21 (2)	08:30	09:36 (3)	07:16	08:21 (26)	06:47	05:27	04:32
	16:04 63	13:00 (4)	17:13 49	12:59 (4)	18:21 20	08:41 (26)	20:33	21:42	22:41
9	09:23	11:21 (2)	08:28	09:21 (6)	07:13	08:22 (26)	06:44	05:24	04:31
	16:05 65	13:01 (4)	17:16 44	12:56 (4)	18:24 19	08:41 (26)	20:35	21:44	22:42
10	09:22	11:21 (2)	08:25	09:18 (6)	07:10	08:24 (26)	06:41	05:22	04:30
	16:07 65	13:01 (4)	17:18 32	09:54 (3)	18:26 15	08:39 (26)	20:38	21:47	22:43
11	09:21	11:21 (2)	08:23	09:16 (6)	07:07	08:26 (26)	06:38	05:20	04:30
	16:09 68	13:03 (4)	17:21 39	09:56 (3)	18:28 10	08:36 (26)	20:40	21:49	22:44
12	09:20	11:21 (2)	08:20	09:14 (6)	07:05		06:36	05:17	04:29
	16:11 68	13:03 (4)	17:23 42	09:56 (3)	18:31		20:42	21:51	22:45
13	09:19	11:22 (2)	08:18	09:13 (6)	07:02		06:33	05:15	04:29
	16:13 68	13:04 (4)	17:26 44	09:57 (3)	18:33		20:44	21:53	22:46
14	09:17	11:22 (2)	08:15	09:13 (6)	06:59	07:37 (28)	06:30	05:13	04:28
	16:15 68	13:04 (4)	17:28 46	09:59 (3)	18:35 4	07:41 (28)	20:47	21:55	22:47
15	09:16	11:22 (2)	08:13	09:13 (6)	06:56	07:33 (28)	06:27	05:11	04:28
	16:17 70	13:05 (4)	17:31 46	09:59 (3)	18:38 11	07:44 (28)	20:49	21:58	22:47
16	09:15	11:22 (2)	08:10	09:12 (6)	06:53	07:31 (28)	06:24	05:08	04:27
	16:19 71	13:05 (4)	17:33 47	09:59 (3)	18:40 15	07:46 (28)	20:51	22:00	22:48
17	09:13	11:23 (2)	08:08	09:13 (6)	06:50	07:30 (28)	06:22	05:06	04:27
	16:21 71	13:06 (4)	17:36 47	10:00 (3)	18:42 16	07:46 (28)	20:54	22:02	22:49
18	09:12	11:23 (2)	08:05	09:13 (6)	06:47	07:29 (28)	06:19	05:04	04:27
	16:23 72	13:07 (4)	17:38 47	10:00 (3)	18:45 18	07:47 (28)	20:56	22:04	22:49
19	09:10	11:24 (2)	08:02	09:14 (6)	06:44	07:28 (28)	06:16	05:02	04:27
	16:26 70	13:07 (4)	17:41 46	10:00 (3)	18:47 19	07:47 (28)	20:58	22:06	22:50
20	09:09	11:24 (2)	08:00	09:14 (6)	06:42	07:27 (28)	06:13	05:00	04:27
	16:28 71	13:08 (4)	17:43 46	10:00 (3)	18:49 19	07:46 (28)	21:01	22:08	22:50
21	09:07	11:25 (2)	07:57	09:15 (6)	06:39	07:28 (28)	06:11	04:58	04:27
	16:30 70	13:08 (4)	17:46 44	09:59 (3)	18:52 19	07:47 (28)	21:03	22:10	22:50
22	09:05	11:25 (2)	07:54	09:19 (6)	06:36	07:28 (28)	06:08	04:56	04:27
	16:32 70	13:08 (4)	17:48 40	10:00 (3)	18:54 18	07:46 (28)	21:05	22:12	22:50
23	09:04	11:25 (2)	07:52	09:26 (3)	06:33	07:28 (28)	06:05	04:54	04:27
	16:35 69	13:08 (4)	17:50 33	09:59 (3)	18:56 17	07:45 (28)	21:08	22:14	22:51
24	09:02	11:26 (2)	07:49	08:32 (26)	06:30	07:29 (28)	06:02	04:53	04:28
	16:37 68	13:08 (4)	17:53 35	09:58 (3)	18:59 14	07:43 (28)	21:10	22:16	22:51
25	09:00	10:27 (1)	07:46	08:28 (26)	06:27	07:31 (28)	06:00	04:51	04:28
	16:39 72	13:09 (4)	17:55 42	09:57 (3)	19:01 10	07:41 (28)	21:12	22:18	22:51
26	08:58	10:23 (1)	07:44	08:25 (26)	06:24		05:57	04:49	04:29
	16:42 74	13:09 (4)	17:58 45	09:56 (3)	19:03		21:14	22:20	22:50
27	08:56	10:20 (1)	07:41	08:23 (26)	06:21		05:54	04:47	04:29
	16:44 75	13:09 (4)	18:00 45	09:54 (3)	19:05		21:17	22:22	22:50
28	08:54	10:15 (1)	07:38	08:23 (26)	06:18		05:52	04:46	04:30
	16:46 76	13:08 (4)	18:02 44	09:53 (3)	19:08		21:19	22:24	22:50
29	08:52	10:11 (1)			07:16		05:49	04:44	04:31
	16:49 73	13:09 (4)			20:10		21:21	22:26	22:50
30	08:50	10:11 (1)			07:13		05:47	04:43	04:31
	16:51 67	13:08 (4)			20:12		21:24	22:27	22:49
31	08:48	10:11 (1)			07:10			04:41	
	16:54 67	13:08 (4)			20:15			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	2073		1299		443				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,64		0,71		0,71				
Total reduction	0,26		0,28		0,29				
Total, real	532		366		126				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December	
1	04:32	05:24	06:33		07:40		07:52	08:47 (6)	09:00	11:03 (2)
	22:49	22:01	20:40		19:13		16:49 36	12:20 (4)	15:51 67	12:45 (4)
2	04:33	05:26	06:35		07:42	09:06 (26)	07:54	09:03 (3)	09:02	11:04 (2)
	22:48	21:59	20:37		19:10 6	09:12 (26)	16:46 43	12:26 (4)	15:50 66	12:45 (4)
3	04:34	05:29	06:38		07:44	09:02 (26)	07:56	09:06 (3)	09:04	11:04 (2)
	22:47	21:56	20:34		19:07 13	09:15 (26)	16:44 50	12:29 (4)	15:49 64	12:44 (4)
4	04:35	05:31	06:40		07:46	09:00 (26)	07:59	09:46 (1)	09:05	11:05 (2)
	22:47	21:54	20:31		19:05 17	09:17 (26)	16:42 44	12:32 (4)	15:48 63	12:44 (4)
5	04:36	05:33	06:42		07:48	08:58 (26)	08:01	09:44 (1)	09:07	11:05 (2)
	22:46	21:52	20:28		19:02 20	09:18 (26)	16:39 51	12:33 (4)	15:47 62	12:44 (4)
6	04:38	05:35	06:44		07:51	08:57 (26)	08:04	09:44 (1)	09:09	11:06 (2)
	22:45	21:49	20:26		18:59 22	09:19 (26)	16:37 55	12:35 (4)	15:46 61	12:45 (4)
7	04:39	05:37	06:47		07:53	08:57 (26)	08:06	09:44 (1)	09:10	11:07 (2)
	22:44	21:47	20:23		18:56 23	09:20 (26)	16:35 58	12:36 (4)	15:46 60	12:45 (4)
8	04:40	05:40	06:49		07:55	08:55 (26)	08:08	09:43 (1)	09:12	11:08 (2)
	22:43	21:44	20:20		18:53 24	09:19 (26)	16:32 60	12:36 (4)	15:45 58	12:45 (4)
9	04:41	05:42	06:51		07:58	08:55 (26)	08:11	09:43 (1)	09:14	11:09 (2)
	22:42	21:42	20:17		18:50 24	09:19 (26)	16:30 64	12:38 (4)	15:44 57	12:45 (4)
10	04:43	05:44	06:53		08:00	08:55 (26)	08:13	09:43 (1)	09:15	11:11 (2)
	22:41	21:39	20:14		18:48 24	09:19 (26)	16:28 65	12:39 (4)	15:44 54	12:45 (4)
11	04:44	05:46	06:55		08:02	08:54 (26)	08:16	09:42 (1)	09:16	11:14 (2)
	22:39	21:37	20:11		18:45 32	10:18 (3)	16:26 67	12:39 (4)	15:43 51	12:45 (4)
12	04:46	05:49	06:58		08:04	08:55 (26)	08:18	09:43 (1)	09:18	11:15 (2)
	22:38	21:34	20:08		18:42 39	10:23 (3)	16:24 67	12:40 (4)	15:43 48	12:45 (4)
13	04:48	05:51	07:00		08:07	08:55 (26)	08:20	09:43 (1)	09:19	11:18 (2)
	22:37	21:32	20:05		18:39 43	10:25 (3)	16:21 73	12:41 (4)	15:43 46	12:46 (4)
14	04:49	05:53	07:02		08:09	08:55 (26)	08:23	09:48 (1)	09:20	11:20 (2)
	22:35	21:29	20:02		18:36 46	10:26 (3)	16:19 75	12:41 (4)	15:42 44	12:46 (4)
15	04:51	05:55	07:04		08:11	08:57 (26)	08:25	09:52 (1)	09:21	11:21 (2)
	22:34	21:26	20:00		18:34 46	10:28 (3)	16:17 75	12:41 (4)	15:42 42	12:46 (4)
16	04:53	05:58	07:06		08:14	08:58 (26)	08:27	09:56 (1)	09:22	11:22 (2)
	22:32	21:24	19:57		18:31 44	10:28 (3)	16:15 74	12:42 (4)	15:42 41	12:46 (4)
17	04:54	06:00	07:09		08:16	09:01 (26)	08:30	10:01 (1)	09:23	11:24 (2)
	22:31	21:21	19:54		18:28 41	10:29 (3)	16:13 71	12:42 (4)	15:42 38	12:46 (4)
18	04:56	06:02	07:11	08:19 (28)	08:18	09:57 (3)	08:32	11:00 (2)	09:24	11:25 (2)
	22:29	21:19	19:51 9	08:28 (28)	18:25 32	10:29 (3)	16:11 68	12:42 (4)	15:42 37	12:47 (4)
19	04:58	06:04	07:13	08:16 (28)	08:21	09:57 (3)	08:34	11:00 (2)	09:25	11:27 (2)
	22:27	21:16	19:48 13	08:29 (28)	18:23 33	10:30 (3)	16:10 69	12:43 (4)	15:43 36	12:47 (4)
20	05:00	06:06	07:15	08:14 (28)	08:23	09:48 (6)	08:37	11:00 (2)	09:26	11:28 (2)
	22:25	21:13	19:45 16	08:30 (28)	18:20 42	10:30 (3)	16:08 70	12:43 (4)	15:43 35	12:48 (4)
21	05:02	06:09	07:17	08:14 (28)	08:25	09:46 (6)	08:39	11:00 (2)	09:26	11:28 (2)
	22:24	21:10	19:42 17	08:31 (28)	18:17 45	10:31 (3)	16:06 70	12:43 (4)	15:43 35	12:48 (4)
22	05:04	06:11	07:20	08:13 (28)	08:28	09:44 (6)	08:41	11:00 (2)	09:27	11:29 (2)
	22:22	21:08	19:39 18	08:31 (28)	18:15 46	10:30 (3)	16:04 71	12:44 (4)	15:44 35	12:49 (4)
23	05:06	06:13	07:22	08:12 (28)	08:30	09:44 (6)	08:43	11:00 (2)	09:27	11:29 (2)
	22:20	21:05	19:36 19	08:31 (28)	18:12 46	10:30 (3)	16:03 70	12:43 (4)	15:44 35	12:49 (4)
24	05:08	06:15	07:24	08:12 (28)	08:32	09:42 (6)	08:45	11:00 (2)	09:28	11:30 (2)
	22:18	21:02	19:33 19	08:31 (28)	18:09 47	10:29 (3)	16:01 72	12:44 (4)	15:45 35	12:50 (4)
25	05:10	06:18	07:26	08:11 (28)	07:35	08:42 (6)	08:48	11:00 (2)	09:28	11:29 (2)
	22:16	20:59	19:31 19	08:30 (28)	17:07 47	09:29 (3)	15:59 71	12:43 (4)	15:45 36	12:50 (4)
26	05:12	06:20	07:28	08:12 (28)	07:37	08:43 (6)	08:50	11:01 (2)	09:28	11:29 (2)
	22:14	20:57	19:28 17	08:29 (28)	17:04 46	09:29 (3)	15:58 71	12:44 (4)	15:46 37	12:51 (4)
27	05:14	06:22	07:31	08:13 (28)	07:40	08:42 (6)	08:52	11:01 (2)	09:28	11:29 (2)
	22:12	20:54	19:25 15	08:28 (28)	17:02 46	09:28 (3)	15:57 71	12:44 (4)	15:47 39	12:52 (4)
28	05:16	06:24	07:33	08:14 (28)	07:42	08:43 (6)	08:54	11:02 (2)	09:29	11:28 (2)
	22:10	20:51	19:22 12	08:26 (28)	16:59 45	09:28 (3)	15:55 68	12:44 (4)	15:48 40	12:52 (4)
29	05:18	06:27	07:35	08:15 (28)	07:44	08:44 (6)	08:56	11:02 (2)	09:29	11:27 (2)
	22:08	20:48	19:19 8	08:23 (28)	16:56 43	09:27 (3)	15:54 68	12:44 (4)	15:49 42	12:52 (4)
30	05:20	06:29	07:37		07:47	08:44 (6)	08:58	11:02 (2)	09:28	11:26 (2)
	22:05	20:45	19:16		16:54 42	09:26 (3)	15:53 68	12:44 (4)	15:50 44	12:53 (4)
31	05:22	06:31			07:49	08:45 (6)			09:28	11:25 (2)
	22:03	20:43			16:51 38	09:25 (3)			15:51 48	12:54 (4)
Potential sun hours	545	478	386		319		236		200	
Total, worst case			182		1062		1935		1456	
Sun reduction			0,50		0,50		0,50		0,50	
Oper. time red.			0,80		0,80		0,80		0,80	
Wind dir. red.			0,70		0,73		0,65		0,63	
Total reduction			0,28		0,29		0,26		0,25	
Total, real			51		310		503		369	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
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NO-0276 Oslo
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		07:34 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33	5	07:39 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		07:30 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36	12	07:42 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56		07:28 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38	15	07:43 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:17	15:42
16	09:15	08:10	06:53		07:26 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40	18	07:44 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:16	15:42
17	09:13	08:08	06:50		07:25 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	08:30	09:23
	16:21	17:36	18:43	19	07:44 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28	16:14	15:42
18	09:12	08:05	06:47		07:24 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:16 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	20	07:44 (4)	20:56	22:04	22:49	22:29	21:19	19:51	8 08:24 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45		07:24 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:13 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	20	07:44 (4)	20:58	22:06	22:50	22:27	21:16	19:48	13 08:26 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42		07:25 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:11 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	20	07:45 (4)	21:01	22:08	22:50	22:26	21:13	19:45	16 08:27 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39		07:25 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:11 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	19	07:44 (4)	21:03	22:10	22:50	22:24	21:11	19:42	17 08:28 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36		07:25 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:09 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	18	07:43 (4)	21:05	22:12	22:51	22:22	21:08	19:39	20 08:29 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33		07:25 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:08 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	17	07:42 (4)	21:08	22:14	22:51	22:20	21:05	19:36	20 08:28 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30		07:26 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:08 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	14	07:40 (4)	21:10	22:16	22:51	22:18	21:02	19:34	20 08:28 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27		07:28 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:07 (4)	07:35	08:48	09:28
	16:39	17:55	19:01	9	07:37 (4)	21:12	22:18	22:51	22:16	21:00	19:31	20 08:27 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20	07:29	08:08 (4)	07:37	08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57	19:28	19 08:27 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:08 (4)	07:40	08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54	19:25	18 08:26 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:08 (4)	07:42	08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51	19:22	17 08:25 (4)	16:59	15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:09 (4)	07:44	08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48	19:19	14 08:23 (4)	16:57	15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:13 (4)	07:47	08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46	19:16	8 08:21 (4)	16:54	15:53	15:50
31	08:48		07:10				04:41		05:22	06:31			07:49		09:28
	16:54		20:15				22:29		22:03	20:43			16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				206							210			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,70							0,70			
Total reduction				0,28							0,28			
Total, real				57							58			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:37	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33		20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36		20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56	07:25 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38 10	07:35 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:18	15:42
16	09:15	08:10	06:53	07:23 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40 13	07:36 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:16	15:42
17	09:13	08:08	06:50	07:21 (4)	06:22	05:06	04:27	04:54	06:00	07:09	08:13 (4)	08:16	08:30	09:23
	16:21	17:36	18:43 16	07:37 (4)	20:54	22:02	22:49	22:31	21:21	19:54 4	08:17 (4)	18:28	16:14	15:42
18	09:12	08:05	06:47	07:20 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:09 (4)	08:18	08:32	09:24
	16:24	17:38	18:45 18	07:38 (4)	20:56	22:04	22:49	22:29	21:19	19:51 11	08:20 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45	07:19 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:07 (4)	08:21	08:34	09:25
	16:26	17:41	18:47 19	07:38 (4)	20:58	22:06	22:50	22:27	21:16	19:48 14	08:21 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:19 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:05 (4)	08:23	08:37	09:26
	16:28	17:43	18:49 20	07:39 (4)	21:01	22:08	22:50	22:26	21:13	19:45 17	08:22 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:19 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:05 (4)	08:25	08:39	09:26
	16:30	17:46	18:52 19	07:38 (4)	21:03	22:10	22:50	22:24	21:11	19:42 18	08:23 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36	07:19 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:04 (4)	08:28	08:41	09:27
	16:33	17:48	18:54 18	07:37 (4)	21:05	22:12	22:51	22:22	21:08	19:39 19	08:23 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:19 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:03 (4)	08:30	08:43	09:27
	16:35	17:51	18:56 17	07:36 (4)	21:08	22:14	22:51	22:20	21:05	19:36 19	08:22 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30	07:20 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:03 (4)	08:32	08:46	09:28
	16:37	17:53	18:59 15	07:35 (4)	21:10	22:16	22:51	22:18	21:02	19:34 19	08:22 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27	07:21 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:02 (4)	07:35	08:48	09:28
	16:40	17:55	19:01 12	07:33 (4)	21:12	22:18	22:51	22:16	21:00	19:31 19	08:21 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24	07:23 (4)	05:57	04:49	04:29	05:12	06:20	07:29	08:04 (4)	07:37	08:50	09:28
	16:42	17:58	19:03 7	07:30 (4)	21:15	22:20	22:51	22:14	20:57	19:28 16	08:20 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21		05:55	04:48	04:29	05:14	06:22	07:31	08:04 (4)	07:40	08:52	09:29
	16:44	18:00	19:06		21:17	22:22	22:50	22:12	20:54	19:25 15	08:19 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19		05:52	04:46	04:30	05:16	06:25	07:33	08:05 (4)	07:42	08:54	09:29
	16:47	18:03	19:08		21:19	22:24	22:50	22:10	20:51	19:22 11	08:16 (4)	16:59	15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35	08:08 (4)	07:44	08:56	09:29
	16:49		20:10		21:22	22:26	22:50	22:08	20:48	19:19 4	08:12 (4)	16:57	15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37		07:47	08:58	09:29
	16:51		20:12		21:24	22:27	22:49	22:06	20:46	19:16		16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31			07:49		09:28
	16:54		20:15			22:29		22:03	20:43			16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				184							186			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,69							0,69			
Total reduction				0,28							0,28			
Total, real				51							51			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:17 (2)	08:46	10:11 (1)	07:35	08:24 (26)	07:07	05:44	04:40
	15:53 54	12:46 (4)	16:56 61	12:57 (4)	18:05 32	09:46 (3)	20:17	21:26	22:31
2	09:28	11:17 (2)	08:44	10:11 (1)	07:33	08:23 (26)	07:04	05:41	04:39
	15:54 54	12:46 (4)	16:59 58	12:56 (4)	18:07 24	08:47 (26)	20:19	21:28	22:32
3	09:27	11:17 (2)	08:41	10:12 (1)	07:30	08:23 (26)	07:01	05:39	04:37
	15:56 56	12:47 (4)	17:01 55	12:55 (4)	18:10 24	08:47 (26)	20:21	21:31	22:34
4	09:27	11:17 (2)	08:39	10:12 (1)	07:27	08:23 (26)	06:58	05:36	04:36
	15:57 57	12:48 (4)	17:04 52	12:54 (4)	18:12 23	08:46 (26)	20:24	21:33	22:35
5	09:26	11:17 (2)	08:37	10:14 (1)	07:24	08:23 (26)	06:55	05:34	04:35
	15:59 58	12:48 (4)	17:06 46	12:53 (4)	18:14 22	08:45 (26)	20:26	21:35	22:37
6	09:25	11:17 (2)	08:35	10:14 (1)	07:22	08:23 (26)	06:53	05:31	04:34
	16:00 59	12:49 (4)	17:09 41	12:50 (4)	18:17 22	08:45 (26)	20:28	21:38	22:38
7	09:25	11:17 (2)	08:32	09:37 (3)	07:19	08:24 (26)	06:50	05:29	04:33
	16:02 61	12:50 (4)	17:11 43	12:47 (4)	18:19 19	08:43 (26)	20:31	21:40	22:39
8	09:24	11:17 (2)	08:30	09:35 (3)	07:16	08:24 (26)	06:47	05:27	04:32
	16:04 63	12:51 (4)	17:13 36	12:44 (4)	18:21 18	08:42 (26)	20:33	21:42	22:41
9	09:23	11:18 (2)	08:28	09:32 (3)	07:13	08:27 (26)	06:44	05:24	04:31
	16:05 63	12:52 (4)	17:16 21	09:53 (3)	18:24 13	08:40 (26)	20:35	21:44	22:42
10	09:22	11:17 (2)	08:25	09:31 (3)	07:10	08:30 (26)	06:41	05:22	04:30
	16:07 65	12:52 (4)	17:18 24	09:55 (3)	18:26 7	08:37 (26)	20:38	21:47	22:43
11	09:21	11:18 (2)	08:23	09:30 (3)	07:07		06:38	05:20	04:30
	16:09 65	12:53 (4)	17:21 26	09:56 (3)	18:28		20:40	21:49	22:44
12	09:20	11:18 (2)	08:20	09:29 (3)	07:05		06:36	05:17	04:29
	16:11 66	12:53 (4)	17:23 28	09:57 (3)	18:31		20:42	21:51	22:45
13	09:19	11:18 (2)	08:18	09:28 (3)	07:02	07:40 (28)	06:33	05:15	04:29
	16:13 67	12:54 (4)	17:26 29	09:57 (3)	18:33 5	07:45 (28)	20:44	21:53	22:46
14	09:17	11:18 (2)	08:15	09:28 (3)	06:59	07:36 (28)	06:30	05:13	04:28
	16:15 68	12:55 (4)	17:28 31	09:59 (3)	18:35 11	07:47 (28)	20:47	21:55	22:47
15	09:16	11:18 (2)	08:13	09:27 (3)	06:56	07:34 (28)	06:27	05:11	04:28
	16:17 69	12:55 (4)	17:31 32	09:59 (3)	18:38 15	07:49 (28)	20:49	21:58	22:47
16	09:15	11:19 (2)	08:10	09:26 (3)	06:53	07:33 (28)	06:24	05:08	04:27
	16:19 68	12:55 (4)	17:33 33	09:59 (3)	18:40 16	07:49 (28)	20:51	22:00	22:48
17	09:13	11:20 (2)	08:08	09:27 (3)	06:50	07:32 (28)	06:22	05:06	04:27
	16:21 69	12:57 (4)	17:36 33	10:00 (3)	18:42 18	07:50 (28)	20:54	22:02	22:49
18	09:12	11:20 (2)	08:05	09:26 (3)	06:47	07:31 (28)	06:19	05:04	04:27
	16:23 69	12:57 (4)	17:38 34	10:00 (3)	18:45 19	07:50 (28)	20:56	22:04	22:49
19	09:10	11:20 (2)	08:02	09:26 (3)	06:44	07:31 (28)	06:16	05:02	04:27
	16:26 69	12:57 (4)	17:41 33	09:59 (3)	18:47 18	07:49 (28)	20:58	22:06	22:50
20	09:09	11:21 (2)	08:00	09:26 (3)	06:42	07:30 (28)	06:13	05:00	04:27
	16:28 69	12:58 (4)	17:43 33	09:59 (3)	18:49 19	07:49 (28)	21:01	22:08	22:50
21	09:07	11:22 (2)	07:57	09:26 (3)	06:39	07:32 (28)	06:11	04:58	04:27
	16:30 67	12:58 (4)	17:46 32	09:58 (3)	18:52 17	07:49 (28)	21:03	22:10	22:50
22	09:05	11:22 (2)	07:54	09:27 (3)	06:36	07:32 (28)	06:08	04:56	04:27
	16:32 67	12:58 (4)	17:48 32	09:59 (3)	18:54 15	07:47 (28)	21:05	22:12	22:50
23	09:04	11:22 (2)	07:52	09:27 (3)	06:33	07:33 (28)	06:05	04:54	04:27
	16:35 66	12:58 (4)	17:50 31	09:58 (3)	18:56 13	07:46 (28)	21:08	22:14	22:51
24	09:02	10:25 (1)	07:49	08:30 (26)	06:30	07:35 (28)	06:02	04:53	04:28
	16:37 70	12:58 (4)	17:53 41	09:57 (3)	18:59 8	07:43 (28)	21:10	22:16	22:51
25	09:00	10:21 (1)	07:46	08:28 (26)	06:27		06:00	04:51	04:28
	16:39 72	12:58 (4)	17:55 42	09:55 (3)	19:01		21:12	22:18	22:51
26	08:58	10:18 (1)	07:44	08:26 (26)	06:24		05:57	04:49	04:29
	16:42 74	12:59 (4)	17:58 44	09:54 (3)	19:03		21:14	22:20	22:50
27	08:56	10:14 (1)	07:41	08:25 (26)	06:21		05:54	04:47	04:29
	16:44 76	12:59 (4)	18:00 41	09:52 (3)	19:05		21:17	22:22	22:50
28	08:54	10:10 (1)	07:38	08:25 (26)	06:18		05:52	04:46	04:30
	16:46 74	12:58 (4)	18:02 38	09:50 (3)	19:08		21:19	22:24	22:50
29	08:52	10:10 (1)			07:16		05:49	04:44	04:31
	16:49 65	12:58 (4)			20:10		21:21	22:26	22:50
30	08:50	10:10 (1)			07:13		05:47	04:43	04:31
	16:51 63	12:57 (4)			20:12		21:24	22:27	22:49
31	08:48	10:11 (1)			07:10			04:41	
	16:54 61	12:57 (4)			20:15			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	2024		1050		378				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,65		0,71		0,71				
Total reduction	0,26		0,28		0,29				
Total, real	524		297		108				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September			October		November			December		
1	04:32	05:24	06:33			07:40		07:52		09:00 (3)	09:00		11:00 (2)
	22:49	22:01	20:40			19:13		16:49	23	09:23 (3)	15:51	65	12:35 (4)
2	04:33	05:26	06:35			07:42		07:54		09:02 (3)	09:02		11:00 (2)
	22:48	21:59	20:37			19:10		16:46	23	09:54 (1)	15:50	65	12:35 (4)
3	04:34	05:29	06:38			07:44		07:56		09:05 (3)	09:04		11:01 (2)
	22:47	21:56	20:34			19:07		16:44	38	12:14 (4)	15:49	63	12:35 (4)
4	04:35	05:31	06:40			07:46		09:05 (26)	07:59		09:08 (3)	09:05		11:01 (2)
	22:47	21:54	20:31			19:05	11	09:16 (26)	16:42	44	12:19 (4)	15:48	63	12:35 (4)
5	04:36	05:33	06:42			07:48		09:02 (26)	08:01		09:44 (1)	09:07		11:02 (2)
	22:46	21:52	20:28			19:02	16	09:18 (26)	16:39	42	12:20 (4)	15:47	61	12:35 (4)
6	04:38	05:35	06:44			07:51		09:00 (26)	08:04		09:43 (1)	09:09		11:03 (2)
	22:45	21:49	20:26			18:59	19	09:19 (26)	16:37	48	12:23 (4)	15:46	59	12:35 (4)
7	04:39	05:37	06:47			07:53		09:00 (26)	08:06		09:43 (1)	09:10		11:04 (2)
	22:44	21:47	20:23			18:56	20	09:20 (26)	16:35	51	12:24 (4)	15:46	58	12:35 (4)
8	04:40	05:40	06:49			07:55		08:58 (26)	08:08		09:42 (1)	09:12		11:05 (2)
	22:43	21:44	20:20			18:53	23	09:21 (26)	16:32	55	12:25 (4)	15:45	58	12:36 (4)
9	04:41	05:42	06:51			07:58		08:57 (26)	08:11		09:42 (1)	09:14		11:06 (2)
	22:42	21:42	20:17			18:50	23	09:20 (26)	16:30	59	12:27 (4)	15:44	56	12:36 (4)
10	04:43	05:44	06:53			08:00		08:57 (26)	08:13		09:42 (1)	09:15		11:06 (2)
	22:41	21:39	20:14			18:48	24	09:21 (26)	16:28	60	12:28 (4)	15:44	55	12:36 (4)
11	04:44	05:46	06:55			08:02		08:57 (26)	08:16		09:41 (1)	09:16		11:07 (2)
	22:39	21:37	20:11			18:45	23	09:20 (26)	16:26	62	12:28 (4)	15:43	54	12:36 (4)
12	04:46	05:49	06:58			08:04		08:57 (26)	08:18		09:42 (1)	09:18		11:07 (2)
	22:38	21:34	20:08			18:42	24	09:21 (26)	16:24	63	12:29 (4)	15:43	52	12:36 (4)
13	04:48	05:51	07:00			08:07		08:57 (26)	08:20		09:42 (1)	09:19		11:10 (2)
	22:37	21:32	20:05			18:39	35	10:20 (3)	16:21	65	12:30 (4)	15:43	50	12:37 (4)
14	04:49	05:53	07:02			08:09		08:57 (26)	08:23		09:43 (1)	09:20		11:11 (2)
	22:35	21:29	20:02			18:36	39	10:23 (3)	16:19	74	12:31 (4)	15:42	49	12:37 (4)
15	04:51	05:55	07:04			08:11		08:58 (26)	08:25		09:46 (1)	09:21		11:13 (2)
	22:34	21:26	20:00			18:34	42	10:25 (3)	16:17	76	12:31 (4)	15:42	46	12:37 (4)
16	04:53	05:58	07:06			08:14		08:58 (26)	08:27		09:51 (1)	09:22		11:14 (2)
	22:32	21:24	19:57			18:31	43	10:26 (3)	16:15	74	12:32 (4)	15:42	45	12:37 (4)
17	04:54	06:00	07:09			08:16		09:00 (26)	08:30		09:55 (1)	09:23		11:15 (2)
	22:31	21:21	19:54			18:28	43	10:28 (3)	16:13	72	12:32 (4)	15:42	43	12:37 (4)
18	04:56	06:02	07:11			08:18		09:02 (26)	08:32		09:59 (1)	09:24		11:17 (2)
	22:29	21:19	19:51			18:25	39	10:28 (3)	16:11	70	12:32 (4)	15:42	40	12:37 (4)
19	04:58	06:04	07:13		08:22 (28)	08:21		09:58 (3)	08:34		10:57 (2)	09:25		11:18 (2)
	22:27	21:16	19:48	7	08:29 (28)	18:23	31	10:29 (3)	16:10	66	12:33 (4)	15:43	41	12:38 (4)
20	05:00	06:06	07:15		08:19 (28)	08:23		09:57 (3)	08:37		10:57 (2)	09:26		11:19 (2)
	22:25	21:13	19:45	12	08:31 (28)	18:20	32	10:29 (3)	16:08	67	12:33 (4)	15:43	40	12:39 (4)
21	05:02	06:09	07:17		08:18 (28)	08:25		09:57 (3)	08:39		10:57 (2)	09:26		11:19 (2)
	22:24	21:10	19:42	15	08:33 (28)	18:17	33	10:30 (3)	16:06	67	12:33 (4)	15:43	39	12:38 (4)
22	05:04	06:11	07:20		08:16 (28)	08:28		09:56 (3)	08:41		10:57 (2)	09:27		11:20 (2)
	22:22	21:08	19:39	17	08:33 (28)	18:15	33	10:29 (3)	16:04	68	12:34 (4)	15:44	39	12:39 (4)
23	05:06	06:13	07:22		08:15 (28)	08:30		09:56 (3)	08:43		10:57 (2)	09:27		11:20 (2)
	22:20	21:05	19:36	18	08:33 (28)	18:12	34	10:30 (3)	16:03	68	12:33 (4)	15:44	40	12:40 (4)
24	05:08	06:15	07:24		08:14 (28)	08:32		09:56 (3)	08:45		10:57 (2)	09:28		11:21 (2)
	22:18	21:02	19:33	19	08:33 (28)	18:09	33	10:29 (3)	16:01	69	12:34 (4)	15:45	41	12:41 (4)
25	05:10	06:18	07:26		08:14 (28)	07:35		08:56 (3)	08:48		10:57 (2)	09:28		11:21 (2)
	22:16	20:59	19:31	18	08:32 (28)	17:07	33	09:29 (3)	15:59	69	12:34 (4)	15:45	41	12:41 (4)
26	05:12	06:20	07:28		08:14 (28)	07:37		08:57 (3)	08:50		10:58 (2)	09:28		11:21 (2)
	22:14	20:57	19:28	19	08:33 (28)	17:04	32	09:29 (3)	15:58	68	12:34 (4)	15:46	42	12:42 (4)
27	05:14	06:22	07:31		08:14 (28)	07:40		08:56 (3)	08:52		10:57 (2)	09:28		11:20 (2)
	22:12	20:54	19:25	18	08:32 (28)	17:02	32	09:28 (3)	15:57	69	12:34 (4)	15:47	43	12:42 (4)
28	05:16	06:24	07:33		08:15 (28)	07:42		08:57 (3)	08:54		10:58 (2)	09:29		11:20 (2)
	22:10	20:51	19:22	15	08:30 (28)	16:59	31	09:28 (3)	15:55	68	12:35 (4)	15:48	44	12:43 (4)
29	05:18	06:27	07:35		08:15 (28)	07:44		08:58 (3)	08:56		10:59 (2)	09:29		11:18 (2)
	22:08	20:48	19:19	13	08:28 (28)	16:56	29	09:27 (3)	15:54	67	12:35 (4)	15:49	47	12:43 (4)
30	05:20	06:29	07:37		08:18 (28)	07:47		08:58 (3)	08:58		10:59 (2)	09:28		11:18 (2)
	22:05	20:45	19:16	8	08:26 (28)	16:54	28	09:26 (3)	15:53	65	12:34 (4)	15:50	49	12:44 (4)
31	05:22	06:31				07:49		09:00 (3)				09:28		11:16 (2)
	22:03	20:43				16:51	25	09:25 (3)				15:51	52	12:44 (4)
Potential sun hours	545	478	386			319		236			200			
Total, worst case				179			830		1810			1540		
Sun reduction				0,50			0,50		0,50			0,50		
Oper. time red.				0,80			0,80		0,80			0,80		
Wind dir. red.				0,70			0,73		0,66			0,64		
Total reduction				0,28			0,29		0,26			0,26		
Total, real				50			242		475			394		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:37	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33		20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		06:30	05:13	04:28	04:49	05:53	07:02		08:05 (4)	08:09	08:23	09:20
	16:15	17:28	18:36		20:47	21:56	22:47	22:35	21:29	20:03	10	08:15 (4)	18:37	16:20	15:43
15	09:16	08:13	06:56		06:27	05:11	04:28	04:51	05:55	07:04		08:02 (4)	08:11	08:25	09:21
	16:17	17:31	18:38		20:49	21:58	22:47	22:34	21:27	20:00	14	08:16 (4)	18:34	16:18	15:42
16	09:15	08:10	06:53		06:24	05:09	04:28	04:53	05:58	07:06		08:00 (4)	08:14	08:27	09:22
	16:19	17:33	18:40		20:51	22:00	22:48	22:32	21:24	19:57	17	08:17 (4)	18:31	16:16	15:42
17	09:13	08:08	06:50		06:22	05:06	04:27	04:54	06:00	07:09		07:59 (4)	08:16	08:30	09:23
	16:21	17:36	18:43		20:54	22:02	22:49	22:31	21:21	19:54	18	08:17 (4)	18:28	16:14	15:42
18	09:12	08:05	06:47		06:19	05:04	04:27	04:56	06:02	07:11		07:58 (4)	08:18	08:32	09:24
	16:24	17:38	18:45		20:56	22:04	22:49	22:29	21:19	19:51	19	08:17 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45	07:25 (4)	06:16	05:02	04:27	04:58	06:04	07:13		07:57 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	3 07:28 (4)	20:58	22:06	22:50	22:27	21:16	19:48	20	08:17 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:22 (4)	06:13	05:00	04:27	05:00	06:07	07:15		07:57 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	8 07:30 (4)	21:01	22:08	22:50	22:26	21:13	19:45	19	08:16 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:19 (4)	06:11	04:58	04:27	05:02	06:09	07:17		08:00 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	11 07:30 (4)	21:03	22:10	22:50	22:24	21:11	19:42	16	08:16 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36	07:15 (4)	06:08	04:56	04:27	05:04	06:11	07:20		08:02 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	16 07:31 (4)	21:05	22:12	22:51	22:22	21:08	19:39	13	08:15 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:11 (4)	06:05	04:55	04:28	05:06	06:13	07:22		08:05 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	20 07:31 (4)	21:08	22:14	22:51	22:20	21:05	19:36	9	08:14 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30	07:11 (4)	06:03	04:53	04:28	05:08	06:16	07:24		08:08 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	19 07:30 (4)	21:10	22:16	22:51	22:18	21:02	19:34	4	08:12 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27	07:10 (4)	06:00	04:51	04:28	05:10	06:18	07:26			07:35	08:48	09:28
	16:40	17:55	19:01	20 07:30 (4)	21:12	22:18	22:51	22:16	21:00	19:31			17:07	16:00	15:46
26	08:58	07:44	06:24	07:10 (4)	05:57	04:49	04:29	05:12	06:20	07:29			07:37	08:50	09:28
	16:42	17:58	19:03	19 07:29 (4)	21:15	22:20	22:51	22:14	20:57	19:28			17:04	15:58	15:46
27	08:56	07:41	06:21	07:11 (4)	05:55	04:48	04:29	05:14	06:22	07:31			07:40	08:52	09:29
	16:44	18:00	19:06	17 07:28 (4)	21:17	22:22	22:50	22:12	20:54	19:25			17:02	15:57	15:47
28	08:54	07:38	06:19	07:12 (4)	05:52	04:46	04:30	05:16	06:25	07:33			07:42	08:54	09:29
	16:47	18:03	19:08	14 07:26 (4)	21:19	22:24	22:50	22:10	20:51	19:22			16:59	15:55	15:48
29	08:52		07:16	08:13 (4)	05:49	04:44	04:31	05:18	06:27	07:35			07:44	08:56	09:29
	16:49		20:10	11 08:24 (4)	21:22	22:26	22:50	22:08	20:48	19:19			16:57	15:54	15:49
30	08:50		07:13	08:18 (4)	05:47	04:43	04:32	05:20	06:29	07:37			07:47	08:58	09:29
	16:51		20:12	2 08:20 (4)	21:24	22:27	22:49	22:05	20:46	19:16			16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31				07:49		09:28
	16:54		20:15			22:29		22:03	20:43				16:52		15:52
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				160							159			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,69							0,69			
Total reduction				0,27							0,27			
Total, real				44							44			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		07:35 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33	8	07:43 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		07:32 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36	13	07:45 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56		07:30 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38	16	07:46 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:17	15:42
16	09:15	08:10	06:53		07:28 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40	19	07:47 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:15	15:42
17	09:13	08:08	06:50		07:27 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	08:30	09:23
	16:21	17:36	18:43	20	07:47 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28	16:14	15:42
18	09:12	08:05	06:47		07:26 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:18 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	21	07:47 (4)	20:56	22:04	22:49	22:29	21:19	19:51	9 08:27 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45		07:26 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:15 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	21	07:47 (4)	20:58	22:06	22:50	22:27	21:16	19:48	14 08:29 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42		07:27 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:13 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	21	07:48 (4)	21:01	22:08	22:50	22:26	21:13	19:45	17 08:30 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39		07:26 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:13 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	21	07:47 (4)	21:03	22:10	22:50	22:24	21:11	19:42	18 08:31 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36		07:27 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:11 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	19	07:46 (4)	21:05	22:12	22:51	22:22	21:08	19:39	20 08:31 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33		07:27 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:10 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	17	07:44 (4)	21:08	22:14	22:51	22:20	21:05	19:36	21 08:31 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30		07:28 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:10 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	15	07:43 (4)	21:10	22:16	22:51	22:18	21:02	19:34	21 08:31 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27		07:30 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:09 (4)	07:35	08:48	09:28
	16:39	17:55	19:01	10	07:40 (4)	21:12	22:18	22:51	22:16	21:00	19:31	21 08:30 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20	07:28	08:10 (4)	07:37	08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57	19:28	20 08:30 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:10 (4)	07:40	08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54	19:25	19 08:29 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:10 (4)	07:42	08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51	19:22	18 08:28 (4)	16:59	15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:11 (4)	07:44	08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48	19:19	15 08:26 (4)	16:57	15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:13 (4)	07:47	08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46	19:16	11 08:24 (4)	16:54	15:53	15:50
31	08:48		07:10				04:41		05:22	06:31			07:49		09:28
	16:54		20:15				22:29		22:03	20:43			16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				221							224			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,70							0,70			
Total reduction				0,28							0,28			
Total, real				61							62			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October		November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40		08:36 (4)	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	24	09:00 (4)	16:49	15:51
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42		08:35 (4)	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	25	09:00 (4)	16:47	15:50
3	09:27	08:41	07:30	08:05 (4)	07:01	05:39	04:37	04:34	05:29	06:38		07:44		08:34 (4)	07:56	09:04
	15:56	17:01	18:10	12 08:17 (4)	20:22	21:31	22:34	22:47	21:56	20:34		19:08	25	08:59 (4)	16:44	15:49
4	09:27	08:39	07:27	08:02 (4)	06:58	05:37	04:36	04:35	05:31	06:40		07:46		08:34 (4)	07:59	09:05
	15:57	17:04	18:12	17 08:19 (4)	20:24	21:33	22:35	22:47	21:54	20:31		19:05	26	09:00 (4)	16:42	15:48
5	09:26	08:37	07:24	08:01 (4)	06:56	05:34	04:35	04:36	05:33	06:42		07:49		08:34 (4)	08:01	09:07
	15:59	17:06	18:14	19 08:20 (4)	20:26	21:35	22:37	22:46	21:52	20:28		19:02	25	08:59 (4)	16:39	15:47
6	09:25	08:35	07:22	07:59 (4)	06:53	05:32	04:34	04:38	05:35	06:44		07:51		08:34 (4)	08:04	09:09
	16:00	17:09	18:17	22 08:21 (4)	20:28	21:38	22:38	22:45	21:49	20:26		18:59	24	08:58 (4)	16:37	15:47
7	09:25	08:32	07:19	07:58 (4)	06:50	05:29	04:33	04:39	05:38	06:47		07:53		08:35 (4)	08:06	09:10
	16:02	17:11	18:19	23 08:21 (4)	20:31	21:40	22:39	22:44	21:47	20:23		18:56	22	08:57 (4)	16:35	15:46
8	09:24	08:30	07:16	07:58 (4)	06:47	05:27	04:32	04:40	05:40	06:49		07:55		08:35 (4)	08:08	09:12
	16:04	17:14	18:22	24 08:22 (4)	20:33	21:42	22:41	22:43	21:44	20:20		18:53	21	08:56 (4)	16:32	15:45
9	09:23	08:28	07:13	07:57 (4)	06:44	05:24	04:31	04:42	05:42	06:51		07:58		08:36 (4)	08:11	09:14
	16:06	17:16	18:24	25 08:22 (4)	20:35	21:44	22:42	22:42	21:42	20:17		18:50	18	08:54 (4)	16:30	15:44
10	09:22	08:25	07:10	07:57 (4)	06:41	05:22	04:31	04:43	05:44	06:53		08:00		08:38 (4)	08:13	09:15
	16:07	17:19	18:26	25 08:22 (4)	20:38	21:47	22:43	22:41	21:39	20:14		18:48	15	08:53 (4)	16:28	15:44
11	09:21	08:23	07:07	07:57 (4)	06:38	05:20	04:30	04:45	05:46	06:55		08:02		08:41 (4)	08:16	09:16
	16:09	17:21	18:29	25 08:22 (4)	20:40	21:49	22:44	22:39	21:37	20:11		18:45	8	08:49 (4)	16:26	15:43
12	09:20	08:20	07:05	07:57 (4)	06:36	05:17	04:29	04:46	05:49	06:58		08:04			08:18	09:18
	16:11	17:24	18:31	24 08:21 (4)	20:42	21:51	22:45	22:38	21:34	20:08		18:42			16:24	15:43
13	09:19	08:18	07:02	07:57 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07			08:20	09:19
	16:13	17:26	18:33	23 08:20 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39			16:22	15:43
14	09:17	08:15	06:59	07:57 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09			08:23	09:20
	16:15	17:28	18:36	22 08:19 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:36			16:19	15:42
15	09:16	08:13	06:56	07:58 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11			08:25	09:21
	16:17	17:31	18:38	20 08:18 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34			16:17	15:42
16	09:15	08:10	06:53	07:59 (4)	06:24	05:09	04:27	04:53	05:58	07:06		08:14			08:27	09:22
	16:19	17:33	18:40	17 08:16 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31			16:15	15:42
17	09:13	08:08	06:50	08:00 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16			08:30	09:23
	16:21	17:36	18:43	14 08:14 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28			16:14	15:42
18	09:12	08:05	06:47	08:04 (4)	06:19	05:04	04:27	04:56	06:02	07:11		08:18			08:32	09:24
	16:24	17:38	18:45	5 08:09 (4)	20:56	22:04	22:49	22:29	21:19	19:51		18:25			16:12	15:42
19	09:10	08:02	06:45		06:16	05:02	04:27	04:58	06:04	07:13		08:21			08:34	09:25
	16:26	17:41	18:47		20:58	22:06	22:50	22:27	21:16	19:48		18:23			16:10	15:43
20	09:09	08:00	06:42		06:13	05:00	04:27	05:00	06:07	07:15		08:23			08:37	09:26
	16:28	17:43	18:49		21:01	22:08	22:50	22:26	21:13	19:45		18:20			16:08	15:43
21	09:07	07:57	06:39		06:11	04:58	04:27	05:02	06:09	07:17		08:25			08:39	09:26
	16:30	17:46	18:52		21:03	22:10	22:50	22:24	21:11	19:42		18:17			16:06	15:43
22	09:05	07:55	06:36		06:08	04:56	04:27	05:04	06:11	07:20		08:28			08:41	09:27
	16:32	17:48	18:54		21:05	22:12	22:51	22:22	21:08	19:39		18:15			16:04	15:44
23	09:04	07:52	06:33		06:05	04:55	04:28	05:06	06:13	07:22		08:30			08:43	09:27
	16:35	17:50	18:56		21:08	22:14	22:51	22:20	21:05	19:36		18:12			16:03	15:44
24	09:02	07:49	06:30		06:03	04:53	04:28	05:08	06:16	07:24		08:32			08:45	09:28
	16:37	17:53	18:59		21:10	22:16	22:51	22:18	21:02	19:34		18:09			16:01	15:45
25	09:00	07:47	06:27		06:00	04:51	04:28	05:10	06:18	07:26		07:35			08:48	09:28
	16:39	17:55	19:01		21:12	22:18	22:51	22:16	21:00	19:31		17:07			16:00	15:46
26	08:58	07:44	06:24		05:57	04:49	04:29	05:12	06:20	07:28	08:44 (4)	07:37			08:50	09:28
	16:42	17:58	19:03		21:15	22:20	22:51	22:14	20:57	19:28	11 08:55 (4)	17:04			15:58	15:46
27	08:56	07:41	06:21		05:55	04:48	04:29	05:14	06:22	07:31	08:41 (4)	07:40			08:52	09:29
	16:44	18:00	19:05		21:17	22:22	22:50	22:12	20:54	19:25	16 08:57 (4)	17:02			15:57	15:47
28	08:54	07:38	06:19		05:52	04:46	04:30	05:16	06:24	07:33	08:39 (4)	07:42			08:54	09:29
	16:47	18:03	19:08		21:19	22:24	22:50	22:10	20:51	19:22	19 08:58 (4)	16:59			15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35	08:37 (4)	07:44			08:56	09:29
	16:49		20:10		21:22	22:26	22:50	22:08	20:48	19:19	22 08:59 (4)	16:57			15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37	08:37 (4)	07:47			08:58	09:29
	16:51		20:12		21:24	22:27	22:49	22:05	20:46	19:16	23 09:00 (4)	16:54			15:53	15:50
31	08:48		07:10			04:41		05:22	06:31			07:49				09:28
	16:54		20:15			22:29		22:03	20:43			16:52				15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319		236		200
Total, worst case				317							91		233			
Sun reduction				0,50							0,50		0,50			
Oper. time red.				0,80							0,80		0,80			
Wind dir. red.				0,71							0,71		0,71			
Total reduction				0,28							0,28		0,28			
Total, real				90							26		66			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28 - 15:53	08:46 - 16:56	07:36 - 18:05 (4)	09:02 (2) - 09:06 (2)	07:07 - 20:17	05:44 - 21:26	04:40 - 22:31	04:32 - 22:49	05:24 - 22:01	06:33 - 20:40	07:40 - 19:13 (28)	08:45 (4) - 09:13 (4)	07:52 - 16:49	09:00 - 15:51
2	09:28 - 15:54	08:44 - 16:59	07:33 - 18:07		07:04 - 20:19	05:42 - 21:28	04:39 - 22:32	04:33 - 22:48	05:27 - 21:59	06:36 - 20:37	07:42 - 19:10 (29)	08:44 (4) - 09:13 (4)	07:54 - 16:47	09:02 - 15:50
3	09:27 - 15:56	08:41 - 17:01	07:30 - 18:10 (10)	08:17 (4) - 08:27 (4)	07:01 - 20:22	05:39 - 21:31	04:37 - 22:34	04:34 - 22:47	05:29 - 21:56	06:38 - 20:34	07:44 - 19:08 (29)	08:43 (4) - 09:12 (4)	07:56 - 16:44	09:04 - 15:49
4	09:27 - 15:57	08:39 - 17:04	07:27 - 18:12 (17)	08:13 (4) - 08:30 (4)	06:58 - 20:24	05:37 - 21:33	04:36 - 22:35	04:35 - 22:47	05:31 - 21:54	06:40 - 20:31	07:46 - 19:05 (28)	08:44 (4) - 09:12 (4)	07:59 - 16:42	09:05 - 15:48
5	09:26 - 15:59	08:37 - 17:06	07:24 - 18:14 (20)	08:11 (4) - 08:31 (4)	06:56 - 20:26	05:34 - 21:35	04:35 - 22:37	04:36 - 22:46	05:33 - 21:52	06:42 - 20:28	07:49 - 19:02 (27)	08:44 (4) - 09:11 (4)	08:01 - 16:39	09:07 - 15:47
6	09:25 - 16:00	08:35 - 17:09	07:22 - 18:17 (24)	08:09 (4) - 08:33 (4)	06:53 - 20:28	05:32 - 21:38	04:34 - 22:38	04:38 - 22:45	05:35 - 21:49	06:44 - 20:26	07:51 - 18:59 (26)	08:44 (4) - 09:10 (4)	08:04 - 16:37	09:09 - 15:47
7	09:25 - 16:02	08:32 - 17:11	07:19 - 18:19 (25)	08:08 (4) - 08:33 (4)	06:50 - 20:31	05:29 - 21:40	04:33 - 22:39	04:39 - 22:44	05:38 - 21:47	06:47 - 20:23	07:53 - 18:56 (24)	08:45 (4) - 09:09 (4)	08:06 - 16:35	09:10 - 15:46
8	09:24 - 16:04	08:30 - 17:14	07:16 - 18:22 (27)	08:07 (4) - 08:34 (4)	06:47 - 20:33	05:27 - 21:42	04:32 - 22:41	04:40 - 22:43	05:40 - 21:44	06:49 - 20:20	07:55 - 18:53 (22)	08:46 (4) - 09:08 (4)	08:08 - 16:32	09:12 - 15:45
9	09:23 - 16:06	08:28 - 17:16	07:13 - 18:24 (28)	08:07 (4) - 08:35 (4)	06:44 - 20:35	05:24 - 21:44	04:31 - 22:42	04:42 - 22:42	05:42 - 21:42	06:51 - 20:17	07:58 - 18:50 (18)	08:47 (4) - 09:05 (4)	08:11 - 16:30	09:14 - 15:44
10	09:22 - 16:07	08:25 - 17:19	07:10 - 18:26 (29)	08:06 (4) - 08:35 (4)	06:41 - 20:38	05:22 - 21:47	04:31 - 22:43	04:43 - 22:41	05:44 - 21:39	06:53 - 20:14	08:00 - 18:48 (15)	08:49 (4) - 09:04 (4)	08:13 - 16:28	09:15 - 15:44
11	09:21 - 16:09	08:23 - 17:21	07:07 - 18:29 (29)	08:06 (4) - 08:35 (4)	06:38 - 20:40	05:20 - 21:49	04:30 - 22:44	04:45 - 22:39	05:46 - 21:37	06:55 - 20:11	08:02 - 18:45 (6)	08:53 (4) - 08:59 (4)	08:16 - 16:26	09:16 - 15:43
12	09:20 - 16:11	08:20 - 17:23	07:05 - 18:31 (29)	08:05 (4) - 08:34 (4)	06:36 - 20:42	05:17 - 21:51	04:29 - 22:45	04:46 - 22:38	05:49 - 21:34	06:58 - 20:08	08:04 - 18:42		08:18 - 16:24	09:18 - 15:43
13	09:19 - 16:13	08:18 - 17:26	07:02 - 18:33 (29)	08:04 (4) - 08:34 (4)	06:33 - 20:44	05:15 - 21:53	04:29 - 22:46	04:48 - 22:37	05:51 - 21:32	07:00 - 20:05	08:07 - 18:39 (7)	09:33 (2) - 09:40 (2)	08:20 - 16:22	09:19 - 15:43
14	09:17 - 16:15	08:15 - 17:28	06:59 - 18:36 (28)	08:05 (4) - 08:33 (4)	06:30 - 20:47	05:13 - 21:56	04:28 - 22:47	04:49 - 22:35	05:53 - 21:29	07:02 - 20:03	08:09 - 18:36 (12)	09:30 (2) - 09:42 (2)	08:23 - 16:19	09:20 - 15:42
15	09:16 - 16:17	08:13 - 17:31	06:56 - 18:38 (32)	07:33 (3) - 08:32 (4)	06:27 - 20:49	05:11 - 21:58	04:28 - 22:47	04:51 - 22:34	05:55 - 21:27	07:04 - 20:00	08:11 - 18:34 (15)	09:29 (2) - 09:44 (2)	08:25 - 16:17	09:21 - 15:42
16	09:15 - 16:19	08:10 - 17:33	06:53 - 18:40 (36)	07:30 (3) - 08:31 (4)	06:24 - 20:51	05:09 - 22:00	04:27 - 22:48	04:53 - 22:32	05:58 - 21:24	07:06 - 19:57	08:14 - 18:31 (17)	09:27 (2) - 09:44 (2)	08:27 - 16:15	09:22 - 15:42
17	09:13 - 16:21	08:08 - 17:36 (9)	09:01 (2) - 09:10 (2)	06:50 - 07:28 (3) - 08:30 (4)	06:22 - 20:54	05:06 - 22:02	04:27 - 22:49	04:54 - 22:31	06:00 - 21:21	07:09 - 19:54 (5)	08:18 (3) - 08:23 (3)	08:16 - 18:28 (18)	09:27 (2) - 09:45 (2)	08:30 - 16:14	09:23 - 15:42
18	09:12 - 16:24	08:05 - 17:38 (14)	08:58 (2) - 09:12 (2)	06:47 - 07:27 (3) - 08:28 (4)	06:19 - 20:56	05:04 - 22:04	04:27 - 22:49	04:56 - 22:29	06:02 - 21:19	07:11 - 19:51 (11)	08:14 (3) - 08:25 (3)	08:18 - 18:25 (19)	09:26 (2) - 09:45 (2)	08:32 - 16:12	09:24 - 15:42
19	09:10 - 16:26	08:02 - 17:41 (16)	08:57 (2) - 09:13 (2)	06:45 - 07:25 (3) - 08:25 (4)	06:16 - 20:58	05:02 - 22:06	04:27 - 22:50	04:58 - 22:27	06:04 - 21:16	07:13 - 19:48 (14)	08:12 (3) - 08:26 (3)	08:21 - 18:23 (19)	09:26 (2) - 09:45 (2)	08:34 - 16:10	09:25 - 15:43
20	09:09 - 16:28	08:00 - 17:43 (17)	08:56 (2) - 09:13 (2)	06:42 - 07:25 (3) - 08:23 (4)	06:13 - 21:01	05:00 - 22:08	04:27 - 22:50	05:00 - 22:26	06:07 - 21:13	07:15 - 19:45 (17)	08:10 (3) - 08:27 (3)	08:23 - 18:20 (19)	09:25 (2) - 09:44 (2)	08:37 - 16:08	09:26 - 15:43
21	09:07 - 16:30	07:57 - 17:46 (18)	08:55 (2) - 09:13 (2)	06:39 - 07:25 (3) - 07:43 (3)	06:11 - 21:03	04:58 - 22:10	04:27 - 22:50	05:02 - 22:24	06:09 - 21:10	07:17 - 19:42 (18)	08:10 (3) - 08:28 (3)	08:25 - 18:17 (18)	09:26 (2) - 09:44 (2)	08:39 - 16:06	09:26 - 15:43
22	09:05 - 16:32	07:55 - 17:48 (19)	08:55 (2) - 09:14 (2)	06:36 - 07:24 (3) - 07:42 (3)	06:08 - 21:05	04:56 - 22:12	04:27 - 22:51	05:04 - 22:22	06:11 - 21:08	07:20 - 19:39 (19)	08:09 (3) - 08:28 (3)	08:28 - 18:15 (17)	09:26 (2) - 09:43 (2)	08:41 - 16:04	09:27 - 15:44
23	09:04 - 16:35	07:52 - 17:50 (19)	08:55 (2) - 09:14 (2)	06:33 - 07:25 (3) - 07:41 (3)	06:05 - 21:08	04:55 - 22:14	04:28 - 22:51	05:06 - 22:20	06:13 - 21:05	07:22 - 19:36 (27)	08:09 (3) - 09:06 (4)	08:30 - 18:12 (15)	09:27 (2) - 09:42 (2)	08:43 - 16:03	09:27 - 15:44
24	09:02 - 16:37	07:49 - 17:53 (19)	08:55 (2) - 09:14 (2)	06:30 - 07:25 (3) - 07:40 (3)	06:02 - 21:10	04:53 - 22:16	04:28 - 22:51	05:08 - 22:18	06:16 - 21:02	07:24 - 19:33 (35)	08:08 (3) - 09:09 (4)	08:32 - 18:09 (12)	09:29 (2) - 09:41 (2)	08:45 - 16:01	09:28 - 15:45
25	09:00 - 16:39	07:46 - 17:55 (18)	08:55 (2) - 09:13 (2)	06:27 - 07:26 (3) - 07:38 (3)	06:00 - 21:12	04:51 - 22:18	04:28 - 22:51	05:10 - 22:16	06:18 - 21:00	07:26 - 19:31 (35)	08:09 (3) - 09:10 (4)	07:35 - 17:07 (7)	08:31 (2) - 08:38 (2)	08:48 - 16:00	09:28 - 15:46
26	08:58 - 16:42	07:44 - 17:58 (17)	08:55 (2) - 09:12 (2)	06:24 - 07:28 (3) - 07:35 (3)	05:57 - 21:15	04:49 - 22:20	04:29 - 22:51	05:12 - 22:14	06:20 - 20:57	07:28 - 19:28 (36)	08:11 (3) - 09:12 (4)	07:37 - 17:04		08:50 - 15:58	09:28 - 15:46
27	08:56 - 16:44	07:41 - 18:00 (15)	08:56 (2) - 09:11 (2)	06:21 - 19:05	05:55 - 21:17	04:48 - 22:22	04:29 - 22:50	05:14 - 22:12	06:22 - 20:54	07:31 - 19:25 (37)	08:11 (3) - 09:13 (4)	07:40 - 17:02		08:52 - 15:57	09:29 - 15:47
28	08:54 - 16:47	07:38 - 18:03 (11)	08:58 (2) - 09:09 (2)	06:19 - 19:08	05:52 - 21:19	04:46 - 22:24	04:30 - 22:50	05:16 - 22:10	06:24 - 20:51	07:33 - 19:22 (34)	08:13 (3) - 09:13 (4)	07:42 - 16:59		08:54 - 15:55	09:29 - 15:48
29	08:52 - 16:49			07:16 - 20:10	05:49 - 21:21	04:44 - 22:26	04:31 - 22:50	05:18 - 22:08	06:27 - 20:48	07:35 - 19:19 (28)	08:45 (4) - 09:13 (4)	07:44 - 16:57		08:56 - 15:54	09:29 - 15:49
30	08:50 - 16:51			07:13 - 20:12	05:47 - 21:24	04:43 - 22:27	04:31 - 22:49	05:20 - 22:05	06:29 - 20:46	07:37 - 19:16 (29)	08:45 (4) - 09:14 (4)	07:47 - 16:54		08:58 - 15:53	09:28 - 15:50
31	08:48 - 16:54			07:10 - 20:15	04:41 - 22:29		05:22 - 22:03	06:31 - 20:43			07:49 - 16:52			09:28 - 15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case		192	591						345	447		
Sun reduction		0,50	0,50						0,50	0,50		
Oper. time red.		0,80	0,80						0,80	0,80		
Wind dir. red.		0,74	0,71						0,71	0,73		
Total reduction		0,29	0,28						0,28	0,29		
Total, real		57	168						97	130		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:18 (2)	08:46	10:00 (3)	07:35	07:07	05:44	04:40
	15:53	49	12:27 (4)	16:56	25	10:25 (3)	18:05	20:17	21:26	22:31
2	09:28		11:18 (2)	08:44	09:59 (3)	07:33	07:04	05:41	04:39
	15:54	50	12:28 (4)	16:59	25	10:24 (3)	18:07	20:19	21:28	22:32
3	09:27		11:18 (2)	08:41	10:00 (3)	07:30	07:01	05:39	04:37
	15:56	51	12:28 (4)	17:01	25	10:25 (3)	18:10	20:21	21:31	22:34
4	09:27		11:18 (2)	08:39	09:59 (3)	07:27	06:58	05:36	04:36
	15:57	51	12:28 (4)	17:04	26	10:25 (3)	18:12	20:24	21:33	22:35
5	09:26		11:19 (2)	08:37	10:00 (3)	07:24	06:55	05:34	04:35
	15:59	51	12:29 (4)	17:06	26	10:26 (3)	18:14	20:26	21:35	22:37
6	09:25		11:19 (2)	08:35	10:00 (3)	07:22	06:53	05:31	04:34
	16:00	51	12:29 (4)	17:09	25	10:25 (3)	18:17	20:28	21:38	22:38
7	09:25		11:20 (2)	08:32	10:00 (3)	07:19	06:50	05:29	04:33
	16:02	51	12:30 (4)	17:11	25	10:25 (3)	18:19	20:31	21:40	22:39
8	09:24		11:20 (2)	08:30	10:01 (3)	07:16	06:47	05:27	04:32
	16:04	51	12:30 (4)	17:13	24	10:25 (3)	18:21	20:33	21:42	22:41
9	09:23		11:21 (2)	08:28	10:01 (3)	07:13	06:44	05:24	04:31
	16:05	51	12:31 (4)	17:16	23	10:24 (3)	18:24	20:35	21:44	22:42
10	09:22		11:21 (2)	08:25	10:03 (3)	07:10	06:41	05:22	04:30
	16:07	51	12:31 (4)	17:18	21	10:24 (3)	18:26	20:38	21:47	22:43
11	09:21		11:22 (2)	08:23	09:07 (26)	07:07	06:38	05:20	04:30
	16:09	50	12:31 (4)	17:21	25	10:22 (3)	18:28	20:40	21:49	22:44
12	09:20		11:22 (2)	08:20	09:04 (26)	07:05	06:36	05:17	04:29
	16:11	49	12:31 (4)	17:23	27	10:20 (3)	18:31	20:42	21:51	22:45
13	09:19		11:23 (2)	08:18	09:03 (26)	07:02	06:33	05:15	04:28
	16:13	49	12:32 (4)	17:26	26	10:18 (3)	18:33	20:44	21:53	22:46
14	09:17		11:24 (2)	08:15	09:02 (26)	06:59	06:30	05:13	04:28
	16:15	47	12:32 (4)	17:28	17	09:19 (26)	18:35	20:47	21:56	22:47
15	09:16		11:24 (2)	08:13	09:01 (26)	06:56	06:27	05:11	04:28
	16:17	47	12:32 (4)	17:31	19	09:20 (26)	18:38	20:49	21:58	22:47
16	09:15		11:25 (2)	08:10	09:00 (26)	06:53	06:24	05:08	04:27
	16:19	44	12:31 (4)	17:33	20	09:20 (26)	18:40	20:51	22:00	22:48
17	09:13		11:27 (2)	08:08	09:01 (26)	06:50	06:22	05:06	04:27
	16:21	42	12:32 (4)	17:36	20	09:21 (26)	18:42	20:54	22:02	22:49
18	09:12		11:28 (2)	08:05	09:00 (26)	06:47	06:19	05:04	04:27
	16:23	39	12:32 (4)	17:38	21	09:21 (26)	18:45	20:56	22:04	22:49
19	09:10		11:29 (2)	08:02	09:00 (26)	06:44	06:16	05:02	04:27
	16:26	35	12:31 (4)	17:41	20	09:20 (26)	18:47	20:58	22:06	22:50
20	09:09		11:31 (2)	08:00	09:00 (26)	06:42	06:13	05:00	04:27
	16:28	30	12:31 (4)	17:43	19	09:19 (26)	18:49	21:01	22:08	22:50
21	09:07		12:09 (4)	07:57	09:01 (26)	06:39	06:11	04:58	04:27
	16:30	21	12:30 (4)	17:46	17	09:18 (26)	18:52	21:03	22:10	22:50
22	09:05		12:11 (4)	07:55	09:02 (26)	06:36	06:08	04:56	04:27
	16:32	19	12:30 (4)	17:48	16	09:18 (26)	18:54	21:05	22:12	22:51
23	09:04		12:12 (4)	07:52	09:04 (26)	06:33	06:05	04:54	04:27
	16:35	17	12:29 (4)	17:50	12	09:16 (26)	18:56	21:08	22:14	22:51
24	09:02		10:08 (3)	07:49	09:06 (26)	06:30	06:02	04:53	04:28
	16:37	16	12:26 (4)	17:53	7	09:13 (26)	18:59	21:10	22:16	22:51
25	09:00		10:05 (3)	07:46		06:27	06:00	04:51	04:28
	16:39	14	12:22 (4)	17:55		19:01	21:12	22:18	22:51
26	08:58		10:03 (3)	07:44		06:24	05:57	04:49	04:29
	16:42	15	10:18 (3)	17:58		19:03	21:15	22:20	22:51
27	08:56		10:03 (3)	07:41		06:21	05:54	04:47	04:29
	16:44	17	10:20 (3)	18:00		19:05	21:17	22:22	22:50
28	08:54		10:01 (3)	07:38		06:18	05:52	04:46	04:30
	16:46	20	10:21 (3)	18:02		19:08	21:19	22:24	22:50
29	08:52		10:01 (3)			07:16	05:49	04:44	04:31
	16:49	21	10:22 (3)			20:10	21:21	22:26	22:50
30	08:50		10:01 (3)			07:13	05:47	04:43	04:31
	16:51	22	10:23 (3)			20:12	21:24	22:27	22:49
31	08:48		10:00 (3)			07:10		04:41	
	16:54	24	10:24 (3)			20:15		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1145			511				
Sun reduction		0,50			0,50				
Oper. time red.		0,80			0,80				
Wind dir. red.		0,66			0,73				
Total reduction		0,26			0,29				
Total, real		300			149				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:40			07:52		09:32 (3)	09:00		11:04 (2)
	22:49	22:01	20:40	19:13			16:49	21	09:53 (3)	15:51	51	12:14 (4)
2	04:33	05:26	06:35	07:42			07:54		09:31 (3)	09:02		11:04 (2)
	22:48	21:59	20:37	19:10			16:46	22	09:53 (3)	15:50	51	12:14 (4)
3	04:34	05:29	06:38	07:44			07:56		09:31 (3)	09:04		11:04 (2)
	22:47	21:56	20:34	19:07			16:44	23	09:54 (3)	15:49	51	12:14 (4)
4	04:35	05:31	06:40	07:46			07:59		09:30 (3)	09:05		11:04 (2)
	22:47	21:54	20:31	19:05			16:42	25	09:55 (3)	15:48	51	12:14 (4)
5	04:36	05:33	06:42	07:49			08:01		09:29 (3)	09:07		11:05 (2)
	22:46	21:52	20:28	19:02			16:39	26	09:55 (3)	15:47	51	12:15 (4)
6	04:38	05:35	06:44	07:51			08:04		09:30 (3)	09:09		11:05 (2)
	22:45	21:49	20:26	18:59			16:37	25	09:55 (3)	15:46	51	12:15 (4)
7	04:39	05:37	06:47	07:53			08:06		09:30 (3)	09:10		11:06 (2)
	22:44	21:47	20:23	18:56			16:35	26	09:56 (3)	15:46	51	12:16 (4)
8	04:40	05:40	06:49	07:55			08:08		09:29 (3)	09:12		11:06 (2)
	22:43	21:44	20:20	18:53			16:32	26	09:55 (3)	15:45	51	12:16 (4)
9	04:41	05:42	06:51	07:58			08:11		09:30 (3)	09:14		11:07 (2)
	22:42	21:42	20:17	18:50			16:30	25	09:55 (3)	15:44	51	12:17 (4)
10	04:43	05:44	06:53	08:00			08:13		09:31 (3)	09:15		11:07 (2)
	22:41	21:39	20:14	18:48			16:28	24	09:55 (3)	15:44	51	12:17 (4)
11	04:44	05:46	06:55	08:02			08:16		09:31 (3)	09:16		11:08 (2)
	22:39	21:37	20:11	18:45			16:26	23	09:54 (3)	15:43	49	12:17 (4)
12	04:46	05:49	06:58	08:04			08:18		09:32 (3)	09:18		11:08 (2)
	22:38	21:34	20:08	18:42			16:24	22	09:54 (3)	15:43	49	12:17 (4)
13	04:48	05:51	07:00	08:07			08:20		09:33 (3)	09:19		11:09 (2)
	22:37	21:32	20:05	18:39			16:21	21	09:54 (3)	15:43	49	12:18 (4)
14	04:49	05:53	07:02	08:09			08:23		09:34 (3)	09:20		11:09 (2)
	22:35	21:29	20:02	18:36			16:19	20	09:54 (3)	15:42	49	12:18 (4)
15	04:51	05:55	07:04	08:11			08:25		09:35 (3)	09:21		11:10 (2)
	22:34	21:26	20:00	18:34			16:17	17	09:52 (3)	15:42	49	12:19 (4)
16	04:53	05:58	07:06	08:14			08:27		09:36 (3)	09:22		11:11 (2)
	22:32	21:24	19:57	18:31			16:15	15	09:51 (3)	15:42	48	12:20 (4)
17	04:54	06:00	07:09	08:16			08:30		09:39 (3)	09:23		11:12 (2)
	22:31	21:21	19:54	18:28			16:13	15	11:56 (4)	15:42	48	12:20 (4)
18	04:56	06:02	07:11	08:18		09:36 (26)	08:32		09:42 (3)	09:24		11:11 (2)
	22:29	21:19	19:51	18:25	10	09:46 (26)	16:11	16	12:00 (4)	15:42	48	12:20 (4)
19	04:58	06:04	07:13	08:21		09:34 (26)	08:34		11:46 (4)	09:25		11:12 (2)
	22:27	21:16	19:48	18:23	14	09:48 (26)	16:10	17	12:03 (4)	15:42	47	12:20 (4)
20	05:00	06:06	07:15	08:23		09:32 (26)	08:37		11:46 (4)	09:26		11:13 (2)
	22:26	21:13	19:45	18:20	17	09:49 (26)	16:08	19	12:05 (4)	15:43	48	12:21 (4)
21	05:02	06:09	07:17	08:25		09:32 (26)	08:39		11:44 (4)	09:26		11:14 (2)
	22:24	21:10	19:42	18:17	18	09:50 (26)	16:06	21	12:05 (4)	15:43	47	12:22 (4)
22	05:04	06:11	07:20	08:28		09:30 (26)	08:41		11:07 (2)	09:27		11:14 (2)
	22:22	21:08	19:39	18:15	20	09:50 (26)	16:04	30	12:07 (4)	15:44	47	12:22 (4)
23	05:06	06:13	07:22	08:30		09:30 (26)	08:43		11:05 (2)	09:27		11:14 (2)
	22:20	21:05	19:36	18:12	20	09:50 (26)	16:03	36	12:08 (4)	15:44	48	12:22 (4)
24	05:08	06:15	07:24	08:32		09:31 (26)	08:45		11:05 (2)	09:28		11:15 (2)
	22:18	21:02	19:33	18:09	20	09:51 (26)	16:01	39	12:09 (4)	15:45	48	12:23 (4)
25	05:10	06:18	07:26	07:35		08:30 (26)	08:48		11:04 (2)	09:28		11:15 (2)
	22:16	20:59	19:31	17:07	20	08:50 (26)	15:59	42	12:09 (4)	15:45	48	12:24 (4)
26	05:12	06:20	07:28	07:37		08:31 (26)	08:50		11:04 (2)	09:28		11:16 (2)
	22:14	20:57	19:28	17:04	19	08:50 (26)	15:58	43	12:10 (4)	15:46	48	12:24 (4)
27	05:14	06:22	07:31	07:40		08:30 (26)	08:52		11:03 (2)	09:29		11:16 (2)
	22:12	20:54	19:25	17:02	19	08:49 (26)	15:57	47	12:11 (4)	15:47	48	12:25 (4)
28	05:16	06:24	07:33	07:42		08:31 (26)	08:54		11:04 (2)	09:29		11:17 (2)
	22:10	20:51	19:22	16:59	17	08:48 (26)	15:55	47	12:12 (4)	15:48	48	12:25 (4)
29	05:18	06:27	07:35	07:44		08:33 (26)	08:56		11:03 (2)	09:29		11:16 (2)
	22:08	20:48	19:19	16:56	26	09:48 (3)	15:54	49	12:12 (4)	15:49	49	12:25 (4)
30	05:20	06:29	07:37	07:47		08:34 (26)	08:58		11:03 (2)	09:28		11:17 (2)
	22:05	20:45	19:16	16:54	27	09:50 (3)	15:53	50	12:12 (4)	15:50	49	12:26 (4)
31	05:22	06:31		07:49		08:37 (26)				09:28		11:18 (2)
	22:03	20:43		16:51	25	09:52 (3)				15:51	49	12:27 (4)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					272			832			1523	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,68			0,65	
Total reduction					0,29			0,27			0,26	
Total, real					80			226			394	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:00 (1)	08:46		09:41 (26)	07:35	08:28 (28)	07:07	05:44	04:40
	15:53	67 13:34 (4)	16:56	27	11:17 (3)	18:05	19 08:47 (28)	20:17	21:26	22:31
2	09:28	11:00 (1)	08:44		09:37 (26)	07:33	08:27 (28)	07:04	05:41	04:39
	15:54	68 13:34 (4)	16:59	32	11:16 (3)	18:07	20 08:47 (28)	20:19	21:28	22:32
3	09:27	11:00 (1)	08:41		09:35 (26)	07:30	08:27 (28)	07:01	05:39	04:37
	15:56	69 13:34 (4)	17:01	35	11:15 (3)	18:10	20 08:47 (28)	20:21	21:31	22:34
4	09:27	11:00 (1)	08:39		09:34 (26)	07:27	08:27 (28)	06:58	05:36	04:36
	15:57	69 13:35 (4)	17:04	33	11:13 (3)	18:12	19 08:46 (28)	20:24	21:33	22:35
5	09:26	11:00 (1)	08:37		09:33 (26)	07:24	08:28 (28)	06:55	05:34	04:35
	15:59	69 13:35 (4)	17:06	33	11:12 (3)	18:14	17 08:45 (28)	20:26	21:35	22:37
6	09:25	11:00 (1)	08:35		09:32 (26)	07:22	08:28 (28)	06:53	05:31	04:34
	16:00	69 13:35 (4)	17:08	23	11:06 (3)	18:17	16 08:44 (28)	20:28	21:38	22:38
7	09:25	10:54 (3)	08:32		09:31 (26)	07:19	08:29 (28)	06:50	05:29	04:33
	16:02	75 13:36 (4)	17:11	22	09:53 (26)	18:19	13 08:42 (28)	20:31	21:40	22:39
8	09:24	10:53 (3)	08:30		09:32 (26)	07:16	08:31 (28)	06:47	05:27	04:32
	16:04	77 13:37 (4)	17:13	22	09:54 (26)	18:21	8 08:39 (28)	20:33	21:42	22:41
9	09:23	10:52 (3)	08:28		09:31 (26)	07:13		06:44	05:24	04:31
	16:05	76 13:37 (4)	17:16	23	09:54 (26)	18:24		20:35	21:44	22:42
10	09:22	10:51 (3)	08:25		09:32 (26)	07:10		06:41	05:22	04:30
	16:07	78 13:37 (4)	17:18	23	09:55 (26)	18:26		20:38	21:47	22:43
11	09:21	10:50 (3)	08:23		09:31 (26)	07:07		06:38	05:20	04:30
	16:09	78 13:38 (4)	17:21	24	09:55 (26)	18:28		20:40	21:49	22:44
12	09:20	10:49 (3)	08:20		09:31 (26)	07:05		06:36	05:17	04:29
	16:11	76 13:37 (4)	17:23	23	09:54 (26)	18:31		20:42	21:51	22:45
13	09:19	10:50 (3)	08:18		09:31 (26)	07:02		06:33	05:15	04:28
	16:13	74 13:38 (4)	17:26	23	09:54 (26)	18:33		20:44	21:53	22:46
14	09:17	10:49 (3)	08:15		09:33 (26)	06:59		06:30	05:13	04:28
	16:15	73 13:38 (4)	17:28	21	09:54 (26)	18:35		20:47	21:55	22:47
15	09:16	10:48 (3)	08:13		09:33 (26)	06:56		06:27	05:11	04:28
	16:17	69 13:38 (4)	17:31	20	09:53 (26)	18:38		20:49	21:58	22:47
16	09:15	10:48 (3)	08:10		09:34 (26)	06:53		06:24	05:08	04:27
	16:19	62 13:37 (4)	17:33	17	09:51 (26)	18:40		20:51	22:00	22:48
17	09:13	10:49 (3)	08:08		09:36 (26)	06:50		06:22	05:06	04:27
	16:21	61 13:38 (4)	17:36	14	09:50 (26)	18:42		20:54	22:02	22:49
18	09:12	10:48 (3)	08:05		09:39 (26)	06:47		06:19	05:04	04:27
	16:23	61 13:38 (4)	17:38	8	09:47 (26)	18:45		20:56	22:04	22:49
19	09:10	10:48 (3)	08:02			06:44		06:16	05:02	04:27
	16:26	58 13:37 (4)	17:41			18:47		20:58	22:06	22:50
20	09:09	10:48 (3)	08:00			06:42		06:13	05:00	04:27
	16:28	57 13:37 (4)	17:43			18:49		21:01	22:08	22:50
21	09:07	10:48 (3)	07:57			06:39		06:10	04:58	04:27
	16:30	53 13:36 (4)	17:45			18:52		21:03	22:10	22:50
22	09:05	10:49 (3)	07:54			06:36		06:08	04:56	04:27
	16:32	49 13:35 (4)	17:48			18:54		21:05	22:12	22:51
23	09:04	10:49 (3)	07:52			06:33		06:05	04:54	04:27
	16:35	43 13:33 (4)	17:50			18:56		21:08	22:14	22:51
24	09:02	10:48 (3)	07:49		08:36 (28)	06:30		06:02	04:53	04:28
	16:37	29 11:17 (3)	17:53	5	08:41 (28)	18:59		21:10	22:16	22:51
25	09:00	10:49 (3)	07:46		08:32 (28)	06:27		06:00	04:51	04:28
	16:39	29 11:18 (3)	17:55	12	08:44 (28)	19:01		21:12	22:18	22:51
26	08:58	10:49 (3)	07:44		08:30 (28)	06:24		05:57	04:49	04:29
	16:42	29 11:18 (3)	17:58	15	08:45 (28)	19:03		21:14	22:20	22:51
27	08:56	10:50 (3)	07:41		08:29 (28)	06:21		05:54	04:47	04:29
	16:44	29 11:19 (3)	18:00	17	08:46 (28)	19:05		21:17	22:22	22:50
28	08:54	10:50 (3)	07:38		08:29 (28)	06:18		05:52	04:46	04:30
	16:46	28 11:18 (3)	18:02	18	08:47 (28)	19:08		21:19	22:24	22:50
29	08:52	10:51 (3)				07:16		05:49	04:44	04:30
	16:49	27 11:18 (3)				20:10		21:21	22:26	22:50
30	08:50	10:51 (3)				07:13		05:47	04:43	04:31
	16:51	26 11:17 (3)				20:12		21:24	22:27	22:49
31	08:48	10:52 (3)				07:10			04:41	
	16:54	25 11:17 (3)				20:15			22:29	
Potential sun hours	221		260			365		432	521	547
Total, worst case		1753		490			132			
Sun reduction		0,50		0,50			0,50			
Oper. time red.		0,80		0,80			0,80			
Wind dir. red.		0,65		0,72			0,73			
Total reduction		0,26		0,29			0,29			
Total, real		456		141			38			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:52		09:00 (26)	09:00		10:33 (3)
	22:49	22:01	20:40	19:13			16:49	24	09:24 (26)	15:51	76	13:20 (4)
2	04:33	05:26	06:35	07:42			07:54		09:01 (26)	09:02		10:34 (3)
	22:48	21:59	20:37	19:10			16:46	23	09:24 (26)	15:50	78	13:20 (4)
3	04:34	05:29	06:38	07:44			07:56		09:01 (26)	09:04		10:35 (3)
	22:47	21:56	20:34	19:07			16:44	23	09:24 (26)	15:49	78	13:20 (4)
4	04:35	05:31	06:40	07:46			07:59		09:02 (26)	09:05		10:37 (3)
	22:47	21:54	20:31	19:05			16:42	22	09:24 (26)	15:48	77	13:21 (4)
5	04:36	05:33	06:42	07:48		09:11 (28)	08:01		09:02 (26)	09:07		10:39 (3)
	22:46	21:52	20:28	19:02	3	09:14 (28)	16:39	26	10:37 (3)	15:47	76	13:21 (4)
6	04:37	05:35	06:44	07:51		09:06 (28)	08:04		09:03 (26)	09:09		10:46 (1)
	22:45	21:49	20:26	18:59	11	09:17 (28)	16:37	32	10:42 (3)	15:46	70	13:22 (4)
7	04:39	05:37	06:47	07:53		09:05 (28)	08:06		09:05 (26)	09:10		10:47 (1)
	22:44	21:47	20:23	18:56	15	09:20 (28)	16:35	34	10:44 (3)	15:46	69	13:22 (4)
8	04:40	05:40	06:49	07:55		09:03 (28)	08:08		09:05 (26)	09:12		10:48 (1)
	22:43	21:44	20:20	18:53	17	09:20 (28)	16:32	35	10:45 (3)	15:45	69	13:23 (4)
9	04:41	05:42	06:51	07:58		09:02 (28)	08:11		09:08 (26)	09:14		10:49 (1)
	22:42	21:42	20:17	18:50	18	09:20 (28)	16:30	33	10:47 (3)	15:44	68	13:23 (4)
10	04:43	05:44	06:53	08:00		09:02 (28)	08:13		09:13 (26)	09:15		10:49 (1)
	22:41	21:39	20:14	18:48	19	09:21 (28)	16:28	25	10:48 (3)	15:44	69	13:23 (4)
11	04:44	05:46	06:55	08:02		09:01 (28)	08:16		10:22 (3)	09:16		10:50 (1)
	22:39	21:37	20:11	18:45	20	09:21 (28)	16:26	26	10:48 (3)	15:43	69	13:24 (4)
12	04:46	05:49	06:58	08:04		09:01 (28)	08:18		10:22 (3)	09:18		10:50 (1)
	22:38	21:34	20:08	18:42	20	09:21 (28)	16:24	27	10:49 (3)	15:43	67	13:24 (4)
13	04:47	05:51	07:00	08:07		09:01 (28)	08:20		10:22 (3)	09:19		10:51 (1)
	22:37	21:32	20:05	18:39	19	09:20 (28)	16:21	28	10:50 (3)	15:43	68	13:25 (4)
14	04:49	05:53	07:02	08:09		09:01 (28)	08:23		10:23 (3)	09:20		10:52 (1)
	22:35	21:29	20:02	18:36	18	09:19 (28)	16:19	28	10:51 (3)	15:42	67	13:25 (4)
15	04:51	05:55	07:04	08:11		09:02 (28)	08:25		10:22 (3)	09:21		10:52 (1)
	22:34	21:26	20:00	18:34	16	09:18 (28)	16:17	29	10:51 (3)	15:42	66	13:25 (4)
16	04:53	05:57	07:06	08:14		09:03 (28)	08:27		10:22 (3)	09:22		10:53 (1)
	22:32	21:24	19:57	18:31	13	09:16 (28)	16:15	29	10:51 (3)	15:42	64	13:25 (4)
17	04:54	06:00	07:09	08:16		09:05 (28)	08:30		10:23 (3)	09:23		10:54 (1)
	22:31	21:21	19:54	18:28	10	09:15 (28)	16:13	29	10:52 (3)	15:42	67	13:27 (4)
18	04:56	06:02	07:11	08:18			08:32		10:22 (3)	09:24		10:54 (1)
	22:29	21:19	19:51	18:25			16:11	29	10:51 (3)	15:42	64	13:26 (4)
19	04:58	06:04	07:13	08:21			08:34		10:23 (3)	09:25		10:55 (1)
	22:27	21:16	19:48	18:23			16:10	43	13:07 (4)	15:42	65	13:27 (4)
20	05:00	06:06	07:15	08:23			08:37		10:24 (3)	09:26		10:55 (1)
	22:25	21:13	19:45	18:20			16:08	49	13:10 (4)	15:43	66	13:28 (4)
21	05:02	06:09	07:17	08:25			08:39		10:23 (3)	09:26		10:56 (1)
	22:24	21:10	19:42	18:17			16:06	53	13:11 (4)	15:43	66	13:29 (4)
22	05:04	06:11	07:20	08:28			08:41		10:24 (3)	09:27		10:56 (1)
	22:22	21:08	19:39	18:15			16:04	57	13:13 (4)	15:44	65	13:28 (4)
23	05:06	06:13	07:22	08:30			08:43		10:24 (3)	09:27		10:56 (1)
	22:20	21:05	19:36	18:12			16:03	58	13:13 (4)	15:44	66	13:29 (4)
24	05:08	06:15	07:24	08:32		10:07 (26)	08:45		10:26 (3)	09:28		10:58 (1)
	22:18	21:02	19:33	18:09	10	10:17 (26)	16:01	60	13:15 (4)	15:45	64	13:30 (4)
25	05:10	06:18	07:26	07:35		09:05 (26)	08:48		10:26 (3)	09:28		10:58 (1)
	22:16	20:59	19:30	17:07	15	09:20 (26)	15:59	61	13:15 (4)	15:45	65	13:30 (4)
26	05:12	06:20	07:28	07:37		09:04 (26)	08:50		10:27 (3)	09:28		10:58 (1)
	22:14	20:57	19:28	17:04	18	09:22 (26)	15:58	62	13:16 (4)	15:46	66	13:31 (4)
27	05:14	06:22	07:31	07:40		09:02 (26)	08:52		10:28 (3)	09:28		10:58 (1)
	22:12	20:54	19:25	17:02	20	09:22 (26)	15:56	67	13:17 (4)	15:47	66	13:31 (4)
28	05:16	06:24	07:33	07:42		09:02 (26)	08:54		10:29 (3)	09:29		10:59 (1)
	22:10	20:51	19:22	16:59	21	09:23 (26)	15:55	72	13:18 (4)	15:48	67	13:32 (4)
29	05:18	06:27	07:35	07:44		09:02 (26)	08:56		10:30 (3)	09:29		10:58 (1)
	22:08	20:48	19:19	16:56	22	09:24 (26)	15:54	74	13:18 (4)	15:49	67	13:32 (4)
30	05:20	06:29	07:37	07:47		09:01 (26)	08:58		10:31 (3)	09:28		10:59 (1)
	22:05	20:45	19:16	16:54	23	09:24 (26)	15:53	75	13:18 (4)	15:50	66	13:32 (4)
31	05:22	06:31		07:49		09:01 (26)				09:28		11:00 (1)
	22:03	20:43		16:51	23	09:24 (26)				15:51	66	13:33 (4)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					351			1233			2117	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,68			0,63	
Total reduction					0,29			0,27			0,25	
Total, real					102			333			533	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April		May	June
1	09:28		11:05 (1)	08:46		09:41 (26)	07:35		08:31 (28)	07:07		05:44	04:40
	15:53	69	13:41 (4)	16:56	36	11:24 (3)	18:05	20	08:51 (28)	20:17		21:26	22:31
2	09:28		11:05 (1)	08:44		09:40 (26)	07:33		08:31 (28)	07:04		05:41	04:39
	15:54	68	13:41 (4)	16:59	35	11:22 (3)	18:07	20	08:51 (28)	20:19		21:28	22:32
3	09:27		11:05 (1)	08:41		09:39 (26)	07:30		08:31 (28)	07:01		05:39	04:37
	15:56	69	13:41 (4)	17:01	35	11:21 (3)	18:10	19	08:50 (28)	20:21		21:31	22:34
4	09:27		11:00 (3)	08:39		09:38 (26)	07:27		08:31 (28)	06:58		05:36	04:36
	15:57	74	13:42 (4)	17:04	32	11:19 (3)	18:12	19	08:50 (28)	20:24		21:33	22:35
5	09:26		10:59 (3)	08:37		09:38 (26)	07:24		08:32 (28)	06:55		05:34	04:35
	15:59	76	13:42 (4)	17:06	22	10:00 (26)	18:14	16	08:48 (28)	20:26		21:35	22:37
6	09:25		10:58 (3)	08:35		09:37 (26)	07:22		08:33 (28)	06:53		05:31	04:34
	16:00	77	13:43 (4)	17:08	23	10:00 (26)	18:17	14	08:47 (28)	20:28		21:38	22:38
7	09:25		10:58 (3)	08:32		09:36 (26)	07:19		08:35 (28)	06:50		05:29	04:33
	16:02	76	13:43 (4)	17:11	24	10:00 (26)	18:19	9	08:44 (28)	20:31		21:40	22:39
8	09:24		10:57 (3)	08:30		09:37 (26)	07:16			06:47		05:27	04:32
	16:04	78	13:44 (4)	17:13	24	10:01 (26)	18:21			20:33		21:42	22:41
9	09:23		10:57 (3)	08:28		09:36 (26)	07:13			06:44		05:24	04:31
	16:05	77	13:44 (4)	17:16	24	10:00 (26)	18:24			20:35		21:44	22:42
10	09:22		10:56 (3)	08:25		09:37 (26)	07:10			06:41		05:22	04:30
	16:07	77	13:44 (4)	17:18	24	10:01 (26)	18:26			20:38		21:47	22:43
11	09:21		10:56 (3)	08:23		09:37 (26)	07:07			06:38		05:20	04:30
	16:09	76	13:45 (4)	17:21	23	10:00 (26)	18:28			20:40		21:49	22:44
12	09:20		10:56 (3)	08:20		09:37 (26)	07:05			06:36		05:17	04:29
	16:11	74	13:44 (4)	17:23	23	10:00 (26)	18:31			20:42		21:51	22:45
13	09:19		10:56 (3)	08:18		09:38 (26)	07:02			06:33		05:15	04:28
	16:13	73	13:45 (4)	17:26	21	09:59 (26)	18:33			20:44		21:53	22:46
14	09:17		10:56 (3)	08:15		09:39 (26)	06:59			06:30		05:13	04:28
	16:15	69	13:45 (4)	17:28	20	09:59 (26)	18:35			20:47		21:55	22:47
15	09:16		10:55 (3)	08:13		09:40 (26)	06:56			06:27		05:11	04:28
	16:17	61	13:45 (4)	17:31	17	09:57 (26)	18:38			20:49		21:58	22:47
16	09:15		10:55 (3)	08:10		09:42 (26)	06:53			06:24		05:08	04:27
	16:19	59	13:44 (4)	17:33	13	09:55 (26)	18:40			20:51		22:00	22:48
17	09:13		10:56 (3)	08:08		09:45 (26)	06:50			06:21		05:06	04:27
	16:21	59	13:45 (4)	17:36	8	09:53 (26)	18:42			20:54		22:02	22:49
18	09:12		10:56 (3)	08:05			06:47			06:19		05:04	04:27
	16:23	58	13:45 (4)	17:38			18:45			20:56		22:04	22:49
19	09:10		10:56 (3)	08:02			06:44			06:16		05:02	04:27
	16:26	55	13:44 (4)	17:41			18:47			20:58		22:06	22:50
20	09:09		10:56 (3)	08:00			06:42			06:13		05:00	04:27
	16:28	54	13:44 (4)	17:43			18:49			21:01		22:08	22:50
21	09:07		10:56 (3)	07:57			06:39			06:10		04:58	04:27
	16:30	50	13:43 (4)	17:45			18:52			21:03		22:10	22:50
22	09:05		10:56 (3)	07:54			06:36			06:08		04:56	04:27
	16:32	45	13:42 (4)	17:48			18:54			21:05		22:12	22:51
23	09:04		10:57 (3)	07:52		08:40 (28)	06:33			06:05		04:54	04:27
	16:35	40	13:40 (4)	17:50	5	08:45 (28)	18:56			21:08		22:14	22:51
24	09:02		10:56 (3)	07:49		08:36 (28)	06:30			06:02		04:53	04:28
	16:37	32	13:36 (4)	17:53	12	08:48 (28)	18:59			21:10		22:16	22:51
25	09:00		10:57 (3)	07:46		08:34 (28)	06:27			06:00		04:51	04:28
	16:39	29	11:26 (3)	17:55	15	08:49 (28)	19:01			21:12		22:18	22:51
26	08:58		10:57 (3)	07:44		08:33 (28)	06:24			05:57		04:49	04:29
	16:42	29	11:26 (3)	17:58	17	08:50 (28)	19:03			21:14		22:20	22:51
27	08:56		10:58 (3)	07:41		08:32 (28)	06:21			05:54		04:47	04:29
	16:44	28	11:26 (3)	18:00	18	08:50 (28)	19:05			21:17		22:22	22:50
28	08:54		10:58 (3)	07:38		08:32 (28)	06:18			05:52		04:46	04:30
	16:46	28	11:26 (3)	18:02	19	08:51 (28)	19:08			21:19		22:24	22:50
29	08:52		10:59 (3)				07:16			05:49		04:44	04:30
	16:49	27	11:26 (3)				20:10			21:21		22:26	22:50
30	08:50		10:59 (3)				07:13			05:47		04:43	04:31
	16:51	26	11:25 (3)				20:12			21:24		22:27	22:49
31	08:48		09:43 (26)				07:10					04:41	
	16:54	32	11:24 (3)				20:15					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		1745			490			117					
Sun reduction		0,50			0,50			0,50					
Oper. time red.		0,80			0,80			0,80					
Wind dir. red.		0,65			0,72			0,73					
Total reduction		0,26			0,29			0,29					
Total, real		452			141			34					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:06 (26)	09:00		10:39 (3)
	22:49	22:01	20:40	19:13			16:49	24	09:30 (26)	15:51	75	13:27 (4)
2	04:33	05:26	06:35	07:42			07:54		09:06 (26)	09:02		10:39 (3)
	22:48	21:59	20:37	19:10			16:46	24	09:30 (26)	15:50	77	13:27 (4)
3	04:34	05:29	06:38	07:44			07:56		09:06 (26)	09:04		10:40 (3)
	22:47	21:56	20:34	19:07			16:44	24	09:30 (26)	15:49	78	13:27 (4)
4	04:35	05:31	06:40	07:46			07:59		09:07 (26)	09:05		10:41 (3)
	22:47	21:54	20:31	19:05			16:42	23	09:30 (26)	15:48	79	13:28 (4)
5	04:36	05:33	06:42	07:48			08:01		09:07 (26)	09:07		10:43 (3)
	22:46	21:52	20:28	19:02			16:39	22	09:29 (26)	15:47	76	13:28 (4)
6	04:37	05:35	06:44	07:51		09:12 (28)	08:04		09:08 (26)	09:09		10:44 (3)
	22:45	21:49	20:26	18:59	7	09:19 (28)	16:37	21	09:29 (26)	15:46	77	13:29 (4)
7	04:39	05:37	06:47	07:53		09:10 (28)	08:06		09:09 (26)	09:10		10:46 (3)
	22:44	21:47	20:23	18:56	12	09:22 (28)	16:35	32	10:50 (3)	15:46	76	13:29 (4)
8	04:40	05:40	06:49	07:55		09:08 (28)	08:08		09:09 (26)	09:12		10:48 (3)
	22:43	21:44	20:20	18:53	15	09:23 (28)	16:32	34	10:51 (3)	15:45	74	13:30 (4)
9	04:41	05:42	06:51	07:58		09:06 (28)	08:11		09:10 (26)	09:14		10:51 (3)
	22:42	21:42	20:17	18:50	18	09:24 (28)	16:30	36	10:53 (3)	15:44	72	13:30 (4)
10	04:43	05:44	06:53	08:00		09:06 (28)	08:13		09:12 (26)	09:15		10:54 (1)
	22:41	21:39	20:14	18:48	19	09:25 (28)	16:28	35	10:55 (3)	15:44	68	13:30 (4)
11	04:44	05:46	06:55	08:02		09:05 (28)	08:16		09:14 (26)	09:16		10:55 (1)
	22:39	21:37	20:11	18:45	19	09:24 (28)	16:26	33	10:55 (3)	15:43	68	13:31 (4)
12	04:46	05:49	06:58	08:04		09:05 (28)	08:18		10:31 (3)	09:18		10:55 (1)
	22:38	21:34	20:08	18:42	20	09:25 (28)	16:24	26	10:57 (3)	15:43	68	13:31 (4)
13	04:47	05:51	07:00	08:07		09:04 (28)	08:20		10:31 (3)	09:19		10:56 (1)
	22:37	21:32	20:05	18:39	20	09:24 (28)	16:21	27	10:58 (3)	15:43	68	13:32 (4)
14	04:49	05:53	07:02	08:09		09:04 (28)	08:23		10:31 (3)	09:20		10:57 (1)
	22:35	21:29	20:02	18:36	19	09:23 (28)	16:19	28	10:59 (3)	15:42	67	13:32 (4)
15	04:51	05:55	07:04	08:11		09:05 (28)	08:25		10:30 (3)	09:21		10:57 (1)
	22:34	21:26	20:00	18:34	18	09:23 (28)	16:17	28	10:58 (3)	15:42	68	13:32 (4)
16	04:53	05:57	07:06	08:14		09:05 (28)	08:27		10:30 (3)	09:22		10:57 (1)
	22:32	21:24	19:57	18:31	16	09:21 (28)	16:15	29	10:59 (3)	15:42	68	13:32 (4)
17	04:54	06:00	07:09	08:16		09:07 (28)	08:30		10:31 (3)	09:23		10:59 (1)
	22:31	21:21	19:54	18:28	14	09:21 (28)	16:13	29	11:00 (3)	15:42	66	13:34 (4)
18	04:56	06:02	07:11	08:18		09:08 (28)	08:32		10:30 (3)	09:24		10:59 (1)
	22:29	21:19	19:51	18:25	10	09:18 (28)	16:11	32	13:10 (4)	15:42	66	13:33 (4)
19	04:58	06:04	07:13	08:21			08:34		10:31 (3)	09:25		10:59 (1)
	22:27	21:16	19:48	18:23			16:10	40	13:14 (4)	15:42	67	13:34 (4)
20	05:00	06:06	07:15	08:23			08:37		10:31 (3)	09:26		11:00 (1)
	22:25	21:13	19:45	18:20			16:08	45	13:17 (4)	15:43	66	13:35 (4)
21	05:02	06:09	07:17	08:25			08:39		10:31 (3)	09:26		11:01 (1)
	22:24	21:10	19:42	18:17			16:06	50	13:18 (4)	15:43	66	13:35 (4)
22	05:04	06:11	07:20	08:28			08:41		10:32 (3)	09:27		11:01 (1)
	22:22	21:08	19:39	18:15			16:04	54	13:20 (4)	15:44	66	13:35 (4)
23	05:06	06:13	07:22	08:30			08:43		10:32 (3)	09:27		11:01 (1)
	22:20	21:05	19:36	18:12			16:03	55	13:20 (4)	15:44	66	13:36 (4)
24	05:08	06:15	07:24	08:32			08:45		10:33 (3)	09:28		11:02 (1)
	22:18	21:02	19:33	18:09			16:01	58	13:22 (4)	15:45	66	13:37 (4)
25	05:10	06:18	07:26	07:35		09:13 (26)	08:48		10:33 (3)	09:28		11:03 (1)
	22:16	20:59	19:30	17:07	10	09:23 (26)	15:59	59	13:22 (4)	15:45	66	13:37 (4)
26	05:12	06:20	07:28	07:37		09:11 (26)	08:50		10:34 (3)	09:28		11:03 (1)
	22:14	20:57	19:28	17:04	15	09:26 (26)	15:58	60	13:24 (4)	15:46	67	13:38 (4)
27	05:14	06:22	07:31	07:40		09:09 (26)	08:52		10:34 (3)	09:28		11:03 (1)
	22:12	20:54	19:25	17:01	18	09:27 (26)	15:56	62	13:24 (4)	15:47	68	13:38 (4)
28	05:16	06:24	07:33	07:42		09:08 (26)	08:54		10:36 (3)	09:29		11:04 (1)
	22:10	20:51	19:22	16:59	20	09:28 (26)	15:55	69	13:25 (4)	15:48	66	13:39 (4)
29	05:18	06:27	07:35	07:44		09:08 (26)	08:56		10:36 (3)	09:29		11:03 (1)
	22:08	20:48	19:19	16:56	21	09:29 (26)	15:54	72	13:25 (4)	15:49	68	13:39 (4)
30	05:20	06:29	07:37	07:47		09:07 (26)	08:58		10:37 (3)	09:28		11:04 (1)
	22:05	20:45	19:16	16:54	22	09:29 (26)	15:53	74	13:26 (4)	15:50	68	13:39 (4)
31	05:22	06:31		07:49		09:07 (26)				09:28		11:05 (1)
	22:03	20:43		16:51	23	09:30 (26)				15:51	68	13:40 (4)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					336			1205			2159	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,67			0,63	
Total reduction					0,29			0,27			0,25	
Total, real					98			324			541	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October		November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40		07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	3	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42		07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10		16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44		07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08		16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46		07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05		16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49		08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02		16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51		08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59		16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53		08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56		16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55		08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53		16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58		08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51		16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00		08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48		16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02		08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45		16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05		08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42		16:24	15:43
13	09:19	08:18	07:02		07:33 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07		08:20	09:19
	16:13	17:26	18:33	9	07:42 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39		16:22	15:43
14	09:17	08:15	06:59		07:31 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09		08:23	09:20
	16:15	17:28	18:36	13	07:44 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:37		16:20	15:43
15	09:16	08:13	06:56		07:29 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11		08:25	09:21
	16:17	17:31	18:38	16	07:45 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34		16:17	15:42
16	09:15	08:10	06:53		07:28 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14		08:27	09:22
	16:19	17:33	18:40	18	07:46 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31		16:15	15:42
17	09:13	08:08	06:50		07:26 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16		08:30	09:23
	16:21	17:36	18:43	20	07:46 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28		16:14	15:42
18	09:12	08:05	06:47		07:26 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:19 (4)	08:18		08:32	09:24
	16:24	17:38	18:45	20	07:46 (4)	20:56	22:04	22:49	22:29	21:19	19:51	5 08:24 (4)	18:26		16:12	15:42
19	09:10	08:03	06:45		07:25 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:15 (4)	08:21		08:34	09:25
	16:26	17:41	18:47	21	07:46 (4)	20:58	22:06	22:50	22:27	21:16	19:48	12 08:27 (4)	18:23		16:10	15:43
20	09:09	08:00	06:42		07:26 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:13 (4)	08:23		08:37	09:26
	16:28	17:43	18:49	20	07:46 (4)	21:01	22:08	22:50	22:26	21:13	19:45	15 08:28 (4)	18:20		16:08	15:43
21	09:07	07:57	06:39		07:26 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:12 (4)	08:25		08:39	09:26
	16:30	17:46	18:52	20	07:46 (4)	21:03	22:10	22:50	22:24	21:11	19:42	18 08:30 (4)	18:17		16:06	15:43
22	09:05	07:55	06:36		07:26 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:11 (4)	08:28		08:41	09:27
	16:33	17:48	18:54	19	07:45 (4)	21:05	22:12	22:51	22:22	21:08	19:39	19 08:30 (4)	18:15		16:04	15:44
23	09:04	07:52	06:33		07:27 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:10 (4)	08:30		08:43	09:27
	16:35	17:51	18:56	16	07:43 (4)	21:08	22:14	22:51	22:20	21:05	19:36	20 08:30 (4)	18:12		16:03	15:44
24	09:02	07:49	06:30		07:28 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:09 (4)	08:32		08:46	09:28
	16:37	17:53	18:59	13	07:41 (4)	21:10	22:16	22:51	22:18	21:02	19:34	21 08:30 (4)	18:09		16:01	15:45
25	09:00	07:47	06:27		07:30 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:09 (4)	07:35		08:48	09:28
	16:39	17:55	19:01	8	07:38 (4)	21:12	22:18	22:51	22:16	21:00	19:31	20 08:29 (4)	17:07		16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20	07:28	08:09 (4)	07:37		08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57	19:28	20 08:29 (4)	17:04		15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:09 (4)	07:40		08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54	19:25	19 08:28 (4)	17:02		15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:09 (4)	07:42		08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51	19:22	18 08:27 (4)	16:59		15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:10 (4)	07:44		08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48	19:19	15 08:25 (4)	16:57		15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:12 (4)	07:47		08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46	19:16	12 08:24 (4)	16:54		15:53	15:50
31	08:48		07:10				04:41		05:22	06:31			07:49			09:28
	16:54		20:15				22:29		22:03	20:43			16:52			15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319		236	200
Total, worst case				213							214		3		
Sun reduction				0,50							0,50		0,50		
Oper. time red.				0,80							0,80		0,80		
Wind dir. red.				0,70							0,70		0,70		
Total reduction				0,28							0,28		0,28		
Total, real				59							59		1		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28		11:26 (2)	08:46		10:08 (3)	07:35	07:07	05:44	04:40
	15:53	51	12:42 (4)	16:56	26	10:34 (3)	18:05	20:17	21:26	22:31
2	09:28		11:26 (2)	08:44		10:07 (3)	07:33	07:04	05:41	04:39
	15:54	51	12:42 (4)	16:59	27	10:34 (3)	18:07	20:19	21:28	22:32
3	09:27		11:26 (2)	08:41		10:08 (3)	07:30	07:01	05:39	04:37
	15:56	52	12:42 (4)	17:01	26	10:34 (3)	18:10	20:21	21:31	22:34
4	09:27		11:27 (2)	08:39		10:07 (3)	07:27	06:58	05:36	04:36
	15:57	52	12:43 (4)	17:04	27	10:34 (3)	18:12	20:24	21:33	22:35
5	09:26		11:27 (2)	08:37		10:08 (3)	07:24	06:55	05:34	04:35
	15:59	52	12:43 (4)	17:06	26	10:34 (3)	18:14	20:26	21:35	22:37
6	09:25		11:28 (2)	08:35		10:08 (3)	07:22	06:53	05:31	04:34
	16:00	51	12:43 (4)	17:09	26	10:34 (3)	18:17	20:28	21:38	22:38
7	09:25		11:28 (2)	08:32		10:08 (3)	07:19	06:50	05:29	04:33
	16:02	52	12:44 (4)	17:11	25	10:33 (3)	18:19	20:31	21:40	22:39
8	09:24		10:35 (1)	08:30		10:10 (3)	07:16	06:47	05:27	04:32
	16:04	58	12:45 (4)	17:13	23	10:33 (3)	18:21	20:33	21:42	22:41
9	09:23		10:34 (1)	08:28		10:10 (3)	07:13	06:44	05:24	04:31
	16:05	60	12:45 (4)	17:16	22	10:32 (3)	18:24	20:35	21:44	22:42
10	09:22		10:33 (1)	08:25		09:11 (26)	07:10	06:41	05:22	04:30
	16:07	62	12:45 (4)	17:18	27	10:31 (3)	18:26	20:38	21:47	22:43
11	09:21		10:33 (1)	08:23		09:09 (26)	07:07	06:38	05:20	04:30
	16:09	63	12:46 (4)	17:21	28	10:29 (3)	18:28	20:40	21:49	22:44
12	09:20		10:32 (1)	08:20		09:07 (26)	07:05	06:36	05:17	04:29
	16:11	64	12:46 (4)	17:23	27	10:27 (3)	18:31	20:42	21:51	22:45
13	09:19		10:33 (1)	08:18		09:06 (26)	07:02	06:33	05:15	04:28
	16:13	64	12:46 (4)	17:26	18	09:24 (26)	18:33	20:44	21:53	22:46
14	09:17		10:32 (1)	08:15		09:05 (26)	06:59	06:30	05:13	04:28
	16:15	64	12:46 (4)	17:28	20	09:25 (26)	18:35	20:47	21:56	22:47
15	09:16		10:32 (1)	08:13		09:05 (26)	06:56	06:27	05:11	04:28
	16:17	63	12:46 (4)	17:31	20	09:25 (26)	18:38	20:49	21:58	22:47
16	09:15		10:31 (1)	08:10		09:04 (26)	06:53	06:24	05:08	04:27
	16:19	63	12:46 (4)	17:33	21	09:25 (26)	18:40	20:51	22:00	22:48
17	09:13		10:32 (1)	08:08		09:05 (26)	06:50	06:22	05:06	04:27
	16:21	60	12:46 (4)	17:36	21	09:26 (26)	18:42	20:54	22:02	22:49
18	09:12		10:32 (1)	08:05		09:05 (26)	06:47	06:19	05:04	04:27
	16:23	58	12:46 (4)	17:38	20	09:25 (26)	18:45	20:56	22:04	22:49
19	09:10		10:32 (1)	08:02		09:05 (26)	06:44	06:16	05:02	04:27
	16:26	53	12:46 (4)	17:41	20	09:25 (26)	18:47	20:58	22:06	22:50
20	09:09		10:33 (1)	08:00		09:05 (26)	06:42	06:13	05:00	04:27
	16:28	42	12:45 (4)	17:43	19	09:24 (26)	18:49	21:01	22:08	22:50
21	09:07		10:33 (1)	07:57		09:05 (26)	06:39	06:11	04:58	04:27
	16:30	42	12:45 (4)	17:46	18	09:23 (26)	18:52	21:03	22:10	22:50
22	09:05		10:16 (3)	07:54		09:07 (26)	06:36	06:08	04:56	04:27
	16:32	44	12:44 (4)	17:48	15	09:22 (26)	18:54	21:05	22:12	22:51
23	09:04		10:13 (3)	07:52		09:09 (26)	06:33	06:05	04:54	04:27
	16:35	48	12:43 (4)	17:50	11	09:20 (26)	18:56	21:08	22:14	22:51
24	09:02		10:11 (3)	07:49		09:13 (26)	06:30	06:02	04:53	04:28
	16:37	45	12:40 (4)	17:53	3	09:16 (26)	18:59	21:10	22:16	22:51
25	09:00		10:10 (3)	07:46			06:27	06:00	04:51	04:28
	16:39	40	12:37 (4)	17:55			19:01	21:12	22:18	22:51
26	08:58		10:09 (3)	07:44			06:24	05:57	04:49	04:29
	16:42	36	10:52 (1)	17:58			19:03	21:15	22:20	22:51
27	08:56		10:09 (3)	07:41			06:21	05:54	04:47	04:29
	16:44	37	10:52 (1)	18:00			19:05	21:17	22:22	22:50
28	08:54		10:08 (3)	07:38			06:18	05:52	04:46	04:30
	16:46	35	10:50 (1)	18:02			19:08	21:19	22:24	22:50
29	08:52		10:08 (3)				07:16	05:49	04:44	04:30
	16:49	33	10:49 (1)				20:10	21:21	22:26	22:50
30	08:50		10:08 (3)				07:13	05:47	04:43	04:31
	16:51	25	10:33 (3)				20:12	21:24	22:27	22:49
31	08:48		10:07 (3)				07:10		04:41	
	16:54	26	10:33 (3)				20:15		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1546			516					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,67			0,73					
Total reduction		0,27			0,29					
Total, real		411			150					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:40			07:52		08:41 (26)	09:00		10:15 (1)
	22:49		22:01		20:40		19:13			16:49	27	10:01 (3)	15:51	63	12:28 (4)
2	04:33		05:26		06:35		07:42			07:54		09:40 (3)	09:02		10:16 (1)
	22:48		21:59		20:37		19:10			16:46	22	10:02 (3)	15:50	62	12:28 (4)
3	04:34		05:29		06:38		07:44			07:56		09:39 (3)	09:04		10:17 (1)
	22:47		21:56		20:34		19:07			16:44	24	10:03 (3)	15:49	60	12:28 (4)
4	04:35		05:31		06:40		07:46			07:59		09:39 (3)	09:05		10:19 (1)
	22:47		21:54		20:31		19:05			16:42	25	10:04 (3)	15:48	57	12:29 (4)
5	04:36		05:33		06:42		07:48			08:01		09:38 (3)	09:07		11:13 (2)
	22:46		21:52		20:28		19:02			16:39	26	10:04 (3)	15:47	52	12:29 (4)
6	04:37		05:35		06:44		07:51			08:04		09:38 (3)	09:09		11:14 (2)
	22:45		21:49		20:26		18:59			16:37	26	10:04 (3)	15:46	52	12:30 (4)
7	04:39		05:37		06:47		07:53			08:06		09:38 (3)	09:10		11:14 (2)
	22:44		21:47		20:23		18:56			16:35	27	10:05 (3)	15:46	52	12:30 (4)
8	04:40		05:40		06:49		07:55			08:08		09:37 (3)	09:12		11:15 (2)
	22:43		21:44		20:20		18:53			16:32	27	10:04 (3)	15:45	52	12:31 (4)
9	04:41		05:42		06:51		07:58			08:11		09:38 (3)	09:14		11:16 (2)
	22:42		21:42		20:17		18:50			16:30	26	10:04 (3)	15:44	51	12:31 (4)
10	04:43		05:44		06:53		08:00			08:13		09:38 (3)	09:15		11:15 (2)
	22:41		21:39		20:14		18:48			16:28	27	10:05 (3)	15:44	52	12:31 (4)
11	04:44		05:46		06:55		08:02			08:16		09:38 (3)	09:16		11:16 (2)
	22:39		21:37		20:11		18:45			16:26	26	10:04 (3)	15:43	51	12:32 (4)
12	04:46		05:49		06:58		08:04			08:18		09:39 (3)	09:18		11:16 (2)
	22:38		21:34		20:08		18:42			16:24	25	10:04 (3)	15:43	51	12:32 (4)
13	04:48		05:51		07:00		08:07			08:20		09:40 (3)	09:19		11:17 (2)
	22:37		21:32		20:05		18:39			16:21	33	10:21 (1)	15:43	51	12:33 (4)
14	04:49		05:53		07:02		08:09			08:23		09:41 (3)	09:20		11:18 (2)
	22:35		21:29		20:02		18:36			16:19	35	10:23 (1)	15:42	50	12:33 (4)
15	04:51		05:55		07:04		08:11			08:25		09:41 (3)	09:21		11:18 (2)
	22:34		21:26		20:00		18:34			16:17	37	10:24 (1)	15:42	50	12:33 (4)
16	04:53		05:58		07:06		08:14			08:27		09:42 (3)	09:22		11:19 (2)
	22:32		21:24		19:57		18:31			16:15	36	10:25 (1)	15:42	50	12:34 (4)
17	04:54		06:00		07:09		08:16			08:30		09:44 (3)	09:23		11:20 (2)
	22:31		21:21		19:54		18:28			16:13	40	12:11 (4)	15:42	50	12:35 (4)
18	04:56		06:02		07:11		08:18		09:42 (26)	08:32		09:45 (3)	09:24		11:19 (2)
	22:29		21:19		19:51		18:25	7	09:49 (26)	16:11	45	12:14 (4)	15:42	49	12:34 (4)
19	04:58		06:04		07:13		08:21		09:39 (26)	08:34		09:47 (3)	09:25		11:20 (2)
	22:27		21:16		19:48		18:23	13	09:52 (26)	16:10	48	12:17 (4)	15:42	50	12:35 (4)
20	05:00		06:06		07:15		08:23		09:37 (26)	08:37		09:51 (3)	09:26		11:21 (2)
	22:26		21:13		19:45		18:20	16	09:53 (26)	16:08	44	12:19 (4)	15:43	50	12:36 (4)
21	05:02		06:09		07:17		08:25		09:36 (26)	08:39		10:08 (1)	09:26		11:22 (2)
	22:24		21:10		19:42		18:17	18	09:54 (26)	16:06	42	12:20 (4)	15:43	49	12:36 (4)
22	05:04		06:11		07:20		08:28		09:35 (26)	08:41		10:09 (1)	09:27		11:22 (2)
	22:22		21:08		19:39		18:15	19	09:54 (26)	16:04	42	12:21 (4)	15:44	49	12:36 (4)
23	05:06		06:13		07:22		08:30		09:35 (26)	08:43		10:08 (1)	09:27		11:22 (2)
	22:20		21:05		19:36		18:12	20	09:55 (26)	16:03	54	12:22 (4)	15:44	49	12:36 (4)
24	05:08		06:15		07:24		08:32		09:34 (26)	08:45		10:09 (1)	09:28		11:23 (2)
	22:18		21:02		19:33		18:09	21	09:55 (26)	16:01	58	12:23 (4)	15:45	50	12:38 (4)
25	05:10		06:18		07:26		07:35		08:34 (26)	08:48		10:09 (1)	09:28		11:23 (2)
	22:16		20:59		19:31		17:07	21	08:55 (26)	15:59	61	12:24 (4)	15:45	49	12:38 (4)
26	05:12		06:20		07:28		07:37		08:34 (26)	08:50		10:10 (1)	09:28		11:24 (2)
	22:14		20:57		19:28		17:04	21	08:55 (26)	15:58	62	12:25 (4)	15:46	49	12:38 (4)
27	05:14		06:22		07:31		07:40		08:34 (26)	08:52		10:11 (1)	09:29		11:24 (2)
	22:12		20:54		19:25		17:02	20	08:54 (26)	15:57	63	12:25 (4)	15:47	50	12:39 (4)
28	05:16		06:24		07:33		07:42		08:35 (26)	08:54		10:12 (1)	09:29		11:25 (2)
	22:10		20:51		19:22		16:59	19	08:54 (26)	15:55	63	12:26 (4)	15:48	50	12:40 (4)
29	05:18		06:27		07:35		07:44		08:36 (26)	08:56		10:13 (1)	09:29		11:24 (2)
	22:08		20:48		19:19		16:56	21	09:53 (3)	15:54	64	12:26 (4)	15:49	50	12:39 (4)
30	05:20		06:29		07:37		07:47		08:36 (26)	08:58		10:13 (1)	09:28		11:25 (2)
	22:05		20:45		19:16		16:54	29	09:57 (3)	15:53	65	12:27 (4)	15:50	50	12:40 (4)
31	05:22		06:31				07:49		08:38 (26)				09:28		11:26 (2)
	22:03		20:43				16:51	29	09:59 (3)				15:51	51	12:41 (4)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								274			1200			1601	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,69			0,64	
Total reduction								0,29			0,27			0,26	
Total, real								80			329			411	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28 - 15:53	08:46 - 16:56	07:36 - 08:20 (4), 18:05 - 08:33 (4) 13	07:07 - 20:17	05:44 - 21:26	04:40 - 22:31	04:32 - 22:49	05:24 - 22:01	06:33 - 20:40	07:40 - 19:13 25	08:51 (4) - 09:16 (4)	07:52 - 16:49	09:00 - 15:51
2	09:28 - 15:54	08:44 - 16:59	07:33 - 08:18 (4), 18:07 - 08:35 (4) 17	07:04 - 20:19	05:42 - 21:28	04:39 - 22:32	04:33 - 22:48	05:27 - 21:59	06:36 - 20:37	07:42 - 19:10 27	08:49 (4) - 09:16 (4)	07:54 - 16:47	09:02 - 15:50
3	09:27 - 15:56	08:41 - 17:01	07:30 - 08:16 (4), 18:10 - 08:36 (4) 20	07:01 - 20:22	05:39 - 21:31	04:37 - 22:34	04:34 - 22:47	05:29 - 21:56	06:38 - 20:34	07:44 - 19:08 28	08:48 (4) - 09:16 (4)	07:56 - 16:44	09:04 - 15:49
4	09:27 - 15:57	08:39 - 17:04	07:27 - 08:14 (4), 18:12 - 08:37 (4) 23	06:58 - 20:24	05:37 - 21:33	04:36 - 22:35	04:35 - 22:47	05:31 - 21:54	06:40 - 20:31	07:46 - 19:05 27	08:49 (4) - 09:16 (4)	07:59 - 16:42	09:05 - 15:48
5	09:26 - 15:59	08:37 - 17:06	07:24 - 08:13 (4), 18:14 - 08:38 (4) 25	06:56 - 20:26	05:34 - 21:35	04:35 - 22:37	04:36 - 22:46	05:33 - 21:52	06:42 - 20:28	07:49 - 19:02 28	08:48 (4) - 09:16 (4)	08:01 - 16:39	09:07 - 15:47
6	09:25 - 16:00	08:35 - 17:09	07:22 - 08:12 (4), 18:17 - 08:38 (4) 26	06:53 - 20:28	05:32 - 21:38	04:34 - 22:38	04:38 - 22:45	05:35 - 21:49	06:44 - 20:26	07:51 - 18:59 28	08:47 (4) - 09:15 (4)	08:04 - 16:37	09:09 - 15:47
7	09:25 - 16:02	08:32 - 17:11	07:19 - 08:11 (4), 18:19 - 08:38 (4) 27	06:50 - 20:31	05:29 - 21:40	04:33 - 22:39	04:39 - 22:44	05:38 - 21:47	06:47 - 20:23	07:53 - 18:56 27	08:48 (4) - 09:15 (4)	08:06 - 16:35	09:10 - 15:46
8	09:24 - 16:04	08:30 - 17:14	07:16 - 08:11 (4), 18:22 - 08:38 (4) 27	06:47 - 20:33	05:27 - 21:42	04:32 - 22:41	04:40 - 22:43	05:40 - 21:44	06:49 - 20:20	07:55 - 18:53 26	08:48 (4) - 09:14 (4)	08:08 - 16:32	09:12 - 15:45
9	09:23 - 16:06	08:28 - 17:16	07:13 - 08:11 (4), 18:24 - 08:39 (4) 28	06:44 - 20:35	05:24 - 21:44	04:31 - 22:42	04:42 - 22:42	05:42 - 21:42	06:51 - 20:17	07:58 - 18:50 24	08:48 (4) - 09:12 (4)	08:11 - 16:30	09:14 - 15:44
10	09:22 - 16:07	08:25 - 17:19	07:10 - 08:11 (4), 18:26 - 08:39 (4) 28	06:41 - 20:38	05:22 - 21:47	04:31 - 22:43	04:43 - 22:41	05:44 - 21:39	06:53 - 20:14	08:00 - 18:48 22	08:50 (4) - 09:12 (4)	08:13 - 16:28	09:15 - 15:44
11	09:21 - 16:09	08:23 - 17:21	07:07 - 08:11 (4), 18:29 - 08:38 (4) 27	06:38 - 20:40	05:20 - 21:49	04:30 - 22:44	04:45 - 22:39	05:46 - 21:37	06:55 - 20:11	08:02 - 18:45 20	08:50 (4) - 09:10 (4)	08:16 - 16:26	09:16 - 15:43
12	09:20 - 16:11	08:20 - 17:23	07:05 - 08:11 (4), 18:31 - 08:37 (4) 26	06:36 - 20:42	05:17 - 21:51	04:29 - 22:45	04:46 - 22:38	05:49 - 21:34	06:58 - 20:08	08:04 - 18:42 15	08:53 (4) - 09:08 (4)	08:18 - 16:24	09:18 - 15:43
13	09:19 - 16:13	08:18 - 17:26	07:02 - 08:12 (4), 18:33 - 08:36 (4) 24	06:33 - 20:45	05:15 - 21:53	04:29 - 22:46	04:48 - 22:37	05:51 - 21:32	07:00 - 20:05	08:07 - 18:39 10	08:55 (4) - 09:05 (4)	08:20 - 16:22	09:19 - 15:43
14	09:17 - 16:15	08:15 - 17:28	06:59 - 08:12 (4), 18:36 - 08:35 (4) 23	06:30 - 20:47	05:13 - 21:56	04:28 - 22:47	04:49 - 22:35	05:53 - 21:29	07:02 - 20:03	08:09 - 18:36		08:23 - 16:19	09:20 - 15:42
15	09:16 - 16:17	08:13 - 17:31	06:56 - 08:13 (4), 18:38 - 08:33 (4) 20	06:27 - 20:49	05:11 - 21:58	04:28 - 22:47	04:51 - 22:34	05:55 - 21:27	07:04 - 20:00	08:11 - 18:34		08:25 - 16:17	09:21 - 15:42
16	09:15 - 16:19	08:10 - 17:33	06:53 - 08:15 (4), 18:40 - 08:30 (4) 15	06:24 - 20:51	05:09 - 22:00	04:27 - 22:48	04:53 - 22:32	05:58 - 21:24	07:06 - 19:57	08:14 - 18:31		08:27 - 16:15	09:22 - 15:42
17	09:13 - 16:21	08:08 - 17:36	06:50 - 08:17 (4), 18:43 - 08:27 (4) 10	06:22 - 20:54	05:06 - 22:02	04:27 - 22:49	04:54 - 22:31	06:00 - 21:21	07:09 - 19:54	08:16 - 18:28		08:30 - 16:14	09:23 - 15:42
18	09:12 - 16:24	08:05 - 17:38	06:47 - 18:45	06:19 - 20:56	05:04 - 22:04	04:27 - 22:49	04:56 - 22:29	06:02 - 21:19	07:11 - 19:51	08:18 - 18:25		08:32 - 16:12	09:24 - 15:42
19	09:10 - 16:26	08:02 - 17:41	06:45 - 18:47	06:16 - 20:58	05:02 - 22:06	04:27 - 22:50	04:58 - 22:27	06:04 - 21:16	07:13 - 19:48	08:21 - 18:23		08:34 - 16:10	09:25 - 15:43
20	09:09 - 16:28	08:00 - 17:43	06:42 - 18:49	06:13 - 21:01	05:00 - 22:08	04:27 - 22:50	05:00 - 22:26	06:07 - 21:13	07:15 - 19:45	08:23 - 18:20		08:37 - 16:08	09:26 - 15:43
21	09:07 - 16:30	07:57 - 17:46	06:39 - 18:52	06:11 - 21:03	04:58 - 22:10	04:27 - 22:50	05:02 - 22:24	06:09 - 21:10	07:17 - 19:42	08:25 - 18:17		08:39 - 16:06	09:26 - 15:43
22	09:05 - 16:32	07:55 - 17:48	06:36 - 18:54	06:08 - 21:05	04:56 - 22:12	04:27 - 22:51	05:04 - 22:22	06:11 - 21:08	07:20 - 19:39	08:28 - 18:15		08:41 - 16:04	09:27 - 15:44
23	09:04 - 16:35	07:52 - 17:50	06:33 - 18:56	06:05 - 21:08	04:55 - 22:14	04:28 - 22:51	05:06 - 22:20	06:13 - 21:05	07:22 - 19:36	08:30 - 18:12		08:43 - 16:03	09:27 - 15:44
24	09:02 - 16:37	07:49 - 17:53	06:30 - 18:59	06:02 - 21:10	04:53 - 22:16	04:28 - 22:51	05:08 - 22:18	06:16 - 21:02	07:24 - 19:33	08:32 - 18:09		08:45 - 16:01	09:28 - 15:45
25	09:00 - 16:39	07:46 - 17:55	06:27 - 19:01	06:00 - 21:12	04:51 - 22:18	04:28 - 22:51	05:10 - 22:16	06:18 - 21:00	07:26 - 19:31	07:35 - 17:07		08:48 - 16:00	09:28 - 15:46
26	08:58 - 16:42	07:44 - 17:58	06:24 - 19:03	05:57 - 21:15	04:49 - 22:20	04:29 - 22:51	05:12 - 22:14	06:20 - 20:57	07:28 - 19:28 6	09:02 (4) - 09:08 (4) 17:04		08:50 - 15:58	09:28 - 15:46
27	08:56 - 16:44	07:41 - 18:00	06:21 - 19:05	05:55 - 21:17	04:48 - 22:22	04:29 - 22:50	05:14 - 22:12	06:22 - 20:54	07:31 - 19:25 14	08:57 (4) - 09:11 (4) 17:02		08:52 - 15:57	09:29 - 15:47
28	08:54 - 16:47	07:38 - 18:03 2	08:26 (4) - 08:28 (4) 19:08	06:19 - 21:19	05:52 - 22:24	04:46 - 22:50	04:30 - 22:10	05:16 - 20:51	06:24 - 19:22 18	07:33 - 09:13 (4) 16:59	08:55 (4) - 07:42	08:54 - 15:55	09:29 - 15:48
29	08:52 - 16:49		07:16 - 20:10	05:49 - 21:21	04:44 - 22:26	04:31 - 22:50	05:18 - 22:08	06:27 - 20:48	07:35 - 19:19 21	08:53 (4) - 09:14 (4) 16:57	07:44	08:56 - 15:54	09:29 - 15:49
30	08:50 - 16:51		07:13 - 20:12	05:47 - 21:24	04:43 - 22:27	04:31 - 22:49	05:20 - 22:05	06:29 - 20:46	07:37 - 19:16 24	08:52 (4) - 09:16 (4) 16:54	07:47	08:58 - 15:53	09:28 - 15:50
31	08:48 - 16:54		07:10 - 20:15	04:41 -	22:29		05:22 - 22:03	06:31 - 20:43		07:49 - 16:52			09:28 - 15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236		200
Total, worst case		2	379						83	307			
Sun reduction		0,50	0,50						0,50	0,50			
Oper. time red.		0,80	0,80						0,80	0,80			
Wind dir. red.		0,72	0,72						0,72	0,72			
Total reduction		0,29	0,29						0,29	0,29			
Total, real		1	109						24	88			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:21 (28)	08:46	10:00 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:36 (32)	09:00	10:51 (27)	
	15:53	20 12:41 (28)	16:56	20 10:20 (32)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6 09:42 (32)	15:51	28 12:23 (28)	
2	09:28	12:22 (28)	08:44	09:59 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54	09:34 (32)	09:02	10:51 (27)	
	15:54	19 12:41 (28)	16:58	21 10:20 (32)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11 09:45 (32)	15:50	30 12:24 (28)	
3	09:27	12:22 (28)	08:41	10:00 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56	09:33 (32)	09:04	10:52 (27)	
	15:55	19 12:41 (28)	17:01	20 10:20 (32)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14 09:47 (32)	15:49	29 12:25 (28)	
4	09:27	11:12 (27)	08:39	10:00 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:31 (32)	09:05	10:53 (27)	
	15:57	22 12:41 (28)	17:03	20 10:20 (32)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17 09:48 (32)	15:48	30 12:26 (28)	
5	09:26	11:11 (27)	08:37	10:01 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	09:31 (32)	09:07	10:54 (27)	
	15:58	26 12:42 (28)	17:06	19 10:20 (32)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18 09:49 (32)	15:47	29 12:27 (28)	
6	09:25	11:10 (27)	08:35	10:01 (32)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:30 (32)	09:09	10:56 (27)	
	16:00	28 12:42 (28)	17:08	18 10:19 (32)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20 09:50 (32)	15:46	28 12:28 (28)	
7	09:25	11:09 (27)	08:32	10:01 (32)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:30 (32)	09:10	10:58 (27)	
	16:02	29 12:42 (28)	17:11	17 10:18 (32)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20 09:50 (32)	15:45	26 12:29 (28)	
8	09:24	11:09 (27)	08:30	10:03 (32)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:30 (32)	09:12	11:00 (27)	
	16:03	30 12:42 (28)	17:13	15 10:18 (32)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20 09:50 (32)	15:45	23 12:30 (28)	
9	09:23	11:09 (27)	08:27	10:04 (32)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:30 (32)	09:13	12:11 (28)	
	16:05	30 12:42 (28)	17:16	12 10:16 (32)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20 09:50 (32)	15:44	19 12:30 (28)	
10	09:22	11:08 (27)	08:25	10:07 (32)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:31 (32)	09:15	12:11 (28)	
	16:07	30 12:41 (28)	17:18	5 10:12 (32)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20 09:51 (32)	15:44	19 12:30 (28)	
11	09:21	11:09 (27)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:30 (32)	09:16	12:11 (28)	
	16:09	28 12:41 (28)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20 09:50 (32)	15:43	20 12:31 (28)	
12	09:20	11:08 (27)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:31 (32)	09:18	12:11 (28)	
	16:11	27 12:40 (28)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27 10:58 (27)	15:43	20 12:31 (28)	
13	09:19	11:08 (27)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:32 (32)	09:19	12:12 (28)	
	16:13	25 12:39 (28)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31 11:01 (27)	15:42	21 12:33 (28)	
14	09:17	11:08 (27)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:33 (32)	09:20	12:12 (28)	
	16:15	20 11:28 (27)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32 11:03 (27)	15:42	21 12:33 (28)	
15	09:16	11:08 (27)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:34 (32)	09:21	12:12 (28)	
	16:17	21 11:29 (27)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31 11:03 (27)	15:42	21 12:33 (28)	
16	09:15	11:08 (27)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:36 (32)	09:22	12:13 (28)	
	16:19	21 11:29 (27)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31 11:05 (27)	15:42	20 12:33 (28)	
17	09:13	11:09 (27)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:38 (32)	09:23	12:14 (28)	
	16:21	22 11:31 (27)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28 11:06 (27)	15:42	21 12:35 (28)	
18	09:12	11:09 (27)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:44 (27)	09:24	12:14 (28)	
	16:23	22 11:31 (27)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22 11:06 (27)	15:42	21 12:35 (28)	
19	09:10	11:09 (27)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	10:45 (27)	09:25	12:14 (28)	
	16:25	22 11:31 (27)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22 11:07 (27)	15:42	21 12:35 (28)	
20	09:09	11:09 (27)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:45 (27)	09:26	12:15 (28)	
	16:28	23 11:32 (27)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22 11:07 (27)	15:43	21 12:36 (28)	
21	09:07	11:09 (27)	07:57		06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39	10:45 (27)	09:26	12:16 (28)	
	16:30	23 11:32 (27)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22 11:07 (27)	15:43	21 12:37 (28)	
22	09:05	11:10 (27)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	10:45 (27)	09:27	12:16 (28)	
	16:32	22 11:32 (27)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23 11:08 (27)	15:43	21 12:37 (28)	
23	09:03	11:10 (27)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:45 (27)	09:27	12:16 (28)	
	16:34	22 11:32 (27)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23 11:08 (27)	15:44	21 12:37 (28)	
24	09:02	11:10 (27)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:46 (27)	09:28	12:17 (28)	
	16:37	22 11:32 (27)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22 11:08 (27)	15:45	21 12:38 (28)	
25	09:00	10:04 (32)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:46 (27)	09:28	12:17 (28)	
	16:39	28 11:32 (27)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22 11:08 (27)	15:45	21 12:38 (28)	
26	08:58	10:03 (32)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:47 (27)	09:28	12:18 (28)	
	16:42	31 11:32 (27)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21 11:08 (27)	15:46	21 12:39 (28)	
27	08:56	10:02 (32)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:47 (27)	09:28	12:18 (28)	
	16:44	31 11:31 (27)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21 11:08 (27)	15:47	21 12:39 (28)	
28	08:54	10:00 (32)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:48 (27)	09:29	12:19 (28)	
	16:46	32 11:30 (27)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21 11:09 (27)	15:48	21 12:40 (28)	
29	08:52	10:00 (32)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:49 (27)	09:29	12:19 (28)	
	16:49	31 11:29 (27)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22 12:18 (28)	15:49	21 12:40 (28)	
30	08:50	09:59 (32)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:49 (27)	09:28	12:20 (28)	
	16:51	27 11:26 (27)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28 12:21 (28)	15:50	20 12:40 (28)	
31	08:48	09:59 (32)			07:10		04:41		05:22	06:31		07:49			09:28	12:21 (28)	
	16:54	20 10:19 (32)			20:14		22:29		22:03	20:43		16:51			15:51	20 12:41 (28)	
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case		773		167										657		697	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,67		0,72										0,70		0,64	
Total reduction		0,27		0,29										0,28		0,25	
Total, real		208		48										183		177	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	22:47	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	04:34	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:39	07:46	07:58	09:05
	15:57	17:03	18:12	20:23	21:32	22:34	22:46	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	22:45	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	22:44	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	04:39	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:39	22:43	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	04:40	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	22:42	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	04:43	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	22:40	21:39	20:13	18:47	16:28	15:44
11	09:20	08:22	07:07	06:38	05:19	04:30	04:44	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:39	21:48	22:43	22:39	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:42	21:50	22:44	22:37	21:34	20:08	18:42	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:13	04:28	04:49	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	22:34	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	22:33	21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	22:31	21:23	19:56	18:30	16:15	15:42
17	09:13	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	22:30	21:21	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	22:28	21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:47	20:58	22:05	22:49	22:26	21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:22	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:49	22:25	21:12	19:44	18:20	16:08	15:43
21	09:06	07:57	06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:38	09:26
	16:30	17:45	18:51	21:02	22:10	22:49	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:40	09:26
	16:32	17:48	18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:29	08:43	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	22:19	21:04	19:36	18:12	16:02	15:44
24	09:01	07:49	06:30	06:02	04:52	04:28	05:07	06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:16	22:50	22:17	21:02	19:33	18:09	16:01	15:45
25	08:59	07:46	06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:12	22:17	22:50	22:15	20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:49	09:28
	16:41	17:57	19:03	21:14	22:19	22:50	22:13	20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	22:11	20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	05:16	06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	22:09	20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	22:07	20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:43	04:31	05:20	06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	22:05	20:45	19:16	16:54	15:52	15:50
31	08:47		07:09		04:41		05:22	06:31		07:48		09:27
	16:53		20:14		22:28		22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	22:47	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	04:34	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:39	07:46	07:58	09:05
	15:57	17:03	18:12	20:23	21:32	22:34	22:46	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	22:45	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	22:44	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	04:39	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:39	22:43	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	04:40	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	22:42	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	04:43	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	22:40	21:39	20:13	18:47	16:28	15:44
11	09:20	08:22	07:07	06:38	05:19	04:30	04:44	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:39	21:48	22:43	22:39	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:17	09:17
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	16:17	17:30	18:37	20:48	21:57	22:47	22:33	21:26	19:59	18:33	16:17	15:42
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	16:30	17:45	18:51	21:02	22:10	22:49	22:23	21:10	19:42	18:17	16:06	15:43
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	16:34	17:50	18:56	21:07	22:14	22:50	22:19	21:04	19:36	18:12	16:02	15:44
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	16:46	18:02	19:07	21:18	22:23	22:49	22:09	20:50	19:21	16:59	15:55	15:48
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30	08:49		07:12	05:46	04:43	04:31	05:20	06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	22:05	20:45	19:16	16:54	15:52	15:50
31	08:47		07:09		04:41		05:22	06:31		07:48		09:27
	16:53		20:14		22:28		22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Vedlegg 2.2

Grafisk Moifjellet og Mellomstrand vindkraftverk

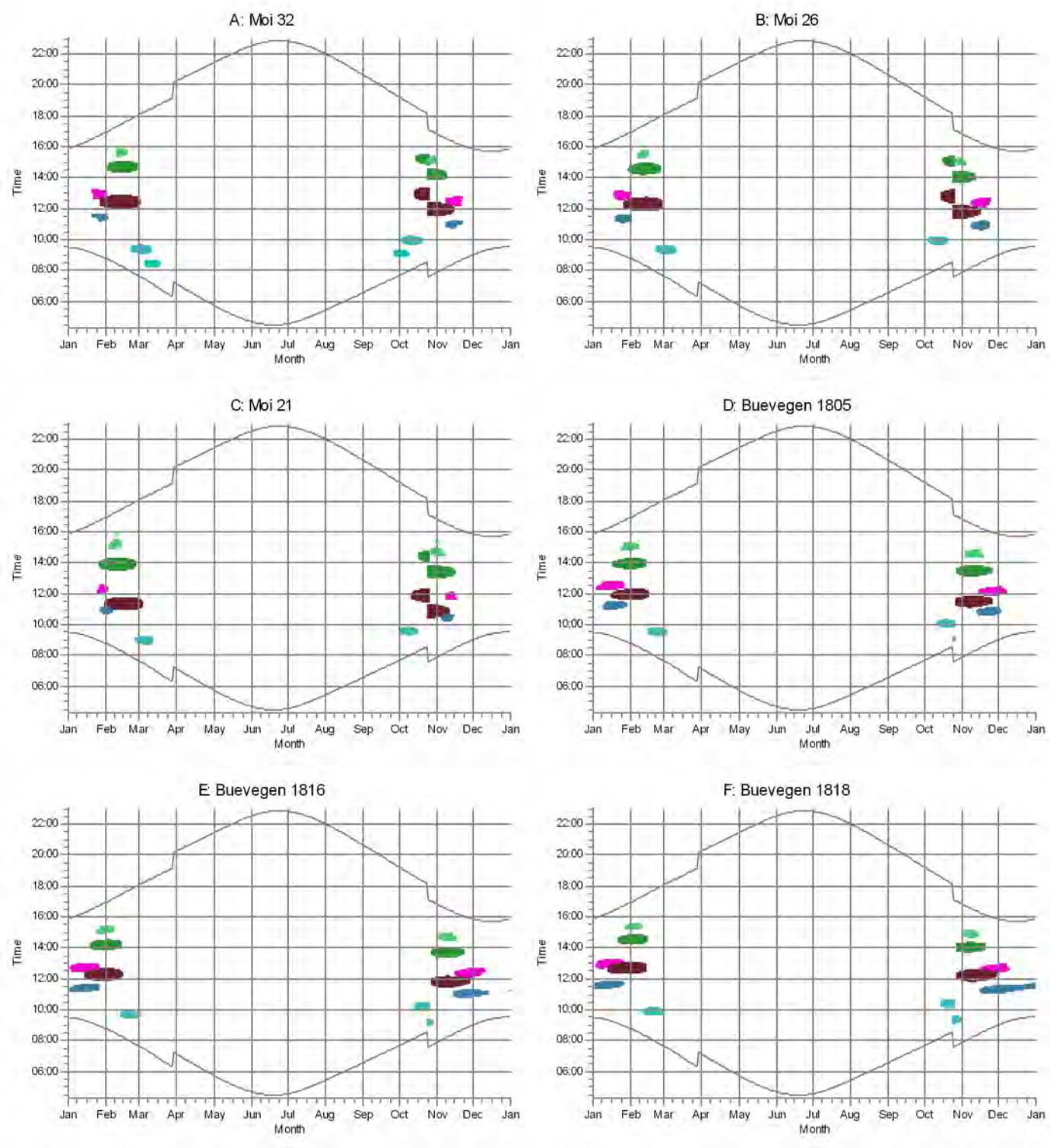
realistic case

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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

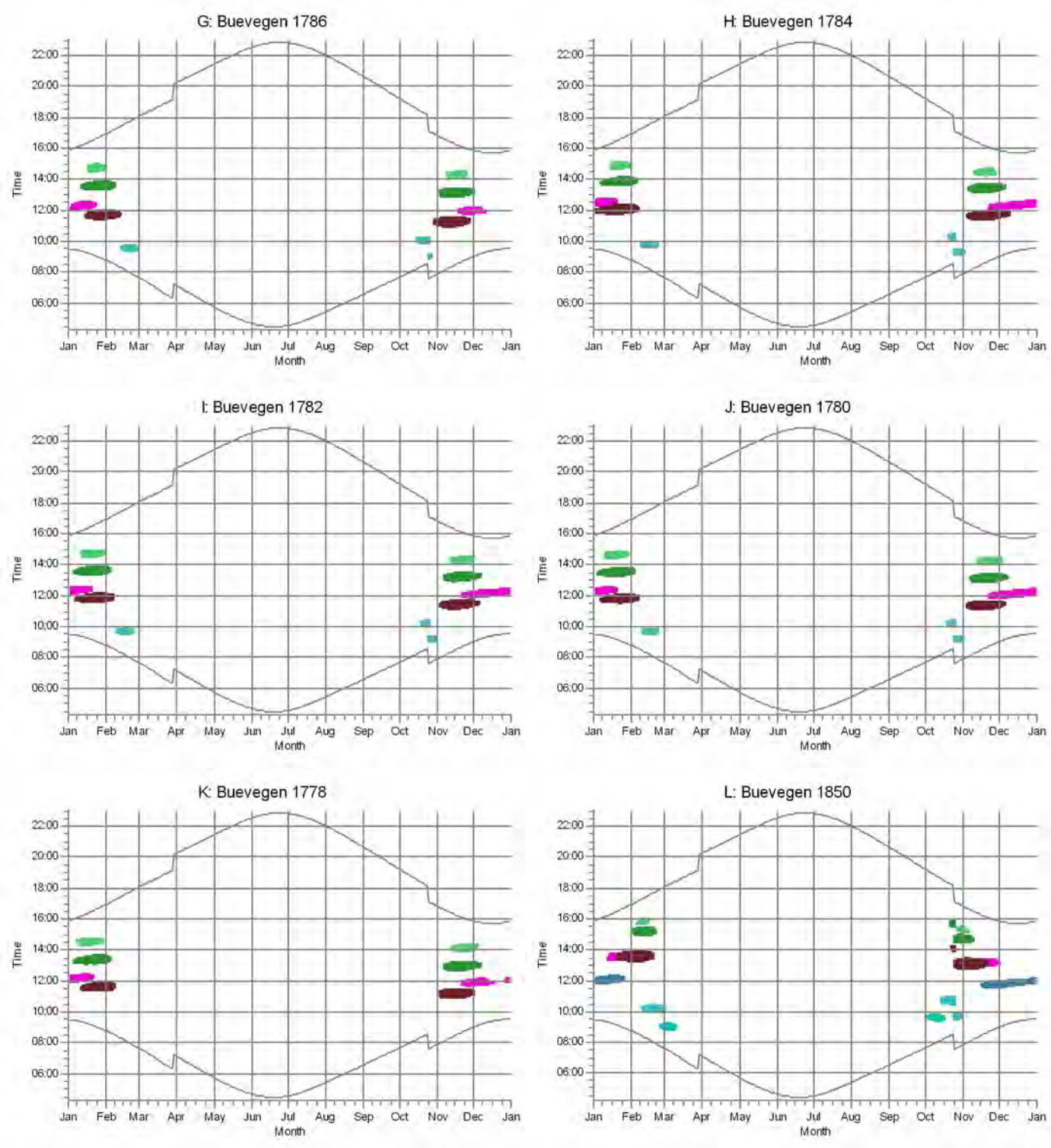


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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

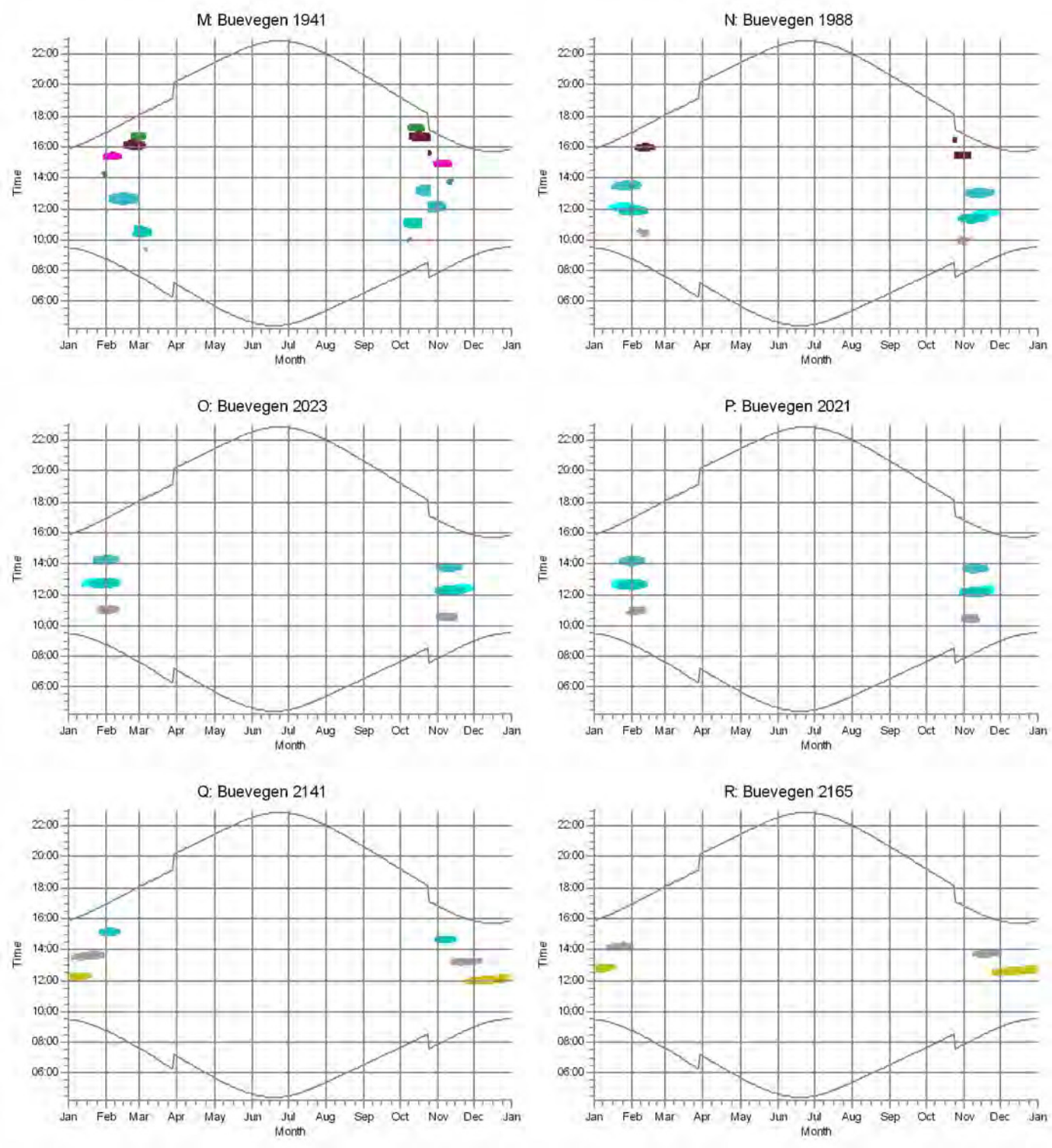


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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

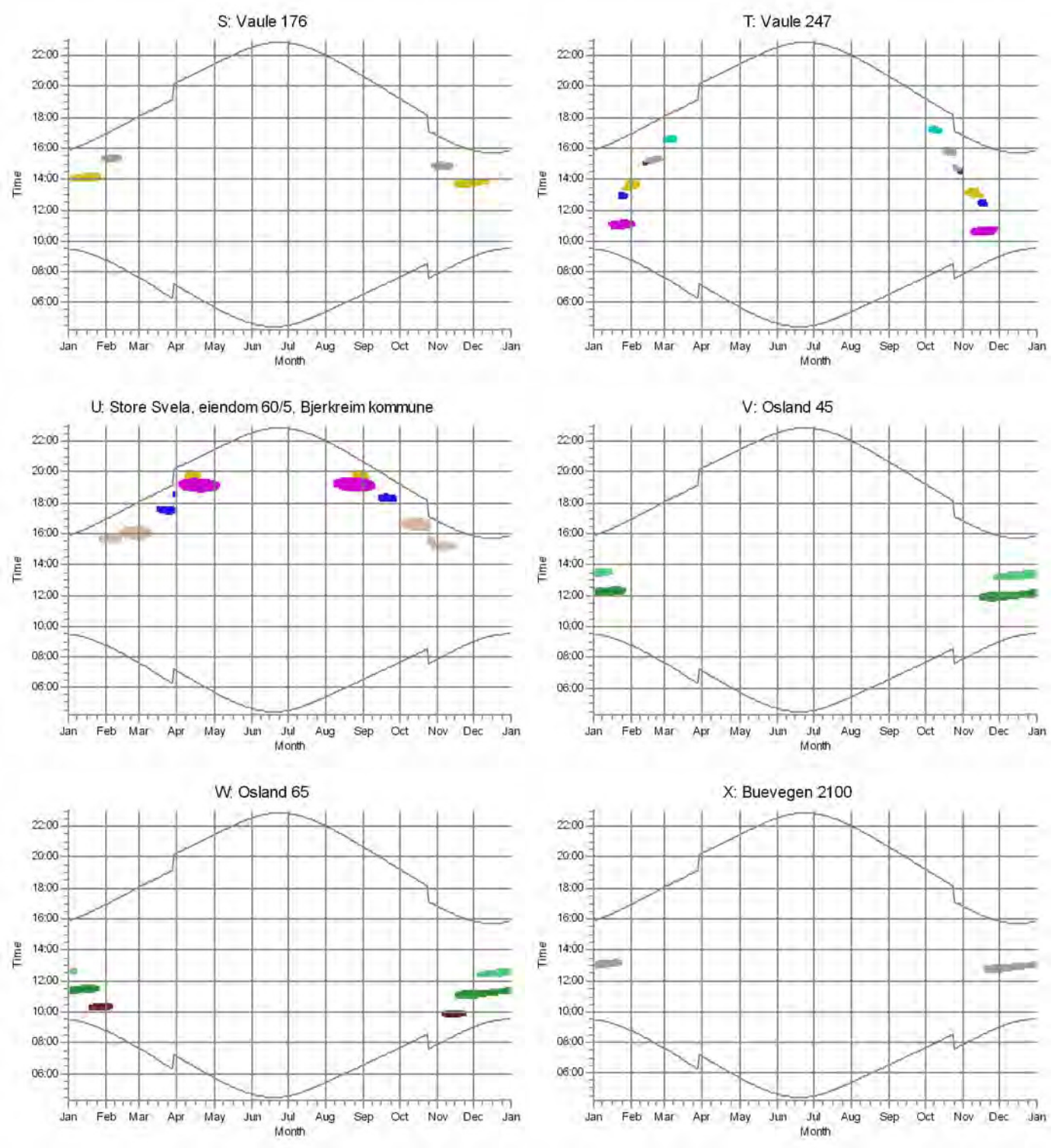


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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere



WTGs

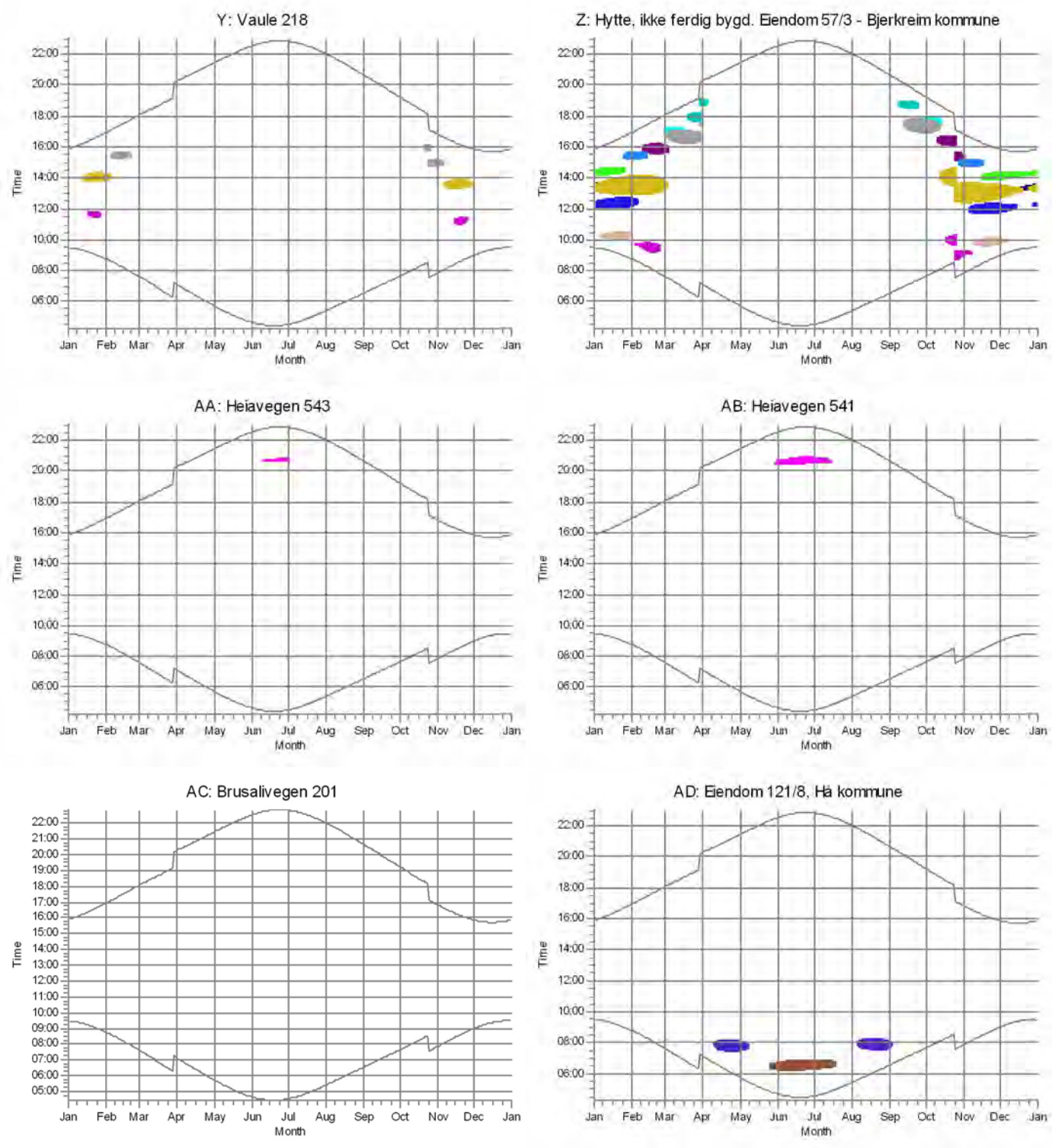
11: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2550
12: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2551
16: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2556
21: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
27: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
30: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569
32: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
36: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575
41: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2580

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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere



WTGs

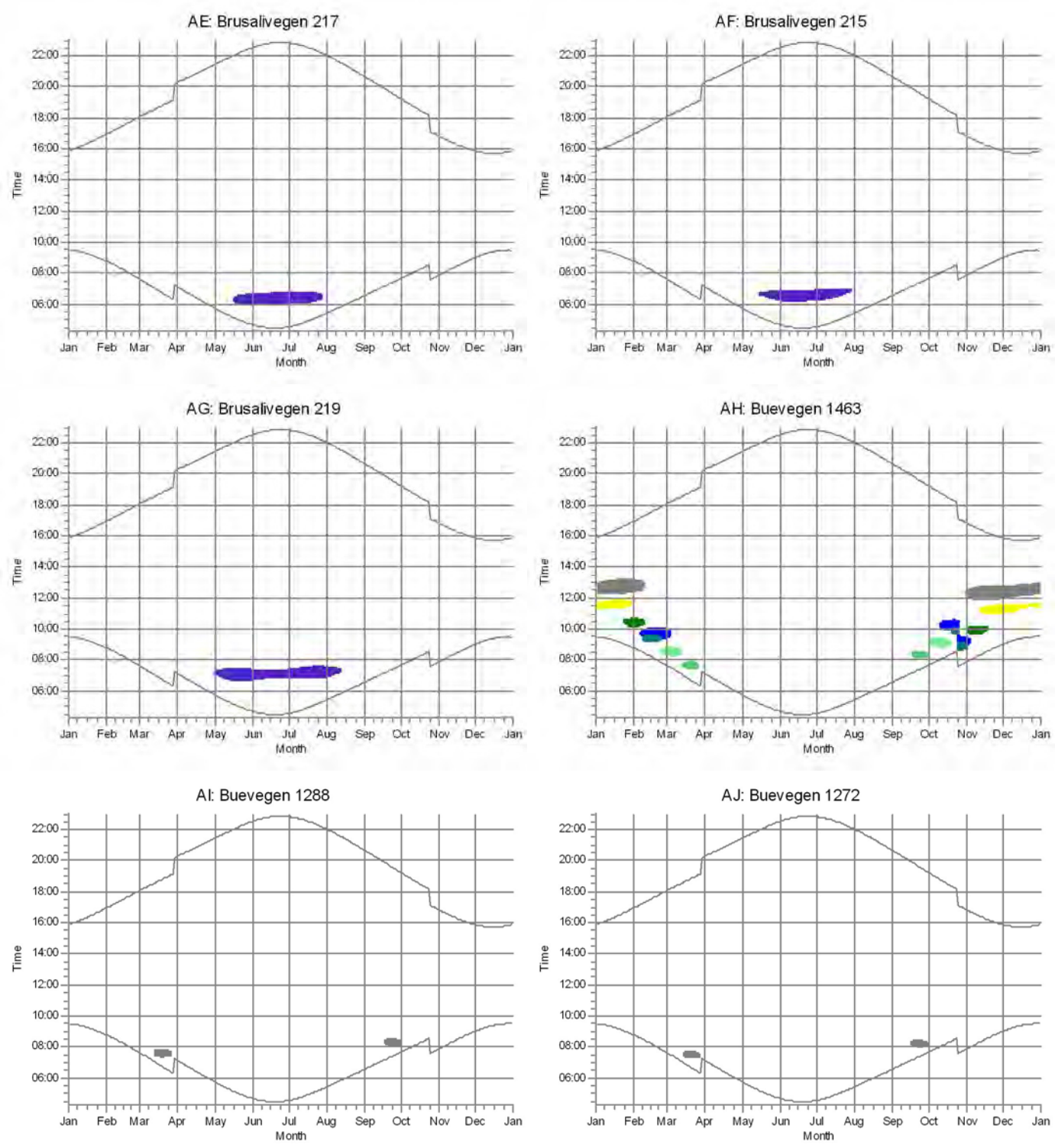
5: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2544	17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2556	39: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2578
7: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2546	18: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2557	40: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2579
11: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2550	21: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560	41: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2580
13: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2552	30: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569	42: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2543
16: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555	36: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575	

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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

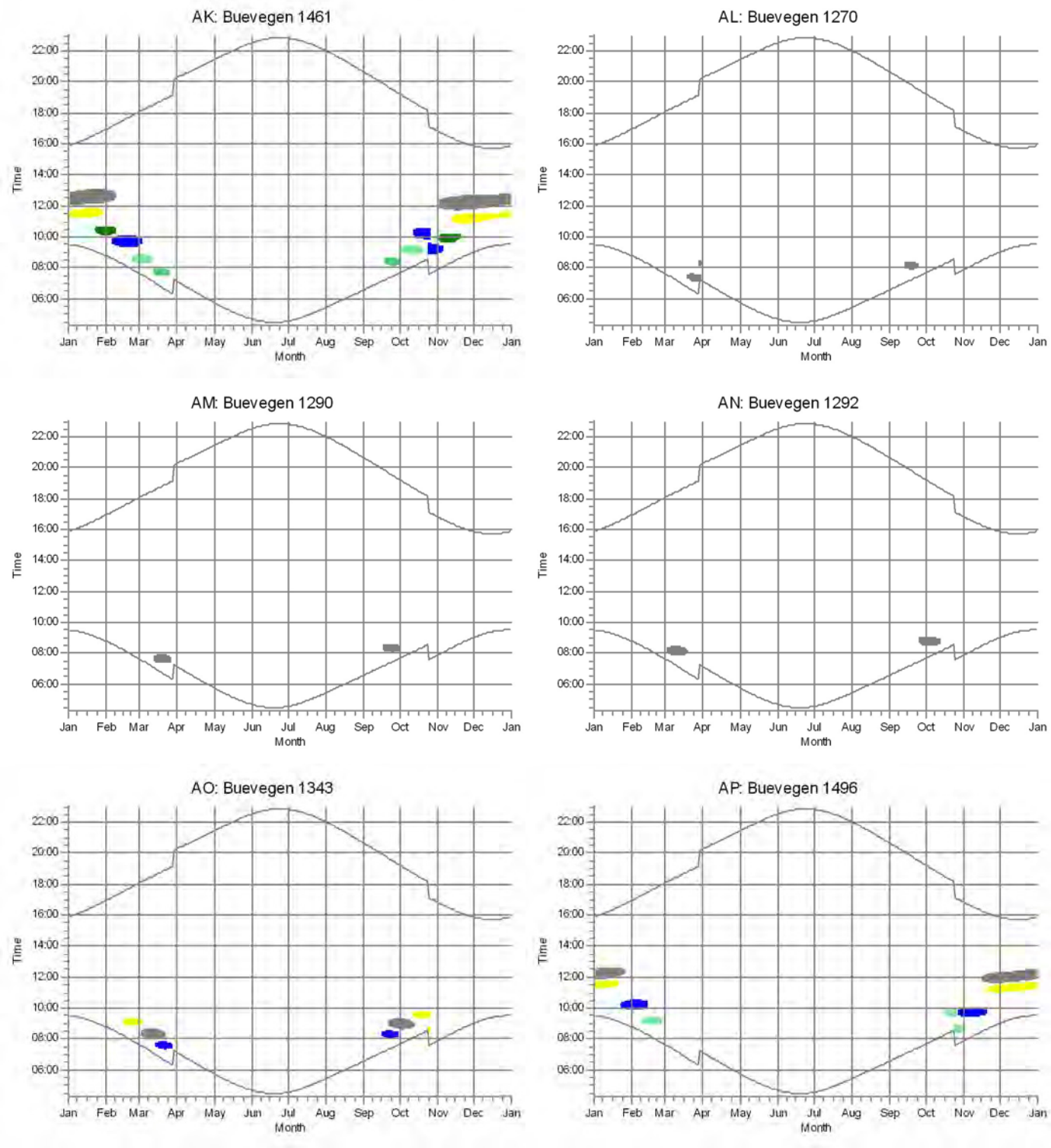


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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

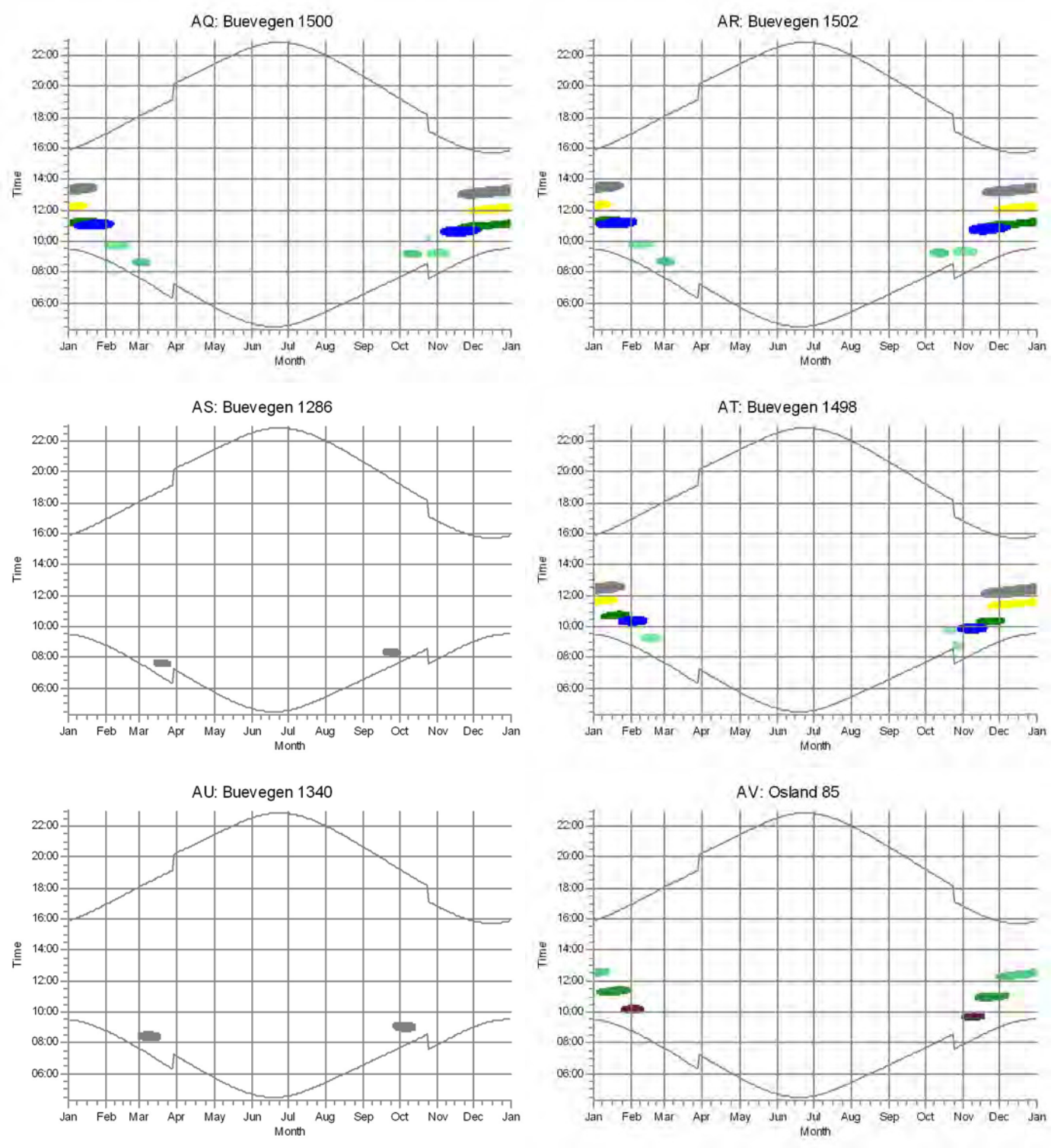


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Calculated:
19.11.2025 14:30/4.2.271

SHADOW - Calendar, graphical

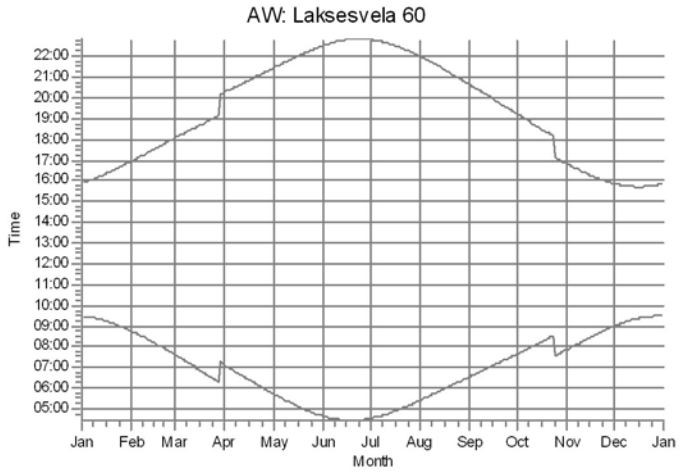
Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere

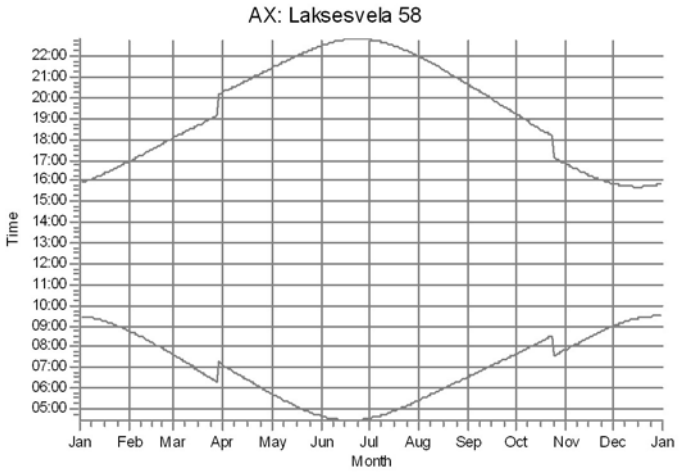


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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand uten eksisterende vkv - real case - mottakere





WTGs

Vedlegg 3.1

Tabell Moifjellet og Mellomstrand vindkraftverk

Med nærliggende – worst case

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		11:19 (37)	07:35		09:10 (19)	07:07		05:44	04:40
	15:53			16:56	51	13:02 (24)	18:05	24	09:34 (19)	20:17		21:26	22:30
2	09:27			08:43		11:24 (37)	07:33		09:10 (19)	07:04		05:41	04:38
	15:54			16:58	34	12:41 (32)	18:07	25	09:35 (19)	20:19		21:28	22:32
3	09:27			08:41		12:08 (32)	07:30		09:10 (19)	07:01		05:39	04:37
	15:55			17:01	43	14:41 (27)	18:09	24	09:34 (19)	20:21		21:30	22:34
4	09:26			08:39		12:07 (32)	07:27		09:10 (19)	06:58		05:36	04:36
	15:57			17:03	56	14:50 (27)	18:12	24	09:34 (19)	20:24		21:33	22:35
5	09:26			08:37		12:06 (32)	07:24		09:10 (19)	06:55		05:34	04:35
	15:58			17:06	61	14:52 (27)	18:14	23	09:33 (19)	20:26		21:35	22:37
6	09:25			08:34		12:06 (32)	07:21		08:24 (21)	06:52		05:31	04:34
	16:00			17:08	66	14:54 (27)	18:17	28	09:32 (19)	20:28		21:37	22:38
7	09:24			08:32		12:05 (32)	07:19		08:21 (21)	06:50		05:29	04:33
	16:02			17:11	69	14:54 (27)	18:19	32	09:30 (19)	20:30		21:40	22:39
8	09:24			08:30		12:05 (32)	07:16		08:19 (21)	06:47		05:26	04:32
	16:03			17:13	72	14:56 (27)	18:21	32	09:28 (19)	20:33		21:42	22:40
9	09:23			08:27		12:04 (32)	07:13		08:18 (21)	06:44		05:24	04:31
	16:05			17:16	75	14:57 (27)	18:24	29	09:26 (19)	20:35		21:44	22:42
10	09:22			08:25		12:04 (32)	07:10		08:17 (21)	06:41		05:22	04:30
	16:07			17:18	80	15:35 (28)	18:26	18	08:35 (21)	20:37		21:46	22:43
11	09:21			08:23		12:04 (32)	07:07		08:17 (21)	06:38		05:19	04:29
	16:09			17:21	91	15:40 (28)	18:28	18	08:35 (21)	20:40		21:49	22:44
12	09:20			08:20		12:04 (32)	07:04		08:17 (21)	06:35		05:17	04:29
	16:11			17:23	99	15:47 (28)	18:31	19	08:36 (21)	20:42		21:51	22:45
13	09:18			08:18		12:03 (32)	07:01		08:17 (21)	06:32		05:15	04:28
	16:13			17:26	101	15:48 (28)	18:33	18	08:35 (21)	20:44		21:53	22:46
14	09:17			08:15		12:04 (32)	06:59		08:17 (21)	06:30		05:13	04:28
	16:15			17:28	99	15:48 (28)	18:35	17	08:34 (21)	20:47		21:55	22:47
15	09:16			08:13		12:04 (32)	06:56		08:18 (21)	06:27		05:10	04:27
	16:17			17:31	96	15:46 (28)	18:38	15	08:33 (21)	20:49		21:58	22:47
16	09:15			08:10		12:03 (32)	06:53		08:19 (21)	06:24		05:08	04:27
	16:19			17:33	92	15:44 (28)	18:40	12	08:31 (21)	20:51		22:00	22:48
17	09:13			08:07		12:03 (32)	06:50		08:22 (21)	06:21		05:06	04:27
	16:21			17:36	86	15:41 (28)	18:42	5	08:27 (21)	20:53		22:02	22:49
18	09:12			08:05		12:04 (32)	06:47			06:19		05:04	04:27
	16:23			17:38	78	14:58 (27)	18:45			20:56		22:04	22:49
19	09:10			08:02		12:05 (32)	06:44			06:16		05:02	04:27
	16:25			17:40	76	14:58 (27)	18:47			20:58		22:06	22:50
20	09:08			08:00		12:05 (32)	06:41			06:13		05:00	04:27
	16:28			17:43	74	14:57 (27)	18:49			21:00		22:08	22:50
21	09:07		11:29 (37)	07:57		12:05 (32)	06:38			06:10		04:58	04:27
	16:30	8	13:08 (24)	17:45	71	14:56 (27)	18:51			21:03		22:10	22:50
22	09:05		11:28 (37)	07:54		12:06 (32)	06:36			06:08		04:56	04:27
	16:32	22	13:07 (24)	17:48	66	14:55 (27)	18:54			21:05		22:12	22:50
23	09:03		11:29 (37)	07:52		09:20 (19)	06:33			06:05		04:54	04:27
	16:34	21	13:08 (24)	17:50	69	14:54 (27)	18:56			21:07		22:14	22:50
24	09:02		11:28 (37)	07:49		09:16 (19)	06:30			06:02		04:52	04:27
	16:37	33	13:08 (24)	17:53	69	14:52 (27)	18:58			21:10		22:16	22:51
25	09:00		11:27 (37)	07:46		09:14 (19)	06:27			05:59		04:51	04:28
	16:39	33	13:08 (24)	17:55	64	14:49 (27)	19:01			21:12		22:18	22:50
26	08:58		11:22 (37)	07:44		09:13 (19)	06:24			05:57		04:49	04:28
	16:41	37	13:08 (24)	17:57	54	14:45 (27)	19:03			21:14		22:20	22:50
27	08:56		11:14 (37)	07:41		09:12 (19)	06:21			05:54		04:47	04:29
	16:44	43	13:07 (24)	18:00	41	12:35 (32)	19:05			21:17		22:22	22:50
28	08:54		11:14 (37)	07:38		09:11 (19)	06:18			05:52		04:46	04:30
	16:46	52	13:07 (24)	18:02	33	12:29 (32)	19:07			21:19		22:24	22:50
29	08:52		11:15 (37)				07:15			05:49		04:44	04:30
	16:49	56	13:07 (24)				20:10			21:21		22:25	22:50
30	08:50		11:15 (37)				07:12			05:46		04:43	04:31
	16:51	59	13:06 (24)				20:12			21:24		22:27	22:49
31	08:48		11:17 (37)				07:10					04:41	
	16:54	57	13:05 (24)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		421			1966			363					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October		November		December
1	04:32	05:24	06:33			07:39		08:56 (21)	07:51	11:33 (32)	09:00
	22:49	22:01	20:40			19:13	19	09:15 (21)	16:49	78	14:57 (28)	15:51
2	04:33	05:26	06:35			07:42		08:56 (21)	07:54	11:34 (32)	09:02
	22:48	21:58	20:37			19:10	18	09:14 (21)	16:46	74	14:26 (27)	15:50
3	04:34	05:28	06:37			07:44		08:55 (21)	07:56	11:35 (32)	09:03
	22:47	21:56	20:34			19:07	19	09:14 (21)	16:44	71	14:25 (27)	15:49
4	04:35	05:31	06:40			07:46		08:55 (21)	07:59	11:35 (32)	09:05
	22:47	21:54	20:31			19:04	26	10:01 (19)	16:41	69	14:24 (27)	15:48
5	04:36	05:33	06:42			07:48		08:56 (21)	08:01	11:36 (32)	09:07
	22:46	21:51	20:28			19:02	31	10:05 (19)	16:39	64	14:23 (27)	15:47
6	04:37	05:35	06:44			07:51		08:57 (21)	08:03	11:37 (32)	09:09
	22:45	21:49	20:25			18:59	32	10:06 (19)	16:37	61	14:22 (27)	15:46
7	04:39	05:37	06:46			07:53		08:58 (21)	08:06	11:37 (32)	09:10
	22:44	21:47	20:22			18:56	31	10:07 (19)	16:34	53	14:17 (27)	15:45
8	04:40	05:39	06:49			07:55		09:03 (21)	08:08	11:39 (32)	09:12
	22:43	21:44	20:20			18:53	23	10:08 (19)	16:32	42	14:11 (27)	15:45
9	04:41	05:42	06:51			07:57		09:45 (19)	08:11	10:53 (37)	09:13
	22:42	21:42	20:17			18:50	23	10:08 (19)	16:30	37	12:12 (32)	15:44
10	04:43	05:44	06:53			08:00		09:45 (19)	08:13	10:50 (37)	09:15
	22:40	21:39	20:14			18:47	24	10:09 (19)	16:28	52	12:34 (24)	15:44
11	04:44	05:46	06:55			08:02		09:44 (19)	08:15	10:48 (37)	09:16
	22:39	21:37	20:11			18:45	24	10:08 (19)	16:25	57	12:36 (24)	15:43
12	04:46	05:48	06:57			08:04		09:43 (19)	08:18	10:47 (37)	09:18
	22:38	21:34	20:08			18:42	24	10:07 (19)	16:23	58	12:37 (24)	15:43
13	04:47	05:51	07:00			08:07		09:44 (19)	08:20	10:47 (37)	09:19
	22:37	21:31	20:05			18:39	23	10:07 (19)	16:21	57	12:39 (24)	15:42
14	04:49	05:53	07:02			08:09		09:44 (19)	08:22	10:46 (37)	09:20
	22:35	21:29	20:02			18:36	37	13:05 (32)	16:19	52	12:39 (24)	15:42
15	04:51	05:55	07:04			08:11		09:45 (19)	08:25	10:47 (37)	09:21
	22:34	21:26	19:59			18:33	44	13:09 (32)	16:17	43	12:40 (24)	15:42
16	04:52	05:57	07:06			08:13		09:45 (19)	08:27	10:55 (37)	09:22
	22:32	21:24	19:56			18:31	59	15:19 (27)	16:15	37	12:41 (24)	15:42
17	04:54	06:00	07:08			08:16		09:47 (19)	08:29	11:00 (37)	09:23
	22:30	21:21	19:54			18:28	66	15:22 (27)	16:13	33	12:41 (24)	15:42
18	04:56	06:02	07:11			08:18		09:48 (19)	08:32	11:02 (37)	09:24
	22:29	21:18	19:51			18:25	71	15:24 (27)	16:11	33	12:42 (24)	15:42
19	04:58	06:04	07:13			08:20		09:52 (19)	08:34	11:04 (37)	09:25
	22:27	21:16	19:48			18:22	70	15:26 (27)	16:09	21	12:43 (24)	15:42
20	05:00	06:06	07:15			08:23		12:37 (32)	08:36	11:03 (37)	09:26
	22:25	21:13	19:45			18:20	68	15:26 (27)	16:08	22	12:42 (24)	15:43
21	05:01	06:08	07:17			08:25		12:36 (32)	08:39	11:04 (37)	09:26
	22:24	21:10	19:42			18:17	71	15:27 (27)	16:06	8	12:43 (24)	15:43
22	05:03	06:11	07:19			08:27		12:35 (32)	08:41			09:27
	22:22	21:08	19:39			18:14	74	15:27 (27)	16:04			15:43
23	05:05	06:13	07:22			08:30		12:35 (32)	08:43			09:27
	22:20	21:05	19:36			18:12	76	15:28 (27)	16:02			15:44
24	05:07	06:15	07:24			08:32		12:34 (32)	08:45			09:28
	22:18	21:02	19:33			18:09	78	15:28 (27)	16:01			15:44
25	05:09	06:17	07:26			07:35		11:34 (32)	08:47			09:28
	22:16	20:59	19:30			17:06	86	15:12 (28)	15:59			15:45
26	05:11	06:20	07:28			07:37		11:33 (32)	08:50			09:28
	22:14	20:56	19:27			17:04	94	15:14 (28)	15:58			15:46
27	05:13	06:22	07:30		09:02 (21)	07:39		11:33 (32)	08:52			09:28
	22:12	20:54	19:25	10	09:12 (21)	17:01	97	15:16 (28)	15:56			15:47
28	05:16	06:24	07:33		09:00 (21)	07:42		11:33 (32)	08:54			09:28
	22:10	20:51	19:22	13	09:13 (21)	16:59	101	15:18 (28)	15:55			15:48
29	05:18	06:26	07:35		08:58 (21)	07:44		11:33 (32)	08:56			09:28
	22:07	20:48	19:19	16	09:14 (21)	16:56	102	15:18 (28)	15:54			15:49
30	05:20	06:29	07:37		08:56 (21)	07:47		11:33 (32)	08:58			09:28
	22:05	20:45	19:16	18	09:14 (21)	16:54	99	15:15 (28)	15:52			15:50
31	05:22	06:31				07:49		11:34 (32)				09:28
	22:03	20:42				16:51	90	15:09 (28)				15:51
Potential sun hours	546	478	386			319			236			199
Total, worst case				57			1700			1022		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April	May	June
1	09:28			08:46		11:16 (37)	07:35		09:09 (19)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (27)	18:05	23	09:32 (19)	20:17	21:26	22:30
2	09:27			08:43		12:00 (32)	07:33		09:09 (19)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (27)	18:07	24	09:33 (19)	20:19	21:28	22:32
3	09:27			08:41		11:58 (32)	07:30		09:09 (19)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (27)	18:09	24	09:33 (19)	20:21	21:30	22:34
4	09:26			08:39		11:58 (32)	07:27		09:09 (19)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (27)	18:12	23	09:32 (19)	20:24	21:33	22:35
5	09:26			08:37		11:57 (32)	07:24		09:10 (19)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (27)	18:14	21	09:31 (19)	20:26	21:35	22:37
6	09:25			08:34		11:57 (32)	07:21		09:10 (19)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (27)	18:17	20	09:30 (19)	20:28	21:37	22:38
7	09:24			08:32		11:56 (32)	07:19		09:11 (19)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (27)	18:19	17	09:28 (19)	20:30	21:40	22:39
8	09:24			08:30		11:56 (32)	07:16		09:13 (19)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (28)	18:21	12	09:25 (19)	20:33	21:42	22:40
9	09:23			08:27		11:56 (32)	07:13		09:16 (19)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (28)	18:24	5	09:21 (19)	20:35	21:44	22:42
10	09:22			08:25		11:55 (32)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (28)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (32)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (28)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (32)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (28)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (32)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (28)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (32)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (28)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (32)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (28)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (32)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (27)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (32)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (27)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (32)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (27)	18:45			20:56	22:04	22:49
19	09:10		12:54 (24)	08:02		11:57 (32)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (24)	17:40	70	14:48 (27)	18:47			20:58	22:06	22:50
20	09:08		11:12 (37)	08:00		11:57 (32)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (24)	17:43	68	14:47 (27)	18:49			21:00	22:08	22:50
21	09:07		11:11 (37)	07:57		11:58 (32)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (24)	17:45	64	14:46 (27)	18:51			21:03	22:10	22:50
22	09:05		11:11 (37)	07:54		11:59 (32)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (24)	17:48	58	14:44 (27)	18:54			21:05	22:12	22:50
23	09:03		11:11 (37)	07:52		09:17 (19)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (24)	17:50	62	14:43 (27)	18:56			21:07	22:14	22:50
24	09:02		11:10 (37)	07:49		09:14 (19)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (24)	17:53	57	14:39 (27)	18:58			21:10	22:16	22:51
25	09:00		11:08 (37)	07:46		09:13 (19)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (24)	17:55	42	12:28 (32)	19:01			21:12	22:18	22:50
26	08:58		11:09 (37)	07:44		09:11 (19)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (24)	17:57	38	12:24 (32)	19:03			21:14	22:20	22:50
27	08:56		11:09 (37)	07:41		09:10 (19)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (24)	18:00	22	09:32 (19)	19:05			21:17	22:22	22:50
28	08:54		11:10 (37)	07:38		09:09 (19)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (24)	18:02	23	09:32 (19)	19:07			21:19	22:24	22:50
29	08:52		11:12 (37)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (24)				20:10			21:21	22:25	22:50
30	08:50		11:12 (37)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (24)				20:12			21:24	22:27	22:49
31	08:48		11:14 (37)				07:10				04:41	
	16:54	56	14:29 (27)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51		09:00
	22:49	22:01	20:40	19:13		16:49	96	15:51
2	04:33	05:26	06:35	07:42		07:54		09:02
	22:48	21:58	20:37	19:10		16:46	90	15:50
3	04:34	05:28	06:37	07:44		07:56		09:03
	22:47	21:56	20:34	19:07		16:44	82	14:58 (28)	15:49
4	04:35	05:31	06:40	07:46		07:59		09:05
	22:47	21:54	20:31	19:04		16:41	72	14:17 (27)	15:48
5	04:36	05:33	06:42	07:48		09:51 (19)	08:01		09:07
	22:46	21:51	20:28	19:02	10	10:01 (19)	16:39	70	14:17 (27)	15:47
6	04:37	05:35	06:44	07:51		09:48 (19)	08:03		09:09
	22:45	21:49	20:25	18:59	15	10:03 (19)	16:37	65	14:16 (27)	15:46
7	04:39	05:37	06:46	07:53		09:46 (19)	08:06		09:10
	22:44	21:47	20:22	18:56	18	10:04 (19)	16:34	62	14:14 (27)	15:45
8	04:40	05:39	06:49	07:55		09:45 (19)	08:08		09:12
	22:43	21:44	20:20	18:53	21	10:06 (19)	16:32	57	14:13 (27)	15:45
9	04:41	05:42	06:51	07:57		09:44 (19)	08:11		09:13
	22:42	21:42	20:17	18:50	22	10:06 (19)	16:30	53	14:12 (27)	15:44
10	04:43	05:44	06:53	08:00		09:44 (19)	08:13		10:47 (37)	09:15
	22:40	21:39	20:14	18:47	23	10:07 (19)	16:28	58	14:10 (27)	15:44
11	04:44	05:46	06:55	08:02		09:43 (19)	08:15		10:45 (37)	09:16
	22:39	21:37	20:11	18:45	23	10:06 (19)	16:25	55	13:59 (27)	15:43
12	04:46	05:48	06:57	08:04		09:42 (19)	08:18		10:44 (37)	09:18
	22:38	21:34	20:08	18:42	24	10:06 (19)	16:23	57	12:31 (24)	15:43
13	04:47	05:51	07:00	08:07		09:43 (19)	08:20		10:43 (37)	09:19
	22:37	21:31	20:05	18:39	23	10:06 (19)	16:21	59	12:32 (24)	15:42
14	04:49	05:53	07:02	08:09		09:42 (19)	08:22		10:42 (37)	09:20
	22:35	21:29	20:02	18:36	23	10:05 (19)	16:19	58	12:33 (24)	15:42
15	04:51	05:55	07:04	08:11		09:43 (19)	08:25		10:42 (37)	09:21
	22:34	21:26	19:59	18:33	33	12:54 (32)	16:17	53	12:34 (24)	15:42
16	04:52	05:57	07:06	08:13		09:44 (19)	08:27		10:42 (37)	09:22
	22:32	21:24	19:56	18:31	39	12:58 (32)	16:15	45	12:35 (24)	15:42
17	04:54	06:00	07:08	08:16		09:45 (19)	08:29		10:41 (37)	09:23
	22:30	21:21	19:54	18:28	46	15:07 (27)	16:13	47	12:35 (24)	15:42
18	04:56	06:02	07:11	08:18		09:46 (19)	08:32		10:44 (37)	09:24
	22:29	21:18	19:51	18:25	59	15:12 (27)	16:11	46	12:36 (24)	15:42
19	04:58	06:04	07:13	08:20		09:49 (19)	08:34		10:46 (37)	09:25
	22:27	21:16	19:48	18:22	62	15:15 (27)	16:09	45	12:37 (24)	15:42
20	05:00	06:06	07:15	08:23		12:30 (32)	08:36		10:46 (37)	09:26
	22:25	21:13	19:45	18:20	60	15:16 (27)	16:08	45	12:37 (24)	15:43
21	05:01	06:08	07:17	08:25		12:29 (32)	08:39		10:46 (37)	09:26
	22:24	21:10	19:42	18:17	65	15:17 (27)	16:06	36	12:37 (24)	15:43
22	05:03	06:11	07:19	08:27		12:27 (32)	08:41		10:48 (37)	09:27
	22:22	21:08	19:39	18:14	70	15:18 (27)	16:04	30	12:38 (24)	15:43
23	05:05	06:13	07:22	08:30		12:27 (32)	08:43		12:30 (24)	09:27
	22:20	21:05	19:36	18:12	72	15:19 (27)	16:02	5	12:35 (24)	15:44
24	05:07	06:15	07:24	08:32		12:26 (32)	08:45			09:28
	22:18	21:02	19:33	18:09	75	15:19 (27)	16:01			15:44
25	05:09	06:17	07:26	07:35		11:26 (32)	08:47			09:28
	22:16	20:59	19:30	17:06	76	14:20 (27)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:25 (32)	08:50			09:28
	22:14	20:56	19:27	17:04	81	15:04 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:25 (32)	08:52			09:28
	22:12	20:54	19:25	17:01	91	15:08 (28)	15:56			15:47
28	05:16	06:24	07:33	07:42		11:25 (32)	08:54			09:28
	22:10	20:51	19:22	16:59	95	15:10 (28)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:24 (32)	08:56			09:28
	22:07	20:48	19:19	16:56	99	15:11 (28)	15:54			15:49
30	05:20	06:29	07:37	07:47		11:25 (32)	08:58			09:28
	22:05	20:45	19:16	16:54	99	15:12 (28)	15:52			15:50
31	05:22	06:31		07:49		11:25 (32)				09:28
	22:03	20:42		16:51	101	15:13 (28)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1425			1286		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		10:42 (37)	07:35		08:50 (19)	07:07		05:44	04:40
	15:53			16:56	72	14:06 (27)	18:05	39	11:29 (32)	20:17		21:26	22:30
2	09:27			08:43		10:44 (37)	07:33		08:50 (19)	07:04		05:41	04:38
	15:54			16:58	72	14:08 (27)	18:07	31	11:25 (32)	20:19		21:28	22:32
3	09:27			08:41		10:46 (37)	07:30		08:49 (19)	07:01		05:39	04:37
	15:55			17:01	71	14:10 (27)	18:09	21	09:10 (19)	20:21		21:31	22:34
4	09:26			08:39		10:47 (37)	07:27		08:48 (19)	06:58		05:36	04:36
	15:57			17:03	77	15:02 (28)	18:12	22	09:10 (19)	20:24		21:33	22:35
5	09:26			08:37		10:50 (37)	07:24		08:48 (19)	06:55		05:34	04:35
	15:58			17:06	77	15:05 (28)	18:14	21	09:09 (19)	20:26		21:35	22:37
6	09:25			08:34		11:05 (32)	07:21		08:48 (19)	06:52		05:31	04:34
	16:00			17:08	82	15:12 (28)	18:17	21	09:09 (19)	20:28		21:37	22:38
7	09:24			08:32		11:03 (32)	07:19		08:48 (19)	06:50		05:29	04:33
	16:02			17:11	92	15:18 (28)	18:19	20	09:08 (19)	20:30		21:40	22:39
8	09:24			08:30		11:03 (32)	07:16		08:48 (19)	06:47		05:26	04:32
	16:03			17:13	101	15:25 (28)	18:21	19	09:07 (19)	20:33		21:42	22:40
9	09:23			08:27		11:02 (32)	07:13		08:48 (19)	06:44		05:24	04:31
	16:05			17:16	112	15:55 (26)	18:24	18	09:06 (19)	20:35		21:44	22:42
10	09:22			08:25		11:01 (32)	07:10		08:49 (19)	06:41		05:22	04:30
	16:07			17:18	104	15:51 (26)	18:26	15	09:04 (19)	20:37		21:46	22:43
11	09:21			08:23		11:01 (32)	07:07		08:51 (19)	06:38		05:19	04:29
	16:09			17:21	101	15:23 (28)	18:28	10	09:01 (19)	20:40		21:49	22:44
12	09:20			08:20		11:00 (32)	07:04			06:35		05:17	04:29
	16:11			17:23	98	15:21 (28)	18:31			20:42		21:51	22:45
13	09:18			08:18		10:59 (32)	07:02			06:33		05:15	04:28
	16:13			17:26	94	15:18 (28)	18:33			20:44		21:53	22:46
14	09:17			08:15		11:00 (32)	06:59			06:30		05:13	04:28
	16:15			17:28	83	14:14 (27)	18:35			20:47		21:55	22:47
15	09:16			08:13		10:59 (32)	06:56			06:27		05:10	04:27
	16:17			17:31	83	14:13 (27)	18:38			20:49		21:58	22:47
16	09:15			08:10		10:59 (32)	06:53			06:24		05:08	04:27
	16:19			17:33	81	14:12 (27)	18:40			20:51		22:00	22:48
17	09:13			08:07		10:59 (32)	06:50			06:21		05:06	04:27
	16:21			17:36	81	14:12 (27)	18:42			20:53		22:02	22:49
18	09:12			08:05		10:59 (32)	06:47			06:19		05:04	04:27
	16:23			17:38	80	14:12 (27)	18:45			20:56		22:04	22:49
19	09:10			08:02		10:59 (32)	06:44			06:16		05:02	04:27
	16:25			17:40	78	14:11 (27)	18:47			20:58		22:06	22:50
20	09:08			08:00		10:59 (32)	06:41			06:13		05:00	04:27
	16:28			17:43	74	14:09 (27)	18:49			21:00		22:08	22:50
21	09:07			07:57		10:59 (32)	06:39			06:10		04:58	04:27
	16:30			17:45	71	14:08 (27)	18:51			21:03		22:10	22:50
22	09:05			07:54		11:00 (32)	06:36			06:08		04:56	04:27
	16:32			17:48	66	14:06 (27)	18:54			21:05		22:12	22:50
23	09:03			07:52		11:01 (32)	06:33			06:05		04:54	04:27
	16:34			17:50	60	14:04 (27)	18:56			21:07		22:14	22:50
24	09:02			07:49		11:01 (32)	06:30			06:02		04:52	04:27
	16:37			17:53	50	14:00 (27)	18:58			21:10		22:16	22:51
25	09:00			07:46		11:02 (32)	06:27			06:00		04:51	04:28
	16:39			17:55	36	11:38 (32)	19:01			21:12		22:18	22:50
26	08:58		12:05 (24)	07:44		08:58 (19)	06:24			05:57		04:49	04:28
	16:41	5	12:10 (24)	17:57	36	11:36 (32)	19:03			21:14		22:20	22:50
27	08:56		12:05 (24)	07:41		08:54 (19)	06:21			05:54		04:47	04:29
	16:44	19	13:53 (27)	18:00	41	11:34 (32)	19:05			21:17		22:22	22:50
28	08:54		11:00 (37)	07:38		08:52 (19)	06:18			05:52		04:46	04:30
	16:46	40	13:59 (27)	18:02	41	11:32 (32)	19:08			21:19		22:24	22:50
29	08:52		10:56 (37)				07:15			05:49		04:44	04:30
	16:49	47	14:02 (27)				20:10			21:21		22:25	22:50
30	08:50		10:50 (37)				07:13			05:46		04:43	04:31
	16:51	55	14:03 (27)				20:12			21:24		22:27	22:49
31	08:48		10:44 (37)				07:10					04:41	
	16:54	62	14:05 (27)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		228			2114			237					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	July		August		September		October			November			December
1	04:32		05:24		06:33		07:39			07:51		10:30 (32)	09:00
	22:49		22:01		20:40		19:13			16:49	107	15:21 (26)	15:51
2	04:33		05:26		06:35		07:42		09:32 (19)	07:54		10:32 (32)	09:02
	22:48		21:58		20:37		19:10	7	09:39 (19)	16:46	110	15:25 (26)	15:50
3	04:34		05:28		06:37		07:44		09:28 (19)	07:56		10:33 (32)	09:03
	22:47		21:56		20:34		19:07	13	09:41 (19)	16:44	97	14:53 (28)	15:49
4	04:35		05:31		06:40		07:46		09:26 (19)	07:59		10:33 (32)	09:05
	22:47		21:54		20:31		19:04	16	09:42 (19)	16:41	89	14:46 (28)	15:48
5	04:36		05:33		06:42		07:48		09:25 (19)	08:01		10:35 (32)	09:07
	22:46		21:51		20:28		19:02	19	09:44 (19)	16:39	81	14:41 (28)	15:47
6	04:37		05:35		06:44		07:51		09:24 (19)	08:03		10:20 (37)	09:09
	22:45		21:49		20:25		18:59	20	09:44 (19)	16:37	77	14:35 (28)	15:46
7	04:39		05:37		06:46		07:53		09:23 (19)	08:06		10:16 (37)	09:10
	22:44		21:47		20:22		18:56	21	09:44 (19)	16:34	77	14:32 (28)	15:45
8	04:40		05:39		06:49		07:55		09:23 (19)	08:08		10:15 (37)	09:12
	22:43		21:44		20:20		18:53	22	09:45 (19)	16:32	71	13:39 (27)	15:45
9	04:41		05:42		06:51		07:57		09:22 (19)	08:11		10:15 (37)	09:13
	22:42		21:42		20:17		18:50	22	09:44 (19)	16:30	72	13:39 (27)	15:44
10	04:43		05:44		06:53		08:00		09:23 (19)	08:13		10:14 (37)	09:15
	22:40		21:39		20:14		18:47	21	09:44 (19)	16:28	71	13:38 (27)	15:44
11	04:44		05:46		06:55		08:02		09:23 (19)	08:15		10:15 (37)	09:16
	22:39		21:37		20:11		18:45	20	09:43 (19)	16:25	61	13:36 (27)	15:43
12	04:46		05:48		06:57		08:04		09:23 (19)	08:18		10:24 (37)	09:18
	22:38		21:34		20:08		18:42	36	12:00 (32)	16:23	52	13:35 (27)	15:43
13	04:47		05:51		07:00		08:07		09:24 (19)	08:20		10:28 (37)	09:19
	22:37		21:31		20:05		18:39	40	12:04 (32)	16:21	47	13:33 (27)	15:42
14	04:49		05:53		07:02		08:09		09:25 (19)	08:22		10:32 (37)	09:20
	22:35		21:29		20:02		18:36	42	12:06 (32)	16:19	39	13:30 (27)	15:42
15	04:51		05:55		07:04		08:11		09:28 (19)	08:25		11:38 (24)	09:21
	22:34		21:26		19:59		18:33	40	12:08 (32)	16:17	19	13:26 (27)	15:42
16	04:52		05:57		07:06		08:13		11:35 (32)	08:27		11:38 (24)	09:22
	22:32		21:24		19:56		18:31	34	12:09 (32)	16:15	4	11:42 (24)	15:42
17	04:54		06:00		07:08		08:16		11:34 (32)	08:29			09:23
	22:30		21:21		19:54		18:28	36	12:10 (32)	16:13			15:42
18	04:56		06:02		07:11		08:18		11:32 (32)	08:32			09:24
	22:29		21:18		19:51		18:25	55	14:33 (27)	16:11			15:42
19	04:58		06:04		07:13		08:20		11:32 (32)	08:34			09:25
	22:27		21:16		19:48		18:22	62	14:36 (27)	16:09			15:42
20	05:00		06:06		07:15		08:23		11:31 (32)	08:36			09:26
	22:25		21:13		19:45		18:20	67	14:37 (27)	16:08			15:43
21	05:01		06:09		07:17		08:25		11:30 (32)	08:39			09:26
	22:24		21:10		19:42		18:17	72	14:39 (27)	16:06			15:43
22	05:03		06:11		07:19		08:27		11:29 (32)	08:41			09:27
	22:22		21:08		19:39		18:14	75	14:40 (27)	16:04			15:43
23	05:05		06:13		07:22		08:30		11:29 (32)	08:43			09:27
	22:20		21:05		19:36		18:12	78	14:41 (27)	16:02			15:44
24	05:07		06:15		07:24		08:32		11:29 (32)	08:45			09:28
	22:18		21:02		19:33		18:09	79	14:41 (27)	16:01			15:45
25	05:09		06:17		07:26		07:35		10:29 (32)	08:47			09:28
	22:16		20:59		19:30		17:07	81	13:42 (27)	15:59			15:45
26	05:11		06:20		07:28		07:37		10:29 (32)	08:50			09:28
	22:14		20:57		19:27		17:04	82	13:43 (27)	15:58			15:46
27	05:13		06:22		07:30		07:39		10:29 (32)	08:52			09:28
	22:12		20:54		19:25		17:01	81	13:42 (27)	15:56			15:47
28	05:16		06:24		07:33		07:42		10:29 (32)	08:54			09:28
	22:10		20:51		19:22		16:59	87	14:45 (28)	15:55			15:48
29	05:18		06:26		07:35		07:44		10:29 (32)	08:56			09:28
	22:07		20:48		19:19		16:56	95	14:48 (28)	15:54			15:49
30	05:20		06:29		07:37		07:47		10:30 (32)	08:58			09:28
	22:05		20:45		19:16		16:54	99	14:51 (28)	15:52			15:50
31	05:22		06:31				07:49		10:31 (32)				09:28
	22:03		20:42				16:51	99	14:52 (28)				15:51
Potential sun hours	546		478		386		319			236			199
Total, worst case								1521			1074		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		11:39 (32)	07:35		09:25 (19)	07:07		05:44	04:40
	15:53			16:56	88	15:12 (28)	18:05	9	09:34 (19)	20:17		21:26	22:31
2	09:27			08:43		11:39 (32)	07:33			07:04		05:41	04:38
	15:54			16:58	88	15:13 (28)	18:07			20:19		21:28	22:32
3	09:27			08:41		11:40 (32)	07:30			07:01		05:39	04:37
	15:55			17:01	85	15:12 (28)	18:09			20:21		21:31	22:34
4	09:27			08:39		11:39 (32)	07:27			06:58		05:36	04:36
	15:57			17:03	83	15:11 (28)	18:12			20:24		21:33	22:35
5	09:26		12:20 (24)	08:37		11:39 (32)	07:24			06:55		05:34	04:35
	15:58	1	12:21 (24)	17:06	80	15:09 (28)	18:14			20:26		21:35	22:37
6	09:25		12:19 (24)	08:34		11:40 (32)	07:21			06:52		05:31	04:34
	16:00	5	12:24 (24)	17:08	74	15:08 (28)	18:17			20:28		21:37	22:38
7	09:24		12:17 (24)	08:32		11:40 (32)	07:19			06:50		05:29	04:33
	16:02	11	12:28 (24)	17:11	62	14:11 (27)	18:19			20:30		21:40	22:39
8	09:24		12:17 (24)	08:30		11:41 (32)	07:16			06:47		05:26	04:32
	16:03	13	12:30 (24)	17:13	61	14:11 (27)	18:21			20:33		21:42	22:40
9	09:23		12:18 (24)	08:27		11:42 (32)	07:13			06:44		05:24	04:31
	16:05	16	12:34 (24)	17:16	57	14:10 (27)	18:24			20:35		21:44	22:42
10	09:22		11:06 (37)	08:25		11:42 (32)	07:10			06:41		05:22	04:30
	16:07	25	12:39 (24)	17:18	54	14:09 (27)	18:26			20:37		21:46	22:43
11	09:21		11:02 (37)	08:23		11:44 (32)	07:07			06:38		05:19	04:29
	16:09	31	12:41 (24)	17:21	48	14:08 (27)	18:28			20:40		21:49	22:44
12	09:20		11:01 (37)	08:20		11:45 (32)	07:04			06:35		05:17	04:29
	16:11	40	12:41 (24)	17:23	42	14:06 (27)	18:31			20:42		21:51	22:45
13	09:18		11:02 (37)	08:18		11:46 (32)	07:02			06:32		05:15	04:28
	16:13	42	12:42 (24)	17:26	32	14:02 (27)	18:33			20:44		21:53	22:46
14	09:17		11:02 (37)	08:15		11:49 (32)	06:59			06:30		05:13	04:28
	16:15	42	12:42 (24)	17:28	18	12:07 (32)	18:35			20:47		21:55	22:47
15	09:16		11:02 (37)	08:13		11:52 (32)	06:56			06:27		05:10	04:27
	16:17	43	12:42 (24)	17:31	12	12:04 (32)	18:38			20:49		21:58	22:47
16	09:15		11:02 (37)	08:10		09:29 (19)	06:53			06:24		05:08	04:27
	16:19	43	12:42 (24)	17:33	5	09:34 (19)	18:40			20:51		22:00	22:48
17	09:13		11:02 (37)	08:07		09:25 (19)	06:50			06:21		05:06	04:27
	16:21	45	12:42 (24)	17:36	12	09:37 (19)	18:42			20:53		22:02	22:49
18	09:12		11:03 (37)	08:05		09:24 (19)	06:47			06:19		05:04	04:27
	16:23	57	13:55 (27)	17:38	16	09:40 (19)	18:45			20:56		22:04	22:49
19	09:10		11:03 (37)	08:02		09:23 (19)	06:44			06:16		05:02	04:27
	16:25	70	13:59 (27)	17:40	17	09:40 (19)	18:47			20:58		22:06	22:50
20	09:08		11:04 (37)	08:00		09:22 (19)	06:41			06:13		05:00	04:27
	16:28	75	14:01 (27)	17:43	19	09:41 (19)	18:49			21:00		22:08	22:50
21	09:07		11:04 (37)	07:57		09:21 (19)	06:39			06:10		04:58	04:27
	16:30	80	14:03 (27)	17:45	20	09:41 (19)	18:51			21:03		22:10	22:50
22	09:05		11:05 (37)	07:54		09:20 (19)	06:36			06:08		04:56	04:27
	16:32	82	14:05 (27)	17:48	21	09:41 (19)	18:54			21:05		22:12	22:50
23	09:03		11:05 (37)	07:52		09:21 (19)	06:33			06:05		04:54	04:27
	16:34	83	14:05 (27)	17:50	21	09:42 (19)	18:56			21:07		22:14	22:51
24	09:02		11:06 (37)	07:49		09:21 (19)	06:30			06:02		04:52	04:27
	16:37	84	14:07 (27)	17:53	20	09:41 (19)	18:58			21:10		22:16	22:51
25	09:00		11:07 (37)	07:46		09:21 (19)	06:27			05:59		04:51	04:28
	16:39	84	14:52 (28)	17:55	20	09:41 (19)	19:01			21:12		22:18	22:51
26	08:58		11:09 (37)	07:44		09:21 (19)	06:24			05:57		04:49	04:28
	16:41	79	14:57 (28)	17:57	19	09:40 (19)	19:03			21:14		22:20	22:50
27	08:56		11:10 (37)	07:41		09:22 (19)	06:21			05:54		04:47	04:29
	16:44	86	15:12 (28)	18:00	16	09:38 (19)	19:05			21:17		22:22	22:50
28	08:54		11:13 (37)	07:38		09:23 (19)	06:18			05:52		04:46	04:30
	16:46	90	15:13 (28)	18:02	14	09:37 (19)	19:08			21:19		22:24	22:50
29	08:52		11:40 (32)				07:15			05:49		04:44	04:30
	16:49	88	15:14 (28)				20:10			21:21		22:25	22:50
30	08:50		11:39 (32)				07:12			05:46		04:42	04:31
	16:51	88	15:13 (28)				20:12			21:24		22:27	22:49
31	08:48		11:39 (32)				07:10					04:41	
	16:54	88	15:13 (28)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		1491			1104			9					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:12 (32)	09:00		10:44 (37)
	22:49	22:01	20:40	19:13			16:49	53	13:38 (27)	15:51	31	12:23 (24)
2	04:33	05:26	06:35	07:42			07:54		11:11 (32)	09:02		10:48 (37)
	22:48	21:58	20:37	19:10			16:46	58	13:40 (27)	15:50	27	12:23 (24)
3	04:34	05:28	06:37	07:44			07:56		11:11 (32)	09:03		12:01 (24)
	22:47	21:56	20:34	19:07			16:44	60	13:41 (27)	15:49	17	12:18 (24)
4	04:35	05:31	06:40	07:46			07:59		11:10 (32)	09:05		12:01 (24)
	22:47	21:54	20:31	19:04			16:41	63	13:41 (27)	15:48	13	12:14 (24)
5	04:36	05:33	06:42	07:48			08:01		11:10 (32)	09:07		12:02 (24)
	22:46	21:51	20:28	19:02			16:39	75	14:38 (28)	15:47	11	12:13 (24)
6	04:37	05:35	06:44	07:51			08:03		11:10 (32)	09:09		12:05 (24)
	22:45	21:49	20:25	18:59			16:37	79	14:40 (28)	15:46	5	12:10 (24)
7	04:39	05:37	06:46	07:53			08:06		11:09 (32)	09:10		12:07 (24)
	22:44	21:47	20:22	18:56			16:34	84	14:41 (28)	15:45	2	12:09 (24)
8	04:40	05:39	06:49	07:55			08:08		11:09 (32)	09:12		
	22:43	21:44	20:20	18:53			16:32	87	14:42 (28)	15:45		
9	04:41	05:42	06:51	07:57			08:11		11:10 (32)	09:13		
	22:42	21:42	20:17	18:50			16:30	87	14:43 (28)	15:44		
10	04:43	05:44	06:53	08:00			08:13		11:10 (32)	09:15		
	22:41	21:39	20:14	18:47			16:28	88	14:44 (28)	15:43		
11	04:44	05:46	06:55	08:02			08:15		11:10 (32)	09:16		
	22:39	21:37	20:11	18:45			16:25	88	14:44 (28)	15:43		
12	04:46	05:48	06:57	08:04		10:02 (19)	08:18		11:11 (32)	09:18		
	22:38	21:34	20:08	18:42	2	10:04 (19)	16:23	88	14:45 (28)	15:43		
13	04:47	05:51	07:00	08:07		09:58 (19)	08:20		11:12 (32)	09:19		
	22:37	21:32	20:05	18:39	11	10:09 (19)	16:21	86	14:45 (28)	15:42		
14	04:49	05:53	07:02	08:09		09:55 (19)	08:22		10:45 (37)	09:20		
	22:35	21:29	20:02	18:36	15	10:10 (19)	16:19	89	14:45 (28)	15:42		
15	04:51	05:55	07:04	08:11		09:54 (19)	08:25		10:42 (37)	09:21		
	22:34	21:26	19:59	18:33	18	10:12 (19)	16:17	87	14:45 (28)	15:42		
16	04:52	05:57	07:06	08:13		09:53 (19)	08:27		10:41 (37)	09:22		
	22:32	21:24	19:56	18:31	19	10:12 (19)	16:15	81	14:30 (28)	15:42		
17	04:54	06:00	07:08	08:16		09:53 (19)	08:30		10:41 (37)	09:23		
	22:30	21:21	19:54	18:28	20	10:13 (19)	16:13	83	14:25 (28)	15:42		
18	04:56	06:02	07:11	08:18		09:52 (19)	08:32		10:40 (37)	09:24		
	22:29	21:18	19:51	18:25	21	10:13 (19)	16:11	84	13:41 (27)	15:42		
19	04:58	06:04	07:13	08:20		09:52 (19)	08:34		10:40 (37)	09:25		
	22:27	21:16	19:48	18:22	21	10:13 (19)	16:09	83	13:40 (27)	15:42		
20	05:00	06:06	07:15	08:23		09:52 (19)	08:36		10:39 (37)	09:26		
	22:25	21:13	19:45	18:20	20	10:12 (19)	16:08	82	13:39 (27)	15:43		
21	05:01	06:08	07:17	08:25		09:52 (19)	08:39		10:39 (37)	09:26		
	22:24	21:10	19:42	18:17	20	10:12 (19)	16:06	80	13:38 (27)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (19)	08:41		10:40 (37)	09:27		
	22:22	21:08	19:39	18:14	19	10:11 (19)	16:04	75	13:37 (27)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (19)	08:43		10:39 (37)	09:27		
	22:20	21:05	19:36	18:12	17	10:10 (19)	16:02	69	13:35 (27)	15:44		
24	05:07	06:15	07:24	08:32		09:54 (19)	08:45		10:40 (37)	09:28		
	22:18	21:02	19:33	18:09	14	10:08 (19)	16:01	58	13:32 (27)	15:44		
25	05:09	06:17	07:26	07:35		08:56 (19)	08:47		10:40 (37)	09:28		
	22:16	20:59	19:30	17:06	11	09:07 (19)	15:59	45	12:20 (24)	15:45		
26	05:11	06:20	07:28	07:37		09:01 (19)	08:50		10:41 (37)	09:28		
	22:14	20:57	19:27	17:04	2	09:03 (19)	15:58	43	12:21 (24)	15:46		
27	05:13	06:22	07:30	07:39		11:20 (32)	08:52		10:41 (37)	09:28		
	22:12	20:54	19:25	17:01	14	11:34 (32)	15:56	43	12:21 (24)	15:47		
28	05:16	06:24	07:33	07:42		11:18 (32)	08:54		10:42 (37)	09:28		
	22:10	20:51	19:22	16:59	19	11:37 (32)	15:55	42	12:22 (24)	15:48		
29	05:18	06:26	07:35	07:44		11:15 (32)	08:56		10:42 (37)	09:28		
	22:07	20:48	19:19	16:56	34	13:32 (27)	15:54	42	12:22 (24)	15:49		
30	05:20	06:29	07:37	07:47		11:14 (32)	08:58		10:42 (37)	09:28		
	22:05	20:45	19:16	16:54	42	13:35 (27)	15:52	40	12:22 (24)	15:50		
31	05:22	06:31		07:49		11:13 (32)				09:28		
	22:03	20:42		16:51	50	13:38 (27)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					389			2122			106	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:12 (37)	08:46		11:58 (32)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (37)	16:56	88	15:21 (28)	18:05	20:17	21:26	22:30
2	09:27		11:11 (37)	08:43		11:59 (32)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (37)	16:58	85	15:21 (28)	18:07	20:19	21:28	22:32
3	09:27		11:11 (37)	08:41		12:00 (32)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (24)	17:01	84	15:21 (28)	18:09	20:21	21:31	22:34
4	09:27		11:11 (37)	08:39		11:59 (32)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (24)	17:03	82	15:20 (28)	18:12	20:24	21:33	22:35
5	09:26		11:11 (37)	08:37		11:59 (32)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (24)	17:06	81	15:19 (28)	18:14	20:26	21:35	22:37
6	09:25		11:11 (37)	08:34		12:00 (32)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (24)	17:08	75	15:18 (28)	18:17	20:28	21:37	22:38
7	09:24		11:11 (37)	08:32		12:01 (32)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (24)	17:11	64	15:14 (28)	18:19	20:30	21:40	22:39
8	09:24		11:11 (37)	08:30		12:02 (32)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (24)	17:13	57	14:25 (27)	18:21	20:33	21:42	22:40
9	09:23		11:12 (37)	08:27		12:03 (32)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (24)	17:16	53	14:24 (27)	18:24	20:35	21:44	22:42
10	09:22		11:11 (37)	08:25		12:04 (32)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (24)	17:18	48	14:23 (27)	18:26	20:37	21:46	22:43
11	09:21		11:12 (37)	08:23		12:06 (32)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (24)	17:21	43	14:22 (27)	18:28	20:40	21:49	22:44
12	09:20		11:12 (37)	08:20		12:07 (32)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (24)	17:23	35	14:20 (27)	18:31	20:42	21:51	22:45
13	09:18		11:12 (37)	08:18		12:10 (32)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (24)	17:26	22	14:16 (27)	18:33	20:44	21:53	22:46
14	09:17		11:12 (37)	08:15		09:38 (19)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (24)	17:28	10	12:19 (32)	18:35	20:47	21:55	22:47
15	09:16		11:12 (37)	08:13		09:35 (19)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (24)	17:31	12	09:47 (19)	18:38	20:49	21:58	22:47
16	09:15		11:12 (37)	08:10		09:33 (19)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (24)	17:33	16	09:49 (19)	18:40	20:51	22:00	22:48
17	09:13		11:13 (37)	08:07		09:32 (19)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (24)	17:36	18	09:50 (19)	18:42	20:53	22:02	22:49
18	09:12		11:14 (37)	08:05		09:31 (19)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (24)	17:38	20	09:51 (19)	18:45	20:56	22:04	22:49
19	09:10		11:15 (37)	08:02		09:31 (19)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (24)	17:40	20	09:51 (19)	18:47	20:58	22:06	22:50
20	09:08		11:15 (37)	08:00		09:30 (19)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (27)	17:43	21	09:51 (19)	18:49	21:00	22:08	22:50
21	09:07		11:16 (37)	07:57		09:30 (19)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (27)	17:45	21	09:51 (19)	18:51	21:03	22:10	22:50
22	09:05		11:16 (37)	07:54		09:29 (19)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (27)	17:48	22	09:51 (19)	18:54	21:05	22:12	22:50
23	09:03		11:17 (37)	07:52		09:30 (19)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (27)	17:50	21	09:51 (19)	18:56	21:07	22:14	22:51
24	09:02		11:19 (37)	07:49		09:31 (19)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (27)	17:53	19	09:50 (19)	18:58	21:10	22:16	22:51
25	09:00		11:20 (37)	07:46		09:31 (19)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (27)	17:55	18	09:49 (19)	19:01	21:12	22:18	22:51
26	08:58		11:23 (37)	07:44		09:32 (19)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (28)	17:57	15	09:47 (19)	19:03	21:14	22:20	22:50
27	08:56		11:58 (32)	07:41		09:34 (19)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (28)	18:00	11	09:45 (19)	19:05	21:17	22:22	22:50
28	08:54		11:58 (32)	07:38		09:38 (19)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (28)	18:02	2	09:40 (19)	19:07	21:19	22:24	22:50
29	08:52		11:59 (32)				07:15	05:49	04:44	04:30
	16:49	83	15:18 (28)				20:10	21:21	22:25	22:50
30	08:50		11:58 (32)				07:12	05:46	04:42	04:31
	16:51	86	15:21 (28)				20:12	21:24	22:27	22:49
31	08:48		11:58 (32)				07:10		04:41	
	16:54	88	15:22 (28)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1646			1063					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:33 (32)	09:00		10:54 (37)
	22:49	22:01	20:40	19:13			16:49	50	13:53 (27)	15:51	43	12:35 (24)
2	04:33	05:26	06:35	07:42			07:54		11:32 (32)	09:02		10:54 (37)
	22:48	21:58	20:37	19:10			16:46	54	13:54 (27)	15:50	42	12:35 (24)
3	04:34	05:28	06:37	07:44			07:56		11:32 (32)	09:03		10:55 (37)
	22:47	21:56	20:34	19:07			16:44	57	13:55 (27)	15:49	40	12:35 (24)
4	04:35	05:31	06:40	07:46			07:59		11:30 (32)	09:05		10:56 (37)
	22:47	21:54	20:31	19:04			16:41	68	14:45 (28)	15:48	39	12:35 (24)
5	04:36	05:33	06:42	07:48			08:01		11:30 (32)	09:07		10:56 (37)
	22:46	21:51	20:28	19:02			16:39	76	14:48 (28)	15:47	39	12:36 (24)
6	04:37	05:35	06:44	07:51			08:03		11:30 (32)	09:09		10:57 (37)
	22:45	21:49	20:25	18:59			16:37	78	14:49 (28)	15:46	30	12:36 (24)
7	04:39	05:37	06:46	07:53			08:06		11:29 (32)	09:10		10:58 (37)
	22:44	21:47	20:22	18:56			16:34	83	14:50 (28)	15:45	29	12:36 (24)
8	04:40	05:39	06:49	07:55			08:08		11:29 (32)	09:12		10:59 (37)
	22:43	21:44	20:20	18:53			16:32	86	14:51 (28)	15:45	15	12:33 (24)
9	04:41	05:42	06:51	07:57			08:11		11:29 (32)	09:13		11:00 (37)
	22:42	21:42	20:17	18:50			16:30	87	14:52 (28)	15:44	12	12:34 (24)
10	04:43	05:44	06:53	08:00			08:13		11:30 (32)	09:15		11:00 (37)
	22:41	21:39	20:14	18:47			16:28	88	14:53 (28)	15:43	4	12:31 (24)
11	04:44	05:46	06:55	08:02			08:15		11:29 (32)	09:16		11:02 (37)
	22:39	21:37	20:11	18:45			16:25	87	14:52 (28)	15:43	2	11:04 (37)
12	04:46	05:48	06:57	08:04			08:18		11:30 (32)	09:18		11:02 (37)
	22:38	21:34	20:08	18:42			16:23	87	14:53 (28)	15:43	2	11:04 (37)
13	04:47	05:51	07:00	08:07			08:20		11:30 (32)	09:19		
	22:37	21:31	20:05	18:39			16:21	83	14:50 (28)	15:42		
14	04:49	05:53	07:02	08:09		10:08 (19)	08:22		11:30 (32)	09:20		
	22:35	21:29	20:02	18:36	8	10:16 (19)	16:19	74	14:42 (28)	15:42		
15	04:51	05:55	07:04	08:11		10:06 (19)	08:25		11:31 (32)	09:21		
	22:34	21:26	19:59	18:33	13	10:19 (19)	16:17	68	14:38 (28)	15:42		
16	04:52	05:57	07:06	08:13		10:04 (19)	08:27		10:56 (37)	09:22		
	22:32	21:24	19:56	18:31	16	10:20 (19)	16:15	69	14:36 (28)	15:42		
17	04:54	06:00	07:08	08:16		10:03 (19)	08:30		10:54 (37)	09:23		
	22:30	21:21	19:54	18:28	18	10:21 (19)	16:13	73	13:55 (27)	15:42		
18	04:56	06:02	07:11	08:18		10:02 (19)	08:32		10:52 (37)	09:24		
	22:29	21:18	19:51	18:25	20	10:22 (19)	16:11	78	13:54 (27)	15:42		
19	04:58	06:04	07:13	08:20		10:01 (19)	08:34		10:52 (37)	09:25		
	22:27	21:16	19:48	18:22	21	10:22 (19)	16:09	81	13:54 (27)	15:42		
20	05:00	06:06	07:15	08:23		10:01 (19)	08:36		10:51 (37)	09:26		
	22:25	21:13	19:45	18:20	21	10:22 (19)	16:08	80	13:52 (27)	15:43		
21	05:01	06:08	07:17	08:25		10:01 (19)	08:39		10:51 (37)	09:26		
	22:24	21:10	19:42	18:17	21	10:22 (19)	16:06	78	13:51 (27)	15:43		
22	05:03	06:11	07:19	08:27		10:00 (19)	08:41		10:51 (37)	09:27		
	22:22	21:08	19:39	18:14	21	10:21 (19)	16:04	75	13:50 (27)	15:43		
23	05:05	06:13	07:22	08:30		10:01 (19)	08:43		10:51 (37)	09:27		
	22:20	21:05	19:36	18:12	20	10:21 (19)	16:02	64	12:31 (24)	15:44		
24	05:07	06:15	07:24	08:32		10:01 (19)	08:45		10:51 (37)	09:28		
	22:18	21:02	19:33	18:09	19	10:20 (19)	16:01	63	12:32 (24)	15:44		
25	05:09	06:17	07:26	07:35		09:02 (19)	08:47		10:51 (37)	09:28		
	22:16	20:59	19:30	17:06	18	09:20 (19)	15:59	60	12:32 (24)	15:45		
26	05:11	06:20	07:28	07:37		09:03 (19)	08:50		10:52 (37)	09:28		
	22:14	20:57	19:27	17:04	15	09:18 (19)	15:58	56	12:33 (24)	15:46		
27	05:13	06:22	07:30	07:39		09:05 (19)	08:52		10:51 (37)	09:28		
	22:12	20:54	19:25	17:01	11	09:16 (19)	15:56	53	12:33 (24)	15:47		
28	05:16	06:24	07:33	07:42		09:08 (19)	08:54		10:52 (37)	09:28		
	22:10	20:51	19:22	16:59	13	11:51 (32)	15:55	44	12:34 (24)	15:48		
29	05:18	06:26	07:35	07:44		11:38 (32)	08:56		10:53 (37)	09:28		
	22:07	20:48	19:19	16:56	26	13:46 (27)	15:54	43	12:34 (24)	15:49		
30	05:20	06:29	07:37	07:47		11:36 (32)	08:58		10:53 (37)	09:28		
	22:05	20:45	19:16	16:54	37	13:50 (27)	15:52	43	12:34 (24)	15:50		
31	05:22	06:31		07:49		11:35 (32)				09:28		11:11 (37)
	22:03	20:42		16:51	44	13:52 (27)				15:51	1	11:12 (37)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					362			2086			298	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:23 (37)	08:46	12:23 (32)	07:35	07:07	05:44	04:40
	15:53	17	11:40 (37)	16:56	82	15:30 (28)	18:05	20:17	21:26	22:30
2	09:27		11:23 (37)	08:43	12:24 (32)	07:33	07:04	05:41	04:38
	15:54	17	11:40 (37)	16:58	86	15:34 (28)	18:07	20:19	21:28	22:32
3	09:27		11:23 (37)	08:41	12:25 (32)	07:30	07:01	05:39	04:37
	15:55	18	11:41 (37)	17:01	84	15:34 (28)	18:09	20:21	21:31	22:34
4	09:26		11:23 (37)	08:39	12:25 (32)	07:27	06:58	05:36	04:36
	15:57	23	12:52 (24)	17:03	85	15:34 (28)	18:12	20:24	21:33	22:35
5	09:26		11:23 (37)	08:37	12:25 (32)	07:24	06:55	05:34	04:35
	15:58	25	12:53 (24)	17:06	82	15:33 (28)	18:14	20:26	21:35	22:37
6	09:25		11:24 (37)	08:34	12:26 (32)	07:21	06:52	05:31	04:34
	16:00	31	13:06 (24)	17:08	79	15:33 (28)	18:17	20:28	21:37	22:38
7	09:24		11:24 (37)	08:32	12:26 (32)	07:19	06:50	05:29	04:33
	16:02	34	13:07 (24)	17:11	74	15:31 (28)	18:19	20:30	21:40	22:39
8	09:24		11:24 (37)	08:30	12:28 (32)	07:16	06:47	05:26	04:32
	16:03	41	13:07 (24)	17:13	68	15:30 (28)	18:21	20:33	21:42	22:40
9	09:23		11:24 (37)	08:27	12:28 (32)	07:13	06:44	05:24	04:31
	16:05	42	13:07 (24)	17:16	60	15:26 (28)	18:24	20:35	21:44	22:42
10	09:22		11:25 (37)	08:25	12:29 (32)	07:10	06:41	05:22	04:30
	16:07	42	13:08 (24)	17:18	51	14:44 (27)	18:26	20:37	21:46	22:43
11	09:21		11:25 (37)	08:23	12:32 (32)	07:07	06:38	05:19	04:29
	16:09	43	13:09 (24)	17:21	45	14:43 (27)	18:28	20:40	21:49	22:44
12	09:20		11:25 (37)	08:20	09:49 (19)	07:04	06:35	05:17	04:29
	16:11	44	13:09 (24)	17:23	45	14:42 (27)	18:31	20:42	21:51	22:45
13	09:18		11:26 (37)	08:18	09:45 (19)	07:01	06:32	05:15	04:28
	16:13	44	13:10 (24)	17:26	43	14:40 (27)	18:33	20:44	21:53	22:46
14	09:17		11:26 (37)	08:15	09:44 (19)	06:59	06:30	05:13	04:28
	16:15	54	13:10 (24)	17:28	27	14:38 (27)	18:35	20:47	21:55	22:47
15	09:16		11:26 (37)	08:13	09:43 (19)	06:56	06:27	05:10	04:27
	16:17	57	13:10 (24)	17:31	18	10:01 (19)	18:38	20:49	21:58	22:47
16	09:15		11:27 (37)	08:10	09:42 (19)	06:53	06:24	05:08	04:27
	16:19	60	13:10 (24)	17:33	20	10:02 (19)	18:40	20:51	22:00	22:48
17	09:13		11:27 (37)	08:07	09:41 (19)	06:50	06:21	05:06	04:27
	16:21	63	13:10 (24)	17:35	21	10:02 (19)	18:42	20:53	22:02	22:49
18	09:12		11:28 (37)	08:05	09:41 (19)	06:47	06:19	05:04	04:27
	16:23	64	13:11 (24)	17:38	22	10:03 (19)	18:45	20:56	22:04	22:49
19	09:10		11:29 (37)	08:02	09:40 (19)	06:44	06:16	05:02	04:27
	16:25	63	13:11 (24)	17:40	23	10:03 (19)	18:47	20:58	22:06	22:50
20	09:08		11:30 (37)	08:00	09:40 (19)	06:41	06:13	05:00	04:27
	16:28	63	13:11 (24)	17:43	23	10:03 (19)	18:49	21:00	22:08	22:50
21	09:07		11:31 (37)	07:57	09:40 (19)	06:38	06:10	04:58	04:27
	16:30	62	13:11 (24)	17:45	22	10:02 (19)	18:51	21:03	22:10	22:50
22	09:05		11:31 (37)	07:54	09:40 (19)	06:36	06:08	04:56	04:27
	16:32	60	13:09 (24)	17:48	22	10:02 (19)	18:54	21:05	22:12	22:50
23	09:03		11:33 (37)	07:52	09:42 (19)	06:33	06:05	04:54	04:27
	16:34	66	14:33 (27)	17:50	20	10:02 (19)	18:56	21:07	22:14	22:50
24	09:02		11:35 (37)	07:49	09:42 (19)	06:30	06:02	04:52	04:27
	16:37	67	14:36 (27)	17:53	18	10:00 (19)	18:58	21:10	22:16	22:51
25	09:00		11:39 (37)	07:46	09:43 (19)	06:27	05:59	04:51	04:28
	16:39	58	14:38 (27)	17:55	16	09:59 (19)	19:01	21:12	22:18	22:50
26	08:58		12:24 (32)	07:44	09:45 (19)	06:24	05:57	04:49	04:28
	16:41	55	14:40 (27)	17:57	11	09:56 (19)	19:03	21:14	22:20	22:50
27	08:56		12:23 (32)	07:41	09:49 (19)	06:21	05:54	04:47	04:29
	16:44	57	14:40 (27)	18:00	2	09:51 (19)	19:05	21:17	22:22	22:50
28	08:54		12:23 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	61	15:15 (28)	18:02			19:07	21:19	22:24	22:50
29	08:52		12:24 (32)				07:15	05:49	04:44	04:30
	16:49	67	15:19 (28)				20:10	21:21	22:25	22:50
30	08:50		12:23 (32)				07:12	05:46	04:42	04:31
	16:51	74	15:23 (28)				20:12	21:24	22:27	22:49
31	08:48		12:24 (32)				07:10		04:41	
	16:53	77	15:26 (28)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1549			1149					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:59 (32)	09:00		11:07 (37)
	22:49	22:01	20:40	19:13			16:49	51	14:13 (27)	15:51	43	12:51 (24)
2	04:33	05:26	06:35	07:42			07:54		11:58 (32)	09:02		11:08 (37)
	22:48	21:58	20:37	19:10			16:46	61	14:57 (28)	15:50	42	12:51 (24)
3	04:34	05:28	06:37	07:44			07:56		11:57 (32)	09:03		11:08 (37)
	22:47	21:56	20:34	19:07			16:44	71	15:00 (28)	15:49	42	12:51 (24)
4	04:35	05:31	06:40	07:46			07:59		11:56 (32)	09:05		11:09 (37)
	22:47	21:54	20:31	19:04			16:41	76	15:01 (28)	15:48	41	12:52 (24)
5	04:36	05:33	06:42	07:48			08:01		11:55 (32)	09:07		11:09 (37)
	22:46	21:51	20:28	19:02			16:39	80	15:02 (28)	15:47	35	12:52 (24)
6	04:37	05:35	06:44	07:51			08:03		11:55 (32)	09:09		11:10 (37)
	22:45	21:49	20:25	18:59			16:37	82	15:03 (28)	15:46	31	12:52 (24)
7	04:38	05:37	06:46	07:53			08:06		11:54 (32)	09:10		11:11 (37)
	22:44	21:47	20:22	18:56			16:34	84	15:03 (28)	15:45	24	12:40 (24)
8	04:40	05:39	06:49	07:55			08:08		11:54 (32)	09:12		11:11 (37)
	22:43	21:44	20:20	18:53			16:32	87	15:04 (28)	15:45	24	12:41 (24)
9	04:41	05:42	06:51	07:57			08:11		11:55 (32)	09:13		11:12 (37)
	22:42	21:42	20:17	18:50			16:30	87	15:05 (28)	15:44	20	12:37 (24)
10	04:43	05:44	06:53	08:00			08:13		11:55 (32)	09:15		11:12 (37)
	22:40	21:39	20:14	18:47			16:28	81	15:01 (28)	15:43	17	11:29 (37)
11	04:44	05:46	06:55	08:02			08:15		11:54 (32)	09:16		11:14 (37)
	22:39	21:37	20:11	18:45			16:25	78	14:57 (28)	15:43	16	11:30 (37)
12	04:46	05:48	06:57	08:04			08:18		11:55 (32)	09:18		11:14 (37)
	22:38	21:34	20:08	18:42			16:23	74	14:55 (28)	15:43	15	11:29 (37)
13	04:47	05:51	07:00	08:07			08:20		11:56 (32)	09:19		11:15 (37)
	22:37	21:31	20:05	18:39			16:21	67	14:51 (28)	15:42	15	11:30 (37)
14	04:49	05:53	07:02	08:09			08:22		11:55 (32)	09:20		11:16 (37)
	22:35	21:29	20:02	18:36			16:19	62	14:47 (28)	15:42	14	11:30 (37)
15	04:51	05:55	07:04	08:11		10:19 (19)	08:25		11:56 (32)	09:21		11:16 (37)
	22:34	21:26	19:59	18:33	8	10:27 (19)	16:17	57	14:13 (27)	15:42	14	11:30 (37)
16	04:52	05:57	07:06	08:13		10:16 (19)	08:27		11:57 (32)	09:22		11:17 (37)
	22:32	21:24	19:56	18:31	13	10:29 (19)	16:15	54	14:12 (27)	15:42	12	11:29 (37)
17	04:54	06:00	07:08	08:16		10:15 (19)	08:29		11:12 (37)	09:23		11:17 (37)
	22:30	21:21	19:54	18:28	16	10:31 (19)	16:13	58	14:11 (27)	15:42	12	11:29 (37)
18	04:56	06:02	07:11	08:18		10:13 (19)	08:32		11:09 (37)	09:24		11:18 (37)
	22:29	21:18	19:51	18:25	19	10:32 (19)	16:11	67	14:10 (27)	15:42	11	11:29 (37)
19	04:58	06:04	07:13	08:20		10:12 (19)	08:34		11:08 (37)	09:25		11:19 (37)
	22:27	21:16	19:48	18:22	21	10:33 (19)	16:09	66	14:08 (27)	15:42	11	11:30 (37)
20	05:00	06:06	07:15	08:23		10:11 (19)	08:36		11:06 (37)	09:26		11:20 (37)
	22:25	21:13	19:45	18:20	22	10:33 (19)	16:08	60	12:44 (24)	15:43	10	11:30 (37)
21	05:01	06:08	07:17	08:25		10:11 (19)	08:39		11:06 (37)	09:26		11:20 (37)
	22:24	21:10	19:42	18:17	23	10:34 (19)	16:06	62	12:46 (24)	15:43	10	11:30 (37)
22	05:03	06:11	07:19	08:27		10:10 (19)	08:41		11:06 (37)	09:27		11:21 (37)
	22:22	21:08	19:39	18:14	23	10:33 (19)	16:04	63	12:47 (24)	15:43	10	11:31 (37)
23	05:05	06:13	07:22	08:30		10:11 (19)	08:43		11:05 (37)	09:27		11:21 (37)
	22:20	21:05	19:36	18:12	22	10:33 (19)	16:02	63	12:47 (24)	15:44	10	11:31 (37)
24	05:07	06:15	07:24	08:32		10:10 (19)	08:45		11:05 (37)	09:28		11:22 (37)
	22:18	21:02	19:33	18:09	22	10:32 (19)	16:01	64	12:48 (24)	15:44	10	11:32 (37)
25	05:09	06:17	07:26	07:35		09:11 (19)	08:47		11:05 (37)	09:28		11:22 (37)
	22:16	20:59	19:30	17:06	21	09:32 (19)	15:59	63	12:48 (24)	15:45	11	11:33 (37)
26	05:11	06:20	07:28	07:37		09:11 (19)	08:50		11:06 (37)	09:28		11:22 (37)
	22:14	20:56	19:27	17:04	20	09:31 (19)	15:58	59	12:49 (24)	15:46	12	11:34 (37)
27	05:13	06:22	07:30	07:39		09:12 (19)	08:52		11:05 (37)	09:28		11:23 (37)
	22:12	20:54	19:25	17:01	18	09:30 (19)	15:56	57	12:49 (24)	15:47	11	11:34 (37)
28	05:16	06:24	07:33	07:42		09:14 (19)	08:54		11:06 (37)	09:28		11:23 (37)
	22:10	20:51	19:22	16:59	28	14:08 (27)	15:55	53	12:50 (24)	15:48	13	11:36 (37)
29	05:18	06:26	07:35	07:44		09:15 (19)	08:56		11:06 (37)	09:28		11:22 (37)
	22:07	20:48	19:19	16:56	44	14:10 (27)	15:54	44	12:50 (24)	15:49	14	11:36 (37)
30	05:20	06:29	07:37	07:47		09:19 (19)	08:58		11:06 (37)	09:28		11:23 (37)
	22:05	20:45	19:16	16:54	44	14:11 (27)	15:52	43	12:50 (24)	15:50	15	11:38 (37)
31	05:22	06:31		07:49		12:01 (32)				09:28		11:23 (37)
	22:03	20:42		16:51	46	14:13 (27)				15:51	15	11:38 (37)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					410			1974			580	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		08:46		11:27 (32)	07:35	07:07	05:44	04:40
	15:53		16:56	70	14:51 (28)	18:05	20:17	21:26	22:31
2	09:27	12:04 (24)	08:43		11:27 (32)	07:33	07:04	05:41	04:38
	15:54	1 12:05 (24)	16:58	60	13:50 (27)	18:07	20:19	21:28	22:32
3	09:27	12:04 (24)	08:41		11:28 (32)	07:30	07:01	05:39	04:37
	15:55	4 12:08 (24)	17:01	58	13:50 (27)	18:09	20:21	21:31	22:34
4	09:27	12:04 (24)	08:39		11:28 (32)	07:27	06:58	05:36	04:36
	15:57	7 12:11 (24)	17:03	54	13:48 (27)	18:12	20:24	21:33	22:35
5	09:26	12:04 (24)	08:37		11:28 (32)	07:24	06:55	05:34	04:35
	15:58	17 12:21 (24)	17:06	52	13:47 (27)	18:14	20:26	21:35	22:37
6	09:25	12:05 (24)	08:34		11:29 (32)	07:21	06:52	05:31	04:34
	16:00	16 12:21 (24)	17:08	49	13:47 (27)	18:17	20:28	21:37	22:38
7	09:24	12:05 (24)	08:32		11:29 (32)	07:19	06:50	05:29	04:33
	16:02	19 12:26 (24)	17:11	43	13:44 (27)	18:19	20:30	21:40	22:39
8	09:24	12:05 (24)	08:30		11:31 (32)	07:16	06:47	05:26	04:32
	16:03	22 12:27 (24)	17:13	35	13:42 (27)	18:21	20:33	21:42	22:40
9	09:23	12:06 (24)	08:27		11:32 (32)	07:13	06:44	05:24	04:31
	16:05	22 12:28 (24)	17:16	22	11:54 (32)	18:24	20:35	21:44	22:42
10	09:22	12:06 (24)	08:25		11:34 (32)	07:10	06:41	05:22	04:30
	16:07	22 12:28 (24)	17:18	18	11:52 (32)	18:26	20:37	21:46	22:43
11	09:21	12:07 (24)	08:23		11:37 (32)	07:07	06:38	05:19	04:29
	16:09	22 12:29 (24)	17:21	14	11:51 (32)	18:28	20:40	21:49	22:44
12	09:20	12:07 (24)	08:20		11:41 (32)	07:04	06:35	05:17	04:29
	16:11	28 13:33 (27)	17:23	4	11:45 (32)	18:31	20:42	21:51	22:45
13	09:18	12:08 (24)	08:18			07:02	06:32	05:15	04:28
	16:13	33 13:37 (27)	17:26			18:33	20:44	21:53	22:46
14	09:17	12:08 (24)	08:15		09:30 (19)	06:59	06:30	05:13	04:28
	16:15	36 13:38 (27)	17:28	5	09:35 (19)	18:35	20:47	21:55	22:47
15	09:16	11:34 (32)	08:13		09:27 (19)	06:56	06:27	05:10	04:27
	16:17	47 13:40 (27)	17:31	11	09:38 (19)	18:38	20:49	21:58	22:47
16	09:15	11:32 (32)	08:10		09:25 (19)	06:53	06:24	05:08	04:27
	16:19	54 13:41 (27)	17:33	14	09:39 (19)	18:40	20:51	22:00	22:48
17	09:13	11:31 (32)	08:07		09:23 (19)	06:50	06:21	05:06	04:27
	16:21	57 13:43 (27)	17:36	17	09:40 (19)	18:42	20:53	22:02	22:49
18	09:12	11:30 (32)	08:05		09:23 (19)	06:47	06:19	05:04	04:27
	16:23	72 14:53 (28)	17:38	18	09:41 (19)	18:45	20:56	22:04	22:49
19	09:10	11:29 (32)	08:02		09:22 (19)	06:44	06:16	05:02	04:27
	16:25	85 14:53 (28)	17:40	19	09:41 (19)	18:47	20:58	22:06	22:50
20	09:09	11:28 (32)	08:00		09:22 (19)	06:41	06:13	05:00	04:27
	16:28	88 14:54 (28)	17:43	19	09:41 (19)	18:49	21:00	22:08	22:50
21	09:07	11:28 (32)	07:57		09:22 (19)	06:39	06:10	04:58	04:27
	16:30	88 14:54 (28)	17:45	19	09:41 (19)	18:51	21:03	22:10	22:50
22	09:05	11:28 (32)	07:54		09:22 (19)	06:36	06:08	04:56	04:27
	16:32	89 14:55 (28)	17:48	19	09:41 (19)	18:54	21:05	22:12	22:50
23	09:03	11:26 (32)	07:52		09:23 (19)	06:33	06:05	04:54	04:27
	16:34	87 14:54 (28)	17:50	18	09:41 (19)	18:56	21:07	22:14	22:51
24	09:02	11:26 (32)	07:49		09:23 (19)	06:30	06:02	04:52	04:27
	16:37	81 14:55 (28)	17:53	17	09:40 (19)	18:58	21:10	22:16	22:51
25	09:00	11:26 (32)	07:46		09:24 (19)	06:27	05:59	04:51	04:28
	16:39	82 14:55 (28)	17:55	14	09:38 (19)	19:01	21:12	22:18	22:51
26	08:58	11:26 (32)	07:44		09:25 (19)	06:24	05:57	04:49	04:28
	16:41	83 14:55 (28)	17:57	11	09:36 (19)	19:03	21:14	22:20	22:50
27	08:56	11:25 (32)	07:41		09:30 (19)	06:21	05:54	04:47	04:29
	16:44	83 14:54 (28)	18:00	1	09:31 (19)	19:05	21:17	22:22	22:50
28	08:54	11:26 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	82 14:54 (28)	18:02			19:08	21:19	22:24	22:50
29	08:52	11:26 (32)				07:15	05:49	04:44	04:30
	16:49	80 14:54 (28)				20:10	21:21	22:25	22:50
30	08:50	11:26 (32)				07:13	05:46	04:42	04:31
	16:51	79 14:53 (28)				20:12	21:24	22:27	22:49
31	08:48	11:26 (32)				07:10		04:41	
	16:54	76 14:52 (28)				20:14		22:29	
Potential sun hours	221		260			365	432	521	547
Total, worst case		1562		681					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December	
1	04:32	05:24	06:33	07:39		07:51		11:03 (32)	09:00		11:49 (24)
	22:49	22:01	20:40	19:13		16:49	19	11:22 (32)	15:51	22	12:11 (24)
2	04:33	05:26	06:35	07:42		07:54		11:01 (32)	09:02		11:49 (24)
	22:48	21:59	20:37	19:10		16:46	23	11:24 (32)	15:50	22	12:11 (24)
3	04:34	05:28	06:37	07:44		07:56		11:01 (32)	09:03		11:49 (24)
	22:47	21:56	20:34	19:07		16:44	36	13:12 (27)	15:49	22	12:11 (24)
4	04:35	05:31	06:40	07:46		07:59		10:59 (32)	09:05		11:50 (24)
	22:47	21:54	20:31	19:04		16:41	43	13:14 (27)	15:48	21	12:11 (24)
5	04:36	05:33	06:42	07:48		08:01		10:59 (32)	09:07		11:50 (24)
	22:46	21:51	20:28	19:02		16:39	48	13:16 (27)	15:47	21	12:11 (24)
6	04:37	05:35	06:44	07:51		08:03		10:58 (32)	09:09		11:51 (24)
	22:45	21:49	20:25	18:59		16:37	53	13:18 (27)	15:46	16	12:07 (24)
7	04:39	05:37	06:46	07:53		08:06		10:57 (32)	09:10		11:51 (24)
	22:44	21:47	20:23	18:56		16:34	55	13:18 (27)	15:45	17	12:08 (24)
8	04:40	05:39	06:49	07:55		08:08		10:57 (32)	09:12		11:52 (24)
	22:43	21:44	20:20	18:53		16:32	58	13:19 (27)	15:45	8	12:00 (24)
9	04:41	05:42	06:51	07:57		08:11		10:57 (32)	09:13		11:53 (24)
	22:42	21:42	20:17	18:50		16:30	63	14:18 (28)	15:44	4	11:57 (24)
10	04:43	05:44	06:53	08:00		08:13		10:58 (32)	09:15		11:53 (24)
	22:41	21:39	20:14	18:47		16:28	71	14:22 (28)	15:43	1	11:54 (24)
11	04:44	05:46	06:55	08:02		08:15		10:57 (32)	09:16		
	22:39	21:37	20:11	18:45		16:25	76	14:23 (28)	15:43		
12	04:46	05:48	06:57	08:04		08:18		10:57 (32)	09:18		
	22:38	21:34	20:08	18:42		16:23	80	14:25 (28)	15:43		
13	04:47	05:51	07:00	08:07		08:20		10:58 (32)	09:19		
	22:37	21:32	20:05	18:39		16:21	81	14:26 (28)	15:42		
14	04:49	05:53	07:02	08:09		08:22		10:58 (32)	09:20		
	22:35	21:29	20:02	18:36		16:19	82	14:26 (28)	15:42		
15	04:51	05:55	07:04	08:11	10:00 (19)	08:25		10:58 (32)	09:21		
	22:34	21:26	19:59	18:33	7 10:07 (19)	16:17	83	14:27 (28)	15:42		
16	04:52	05:57	07:06	08:13	09:57 (19)	08:27		10:59 (32)	09:22		
	22:32	21:24	19:56	18:31	12 10:09 (19)	16:15	83	14:28 (28)	15:42		
17	04:54	06:00	07:08	08:16	09:56 (19)	08:30		11:00 (32)	09:23		
	22:31	21:21	19:54	18:28	15 10:11 (19)	16:13	83	14:29 (28)	15:42		
18	04:56	06:02	07:11	08:18	09:54 (19)	08:32		11:00 (32)	09:24		
	22:29	21:18	19:51	18:25	17 10:11 (19)	16:11	81	14:29 (28)	15:42		
19	04:58	06:04	07:13	08:20	09:54 (19)	08:34		11:01 (32)	09:25		
	22:27	21:16	19:48	18:22	18 10:12 (19)	16:09	87	14:29 (28)	15:42		
20	05:00	06:06	07:15	08:23	09:53 (19)	08:36		11:02 (32)	09:26		
	22:25	21:13	19:45	18:20	19 10:12 (19)	16:08	88	14:29 (28)	15:43		
21	05:01	06:08	07:17	08:25	09:53 (19)	08:39		11:03 (32)	09:26		
	22:24	21:10	19:42	18:17	19 10:12 (19)	16:06	88	14:29 (28)	15:43		
22	05:03	06:11	07:19	08:27	09:52 (19)	08:41		11:04 (32)	09:27		
	22:22	21:08	19:39	18:14	20 10:12 (19)	16:04	88	14:30 (28)	15:43		
23	05:05	06:13	07:22	08:30	09:53 (19)	08:43		11:05 (32)	09:27		
	22:20	21:05	19:36	18:12	19 10:12 (19)	16:02	84	14:29 (28)	15:44		
24	05:07	06:15	07:24	08:32	09:53 (19)	08:45		11:07 (32)	09:28		
	22:18	21:02	19:33	18:09	17 10:10 (19)	16:01	72	14:30 (28)	15:44		
25	05:09	06:17	07:26	07:35	08:54 (19)	08:47		11:08 (32)	09:28		
	22:16	20:59	19:30	17:06	16 09:10 (19)	15:59	58	13:20 (27)	15:45		
26	05:11	06:20	07:28	07:37	08:55 (19)	08:50		11:11 (32)	09:28		
	22:14	20:57	19:27	17:04	14 09:09 (19)	15:58	53	13:20 (27)	15:46		
27	05:13	06:22	07:30	07:39	08:56 (19)	08:52		11:13 (32)	09:28		
	22:12	20:54	19:25	17:01	10 09:06 (19)	15:56	47	13:19 (27)	15:47		
28	05:16	06:24	07:33	07:42		08:54		11:48 (24)	09:28		
	22:10	20:51	19:22	16:59		15:55	35	13:18 (27)	15:48		
29	05:18	06:26	07:35	07:44		08:56		11:48 (24)	09:28		
	22:07	20:48	19:19	16:56		15:54	33	13:17 (27)	15:49		
30	05:20	06:29	07:37	07:47	11:09 (32)	08:58		11:48 (24)	09:28		
	22:05	20:45	19:16	16:54	7 11:16 (32)	15:52	30	13:15 (27)	15:50		
31	05:22	06:31		07:49	11:06 (32)				09:28		
	22:03	20:42		16:51	15 11:21 (32)				15:51		
Potential sun hours	546	478	386	319		236			199		
Total, worst case					225		1881			154	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		12:18 (24)	08:46		11:53 (32)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (24)	16:56	49	14:04 (27)	18:05	20:17	21:26	22:31
2	09:27		12:18 (24)	08:43		11:54 (32)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (24)	16:58	44	14:02 (27)	18:07	20:19	21:28	22:32
3	09:27		11:54 (32)	08:41		11:56 (32)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (24)	17:01	39	14:01 (27)	18:09	20:21	21:31	22:34
4	09:27		11:52 (32)	08:39		11:57 (32)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (24)	17:03	32	13:59 (27)	18:12	20:24	21:33	22:35
5	09:26		11:51 (32)	08:37		11:59 (32)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (24)	17:06	19	13:55 (27)	18:14	20:26	21:35	22:37
6	09:25		11:50 (32)	08:34		12:04 (32)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (24)	17:08	5	12:09 (32)	18:17	20:28	21:37	22:38
7	09:24		11:50 (32)	08:32			07:19	06:50	05:29	04:33
	16:02	42	13:46 (27)	17:11			18:19	20:30	21:40	22:39
8	09:24		11:50 (32)	08:30			07:16	06:47	05:26	04:32
	16:03	48	13:49 (27)	17:13			18:21	20:33	21:42	22:40
9	09:23		11:50 (32)	08:27		09:42 (19)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (27)	17:16	7	09:49 (19)	18:24	20:35	21:44	22:42
10	09:22		11:49 (32)	08:25		09:40 (19)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (27)	17:18	12	09:52 (19)	18:26	20:37	21:46	22:43
11	09:21		11:49 (32)	08:23		09:39 (19)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (27)	17:21	15	09:54 (19)	18:28	20:40	21:49	22:44
12	09:20		11:48 (32)	08:20		09:37 (19)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (27)	17:23	17	09:54 (19)	18:31	20:42	21:51	22:45
13	09:18		11:49 (32)	08:18		09:36 (19)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (27)	17:26	19	09:55 (19)	18:33	20:44	21:53	22:46
14	09:17		11:48 (32)	08:15		09:37 (19)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (27)	17:28	19	09:56 (19)	18:35	20:47	21:55	22:47
15	09:16		11:48 (32)	08:13		09:36 (19)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (28)	17:31	20	09:56 (19)	18:38	20:49	21:58	22:47
16	09:15		11:47 (32)	08:10		09:36 (19)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (28)	17:33	20	09:56 (19)	18:40	20:51	22:00	22:48
17	09:13		11:48 (32)	08:07		09:36 (19)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (28)	17:36	19	09:55 (19)	18:42	20:53	22:02	22:49
18	09:12		11:48 (32)	08:05		09:37 (19)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (28)	17:38	19	09:56 (19)	18:45	20:56	22:04	22:49
19	09:10		11:48 (32)	08:02		09:37 (19)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (28)	17:40	18	09:55 (19)	18:47	20:58	22:06	22:50
20	09:08		11:48 (32)	08:00		09:38 (19)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (28)	17:43	15	09:53 (19)	18:49	21:00	22:08	22:50
21	09:07		11:48 (32)	07:57		09:39 (19)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (28)	17:45	13	09:52 (19)	18:51	21:03	22:10	22:50
22	09:05		11:48 (32)	07:54		09:41 (19)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (28)	17:48	8	09:49 (19)	18:54	21:05	22:12	22:50
23	09:03		11:48 (32)	07:52			06:33	06:05	04:54	04:27
	16:34	80	15:02 (28)	17:50			18:56	21:07	22:14	22:51
24	09:02		11:48 (32)	07:49			06:30	06:02	04:52	04:27
	16:37	80	15:02 (28)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:49 (32)	07:46			06:27	05:59	04:51	04:28
	16:39	80	15:02 (28)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:49 (32)	07:44			06:24	05:57	04:49	04:28
	16:41	79	15:02 (28)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:49 (32)	07:41			06:21	05:54	04:47	04:29
	16:44	75	15:01 (28)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:50 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	73	15:01 (28)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:51 (32)				07:15	05:49	04:44	04:30
	16:49	69	15:00 (28)				20:10	21:21	22:25	22:50
30	08:50		11:51 (32)				07:12	05:46	04:42	04:31
	16:51	64	14:58 (28)				20:12	21:24	22:27	22:49
31	08:48		11:52 (32)				07:10		04:41	
	16:54	55	14:55 (28)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1930			409					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (19)	09:00		11:31 (32)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (19)	15:51	60	13:37 (27)
2	04:33	05:26	06:35	07:42			07:54		09:12 (19)	09:02		11:32 (32)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (19)	15:50	56	13:36 (27)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (27)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (32)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (27)
5	04:36	05:33	06:42	07:48			08:01		11:32 (32)	09:07		11:35 (32)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (32)	15:47	43	13:32 (27)
6	04:37	05:35	06:44	07:51			08:03		11:29 (32)	09:09		11:37 (32)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (27)	15:46	36	12:27 (24)
7	04:38	05:37	06:46	07:53			08:06		11:27 (32)	09:10		11:38 (32)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (27)	15:45	34	12:27 (24)
8	04:40	05:39	06:49	07:55			08:08		11:25 (32)	09:12		11:40 (32)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (27)	15:45	32	12:28 (24)
9	04:41	05:42	06:51	07:57			08:11		11:25 (32)	09:13		11:42 (32)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (27)	15:44	28	12:28 (24)
10	04:43	05:44	06:53	08:00			08:13		11:24 (32)	09:15		12:07 (24)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (27)	15:43	21	12:28 (24)
11	04:44	05:46	06:55	08:02			08:15		11:23 (32)	09:16		12:08 (24)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (28)	15:43	21	12:29 (24)
12	04:46	05:48	06:57	08:04			08:18		11:23 (32)	09:18		12:08 (24)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (28)	15:43	21	12:29 (24)
13	04:47	05:51	07:00	08:07			08:20		11:23 (32)	09:19		12:09 (24)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (28)	15:42	21	12:30 (24)
14	04:49	05:53	07:02	08:09			08:22		11:22 (32)	09:20		12:09 (24)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (28)	15:42	21	12:30 (24)
15	04:51	05:55	07:04	08:11			08:25		11:22 (32)	09:21		12:09 (24)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (28)	15:42	21	12:30 (24)
16	04:52	05:57	07:06	08:13			08:27		11:22 (32)	09:22		12:10 (24)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (28)	15:42	20	12:30 (24)
17	04:54	06:00	07:08	08:16			08:30		11:23 (32)	09:23		12:10 (24)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (28)	15:42	21	12:31 (24)
18	04:56	06:02	07:11	08:18			08:32		11:22 (32)	09:24		12:11 (24)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (28)	15:42	20	12:31 (24)
19	04:58	06:04	07:13	08:20			08:34		11:23 (32)	09:25		12:12 (24)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (28)	15:42	20	12:32 (24)
20	05:00	06:06	07:15	08:23		10:11 (19)	08:36		11:22 (32)	09:26		12:12 (24)
	22:25	21:13	19:45	18:20	10	10:21 (19)	16:08	82	14:37 (28)	15:43	20	12:32 (24)
21	05:01	06:08	07:17	08:25		10:10 (19)	08:39		11:23 (32)	09:26		12:12 (24)
	22:24	21:10	19:42	18:17	13	10:23 (19)	16:06	80	14:37 (28)	15:43	20	12:32 (24)
22	05:03	06:11	07:19	08:27		10:08 (19)	08:41		11:24 (32)	09:27		12:13 (24)
	22:22	21:08	19:39	18:14	16	10:24 (19)	16:04	79	14:38 (28)	15:43	20	12:33 (24)
23	05:05	06:13	07:22	08:30		10:07 (19)	08:43		11:24 (32)	09:27		12:13 (24)
	22:20	21:05	19:36	18:12	18	10:25 (19)	16:02	84	14:38 (28)	15:44	20	12:33 (24)
24	05:07	06:15	07:24	08:32		10:06 (19)	08:45		11:25 (32)	09:28		12:14 (24)
	22:18	21:02	19:33	18:09	19	10:25 (19)	16:01	88	14:38 (28)	15:44	21	12:35 (24)
25	05:09	06:17	07:26	07:35		09:06 (19)	08:47		11:25 (32)	09:28		12:15 (24)
	22:16	20:59	19:30	17:06	20	09:26 (19)	15:59	88	14:38 (28)	15:45	20	12:35 (24)
26	05:11	06:20	07:28	07:37		09:06 (19)	08:50		11:26 (32)	09:28		12:15 (24)
	22:14	20:57	19:27	17:04	20	09:26 (19)	15:58	81	14:37 (28)	15:46	20	12:35 (24)
27	05:13	06:22	07:30	07:39		09:06 (19)	08:52		11:27 (32)	09:28		12:16 (24)
	22:12	20:54	19:25	17:01	19	09:25 (19)	15:56	73	14:26 (28)	15:47	20	12:36 (24)
28	05:16	06:24	07:33	07:42		09:06 (19)	08:54		11:28 (32)	09:28		12:16 (24)
	22:10	20:51	19:22	16:59	19	09:25 (19)	15:55	65	13:38 (27)	15:48	21	12:37 (24)
29	05:18	06:26	07:35	07:44		09:06 (19)	08:56		11:29 (32)	09:28		12:16 (24)
	22:07	20:48	19:19	16:56	18	09:24 (19)	15:54	64	13:37 (27)	15:49	20	12:36 (24)
30	05:20	06:29	07:37	07:47		09:07 (19)	08:58		11:29 (32)	09:28		12:17 (24)
	22:05	20:45	19:16	16:54	17	09:24 (19)	15:52	62	13:37 (27)	15:50	20	12:37 (24)
31	05:22	06:31		07:49		09:08 (19)				09:28		12:16 (24)
	22:03	20:42		16:51	15	09:23 (19)				15:51	21	12:37 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		12:08 (24)	08:46		11:39 (32)	07:35	07:07	05:44	04:40
	15:53	21	12:29 (24)	16:56	49	13:50 (27)	18:05	20:17	21:26	22:31
2	09:27		12:08 (24)	08:43		11:40 (32)	07:33	07:04	05:41	04:38
	15:54	21	12:29 (24)	16:58	44	13:48 (27)	18:07	20:19	21:28	22:32
3	09:27		12:09 (24)	08:41		11:41 (32)	07:30	07:01	05:39	04:37
	15:55	20	12:29 (24)	17:01	39	13:47 (27)	18:09	20:21	21:31	22:34
4	09:27		12:09 (24)	08:39		11:42 (32)	07:27	06:58	05:36	04:36
	15:57	21	12:30 (24)	17:03	32	13:45 (27)	18:12	20:24	21:33	22:35
5	09:26		12:09 (24)	08:37		11:43 (32)	07:24	06:55	05:34	04:35
	15:58	21	12:30 (24)	17:06	19	12:02 (32)	18:14	20:26	21:35	22:37
6	09:25		12:10 (24)	08:34		11:46 (32)	07:21	06:52	05:31	04:34
	16:00	25	13:32 (27)	17:08	14	12:00 (32)	18:17	20:28	21:37	22:38
7	09:24		11:43 (32)	08:32		11:50 (32)	07:19	06:50	05:29	04:33
	16:02	33	13:35 (27)	17:11	6	11:56 (32)	18:19	20:30	21:40	22:39
8	09:24		11:41 (32)	08:30			07:16	06:47	05:26	04:32
	16:03	41	13:37 (27)	17:13			18:21	20:33	21:42	22:41
9	09:23		11:40 (32)	08:27			07:13	06:44	05:24	04:31
	16:05	47	13:39 (27)	17:16			18:24	20:35	21:44	22:42
10	09:22		11:38 (32)	08:25		09:39 (19)	07:10	06:41	05:22	04:30
	16:07	51	13:40 (27)	17:18	3	09:42 (19)	18:26	20:37	21:46	22:43
11	09:21		11:38 (32)	08:23		09:36 (19)	07:07	06:38	05:19	04:29
	16:09	55	13:42 (27)	17:21	10	09:46 (19)	18:28	20:40	21:49	22:44
12	09:20		11:37 (32)	08:20		09:34 (19)	07:04	06:35	05:17	04:29
	16:11	60	14:46 (28)	17:23	14	09:48 (19)	18:31	20:42	21:51	22:45
13	09:18		11:37 (32)	08:18		09:33 (19)	07:02	06:32	05:15	04:28
	16:13	72	14:49 (28)	17:26	16	09:49 (19)	18:33	20:44	21:53	22:46
14	09:17		11:36 (32)	08:15		09:33 (19)	06:59	06:30	05:13	04:28
	16:15	83	14:49 (28)	17:28	17	09:50 (19)	18:35	20:47	21:55	22:47
15	09:16		11:36 (32)	08:13		09:32 (19)	06:56	06:27	05:10	04:27
	16:17	87	14:50 (28)	17:31	18	09:50 (19)	18:38	20:49	21:58	22:47
16	09:15		11:35 (32)	08:10		09:31 (19)	06:53	06:24	05:08	04:27
	16:19	86	14:50 (28)	17:33	19	09:50 (19)	18:40	20:51	22:00	22:48
17	09:13		11:36 (32)	08:07		09:31 (19)	06:50	06:21	05:06	04:27
	16:21	87	14:51 (28)	17:36	19	09:50 (19)	18:42	20:53	22:02	22:49
18	09:12		11:36 (32)	08:05		09:32 (19)	06:47	06:19	05:04	04:27
	16:23	89	14:52 (28)	17:38	19	09:51 (19)	18:45	20:56	22:04	22:49
19	09:10		11:36 (32)	08:02		09:32 (19)	06:44	06:16	05:02	04:27
	16:25	87	14:52 (28)	17:40	18	09:50 (19)	18:47	20:58	22:06	22:50
20	09:09		11:35 (32)	08:00		09:32 (19)	06:41	06:13	05:00	04:27
	16:28	85	14:53 (28)	17:43	17	09:49 (19)	18:49	21:00	22:08	22:50
21	09:07		11:35 (32)	07:57		09:33 (19)	06:39	06:10	04:58	04:27
	16:30	79	14:53 (28)	17:45	15	09:48 (19)	18:51	21:03	22:10	22:50
22	09:05		11:36 (32)	07:54		09:34 (19)	06:36	06:08	04:56	04:27
	16:32	79	14:53 (28)	17:48	12	09:46 (19)	18:54	21:05	22:12	22:50
23	09:03		11:35 (32)	07:52		09:38 (19)	06:33	06:05	04:54	04:27
	16:34	79	14:52 (28)	17:50	6	09:44 (19)	18:56	21:07	22:14	22:51
24	09:02		11:35 (32)	07:49			06:30	06:02	04:52	04:27
	16:37	79	14:52 (28)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:35 (32)	07:46			06:27	05:59	04:51	04:28
	16:39	78	14:52 (28)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:36 (32)	07:44			06:24	05:57	04:49	04:28
	16:41	77	14:52 (28)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:36 (32)	07:41			06:21	05:54	04:47	04:29
	16:44	74	14:51 (28)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:36 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	71	14:50 (28)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:37 (32)				07:15	05:49	04:44	04:30
	16:49	66	14:49 (28)				20:10	21:21	22:25	22:50
30	08:50		11:37 (32)				07:13	05:46	04:42	04:31
	16:51	56	14:45 (28)				20:12	21:24	22:27	22:49
31	08:48		11:38 (32)				07:10		04:41	
	16:54	51	13:50 (27)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1881			406					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (32)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (27)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (32)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (27)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (27)
4	04:35	05:31	06:40	07:46			07:59		11:18 (32)	09:05		11:25 (32)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (32)	15:48	42	13:22 (27)
5	04:36	05:33	06:42	07:48			08:01		11:15 (32)	09:07		11:28 (32)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (32)	15:47	34	13:21 (27)
6	04:37	05:35	06:44	07:51			08:03		11:14 (32)	09:09		11:56 (24)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (32)	15:46	26	13:19 (27)
7	04:38	05:37	06:46	07:53			08:06		11:12 (32)	09:10		11:56 (24)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (27)	15:45	21	12:17 (24)
8	04:40	05:39	06:49	07:55			08:08		11:11 (32)	09:12		11:57 (24)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (27)	15:45	21	12:18 (24)
9	04:41	05:42	06:51	07:57			08:11		11:10 (32)	09:13		11:58 (24)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (27)	15:44	20	12:18 (24)
10	04:43	05:44	06:53	08:00			08:13		11:10 (32)	09:15		11:58 (24)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (27)	15:43	20	12:18 (24)
11	04:44	05:46	06:55	08:02			08:15		11:09 (32)	09:16		11:58 (24)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (27)	15:43	21	12:19 (24)
12	04:46	05:48	06:57	08:04			08:18		11:09 (32)	09:18		11:58 (24)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (28)	15:43	21	12:19 (24)
13	04:47	05:51	07:00	08:07			08:20		11:09 (32)	09:19		12:00 (24)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (28)	15:42	20	12:20 (24)
14	04:49	05:53	07:02	08:09			08:23		11:08 (32)	09:20		12:00 (24)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (28)	15:42	20	12:20 (24)
15	04:51	05:55	07:04	08:11			08:25		11:08 (32)	09:21		12:00 (24)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (28)	15:42	20	12:20 (24)
16	04:52	05:57	07:06	08:13			08:27		11:09 (32)	09:22		12:01 (24)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (28)	15:42	19	12:20 (24)
17	04:54	06:00	07:08	08:16			08:30		11:09 (32)	09:23		12:01 (24)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (28)	15:42	20	12:21 (24)
18	04:56	06:02	07:11	08:18			08:32		11:09 (32)	09:24		12:02 (24)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (28)	15:42	19	12:21 (24)
19	04:58	06:04	07:13	08:20		10:07 (19)	08:34		11:10 (32)	09:25		12:02 (24)
	22:27	21:16	19:48	18:22	9	10:16 (19)	16:09	79	14:27 (28)	15:42	20	12:22 (24)
20	05:00	06:06	07:15	08:23		10:05 (19)	08:36		11:10 (32)	09:26		12:03 (24)
	22:25	21:13	19:45	18:20	13	10:18 (19)	16:08	79	14:27 (28)	15:43	19	12:22 (24)
21	05:01	06:08	07:17	08:25		10:04 (19)	08:39		11:10 (32)	09:26		12:03 (24)
	22:24	21:10	19:42	18:17	15	10:19 (19)	16:06	79	14:28 (28)	15:43	19	12:22 (24)
22	05:03	06:11	07:19	08:27		10:02 (19)	08:41		11:11 (32)	09:27		12:04 (24)
	22:22	21:08	19:39	18:14	17	10:19 (19)	16:04	84	14:29 (28)	15:43	19	12:23 (24)
23	05:05	06:13	07:22	08:30		10:02 (19)	08:43		11:12 (32)	09:27		12:04 (24)
	22:20	21:05	19:36	18:12	18	10:20 (19)	16:02	86	14:28 (28)	15:44	19	12:23 (24)
24	05:07	06:15	07:24	08:32		10:01 (19)	08:45		11:13 (32)	09:28		12:05 (24)
	22:18	21:02	19:33	18:09	19	10:20 (19)	16:01	88	14:29 (28)	15:44	19	12:24 (24)
25	05:09	06:17	07:26	07:35		09:01 (19)	08:47		11:13 (32)	09:28		12:06 (24)
	22:16	20:59	19:30	17:06	19	09:20 (19)	15:59	88	14:29 (28)	15:45	19	12:25 (24)
26	05:11	06:20	07:28	07:37		09:02 (19)	08:50		11:14 (32)	09:28		12:06 (24)
	22:14	20:57	19:27	17:04	19	09:21 (19)	15:58	87	14:29 (28)	15:46	19	12:25 (24)
27	05:13	06:22	07:30	07:39		09:01 (19)	08:52		11:15 (32)	09:28		12:06 (24)
	22:12	20:54	19:25	17:01	19	09:20 (19)	15:56	86	14:29 (28)	15:47	20	12:26 (24)
28	05:16	06:24	07:33	07:42		09:02 (19)	08:54		11:16 (32)	09:28		12:07 (24)
	22:10	20:51	19:22	16:59	17	09:19 (19)	15:55	82	14:29 (28)	15:48	20	12:27 (24)
29	05:18	06:26	07:35	07:44		09:02 (19)	08:56		11:17 (32)	09:28		12:07 (24)
	22:07	20:48	19:19	16:56	16	09:18 (19)	15:54	72	14:29 (28)	15:49	19	12:26 (24)
30	05:20	06:29	07:37	07:47		09:04 (19)	08:58		11:18 (32)	09:28		12:07 (24)
	22:05	20:45	19:16	16:54	13	09:17 (19)	15:52	60	14:28 (28)	15:50	20	12:27 (24)
31	05:22	06:31		07:49		09:06 (19)				09:28		12:07 (24)
	22:03	20:42		16:51	9	09:15 (19)				15:51	20	12:27 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28	12:05 (24)	08:46	11:36 (32)	07:35	07:07	05:44	04:40
	15:53	21 12:26 (24)	16:56	45 13:44 (27)	18:05	20:17	21:26	22:31
2	09:27	12:06 (24)	08:43	11:37 (32)	07:33	07:04	05:41	04:38
	15:54	20 12:26 (24)	16:58	40 13:42 (27)	18:07	20:19	21:28	22:32
3	09:27	12:06 (24)	08:41	11:38 (32)	07:30	07:01	05:39	04:37
	15:55	20 12:26 (24)	17:01	34 13:40 (27)	18:09	20:21	21:31	22:34
4	09:27	12:06 (24)	08:39	11:39 (32)	07:27	06:58	05:36	04:36
	15:57	21 12:27 (24)	17:03	20 11:59 (32)	18:12	20:24	21:33	22:35
5	09:26	12:06 (24)	08:37	11:41 (32)	07:24	06:55	05:34	04:35
	15:58	28 13:28 (27)	17:06	16 11:57 (32)	18:14	20:26	21:35	22:37
6	09:25	12:07 (24)	08:34	11:44 (32)	07:21	06:52	05:31	04:34
	16:00	32 13:31 (27)	17:08	11 11:55 (32)	18:17	20:28	21:37	22:38
7	09:24	11:39 (32)	08:32		07:19	06:50	05:29	04:33
	16:02	38 13:32 (27)	17:11		18:19	20:30	21:40	22:39
8	09:24	11:37 (32)	08:30		07:16	06:47	05:26	04:32
	16:03	46 13:34 (27)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:36 (32)	08:27		07:13	06:44	05:24	04:31
	16:05	50 13:36 (27)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:35 (32)	08:25	09:37 (19)	07:10	06:41	05:22	04:30
	16:07	58 14:41 (28)	17:18	6 09:43 (19)	18:26	20:37	21:46	22:43
11	09:21	11:34 (32)	08:23	09:35 (19)	07:07	06:38	05:19	04:29
	16:09	71 14:43 (28)	17:21	11 09:46 (19)	18:28	20:40	21:49	22:44
12	09:20	11:33 (32)	08:20	09:33 (19)	07:04	06:35	05:17	04:29
	16:11	79 14:44 (28)	17:23	15 09:48 (19)	18:31	20:42	21:51	22:45
13	09:18	11:34 (32)	08:18	09:32 (19)	07:02	06:32	05:15	04:28
	16:13	81 14:45 (28)	17:26	16 09:48 (19)	18:33	20:44	21:53	22:46
14	09:17	11:33 (32)	08:15	09:32 (19)	06:59	06:30	05:13	04:28
	16:15	84 14:45 (28)	17:28	18 09:50 (19)	18:35	20:47	21:55	22:47
15	09:16	11:32 (32)	08:13	09:31 (19)	06:56	06:27	05:10	04:27
	16:17	86 14:46 (28)	17:31	19 09:50 (19)	18:38	20:49	21:58	22:47
16	09:15	11:32 (32)	08:10	09:31 (19)	06:53	06:24	05:08	04:27
	16:19	87 14:46 (28)	17:33	19 09:50 (19)	18:40	20:51	22:00	22:48
17	09:13	11:32 (32)	08:07	09:31 (19)	06:50	06:21	05:06	04:27
	16:21	87 14:47 (28)	17:36	19 09:50 (19)	18:42	20:53	22:02	22:49
18	09:12	11:32 (32)	08:05	09:32 (19)	06:47	06:19	05:04	04:27
	16:23	88 14:48 (28)	17:38	18 09:50 (19)	18:45	20:56	22:04	22:49
19	09:10	11:32 (32)	08:02	09:32 (19)	06:44	06:16	05:02	04:27
	16:25	86 14:48 (28)	17:40	17 09:49 (19)	18:47	20:58	22:06	22:50
20	09:09	11:32 (32)	08:00	09:32 (19)	06:41	06:13	05:00	04:27
	16:28	79 14:48 (28)	17:43	16 09:48 (19)	18:49	21:00	22:08	22:50
21	09:07	11:32 (32)	07:57	09:33 (19)	06:39	06:10	04:58	04:27
	16:30	77 14:48 (28)	17:45	14 09:47 (19)	18:51	21:03	22:10	22:50
22	09:05	11:32 (32)	07:54	09:35 (19)	06:36	06:08	04:56	04:27
	16:32	79 14:49 (28)	17:48	10 09:45 (19)	18:54	21:05	22:12	22:50
23	09:03	11:31 (32)	07:52		06:33	06:05	04:54	04:27
	16:34	78 14:48 (28)	17:50		18:56	21:07	22:14	22:51
24	09:02	11:32 (32)	07:49		06:30	06:02	04:52	04:27
	16:37	77 14:48 (28)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:32 (32)	07:46		06:27	05:59	04:51	04:28
	16:39	75 14:47 (28)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:33 (32)	07:44		06:24	05:57	04:49	04:28
	16:41	73 14:47 (28)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:32 (32)	07:41		06:21	05:54	04:47	04:29
	16:44	70 14:45 (28)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:33 (32)	07:38		06:18	05:52	04:46	04:30
	16:46	66 14:44 (28)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:34 (32)			07:15	05:49	04:44	04:30
	16:49	57 14:41 (28)			20:10	21:21	22:25	22:50
30	08:50	11:34 (32)			07:13	05:46	04:42	04:31
	16:51	52 13:45 (27)			20:12	21:24	22:27	22:49
31	08:48	11:35 (32)			07:10		04:41	
	16:54	48 13:44 (27)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1914		364				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:08 (19)	09:00		11:16 (32)
	22:49	22:01	20:40	19:13			16:49	4	09:12 (19)	15:51	74	14:26 (28)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:18 (32)
	22:48	21:59	20:37	19:10			16:46			15:50	58	14:24 (28)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:19 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	51	13:19 (27)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:21 (32)
	22:47	21:54	20:31	19:04			16:41			15:48	46	13:18 (27)
5	04:36	05:33	06:42	07:48			08:01		11:13 (32)	09:07		11:23 (32)
	22:46	21:51	20:28	19:02			16:39	12	11:25 (32)	15:47	39	13:18 (27)
6	04:37	05:35	06:44	07:51			08:03		11:11 (32)	09:09		11:53 (24)
	22:45	21:49	20:25	18:59			16:37	17	11:28 (32)	15:46	32	13:17 (27)
7	04:38	05:37	06:46	07:53			08:06		11:10 (32)	09:10		11:54 (24)
	22:44	21:47	20:23	18:56			16:34	22	13:06 (27)	15:45	28	13:16 (27)
8	04:40	05:39	06:49	07:55			08:08		11:08 (32)	09:12		11:54 (24)
	22:43	21:44	20:20	18:53			16:32	34	13:10 (27)	15:45	22	13:13 (27)
9	04:41	05:42	06:51	07:57			08:11		11:07 (32)	09:13		11:55 (24)
	22:42	21:42	20:17	18:50			16:30	41	13:13 (27)	15:44	20	12:15 (24)
10	04:43	05:44	06:53	08:00			08:13		11:07 (32)	09:15		11:55 (24)
	22:41	21:39	20:14	18:47			16:28	46	13:15 (27)	15:43	20	12:15 (24)
11	04:44	05:46	06:55	08:02			08:15		11:06 (32)	09:16		11:56 (24)
	22:39	21:37	20:11	18:45			16:25	48	13:15 (27)	15:43	20	12:16 (24)
12	04:46	05:48	06:57	08:04			08:18		11:06 (32)	09:18		11:56 (24)
	22:38	21:34	20:08	18:42			16:23	52	13:17 (27)	15:43	20	12:16 (24)
13	04:47	05:51	07:00	08:07			08:20		11:06 (32)	09:19		11:57 (24)
	22:37	21:32	20:05	18:39			16:21	58	14:14 (28)	15:42	20	12:17 (24)
14	04:49	05:53	07:02	08:09			08:23		11:05 (32)	09:20		11:57 (24)
	22:35	21:29	20:02	18:36			16:19	66	14:16 (28)	15:42	20	12:17 (24)
15	04:51	05:55	07:04	08:11			08:25		11:05 (32)	09:21		11:57 (24)
	22:34	21:26	19:59	18:33			16:17	70	14:18 (28)	15:42	20	12:17 (24)
16	04:52	05:57	07:06	08:13			08:27		11:06 (32)	09:22		11:58 (24)
	22:32	21:24	19:56	18:31			16:15	73	14:20 (28)	15:42	19	12:17 (24)
17	04:54	06:00	07:08	08:16			08:30		11:06 (32)	09:23		11:58 (24)
	22:31	21:21	19:54	18:28			16:13	75	14:21 (28)	15:42	19	12:17 (24)
18	04:56	06:02	07:11	08:18			08:32		11:06 (32)	09:24		11:59 (24)
	22:29	21:18	19:51	18:25			16:11	77	14:22 (28)	15:42	19	12:18 (24)
19	04:58	06:04	07:13	08:20		10:09 (19)	08:34		11:06 (32)	09:25		11:59 (24)
	22:27	21:16	19:48	18:22	5	10:14 (19)	16:09	78	14:23 (28)	15:42	20	12:19 (24)
20	05:00	06:06	07:15	08:23		10:05 (19)	08:36		11:06 (32)	09:26		12:00 (24)
	22:25	21:13	19:45	18:20	11	10:16 (19)	16:08	79	14:23 (28)	15:43	19	12:19 (24)
21	05:01	06:08	07:17	08:25		10:04 (19)	08:39		11:07 (32)	09:26		12:00 (24)
	22:24	21:10	19:42	18:17	14	10:18 (19)	16:06	77	14:23 (28)	15:43	19	12:19 (24)
22	05:03	06:11	07:19	08:27		10:02 (19)	08:41		11:08 (32)	09:27		12:01 (24)
	22:22	21:08	19:39	18:14	17	10:19 (19)	16:04	77	14:24 (28)	15:43	19	12:20 (24)
23	05:05	06:13	07:22	08:30		10:02 (19)	08:43		11:08 (32)	09:27		12:01 (24)
	22:20	21:05	19:36	18:12	18	10:20 (19)	16:02	86	14:24 (28)	15:44	19	12:20 (24)
24	05:07	06:15	07:24	08:32		10:01 (19)	08:45		11:09 (32)	09:28		12:02 (24)
	22:18	21:02	19:33	18:09	18	10:19 (19)	16:01	87	14:25 (28)	15:44	19	12:21 (24)
25	05:09	06:17	07:26	07:35		09:01 (19)	08:47		11:10 (32)	09:28		12:03 (24)
	22:16	20:59	19:30	17:06	19	09:20 (19)	15:59	87	14:25 (28)	15:45	19	12:22 (24)
26	05:11	06:20	07:28	07:37		09:01 (19)	08:50		11:11 (32)	09:28		12:03 (24)
	22:14	20:57	19:27	17:04	19	09:20 (19)	15:58	87	14:25 (28)	15:46	19	12:22 (24)
27	05:13	06:22	07:30	07:39		09:01 (19)	08:52		11:11 (32)	09:28		12:03 (24)
	22:12	20:54	19:25	17:01	18	09:19 (19)	15:56	86	14:25 (28)	15:47	20	12:23 (24)
28	05:16	06:24	07:33	07:42		09:02 (19)	08:54		11:13 (32)	09:28		12:04 (24)
	22:10	20:51	19:22	16:59	17	09:19 (19)	15:55	85	14:26 (28)	15:48	20	12:24 (24)
29	05:18	06:26	07:35	07:44		09:02 (19)	08:56		11:14 (32)	09:28		12:04 (24)
	22:07	20:48	19:19	16:56	16	09:18 (19)	15:54	82	14:25 (28)	15:49	19	12:23 (24)
30	05:20	06:29	07:37	07:47		09:03 (19)	08:58		11:14 (32)	09:28		12:04 (24)
	22:05	20:45	19:16	16:54	14	09:17 (19)	15:52	80	14:25 (28)	15:50	20	12:24 (24)
31	05:22	06:31		07:49		09:05 (19)				09:28		12:04 (24)
	22:03	20:42		16:51	11	09:16 (19)				15:51	20	12:24 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					197			1686			799	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November			December		
1	09:28		11:58 (24)	08:46		11:24 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:44 (24)
	15:53	16	12:14 (24)	16:56	49	13:35 (27)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	57	14:20 (28)
2	09:28		11:58 (24)	08:43		11:24 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:44 (24)
	15:54	18	12:16 (24)	16:58	47	13:34 (27)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	50	14:19 (28)
3	09:27		11:58 (24)	08:41		11:25 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56		11:02 (32)	09:03		11:44 (24)
	15:55	20	12:18 (24)	17:01	42	13:33 (27)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	12	11:14 (32)	15:49	40	14:19 (28)
4	09:27		11:58 (24)	08:39		11:26 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		10:59 (32)	09:05		11:44 (24)
	15:57	21	12:19 (24)	17:03	35	13:30 (27)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17	11:16 (32)	15:48	34	14:19 (28)
5	09:26		11:59 (24)	08:37		11:26 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		10:58 (32)	09:07		11:45 (24)
	15:58	20	12:19 (24)	17:06	23	11:49 (32)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39	20	11:18 (32)	15:47	31	13:06 (27)
6	09:25		11:59 (24)	08:34		11:28 (32)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		10:57 (32)	09:09		11:45 (24)
	16:00	26	13:18 (27)	17:08	20	11:48 (32)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	23	11:20 (32)	15:46	27	13:05 (27)
7	09:25		12:00 (24)	08:32		11:30 (32)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		10:56 (32)	09:10		11:46 (24)
	16:02	30	13:21 (27)	17:11	16	11:46 (32)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34	37	13:01 (27)	15:45	20	12:06 (24)
8	09:24		12:00 (24)	08:30		11:33 (32)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		10:55 (32)	09:12		11:47 (24)
	16:03	34	14:35 (28)	17:13	11	11:44 (32)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	43	13:03 (27)	15:45	20	12:07 (24)
9	09:23		12:01 (24)	08:27			07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		10:54 (32)	09:13		11:47 (24)
	16:05	41	14:36 (28)	17:16			18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	48	13:05 (27)	15:44	20	12:07 (24)
10	09:22		12:01 (24)	08:25			07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		10:54 (32)	09:15		11:47 (24)
	16:07	50	14:36 (28)	17:18			18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28	51	13:06 (27)	15:43	19	12:07 (24)
11	09:21		12:02 (24)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		10:54 (32)	09:16		11:48 (24)
	16:09	57	14:37 (28)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25	52	13:06 (27)	15:43	16	12:04 (24)
12	09:20		11:28 (32)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		10:54 (32)	09:18		11:48 (24)
	16:11	68	14:38 (28)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	55	13:08 (27)	15:43	11	11:59 (24)
13	09:18		11:26 (32)	08:18			07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20		10:54 (32)	09:19		11:49 (24)
	16:13	75	14:39 (28)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	62	14:08 (28)	15:42	11	12:00 (24)
14	09:17		11:25 (32)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		10:53 (32)	09:20		11:50 (24)
	16:15	78	14:39 (28)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	69	14:10 (28)	15:42	7	12:00 (24)
15	09:16		11:24 (32)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		10:54 (32)	09:21		11:50 (24)
	16:17	82	14:40 (28)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	71	14:12 (28)	15:42	3	11:53 (24)
16	09:15		11:23 (32)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		10:54 (32)	09:22		11:50 (24)
	16:19	85	14:40 (28)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	75	14:14 (28)	15:42	3	11:53 (24)
17	09:13		11:23 (32)	08:07			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		10:55 (32)	09:23		11:51 (24)
	16:21	86	14:41 (28)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	77	14:15 (28)	15:42	1	11:52 (24)
18	09:12		11:23 (32)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		10:55 (32)	09:24		
	16:23	87	14:42 (28)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	76	14:15 (28)	15:42		
19	09:10		11:22 (32)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		10:56 (32)	09:25		
	16:25	88	14:42 (28)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	77	14:16 (28)	15:42		
20	09:09		11:22 (32)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		10:56 (32)	09:26		
	16:28	86	14:42 (28)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	77	14:16 (28)	15:43		
21	09:07		11:22 (32)	07:57			06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39		10:57 (32)	09:26		
	16:30	83	14:42 (28)	17:45			18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	83	14:17 (28)	15:43		
22	09:05		11:22 (32)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41		10:58 (32)	09:27		
	16:32	77	14:42 (28)	17:48			18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	86	14:18 (28)	15:43		
23	09:03		11:21 (32)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		10:58 (32)	09:27		
	16:34	77	14:41 (28)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	88	14:18 (28)	15:44		
24	09:02		11:21 (32)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:00 (32)	09:28		
	16:37	76	14:41 (28)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	87	14:19 (28)	15:44		
25	09:00		11:21 (32)	07:46			06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47		11:00 (32)	09:28		
	16:39	77	14:41 (28)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59	86	14:18 (28)	15:45		
26	08:58		11:22 (32)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:02 (32)	09:28		
	16:41	74	14:41 (28)	17:57			19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	85	14:19 (28)	15:46		
27	08:56		11:21 (32)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:03 (32)	09:28		11:56 (24)
	16:44	71	14:39 (28)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	83	14:19 (28)	15:47	3	11:59 (24)
28	08:54		11:21 (32)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:05 (32)	09:28		11:57 (24)
	16:46	69	14:38 (28)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	79	14:19 (28)	15:48	3	12:00 (24)
29	08:52		11:22 (32)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:07 (32)	09:28		11:56 (24)
	16:49	61	14:36 (28)				20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54	73	14:19 (28)	15:49	5	12:07 (24)
30	08:50		11:22 (32)				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:08 (32)	09:28		11:57 (24)
	16:51	55	13:36 (27)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	69	14:19 (28)	15:50	11	12:08 (24)
31	08:48		11:23 (32)				07:10		04:41		05:22	06:31		07:49				09:28		11:57 (24)
	16:54	53	13:36 (27)				20:14		22:29		22:03	20:42		16:51				15:51	11	12:08 (24)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236			199		
Total, worst case		1841			243											1761			403	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		11:52 (37)	08:46		13:17 (32)	07:35	08:53 (21)	07:07	05:44	04:40
	15:53	17	12:09 (37)	16:56	36	13:53 (32)	18:05	19	09:12 (21)	20:17	21:26	22:30
2	09:27		11:51 (37)	08:43		13:18 (32)	07:32		08:53 (21)	07:04	05:41	04:38
	15:54	19	12:10 (37)	16:58	43	15:13 (27)	18:07	20	09:13 (21)	20:19	21:28	22:32
3	09:27		11:51 (37)	08:41		13:17 (32)	07:30		08:52 (21)	07:01	05:39	04:37
	15:55	19	12:10 (37)	17:01	52	15:18 (27)	18:09	21	09:13 (21)	20:21	21:30	22:34
4	09:26		11:51 (37)	08:39		13:18 (32)	07:27		08:52 (21)	06:58	05:36	04:36
	15:57	20	12:11 (37)	17:03	54	15:20 (27)	18:12	20	09:12 (21)	20:24	21:33	22:35
5	09:26		11:52 (37)	08:37		13:17 (32)	07:24		08:52 (21)	06:55	05:34	04:35
	15:58	20	12:12 (37)	17:06	58	15:21 (27)	18:14	20	09:12 (21)	20:26	21:35	22:37
6	09:25		11:52 (37)	08:34		13:18 (32)	07:21		08:52 (21)	06:52	05:31	04:34
	16:00	20	12:12 (37)	17:08	62	15:43 (28)	18:16	19	09:11 (21)	20:28	21:37	22:38
7	09:24		11:52 (37)	08:32		13:17 (32)	07:19		08:53 (21)	06:49	05:29	04:33
	16:02	21	12:13 (37)	17:11	68	15:46 (28)	18:19	17	09:10 (21)	20:30	21:40	22:39
8	09:24		11:53 (37)	08:30		13:18 (32)	07:16		08:54 (21)	06:47	05:26	04:32
	16:03	21	12:14 (37)	17:13	72	15:51 (28)	18:21	14	09:08 (21)	20:33	21:42	22:40
9	09:23		11:52 (37)	08:27		13:18 (32)	07:13		08:55 (21)	06:44	05:24	04:31
	16:05	22	12:14 (37)	17:16	78	15:59 (28)	18:24	10	09:05 (21)	20:35	21:44	22:42
10	09:22		11:53 (37)	08:25		13:18 (32)	07:10			06:41	05:22	04:30
	16:07	22	12:15 (37)	17:18	82	16:00 (28)	18:26			20:37	21:46	22:43
11	09:21		11:54 (37)	08:23		10:11 (19)	07:07			06:38	05:19	04:29
	16:09	22	12:16 (37)	17:21	84	16:00 (28)	18:28			20:40	21:49	22:44
12	09:20		11:53 (37)	08:20		10:06 (19)	07:04			06:35	05:17	04:29
	16:11	23	12:16 (37)	17:23	89	15:59 (28)	18:31			20:42	21:51	22:45
13	09:18		11:53 (37)	08:18		10:04 (19)	07:01			06:32	05:15	04:28
	16:13	29	13:27 (24)	17:26	90	15:58 (28)	18:33			20:44	21:53	22:46
14	09:17		11:54 (37)	08:15		10:03 (19)	06:59			06:30	05:13	04:28
	16:15	38	13:37 (24)	17:28	87	15:57 (28)	18:35			20:47	21:55	22:46
15	09:16		11:55 (37)	08:13		10:02 (19)	06:56			06:27	05:10	04:27
	16:17	44	13:43 (24)	17:31	81	15:54 (28)	18:38			20:49	21:57	22:47
16	09:15		11:55 (37)	08:10		10:01 (19)	06:53			06:24	05:08	04:27
	16:19	45	13:44 (24)	17:33	72	15:24 (27)	18:40			20:51	22:00	22:48
17	09:13		11:55 (37)	08:07		10:00 (19)	06:50			06:21	05:06	04:27
	16:21	45	13:44 (24)	17:35	67	15:23 (27)	18:42			20:53	22:02	22:49
18	09:12		11:57 (37)	08:05		10:00 (19)	06:47			06:19	05:04	04:27
	16:23	44	13:46 (24)	17:38	61	15:23 (27)	18:45			20:56	22:04	22:49
19	09:10		11:57 (37)	08:02		10:00 (19)	06:44			06:16	05:02	04:27
	16:25	44	13:46 (24)	17:40	43	15:21 (27)	18:47			20:58	22:06	22:50
20	09:08		11:58 (37)	08:00		09:59 (19)	06:41			06:13	05:00	04:27
	16:28	43	13:46 (24)	17:43	41	15:19 (27)	18:49			21:00	22:08	22:50
21	09:07		11:59 (37)	07:57		09:59 (19)	06:38			06:10	04:58	04:27
	16:30	40	13:46 (24)	17:45	32	15:15 (27)	18:51			21:03	22:10	22:50
22	09:05		11:59 (37)	07:54		09:59 (19)	06:36			06:08	04:56	04:27
	16:32	40	13:46 (24)	17:48	25	10:24 (19)	18:54			21:05	22:12	22:50
23	09:03		12:01 (37)	07:52		10:00 (19)	06:33			06:05	04:54	04:27
	16:34	36	13:46 (24)	17:50	24	10:24 (19)	18:56			21:07	22:14	22:50
24	09:02		12:03 (37)	07:49		10:01 (19)	06:30			06:02	04:52	04:27
	16:37	34	13:46 (24)	17:53	22	10:23 (19)	18:58			21:10	22:16	22:51
25	09:00		12:05 (37)	07:46		09:00 (21)	06:27			05:59	04:51	04:28
	16:39	32	13:46 (32)	17:55	27	10:22 (19)	19:01			21:12	22:18	22:50
26	08:58		13:21 (32)	07:43		08:57 (21)	06:24			05:57	04:49	04:28
	16:41	27	13:48 (32)	17:57	30	10:20 (19)	19:03			21:14	22:20	22:50
27	08:56		13:20 (32)	07:41		08:55 (21)	06:21			05:54	04:47	04:29
	16:44	28	13:48 (32)	18:00	28	10:17 (19)	19:05			21:17	22:22	22:50
28	08:54		13:19 (32)	07:38		08:54 (21)	06:18			05:52	04:46	04:30
	16:46	31	13:50 (32)	18:02	22	10:13 (19)	19:07			21:19	22:24	22:50
29	08:52		13:19 (32)				07:15			05:49	04:44	04:30
	16:49	32	13:51 (32)				20:10			21:21	22:25	22:50
30	08:50		13:18 (32)				07:12			05:46	04:42	04:31
	16:51	33	13:51 (32)				20:12			21:24	22:27	22:49
31	08:48		13:18 (32)				07:10				04:41	
	16:53	34	13:52 (32)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		945			1530			160				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December	
1	04:32	05:24	06:33	07:39		07:51		12:48 (32)	09:00		11:36 (37)
	22:49	22:01	20:40	19:13		16:49	83	15:30 (28)	15:51	22	11:58 (37)
2	04:33	05:26	06:35	07:42		07:54		12:48 (32)	09:02		11:36 (37)
	22:48	21:58	20:37	19:10		16:46	76	15:28 (28)	15:50	22	11:58 (37)
3	04:34	05:28	06:37	07:44		07:56		12:48 (32)	09:03		11:36 (37)
	22:47	21:56	20:34	19:07		16:44	71	15:20 (28)	15:49	22	11:58 (37)
4	04:35	05:31	06:40	07:46	09:34 (21)	07:59		12:47 (32)	09:05		11:37 (37)
	22:47	21:54	20:31	19:04	7 09:41 (21)	16:41	66	15:15 (28)	15:48	21	11:58 (37)
5	04:36	05:33	06:42	07:48	09:32 (21)	08:01		12:47 (32)	09:07		11:37 (37)
	22:46	21:51	20:28	19:01	12 09:44 (21)	16:39	62	15:13 (28)	15:47	21	11:58 (37)
6	04:37	05:35	06:44	07:51	09:30 (21)	08:03		12:48 (32)	09:09		11:38 (37)
	22:45	21:49	20:25	18:59	15 09:45 (21)	16:37	57	14:51 (27)	15:46	21	11:59 (37)
7	04:38	05:37	06:46	07:53	09:28 (21)	08:06		12:47 (32)	09:10		11:39 (37)
	22:44	21:47	20:22	18:56	18 09:46 (21)	16:34	55	14:50 (27)	15:45	20	11:59 (37)
8	04:40	05:39	06:48	07:55	09:28 (21)	08:08		12:48 (32)	09:12		11:40 (37)
	22:43	21:44	20:20	18:53	19 09:47 (21)	16:32	50	14:48 (27)	15:45	19	11:59 (37)
9	04:41	05:42	06:51	07:57	09:27 (21)	08:11		12:48 (32)	09:13		11:41 (37)
	22:42	21:42	20:17	18:50	20 09:47 (21)	16:30	42	14:43 (27)	15:44	19	12:00 (37)
10	04:43	05:44	06:53	08:00	09:27 (21)	08:13		12:49 (32)	09:15		11:41 (37)
	22:40	21:39	20:14	18:47	20 09:47 (21)	16:28	35	13:24 (32)	15:43	18	11:59 (37)
11	04:44	05:46	06:55	08:02	09:26 (21)	08:15		12:49 (32)	09:16		11:42 (37)
	22:39	21:37	20:11	18:45	20 09:46 (21)	16:25	34	13:23 (32)	15:43	18	12:00 (37)
12	04:46	05:48	06:57	08:04	09:26 (21)	08:18		12:50 (32)	09:18		11:42 (37)
	22:38	21:34	20:08	18:42	19 09:45 (21)	16:23	33	13:23 (32)	15:43	17	11:59 (37)
13	04:47	05:51	07:00	08:06	09:27 (21)	08:20		12:51 (32)	09:19		11:43 (37)
	22:37	21:31	20:05	18:39	18 09:45 (21)	16:21	32	13:23 (32)	15:42	17	12:00 (37)
14	04:49	05:53	07:02	08:09	09:27 (21)	08:22		12:51 (32)	09:20		11:44 (37)
	22:35	21:29	20:02	18:36	26 10:48 (19)	16:19	31	13:22 (32)	15:42	16	12:00 (37)
15	04:51	05:55	07:04	08:11	09:29 (21)	08:25		12:53 (32)	09:21		11:44 (37)
	22:34	21:26	19:59	18:33	29 10:51 (19)	16:17	28	13:21 (32)	15:42	16	12:00 (37)
16	04:52	05:57	07:06	08:13	09:30 (21)	08:27		12:54 (32)	09:22		11:45 (37)
	22:32	21:24	19:56	18:31	28 10:52 (19)	16:15	27	13:21 (32)	15:42	15	12:00 (37)
17	04:54	05:59	07:08	08:16	10:33 (19)	08:29		11:38 (37)	09:23		11:45 (37)
	22:30	21:21	19:54	18:28	21 10:54 (19)	16:13	32	13:19 (32)	15:42	15	12:00 (37)
18	04:56	06:02	07:10	08:18	10:31 (19)	08:32		11:36 (37)	09:24		11:46 (37)
	22:29	21:18	19:51	18:25	23 10:54 (19)	16:11	35	13:20 (24)	15:42	15	12:01 (37)
19	04:58	06:04	07:13	08:20	10:31 (19)	08:34		11:36 (37)	09:25		11:47 (37)
	22:27	21:16	19:48	18:22	24 10:55 (19)	16:09	36	13:21 (24)	15:42	14	12:01 (37)
20	05:00	06:06	07:15	08:23	10:30 (19)	08:36		11:34 (37)	09:26		11:48 (37)
	22:25	21:13	19:45	18:20	25 10:55 (19)	16:08	40	13:21 (24)	15:42	14	12:02 (37)
21	05:01	06:08	07:17	08:25	10:30 (19)	08:39		11:34 (37)	09:26		11:48 (37)
	22:24	21:10	19:42	18:17	37 15:48 (27)	16:06	40	13:21 (24)	15:43	14	12:02 (37)
22	05:03	06:11	07:19	08:27	10:29 (19)	08:41		11:34 (37)	09:27		11:49 (37)
	22:22	21:08	19:39	18:14	42 15:50 (27)	16:04	43	13:22 (24)	15:43	14	12:03 (37)
23	05:05	06:13	07:22	08:30	10:30 (19)	08:43		11:33 (37)	09:27		11:49 (37)
	22:20	21:05	19:36	18:12	50 15:52 (27)	16:02	44	13:22 (24)	15:44	14	12:03 (37)
24	05:07	06:15	07:24	08:32	10:29 (19)	08:45		11:34 (37)	09:28		11:50 (37)
	22:18	21:02	19:33	18:09	63 15:52 (27)	16:01	44	13:23 (24)	15:44	14	12:04 (37)
25	05:09	06:17	07:26	07:35	09:30 (19)	08:47		11:33 (37)	09:28		11:50 (37)
	22:16	20:59	19:30	17:06	69 14:54 (27)	15:59	44	13:22 (24)	15:45	14	12:04 (37)
26	05:11	06:20	07:28	07:37	09:30 (19)	08:50		11:34 (37)	09:28		11:50 (37)
	22:14	20:56	19:27	17:04	74 14:54 (27)	15:58	44	13:23 (24)	15:46	15	12:05 (37)
27	05:13	06:22	07:30	07:39	09:31 (19)	08:52		11:34 (37)	09:28		11:50 (37)
	22:12	20:54	19:24	17:01	82 15:24 (28)	15:56	44	13:23 (24)	15:47	16	12:06 (37)
28	05:16	06:24	07:33	07:42	09:33 (19)	08:54		11:35 (37)	09:28		11:50 (37)
	22:10	20:51	19:22	16:59	89 15:27 (28)	15:55	37	13:17 (24)	15:48	16	12:06 (37)
29	05:18	06:26	07:35	07:44	09:34 (19)	08:56		11:35 (37)	09:28		11:50 (37)
	22:07	20:48	19:19	16:56	90 15:28 (28)	15:54	29	13:09 (24)	15:49	16	12:06 (37)
30	05:20	06:29	07:37	07:47	09:36 (19)	08:58		11:35 (37)	09:28		11:51 (37)
	22:05	20:45	19:16	16:54	90 15:29 (28)	15:52	23	13:03 (24)	15:50	17	12:08 (37)
31	05:22	06:31		07:49	12:49 (32)				09:28		11:51 (37)
	22:03	20:42		16:51	81 15:30 (28)				15:51	17	12:08 (37)
Potential sun hours	546	478	386	319		236			199		
Total, worst case					1111		1317			529	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		14:11 (37)	07:35		10:14 (21)	07:07		05:44	04:40
	15:53			16:56	18	15:31 (24)	18:05	73	16:49 (27)	20:17		21:26	22:30
2	09:27			08:43		15:15 (24)	07:32		10:15 (21)	07:04		05:41	04:38
	15:54			16:58	17	15:32 (24)	18:07	70	16:50 (27)	20:19		21:28	22:32
3	09:27			08:41		15:14 (24)	07:30		10:16 (21)	07:01		05:39	04:37
	15:55			17:01	19	15:33 (24)	18:09	63	16:48 (27)	20:21		21:30	22:34
4	09:26			08:39		12:33 (19)	07:27		10:16 (21)	06:58		05:36	04:36
	15:57			17:03	32	15:33 (24)	18:12	54	16:47 (27)	20:23		21:33	22:35
5	09:26			08:37		12:30 (19)	07:24		09:25 (16)	06:55		05:34	04:35
	15:58			17:06	37	15:33 (24)	18:14	37	16:44 (27)	20:26		21:35	22:36
6	09:25			08:34		12:29 (19)	07:21		09:21 (16)	06:52		05:31	04:34
	16:00			17:08	40	15:34 (24)	18:16	27	10:42 (21)	20:28		21:37	22:38
7	09:24			08:32		12:27 (19)	07:18		10:19 (21)	06:49		05:29	04:33
	16:02			17:11	43	15:33 (24)	18:19	20	10:39 (21)	20:30		21:40	22:39
8	09:24			08:30		12:26 (19)	07:16		10:21 (21)	06:47		05:26	04:32
	16:03			17:13	46	15:34 (24)	18:21	15	10:36 (21)	20:33		21:42	22:40
9	09:23			08:27		12:25 (19)	07:13		10:24 (21)	06:44		05:24	04:31
	16:05			17:16	46	15:33 (24)	18:24	8	10:32 (21)	20:35		21:44	22:42
10	09:22			08:25		12:24 (19)	07:10			06:41		05:22	04:30
	16:07			17:18	45	15:31 (24)	18:26			20:37		21:46	22:43
11	09:21			08:22		12:24 (19)	07:07			06:38		05:19	04:29
	16:09			17:21	43	15:30 (24)	18:28			20:40		21:49	22:44
12	09:20			08:20		12:23 (19)	07:04			06:35		05:17	04:29
	16:11			17:23	38	15:27 (24)	18:31			20:42		21:51	22:45
13	09:18			08:18		12:22 (19)	07:01			06:32		05:15	04:28
	16:13			17:26	35	12:57 (19)	18:33			20:44		21:53	22:46
14	09:17			08:15		12:23 (19)	06:59			06:30		05:12	04:28
	16:15			17:28	35	12:58 (19)	18:35			20:46		21:55	22:46
15	09:16			08:12		12:22 (19)	06:56			06:27		05:10	04:27
	16:17			17:30	35	12:57 (19)	18:38			20:49		21:57	22:47
16	09:14			08:10		12:22 (19)	06:53			06:24		05:08	04:27
	16:19			17:33	43	16:12 (32)	18:40			20:51		22:00	22:48
17	09:13			08:07		12:22 (19)	06:50			06:21		05:06	04:27
	16:21			17:35	49	16:15 (32)	18:42			20:53		22:02	22:48
18	09:12			08:05		12:23 (19)	06:47			06:18		05:04	04:27
	16:23			17:38	51	16:17 (32)	18:44			20:56		22:04	22:49
19	09:10			08:02		12:23 (19)	06:44			06:16		05:02	04:27
	16:25			17:40	54	16:18 (32)	18:47			20:58		22:06	22:49
20	09:08			08:00		12:23 (19)	06:41			06:13		05:00	04:27
	16:28			17:43	55	16:19 (32)	18:49			21:00		22:08	22:50
21	09:07			07:57		12:23 (19)	06:38			06:10		04:58	04:27
	16:30			17:45	56	16:20 (32)	18:51			21:03		22:10	22:50
22	09:05			07:54		12:24 (19)	06:36			06:07		04:56	04:27
	16:32			17:48	61	16:42 (27)	18:54			21:05		22:12	22:50
23	09:03			07:52		12:26 (19)	06:33			06:05		04:54	04:27
	16:34			17:50	66	16:48 (27)	18:56			21:07		22:14	22:50
24	09:01			07:49		10:20 (21)	06:30			06:02		04:52	04:27
	16:37			17:52	68	16:49 (27)	18:58			21:10		22:16	22:50
25	09:00			07:46		10:16 (21)	06:27			05:59		04:51	04:28
	16:39			17:55	89	16:50 (27)	19:01			21:12		22:18	22:50
26	08:58			07:43		10:15 (21)	06:24			05:57		04:49	04:28
	16:41			17:57	92	16:50 (27)	19:03			21:14		22:20	22:50
27	08:56			07:41		10:15 (21)	06:21			05:54		04:47	04:29
	16:44			18:00	77	16:50 (27)	19:05			21:17		22:22	22:50
28	08:54			07:38		10:15 (21)	06:18			05:51		04:45	04:29
	16:46			18:02	75	16:50 (27)	19:07			21:19		22:24	22:50
29	08:52						07:15			05:49		04:44	04:30
	16:49						20:10			21:21		22:25	22:49
30	08:50		14:16 (37)				07:12			05:46		04:42	04:31
	16:51	3	14:19 (37)				20:12			21:23		22:27	22:49
31	08:48		14:08 (37)				07:10					04:41	
	16:53	21	15:27 (24)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		24			1365			367					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51	11:53 (19)	09:00
	22:48	22:01	20:40	19:13		16:49	46 15:01 (24)	15:51
2	04:33	05:26	06:35	07:41		07:54	11:55 (19)	09:01
	22:48	21:58	20:37	19:10		16:46	45 15:02 (24)	15:50
3	04:34	05:28	06:37	07:44		07:56	11:56 (19)	09:03
	22:47	21:56	20:34	19:07		16:44	45 15:03 (24)	15:49
4	04:35	05:31	06:40	07:46		07:58	11:57 (19)	09:05
	22:46	21:54	20:31	19:04		16:41	43 15:03 (24)	15:48
5	04:36	05:33	06:42	07:48	10:59 (21)	08:01	11:58 (19)	09:07
	22:46	21:51	20:28	19:01	13 11:12 (21)	16:39	41 15:03 (24)	15:47
6	04:37	05:35	06:44	07:50	10:56 (21)	08:03	12:01 (19)	09:09
	22:45	21:49	20:25	18:59	19 11:15 (21)	16:37	36 15:04 (24)	15:46
7	04:38	05:37	06:46	07:53	09:54 (16)	08:06	12:03 (19)	09:10
	22:44	21:47	20:22	18:56	24 11:16 (21)	16:34	31 15:03 (24)	15:45
8	04:40	05:39	06:48	07:55	09:58 (16)	08:08	14:45 (24)	09:12
	22:43	21:44	20:20	18:53	33 17:18 (27)	16:32	18 15:03 (24)	15:45
9	04:41	05:42	06:51	07:57	10:01 (16)	08:10	14:46 (24)	09:13
	22:42	21:42	20:17	18:50	49 17:20 (27)	16:30	17 15:03 (24)	15:44
10	04:43	05:44	06:53	08:00	10:49 (21)	08:13	13:42 (37)	09:15
	22:40	21:39	20:14	18:47	59 17:21 (27)	16:28	20 15:03 (24)	15:43
11	04:44	05:46	06:55	08:02	10:49 (21)	08:15	13:39 (37)	09:16
	22:39	21:37	20:11	18:44	67 17:23 (27)	16:25	20 14:58 (24)	15:43
12	04:46	05:48	06:57	08:04	10:48 (21)	08:18	13:48 (37)	09:17
	22:38	21:34	20:08	18:42	72 17:23 (27)	16:23	3 13:51 (37)	15:43
13	04:47	05:50	06:59	08:06	10:48 (21)	08:20		09:19
	22:36	21:31	20:05	18:39	73 17:23 (27)	16:21		15:42
14	04:49	05:53	07:02	08:09	10:47 (21)	08:22		09:20
	22:35	21:29	20:02	18:36	77 17:23 (27)	16:19		15:42
15	04:50	05:55	07:04	08:11	10:48 (21)	08:25		09:21
	22:34	21:26	19:59	18:33	86 17:23 (27)	16:17		15:42
16	04:52	05:57	07:06	08:13	10:47 (21)	08:27		09:22
	22:32	21:24	19:56	18:31	93 17:22 (27)	16:15		15:42
17	04:54	05:59	07:08	08:16	10:48 (21)	08:29		09:23
	22:30	21:21	19:53	18:28	85 17:22 (27)	16:13		15:42
18	04:56	06:02	07:10	08:18	12:58 (19)	08:32		09:24
	22:29	21:18	19:51	18:25	66 17:20 (27)	16:11		15:42
19	04:58	06:04	07:13	08:20	12:57 (19)	08:34		09:25
	22:27	21:16	19:48	18:22	64 17:17 (27)	16:09		15:42
20	04:59	06:06	07:15	08:23	12:55 (19)	08:36		09:25
	22:25	21:13	19:45	18:20	58 17:12 (27)	16:07		15:42
21	05:01	06:08	07:17	08:25	12:54 (19)	08:39		09:26
	22:23	21:10	19:42	18:17	56 16:51 (32)	16:06		15:43
22	05:03	06:11	07:19	08:27	12:53 (19)	08:41		09:27
	22:22	21:07	19:39	18:14	55 16:49 (32)	16:04		15:43
23	05:05	06:13	07:21	08:30	12:53 (19)	08:43		09:27
	22:20	21:05	19:36	18:12	53 16:48 (32)	16:02		15:44
24	05:07	06:15	07:24	08:32	12:52 (19)	08:45		09:28
	22:18	21:02	19:33	18:09	52 16:46 (32)	16:01		15:44
25	05:09	06:17	07:26	07:34	11:52 (19)	08:47		09:28
	22:16	20:59	19:30	17:06	47 15:44 (32)	15:59		15:45
26	05:11	06:20	07:28	07:37	11:51 (19)	08:49		09:28
	22:14	20:56	19:27	17:04	39 15:39 (32)	15:58		15:46
27	05:13	06:22	07:30	07:39	11:52 (19)	08:52		09:28
	22:12	20:54	19:24	17:01	35 12:27 (19)	15:56		15:47
28	05:15	06:24	07:33	07:42	11:52 (19)	08:54		09:28
	22:10	20:51	19:22	16:59	35 12:27 (19)	15:55		15:48
29	05:18	06:26	07:35	07:44	11:52 (19)	08:56		09:28
	22:07	20:48	19:19	16:56	34 12:26 (19)	15:53		15:49
30	05:20	06:29	07:37	07:46	11:53 (19)	08:58		09:28
	22:05	20:45	19:16	16:54	40 14:58 (24)	15:52		15:50
31	05:22	06:31		07:49	11:53 (19)			09:28
	22:03	20:42		16:51	44 15:00 (24)			15:51
Potential sun hours	546	478	386	319		236		199
Total, worst case					1428		365	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		11:38 (21) | 07:35	07:07	04:40	04:32	05:24	06:33	07:39		07:51		09:44 (16) | 09:00
	15:53		16:56	63	13:43 (19) | 18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13	16:49	56	15:37 (32) | 15:51
2	09:27		08:43		11:39 (21) | 07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:56 (16) | 09:01
	15:54		16:58	59	13:43 (19) | 18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46	51	15:37 (32) | 15:50
3	09:27		08:41		11:38 (21) | 07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56		09:57 (16) | 09:03
	15:55		17:01	51	13:42 (19) | 18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07	16:44	55	15:36 (32) | 15:49
4	09:26		08:39		11:39 (21) | 07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46	07:58		10:02 (16) | 09:05
	15:57		17:03	51	15:59 (32) | 18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41	56	15:35 (32) | 15:48
5	09:26		08:37		11:39 (21) | 07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		10:04 (16) | 09:07
	15:58		17:06	56	16:02 (32) | 18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39	58	15:34 (32) | 15:47
6	09:25		08:34		10:34 (16) | 07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03		11:10 (21) | 09:09
	16:00		17:08	57	16:05 (32) | 18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	55	15:33 (32) | 15:46
7	09:24		08:32		10:32 (16) | 07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53	08:06		11:09 (21) | 09:10
	16:02		17:11	55	16:05 (32) | 18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56	16:34	49	13:12 (19) | 15:45
8	09:24		08:30		10:27 (16) | 07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55	08:08		11:09 (21) | 09:12
	16:03		17:13	53	16:07 (32) | 18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53	16:32	50	13:13 (19) | 15:45
9	09:23		08:27		10:26 (16) | 07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:10		11:09 (21) | 09:13
	16:05		17:16	49	16:07 (32) | 18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	60	13:14 (19) | 15:44
10	09:22		08:25		10:15 (16) | 07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		11:10 (21) | 09:15
	16:07		17:18	58	16:07 (32) | 18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:28	61	13:14 (19) | 15:43
11	09:21		08:22		10:16 (16) | 07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		11:10 (21) | 09:16
	16:09		17:21	55	16:08 (32) | 18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44	16:25	63	13:14 (19) | 15:43
12	09:20		08:20		10:17 (16) | 07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		11:10 (21) | 09:17
	16:11		17:23	48	16:08 (32) | 18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	66	13:15 (19) | 15:43
13	09:18		08:17		10:18 (16) | 07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20		11:11 (21) | 09:19
	16:13		17:26	33	16:07 (32) | 18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21	65	13:15 (19) | 15:42
14	09:17		12:02 (13) | 08:15		10:21 (16) | 06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09	08:22		11:11 (21) | 09:20
	16:15	8	12:10 (13) | 17:28	28	16:08 (32) | 18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19	66	13:15 (19) | 15:42
15	09:16		12:02 (13) | 08:12		15:50 (32) | 06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25		11:13 (21) | 09:21
	16:17	9	12:11 (13) | 17:30	17	16:07 (32) | 18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17	64	13:15 (19) | 15:42
16	09:14		12:02 (13) | 08:10		15:51 (32) | 06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:14 (21) | 09:22
	16:19	11	12:13 (13) | 17:33	14	16:05 (32) | 18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	62	13:15 (19) | 15:42
17	09:13		12:02 (13) | 08:07		15:52 (32) | 06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29		11:15 (21) | 09:23
	16:21	20	13:30 (19) | 17:35	12	16:04 (32) | 18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13	61	13:14 (19) | 15:42
18	09:12		11:58 (13) | 08:05		15:56 (32) | 06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18	08:32		11:16 (21) | 09:24
	16:23	30	13:34 (19) | 17:38	6	16:02 (32) | 18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	60	13:14 (19) | 15:42
19	09:10		11:58 (13) | 08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20	08:34		11:19 (21) | 09:25
	16:25	33	13:35 (19) | 17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22	16:09	55	13:14 (19) | 15:42
20	09:08		11:58 (13) | 08:00		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36		11:21 (21) | 09:25
	16:27	36	13:37 (19) | 17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07	47	13:13 (19) | 15:42
21	09:07		11:58 (13) | 07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39		11:33 (13) | 09:26
	16:30	39	13:38 (19) | 17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	39	13:13 (19) | 15:43
22	09:05		11:46 (21) | 07:54		06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41		11:34 (13) | 09:27
	16:32	47	13:38 (19) | 17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04	36	13:13 (19) | 15:43
23	09:03		11:44 (21) | 07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43		11:34 (13) | 09:27
	16:34	55	13:39 (19) | 17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02	33	13:12 (19) | 15:44
24	09:01		11:42 (21) | 07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	16:24 (32) | 08:45		11:35 (13) | 09:28
	16:37	60	13:40 (19) | 17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	8 | 16:32 (32) | 16:01	30	13:11 (19) | 15:44
25	09:00		11:42 (21) | 07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	15:22 (32) | 08:47		11:41 (13) | 09:28
	16:39	61	13:41 (19) | 17:55		19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06	12 | 15:34 (32) | 15:59	20	13:09 (19) | 15:45
26	08:58		11:41 (21) | 07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	15:20 (32) | 08:49		11:41 (13) | 09:28
	16:41	62	13:42 (19) | 17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15 | 15:35 (32) | 15:58	11	11:52 (13) | 15:46
27	08:56		11:40 (21) | 07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	15:19 (32) | 08:52		11:41 (13) | 09:28
	16:44	64	13:42 (19) | 18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01	17 | 15:36 (32) | 15:56	10	11:51 (13) | 15:47
28	08:54		11:40 (21) | 07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42	09:50 (16) | 08:54		11:42 (13) | 09:28
	16:46	65	13:43 (19) | 18:02		19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59	28 | 15:37 (32) | 15:55	8	11:50 (13) | 15:48
29	08:52		11:39 (21) |		07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	09:47 (16) | 08:56		09:28
	16:49	65	13:43 (19) |		20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	37 | 15:37 (32) | 15:53		15:49
30	08:50		11:39 (21) |		07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	09:46 (16) | 08:58		09:28
	16:51	65	13:43 (19) |		20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	49 | 15:37 (32) | 15:52		15:50
31	08:48		11:39 (21) |		07:09		04:41		05:22	06:31		07:49	09:46 (16) |		09:28
	16:53	63	13:43 (19) |		20:14		22:29		22:03	20:42		16:51	55 | 15:38 (32) |		15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		793		765									221		1347	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June	July	August	September	October			November			December
1	09:28			08:46		10:50 (16)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39			07:51		10:27 (16)	09:00
	15:53			16:56	74	14:26 (19)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13			16:49	30	13:49 (19)	15:51
2	09:27			08:43		10:51 (16)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41			07:54		10:25 (16)	09:01
	15:54			16:58	73	14:27 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10			16:46	45	13:52 (19)	15:50
3	09:27			08:41		10:50 (16)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44			07:56		10:24 (16)	09:03
	15:55			17:01	74	14:27 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07			16:44	54	13:54 (19)	15:49
4	09:26			08:39		10:51 (16)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46			07:58		10:22 (16)	09:05
	15:57			17:03	71	14:27 (19)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04			16:41	61	13:55 (19)	15:48
5	09:26			08:37		10:51 (16)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48			08:01		10:22 (16)	09:07
	15:58			17:06	68	14:26 (19)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01			16:39	65	13:56 (19)	15:47
6	09:25			08:34		10:53 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50			08:03		10:22 (16)	09:09
	16:00			17:08	64	14:26 (19)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59			16:37	69	13:57 (19)	15:46
7	09:24			08:32		10:53 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53			08:06		10:21 (16)	09:10
	16:02			17:11	59	14:25 (19)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56			16:34	72	13:57 (19)	15:45
8	09:24			08:30		10:55 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55			08:08		10:21 (16)	09:12
	16:03			17:13	52	14:24 (19)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53			16:32	73	13:57 (19)	15:45
9	09:23			08:27		10:56 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57			08:10		10:21 (16)	09:13
	16:05			17:16	43	14:22 (19)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50			16:30	75	13:58 (19)	15:44
10	09:22			08:25		10:58 (16)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00			08:13		10:22 (16)	09:15
	16:07			17:18	26	14:18 (19)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47			16:28	72	13:58 (19)	15:43
11	09:21			08:22		12:44 (21)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02			08:15		10:21 (16)	09:16
	16:09			17:21	5	12:49 (21)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44			16:25	75	13:58 (19)	15:43
12	09:20			08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04			08:18		10:22 (16)	09:17
	16:11			17:23			18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42			16:23	72	13:58 (19)	15:42
13	09:18		12:39 (13)	08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06			08:20		10:23 (16)	09:19
	16:13	5	12:44 (13)	17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39			16:21	72	13:58 (19)	15:42
14	09:17		12:39 (13)	08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09			08:22		10:23 (16)	09:20
	16:15	7	12:46 (13)	17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36			16:19	68	13:57 (19)	15:42
15	09:16		12:39 (13)	08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11			08:25		10:24 (16)	09:21
	16:17	15	12:54 (13)	17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33			16:17	63	13:57 (19)	15:42
16	09:14		12:38 (13)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13			08:27		10:30 (16)	09:22
	16:19	17	12:55 (13)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31			16:15	50	13:57 (19)	15:42
17	09:13		12:38 (13)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16			08:29		12:05 (21)	09:23
	16:21	18	12:56 (13)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28			16:13	45	13:55 (19)	15:42
18	09:12		12:37 (13)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18			08:32		12:07 (21)	09:24
	16:23	19	12:56 (13)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25			16:11	42	13:55 (19)	15:42
19	09:10		12:38 (13)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20			08:34		12:08 (21)	09:25
	16:25	20	12:58 (13)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22			16:09	39	13:54 (19)	15:42
20	09:08		12:37 (21)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23			08:36		12:09 (21)	09:25
	16:27	22	12:59 (13)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20			16:07	33	13:51 (19)	15:42
21	09:07		12:35 (21)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25			08:39		12:11 (21)	09:26
	16:30	23	12:58 (13)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17			16:06	23	12:34 (13)	15:43
22	09:05		12:34 (21)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27			08:41		12:13 (21)	09:27
	16:32	33	14:16 (19)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14			16:04	22	12:35 (13)	15:43
23	09:03		12:33 (21)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30			08:43		12:14 (13)	09:27
	16:34	39	14:19 (19)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12			16:02	20	12:34 (13)	15:44
24	09:01		12:33 (21)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32			08:45		12:15 (13)	09:28
	16:37	42	14:21 (19)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09			16:01	20	12:35 (13)	15:44
25	09:00		12:32 (21)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34			08:47		12:16 (13)	09:28
	16:39	45	14:22 (19)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06			15:59	18	12:34 (13)	15:45
26	08:58		10:57 (16)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37			08:49		12:17 (13)	09:28
	16:41	50	14:24 (19)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04			15:58	17	12:34 (13)	15:46
27	08:56		10:51 (16)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39			08:52		12:18 (13)	09:28
	16:44	64	14:24 (19)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01			15:56	15	12:33 (13)	15:47
28	08:54		10:51 (16)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42			08:54		12:19 (13)	09:28
	16:46	69	14:25 (19)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59			15:55	7	12:26 (13)	15:48
29	08:52		10:51 (16)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44			08:56		12:20 (13)	09:28
	16:49	70	14:26 (19)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56			15:53	5	12:25 (13)	15:49
30	08:50		10:50 (16)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46			08:58			09:28
	16:51	72	14:26 (19)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54			15:52			15:50
31	08:48		10:51 (16)				07:09		04:41		05:22	06:31		07:49	12:13 (21)					09:28
	16:53	74	14:27 (19)				20:14		22:29		22:03	20:42		16:51	7 12:20 (21)					15:51
Potential sun hours	221			260			365	432	521	547	546	478	386	319			236			199
Total, worst case		704			609										7			1322		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June	July	August	September	October			November			December
1	09:28			08:46		10:45 (16)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39			07:51		10:19 (16)	09:00
	15:53			16:56	73	14:22 (19)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13			16:49	43	13:46 (19)	15:51
2	09:27			08:43		10:46 (16)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41			07:54		10:18 (16)	09:01
	15:54			16:58	74	14:23 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10			16:46	53	13:48 (19)	15:50
3	09:27			08:41		10:45 (16)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44			07:56		10:18 (16)	09:03
	15:55			17:01	74	14:22 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07			16:44	59	13:50 (19)	15:49
4	09:26			08:39		10:46 (16)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46			07:58		10:16 (16)	09:05
	15:57			17:03	73	14:23 (19)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04			16:41	65	13:51 (19)	15:48
5	09:26			08:37		10:46 (16)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48			08:01		10:16 (16)	09:07
	15:58			17:06	71	14:22 (19)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01			16:39	70	13:52 (19)	15:47
6	09:25			08:34		10:47 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50			08:03		10:16 (16)	09:09
	16:00			17:08	68	14:22 (19)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59			16:37	73	13:53 (19)	15:46
7	09:24			08:32		10:47 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53			08:06		10:16 (16)	09:10
	16:02			17:11	65	14:21 (19)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56			16:34	73	13:52 (19)	15:45
8	09:24			08:30		10:48 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55			08:08		10:16 (16)	09:12
	16:03			17:13	58	14:20 (19)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53			16:32	73	13:53 (19)	15:45
9	09:23			08:27		10:49 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57			08:10		10:16 (16)	09:13
	16:05			17:16	50	14:18 (19)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50			16:30	75	13:53 (19)	15:44
10	09:22			08:25		10:50 (16)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00			08:13		10:17 (16)	09:15
	16:07			17:18	40	14:16 (19)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47			16:28	74	13:54 (19)	15:43
11	09:21			08:22		10:53 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02			08:15		10:17 (16)	09:16
	16:09			17:21	22	12:47 (21)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44			16:25	69	13:53 (19)	15:43
12	09:20			08:20		12:38 (21)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04			08:18		10:18 (16)	09:17
	16:11			17:23	4	12:42 (21)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42			16:23	54	13:53 (19)	15:42
13	09:18			08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06			08:20		10:20 (16)	09:19
	16:13			17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39			16:21	53	13:53 (19)	15:42
14	09:17			08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09			08:22		11:57 (21)	09:20
	16:15			17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36			16:19	51	13:52 (19)	15:42
15	09:16			08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11			08:25		11:58 (21)	09:21
	16:17			17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33			16:17	50	13:52 (19)	15:42
16	09:14			08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13			08:27		11:59 (21)	09:22
	16:19			17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31			16:15	49	13:52 (19)	15:42
17	09:13		12:33 (13)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16			08:29		12:00 (21)	09:23
	16:21	5	12:50 (13)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28			16:13	45	13:50 (19)	15:42
18	09:12		12:33 (13)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18			08:32		12:01 (21)	09:24
	16:23	18	12:51 (13)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25			16:11	43	13:50 (19)	15:42
19	09:10		12:34 (13)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20			08:34		12:03 (21)	09:25
	16:25	19	12:53 (13)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22			16:09	38	13:49 (19)	15:42
20	09:08		12:34 (13)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23			08:36		12:04 (21)	09:25
	16:27	20	12:54 (13)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20			16:07	27	13:41 (19)	15:42
21	09:07		12:31 (21)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25			08:39		12:07 (21)	09:26
	16:30	22	12:53 (13)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17			16:06	22	12:29 (13)	15:43
22	09:05		12:29 (21)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27			08:41		12:10 (13)	09:27
	16:32	27	14:06 (19)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14			16:04	20	12:30 (13)	15:43
23	09:03		12:28 (21)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30			08:43		12:10 (13)	09:27
	16:34	38	14:14 (19)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12			16:02	19	12:29 (13)	15:44
24	09:01		12:27 (21)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32			08:45		12:11 (13)	09:28
	16:37	43	14:16 (19)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09			16:01	18	12:29 (13)	15:44
25	09:00		12:27 (21)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34			08:47		12:11 (13)	09:28
	16:39	45	14:17 (19)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06			15:59	5	12:28 (13)	15:45
26	08:58		12:26 (21)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37			08:49			09:28
	16:41	49	14:19 (19)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04			15:58			15:46
27	08:56		12:25 (21)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39			08:52			09:28
	16:44	50	14:19 (19)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01			15:56			15:47
28	08:54		12:25 (21)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42			08:54			09:28
	16:46	51	14:20 (19)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59			15:55			15:48
29	08:52		10:48 (16)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44			08:56			09:28
	16:49	53	14:21 (19)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56			15:53			15:49
30	08:50		10:46 (16)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		12:06 (21)	08:58			09:28
	16:51	55	14:21 (19)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	7	12:13 (21)	15:52			15:50
31	08:48		10:46 (16)				07:09		04:41		05:22	06:31		07:49		10:22 (16)				09:28
	16:53	69	14:22 (19)				20:14		22:29		22:03	20:42		16:51	25	12:17 (21)				15:51
Potential sun hours	221			260			365	432	521	547	546	478	386	319			236			199
Total, worst case		564			672										32			1221		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		12:03 (30)	08:45		14:59 (21)	07:35	07:07	05:44	04:39
	15:52	20	12:23 (30)	16:56	18	15:17 (21)	18:04	20:16	21:26	22:30
2	09:27		12:03 (30)	08:43		14:59 (21)	07:32	07:04	05:41	04:38
	15:54	20	12:23 (30)	16:58	19	15:18 (21)	18:07	20:19	21:28	22:32
3	09:27		12:03 (30)	08:41		14:58 (21)	07:30	07:01	05:38	04:37
	15:55	20	12:23 (30)	17:01	19	15:17 (21)	18:09	20:21	21:30	22:33
4	09:26		12:03 (30)	08:39		14:59 (21)	07:27	06:58	05:36	04:36
	15:57	21	12:24 (30)	17:03	19	15:18 (21)	18:12	20:23	21:33	22:35
5	09:26		12:04 (30)	08:37		14:59 (21)	07:24	06:55	05:33	04:34
	15:58	26	13:33 (16)	17:06	19	15:18 (21)	18:14	20:26	21:35	22:36
6	09:25		12:04 (30)	08:34		15:00 (21)	07:21	06:52	05:31	04:33
	16:00	29	13:35 (16)	17:08	18	15:18 (21)	18:16	20:28	21:37	22:38
7	09:24		12:05 (30)	08:32		15:00 (21)	07:18	06:49	05:29	04:32
	16:01	31	13:37 (16)	17:11	17	15:17 (21)	18:19	20:30	21:39	22:39
8	09:23		12:06 (30)	08:30		15:00 (21)	07:16	06:46	05:26	04:31
	16:03	33	13:39 (16)	17:13	16	15:16 (21)	18:21	20:33	21:42	22:40
9	09:23		12:06 (30)	08:27		15:02 (21)	07:13	06:44	05:24	04:31
	16:05	33	13:39 (16)	17:15	14	15:16 (21)	18:23	20:35	21:44	22:42
10	09:22		12:07 (30)	08:25		15:03 (21)	07:10	06:41	05:21	04:30
	16:07	35	13:41 (16)	17:18	11	15:14 (21)	18:26	20:37	21:46	22:43
11	09:21		12:07 (30)	08:22		15:07 (21)	07:07	06:38	05:19	04:29
	16:09	35	13:41 (16)	17:20	5	15:12 (21)	18:28	20:39	21:49	22:44
12	09:19		12:08 (30)	08:20			07:04	06:35	05:17	04:29
	16:11	35	13:42 (16)	17:23			18:30	20:42	21:51	22:45
13	09:18		12:09 (30)	08:17			07:01	06:32	05:15	04:28
	16:12	35	13:43 (16)	17:25			18:33	20:44	21:53	22:46
14	09:17		12:10 (30)	08:15			06:58	06:29	05:12	04:28
	16:14	35	13:44 (16)	17:28			18:35	20:46	21:55	22:46
15	09:16		12:11 (30)	08:12			06:56	06:27	05:10	04:27
	16:17	34	13:45 (16)	17:30			18:37	20:49	21:57	22:47
16	09:14		12:12 (30)	08:10			06:53	06:24	05:08	04:27
	16:19	32	13:45 (16)	17:33			18:40	20:51	22:00	22:48
17	09:13		12:14 (30)	08:07			06:50	06:21	05:06	04:27
	16:21	29	13:45 (16)	17:35			18:42	20:53	22:02	22:48
18	09:11		12:16 (30)	08:05			06:47	06:18	05:04	04:26
	16:23	26	13:46 (16)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:25 (16)	08:02			06:44	06:16	05:02	04:26
	16:25	21	13:46 (16)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:25 (16)	07:59			06:41	06:13	05:00	04:26
	16:27	22	13:47 (16)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:26 (16)	07:57			06:38	06:10	04:58	04:26
	16:30	21	13:47 (16)	17:45			18:51	21:03	22:10	22:50
22	09:05		13:26 (16)	07:54			06:35	06:07	04:56	04:27
	16:32	21	13:47 (16)	17:48			18:54	21:05	22:12	22:50
23	09:03		13:27 (16)	07:51			06:33	06:05	04:54	04:27
	16:34	20	13:47 (16)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:28 (16)	07:49			06:30	06:02	04:52	04:27
	16:37	19	13:47 (16)	17:52			18:58	21:09	22:16	22:50
25	09:00		13:29 (16)	07:46			06:27	05:59	04:50	04:28
	16:39	18	13:47 (16)	17:55			19:00	21:12	22:18	22:50
26	08:58		13:30 (16)	07:43			06:24	05:57	04:49	04:28
	16:41	17	13:47 (16)	17:57			19:03	21:14	22:20	22:50
27	08:56		13:30 (16)	07:41			06:21	05:54	04:47	04:29
	16:44	20	15:09 (21)	18:00			19:05	21:16	22:22	22:50
28	08:54		13:32 (16)	07:38			06:18	05:51	04:45	04:29
	16:46	23	15:12 (21)	18:02			19:07	21:19	22:23	22:50
29	08:52		13:35 (16)				07:15	05:49	04:44	04:30
	16:48	21	15:14 (21)				20:10	21:21	22:25	22:49
30	08:50		15:00 (21)				07:12	05:46	04:42	04:31
	16:51	15	15:15 (21)				20:12	21:23	22:27	22:49
31	08:48		15:00 (21)				07:09		04:41	
	16:53	16	15:16 (21)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		783			175					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (21)	08:59		11:49 (30)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (21)	15:51	35	13:23 (16)
2	04:33	05:26	06:35	07:41			07:54		14:31 (21)	09:01		11:50 (30)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (21)	15:50	35	13:24 (16)
3	04:34	05:28	06:37	07:44			07:56		14:31 (21)	09:03		11:50 (30)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (21)	15:49	33	13:23 (16)
4	04:35	05:30	06:39	07:46			07:58		14:29 (21)	09:05		11:50 (30)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (21)	15:48	33	13:23 (16)
5	04:36	05:33	06:42	07:48			08:01		14:29 (21)	09:07		11:50 (30)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (21)	15:47	31	13:22 (16)
6	04:37	05:35	06:44	07:50			08:03		14:29 (21)	09:08		11:50 (30)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (21)	15:46	30	13:22 (16)
7	04:38	05:37	06:46	07:53			08:06		14:29 (21)	09:10		11:51 (30)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (21)	15:45	27	13:21 (16)
8	04:40	05:39	06:48	07:55			08:08		14:29 (21)	09:12		11:51 (30)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (21)	15:44	21	12:12 (30)
9	04:41	05:41	06:51	07:57			08:10		14:30 (21)	09:13		11:51 (30)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (21)	15:44	21	12:12 (30)
10	04:42	05:44	06:53	07:59			08:13		14:29 (21)	09:15		11:52 (30)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (21)	15:43	20	12:12 (30)
11	04:44	05:46	06:55	08:02			08:15		14:30 (21)	09:16		11:53 (30)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (21)	15:43	20	12:13 (30)
12	04:45	05:48	06:57	08:04			08:18		14:32 (21)	09:17		11:53 (30)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (21)	15:42	20	12:13 (30)
13	04:47	05:50	06:59	08:06			08:20		13:07 (16)	09:19		11:54 (30)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (21)	15:42	20	12:14 (30)
14	04:49	05:53	07:02	08:09			08:22		13:04 (16)	09:20		11:54 (30)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (21)	15:42	20	12:14 (30)
15	04:50	05:55	07:04	08:11			08:25		13:03 (16)	09:21		11:54 (30)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (21)	15:42	20	12:14 (30)
16	04:52	05:57	07:06	08:13			08:27		13:03 (16)	09:22		11:55 (30)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (16)	15:42	20	12:15 (30)
17	04:54	05:59	07:08	08:16			08:29		13:02 (16)	09:23		11:55 (30)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (16)	15:42	20	12:15 (30)
18	04:56	06:02	07:10	08:18			08:32		13:02 (16)	09:24		11:56 (30)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (16)	15:42	19	12:15 (30)
19	04:57	06:04	07:13	08:20			08:34		13:02 (16)	09:25		11:56 (30)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (16)	15:42	20	12:16 (30)
20	04:59	06:06	07:15	08:23			08:36		13:01 (16)	09:25		11:57 (30)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (16)	15:42	20	12:17 (30)
21	05:01	06:08	07:17	08:25			08:38		13:02 (16)	09:26		11:57 (30)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (16)	15:43	20	12:17 (30)
22	05:03	06:10	07:19	08:27			08:41		13:02 (16)	09:27		11:58 (30)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (16)	15:43	20	12:18 (30)
23	05:05	06:13	07:21	08:30			08:43		13:02 (16)	09:27		11:58 (30)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (16)	15:44	20	12:18 (30)
24	05:07	06:15	07:24	08:32			08:45		11:55 (30)	09:27		11:58 (30)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (16)	15:44	20	12:18 (30)
25	05:09	06:17	07:26	07:34			08:47		11:52 (30)	09:28		11:59 (30)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (16)	15:45	20	12:19 (30)
26	05:11	06:19	07:28	07:37			08:49		11:51 (30)	09:28		12:00 (30)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (16)	15:46	20	12:20 (30)
27	05:13	06:22	07:30	07:39			08:51		11:50 (30)	09:28		12:00 (30)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (16)	15:47	20	12:20 (30)
28	05:15	06:24	07:32	07:42			08:54		11:49 (30)	09:28		12:00 (30)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (16)	15:48	20	12:20 (30)
29	05:17	06:26	07:35	07:44			08:56		11:50 (30)	09:28		12:01 (30)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (16)	15:49	20	12:21 (30)
30	05:20	06:28	07:37	07:46			08:58		11:49 (30)	09:28		12:01 (30)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (16)	15:50	21	12:22 (30)
31	05:22	06:31		07:49		14:35 (21)				09:28		12:01 (30)
	22:03	20:42		16:51	6	14:41 (21)				15:51	21	12:22 (30)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November			December		
1	09:28		12:35 (30)	08:45		14:09 (16)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51			08:59		12:23 (30)
	15:52	20	12:55 (30)	16:56	5	14:14 (16)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48			15:51	18	12:41 (30)
2	09:27		12:36 (30)	08:43			07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54			09:01		12:23 (30)
	15:54	21	12:57 (30)	16:58			18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46			15:50	19	12:42 (30)
3	09:27		12:36 (30)	08:41			07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56			09:03		12:23 (30)
	15:55	21	12:57 (30)	17:01			18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44			15:49	20	12:43 (30)
4	09:26		12:37 (30)	08:39			07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58			09:05		12:23 (30)
	15:57	20	12:57 (30)	17:03			18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41			15:48	20	12:43 (30)
5	09:26		12:37 (30)	08:37			07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01			09:07		12:24 (30)
	15:58	20	12:57 (30)	17:06			18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39			15:47	20	12:44 (30)
6	09:25		12:38 (30)	08:34			07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03			09:08		12:24 (30)
	16:00	20	12:58 (30)	17:08			18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36			15:46	20	12:44 (30)
7	09:24		12:38 (30)	08:32			07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06			09:10		12:24 (30)
	16:01	20	12:58 (30)	17:11			18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34			15:45	21	12:45 (30)
8	09:23		12:39 (30)	08:30			07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08			09:12		12:25 (30)
	16:03	20	12:59 (30)	17:13			18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32			15:44	20	12:45 (30)
9	09:23		12:39 (30)	08:27			07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10			09:13		12:24 (30)
	16:05	19	12:58 (30)	17:15			18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30			15:44	21	12:45 (30)
10	09:22		12:40 (30)	08:25			07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13		13:40 (16)	09:15		12:25 (30)
	16:07	19	12:59 (30)	17:18			18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27	5	13:45 (16)	15:43	21	12:46 (30)
11	09:21		12:40 (30)	08:22			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		13:37 (16)	09:16		12:26 (30)
	16:09	19	12:59 (30)	17:20			18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25	11	13:48 (16)	15:43	21	12:47 (30)
12	09:19		12:42 (30)	08:20			07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18		13:36 (16)	09:17		12:26 (30)
	16:10	24	14:10 (16)	17:23			18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	14	13:50 (16)	15:42	20	12:46 (30)
13	09:18		12:42 (30)	08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20		13:35 (16)	09:19		12:27 (30)
	16:12	27	14:11 (16)	17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21	17	13:52 (16)	15:42	20	12:47 (30)
14	09:17		12:44 (30)	08:15			06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22		13:34 (16)	09:20		12:27 (30)
	16:14	27	14:13 (16)	17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19	18	13:52 (16)	15:42	21	12:48 (30)
15	09:16		12:45 (30)	08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25		13:34 (16)	09:21		12:27 (30)
	16:17	27	14:14 (16)	17:30			18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17	19	13:53 (16)	15:42	21	12:48 (30)
16	09:14		12:46 (30)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		13:34 (16)	09:22		12:28 (30)
	16:19	27	14:15 (16)	17:33			18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15	20	13:54 (16)	15:42	20	12:48 (30)
17	09:13		12:48 (30)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29		13:33 (16)	09:23		12:28 (30)
	16:21	25	14:16 (16)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13	20	13:53 (16)	15:42	20	12:48 (30)
18	09:11		13:59 (16)	08:05			06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32		13:34 (16)	09:24		12:29 (30)
	16:23	18	14:17 (16)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11	20	13:54 (16)	15:42	20	12:49 (30)
19	09:10		13:59 (16)	08:02			06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34		13:34 (16)	09:25		12:30 (30)
	16:25	19	14:18 (16)	17:40			18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09	21	13:55 (16)	15:42	20	12:50 (30)
20	09:08		13:59 (16)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36		13:34 (16)	09:25		12:30 (30)
	16:27	19	14:18 (16)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07	20	13:54 (16)	15:42	20	12:50 (30)
21	09:07		13:59 (16)	07:57			06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38		13:35 (16)	09:26		12:30 (30)
	16:30	20	14:19 (16)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	20	13:55 (16)	15:43	20	12:50 (30)
22	09:05		13:59 (16)	07:54			06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41		13:35 (16)	09:27		12:31 (30)
	16:32	20	14:19 (16)	17:47			18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04	19	13:54 (16)	15:43	20	12:51 (30)
23	09:03		13:59 (16)	07:51			06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43		13:36 (16)	09:27		12:31 (30)
	16:34	21	14:20 (16)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02	19	13:55 (16)	15:44	20	12:51 (30)
24	09:01		14:00 (16)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		13:37 (16)	09:27		12:31 (30)
	16:36	20	14:20 (16)	17:52			18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01	18	13:55 (16)	15:44	21	12:52 (30)
25	09:00		14:00 (16)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47		12:26 (30)	09:28		12:33 (30)
	16:39	21	14:21 (16)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59	25	13:54 (16)	15:45	20	12:53 (30)
26	08:58		14:01 (16)	07:43			06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49		12:25 (30)	09:28		12:33 (30)
	16:41	20	14:21 (16)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57	26	13:54 (16)	15:46	20	12:53 (30)
27	08:56		14:01 (16)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51		12:24 (30)	09:28		12:34 (30)
	16:44	19	14:20 (16)	18:00			19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56	28	13:54 (16)	15:47	20	12:54 (30)
28	08:54		14:02 (16)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54		12:23 (30)	09:28		12:33 (30)
	16:46	18	14:20 (16)	18:02			19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55	28	13:53 (16)	15:47	21	12:54 (30)
29	08:52		14:04 (16)				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56		12:23 (30)	09:28		12:34 (30)
	16:48	16	14:20 (16)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53	27	13:52 (16)	15:49	20	12:54 (30)
30	08:50		14:04 (16)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58		12:23 (30)	09:28		12:35 (30)
	16:51	14	14:18 (16)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52	24	13:51 (16)	15:50	20	12:55 (30)
31	08:48		14:07 (16)				07:09		04:41		05:22	06:31		07:49				09:28		12:35 (30)
	16:53	10	14:17 (16)				20:14		22:29		22:03	20:42		16:51				15:51	20	12:55 (30)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236			199		
Total, worst case		631			5											419			625	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		13:54 (30)	08:45		15:12 (16)	07:35	07:06	05:43	04:39
	15:52	9	14:03 (30)	16:56	14	15:26 (16)	18:04	20:16	21:26	22:30
2	09:27		13:54 (30)	08:43		15:12 (16)	07:32	07:04	05:41	04:38
	15:54	11	14:05 (30)	16:58	16	15:28 (16)	18:07	20:19	21:28	22:32
3	09:27		13:54 (30)	08:41		15:11 (16)	07:29	07:01	05:38	04:37
	15:55	12	14:06 (30)	17:01	17	15:28 (16)	18:09	20:21	21:30	22:33
4	09:26		13:54 (30)	08:39		15:11 (16)	07:27	06:58	05:36	04:36
	15:57	13	14:07 (30)	17:03	18	15:29 (16)	18:12	20:23	21:33	22:35
5	09:26		13:53 (30)	08:37		15:11 (16)	07:24	06:55	05:33	04:34
	15:58	15	14:08 (30)	17:06	18	15:29 (16)	18:14	20:26	21:35	22:36
6	09:25		13:53 (30)	08:34		15:11 (16)	07:21	06:52	05:31	04:33
	16:00	16	14:09 (30)	17:08	19	15:30 (16)	18:16	20:28	21:37	22:38
7	09:24		13:54 (30)	08:32		15:11 (16)	07:18	06:49	05:29	04:32
	16:01	16	14:10 (30)	17:10	19	15:30 (16)	18:19	20:30	21:39	22:39
8	09:23		13:54 (30)	08:30		15:11 (16)	07:15	06:46	05:26	04:31
	16:03	17	14:11 (30)	17:13	18	15:29 (16)	18:21	20:32	21:42	22:40
9	09:23		13:53 (30)	08:27		15:12 (16)	07:13	06:44	05:24	04:31
	16:05	18	14:11 (30)	17:15	18	15:30 (16)	18:23	20:35	21:44	22:41
10	09:22		13:53 (30)	08:25		15:12 (16)	07:10	06:41	05:21	04:30
	16:07	19	14:12 (30)	17:18	17	15:29 (16)	18:26	20:37	21:46	22:43
11	09:20		13:53 (30)	08:22		15:13 (16)	07:07	06:38	05:19	04:29
	16:09	19	14:12 (30)	17:20	14	15:27 (16)	18:28	20:39	21:48	22:44
12	09:19		13:54 (30)	08:20		15:16 (16)	07:04	06:35	05:17	04:28
	16:10	19	14:13 (30)	17:23	11	15:27 (16)	18:30	20:42	21:51	22:45
13	09:18		13:53 (30)	08:17		15:18 (16)	07:01	06:32	05:14	04:28
	16:12	21	14:14 (30)	17:25	5	15:23 (16)	18:33	20:44	21:53	22:45
14	09:17		13:54 (30)	08:15			06:58	06:29	05:12	04:27
	16:14	21	14:15 (30)	17:28			18:35	20:46	21:55	22:46
15	09:16		13:54 (30)	08:12			06:56	06:27	05:10	04:27
	16:16	21	14:15 (30)	17:30			18:37	20:49	21:57	22:47
16	09:14		13:54 (30)	08:10			06:53	06:24	05:08	04:27
	16:19	21	14:15 (30)	17:33			18:40	20:51	21:59	22:48
17	09:13		13:54 (30)	08:07			06:50	06:21	05:06	04:27
	16:21	22	14:16 (30)	17:35			18:42	20:53	22:02	22:48
18	09:11		13:55 (30)	08:05			06:47	06:18	05:04	04:26
	16:23	21	14:16 (30)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:55 (30)	08:02			06:44	06:15	05:02	04:26
	16:25	21	14:16 (30)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:56 (30)	07:59			06:41	06:13	05:00	04:26
	16:27	20	14:16 (30)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:56 (30)	07:57			06:38	06:10	04:58	04:26
	16:30	20	14:16 (30)	17:45			18:51	21:02	22:10	22:50
22	09:05		13:57 (30)	07:54			06:35	06:07	04:56	04:27
	16:32	19	14:16 (30)	17:47			18:53	21:05	22:12	22:50
23	09:03		13:58 (30)	07:51			06:32	06:05	04:54	04:27
	16:34	18	14:16 (30)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:59 (30)	07:49			06:30	06:02	04:52	04:27
	16:36	17	14:16 (30)	17:52			18:58	21:09	22:16	22:50
25	08:59		14:01 (30)	07:46			06:27	05:59	04:50	04:28
	16:39	14	14:15 (30)	17:55			19:00	21:12	22:18	22:50
26	08:58		14:02 (30)	07:43			06:24	05:57	04:49	04:28
	16:41	11	14:13 (30)	17:57			19:03	21:14	22:20	22:50
27	08:56		14:05 (30)	07:41			06:21	05:54	04:47	04:29
	16:44	6	14:11 (30)	18:00			19:05	21:16	22:22	22:50
28	08:54			07:38			06:18	05:51	04:45	04:29
	16:46			18:02			19:07	21:19	22:23	22:50
29	08:52						07:15	05:49	04:44	04:30
	16:48						20:10	21:21	22:25	22:49
30	08:50		15:15 (16)				07:12	05:46	04:42	04:31
	16:51	8	15:23 (16)				20:12	21:23	22:27	22:49
31	08:48		15:14 (16)				07:09		04:41	
	16:53	11	15:25 (16)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		476			204					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		14:42 (16)	08:59		13:35 (30)
	22:48		22:01		20:39		19:13			16:48	16	14:58 (16)	15:51	19	13:54 (30)
2	04:33		05:26		06:35		07:41			07:53		14:41 (16)	09:01		13:37 (30)
	22:48		21:58		20:37		19:10			16:46	18	14:59 (16)	15:50	18	13:55 (30)
3	04:34		05:28		06:37		07:44			07:56		14:40 (16)	09:03		13:37 (30)
	22:47		21:56		20:34		19:07			16:44	19	14:59 (16)	15:49	18	13:55 (30)
4	04:35		05:30		06:39		07:46			07:58		14:40 (16)	09:05		13:38 (30)
	22:46		21:54		20:31		19:04			16:41	20	15:00 (16)	15:48	17	13:55 (30)
5	04:36		05:32		06:42		07:48			08:01		14:41 (16)	09:07		13:39 (30)
	22:45		21:51		20:28		19:01			16:39	19	15:00 (16)	15:47	16	13:55 (30)
6	04:37		05:35		06:44		07:50			08:03		14:41 (16)	09:08		13:40 (30)
	22:45		21:49		20:25		18:58			16:36	19	15:00 (16)	15:46	15	13:55 (30)
7	04:38		05:37		06:46		07:53			08:06		14:41 (16)	09:10		13:41 (30)
	22:44		21:46		20:22		18:56			16:34	18	14:59 (16)	15:45	14	13:55 (30)
8	04:40		05:39		06:48		07:55			08:08		14:42 (16)	09:12		13:42 (30)
	22:43		21:44		20:19		18:53			16:32	17	14:59 (16)	15:44	13	13:55 (30)
9	04:41		05:41		06:50		07:57			08:10		14:43 (16)	09:13		13:42 (30)
	22:41		21:41		20:16		18:50			16:30	16	14:59 (16)	15:44	12	13:54 (30)
10	04:42		05:44		06:53		07:59			08:13		14:43 (16)	09:15		13:43 (30)
	22:40		21:39		20:14		18:47			16:27	14	14:57 (16)	15:43	11	13:54 (30)
11	04:44		05:46		06:55		08:02			08:15		14:45 (16)	09:16		13:45 (30)
	22:39		21:36		20:11		18:44			16:25	11	14:56 (16)	15:43	9	13:54 (30)
12	04:45		05:48		06:57		08:04			08:18		14:47 (16)	09:17		13:46 (30)
	22:38		21:34		20:08		18:41			16:23	7	14:54 (16)	15:42	7	13:53 (30)
13	04:47		05:50		06:59		08:06			08:20			09:19		13:48 (30)
	22:36		21:31		20:05		18:39			16:21			15:42	5	13:53 (30)
14	04:49		05:53		07:01		08:09			08:22			09:20		13:49 (30)
	22:35		21:29		20:02		18:36			16:19			15:42	3	13:52 (30)
15	04:50		05:55		07:04		08:11			08:25		13:37 (30)	09:21		
	22:33		21:26		19:59		18:33			16:17	7	13:44 (30)	15:42		
16	04:52		05:57		07:06		08:13			08:27		13:36 (30)	09:22		
	22:32		21:23		19:56		18:30			16:15	11	13:47 (30)	15:42		
17	04:54		05:59		07:08		08:16			08:29		13:34 (30)	09:23		
	22:30		21:21		19:53		18:28			16:13	14	13:48 (30)	15:42		
18	04:56		06:01		07:10		08:18			08:32		13:33 (30)	09:24		
	22:29		21:18		19:50		18:25			16:11	17	13:50 (30)	15:42		
19	04:57		06:04		07:12		08:20			08:34		13:33 (30)	09:25		
	22:27		21:15		19:47		18:22			16:09	18	13:51 (30)	15:42		
20	04:59		06:06		07:15		08:23			08:36		13:32 (30)	09:25		
	22:25		21:13		19:45		18:19			16:07	19	13:51 (30)	15:42		
21	05:01		06:08		07:17		08:25			08:38		13:32 (30)	09:26		
	22:23		21:10		19:42		18:17			16:06	20	13:52 (30)	15:43		
22	05:03		06:10		07:19		08:27			08:41		13:32 (30)	09:27		
	22:21		21:07		19:39		18:14			16:04	20	13:52 (30)	15:43		
23	05:05		06:13		07:21		08:30			08:43		13:32 (30)	09:27		
	22:20		21:05		19:36		18:11			16:02	21	13:53 (30)	15:44		
24	05:07		06:15		07:23		08:32			08:45		13:33 (30)	09:27		
	22:18		21:02		19:33		18:09			16:00	21	13:54 (30)	15:44		
25	05:09		06:17		07:26		07:34			08:47		13:33 (30)	09:28		
	22:16		20:59		19:30		17:06			15:59	21	13:54 (30)	15:45		
26	05:11		06:19		07:28		07:37			08:49		13:33 (30)	09:28		
	22:14		20:56		19:27		17:04			15:57	21	13:54 (30)	15:46		
27	05:13		06:22		07:30		07:39			08:51		13:33 (30)	09:28		
	22:11		20:53		19:24		17:01			15:56	21	13:54 (30)	15:47		
28	05:15		06:24		07:32		07:41			08:53		13:33 (30)	09:28		
	22:09		20:51		19:21		16:58			15:55	21	13:54 (30)	15:47		
29	05:17		06:26		07:35		07:44		14:47 (16)	08:55		13:35 (30)	09:28		
	22:07		20:48		19:18		16:56	7	14:54 (16)	15:53	20	13:55 (30)	15:48		
30	05:19		06:28		07:37		07:46		14:45 (16)	08:57		13:35 (30)	09:28		13:56 (30)
	22:05		20:45		19:16		16:53	11	14:56 (16)	15:52	20	13:55 (30)	15:50	4	14:00 (30)
31	05:22		06:31				07:49		14:42 (16)				09:28		13:55 (30)
	22:03		20:42				16:51	15	14:57 (16)				15:51	6	14:01 (30)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								33			486			187	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April	May	June
1	09:28			08:45		10:57 (41)	07:35		16:28 (21)	07:06	05:44	04:39
	15:52			16:56	40	13:50 (30)	18:04	11	16:39 (21)	20:16	21:26	22:30
2	09:27			08:43		10:59 (41)	07:32		16:27 (21)	07:04	05:41	04:38
	15:54			16:58	37	13:51 (30)	18:07	13	16:40 (21)	20:19	21:28	22:32
3	09:27			08:41		11:02 (41)	07:30		16:27 (21)	07:01	05:38	04:37
	15:55			17:01	28	13:49 (30)	18:09	14	16:41 (21)	20:21	21:30	22:33
4	09:26			08:39		13:29 (30)	07:27		16:27 (21)	06:58	05:36	04:36
	15:57			17:03	20	13:49 (30)	18:12	17	16:44 (21)	20:23	21:33	22:35
5	09:26			08:37		13:30 (30)	07:24		16:27 (21)	06:55	05:33	04:34
	15:58			17:06	17	13:47 (30)	18:14	19	16:46 (21)	20:26	21:35	22:36
6	09:25			08:34		13:33 (30)	07:21		16:28 (21)	06:52	05:31	04:33
	16:00			17:08	12	13:45 (30)	18:16	17	16:45 (21)	20:28	21:37	22:38
7	09:24			08:32			07:18		16:29 (21)	06:49	05:29	04:32
	16:01			17:11			18:19	15	16:44 (21)	20:30	21:39	22:39
8	09:23			08:30			07:15		16:30 (21)	06:46	05:26	04:32
	16:03			17:13			18:21	12	16:42 (21)	20:32	21:42	22:40
9	09:23			08:27			07:13		16:33 (21)	06:44	05:24	04:31
	16:05			17:15			18:23	6	16:39 (21)	20:35	21:44	22:41
10	09:22			08:25			07:10			06:41	05:21	04:30
	16:07			17:18			18:26			20:37	21:46	22:43
11	09:20			08:22			07:07			06:38	05:19	04:29
	16:09			17:20			18:28			20:39	21:48	22:44
12	09:19			08:20		14:57 (11)	07:04			06:35	05:17	04:29
	16:11			17:23	8	15:05 (11)	18:30			20:42	21:51	22:45
13	09:18			08:17		14:59 (11)	07:01			06:32	05:15	04:28
	16:12			17:25	11	15:10 (11)	18:33			20:44	21:53	22:45
14	09:17		11:05 (41)	08:15		15:02 (11)	06:58			06:29	05:12	04:28
	16:14	3	11:08 (41)	17:28	12	15:14 (16)	18:35			20:46	21:55	22:46
15	09:16		10:59 (41)	08:12		15:06 (16)	06:56			06:27	05:10	04:27
	16:17	10	11:09 (41)	17:30	12	15:18 (16)	18:37			20:49	21:57	22:47
16	09:14		10:52 (41)	08:10		15:06 (16)	06:53			06:24	05:08	04:27
	16:19	18	11:10 (41)	17:33	15	15:21 (16)	18:40			20:51	21:59	22:48
17	09:13		10:51 (41)	08:07		15:05 (16)	06:50			06:21	05:06	04:27
	16:21	19	11:10 (41)	17:35	16	15:21 (16)	18:42			20:53	22:02	22:48
18	09:11		10:51 (41)	08:05		15:05 (16)	06:47			06:18	05:04	04:26
	16:23	20	11:11 (41)	17:38	15	15:20 (16)	18:44			20:56	22:04	22:49
19	09:10		10:51 (41)	08:02		15:06 (16)	06:44			06:16	05:02	04:26
	16:25	21	11:12 (41)	17:40	16	15:22 (16)	18:47			20:58	22:06	22:49
20	09:08		10:51 (41)	07:59		15:07 (16)	06:41			06:13	05:00	04:26
	16:27	22	11:13 (41)	17:43	17	15:24 (16)	18:49			21:00	22:08	22:50
21	09:07		10:51 (41)	07:57		15:07 (16)	06:38			06:10	04:58	04:26
	16:30	22	11:13 (41)	17:45	20	15:27 (16)	18:51			21:02	22:10	22:50
22	09:05		10:51 (41)	07:54		15:08 (16)	06:35			06:07	04:56	04:27
	16:32	27	12:49 (36)	17:47	20	15:28 (16)	18:53			21:05	22:12	22:50
23	09:03		10:51 (41)	07:51		15:09 (16)	06:32			06:05	04:54	04:27
	16:34	39	13:02 (36)	17:50	18	15:27 (16)	18:56			21:07	22:14	22:50
24	09:01		10:52 (41)	07:49		15:12 (16)	06:30			06:02	04:52	04:27
	16:37	40	13:04 (36)	17:52	13	15:25 (16)	18:58			21:09	22:16	22:50
25	08:59		10:52 (41)	07:46		15:16 (16)	06:27			05:59	04:50	04:28
	16:39	39	13:04 (36)	17:55	5	15:21 (16)	19:00			21:12	22:18	22:50
26	08:58		10:52 (41)	07:43			06:24			05:57	04:49	04:28
	16:41	39	13:24 (30)	17:57			19:03			21:14	22:20	22:50
27	08:56		10:53 (41)	07:41			06:21			05:54	04:47	04:29
	16:44	39	13:28 (30)	18:00			19:05			21:16	22:22	22:50
28	08:54		10:53 (41)	07:38		16:32 (21)	06:18			05:51	04:45	04:29
	16:46	41	13:35 (30)	18:02	4	16:36 (21)	19:07			21:19	22:23	22:50
29	08:52		10:54 (41)				07:15			05:49	04:44	04:30
	16:48	41	13:44 (30)				20:10			21:21	22:25	22:49
30	08:50		10:55 (41)				07:12			05:46	04:42	04:31
	16:51	42	13:47 (30)				20:12			21:23	22:27	22:49
31	08:48		10:56 (41)				07:09				04:41	
	16:53	42	13:49 (30)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		524			356			124				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51		08:59
	22:48	22:01	20:39	19:13		16:48		15:51
2	04:33	05:26	06:35	07:41		07:54		09:01
	22:48	21:58	20:37	19:10		16:46		15:50
3	04:34	05:28	06:37	07:44		07:56		09:03
	22:47	21:56	20:34	19:07		16:44		15:49
4	04:35	05:30	06:39	07:46		07:58	13:07 (30)	09:05
	22:46	21:54	20:31	19:04		16:41	4 13:11 (30)	15:48
5	04:36	05:33	06:42	07:48	17:09 (21)	08:01	13:02 (30)	09:07
	22:45	21:51	20:28	19:01	9 17:18 (21)	16:39	13 13:15 (30)	15:47
6	04:37	05:35	06:44	07:50	17:06 (21)	08:03	13:01 (30)	09:08
	22:45	21:49	20:25	18:58	14 17:20 (21)	16:36	17 13:18 (30)	15:46
7	04:38	05:37	06:46	07:53	17:04 (21)	08:06	12:58 (30)	09:10
	22:44	21:46	20:22	18:56	16 17:20 (21)	16:34	21 13:19 (30)	15:45
8	04:40	05:39	06:48	07:55	17:03 (21)	08:08	10:32 (41)	09:12
	22:43	21:44	20:19	18:53	18 17:21 (21)	16:32	29 13:20 (30)	15:44
9	04:41	05:41	06:50	07:57	17:02 (21)	08:10	10:30 (41)	09:13
	22:41	21:41	20:16	18:50	18 17:20 (21)	16:30	37 13:22 (30)	15:44
10	04:42	05:44	06:53	07:59	17:01 (21)	08:13	10:28 (41)	09:15
	22:40	21:39	20:14	18:47	16 17:17 (21)	16:27	40 13:21 (30)	15:43
11	04:44	05:46	06:55	08:02	17:01 (21)	08:15	10:27 (41)	09:16
	22:39	21:36	20:11	18:44	14 17:15 (21)	16:25	41 13:19 (30)	15:43
12	04:45	05:48	06:57	08:04	17:01 (21)	08:18	10:27 (41)	09:17
	22:38	21:34	20:08	18:41	12 17:13 (21)	16:23	42 13:19 (30)	15:42
13	04:47	05:50	06:59	08:06	17:02 (21)	08:20	10:25 (41)	09:19
	22:36	21:31	20:05	18:39	10 17:12 (21)	16:21	41 13:15 (30)	15:42
14	04:49	05:53	07:01	08:09	17:06 (21)	08:22	10:25 (41)	09:20
	22:35	21:29	20:02	18:36	2 17:08 (21)	16:19	41 13:07 (30)	15:42
15	04:50	05:55	07:04	08:11		08:25	10:25 (41)	09:21
	22:33	21:26	19:59	18:33		16:17	40 13:01 (30)	15:42
16	04:52	05:57	07:06	08:13		08:27	10:26 (41)	09:22
	22:32	21:23	19:56	18:30		16:15	39 12:58 (30)	15:42
17	04:54	05:59	07:08	08:16	15:45 (16)	08:29	10:25 (41)	09:23
	22:30	21:21	19:53	18:28	9 15:54 (16)	16:13	39 12:37 (36)	15:42
18	04:56	06:02	07:10	08:18	15:42 (16)	08:32	10:26 (41)	09:24
	22:29	21:18	19:50	18:25	15 15:57 (16)	16:11	40 12:38 (36)	15:42
19	04:57	06:04	07:12	08:20	15:40 (16)	08:34	10:26 (41)	09:25
	22:27	21:15	19:47	18:22	18 15:58 (16)	16:09	39 12:37 (36)	15:42
20	04:59	06:06	07:15	08:23	15:39 (16)	08:36	10:26 (41)	09:25
	22:25	21:13	19:45	18:20	21 16:00 (16)	16:07	28 12:25 (36)	15:42
21	05:01	06:08	07:17	08:25	15:37 (16)	08:38	10:27 (41)	09:26
	22:23	21:10	19:42	18:17	18 15:55 (16)	16:06	22 10:49 (41)	15:43
22	05:03	06:10	07:19	08:27	15:37 (16)	08:41	10:27 (41)	09:27
	22:21	21:07	19:39	18:14	16 15:53 (16)	16:04	22 10:49 (41)	15:43
23	05:05	06:13	07:21	08:30	15:36 (16)	08:43	10:28 (41)	09:27
	22:20	21:05	19:36	18:12	16 15:52 (16)	16:02	21 10:49 (41)	15:44
24	05:07	06:15	07:24	08:32	15:35 (16)	08:45	10:29 (41)	09:27
	22:18	21:02	19:33	18:09	16 15:51 (16)	16:01	20 10:49 (41)	15:44
25	05:09	06:17	07:26	07:34	14:36 (16)	08:47	10:29 (41)	09:28
	22:16	20:59	19:30	17:06	15 14:51 (16)	15:59	19 10:48 (41)	15:45
26	05:11	06:19	07:28	07:37	14:35 (16)	08:49	10:31 (41)	09:28
	22:14	20:56	19:27	17:04	14 14:49 (16)	15:57	18 10:49 (41)	15:46
27	05:13	06:22	07:30	07:39	14:35 (16)	08:51	10:38 (41)	09:28
	22:11	20:53	19:24	17:01	12 14:47 (16)	15:56	10 10:48 (41)	15:47
28	05:15	06:24	07:32	07:41	14:30 (11)	08:53	10:44 (41)	09:28
	22:09	20:51	19:21	16:58	12 14:42 (16)	15:55	3 10:47 (41)	15:48
29	05:17	06:26	07:35	07:44	14:27 (11)	08:55		09:28
	22:07	20:48	19:19	16:56	11 14:38 (11)	15:53		15:49
30	05:20	06:28	07:37	07:46	14:26 (11)	08:57		09:28
	22:05	20:45	19:16	16:53	8 14:34 (11)	15:52		15:50
31	05:22	06:31		07:49				09:28
	22:03	20:42		16:51				15:51
Potential sun hours	546	478	386	319		236		199
Total, worst case					330		686	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April			May			June		
1	09:27			08:45		15:29 (12)	07:35		15:43 (17)	07:06			05:43		18:54 (41)	04:39		
	15:52			16:56	22	15:51 (12)	18:04	38	16:21 (17)	20:16			21:25	25	19:19 (41)	22:30		
2	09:27			08:43		15:29 (12)	07:32		15:44 (17)	07:04			05:41		18:56 (41)	04:38		
	15:54			16:58	23	15:52 (12)	18:07	36	16:20 (17)	20:19			21:28	20	19:16 (41)	22:32		
3	09:27			08:41		15:29 (12)	07:29		15:44 (17)	07:01		19:08 (41)	05:38		18:59 (41)	04:37		
	15:55			17:01	23	15:52 (12)	18:09	35	16:19 (17)	20:21	9	19:17 (41)	21:30	15	19:14 (41)	22:33		
4	09:26			08:39		15:29 (12)	07:27		15:45 (17)	06:58		19:03 (41)	05:36		19:04 (41)	04:36		
	15:57			17:03	24	15:53 (12)	18:11	33	16:18 (17)	20:23	18	19:21 (41)	21:32	5	19:09 (41)	22:35		
5	09:25			08:36		15:29 (12)	07:24		15:46 (17)	06:55		18:59 (41)	05:33			04:35		
	15:58			17:06	23	15:52 (12)	18:14	32	16:18 (17)	20:25	24	19:23 (41)	21:35			22:36		
6	09:25			08:34		15:28 (12)	07:21		15:48 (17)	06:52		18:57 (41)	05:31			04:33		
	16:00			17:08	24	15:52 (12)	18:16	28	16:16 (17)	20:28	28	19:25 (41)	21:37			22:37		
7	09:24			08:32		15:29 (12)	07:18		15:49 (17)	06:49		18:55 (41)	05:29			04:32		
	16:01			17:10	24	15:53 (12)	18:19	25	16:14 (17)	20:30	31	19:26 (41)	21:39			22:39		
8	09:23			08:29		15:29 (12)	07:15		15:51 (17)	06:46		18:53 (41)	05:26			04:32		
	16:03			17:13	23	15:52 (12)	18:21	21	16:12 (17)	20:32	35	19:42 (30)	21:42			22:40		
9	09:22			08:27		15:31 (12)	07:13		15:54 (17)	06:43		18:52 (41)	05:24			04:31		
	16:05			17:15	21	15:52 (12)	18:23	15	16:09 (17)	20:35	54	19:59 (30)	21:44			22:41		
10	09:21			08:25		15:31 (12)	07:10			06:41		18:51 (41)	05:21			04:30		
	16:07			17:18	20	15:51 (12)	18:26			20:37	57	19:59 (30)	21:46			22:42		
11	09:20			08:22		15:32 (12)	07:07			06:38		18:49 (41)	05:19			04:29		
	16:09			17:20	18	15:50 (12)	18:28			20:39	60	19:59 (30)	21:48			22:43		
12	09:19			08:20		15:34 (12)	07:04			06:35		18:48 (41)	05:17			04:29		
	16:11			17:23	15	15:49 (12)	18:30			20:42	62	19:58 (30)	21:50			22:44		
13	09:18			08:17		15:36 (12)	07:01			06:32		18:48 (41)	05:15			04:28		
	16:12			17:25	22	16:09 (17)	18:33			20:44	64	19:59 (30)	21:53			22:45		
14	09:17			08:15		15:54 (17)	06:58			06:29		18:47 (41)	05:12			04:28		
	16:14			17:28	18	16:12 (17)	18:35			20:46	63	19:58 (30)	21:55			22:46		
15	09:15			08:12		15:52 (17)	06:55			06:27		18:46 (41)	05:10			04:27		
	16:17			17:30	22	16:14 (17)	18:37			20:48	63	19:57 (30)	21:57			22:47		
16	09:14			08:10		15:51 (17)	06:53		17:30 (36)	06:24		18:47 (41)	05:08			04:27		
	16:19			17:33	26	16:17 (17)	18:40	8	17:38 (36)	20:51	62	19:57 (30)	21:59			22:47		
17	09:13			08:07		15:49 (17)	06:50		17:27 (36)	06:21		18:46 (41)	05:06			04:27		
	16:21			17:35	29	16:18 (17)	18:42	13	17:40 (36)	20:53	60	19:55 (30)	22:01			22:48		
18	09:11			08:04		15:47 (17)	06:47		17:25 (36)	06:18		18:45 (41)	05:04			04:26		
	16:23			17:38	32	16:19 (17)	18:44	17	17:42 (36)	20:55	58	19:53 (30)	22:04			22:49		
19	09:10			08:02		15:46 (17)	06:44		17:23 (36)	06:15		18:46 (41)	05:02			04:26		
	16:25			17:40	33	16:19 (17)	18:46	19	17:42 (36)	20:58	53	19:52 (30)	22:06			22:49		
20	09:08			07:59		15:46 (17)	06:41		17:22 (36)	06:13		18:45 (41)	05:00			04:26		
	16:27			17:43	35	16:21 (17)	18:49	21	17:43 (36)	21:00	44	19:29 (41)	22:08			22:49		
21	09:06			07:57		15:45 (17)	06:38		17:21 (36)	06:10		18:45 (41)	04:58			04:26		
	16:30			17:45	36	16:21 (17)	18:51	22	17:43 (36)	21:02	43	19:28 (41)	22:10			22:50		
22	09:05			07:54		15:44 (17)	06:35		17:21 (36)	06:07		18:46 (41)	04:56			04:27		
	16:32			17:47	37	16:21 (17)	18:53	22	17:43 (36)	21:05	43	19:29 (41)	22:12			22:50		
23	09:03			07:51		15:44 (17)	06:32		17:20 (36)	06:05		18:46 (41)	04:54			04:27		
	16:34			17:50	38	16:22 (17)	18:56	22	17:42 (36)	21:07	41	19:27 (41)	22:14			22:50		
24	09:01			07:49		15:43 (17)	06:29		17:20 (36)	06:02		18:47 (41)	04:52			04:27		
	16:36			17:52	39	16:22 (17)	18:58	22	17:42 (36)	21:09	40	19:27 (41)	22:16			22:50		
25	08:59			07:46		15:44 (17)	06:27		17:20 (36)	05:59		18:47 (41)	04:50			04:28		
	16:39			17:55	38	16:22 (17)	19:00	21	17:41 (36)	21:12	39	19:26 (41)	22:18			22:50		
26	08:57			07:43		15:43 (17)	06:24		17:20 (36)	05:57		18:48 (41)	04:49			04:28		
	16:41			17:57	39	16:22 (17)	19:03	20	17:40 (36)	21:14	37	19:25 (41)	22:20			22:50		
27	08:55		15:34 (12)	07:40		15:43 (17)	06:21		17:22 (36)	05:54		18:48 (41)	04:47			04:29		
	16:44	10	15:44 (12)	18:00	39	16:22 (17)	19:05	17	17:39 (36)	21:16	36	19:24 (41)	22:21			22:50		
28	08:54		15:33 (12)	07:38		15:43 (17)	06:18		17:24 (36)	05:51		18:50 (41)	04:45			04:29		
	16:46	13	15:46 (12)	18:02	38	16:21 (17)	19:07	13	17:37 (36)	21:19	33	19:23 (41)	22:23			22:49		
29	08:51		15:31 (12)				07:15		18:26 (36)	05:49		18:50 (41)	04:44			04:30		
	16:48	16	15:47 (12)				20:09	8	18:34 (36)	21:21	31	19:21 (41)	22:25			22:49		
30	08:49		15:31 (12)				07:12			05:46		18:52 (41)	04:42			04:31		
	16:51	18	15:49 (12)				20:12			21:23	28	19:20 (41)	22:27			22:49		
31	08:47		15:29 (12)				07:09						04:41					
	16:53	20	15:49 (12)				20:14						22:28					
Potential sun hours	221			260			365			432			521			547		
Total, worst case		77			781			508			1216			65				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August			September			October			November			December
1	04:32	05:24			06:33		18:48 (41)	07:39			07:51		15:00 (12)	08:59
	22:48	22:00			20:39	60	19:58 (30)	19:13			16:48	21	15:21 (12)	15:51
2	04:33	05:26			06:35		18:49 (41)	07:41			07:53		15:00 (12)	09:01
	22:47	21:58			20:36	57	19:57 (30)	19:10			16:46	22	15:22 (12)	15:50
3	04:34	05:28			06:37		18:49 (41)	07:43			07:56		14:59 (12)	09:03
	22:47	21:56			20:34	54	19:56 (30)	19:07			16:44	23	15:22 (12)	15:49
4	04:35	05:30			06:39		18:51 (41)	07:46		16:33 (17)	07:58		14:59 (12)	09:05
	22:46	21:53			20:31	35	19:40 (30)	19:04	11	16:44 (17)	16:41	23	15:22 (12)	15:48
5	04:36	05:33			06:42		18:52 (41)	07:48		16:29 (17)	08:01		14:59 (12)	09:07
	22:45	21:51			20:28	31	19:23 (41)	19:01	18	16:47 (17)	16:39	24	15:23 (12)	15:47
6	04:37	05:35			06:44		18:53 (41)	07:50		16:26 (17)	08:03		14:58 (12)	09:08
	22:44	21:49			20:25	28	19:21 (41)	18:58	24	16:50 (17)	16:36	24	15:22 (12)	15:46
7	04:38	05:37			06:46		18:54 (41)	07:52		16:24 (17)	08:05		14:59 (12)	09:10
	22:43	21:46			20:22	25	19:19 (41)	18:55	27	16:51 (17)	16:34	23	15:22 (12)	15:45
8	04:40	05:39			06:48		18:57 (41)	07:55		16:21 (17)	08:08		14:59 (12)	09:11
	22:42	21:44			20:19	18	19:15 (41)	18:53	30	16:51 (17)	16:32	23	15:22 (12)	15:44
9	04:41	05:41		19:10 (41)	06:50		19:00 (41)	07:57		16:21 (17)	08:10		14:59 (12)	09:13
	22:41	21:41	10	19:20 (41)	20:16	11	19:11 (41)	18:50	32	16:53 (17)	16:30	23	15:22 (12)	15:44
10	04:42	05:44		19:07 (41)	06:53			07:59		16:19 (17)	08:13		15:00 (12)	09:14
	22:40	21:39	17	19:24 (41)	20:13			18:47	34	16:53 (17)	16:27	21	15:21 (12)	15:43
11	04:44	05:46		19:04 (41)	06:55			08:02		16:18 (17)	08:15		15:01 (12)	09:16
	22:39	21:36	22	19:26 (41)	20:11			18:44	36	16:54 (17)	16:25	20	15:21 (12)	15:43
12	04:45	05:48		19:02 (41)	06:57			08:04		16:17 (17)	08:17		15:02 (12)	09:17
	22:37	21:34	26	19:28 (41)	20:08			18:41	37	16:54 (17)	16:23	19	15:21 (12)	15:42
13	04:47	05:50		19:00 (41)	06:59			08:06		16:16 (17)	08:20		15:03 (12)	09:18
	22:36	21:31	29	19:29 (41)	20:05			18:39	38	16:54 (17)	16:21	16	15:19 (12)	15:42
14	04:49	05:53		18:58 (41)	07:01		18:17 (36)	08:08		16:16 (17)	08:22		15:05 (12)	09:20
	22:35	21:28	32	19:30 (41)	20:02	7	18:24 (36)	18:36	38	16:54 (17)	16:19	13	15:18 (12)	15:42
15	04:50	05:55		18:57 (41)	07:04		18:13 (36)	08:11		16:15 (17)	08:24		15:07 (12)	09:21
	22:33	21:26	34	19:31 (41)	19:59	13	18:26 (36)	18:33	39	16:54 (17)	16:17	10	15:17 (12)	15:42
16	04:52	05:57		18:56 (41)	07:06		18:11 (36)	08:13		16:15 (17)	08:27			09:22
	22:32	21:23	36	19:32 (41)	19:56	16	18:27 (36)	18:30	39	16:54 (17)	16:15			15:42
17	04:54	05:59		18:54 (41)	07:08		18:09 (36)	08:15		16:15 (17)	08:29			09:23
	22:30	21:21	38	19:32 (41)	19:53	19	18:28 (36)	18:28	38	16:53 (17)	16:13			15:42
18	04:56	06:01		18:53 (41)	07:10		18:08 (36)	08:18		16:15 (17)	08:31			09:24
	22:28	21:18	40	19:33 (41)	19:50	20	18:28 (36)	18:25	39	16:54 (17)	16:11			15:42
19	04:57	06:04		18:52 (41)	07:12		18:08 (36)	08:20		16:15 (17)	08:34			09:24
	22:27	21:15	41	19:33 (41)	19:47	21	18:29 (36)	18:22	38	16:53 (17)	16:09			15:42
20	04:59	06:06		18:51 (41)	07:15		18:07 (36)	08:22		16:16 (17)	08:36			09:25
	22:25	21:13	42	19:33 (41)	19:44	22	18:29 (36)	18:19	36	16:52 (17)	16:07			15:42
21	05:01	06:08		18:50 (41)	07:17		18:06 (36)	08:25		16:16 (17)	08:38			09:26
	22:23	21:10	43	19:33 (41)	19:42	22	18:28 (36)	18:17	35	16:51 (17)	16:06			15:43
22	05:03	06:10		18:50 (41)	07:19		18:06 (36)	08:27		16:17 (17)	08:40			09:26
	22:21	21:07	43	19:33 (41)	19:39	22	18:28 (36)	18:14	34	16:51 (17)	16:04			15:43
23	05:05	06:13		18:49 (41)	07:21		18:06 (36)	08:29		16:17 (17)	08:43			09:27
	22:19	21:04	44	19:33 (41)	19:36	21	18:27 (36)	18:11	32	16:49 (17)	16:02			15:44
24	05:07	06:15		18:49 (41)	07:23		18:07 (36)	08:32		16:18 (17)	08:45			09:27
	22:17	21:02	54	19:55 (30)	19:33	19	18:26 (36)	18:09	31	16:49 (17)	16:01			15:44
25	05:09	06:17		18:49 (41)	07:26		18:07 (36)	07:34		15:18 (17)	08:47			09:28
	22:15	20:59	58	19:57 (30)	19:30	18	18:25 (36)	17:06	29	15:47 (17)	15:59			15:45
26	05:11	06:19		18:49 (41)	07:28		18:08 (36)	07:37		15:20 (17)	08:49			09:28
	22:13	20:56	60	19:58 (30)	19:27	15	18:23 (36)	17:04	25	15:45 (17)	15:57			15:46
27	05:13	06:22		18:48 (41)	07:30		18:09 (36)	07:39		15:22 (17)	08:51			09:28
	22:11	20:53	63	19:59 (30)	19:24	11	18:20 (36)	17:01	22	15:44 (17)	15:56			15:47
28	05:15	06:24		18:48 (41)	07:32			07:41		15:08 (12)	08:53			09:28
	22:09	20:51	63	19:59 (30)	19:21			16:58	22	15:41 (17)	15:55			15:48
29	05:17	06:26		18:48 (41)	07:34			07:44		15:05 (12)	08:55			09:28
	22:07	20:48	63	19:59 (30)	19:18			16:56	21	15:37 (17)	15:53			15:49
30	05:20	06:28		18:48 (41)	07:37			07:46		15:03 (12)	08:57			09:28
	22:05	20:45	63	19:59 (30)	19:16			16:53	16	15:19 (12)	15:52			15:50
31	05:22	06:30		18:48 (41)				07:49		15:01 (12)				09:28
	22:03	20:42	62	19:58 (30)				16:51	18	15:19 (12)				15:51
Potential sun hours	545	478			386			319			236			200
Total, worst case			983			565			839			305		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (27)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (27)
	15:53	39	13:36 (28)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (28)
2	09:28		12:01 (27)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (27)
	15:54	41	13:36 (28)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (28)
3	09:27		12:01 (27)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (27)
	15:55	41	13:36 (28)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (28)
4	09:27		12:01 (27)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (27)
	15:57	41	13:36 (28)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (28)
5	09:26		12:01 (27)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (27)
	15:58	43	13:37 (28)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (28)
6	09:25		12:02 (27)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (27)
	16:00	41	13:37 (28)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (28)
7	09:25		12:02 (27)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (27)
	16:02	41	13:37 (28)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (28)
8	09:24		12:02 (27)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (27)
	16:03	42	13:38 (28)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (28)
9	09:23		12:03 (27)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (27)
	16:05	41	13:38 (28)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (28)
10	09:22		12:03 (27)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (27)
	16:07	40	13:37 (28)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (28)
11	09:21		12:03 (27)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (27)
	16:09	41	13:38 (28)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (28)
12	09:20		12:03 (27)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (27)
	16:11	39	13:37 (28)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (28)
13	09:19		12:04 (27)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (27)
	16:13	37	13:37 (28)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (28)
14	09:17		12:04 (27)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (27)
	16:15	35	13:36 (28)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (28)
15	09:16		12:04 (27)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (27)	09:21		11:54 (27)
	16:17	32	13:35 (28)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (27)	15:42	38	13:27 (28)
16	09:15		12:04 (27)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (27)	09:22		11:55 (27)
	16:19	24	12:28 (27)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (27)	15:42	37	13:28 (28)
17	09:13		12:06 (27)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (27)	09:23		11:55 (27)
	16:21	24	12:30 (27)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (27)	15:42	37	13:28 (28)
18	09:12		12:06 (27)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (27)	09:24		11:56 (27)
	16:23	24	12:30 (27)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (27)	15:42	36	13:29 (28)
19	09:10		12:06 (27)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (27)	09:25		11:57 (27)
	16:25	24	12:30 (27)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (27)	15:42	36	13:29 (28)
20	09:09		12:07 (27)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (27)	09:26		11:58 (27)
	16:28	23	12:30 (27)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (27)	15:43	36	13:30 (28)
21	09:07		12:08 (27)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (27)	09:26		11:59 (27)
	16:30	21	12:29 (27)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (27)	15:43	35	13:31 (28)
22	09:05		12:09 (27)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (27)	09:27		11:58 (27)
	16:32	20	12:29 (27)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (27)	15:43	36	13:31 (28)
23	09:03		12:09 (27)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (27)	09:27		11:59 (27)
	16:34	19	12:28 (27)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (27)	15:44	36	13:31 (28)
24	09:02		12:10 (27)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (27)	09:28		12:00 (27)
	16:37	17	12:27 (27)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (27)	15:44	36	13:32 (28)
25	09:00		12:12 (27)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (27)	09:28		12:00 (27)
	16:39	15	12:27 (27)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (27)	15:45	37	13:33 (28)
26	08:58		12:14 (27)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (27)	09:28		12:00 (27)
	16:41	11	12:25 (27)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (27)	15:46	37	13:33 (28)
27	08:56		12:17 (27)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (27)	09:28		12:00 (27)
	16:44	4	12:21 (27)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (28)	15:47	38	13:33 (28)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (27)	09:29		12:01 (27)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (28)	15:48	37	13:34 (28)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (27)	09:28		12:00 (27)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (28)	15:49	38	13:34 (28)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (27)	09:28		12:01 (27)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (28)	15:50	39	13:35 (28)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (27)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (28)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November		December		
1	09:28		11:14 (27)	08:46		10:11 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (27)
	15:53	31	12:43 (28)	16:56	18	10:29 (32)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (27)
2	09:28		11:14 (27)	08:44		10:11 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (27)
	15:54	30	12:43 (28)	16:58	17	10:28 (32)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (27)
3	09:27		11:13 (27)	08:41		10:13 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (27)
	15:55	31	12:43 (28)	17:01	14	10:27 (32)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (27)
4	09:27		11:13 (27)	08:39		10:14 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (27)
	15:57	30	12:43 (28)	17:03	11	10:25 (32)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (27)
5	09:26		11:14 (27)	08:37		10:17 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (27)
	15:58	28	12:42 (28)	17:06	7	10:24 (32)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (28)
6	09:25		11:14 (27)	08:35			07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:47 (32)	09:09		11:00 (27)
	16:00	28	12:42 (28)	17:08			18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	7 09:54 (32)	15:46	28	12:28 (28)
7	09:25		11:14 (27)	08:32			07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:45 (32)	09:10		11:01 (27)
	16:02	26	12:41 (28)	17:11			18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	11 09:56 (32)	15:45	29	12:30 (28)
8	09:24		11:14 (27)	08:30			07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:43 (32)	09:12		11:02 (27)
	16:03	21	11:35 (27)	17:13			18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	14 09:57 (32)	15:45	30	12:31 (28)
9	09:23		11:15 (27)	08:27			07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:42 (32)	09:14		11:03 (27)
	16:05	21	11:36 (27)	17:16			18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	17 09:59 (32)	15:44	30	12:32 (28)
10	09:22		11:15 (27)	08:25			07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:42 (32)	09:15		11:03 (27)
	16:07	21	11:36 (27)	17:18			18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	18 10:00 (32)	15:44	30	12:32 (28)
11	09:21		11:15 (27)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:41 (32)	09:16		11:04 (27)
	16:09	22	11:37 (27)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	19 10:00 (32)	15:43	30	12:33 (28)
12	09:20		11:15 (27)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:41 (32)	09:18		11:04 (27)
	16:11	22	11:37 (27)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	19 10:00 (32)	15:43	31	12:34 (28)
13	09:19		11:16 (27)	08:18			07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:41 (32)	09:19		11:05 (27)
	16:13	22	11:38 (27)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	20 10:01 (32)	15:42	31	12:35 (28)
14	09:17		11:16 (27)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:42 (32)	09:20		11:06 (27)
	16:15	22	11:38 (27)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	19 10:01 (32)	15:42	30	12:35 (28)
15	09:16		11:16 (27)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:41 (32)	09:21		11:06 (27)
	16:17	22	11:38 (27)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	20 10:01 (32)	15:42	31	12:36 (28)
16	09:15		11:16 (27)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:42 (32)	09:22		11:08 (27)
	16:19	22	11:38 (27)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	19 10:01 (32)	15:42	30	12:37 (28)
17	09:13		11:18 (27)	08:08			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:43 (32)	09:23		11:09 (27)
	16:21	21	11:39 (27)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	26 11:08 (27)	15:42	30	12:38 (28)
18	09:12		11:18 (27)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:43 (32)	09:24		11:08 (27)
	16:23	21	11:39 (27)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	29 11:10 (27)	15:42	30	12:37 (28)
19	09:10		10:13 (32)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:44 (32)	09:25		11:09 (27)
	16:25	27	11:39 (27)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	31 11:12 (27)	15:42	29	12:38 (28)
20	09:09		10:12 (32)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	09:45 (32)	09:26		11:10 (27)
	16:28	30	11:39 (27)	17:43			18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	32 11:13 (27)	15:43	30	12:39 (28)
21	09:07		10:11 (32)	07:57			06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39	09:46 (32)	09:26		11:11 (27)
	16:30	32	11:39 (27)	17:45			18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	32 11:14 (27)	15:43	29	12:40 (28)
22	09:05		10:10 (32)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	09:48 (32)	09:27		11:11 (27)
	16:32	32	11:38 (27)	17:48			18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04	29 11:15 (27)	15:43	29	12:40 (28)
23	09:03		10:09 (32)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	09:49 (32)	09:27		11:11 (27)
	16:34	31	11:37 (27)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	27 11:15 (27)	15:44	30	12:40 (28)
24	09:02		10:09 (32)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:55 (27)	09:28		11:12 (27)
	16:37	29	11:36 (27)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	21 11:16 (27)	15:45	30	12:41 (28)
25	09:00		10:09 (32)	07:46			06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:55 (27)	09:28		11:12 (27)
	16:39	26	11:34 (27)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	21 11:16 (27)	15:45	29	12:41 (28)
26	08:58		10:09 (32)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:55 (27)	09:28		11:13 (27)
	16:41	19	10:28 (32)	17:57			19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58	22 11:17 (27)	15:46	30	12:42 (28)
27	08:56		10:09 (32)	07:41			06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:55 (27)	09:28		11:13 (27)
	16:44	20	10:29 (32)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	22 11:17 (27)	15:47	30	12:42 (28)
28	08:54		10:09 (32)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:56 (27)	09:29		11:13 (27)
	16:46	19	10:28 (32)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	22 11:18 (27)	15:48	31	12:43 (28)
29	08:52		10:09 (32)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:56 (27)	09:29		11:13 (27)
	16:49	20	10:29 (32)				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22 11:18 (27)	15:49	30	12:42 (28)
30	08:50		10:09 (32)				07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:56 (27)	09:28		11:13 (27)
	16:51	19	10:28 (32)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	22 11:18 (27)	15:50	31	12:43 (28)
31	08:48		10:10 (32)				07:10		04:41		05:22	06:31		07:49			09:28		11:14 (27)
	16:54	19	10:29 (32)				20:14		22:29		22:03	20:43		16:51			15:51	30	12:43 (28)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236		199		
Total, worst case		764			67											541		888	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February	March	April	May	June	July	August	September	October	November	December
1	09:28	12:55 (16)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51	09:00 12:38 (16)
	15:52 16	13:11 (16)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48	15:51 20 12:58 (16)
2	09:27	12:55 (16)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54	09:01 12:39 (16)
	15:54 16	13:11 (16)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46	15:50 20 12:59 (16)
3	09:27	12:55 (16)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56	09:03 12:40 (16)
	15:55 17	13:12 (16)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49 20 13:00 (16)
4	09:26	12:55 (16)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58	09:05 12:40 (16)
	15:57 17	13:12 (16)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41	15:48 20 13:00 (16)
5	09:26	12:55 (16)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01	09:07 12:41 (16)
	15:58 18	13:13 (16)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39	15:47 19 13:00 (16)
6	09:25	12:55 (16)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03	09:09 12:41 (16)
	16:00 19	13:14 (16)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36	15:46 19 13:00 (16)
7	09:24	12:55 (16)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06	09:10 12:42 (16)
	16:01 20	13:15 (16)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34	15:45 18 13:00 (16)
8	09:24	12:56 (16)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08	09:12 12:43 (16)
	16:03 19	13:15 (16)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32	15:44 18 13:01 (16)
9	09:23	12:55 (16)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10	09:13 12:43 (16)
	16:05 20	13:15 (16)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44 17 13:00 (16)
10	09:22	12:56 (16)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	09:15 12:44 (16)
	16:07 20	13:16 (16)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27	15:43 17 13:01 (16)
11	09:21	12:57 (16)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:16 12:45 (16)
	16:09 20	13:17 (16)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25	15:43 16 13:01 (16)
12	09:19	12:57 (16)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	09:17 12:45 (16)
	16:11 20	13:17 (16)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	15:42 16 13:01 (16)
13	09:18	12:57 (16)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	09:19 12:46 (16)
	16:12 20	13:17 (16)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21	15:42 16 13:02 (16)
14	09:17	12:58 (16)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22	09:20 12:47 (16)
	16:14 20	13:18 (16)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19	15:42 14 13:01 (16)
15	09:16	12:58 (16)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	09:21 12:47 (16)
	16:17 20	13:18 (16)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17	15:42 14 13:01 (16)
16	09:14	12:58 (16)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	09:22 12:48 (16)
	16:19 20	13:18 (16)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15	15:42 13 13:01 (16)
17	09:13	12:59 (16)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	09:23 12:48 (16)
	16:21 19	13:18 (16)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13	15:42 14 13:02 (16)
18	09:11	12:59 (16)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	09:24 12:49 (16)
	16:23 19	13:18 (16)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11	15:42 13 13:02 (16)
19	09:10	13:01 (16)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34 12:41 (16)	09:25 12:50 (16)
	16:25 18	13:19 (16)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 9 12:50 (16)	15:42 13 13:03 (16)
20	09:08	13:02 (16)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36 12:39 (16)	09:25 12:51 (16)
	16:27 16	13:18 (16)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 12 12:51 (16)	15:42 12 13:03 (16)
21	09:07	13:02 (16)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38 12:38 (16)	09:26 12:51 (16)
	16:30 15	13:17 (16)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 15 12:53 (16)	15:43 12 13:03 (16)
22	09:05	13:04 (16)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41 12:38 (16)	09:27 12:52 (16)
	16:32 12	13:16 (16)	17:48	18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04 16 12:54 (16)	15:43 12 13:04 (16)
23	09:03	13:06 (16)	07:51	06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43 12:37 (16)	09:27 12:52 (16)
	16:34 9	13:15 (16)	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02 18 12:55 (16)	15:44 12 13:04 (16)
24	09:01		07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45 12:38 (16)	09:28 12:52 (16)
	16:37		17:52	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18 12:56 (16)	15:44 12 13:04 (16)
25	09:00		07:46	06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47 12:37 (16)	09:28 12:53 (16)
	16:39		17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 19 12:56 (16)	15:45 13 13:06 (16)
26	08:58		07:43	06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49 12:37 (16)	09:28 12:53 (16)
	16:41		17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 20 12:57 (16)	15:46 13 13:06 (16)
27	08:56		07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52 12:37 (16)	09:28 12:54 (16)
	16:44		18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 20 12:57 (16)	15:47 13 13:07 (16)
28	08:54		07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54 12:37 (16)	09:28 12:53 (16)
	16:46		18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55 20 12:57 (16)	15:48 14 13:07 (16)
29	08:52			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56 12:38 (16)	09:28 12:53 (16)
	16:48			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 20 12:58 (16)	15:49 15 13:08 (16)
30	08:50			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58 12:38 (16)	09:28 12:54 (16)
	16:51			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 20 12:58 (16)	15:50 15 13:09 (16)
31	08:48			07:09		04:41		05:22	06:31		07:49		09:28 12:54 (16)
	16:53			20:14		22:29		22:03	20:42		16:51		15:51 15 13:09 (16)
Potential sun hours	221		260	365	432	521	547	546	478	386	319	236	199
Total, worst case		410										207	475

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:45	13:54 (30)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39		07:51	14:48 (16)	08:59
	15:52		16:56 19	14:13 (30)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13		16:48 19	15:07 (16)	15:51
2	09:27		08:43	13:56 (30)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:53	14:49 (16)	09:01
	15:54		16:58 16	14:12 (30)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 17	15:06 (16)	15:50
3	09:27		08:41	13:58 (30)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44		07:56	14:49 (16)	09:03
	15:55		17:01 12	14:10 (30)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07		16:44 15	15:04 (16)	15:49
4	09:26		08:39	14:02 (30)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46		07:58	14:52 (16)	09:05
	15:57		17:03 5	14:07 (30)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 10	15:02 (16)	15:48
5	09:26		08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48		08:01	14:56 (16)	09:07
	15:58		17:06		18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01		16:39 2	14:58 (16)	15:47
6	09:25		08:34	15:25 (16)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50		08:03		09:08
	16:00		17:08 4	15:29 (16)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58		16:36		15:46
7	09:24		08:32	15:22 (16)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53		08:06	13:31 (30)	09:10
	16:01		17:11 11	15:33 (16)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56		16:34 7	13:38 (30)	15:45
8	09:23		08:30	15:20 (16)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55		08:08	13:28 (30)	09:12
	16:03		17:13 15	15:35 (16)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53		16:32 13	13:41 (30)	15:44
9	09:23		08:27	15:19 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57		08:10	13:27 (30)	09:13
	16:05		17:15 18	15:37 (16)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50		16:30 16	13:43 (30)	15:44
10	09:22		08:25	15:18 (16)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59		08:13	13:25 (30)	09:15
	16:07		17:18 19	15:37 (16)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:27 19	13:44 (30)	15:43
11	09:20		08:22	15:17 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	13:24 (30)	09:16
	16:09		17:20 21	15:38 (16)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44		16:25 21	13:45 (30)	15:43
12	09:19		08:20	15:17 (16)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04		08:17	13:24 (30)	09:17
	16:10		17:23 22	15:39 (16)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41		16:23 22	13:46 (30)	15:42
13	09:18	13:53 (30)	08:17	15:17 (16)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	13:23 (30)	09:19
	16:12 5	13:58 (30)	17:25 22	15:39 (16)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39		16:21 23	13:46 (30)	15:42
14	09:17	13:51 (30)	08:15	15:16 (16)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09		08:22	13:23 (30)	09:20
	16:14 9	14:00 (30)	17:28 23	15:39 (16)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 24	13:47 (30)	15:42
15	09:16	13:50 (30)	08:12	15:17 (16)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:07 (41)	09:21
	16:17 11	14:01 (30)	17:30 22	15:39 (16)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33		16:17 33	13:48 (30)	15:42
16	09:14	13:50 (30)	08:10	15:17 (16)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:06 (41)	09:22
	16:19 17	14:07 (30)	17:33 22	15:39 (16)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30		16:15 36	13:48 (30)	15:42
17	09:13	13:49 (30)	08:07	15:17 (16)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	11:04 (41)	09:23
	16:21 21	14:10 (30)	17:35 21	15:38 (16)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 40	13:48 (30)	15:42
18	09:11	11:38 (41)	08:05	15:18 (16)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18		08:32	11:03 (41)	09:24
	16:23 27	14:11 (30)	17:38 19	15:37 (16)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25		16:11 42	13:49 (30)	15:42
19	09:10	11:35 (41)	08:02	15:20 (16)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20		08:34	11:03 (41)	09:25
	16:25 32	14:12 (30)	17:40 17	15:37 (16)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22		16:09 44	13:49 (30)	15:42
20	09:08	11:32 (41)	07:59	15:21 (16)	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	11:02 (41)	09:25
	16:27 36	14:12 (30)	17:43 14	15:35 (16)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19		16:07 45	13:49 (30)	15:42
21	09:07	11:29 (41)	07:57	15:24 (16)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	15:53 (16)	08:38	11:05 (41)	09:26
	16:30 42	14:13 (30)	17:45 8	15:32 (16)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17 10	16:03 (16)	16:06 42	13:49 (30)	15:43
22	09:05	11:27 (41)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	15:51 (16)	08:41	11:08 (41)	09:27
	16:32 45	14:14 (30)	17:47		18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14 15	16:06 (16)	16:04 36	13:48 (30)	15:43
23	09:03	11:28 (41)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	15:49 (16)	08:43	11:12 (41)	09:27
	16:34 44	14:14 (30)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11 17	16:06 (16)	16:02 32	13:49 (30)	15:44
24	09:01	11:29 (41)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:23	08:32	15:48 (16)	08:45	11:16 (41)	09:27
	16:36 42	14:15 (30)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09 19	16:07 (16)	16:01 28	13:49 (30)	15:44
25	08:59	11:31 (41)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	14:48 (16)	08:47	13:27 (30)	09:28
	16:39 40	14:15 (30)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06 20	15:08 (16)	15:59 21	13:48 (30)	15:45
26	08:58	11:32 (41)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	14:46 (16)	08:49	13:29 (30)	09:28
	16:41 37	14:15 (30)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 22	15:08 (16)	15:57 17	13:46 (30)	15:46
27	08:56	11:34 (41)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	14:46 (16)	08:51	13:29 (30)	09:28
	16:44 33	14:15 (30)	18:00		19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01 23	15:09 (16)	15:56 12	13:41 (30)	15:47
28	08:54	13:51 (30)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41	14:46 (16)	08:53	13:30 (30)	09:28
	16:46 24	14:15 (30)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58 22	15:08 (16)	15:55 9	13:39 (30)	15:47
29	08:52	13:51 (30)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	14:46 (16)	08:55	13:35 (30)	09:28
	16:48 23	14:14 (30)			20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56 22	15:08 (16)	15:53 5	13:40 (30)	15:49
30	08:50	13:52 (30)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	14:47 (16)	08:57		09:28
	16:51 22	14:14 (30)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53 21	15:08 (16)	15:52		15:50
31	08:48	13:54 (30)			07:09		04:41		05:22	06:31		07:49	14:47 (16)			09:28
	16:53 20	14:14 (30)			20:14		22:29		22:03	20:42		16:51 20	15:07 (16)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		530		330									211		650	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April		May		June	
1	09:28		12:11 (36)		08:45		10:15 (17)		07:35		13:26 (30)	
	15:52	47	14:26 (18)		16:56	119	15:37 (39)		18:04	35	17:05 (13)	
2	09:27		12:11 (36)		08:43		12:16 (36)		07:32		15:45 (11)	
	15:54	53	14:28 (18)		16:58	114	15:38 (39)		18:07	27	17:09 (13)	
3	09:27		12:10 (36)		08:41		12:17 (36)		07:30		16:34 (16)	
	15:55	58	14:29 (18)		17:01	113	15:38 (39)		18:09	33	17:12 (13)	
4	09:26		12:10 (36)		08:39		09:39 (41)		07:27		16:31 (16)	
	15:57	61	14:29 (18)		17:03	109	15:39 (39)		18:12	43	17:15 (13)	
5	09:26		12:10 (36)		08:36		09:39 (41)		07:24		16:29 (16)	
	15:58	64	14:30 (18)		17:06	105	15:39 (39)		18:14	46	17:15 (13)	
6	09:25		12:09 (36)		08:34		09:40 (41)		07:21		16:26 (16)	
	16:00	70	14:31 (18)		17:08	95	15:39 (39)		18:16	49	17:15 (13)	
7	09:24		10:10 (17)		08:32		09:40 (41)		07:18		16:25 (16)	
	16:01	78	14:32 (18)		17:11	96	15:39 (39)		18:19	50	17:15 (13)	
8	09:23		10:10 (17)		08:30		09:38 (41)		07:15		16:23 (16)	
	16:03	84	14:33 (18)		17:13	96	15:38 (39)		18:21	52	17:15 (13)	
9	09:22		10:10 (17)		08:27		09:36 (41)		07:13		16:22 (16)	
	16:05	86	14:33 (18)		17:16	98	15:38 (39)		18:23	53	17:15 (13)	
10	09:21		10:11 (17)		08:25		09:33 (41)		07:10		16:20 (16)	
	16:07	91	14:34 (18)		17:18	107	15:57 (11)		18:26	54	17:14 (13)	
11	09:20		10:10 (17)		08:22		09:29 (41)		07:07		16:19 (16)	
	16:09	97	14:34 (18)		17:20	114	16:00 (11)		18:28	54	17:13 (13)	
12	09:19		10:09 (17)		08:20		09:27 (41)		07:04		16:18 (16)	
	16:11	102	14:35 (18)		17:23	118	16:03 (11)		18:30	54	17:12 (13)	
13	09:18		10:09 (17)		08:17		09:24 (41)		07:01		16:18 (16)	
	16:13	105	14:35 (18)		17:25	118	16:04 (11)		18:33	52	17:10 (13)	
14	09:17		10:10 (17)		08:15		09:21 (41)		06:58		16:17 (16)	
	16:15	107	14:36 (18)		17:28	114	16:05 (11)		18:35	51	17:08 (13)	
15	09:16		10:10 (17)		08:12		09:18 (41)		06:56		16:17 (16)	
	16:17	112	14:37 (18)		17:30	120	16:07 (11)		18:37	47	17:04 (13)	
16	09:14		10:02 (17)		08:10		09:13 (41)		06:53		16:17 (16)	
	16:19	119	14:37 (18)		17:33	125	16:08 (11)		18:40	46	17:03 (16)	
17	09:13		10:02 (17)		08:07		09:13 (41)		06:50		16:17 (16)	
	16:21	126	14:37 (18)		17:35	123	16:08 (11)		18:42	46	17:03 (16)	
18	09:11		10:02 (17)		08:05		09:13 (41)		06:47		16:16 (16)	
	16:23	127	14:37 (18)		17:38	121	16:08 (11)		18:44	46	17:02 (16)	
19	09:10		10:02 (17)		08:02		09:15 (41)		06:44		16:16 (16)	
	16:25	129	14:37 (18)		17:40	118	16:09 (11)		18:47	56	18:01 (21)	
20	09:08		10:02 (17)		07:59		09:16 (41)		06:41		16:16 (16)	
	16:27	130	14:37 (18)		17:43	114	16:09 (11)		18:49	60	18:03 (21)	
21	09:07		10:03 (17)		07:57		09:17 (41)		06:38		16:16 (16)	
	16:30	131	14:37 (18)		17:45	110	16:09 (11)		18:51	64	18:05 (21)	
22	09:05		10:03 (17)		07:54		09:18 (41)		06:35		16:17 (16)	
	16:32	129	14:36 (18)		17:48	104	16:08 (11)		18:54	63	18:05 (21)	
23	09:03		10:04 (17)		07:51		09:20 (41)		06:32		16:17 (16)	
	16:34	131	14:36 (18)		17:50	95	16:08 (11)		18:56	64	18:06 (21)	
24	09:01		10:04 (17)		07:49		13:09 (30)		06:30		16:18 (16)	
	16:37	128	14:35 (18)		17:52	77	16:08 (11)		18:58	64	18:06 (21)	
25	08:59		10:05 (17)		07:46		13:11 (30)		06:27		16:18 (16)	
	16:39	125	14:34 (18)		17:55	71	16:07 (11)		19:00	62	18:06 (21)	
26	08:58		10:05 (17)		07:43		13:13 (30)		06:24		16:20 (16)	
	16:41	124	15:28 (39)		17:57	66	16:06 (11)		19:03	61	18:07 (21)	
27	08:56		10:06 (17)		07:41		13:16 (30)		06:21		16:22 (16)	
	16:44	127	15:30 (39)		18:00	58	16:05 (11)		19:05	57	18:07 (21)	
28	08:54		10:07 (17)		07:38		13:19 (30)		06:18		16:23 (16)	
	16:46	130	15:33 (39)		18:02	49	16:04 (11)		19:07	54	18:06 (21)	
29	08:52		10:08 (17)						07:15		17:26 (16)	
	16:48	131	15:35 (39)						20:10	47	19:05 (21)	
30	08:50		10:09 (17)						07:12		17:29 (16)	
	16:51	129	15:36 (39)						20:12	38	19:04 (21)	
31	08:47		10:12 (17)						07:09		18:41 (21)	
	16:53	126	15:37 (39)						20:14	22	19:03 (21)	
Potential sun hours	221		260		365		432		521		547	
Total, worst case	3257		2867		1550		46					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September		October		November		December		
1	04:32	05:24	06:33		07:39		16:57 (16)	07:51	09:03 (41)	08:59	09:52 (17)
	22:48	22:01	20:39		19:13	53	17:50 (13)	16:49 107	15:26 (11)	15:51 96	14:16 (18)
2	04:33	05:26	06:35		07:41		16:58 (16)	07:53	09:06 (41)	09:01	09:53 (17)
	22:48	21:58	20:37		19:10	54	17:52 (13)	16:46 98	15:08 (39)	15:50 91	14:16 (18)
3	04:34	05:28	06:37		07:44		16:58 (16)	07:56	09:08 (41)	09:03	09:54 (17)
	22:47	21:56	20:34		19:07	54	17:52 (13)	16:44 96	15:08 (39)	15:49 88	14:17 (18)
4	04:35	05:30	06:39		07:46		16:58 (16)	07:58	09:10 (41)	09:05	09:54 (17)
	22:46	21:54	20:31		19:04	54	17:52 (13)	16:41 94	15:08 (39)	15:48 83	14:17 (18)
5	04:36	05:33	06:42		07:48		17:00 (16)	08:01	09:10 (41)	09:07	09:55 (17)
	22:45	21:51	20:28		19:01	52	17:52 (13)	16:39 95	15:09 (39)	15:47 77	14:17 (18)
6	04:37	05:35	06:44		07:50		17:00 (16)	08:03	09:10 (41)	09:08	09:57 (17)
	22:45	21:49	20:25		18:58	52	17:52 (13)	16:37 105	15:09 (39)	15:46 71	14:17 (18)
7	04:38	05:37	06:46		07:53		17:01 (16)	08:06	09:08 (41)	09:10	09:57 (17)
	22:44	21:46	20:22		18:56	50	17:51 (13)	16:34 111	15:09 (39)	15:45 64	14:17 (18)
8	04:40	05:39	06:48		07:55		17:03 (16)	08:08	11:48 (36)	09:12	11:57 (36)
	22:43	21:44	20:19		18:53	48	17:51 (13)	16:32 112	15:09 (39)	15:44 62	14:17 (18)
9	04:41	05:41	06:51	18:40 (21)	07:57		17:04 (16)	08:10	11:47 (36)	09:13	11:59 (36)
	22:41	21:41	20:16 10	18:50 (21)	18:50	46	17:50 (13)	16:30 113	15:09 (39)	15:44 57	14:17 (18)
10	04:42	05:44	06:53	18:37 (21)	07:59		17:06 (16)	08:13	09:45 (17)	09:15	12:00 (36)
	22:40	21:39	20:14 15	18:52 (21)	18:47	40	17:48 (13)	16:27 121	15:08 (39)	15:43 53	14:17 (18)
11	04:44	05:46	06:55	18:35 (21)	08:02		16:22 (11)	08:15	09:42 (17)	09:16	12:01 (36)
	22:39	21:36	20:11 19	18:54 (21)	18:44	36	17:45 (13)	16:25 127	15:08 (39)	15:43 47	14:16 (18)
12	04:45	05:48	06:57	18:34 (21)	08:04		16:18 (11)	08:17	09:41 (17)	09:17	12:03 (36)
	22:38	21:34	20:08 21	18:55 (21)	18:42	25	17:41 (13)	16:23 130	15:08 (39)	15:42 44	14:17 (18)
13	04:47	05:50	06:59	17:21 (16)	08:06		13:56 (30)	08:20	09:39 (17)	09:19	12:04 (36)
	22:36	21:31	20:05 37	18:55 (21)	18:39	42	17:38 (13)	16:21 131	15:06 (39)	15:42 39	14:17 (18)
14	04:49	05:53	07:02	17:17 (16)	08:09		13:50 (30)	08:22	09:39 (17)	09:20	12:07 (36)
	22:35	21:29	20:02 45	18:55 (21)	18:36	53	16:37 (11)	16:19 131	15:05 (39)	15:42 34	14:17 (18)
15	04:50	05:55	07:04	17:13 (16)	08:11		13:46 (30)	08:25	09:39 (17)	09:21	13:06 (30)
	22:33	21:26	19:59 52	18:55 (21)	18:33	62	16:37 (11)	16:17 128	15:03 (39)	15:42 26	14:16 (18)
16	04:52	05:57	07:06	17:11 (16)	08:13		13:44 (30)	08:27	09:39 (17)	09:22	13:08 (30)
	22:32	21:23	19:56 56	18:55 (21)	18:30	69	16:39 (11)	16:15 124	15:02 (39)	15:42 22	14:15 (18)
17	04:54	05:59	07:08	17:08 (16)	08:16		13:41 (30)	08:29	09:38 (17)	09:23	13:10 (30)
	22:30	21:21	19:53 59	18:54 (21)	18:28	75	16:39 (11)	16:13 125	14:07 (18)	15:42 18	14:15 (18)
18	04:56	06:02	07:10	17:07 (16)	08:18		09:55 (41)	08:32	09:38 (17)	09:24	13:12 (30)
	22:29	21:18	19:50 63	18:55 (21)	18:25	86	16:39 (11)	16:11 129	14:09 (18)	15:42 16	14:15 (18)
19	04:58	06:04	07:12	17:06 (16)	08:20		09:51 (41)	08:34	09:39 (17)	09:25	13:16 (7)
	22:27	21:15	19:47 63	18:54 (21)	18:22	98	16:39 (11)	16:09 131	14:11 (18)	15:42 11	14:15 (18)
20	04:59	06:06	07:15	17:04 (16)	08:23		09:49 (41)	08:36	09:38 (17)	09:25	13:16 (7)
	22:25	21:13	19:45 65	18:53 (21)	18:20	106	16:40 (11)	16:07 129	14:11 (18)	15:42 9	14:14 (18)
21	05:01	06:08	07:17	17:03 (16)	08:25		09:46 (41)	08:38	09:39 (17)	09:26	13:17 (7)
	22:23	21:10	19:42 64	18:51 (21)	18:17	113	16:39 (11)	16:06 131	14:13 (18)	15:43 9	14:15 (18)
22	05:03	06:11	07:19	17:01 (16)	08:27		09:45 (41)	08:41	09:38 (17)	09:26	13:18 (7)
	22:21	21:07	19:39 64	18:50 (21)	18:14	116	16:39 (11)	16:04 131	14:13 (18)	15:43 9	14:16 (18)
23	05:05	06:13	07:21	17:00 (16)	08:30		09:44 (41)	08:43	09:39 (17)	09:27	13:18 (7)
	22:19	21:05	19:36 62	18:48 (21)	18:12	119	16:38 (11)	16:02 128	14:14 (18)	15:44 9	14:16 (18)
24	05:07	06:15	07:24	17:00 (16)	08:32		09:43 (41)	08:45	09:39 (17)	09:27	13:18 (7)
	22:18	21:02	19:33 58	18:46 (21)	18:09	122	16:38 (11)	16:01 127	14:14 (18)	15:44 11	14:17 (18)
25	05:09	06:17	07:26	16:59 (16)	07:34		08:43 (41)	08:47	09:40 (17)	09:28	13:15 (30)
	22:16	20:59	19:30 46	17:45 (16)	17:06	123	15:38 (11)	15:59 124	14:15 (18)	15:45 14	14:17 (18)
26	05:11	06:19	07:28	16:58 (16)	07:37		08:44 (41)	08:49	09:40 (17)	09:28	13:14 (30)
	22:14	20:56	19:27 47	17:45 (16)	17:04	122	15:37 (11)	15:58 119	14:15 (18)	15:46 17	14:18 (18)
27	05:13	06:22	07:30	16:58 (16)	07:39		08:48 (41)	08:51	09:49 (17)	09:28	13:13 (30)
	22:11	20:53	19:24 46	17:44 (16)	17:01	118	15:36 (11)	15:56 112	14:16 (18)	15:47 20	14:19 (18)
28	05:15	06:24	07:32	16:58 (16)	07:41		08:51 (41)	08:53	09:49 (17)	09:28	13:12 (30)
	22:09	20:51	19:21 46	17:44 (16)	16:59	115	15:35 (11)	15:55 109	14:16 (18)	15:48 24	14:21 (18)
29	05:17	06:26	07:35	16:58 (16)	07:44		08:54 (41)	08:55	09:50 (17)	09:28	12:14 (36)
	22:07	20:48	19:19 50	17:48 (13)	16:56	119	15:34 (11)	15:53 106	14:16 (18)	15:49 31	14:23 (18)
30	05:20	06:28	07:37	16:57 (16)	07:46		08:57 (41)	08:57	09:50 (17)	09:28	12:13 (36)
	22:05	20:45	19:16 52	17:49 (13)	16:53	117	15:32 (11)	15:52 103	14:16 (18)	15:50 37	14:25 (18)
31	05:22	06:31			07:49		08:59 (41)			09:28	12:12 (36)
	22:03	20:42			16:51	115	15:29 (11)			15:51 41	14:25 (18)
Potential sun hours	546	478	386		319		236		199		
Total, worst case			1040		2454		3527		1230		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (5)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (5)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (5)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	1 20:40 (5)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (5)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	1 20:41 (5)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (5)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	1 20:40 (5)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (5)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	1 20:41 (5)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (5)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	2 20:42 (5)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (5)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	2 20:42 (5)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (5)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	2 20:42 (5)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (5)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	2 20:43 (5)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (5)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	2 20:43 (5)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (5)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	2 20:43 (5)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (5)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	2 20:43 (5)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (5)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	2 20:43 (5)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (5)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	2 20:44 (5)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (5)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	2 20:44 (5)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (5)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	2 20:44 (5)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (5)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	2 20:44 (5)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (5)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	2 20:44 (5)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (5)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	1 20:44 (5)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (5)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	2 20:45 (5)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (5)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	1 20:44 (5)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case							34		1					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44		04:40		20:27 (5)	04:32	20:33 (5)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25		22:30	8	20:35 (5)	22:48	15 20:48 (5)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41		04:38		20:27 (5)	04:33	20:33 (5)	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28		22:31	11	20:38 (5)	22:47	15 20:48 (5)	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39		04:37		20:27 (5)	04:34	20:33 (5)	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30		22:33	12	20:39 (5)	22:47	15 20:48 (5)	21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36		04:36		20:27 (5)	04:35	20:33 (5)	05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32		22:34	12	20:39 (5)	22:46	14 20:47 (5)	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34		04:35		20:27 (5)	04:36	20:33 (5)	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35		22:36	13	20:40 (5)	22:45	14 20:47 (5)	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31		04:34		20:27 (5)	04:37	20:34 (5)	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37		22:37	13	20:40 (5)	22:44	13 20:47 (5)	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29		04:33		20:28 (5)	04:39	20:34 (5)	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39		22:38	14	20:42 (5)	22:43	12 20:46 (5)	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26		04:32		20:28 (5)	04:40	20:34 (5)	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41		22:40	14	20:42 (5)	22:42	12 20:46 (5)	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24		04:31		20:28 (5)	04:41	20:35 (5)	05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44		22:41	14	20:42 (5)	22:41	11 20:46 (5)	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22		04:30		20:29 (5)	04:43	20:35 (5)	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46		22:42	14	20:43 (5)	22:40	11 20:46 (5)	21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19		04:29		20:28 (5)	04:44	20:35 (5)	05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48		22:43	16	20:44 (5)	22:39	9 20:44 (5)	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17		04:29		20:29 (5)	04:46	20:35 (5)	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50		22:44	16	20:45 (5)	22:37	4 20:39 (5)	21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15		04:28		20:29 (5)	04:47	20:35 (5)	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53		22:45	16	20:45 (5)	22:36	3 20:38 (5)	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12		04:28		20:29 (5)	04:49	20:35 (5)	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55		22:46	17	20:46 (5)	22:34	2 20:37 (5)	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10		04:27		20:30 (5)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57		22:47	17	20:47 (5)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08		04:27		20:30 (5)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59		22:47	17	20:47 (5)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06		04:27		20:30 (5)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01		22:48	18	20:48 (5)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04		04:27		20:31 (5)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03		22:48	17	20:48 (5)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02		04:27		20:31 (5)	04:58		06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05		22:49	18	20:49 (5)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00		04:27		20:31 (5)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07		22:49	18	20:49 (5)	22:25		21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58		04:27		20:31 (5)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10		22:49	18	20:49 (5)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56		04:27		20:31 (5)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12		22:50	18	20:49 (5)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54		04:27		20:31 (5)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14		22:50	18	20:49 (5)	22:19		21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52		04:27		20:32 (5)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15		22:50	17	20:49 (5)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51		04:28		20:32 (5)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17		22:50	17	20:49 (5)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49		04:28		20:32 (5)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19		22:50	18	20:50 (5)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47		04:29		20:32 (5)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21		22:49	17	20:49 (5)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46		04:30		20:32 (5)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23		22:49	17	20:49 (5)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44		04:30		20:33 (5)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25		22:49	17	20:50 (5)	22:07		20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42		20:27 (5)	04:31	20:32 (5)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	2	20:29 (5)	22:48	17 20:49 (5)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41		20:27 (5)			05:22		06:31		07:48		09:27
	16:53		20:14		22:28	3	20:30 (5)			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521			547		545		478	386	319	236	200
Total, worst case						5			469		150					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:35		07:07	05:44	04:40	04:32	05:24	06:33		07:39	08:39 (86)	07:51	09:00
	15:53	16:56		18:05		20:17	21:26	22:30	22:48	22:01	20:40		19:13	09:01 (89)	16:49	15:52
2	09:27	08:43		07:33	08:13 (89)	07:04	05:42	04:39	04:33	05:27	06:35		07:42	08:36 (86)	07:54	09:01
	15:54	16:59		18:07	6 08:19 (89)	20:19	21:28	22:32	22:48	21:58	20:37		19:10	25 09:01 (89)	16:47	15:50
3	09:27	08:41		07:30	08:10 (89)	07:01	05:39	04:38	04:34	05:29	06:38		07:44	08:35 (86)	07:56	09:03
	15:56	17:01		18:10	12 08:22 (89)	20:21	21:30	22:33	22:47	21:56	20:34		19:07	26 09:01 (89)	16:44	15:49
4	09:26	08:39		07:27	08:07 (89)	06:58	05:36	04:36	04:35	05:31	06:40		07:46	08:34 (86)	07:59	09:05
	15:57	17:04		18:12	16 08:23 (89)	20:24	21:33	22:35	22:46	21:54	20:31		19:05	28 09:02 (89)	16:42	15:48
5	09:26	08:37		07:24	08:00 (86)	06:55	05:34	04:35	04:37	05:33	06:42		07:48	08:34 (86)	08:01	09:07
	15:59	17:06		18:14	24 08:24 (89)	20:26	21:35	22:36	22:45	21:51	20:28		19:02	28 09:02 (89)	16:39	15:47
6	09:25	08:34		07:21	07:58 (86)	06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:33 (86)	08:03	09:08
	16:00	17:09		18:17	26 08:24 (89)	20:28	21:37	22:38	22:45	21:49	20:25		18:59	28 09:01 (89)	16:37	15:47
7	09:24	08:32		07:19	07:57 (86)	06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:34 (86)	08:06	09:10
	16:02	17:11		18:19	28 08:25 (89)	20:30	21:40	22:39	22:44	21:47	20:23		18:56	27 09:01 (89)	16:35	15:46
8	09:23	08:30		07:16	07:56 (86)	06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:35 (86)	08:08	09:12
	16:04	17:14		18:21	28 08:24 (89)	20:33	21:42	22:40	22:43	21:44	20:20		18:53	25 09:00 (89)	16:32	15:45
9	09:23	08:27		07:13	07:56 (86)	06:44	05:24	04:31	04:42	05:42	06:51		07:57	08:36 (86)	08:11	09:13
	16:06	17:16		18:24	28 08:24 (89)	20:35	21:44	22:41	22:41	21:42	20:17		18:50	22 08:58 (89)	16:30	15:44
10	09:22	08:25		07:10	07:56 (86)	06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:43 (89)	08:13	09:15
	16:07	17:18		18:26	27 08:23 (89)	20:37	21:46	22:43	22:40	21:39	20:14		18:48	14 08:57 (89)	16:28	15:44
11	09:21	08:23		07:07	07:58 (86)	06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:44 (89)	08:15	09:16
	16:09	17:21		18:28	26 08:24 (89)	20:40	21:49	22:44	22:39	21:37	20:11		18:45	10 08:54 (89)	16:26	15:43
12	09:19	08:20		07:04	07:59 (86)	06:36	05:17	04:29	04:46	05:49	06:58		08:04		08:18	09:17
	16:11	17:23		18:31	23 08:22 (89)	20:42	21:51	22:45	22:38	21:34	20:08		18:42		16:24	15:43
13	09:18	08:18		07:02	07:37 (85)	06:33	05:15	04:29	04:48	05:51	07:00	08:13 (88)	08:07		08:20	09:19
	16:13	17:26		18:33	20 08:21 (89)	20:44	21:53	22:45	22:36	21:31	20:05	8 08:21 (88)	18:39		16:22	15:43
14	09:17	08:15		06:59	07:35 (85)	06:30	05:13	04:28	04:49	05:53	07:02	08:10 (88)	08:09		08:22	09:20
	16:15	17:28		18:35	20 08:18 (89)	20:47	21:55	22:46	22:35	21:29	20:02	13 08:23 (88)	18:36		16:19	15:43
15	09:16	08:13		06:56	07:33 (85)	06:27	05:11	04:28	04:51	05:55	07:04	08:08 (88)	08:11		08:25	09:21
	16:17	17:31		18:38	14 08:14 (89)	20:49	21:57	22:47	22:33	21:26	19:59	16 08:24 (88)	18:34		16:17	15:42
16	09:14	08:10		06:53	07:32 (85)	06:24	05:09	04:28	04:53	05:58	07:06	08:08 (88)	08:13	09:01 (87)	08:27	09:22
	16:19	17:33		18:40	12 07:44 (85)	20:51	22:00	22:48	22:32	21:24	19:57	17 08:25 (88)	18:31	9 09:10 (87)	16:15	15:42
17	09:13	08:07		06:50	07:32 (85)	06:22	05:06	04:27	04:54	06:00	07:08	08:07 (88)	08:16	09:00 (87)	08:29	09:23
	16:21	17:36		18:42	12 07:44 (85)	20:53	22:02	22:48	22:30	21:21	19:54	18 08:25 (88)	18:28	12 09:12 (87)	16:13	15:42
18	09:12	08:05	08:36 (87)	06:47	07:32 (85)	06:19	05:04	04:27	04:56	06:02	07:11	08:06 (88)	08:18	08:59 (87)	08:32	09:24
	16:24	17:38	3 08:39 (87)	18:45	11 07:43 (85)	20:56	22:04	22:49	22:29	21:18	19:51	19 08:25 (88)	18:25	13 09:12 (87)	16:12	15:42
19	09:10	08:02	08:33 (87)	06:44	07:26 (88)	06:16	05:02	04:27	04:58	06:04	07:13	08:05 (88)	08:20	08:59 (87)	08:34	09:25
	16:26	17:41	7 08:40 (87)	18:47	16 07:42 (85)	20:58	22:06	22:49	22:27	21:16	19:48	19 08:24 (88)	18:23	14 09:13 (87)	16:10	15:43
20	09:08	08:00	08:30 (87)	06:42	07:23 (88)	06:13	05:00	04:27	05:00	06:07	07:15	08:05 (88)	08:23	08:58 (87)	08:36	09:25
	16:28	17:43	11 08:41 (87)	18:49	17 07:40 (85)	21:00	22:08	22:50	22:25	21:13	19:45	19 08:24 (88)	18:20	14 09:12 (87)	16:08	15:43
21	09:07	07:57	08:27 (87)	06:39	07:21 (88)	06:11	04:58	04:27	05:02	06:09	07:17	08:05 (88)	08:25	08:58 (87)	08:39	09:26
	16:30	17:46	14 08:41 (87)	18:52	15 07:36 (88)	21:03	22:10	22:50	22:23	21:10	19:42	17 08:22 (88)	18:17	14 09:12 (87)	16:06	15:43
22	09:05	07:54	08:27 (87)	06:36	07:20 (88)	06:08	04:56	04:27	05:04	06:11	07:19	08:06 (88)	08:27	09:01 (87)	08:41	09:27
	16:32	17:48	14 08:41 (87)	18:54	18 07:38 (88)	21:05	22:12	22:50	22:22	21:08	19:39	16 08:22 (88)	18:15	10 09:11 (87)	16:04	15:44
23	09:03	07:52	08:28 (87)	06:33	07:19 (88)	06:05	04:55	04:28	05:06	06:13	07:22	08:07 (88)	08:30	09:04 (87)	08:43	09:27
	16:35	17:50	13 08:41 (87)	18:56	19 07:38 (88)	21:07	22:14	22:50	22:20	21:05	19:36	17 08:24 (85)	18:12	6 09:10 (87)	16:03	15:44
24	09:01	07:49	08:28 (87)	06:30	07:19 (88)	06:02	04:53	04:28	05:08	06:15	07:24	08:09 (88)	08:32	09:06 (87)	08:45	09:27
	16:37	17:53	13 08:41 (87)	18:58	19 07:38 (88)	21:10	22:16	22:50	22:18	21:02	19:33	16 08:25 (85)	18:09	2 09:08 (87)	16:01	15:45
25	09:00	07:46	08:29 (87)	06:27	07:18 (88)	06:00	04:51	04:28	05:10	06:18	07:26	08:15 (85)	07:35		08:47	09:28
	16:39	17:55	10 08:39 (87)	19:01	19 07:37 (88)	21:12	22:18	22:50	22:16	20:59	19:30	11 08:26 (85)	17:07		16:00	15:46
26	08:58	07:44	08:30 (87)	06:24	07:18 (88)	05:57	04:49	04:29	05:12	06:20	07:28	08:14 (85)	07:37		08:49	09:28
	16:42	17:58	7 08:37 (87)	19:03	19 07:37 (88)	21:14	22:20	22:50	22:14	20:57	19:28	12 08:26 (85)	17:04		15:58	15:46
27	08:56	07:41		06:21	07:18 (88)	05:54	04:48	04:29	05:14	06:22	07:31	08:14 (85)	07:39		08:52	09:28
	16:44	18:00		19:05	18 07:36 (88)	21:17	22:22	22:50	22:12	20:54	19:25	12 08:26 (85)	17:02		15:57	15:47
28	08:54	07:38		06:18	07:18 (88)	05:52	04:46	04:30	05:16	06:24	07:33	08:14 (85)	07:42		08:54	09:28
	16:47	18:02		19:08	16 07:34 (88)	21:19	22:23	22:50	22:09	20:51	19:22	12 08:26 (85)	16:59		15:55	15:48
29	08:52			07:16	08:19 (88)	05:49	04:44	04:31	05:18	06:27	07:35	08:14 (85)	07:44		08:56	09:28
	16:49			20:10	14 08:33 (88)	21:21	22:25	22:49	22:07	20:48	19:19	19 08:57 (89)	16:56		15:54	15:49
30	08:50			07:13	08:21 (88)	05:47	04:43	04:32	05:20	06:29	07:37	08:15 (85)	07:47		08:58	09:28
	16:51			20:12	9 08:30 (88)	21:24	22:27	22:49	22:05	20:45	19:16	21 08:59 (89)	16:54		15:53	15:50
31	08:48			07:10			04:41		05:22	06:31			07:49			09:28
	16:54			20:14			22:29		22:03	20:43			16:51			15:51
Potential sun hours	222	260		365		432	521	547	545	478	386		319		236	200
Total, worst case			92		532							282		349		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March	April		May		June		
1	09:28	08:46		07:35	07:07		05:44		07:31 (42)	04:40	06:17 (40)
	15:53	16:56		18:05	20:17		21:26	31	08:02 (42)	22:30	23 06:40 (40)
2	09:27	08:43		07:33	07:04		05:42		07:32 (42)	04:39	06:16 (40)
	15:54	16:59		18:07	20:19		21:28	29	08:01 (42)	22:32	24 06:40 (40)
3	09:27	08:41		07:30	07:01		05:39		07:32 (42)	04:37	06:16 (40)
	15:56	17:01		18:10	20:21		21:31	27	07:59 (42)	22:34	25 06:41 (40)
4	09:26	08:39		07:27	06:58		05:36		07:34 (42)	04:36	06:16 (40)
	15:57	17:04		18:12	20:24		21:33	24	07:58 (42)	22:35	26 06:42 (40)
5	09:26	08:37		07:24	06:55		05:34		07:36 (42)	04:35	06:16 (40)
	15:59	17:06		18:14	20:26		21:35	20	07:56 (42)	22:36	27 06:43 (40)
6	09:25	08:34		07:21	06:53		05:32		07:38 (42)	04:34	06:16 (40)
	16:00	17:09		18:17	20:28		21:37	16	07:54 (42)	22:38	27 06:43 (40)
7	09:24	08:32		07:19	06:50		05:29		07:40 (42)	04:33	06:16 (40)
	16:02	17:11		18:19	20:31		21:40	10	07:50 (42)	22:39	27 06:43 (40)
8	09:24	08:30	09:03 (89)	07:16	06:47		05:27			04:32	06:15 (40)
	16:04	17:14	2 09:05 (89)	18:21	20:33		21:42			22:40	29 06:44 (40)
9	09:23	08:27	09:00 (89)	07:13	06:44		05:24			04:31	06:16 (40)
	16:06	17:16	7 09:07 (89)	18:24	20:35		21:44			22:42	29 06:45 (40)
10	09:22	08:25	08:58 (89)	07:10	06:41	07:48 (42)	05:22			04:31	06:15 (40)
	16:07	17:18	10 09:08 (89)	18:26	20:37	10 07:58 (42)	21:46			22:43	30 06:45 (40)
11	09:21	08:23	08:56 (89)	07:07	06:38	07:45 (42)	05:20			04:30	06:16 (40)
	16:09	17:21	13 09:09 (89)	18:28	20:40	17 08:02 (42)	21:49			22:44	29 06:45 (40)
12	09:20	08:20	08:55 (89)	07:04	06:36	07:41 (42)	05:17			04:29	06:15 (40)
	16:11	17:23	14 09:09 (89)	18:31	20:42	22 08:03 (42)	21:51			22:45	30 06:45 (40)
13	09:18	08:18	08:55 (89)	07:02	06:33	07:37 (42)	05:15			04:29	06:16 (40)
	16:13	17:26	14 09:09 (89)	18:33	20:44	27 08:04 (42)	21:53			22:46	30 06:46 (40)
14	09:17	08:15	08:56 (89)	06:59	06:30	07:35 (42)	05:13			04:28	06:16 (40)
	16:15	17:28	13 09:09 (89)	18:35	20:47	30 08:05 (42)	21:55			22:46	30 06:46 (40)
15	09:16	08:13	08:56 (89)	06:56	06:27	07:34 (42)	05:11			04:28	06:15 (40)
	16:17	17:31	13 09:09 (89)	18:38	20:49	33 08:07 (42)	21:57			22:47	31 06:46 (40)
16	09:14	08:10	08:56 (89)	06:53	06:24	07:33 (42)	05:09			04:28	06:16 (40)
	16:19	17:33	11 09:07 (89)	18:40	20:51	34 08:07 (42)	22:00			22:48	30 06:46 (40)
17	09:13	08:07	08:58 (89)	06:50	06:22	07:32 (42)	05:06			04:27	06:16 (40)
	16:21	17:36	7 09:05 (89)	18:42	20:54	35 08:07 (42)	22:02			22:48	31 06:47 (40)
18	09:12	08:05		06:47	06:19	07:31 (42)	05:04			04:27	06:16 (40)
	16:24	17:38		18:45	20:56	37 08:08 (42)	22:04			22:49	31 06:47 (40)
19	09:10	08:02		06:44	06:16	07:30 (42)	05:02			04:27	06:16 (40)
	16:26	17:41		18:47	20:58	38 08:08 (42)	22:06			22:49	31 06:47 (40)
20	09:08	08:00		06:42	06:13	07:30 (42)	05:00			04:27	06:16 (40)
	16:28	17:43		18:49	21:00	39 08:09 (42)	22:08			22:50	31 06:47 (40)
21	09:07	07:57		06:39	06:11	07:30 (42)	04:58			04:27	06:16 (40)
	16:30	17:46		18:52	21:03	38 08:08 (42)	22:10			22:50	31 06:47 (40)
22	09:05	07:54		06:36	06:08	07:29 (42)	04:56			04:27	06:17 (40)
	16:32	17:48		18:54	21:05	39 08:08 (42)	22:12			22:50	31 06:48 (40)
23	09:03	07:52		06:33	06:05	07:29 (42)	04:55			04:28	06:17 (40)
	16:35	17:50		18:56	21:07	39 08:08 (42)	22:14			22:50	31 06:48 (40)
24	09:02	07:49		06:30	06:02	07:29 (42)	04:53			04:28	06:17 (40)
	16:37	17:53		18:58	21:10	38 08:07 (42)	22:16			22:50	31 06:48 (40)
25	09:00	07:46		06:27	06:00	07:29 (42)	04:51			04:28	06:18 (40)
	16:39	17:55		19:01	21:12	38 08:07 (42)	22:18			22:50	31 06:49 (40)
26	08:58	07:44		06:24	05:57	07:29 (42)	04:49		06:24 (40)	04:29	06:18 (40)
	16:42	17:58		19:03	21:14	37 08:06 (42)	22:20	8	06:32 (40)	22:50	31 06:49 (40)
27	08:56	07:41		06:21	05:54	07:29 (42)	04:48		06:21 (40)	04:29	06:19 (40)
	16:44	18:00		19:05	21:17	37 08:06 (42)	22:22	13	06:34 (40)	22:50	30 06:49 (40)
28	08:54	07:38		06:18	05:52	07:29 (42)	04:46		06:20 (40)	04:30	06:18 (40)
	16:47	18:02		19:08	21:19	36 08:05 (42)	22:24	16	06:36 (40)	22:50	31 06:49 (40)
29	08:52			07:16	05:49	07:30 (42)	04:44		06:19 (40)	04:31	06:19 (40)
	16:49			20:10	21:21	34 08:04 (42)	22:25	18	06:37 (40)	22:49	30 06:49 (40)
30	08:50			07:13	05:47	07:30 (42)	04:43		06:19 (40)	04:31	06:19 (40)
	16:51			20:12	21:24	33 08:03 (42)	22:27	20	06:39 (40)	22:49	30 06:49 (40)
31	08:48			07:10			04:41		06:17 (40)		
	16:54			20:14			22:29	22	06:39 (40)		
Potential sun hours	221	260		365	432		521			547	
Total, worst case			104			691		254			878

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July			August			September			October			November			December
1	04:32		06:20 (40)	05:24			06:33		07:44 (42)	07:39			07:51		08:28 (89)	09:00
	22:48	30	06:50 (40)	22:01			20:40	17	08:01 (42)	19:13			16:49	9	08:37 (89)	15:51
2	04:33		06:20 (40)	05:27			06:35		07:47 (42)	07:42			07:54		08:30 (89)	09:01
	22:48	30	06:50 (40)	21:58			20:37	10	07:57 (42)	19:10			16:47	6	08:36 (89)	15:50
3	04:34		06:20 (40)	05:29			06:38			07:44			07:56		08:33 (89)	09:03
	22:47	29	06:49 (40)	21:56			20:34			19:07			16:44	1	08:34 (89)	15:49
4	04:35		06:20 (40)	05:31			06:40			07:46			07:59			09:05
	22:46	29	06:49 (40)	21:54			20:31			19:05			16:42			15:48
5	04:36		06:21 (40)	05:33			06:42			07:48			08:01			09:07
	22:46	28	06:49 (40)	21:51			20:28			19:02			16:39			15:47
6	04:38		06:21 (40)	05:35		07:49 (42)	06:44			07:51			08:03			09:09
	22:45	28	06:49 (40)	21:49	13	08:02 (42)	20:25			18:59			16:37			15:47
7	04:39		06:23 (40)	05:38		07:46 (42)	06:47			07:53			08:06			09:10
	22:44	27	06:50 (40)	21:47	18	08:04 (42)	20:23			18:56			16:35			15:46
8	04:40		06:23 (40)	05:40		07:44 (42)	06:49			07:55			08:08			09:12
	22:43	26	06:49 (40)	21:44	22	08:06 (42)	20:20			18:53			16:32			15:45
9	04:42		06:23 (40)	05:42		07:43 (42)	06:51			07:57			08:11			09:13
	22:42	26	06:49 (40)	21:42	25	08:08 (42)	20:17			18:50			16:30			15:44
10	04:43		06:24 (40)	05:44		07:41 (42)	06:53			08:00			08:13			09:15
	22:40	24	06:48 (40)	21:39	28	08:09 (42)	20:14			18:48			16:28			15:44
11	04:45		06:25 (40)	05:46		07:40 (42)	06:55			08:02			08:15			09:16
	22:39	23	06:48 (40)	21:37	30	08:10 (42)	20:11			18:45			16:26			15:43
12	04:46		06:25 (40)	05:49		07:39 (42)	06:58			08:04			08:18			09:17
	22:38	23	06:48 (40)	21:34	32	08:11 (42)	20:08			18:42			16:24			15:43
13	04:48		06:26 (40)	05:51		07:38 (42)	07:00			08:07			08:20			09:19
	22:36	21	06:47 (40)	21:32	33	08:11 (42)	20:05			18:39			16:22			15:43
14	04:49		06:28 (40)	05:53		07:37 (42)	07:02			08:09			08:22			09:20
	22:35	18	06:46 (40)	21:29	35	08:12 (42)	20:02			18:36			16:19			15:43
15	04:51		06:28 (40)	05:55		07:36 (42)	07:04			08:11			08:25			09:21
	22:34	17	06:45 (40)	21:26	36	08:12 (42)	19:59			18:34			16:17			15:42
16	04:53		06:30 (40)	05:58		07:36 (42)	07:06			08:14			08:27			09:22
	22:32	14	06:44 (40)	21:24	37	08:13 (42)	19:57			18:31			16:15			15:42
17	04:54		06:31 (40)	06:00		07:35 (42)	07:09			08:16			08:29			09:23
	22:30	11	06:42 (40)	21:21	38	08:13 (42)	19:54			18:28			16:13			15:42
18	04:56		06:35 (40)	06:02		07:36 (42)	07:11			08:18			08:32			09:24
	22:29	5	06:40 (40)	21:18	38	08:14 (42)	19:51			18:25			16:12			15:42
19	04:58			06:04		07:35 (42)	07:13			08:21			08:34			09:25
	22:27			21:16	39	08:14 (42)	19:48			18:23			16:10			15:43
20	05:00			06:07		07:35 (42)	07:15			08:23			08:36			09:25
	22:25			21:13	38	08:13 (42)	19:45			18:20			16:08			15:43
21	05:02			06:09		07:34 (42)	07:17			08:25			08:39			09:26
	22:23			21:10	39	08:13 (42)	19:42			18:17			16:06			15:43
22	05:04			06:11		07:34 (42)	07:20			08:28			08:41			09:27
	22:22			21:08	39	08:13 (42)	19:39			18:15			16:04			15:44
23	05:06			06:13		07:34 (42)	07:22			08:30			08:43			09:27
	22:20			21:05	38	08:12 (42)	19:36			18:12			16:03			15:44
24	05:08			06:15		07:34 (42)	07:24			08:32		09:30 (89)	08:45			09:28
	22:18			21:02	37	08:11 (42)	19:33			18:09	3	09:33 (89)	16:01			15:45
25	05:10			06:18		07:34 (42)	07:26			07:35		08:28 (89)	08:47			09:28
	22:16			20:59	37	08:11 (42)	19:30			17:07	8	08:36 (89)	16:00			15:46
26	05:12			06:20		07:34 (42)	07:28			07:37		08:27 (89)	08:50			09:28
	22:14			20:57	36	08:10 (42)	19:28			17:04	11	08:38 (89)	15:58			15:46
27	05:14			06:22		07:35 (42)	07:31			07:39		08:25 (89)	08:52			09:28
	22:12			20:54	34	08:09 (42)	19:25			17:02	13	08:38 (89)	15:57			15:47
28	05:16			06:24		07:35 (42)	07:33			07:42		08:25 (89)	08:54			09:28
	22:10			20:51	32	08:07 (42)	19:22			16:59	14	08:39 (89)	15:55			15:48
29	05:18			06:27		07:36 (42)	07:35			07:44		08:24 (89)	08:56			09:28
	22:07			20:48	30	08:06 (42)	19:19			16:56	14	08:38 (89)	15:54			15:49
30	05:20			06:29		07:38 (42)	07:37			07:47		08:25 (89)	08:58			09:28
	22:05			20:45	27	08:05 (42)	19:16			16:54	13	08:38 (89)	15:53			15:50
31	05:22			06:31		07:41 (42)				07:49		08:26 (89)				09:28
	22:03			20:43	22	08:03 (42)				16:51	12	08:38 (89)				15:51
Potential sun hours	545			478			386			319			236			200
Total, worst case		409			833			27			88			16		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April	May			June		
1	09:28	08:46		07:35		08:16 (89)	07:07	05:44			04:40		06:01 (42)
	15:53	16:56		18:05	15	08:31 (89)	20:17	21:26			22:30	34	06:35 (42)
2	09:27	08:43		07:33		08:17 (89)	07:04	05:42			04:39		06:01 (42)
	15:54	16:59		18:07	13	08:30 (89)	20:19	21:28			22:32	35	06:36 (42)
3	09:27	08:41		07:30		08:18 (89)	07:01	05:39			04:38		06:01 (42)
	15:56	17:01		18:10	10	08:28 (89)	20:21	21:30			22:33	35	06:36 (42)
4	09:26	08:39		07:27		08:20 (89)	06:58	05:37			04:36		06:00 (42)
	15:57	17:04		18:12	5	08:25 (89)	20:24	21:33			22:35	36	06:36 (42)
5	09:26	08:37		07:24			06:55	05:34			04:35		06:01 (42)
	15:59	17:06		18:14			20:26	21:35			22:36	36	06:37 (42)
6	09:25	08:34		07:21			06:53	05:32			04:34		06:01 (42)
	16:00	17:09		18:17			20:28	21:37			22:38	36	06:37 (42)
7	09:24	08:32		07:19			06:50	05:29			04:33		06:01 (42)
	16:02	17:11		18:19			20:31	21:40			22:39	36	06:37 (42)
8	09:24	08:30		07:16		07:46 (88)	06:47	05:27			04:32		06:01 (42)
	16:04	17:14		18:21	7	07:53 (88)	20:33	21:42			22:40	36	06:37 (42)
9	09:23	08:27		07:13		07:44 (88)	06:44	05:24			04:31		06:02 (42)
	16:06	17:16		18:24	10	07:54 (88)	20:35	21:44			22:41	36	06:38 (42)
10	09:22	08:25		07:10		07:43 (88)	06:41	05:22			04:31		06:01 (42)
	16:07	17:19		18:26	13	07:56 (88)	20:37	21:46			22:43	37	06:38 (42)
11	09:21	08:23		07:07		07:42 (88)	06:38	05:20			04:30		06:02 (42)
	16:09	17:21		18:28	14	07:56 (88)	20:40	21:49			22:44	37	06:39 (42)
12	09:20	08:20		07:04		07:42 (88)	06:36	05:17			04:29		06:02 (42)
	16:11	17:23		18:31	14	07:56 (88)	20:42	21:51			22:45	36	06:38 (42)
13	09:18	08:18		07:02		07:41 (88)	06:33	05:15			04:29		06:02 (42)
	16:13	17:26		18:33	15	07:56 (88)	20:44	21:53			22:46	37	06:39 (42)
14	09:17	08:15		06:59		07:42 (88)	06:30	05:13			04:28		06:03 (42)
	16:15	17:28		18:35	13	07:55 (88)	20:47	21:55			22:46	36	06:39 (42)
15	09:16	08:13		06:56		07:42 (88)	06:27	05:11			04:28		06:02 (42)
	16:17	17:31		18:38	11	07:53 (88)	20:49	21:57			22:47	37	06:39 (42)
16	09:14	08:10		06:53		07:44 (88)	06:24	05:09			04:28		06:02 (42)
	16:19	17:33		18:40	7	07:51 (88)	20:51	22:00			22:48	37	06:39 (42)
17	09:13	08:07		06:50			06:22	05:06		06:12 (42)	04:27		06:03 (42)
	16:21	17:36		18:42			20:54	22:02	10	06:22 (42)	22:48	37	06:40 (42)
18	09:12	08:05		06:47			06:19	05:04		06:11 (42)	04:27		06:03 (42)
	16:24	17:38		18:45			20:56	22:04	14	06:25 (42)	22:49	37	06:40 (42)
19	09:10	08:02		06:44			06:16	05:02		06:09 (42)	04:27		06:03 (42)
	16:26	17:41		18:47			20:58	22:06	18	06:27 (42)	22:49	37	06:40 (42)
20	09:08	08:00		06:42			06:13	05:00		06:08 (42)	04:27		06:03 (42)
	16:28	17:43		18:49			21:00	22:08	20	06:28 (42)	22:50	37	06:40 (42)
21	09:07	07:57		06:39			06:11	04:58		06:06 (42)	04:27		06:03 (42)
	16:30	17:46		18:52			21:03	22:10	23	06:29 (42)	22:50	37	06:40 (42)
22	09:05	07:54		06:36			06:08	04:56		06:05 (42)	04:27		06:04 (42)
	16:32	17:48		18:54			21:05	22:12	25	06:30 (42)	22:50	37	06:41 (42)
23	09:03	07:52		06:33			06:05	04:55		06:03 (42)	04:28		06:04 (42)
	16:35	17:50	8	08:29 (89)	18:56			21:07	22:14	28	06:31 (42)	22:50	37	06:41 (42)
24	09:02	07:49		08:18 (89)	06:30			06:02	04:53		06:03 (42)	04:28		06:04 (42)
	16:37	17:53	12	08:30 (89)	18:58			21:10	22:16	29	06:32 (42)	22:50	37	06:41 (42)
25	09:00	07:46		08:17 (89)	06:27			06:00	04:51		06:02 (42)	04:28		06:05 (42)
	16:39	17:55	14	08:31 (89)	19:01			21:12	22:18	30	06:32 (42)	22:50	37	06:42 (42)
26	08:58	07:44		08:16 (89)	06:24			05:57	04:49		06:02 (42)	04:29		06:05 (42)
	16:42	17:58	15	08:31 (89)	19:03			21:14	22:20	31	06:33 (42)	22:50	36	06:41 (42)
27	08:56	07:41		08:15 (89)	06:21			05:54	04:48		06:01 (42)	04:29		06:05 (42)
	16:44	18:00	16	08:31 (89)	19:05			21:17	22:22	32	06:33 (42)	22:50	37	06:42 (42)
28	08:54	07:38		08:15 (89)	06:18			05:52	04:46		06:01 (42)	04:30		06:05 (42)
	16:47	18:02	15	08:30 (89)	19:08			21:19	22:24	33	06:34 (42)	22:50	37	06:42 (42)
29	08:52				07:16			05:49	04:44		06:01 (42)	04:31		06:05 (42)
	16:49				20:10			21:21	22:25	34	06:35 (42)	22:49	37	06:42 (42)
30	08:50				07:13			05:47	04:43		06:01 (42)	04:32		06:06 (42)
	16:51				20:12			21:24	22:27	34	06:35 (42)	22:49	37	06:43 (42)
31	08:48				07:10				04:41		06:01 (42)			
	16:54				20:14				22:29	34	06:35 (42)			
Potential sun hours	221	260			365			432	521			547		
Total, worst case			80			147				395			1094	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July			August		September			October			November	December
1	04:32		06:06 (42)	05:24		06:33			07:39		08:21 (88)	07:51	09:00
	22:48	37	06:43 (42)	22:01		20:40			19:13	14	08:35 (88)	16:49	15:52
2	04:33		06:07 (42)	05:27		06:35			07:42		08:20 (88)	07:54	09:01
	22:48	36	06:43 (42)	21:58		20:37			19:10	15	08:35 (88)	16:47	15:50
3	04:34		06:06 (42)	05:29		06:38			07:44		08:20 (88)	07:56	09:03
	22:47	37	06:43 (42)	21:56		20:34			19:07	13	08:33 (88)	16:44	15:49
4	04:35		06:06 (42)	05:31		06:40			07:46		08:21 (88)	07:59	09:05
	22:46	37	06:43 (42)	21:54		20:31			19:05	12	08:33 (88)	16:42	15:48
5	04:37		06:06 (42)	05:33		06:42			07:48		08:22 (88)	08:01	09:07
	22:46	37	06:43 (42)	21:51		20:28			19:02	9	08:31 (88)	16:39	15:47
6	04:38		06:08 (42)	05:35		06:44			07:51			08:03	09:09
	22:45	36	06:44 (42)	21:49		20:25			18:59			16:37	15:47
7	04:39		06:08 (42)	05:38		06:47			07:53			08:06	09:10
	22:44	36	06:44 (42)	21:47		20:23			18:56			16:35	15:46
8	04:40		06:08 (42)	05:40		06:49			07:55			08:08	09:12
	22:43	36	06:44 (42)	21:44		20:20			18:53			16:32	15:45
9	04:42		06:08 (42)	05:42		06:51			07:57			08:11	09:13
	22:42	36	06:44 (42)	21:42		20:17			18:50			16:30	15:44
10	04:43		06:08 (42)	05:44		06:53			08:00		08:54 (89)	08:13	09:15
	22:40	35	06:43 (42)	21:39		20:14			18:48	7	09:01 (89)	16:28	15:44
11	04:45		06:09 (42)	05:46		06:55			08:02		08:51 (89)	08:15	09:16
	22:39	35	06:44 (42)	21:37		20:11			18:45	11	09:02 (89)	16:26	15:43
12	04:46		06:09 (42)	05:49		06:58			08:04		08:49 (89)	08:18	09:17
	22:38	35	06:44 (42)	21:34		20:08			18:42	14	09:03 (89)	16:24	15:43
13	04:48		06:09 (42)	05:51		07:00			08:07		08:49 (89)	08:20	09:19
	22:36	34	06:43 (42)	21:31		20:05			18:39	15	09:04 (89)	16:22	15:43
14	04:49		06:10 (42)	05:53		07:02			08:09		08:48 (89)	08:22	09:20
	22:35	33	06:43 (42)	21:29		20:02			18:36	15	09:03 (89)	16:19	15:43
15	04:51		06:10 (42)	05:55		07:04			08:11		08:48 (89)	08:25	09:21
	22:34	33	06:43 (42)	21:26		19:59			18:34	16	09:04 (89)	16:17	15:42
16	04:53		06:11 (42)	05:58		07:06			08:14		08:48 (89)	08:27	09:22
	22:32	32	06:43 (42)	21:24		19:57			18:31	15	09:03 (89)	16:15	15:42
17	04:54		06:11 (42)	06:00		07:09			08:16		08:49 (89)	08:29	09:23
	22:30	31	06:42 (42)	21:21		19:54			18:28	13	09:02 (89)	16:14	15:42
18	04:56		06:12 (42)	06:02		07:11			08:18		08:50 (89)	08:32	09:24
	22:29	30	06:42 (42)	21:18		19:51			18:25	11	09:01 (89)	16:12	15:42
19	04:58		06:13 (42)	06:04		07:13			08:20		08:53 (89)	08:34	09:25
	22:27	29	06:42 (42)	21:16		19:48			18:23	6	08:59 (89)	16:10	15:43
20	05:00		06:13 (42)	06:07		07:15			08:23			08:36	09:25
	22:25	28	06:41 (42)	21:13		19:45			18:20			16:08	15:43
21	05:02		06:14 (42)	06:09		07:17			08:25			08:39	09:26
	22:23	27	06:41 (42)	21:10		19:42			18:17			16:06	15:43
22	05:04		06:16 (42)	06:11		07:20			08:28			08:41	09:27
	22:22	24	06:40 (42)	21:08		19:39			18:15			16:04	15:44
23	05:06		06:17 (42)	06:13		07:22			08:30			08:43	09:27
	22:20	21	06:38 (42)	21:05		19:36			18:12			16:03	15:44
24	05:08		06:18 (42)	06:15		07:24			08:32			08:45	09:28
	22:18	19	06:37 (42)	21:02		19:33			18:09			16:01	15:45
25	05:10		06:20 (42)	06:18		07:26			07:35			08:47	09:28
	22:16	16	06:36 (42)	20:59		19:30			17:07			16:00	15:46
26	05:12		06:22 (42)	06:20		07:28			07:37			08:49	09:28
	22:14	12	06:34 (42)	20:57		19:28			17:04			15:58	15:46
27	05:14		06:25 (42)	06:22		07:31		08:27 (88)	07:39			08:52	09:28
	22:12	6	06:31 (42)	20:54		19:25	5	08:32 (88)	17:02			15:57	15:47
28	05:16			06:24		07:33		08:24 (88)	07:42			08:54	09:28
	22:10			20:51		19:22	10	08:34 (88)	16:59			15:55	15:48
29	05:18			06:27		07:35		08:22 (88)	07:44			08:56	09:28
	22:07			20:48		19:19	12	08:34 (88)	16:56			15:54	15:49
30	05:20			06:29		07:37		08:21 (88)	07:47			08:58	09:28
	22:05			20:45		19:16	14	08:35 (88)	16:54			15:53	15:50
31	05:22			06:31					07:49				09:28
	22:03			20:43					16:51				15:51
Potential sun hours	545			478		386			319			236	200
Total, worst case		808					41			186			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April	May			June		
1	09:28	08:46		07:35		08:18 (89)	07:07	05:44			04:40		06:18 (42)
	15:53	16:56		18:05	13	08:31 (89)	20:17	21:26			22:30	28	06:46 (42)
2	09:27	08:43		07:33		08:19 (89)	07:04	05:42			04:39		06:18 (42)
	15:54	16:59		18:07	10	08:29 (89)	20:19	21:28			22:32	28	06:46 (42)
3	09:27	08:41		07:30		08:21 (89)	07:01	05:39			04:38		06:17 (42)
	15:56	17:01		18:10	5	08:26 (89)	20:21	21:31			22:33	29	06:46 (42)
4	09:26	08:39		07:27			06:58	05:37			04:36		06:16 (42)
	15:57	17:04		18:12			20:24	21:33			22:35	30	06:46 (42)
5	09:26	08:37		07:24			06:55	05:34			04:35		06:16 (42)
	15:59	17:06		18:14			20:26	21:35			22:36	31	06:47 (42)
6	09:25	08:34		07:21			06:53	05:32			04:34		06:15 (42)
	16:00	17:09		18:17			20:28	21:37			22:38	32	06:47 (42)
7	09:24	08:32		07:19		07:48 (88)	06:50	05:29			04:33		06:14 (42)
	16:02	17:11		18:19	6	07:54 (88)	20:31	21:40			22:39	32	06:46 (42)
8	09:24	08:30		07:16		07:46 (88)	06:47	05:27			04:32		06:13 (42)
	16:04	17:14		18:21	10	07:56 (88)	20:33	21:42			22:40	33	06:46 (42)
9	09:23	08:27		07:13		07:44 (88)	06:44	05:24			04:31		06:14 (42)
	16:06	17:16		18:24	13	07:57 (88)	20:35	21:44			22:41	33	06:47 (42)
10	09:22	08:25		07:10		07:44 (88)	06:41	05:22			04:31		06:13 (42)
	16:07	17:19		18:26	14	07:58 (88)	20:37	21:46			22:43	33	06:46 (42)
11	09:21	08:23		07:07		07:44 (88)	06:38	05:20			04:30		06:14 (42)
	16:09	17:21		18:28	14	07:58 (88)	20:40	21:49			22:44	33	06:47 (42)
12	09:20	08:20		07:04		07:44 (88)	06:36	05:17			04:29		06:14 (42)
	16:11	17:23		18:31	13	07:57 (88)	20:42	21:51			22:45	32	06:46 (42)
13	09:18	08:18		07:02		07:44 (88)	06:33	05:15			04:29		06:14 (42)
	16:13	17:26		18:33	12	07:56 (88)	20:44	21:53			22:46	33	06:47 (42)
14	09:17	08:15		06:59		07:45 (88)	06:30	05:13			04:28		06:15 (42)
	16:15	17:28		18:35	10	07:55 (88)	20:47	21:55			22:46	32	06:47 (42)
15	09:16	08:13		06:56		07:46 (88)	06:27	05:11			04:28		06:15 (42)
	16:17	17:31		18:38	6	07:52 (88)	20:49	21:57			22:47	32	06:47 (42)
16	09:14	08:10		06:53			06:24	05:09		06:39 (42)	04:28		06:15 (42)
	16:19	17:33		18:40			20:51	22:00	2	06:41 (42)	22:48	32	06:47 (42)
17	09:13	08:07		06:50			06:22	05:06		06:37 (42)	04:27		06:15 (42)
	16:21	17:36		18:42			20:54	22:02	4	06:41 (42)	22:48	32	06:47 (42)
18	09:12	08:05		06:47			06:19	05:04		06:36 (42)	04:27		06:16 (42)
	16:24	17:38		18:45			20:56	22:04	7	06:43 (42)	22:49	31	06:47 (42)
19	09:10	08:02		06:44			06:16	05:02		06:35 (42)	04:27		06:16 (42)
	16:26	17:41		18:47			20:58	22:06	8	06:43 (42)	22:49	31	06:47 (42)
20	09:08	08:00		06:42			06:13	05:00		06:33 (42)	04:27		06:16 (42)
	16:28	17:43		18:49			21:00	22:08	10	06:43 (42)	22:50	31	06:47 (42)
21	09:07	07:57		06:39			06:11	04:58		06:31 (42)	04:27		06:16 (42)
	16:30	17:46		18:52			21:03	22:10	12	06:43 (42)	22:50	31	06:47 (42)
22	09:05	07:54		06:36			06:08	04:56		06:30 (42)	04:27		06:17 (42)
	16:32	17:48	5	08:28 (89)	18:54			21:05	22:12	14	06:44 (42)	22:50	31	06:48 (42)
23	09:03	07:52		08:21 (89)	06:33			06:05	04:55		06:29 (42)	04:28		06:17 (42)
	16:35	17:50	10	08:31 (89)	18:56			21:07	22:14	15	06:44 (42)	22:50	31	06:48 (42)
24	09:02	07:49		08:18 (89)	06:30			06:02	04:53		06:28 (42)	04:28		06:17 (42)
	16:37	17:53	13	08:31 (89)	18:58			21:10	22:16	17	06:45 (42)	22:50	31	06:48 (42)
25	09:00	07:46		08:17 (89)	06:27			06:00	04:51		06:26 (42)	04:28		06:18 (42)
	16:39	17:55	15	08:32 (89)	19:01			21:12	22:18	19	06:45 (42)	22:50	31	06:49 (42)
26	08:58	07:44		08:17 (89)	06:24			05:57	04:49		06:25 (42)	04:29		06:17 (42)
	16:42	17:58	15	08:32 (89)	19:03			21:14	22:20	20	06:45 (42)	22:50	32	06:49 (42)
27	08:56	07:41		08:17 (89)	06:21			05:54	04:48		06:23 (42)	04:29		06:18 (42)
	16:44	18:00	14	08:31 (89)	19:05			21:17	22:22	22	06:45 (42)	22:50	32	06:50 (42)
28	08:54	07:38		08:17 (89)	06:18			05:52	04:46		06:23 (42)	04:30		06:17 (42)
	16:47	18:02	14	08:31 (89)	19:08			21:19	22:24	22	06:45 (42)	22:50	32	06:49 (42)
29	08:52				07:16			05:49	04:44		06:22 (42)	04:31		06:18 (42)
	16:49				20:10			21:21	22:25	24	06:46 (42)	22:49	32	06:50 (42)
30	08:50				07:13			05:47	04:43		06:21 (42)	04:32		06:18 (42)
	16:51				20:12			21:24	22:27	25	06:46 (42)	22:49	33	06:51 (42)
31	08:48				07:10				04:41		06:19 (42)			
	16:54				20:14				22:29	26	06:45 (42)			
Potential sun hours	221	260		365			432	521			547		
Total, worst case			86			126			247			944	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July			August		September			October			November	December
1	04:32		06:18 (42)	05:24		06:33			07:39		08:23 (88)	07:51	09:00
	22:48	33	06:51 (42)	22:01		20:40			19:13	13	08:36 (88)	16:49	15:52
2	04:33		06:19 (42)	05:27		06:35			07:42		08:22 (88)	07:54	09:01
	22:48	33	06:52 (42)	21:58		20:37			19:10	14	08:36 (88)	16:47	15:50
3	04:34		06:18 (42)	05:29		06:38			07:44		08:21 (88)	07:56	09:03
	22:47	33	06:51 (42)	21:56		20:34			19:07	14	08:35 (88)	16:44	15:49
4	04:35		06:18 (42)	05:31		06:40			07:46		08:22 (88)	07:59	09:05
	22:46	33	06:51 (42)	21:54		20:31			19:05	13	08:35 (88)	16:42	15:48
5	04:37		06:19 (42)	05:33		06:42			07:48		08:22 (88)	08:01	09:07
	22:46	33	06:52 (42)	21:51		20:28			19:02	12	08:34 (88)	16:39	15:47
6	04:38		06:21 (42)	05:35		06:44			07:51		08:23 (88)	08:03	09:09
	22:45	32	06:53 (42)	21:49		20:25			18:59	9	08:32 (88)	16:37	15:47
7	04:39		06:22 (42)	05:38		06:47			07:53			08:06	09:10
	22:44	31	06:53 (42)	21:47		20:23			18:56			16:35	15:46
8	04:40		06:23 (42)	05:40		06:49			07:55			08:08	09:12
	22:43	30	06:53 (42)	21:44		20:20			18:53			16:32	15:45
9	04:42		06:24 (42)	05:42		06:51			07:57			08:11	09:13
	22:42	29	06:53 (42)	21:42		20:17			18:50			16:30	15:44
10	04:43		06:25 (42)	05:44		06:53			08:00			08:13	09:15
	22:40	28	06:53 (42)	21:39		20:14			18:48			16:28	15:44
11	04:45		06:26 (42)	05:46		06:55			08:02		08:54 (89)	08:15	09:16
	22:39	28	06:54 (42)	21:37		20:11			18:45	7	09:01 (89)	16:26	15:43
12	04:46		06:27 (42)	05:49		06:58			08:04		08:51 (89)	08:18	09:17
	22:38	27	06:54 (42)	21:34		20:08			18:42	12	09:03 (89)	16:24	15:43
13	04:48		06:28 (42)	05:51		07:00			08:07		08:51 (89)	08:20	09:19
	22:36	26	06:54 (42)	21:32		20:05			18:39	13	09:04 (89)	16:22	15:43
14	04:49		06:30 (42)	05:53		07:02			08:09		08:49 (89)	08:22	09:20
	22:35	24	06:54 (42)	21:29		20:02			18:36	15	09:04 (89)	16:19	15:43
15	04:51		06:31 (42)	05:55		07:04			08:11		08:49 (89)	08:25	09:21
	22:34	23	06:54 (42)	21:26		19:59			18:34	15	09:04 (89)	16:17	15:42
16	04:53		06:33 (42)	05:58		07:06			08:14		08:49 (89)	08:27	09:22
	22:32	22	06:55 (42)	21:24		19:57			18:31	15	09:04 (89)	16:15	15:42
17	04:54		06:33 (42)	06:00		07:09			08:16		08:50 (89)	08:29	09:23
	22:30	21	06:54 (42)	21:21		19:54			18:28	14	09:04 (89)	16:14	15:42
18	04:56		06:35 (42)	06:02		07:11			08:18		08:50 (89)	08:32	09:24
	22:29	20	06:55 (42)	21:18		19:51			18:25	12	09:02 (89)	16:12	15:42
19	04:58		06:37 (42)	06:04		07:13			08:21		08:53 (89)	08:34	09:25
	22:27	18	06:55 (42)	21:16		19:48			18:23	8	09:01 (89)	16:10	15:43
20	05:00		06:38 (42)	06:07		07:15			08:23		08:55 (89)	08:36	09:25
	22:25	16	06:54 (42)	21:13		19:45			18:20	3	08:58 (89)	16:08	15:43
21	05:02		06:39 (42)	06:09		07:17			08:25			08:39	09:26
	22:23	15	06:54 (42)	21:10		19:42			18:17			16:06	15:43
22	05:04		06:41 (42)	06:11		07:20			08:28			08:41	09:27
	22:22	13	06:54 (42)	21:08		19:39			18:15			16:04	15:44
23	05:06		06:42 (42)	06:13		07:22			08:30			08:43	09:27
	22:20	11	06:53 (42)	21:05		19:36			18:12			16:03	15:44
24	05:08		06:44 (42)	06:15		07:24			08:32			08:45	09:28
	22:18	9	06:53 (42)	21:02		19:33			18:09			16:01	15:45
25	05:10		06:45 (42)	06:18		07:26			07:35			08:47	09:28
	22:16	8	06:53 (42)	20:59		19:30			17:07			16:00	15:46
26	05:12		06:47 (42)	06:20		07:28			07:37			08:49	09:28
	22:14	6	06:53 (42)	20:57		19:28			17:04			15:58	15:46
27	05:14		06:49 (42)	06:22		07:31			07:39			08:52	09:28
	22:12	3	06:52 (42)	20:54		19:25			17:02			15:57	15:47
28	05:16		06:51 (42)	06:24		07:33		08:29 (88)	07:42			08:54	09:28
	22:10	1	06:52 (42)	20:51		19:22	3	08:32 (88)	16:59			15:55	15:48
29	05:18			06:27		07:35		08:25 (88)	07:44			08:56	09:28
	22:07			20:48		19:19	9	08:34 (88)	16:56			15:54	15:49
30	05:20			06:29		07:37		08:23 (88)	07:47			08:58	09:28
	22:05			20:45		19:16	12	08:35 (88)	16:54			15:53	15:50
31	05:22			06:31					07:49				09:28
	22:03			20:43					16:51				15:51
Potential sun hours	545			478		386			319			236	200
Total, worst case		606					24			189			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April	May			June		
1	09:28	08:46		07:35		08:11 (88)	07:07	05:44		07:08 (42)	04:40		06:45 (42)
	15:53	16:56		18:05	6	08:17 (88)	20:17	21:26	1	07:09 (42)	22:30	32	07:17 (42)
2	09:27	08:43		07:33		08:08 (88)	07:04	05:42		07:06 (42)	04:39		06:46 (42)
	15:54	16:59		18:07	11	08:19 (88)	20:19	21:28	6	07:12 (42)	22:32	31	07:17 (42)
3	09:27	08:41		07:30		08:06 (88)	07:01	05:39		07:04 (42)	04:38		06:46 (42)
	15:56	17:01		18:10	13	08:19 (88)	20:21	21:31	9	07:13 (42)	22:33	31	07:17 (42)
4	09:26	08:39		07:27		08:05 (88)	06:58	05:37		07:02 (42)	04:36		06:47 (42)
	15:57	17:04		18:12	14	08:19 (88)	20:24	21:33	13	07:15 (42)	22:35	29	07:16 (42)
5	09:26	08:37		07:24		08:05 (88)	06:55	05:34		07:00 (42)	04:35		06:48 (42)
	15:59	17:06		18:14	14	08:19 (88)	20:26	21:35	16	07:16 (42)	22:36	29	07:17 (42)
6	09:25	08:34		07:21		08:05 (88)	06:53	05:32		06:58 (42)	04:34		06:49 (42)
	16:00	17:09		18:17	13	08:18 (88)	20:28	21:37	19	07:17 (42)	22:38	27	07:16 (42)
7	09:24	08:32		07:19		08:05 (88)	06:50	05:29		06:55 (42)	04:33		06:49 (42)
	16:02	17:11		18:19	12	08:17 (88)	20:31	21:40	22	07:17 (42)	22:39	27	07:16 (42)
8	09:24	08:30		07:16		08:06 (88)	06:47	05:27		06:54 (42)	04:32		06:49 (42)
	16:04	17:14		18:21	10	08:16 (88)	20:33	21:42	24	07:18 (42)	22:40	26	07:15 (42)
9	09:23	08:27		07:13		08:08 (88)	06:44	05:24		06:52 (42)	04:31		06:50 (42)
	16:06	17:16		18:24	5	08:13 (88)	20:35	21:44	27	07:19 (42)	22:42	26	07:16 (42)
10	09:22	08:25		07:10			06:41	05:22		06:50 (42)	04:31		06:51 (42)
	16:07	17:18		18:26			20:37	21:46	29	07:19 (42)	22:43	24	07:15 (42)
11	09:21	08:23		07:07			06:38	05:20		06:48 (42)	04:30		06:52 (42)
	16:09	17:21		18:28			20:40	21:49	32	07:20 (42)	22:44	23	07:15 (42)
12	09:20	08:20		07:04			06:36	05:17		06:46 (42)	04:29		06:52 (42)
	16:11	17:23		18:31			20:42	21:51	34	07:20 (42)	22:45	22	07:14 (42)
13	09:18	08:18		07:02			06:33	05:15		06:45 (42)	04:29		06:53 (42)
	16:13	17:26		18:33			20:44	21:53	35	07:20 (42)	22:46	21	07:14 (42)
14	09:17	08:15		06:59			06:30	05:13		06:43 (42)	04:28		06:53 (42)
	16:15	17:28		18:35			20:47	21:55	37	07:20 (42)	22:46	22	07:15 (42)
15	09:16	08:13	08:44 (89)	06:56			06:27	05:11		06:41 (42)	04:28		06:53 (42)
	16:17	17:31	6 08:50 (89)	18:38			20:49	21:57	39	07:20 (42)	22:47	21	07:14 (42)
16	09:14	08:10	08:42 (89)	06:53			06:24	05:09		06:41 (42)	04:28		06:54 (42)
	16:19	17:33	10 08:52 (89)	18:40			20:51	22:00	39	07:20 (42)	22:48	20	07:14 (42)
17	09:13	08:07	08:40 (89)	06:50			06:22	05:06		06:40 (42)	04:27		06:54 (42)
	16:21	17:36	13 08:53 (89)	18:42			20:54	22:02	40	07:20 (42)	22:48	20	07:14 (42)
18	09:12	08:05	08:40 (89)	06:47			06:19	05:04		06:41 (42)	04:27		06:55 (42)
	16:24	17:38	14 08:54 (89)	18:45			20:56	22:04	40	07:21 (42)	22:49	19	07:14 (42)
19	09:10	08:02	08:39 (89)	06:44			06:16	05:02		06:41 (42)	04:27		06:55 (42)
	16:26	17:41	15 08:54 (89)	18:47			20:58	22:06	40	07:21 (42)	22:49	19	07:14 (42)
20	09:08	08:00	08:39 (89)	06:42			06:13	05:00		06:41 (42)	04:27		06:55 (42)
	16:28	17:43	15 08:54 (89)	18:49			21:00	22:08	39	07:20 (42)	22:50	19	07:14 (42)
21	09:07	07:57	08:39 (89)	06:39			06:11	04:58		06:41 (42)	04:27		06:55 (42)
	16:30	17:46	14 08:53 (89)	18:52			21:03	22:10	39	07:20 (42)	22:50	19	07:14 (42)
22	09:05	07:54	08:39 (89)	06:36			06:08	04:56		06:41 (42)	04:27		06:56 (42)
	16:32	17:48	13 08:52 (89)	18:54			21:05	22:12	39	07:20 (42)	22:50	19	07:15 (42)
23	09:03	07:52	08:41 (89)	06:33			06:05	04:55		06:41 (42)	04:28		06:56 (42)
	16:35	17:50	11 08:52 (89)	18:56			21:07	22:14	39	07:20 (42)	22:50	19	07:15 (42)
24	09:02	07:49	08:42 (89)	06:30			06:02	04:53		06:42 (42)	04:28		06:56 (42)
	16:37	17:53	8 08:50 (89)	18:58			21:10	22:16	38	07:20 (42)	22:50	19	07:15 (42)
25	09:00	07:46		06:27			06:00	04:51		06:42 (42)	04:28		06:57 (42)
	16:39	17:55		19:01			21:12	22:18	37	07:19 (42)	22:50	19	07:16 (42)
26	08:58	07:44		06:24			05:57	04:49		06:43 (42)	04:29		06:56 (42)
	16:42	17:58		19:03			21:14	22:20	37	07:20 (42)	22:50	20	07:16 (42)
27	08:56	07:41		06:21			05:54	04:48		06:43 (42)	04:29		06:56 (42)
	16:44	18:00		19:05			21:17	22:22	36	07:19 (42)	22:50	21	07:17 (42)
28	08:54	07:38		06:18			05:52	04:46		06:43 (42)	04:30		06:56 (42)
	16:47	18:02		19:08			21:19	22:24	36	07:19 (42)	22:50	21	07:17 (42)
29	08:52			07:16			05:49	04:44		06:44 (42)	04:31		06:56 (42)
	16:49			20:10			21:21	22:25	35	07:19 (42)	22:49	21	07:17 (42)
30	08:50			07:13			05:47	04:43		06:45 (42)	04:32		06:56 (42)
	16:51			20:12			21:24	22:27	34	07:19 (42)	22:49	22	07:18 (42)
31	08:48			07:10				04:41		06:44 (42)			
	16:54			20:14				22:29	34	07:18 (42)			
Potential sun hours	221	260		365			432	521			547		
Total, worst case			119		98				945			688	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September	October		November	December
1	04:32		06:56 (42)	05:24	06:57 (42)	06:33	07:39	07:51	09:00
	22:48	23	07:19 (42)	22:01	33 07:30 (42)	20:40	19:13	16:49	15:52
2	04:33		06:56 (42)	05:27	06:59 (42)	06:35	07:42	07:54	09:01
	22:48	24	07:20 (42)	21:58	31 07:30 (42)	20:37	19:10	16:47	15:50
3	04:34		06:55 (42)	05:29	07:01 (42)	06:38	07:44	07:56	09:03
	22:47	25	07:20 (42)	21:56	28 07:29 (42)	20:34	19:07	16:44	15:49
4	04:35		06:55 (42)	05:31	07:03 (42)	06:40	07:46	07:59	09:05
	22:46	25	07:20 (42)	21:54	26 07:29 (42)	20:31	19:05	16:42	15:48
5	04:37		06:54 (42)	05:33	07:05 (42)	06:42	07:48	08:44 (88)	08:01 09:07
	22:46	27	07:21 (42)	21:51	23 07:28 (42)	20:28	19:02	8 08:52 (88)	16:39 15:47
6	04:38		06:55 (42)	05:35	07:06 (42)	06:44	07:51	08:42 (88)	08:03 09:09
	22:45	28	07:23 (42)	21:49	21 07:27 (42)	20:25	18:59	11 08:53 (88)	16:37 15:47
7	04:39		06:55 (42)	05:38	07:08 (42)	06:47	07:53	08:41 (88)	08:06 09:10
	22:44	28	07:23 (42)	21:47	18 07:26 (42)	20:23	18:56	13 08:54 (88)	16:35 15:46
8	04:40		06:54 (42)	05:40	07:10 (42)	06:49	07:55	08:40 (88)	08:08 09:12
	22:43	30	07:24 (42)	21:44	15 07:25 (42)	20:20	18:53	14 08:54 (88)	16:32 15:45
9	04:42		06:54 (42)	05:42	07:12 (42)	06:51	07:57	08:39 (88)	08:11 09:13
	22:42	30	07:24 (42)	21:42	12 07:24 (42)	20:17	18:50	15 08:54 (88)	16:30 15:44
10	04:43		06:53 (42)	05:44	07:13 (42)	06:53	08:00	08:40 (88)	08:13 09:15
	22:40	31	07:24 (42)	21:39	9 07:22 (42)	20:14	18:48	14 08:54 (88)	16:28 15:44
11	04:45		06:54 (42)	05:46	07:15 (42)	06:55	08:02	08:40 (88)	08:15 09:16
	22:39	32	07:26 (42)	21:37	5 07:20 (42)	20:11	18:45	13 08:53 (88)	16:26 15:43
12	04:46		06:53 (42)	05:49		06:58	08:04	08:42 (88)	08:18 09:17
	22:38	33	07:26 (42)	21:34		20:08	18:42	9 08:51 (88)	16:24 15:43
13	04:48		06:53 (42)	05:51		07:00	08:07	08:45 (88)	08:20 09:19
	22:36	33	07:26 (42)	21:32		20:05	18:39	4 08:49 (88)	16:22 15:43
14	04:49		06:53 (42)	05:53		07:02	08:09		08:22 09:20
	22:35	34	07:27 (42)	21:29		20:02	18:36		16:19 15:43
15	04:51		06:52 (42)	05:55		07:04	08:11		08:25 09:21
	22:34	35	07:27 (42)	21:26		19:59	18:34		16:17 15:42
16	04:53		06:52 (42)	05:58		07:06	08:14		08:27 09:22
	22:32	36	07:28 (42)	21:24		19:57	18:31		16:15 15:42
17	04:54		06:52 (42)	06:00		07:09	08:16	09:17 (89)	08:29 09:23
	22:30	36	07:28 (42)	21:21		19:54	18:28	2 09:19 (89)	16:13 15:42
18	04:56		06:52 (42)	06:02		07:11	08:18	09:13 (89)	08:32 09:24
	22:29	37	07:29 (42)	21:18		19:51	18:25	9 09:22 (89)	16:12 15:42
19	04:58		06:52 (42)	06:04		07:13	08:21	09:12 (89)	08:34 09:25
	22:27	38	07:30 (42)	21:16		19:48	18:23	12 09:24 (89)	16:10 15:43
20	05:00		06:51 (42)	06:07		07:15	08:23	09:10 (89)	08:36 09:25
	22:25	38	07:29 (42)	21:13		19:45	18:20	14 09:24 (89)	16:08 15:43
21	05:02		06:51 (42)	06:09		07:17	08:25	09:10 (89)	08:39 09:26
	22:23	39	07:30 (42)	21:10		19:42	18:17	15 09:25 (89)	16:06 15:43
22	05:04		06:52 (42)	06:11		07:19	08:28	09:09 (89)	08:41 09:27
	22:22	39	07:31 (42)	21:08		19:39	18:15	15 09:24 (89)	16:04 15:44
23	05:06		06:51 (42)	06:13		07:22	08:30	09:09 (89)	08:43 09:27
	22:20	39	07:30 (42)	21:05		19:36	18:12	15 09:24 (89)	16:03 15:44
24	05:08		06:51 (42)	06:15		07:24	08:32	09:09 (89)	08:45 09:28
	22:18	40	07:31 (42)	21:02		19:33	18:09	14 09:23 (89)	16:01 15:45
25	05:10		06:51 (42)	06:18		07:26	07:35	08:10 (89)	08:47 09:28
	22:16	40	07:31 (42)	20:59		19:30	17:07	13 08:23 (89)	16:00 15:46
26	05:12		06:51 (42)	06:20		07:28	07:37	08:13 (89)	08:49 09:28
	22:14	40	07:31 (42)	20:57		19:28	17:04	9 08:22 (89)	15:58 15:46
27	05:14		06:52 (42)	06:22		07:31	07:39	08:14 (89)	08:52 09:28
	22:12	39	07:31 (42)	20:54		19:25	17:02	5 08:19 (89)	15:57 15:47
28	05:16		06:52 (42)	06:24		07:33	07:42		08:54 09:28
	22:10	39	07:31 (42)	20:51		19:22	16:59		15:55 15:48
29	05:18		06:52 (42)	06:27		07:35	07:44		08:56 09:28
	22:07	38	07:30 (42)	20:48		19:19	16:56		15:54 15:49
30	05:20		06:54 (42)	06:29		07:37	07:47		08:58 09:28
	22:05	36	07:30 (42)	20:45		19:16	16:54		15:53 15:50
31	05:22		06:55 (42)	06:31			07:49		09:28
	22:03	35	07:30 (42)	20:43			16:51		15:51
Potential sun hours	545			478		386	319		236 200
Total, worst case		1047			221			224	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		11:24 (2)	08:46		10:12 (1)	07:35	08:22 (26)	07:07	05:44	04:40
	15:53	50	12:55 (4)	16:56	65	13:08 (4)	18:05	42	09:51 (3)	20:17	21:26	22:31
2	09:28		11:22 (2)	08:44		10:12 (1)	07:33	08:21 (26)	07:04	05:41	04:39
	15:54	54	12:56 (4)	16:59	63	13:07 (4)	18:07	37	09:47 (3)	20:19	21:28	22:32
3	09:27		11:20 (2)	08:41		10:13 (1)	07:30	08:21 (26)	07:01	05:39	04:37
	15:56	57	12:56 (4)	17:01	61	13:07 (4)	18:10	24	08:45 (26)	20:21	21:31	22:34
4	09:27		11:20 (2)	08:39		10:13 (1)	07:27	08:20 (26)	06:58	05:36	04:36
	15:57	58	12:57 (4)	17:04	57	13:05 (4)	18:12	25	08:45 (26)	20:24	21:33	22:35
5	09:26		11:20 (2)	08:37		10:14 (1)	07:24	08:20 (26)	06:55	05:34	04:35
	15:59	60	12:58 (4)	17:06	54	13:05 (4)	18:14	24	08:44 (26)	20:26	21:35	22:37
6	09:25		11:20 (2)	08:35		10:15 (1)	07:22	08:20 (26)	06:53	05:31	04:34
	16:00	61	12:58 (4)	17:09	49	13:03 (4)	18:17	24	08:44 (26)	20:28	21:38	22:38
7	09:25		11:20 (2)	08:32		09:40 (3)	07:19	08:20 (26)	06:50	05:29	04:33
	16:02	62	12:59 (4)	17:11	47	13:01 (4)	18:19	23	08:43 (26)	20:31	21:40	22:39
8	09:24		11:21 (2)	08:30		09:36 (3)	07:16	08:21 (26)	06:47	05:27	04:32
	16:04	63	13:00 (4)	17:13	49	12:59 (4)	18:21	20	08:41 (26)	20:33	21:42	22:41
9	09:23		11:21 (2)	08:28		09:21 (6)	07:13	08:22 (26)	06:44	05:24	04:31
	16:05	65	13:01 (4)	17:16	44	12:56 (4)	18:24	19	08:41 (26)	20:35	21:44	22:42
10	09:22		11:21 (2)	08:25		09:18 (6)	07:10	08:24 (26)	06:41	05:22	04:30
	16:07	65	13:01 (4)	17:18	32	09:54 (3)	18:26	15	08:39 (26)	20:38	21:47	22:43
11	09:21		11:21 (2)	08:23		09:16 (6)	07:07	08:26 (26)	06:38	05:20	04:30
	16:09	68	13:03 (4)	17:21	39	09:56 (3)	18:28	10	08:36 (26)	20:40	21:49	22:44
12	09:20		11:21 (2)	08:20		09:14 (6)	07:05			06:36	05:17	04:29
	16:11	68	13:03 (4)	17:23	42	09:56 (3)	18:31			20:42	21:51	22:45
13	09:19		11:22 (2)	08:18		09:13 (6)	07:02			06:33	05:15	04:29
	16:13	68	13:04 (4)	17:26	44	09:57 (3)	18:33			20:44	21:53	22:46
14	09:17		11:22 (2)	08:15		09:13 (6)	06:59	07:37 (28)	06:30	05:13	04:28
	16:15	68	13:04 (4)	17:28	46	09:59 (3)	18:35	4	07:41 (28)	20:47	21:55	22:47
15	09:16		11:22 (2)	08:13		09:13 (6)	06:56	07:33 (28)	06:27	05:11	04:28
	16:17	70	13:05 (4)	17:31	46	09:59 (3)	18:38	11	07:44 (28)	20:49	21:58	22:47
16	09:15		11:22 (2)	08:10		09:12 (6)	06:53	07:31 (28)	06:24	05:08	04:27
	16:19	71	13:05 (4)	17:33	47	09:59 (3)	18:40	15	07:46 (28)	20:51	22:00	22:48
17	09:13		11:23 (2)	08:08		09:13 (6)	06:50	07:30 (28)	06:22	05:06	04:27
	16:21	71	13:06 (4)	17:36	47	10:00 (3)	18:42	16	07:46 (28)	20:54	22:02	22:49
18	09:12		11:23 (2)	08:05		09:13 (6)	06:47	07:29 (28)	06:19	05:04	04:27
	16:23	72	13:07 (4)	17:38	47	10:00 (3)	18:45	18	07:47 (28)	20:56	22:04	22:49
19	09:10		11:24 (2)	08:02		09:14 (6)	06:44	07:28 (28)	06:16	05:02	04:27
	16:26	70	13:07 (4)	17:41	46	10:00 (3)	18:47	19	07:47 (28)	20:58	22:06	22:50
20	09:09		11:24 (2)	08:00		09:14 (6)	06:42	07:27 (28)	06:13	05:00	04:27
	16:28	71	13:08 (4)	17:43	46	10:00 (3)	18:49	19	07:46 (28)	21:01	22:08	22:50
21	09:07		11:25 (2)	07:57		09:15 (6)	06:39	07:28 (28)	06:11	04:58	04:27
	16:30	70	13:08 (4)	17:46	44	09:59 (3)	18:52	19	07:47 (28)	21:03	22:10	22:50
22	09:05		11:25 (2)	07:54		09:19 (6)	06:36	07:28 (28)	06:08	04:56	04:27
	16:32	70	13:08 (4)	17:48	40	10:00 (3)	18:54	18	07:46 (28)	21:05	22:12	22:50
23	09:04		11:25 (2)	07:52		09:26 (3)	06:33	07:28 (28)	06:05	04:54	04:27
	16:35	69	13:08 (4)	17:50	33	09:59 (3)	18:56	17	07:45 (28)	21:08	22:14	22:51
24	09:02		11:26 (2)	07:49		08:32 (26)	06:30	07:29 (28)	06:02	04:53	04:28
	16:37	68	13:08 (4)	17:53	35	09:58 (3)	18:59	14	07:43 (28)	21:10	22:16	22:51
25	09:00		10:27 (1)	07:46		08:28 (26)	06:27	07:31 (28)	06:00	04:51	04:28
	16:39	72	13:09 (4)	17:55	42	09:57 (3)	19:01	10	07:41 (28)	21:12	22:18	22:51
26	08:58		10:23 (1)	07:44		08:25 (26)	06:24			05:57	04:49	04:29
	16:42	74	13:09 (4)	17:58	45	09:56 (3)	19:03			21:14	22:20	22:50
27	08:56		10:20 (1)	07:41		08:23 (26)	06:21			05:54	04:47	04:29
	16:44	75	13:09 (4)	18:00	45	09:54 (3)	19:05			21:17	22:22	22:50
28	08:54		10:15 (1)	07:38		08:23 (26)	06:18			05:52	04:46	04:30
	16:46	76	13:08 (4)	18:02	44	09:53 (3)	19:08			21:19	22:24	22:50
29	08:52		10:11 (1)				07:16			05:49	04:44	04:31
	16:49	73	13:09 (4)				20:10			21:21	22:26	22:50
30	08:50		10:11 (1)				07:13			05:47	04:43	04:31
	16:51	67	13:08 (4)				20:12			21:24	22:27	22:49
31	08:48		10:11 (1)				07:10				04:41	
	16:54	67	13:08 (4)				20:15				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		2073			1299			443				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October			November			December		
1	04:32	05:24	06:33			07:40			07:52		08:47 (6)	09:00		11:03 (2)
	22:49	22:01	20:40			19:13			16:49	36	12:20 (4)	15:51	67	12:45 (4)
2	04:33	05:26	06:35			07:42		09:06 (26)	07:54		09:03 (3)	09:02		11:04 (2)
	22:48	21:59	20:37			19:10	6	09:12 (26)	16:46	43	12:26 (4)	15:50	66	12:45 (4)
3	04:34	05:29	06:38			07:44		09:02 (26)	07:56		09:06 (3)	09:04		11:04 (2)
	22:47	21:56	20:34			19:07	13	09:15 (26)	16:44	50	12:29 (4)	15:49	64	12:44 (4)
4	04:35	05:31	06:40			07:46		09:00 (26)	07:59		09:46 (1)	09:05		11:05 (2)
	22:47	21:54	20:31			19:05	17	09:17 (26)	16:42	44	12:32 (4)	15:48	63	12:44 (4)
5	04:36	05:33	06:42			07:48		08:58 (26)	08:01		09:44 (1)	09:07		11:05 (2)
	22:46	21:52	20:28			19:02	20	09:18 (26)	16:39	51	12:33 (4)	15:47	62	12:44 (4)
6	04:38	05:35	06:44			07:51		08:57 (26)	08:04		09:44 (1)	09:09		11:06 (2)
	22:45	21:49	20:26			18:59	22	09:19 (26)	16:37	55	12:35 (4)	15:46	61	12:45 (4)
7	04:39	05:37	06:47			07:53		08:57 (26)	08:06		09:44 (1)	09:10		11:07 (2)
	22:44	21:47	20:23			18:56	23	09:20 (26)	16:35	58	12:36 (4)	15:46	60	12:45 (4)
8	04:40	05:40	06:49			07:55		08:55 (26)	08:08		09:43 (1)	09:12		11:08 (2)
	22:43	21:44	20:20			18:53	24	09:19 (26)	16:32	60	12:36 (4)	15:45	58	12:45 (4)
9	04:41	05:42	06:51			07:58		08:55 (26)	08:11		09:43 (1)	09:14		11:09 (2)
	22:42	21:42	20:17			18:50	24	09:19 (26)	16:30	64	12:38 (4)	15:44	57	12:45 (4)
10	04:43	05:44	06:53			08:00		08:55 (26)	08:13		09:43 (1)	09:15		11:11 (2)
	22:41	21:39	20:14			18:48	24	09:19 (26)	16:28	65	12:39 (4)	15:44	54	12:45 (4)
11	04:44	05:46	06:55			08:02		08:54 (26)	08:16		09:42 (1)	09:16		11:14 (2)
	22:39	21:37	20:11			18:45	32	10:18 (3)	16:26	67	12:39 (4)	15:43	51	12:45 (4)
12	04:46	05:49	06:58			08:04		08:55 (26)	08:18		09:43 (1)	09:18		11:15 (2)
	22:38	21:34	20:08			18:42	39	10:23 (3)	16:24	67	12:40 (4)	15:43	48	12:45 (4)
13	04:48	05:51	07:00			08:07		08:55 (26)	08:20		09:43 (1)	09:19		11:18 (2)
	22:37	21:32	20:05			18:39	43	10:25 (3)	16:21	73	12:41 (4)	15:43	46	12:46 (4)
14	04:49	05:53	07:02			08:09		08:55 (26)	08:23		09:48 (1)	09:20		11:20 (2)
	22:35	21:29	20:02			18:36	46	10:26 (3)	16:19	75	12:41 (4)	15:42	44	12:46 (4)
15	04:51	05:55	07:04			08:11		08:57 (26)	08:25		09:52 (1)	09:21		11:21 (2)
	22:34	21:26	20:00			18:34	46	10:28 (3)	16:17	75	12:41 (4)	15:42	42	12:46 (4)
16	04:53	05:58	07:06			08:14		08:58 (26)	08:27		09:56 (1)	09:22		11:22 (2)
	22:32	21:24	19:57			18:31	44	10:28 (3)	16:15	74	12:42 (4)	15:42	41	12:46 (4)
17	04:54	06:00	07:09			08:16		09:01 (26)	08:30		10:01 (1)	09:23		11:24 (2)
	22:31	21:21	19:54			18:28	41	10:29 (3)	16:13	71	12:42 (4)	15:42	38	12:46 (4)
18	04:56	06:02	07:11		08:19 (28)	08:18		09:57 (3)	08:32		11:00 (2)	09:24		11:25 (2)
	22:29	21:19	19:51	9	08:28 (28)	18:25	32	10:29 (3)	16:11	68	12:42 (4)	15:42	37	12:47 (4)
19	04:58	06:04	07:13		08:16 (28)	08:21		09:57 (3)	08:34		11:00 (2)	09:25		11:27 (2)
	22:27	21:16	19:48	13	08:29 (28)	18:23	33	10:30 (3)	16:10	69	12:43 (4)	15:43	36	12:47 (4)
20	05:00	06:06	07:15		08:14 (28)	08:23		09:48 (6)	08:37		11:00 (2)	09:26		11:28 (2)
	22:25	21:13	19:45	16	08:30 (28)	18:20	42	10:30 (3)	16:08	70	12:43 (4)	15:43	35	12:48 (4)
21	05:02	06:09	07:17		08:14 (28)	08:25		09:46 (6)	08:39		11:00 (2)	09:26		11:28 (2)
	22:24	21:10	19:42	17	08:31 (28)	18:17	45	10:31 (3)	16:06	70	12:43 (4)	15:43	35	12:48 (4)
22	05:04	06:11	07:20		08:13 (28)	08:28		09:44 (6)	08:41		11:00 (2)	09:27		11:29 (2)
	22:22	21:08	19:39	18	08:31 (28)	18:15	46	10:30 (3)	16:04	71	12:44 (4)	15:44	35	12:49 (4)
23	05:06	06:13	07:22		08:12 (28)	08:30		09:44 (6)	08:43		11:00 (2)	09:27		11:29 (2)
	22:20	21:05	19:36	19	08:31 (28)	18:12	46	10:30 (3)	16:03	70	12:43 (4)	15:44	35	12:49 (4)
24	05:08	06:15	07:24		08:12 (28)	08:32		09:42 (6)	08:45		11:00 (2)	09:28		11:30 (2)
	22:18	21:02	19:33	19	08:31 (28)	18:09	47	10:29 (3)	16:01	72	12:44 (4)	15:45	35	12:50 (4)
25	05:10	06:18	07:26		08:11 (28)	07:35		08:42 (6)	08:48		11:00 (2)	09:28		11:29 (2)
	22:16	20:59	19:31	19	08:30 (28)	17:07	47	09:29 (3)	15:59	71	12:43 (4)	15:45	36	12:50 (4)
26	05:12	06:20	07:28		08:12 (28)	07:37		08:43 (6)	08:50		11:01 (2)	09:28		11:29 (2)
	22:14	20:57	19:28	17	08:29 (28)	17:04	46	09:29 (3)	15:58	71	12:44 (4)	15:46	37	12:51 (4)
27	05:14	06:22	07:31		08:13 (28)	07:40		08:42 (6)	08:52		11:01 (2)	09:28		11:29 (2)
	22:12	20:54	19:25	15	08:28 (28)	17:02	46	09:28 (3)	15:57	71	12:44 (4)	15:47	39	12:52 (4)
28	05:16	06:24	07:33		08:14 (28)	07:42		08:43 (6)	08:54		11:02 (2)	09:29		11:28 (2)
	22:10	20:51	19:22	12	08:26 (28)	16:59	45	09:28 (3)	15:55	68	12:44 (4)	15:48	40	12:52 (4)
29	05:18	06:27	07:35		08:15 (28)	07:44		08:44 (6)	08:56		11:02 (2)	09:29		11:27 (2)
	22:08	20:48	19:19	8	08:23 (28)	16:56	43	09:27 (3)	15:54	68	12:44 (4)	15:49	42	12:52 (4)
30	05:20	06:29	07:37			07:47		08:44 (6)	08:58		11:02 (2)	09:28		11:26 (2)
	22:05	20:45	19:16			16:54	42	09:26 (3)	15:53	68	12:44 (4)	15:50	44	12:53 (4)
31	05:22	06:31				07:49		08:45 (6)				09:28		11:25 (2)
	22:03	20:43				16:51	38	09:25 (3)				15:51	48	12:54 (4)
Potential sun hours	545	478	386			319			236			200		
Total, worst case				182			1062			1935			1456	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		07:34 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33	5	07:39 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		07:30 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36	12	07:42 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56		07:28 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38	15	07:43 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:17	15:42
16	09:15	08:10	06:53		07:26 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40	18	07:44 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:16	15:42
17	09:13	08:08	06:50		07:25 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	08:30	09:23
	16:21	17:36	18:43	19	07:44 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28	16:14	15:42
18	09:12	08:05	06:47		07:24 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:16 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	20	07:44 (4)	20:56	22:04	22:49	22:29	21:19	19:51	8 08:24 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45		07:24 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:13 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	20	07:44 (4)	20:58	22:06	22:50	22:27	21:16	19:48	13 08:26 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42		07:25 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:11 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	20	07:45 (4)	21:01	22:08	22:50	22:26	21:13	19:45	16 08:27 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39		07:25 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:11 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	19	07:44 (4)	21:03	22:10	22:50	22:24	21:11	19:42	17 08:28 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36		07:25 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:09 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	18	07:43 (4)	21:05	22:12	22:51	22:22	21:08	19:39	20 08:29 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33		07:25 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:08 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	17	07:42 (4)	21:08	22:14	22:51	22:20	21:05	19:36	20 08:28 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30		07:26 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:08 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	14	07:40 (4)	21:10	22:16	22:51	22:18	21:02	19:34	20 08:28 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27		07:28 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:07 (4)	07:35	08:48	09:28
	16:39	17:55	19:01	9	07:37 (4)	21:12	22:18	22:51	22:16	21:00	19:31	20 08:27 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20	07:29	08:08 (4)	07:37	08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57	19:28	19 08:27 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:08 (4)	07:40	08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54	19:25	18 08:26 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:08 (4)	07:42	08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51	19:22	17 08:25 (4)	16:59	15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:09 (4)	07:44	08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48	19:19	14 08:23 (4)	16:57	15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:13 (4)	07:47	08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46	19:16	8 08:21 (4)	16:54	15:53	15:50
31	08:48		07:10				04:41		05:22	06:31			07:49		09:28
	16:54		20:15				22:29		22:03	20:43			16:52		15:51
Potential sun hours	221	260	365			432	521	547	545	478	386		319	236	200
Total, worst case				206							210				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:37	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33		20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36		20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56	07:25 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38	10 07:35 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:18	15:42
16	09:15	08:10	06:53	07:23 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40	13 07:36 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:16	15:42
17	09:13	08:08	06:50	07:21 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:13 (4)	08:16	08:30	09:23
	16:21	17:36	18:43	16 07:37 (4)	20:54	22:02	22:49	22:31	21:21	19:54	4	08:17 (4)	18:28	16:14	15:42
18	09:12	08:05	06:47	07:20 (4)	06:19	05:04	04:27	04:56	06:02	07:11		08:09 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	18 07:38 (4)	20:56	22:04	22:49	22:29	21:19	19:51	11	08:20 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45	07:19 (4)	06:16	05:02	04:27	04:58	06:04	07:13		08:07 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	19 07:38 (4)	20:58	22:06	22:50	22:27	21:16	19:48	14	08:21 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:19 (4)	06:13	05:00	04:27	05:00	06:07	07:15		08:05 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	20 07:39 (4)	21:01	22:08	22:50	22:26	21:13	19:45	17	08:22 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:19 (4)	06:11	04:58	04:27	05:02	06:09	07:17		08:05 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	19 07:38 (4)	21:03	22:10	22:50	22:24	21:11	19:42	18	08:23 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36	07:19 (4)	06:08	04:56	04:27	05:04	06:11	07:20		08:04 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	18 07:37 (4)	21:05	22:12	22:51	22:22	21:08	19:39	19	08:23 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:19 (4)	06:05	04:55	04:28	05:06	06:13	07:22		08:03 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	17 07:36 (4)	21:08	22:14	22:51	22:20	21:05	19:36	19	08:22 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30	07:20 (4)	06:03	04:53	04:28	05:08	06:16	07:24		08:03 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	15 07:35 (4)	21:10	22:16	22:51	22:18	21:02	19:34	19	08:22 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27	07:21 (4)	06:00	04:51	04:28	05:10	06:18	07:26		08:02 (4)	07:35	08:48	09:28
	16:40	17:55	19:01	12 07:33 (4)	21:12	22:18	22:51	22:16	21:00	19:31	19	08:21 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24	07:23 (4)	05:57	04:49	04:29	05:12	06:20	07:29		08:04 (4)	07:37	08:50	09:28
	16:42	17:58	19:03	7 07:30 (4)	21:15	22:20	22:51	22:14	20:57	19:28	16	08:20 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21		05:55	04:48	04:29	05:14	06:22	07:31		08:04 (4)	07:40	08:52	09:29
	16:44	18:00	19:06		21:17	22:22	22:50	22:12	20:54	19:25	15	08:19 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19		05:52	04:46	04:30	05:16	06:25	07:33		08:05 (4)	07:42	08:54	09:29
	16:47	18:03	19:08		21:19	22:24	22:50	22:10	20:51	19:22	11	08:16 (4)	16:59	15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35		08:08 (4)	07:44	08:56	09:29
	16:49		20:10		21:22	22:26	22:50	22:08	20:48	19:19	4	08:12 (4)	16:57	15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37			07:47	08:58	09:29
	16:51		20:12		21:24	22:27	22:49	22:06	20:46	19:16			16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31				07:49		09:28
	16:54		20:15			22:29		22:03	20:43				16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				184							186			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		11:17 (2)	08:46		10:11 (1)	07:35	08:24 (26)	07:07	05:44	04:40
	15:53	54	12:46 (4)	16:56	61	12:57 (4)	18:05	32	09:46 (3)	20:17	21:26	22:31
2	09:28		11:17 (2)	08:44		10:11 (1)	07:33		08:23 (26)	07:04	05:41	04:39
	15:54	54	12:46 (4)	16:59	58	12:56 (4)	18:07	24	08:47 (26)	20:19	21:28	22:32
3	09:27		11:17 (2)	08:41		10:12 (1)	07:30		08:23 (26)	07:01	05:39	04:37
	15:56	56	12:47 (4)	17:01	55	12:55 (4)	18:10	24	08:47 (26)	20:21	21:31	22:34
4	09:27		11:17 (2)	08:39		10:12 (1)	07:27		08:23 (26)	06:58	05:36	04:36
	15:57	57	12:48 (4)	17:04	52	12:54 (4)	18:12	23	08:46 (26)	20:24	21:33	22:35
5	09:26		11:17 (2)	08:37		10:14 (1)	07:24		08:23 (26)	06:55	05:34	04:35
	15:59	58	12:48 (4)	17:06	46	12:53 (4)	18:14	22	08:45 (26)	20:26	21:35	22:37
6	09:25		11:17 (2)	08:35		10:14 (1)	07:22		08:23 (26)	06:53	05:31	04:34
	16:00	59	12:49 (4)	17:09	41	12:50 (4)	18:17	22	08:45 (26)	20:28	21:38	22:38
7	09:25		11:17 (2)	08:32		09:37 (3)	07:19		08:24 (26)	06:50	05:29	04:33
	16:02	61	12:50 (4)	17:11	43	12:47 (4)	18:19	19	08:43 (26)	20:31	21:40	22:39
8	09:24		11:17 (2)	08:30		09:35 (3)	07:16		08:24 (26)	06:47	05:27	04:32
	16:04	63	12:51 (4)	17:13	36	12:44 (4)	18:21	18	08:42 (26)	20:33	21:42	22:41
9	09:23		11:18 (2)	08:28		09:32 (3)	07:13		08:27 (26)	06:44	05:24	04:31
	16:05	63	12:52 (4)	17:16	21	09:53 (3)	18:24	13	08:40 (26)	20:35	21:44	22:42
10	09:22		11:17 (2)	08:25		09:31 (3)	07:10		08:30 (26)	06:41	05:22	04:30
	16:07	65	12:52 (4)	17:18	24	09:55 (3)	18:26	7	08:37 (26)	20:38	21:47	22:43
11	09:21		11:18 (2)	08:23		09:30 (3)	07:07			06:38	05:20	04:30
	16:09	65	12:53 (4)	17:21	26	09:56 (3)	18:28			20:40	21:49	22:44
12	09:20		11:18 (2)	08:20		09:29 (3)	07:05			06:36	05:17	04:29
	16:11	66	12:53 (4)	17:23	28	09:57 (3)	18:31			20:42	21:51	22:45
13	09:19		11:18 (2)	08:18		09:28 (3)	07:02		07:40 (28)	06:33	05:15	04:29
	16:13	67	12:54 (4)	17:26	29	09:57 (3)	18:33	5	07:45 (28)	20:44	21:53	22:46
14	09:17		11:18 (2)	08:15		09:28 (3)	06:59		07:36 (28)	06:30	05:13	04:28
	16:15	68	12:55 (4)	17:28	31	09:59 (3)	18:35	11	07:47 (28)	20:47	21:55	22:47
15	09:16		11:18 (2)	08:13		09:27 (3)	06:56		07:34 (28)	06:27	05:11	04:28
	16:17	69	12:55 (4)	17:31	32	09:59 (3)	18:38	15	07:49 (28)	20:49	21:58	22:47
16	09:15		11:19 (2)	08:10		09:26 (3)	06:53		07:33 (28)	06:24	05:08	04:27
	16:19	68	12:55 (4)	17:33	33	09:59 (3)	18:40	16	07:49 (28)	20:51	22:00	22:48
17	09:13		11:20 (2)	08:08		09:27 (3)	06:50		07:32 (28)	06:22	05:06	04:27
	16:21	69	12:57 (4)	17:36	33	10:00 (3)	18:42	18	07:50 (28)	20:54	22:02	22:49
18	09:12		11:20 (2)	08:05		09:26 (3)	06:47		07:31 (28)	06:19	05:04	04:27
	16:23	69	12:57 (4)	17:38	34	10:00 (3)	18:45	19	07:50 (28)	20:56	22:04	22:49
19	09:10		11:20 (2)	08:02		09:26 (3)	06:44		07:31 (28)	06:16	05:02	04:27
	16:26	69	12:57 (4)	17:41	33	09:59 (3)	18:47	18	07:49 (28)	20:58	22:06	22:50
20	09:09		11:21 (2)	08:00		09:26 (3)	06:42		07:30 (28)	06:13	05:00	04:27
	16:28	69	12:58 (4)	17:43	33	09:59 (3)	18:49	19	07:49 (28)	21:01	22:08	22:50
21	09:07		11:22 (2)	07:57		09:26 (3)	06:39		07:32 (28)	06:11	04:58	04:27
	16:30	67	12:58 (4)	17:46	32	09:58 (3)	18:52	17	07:49 (28)	21:03	22:10	22:50
22	09:05		11:22 (2)	07:54		09:27 (3)	06:36		07:32 (28)	06:08	04:56	04:27
	16:32	67	12:58 (4)	17:48	32	09:59 (3)	18:54	15	07:47 (28)	21:05	22:12	22:50
23	09:04		11:22 (2)	07:52		09:27 (3)	06:33		07:33 (28)	06:05	04:54	04:27
	16:35	66	12:58 (4)	17:50	31	09:58 (3)	18:56	13	07:46 (28)	21:08	22:14	22:51
24	09:02		10:25 (1)	07:49		08:30 (26)	06:30		07:35 (28)	06:02	04:53	04:28
	16:37	70	12:58 (4)	17:53	41	09:57 (3)	18:59	8	07:43 (28)	21:10	22:16	22:51
25	09:00		10:21 (1)	07:46		08:28 (26)	06:27			06:00	04:51	04:28
	16:39	72	12:58 (4)	17:55	42	09:55 (3)	19:01			21:12	22:18	22:51
26	08:58		10:18 (1)	07:44		08:26 (26)	06:24			05:57	04:49	04:29
	16:42	74	12:59 (4)	17:58	44	09:54 (3)	19:03			21:14	22:20	22:50
27	08:56		10:14 (1)	07:41		08:25 (26)	06:21			05:54	04:47	04:29
	16:44	76	12:59 (4)	18:00	41	09:52 (3)	19:05			21:17	22:22	22:50
28	08:54		10:10 (1)	07:38		08:25 (26)	06:18			05:52	04:46	04:30
	16:46	74	12:58 (4)	18:02	38	09:50 (3)	19:08			21:19	22:24	22:50
29	08:52		10:10 (1)				07:16			05:49	04:44	04:31
	16:49	65	12:58 (4)				20:10			21:21	22:26	22:50
30	08:50		10:10 (1)				07:13			05:47	04:43	04:31
	16:51	63	12:57 (4)				20:12			21:24	22:27	22:49
31	08:48		10:11 (1)				07:10				04:41	
	16:54	61	12:57 (4)				20:15				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		2024			1050			378				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October			November			December		
1	04:32	05:24	06:33			07:40			07:52		09:00 (3)	09:00		11:00 (2)
	22:49	22:01	20:40			19:13			16:49	23	09:23 (3)	15:51	65	12:35 (4)
2	04:33	05:26	06:35			07:42			07:54		09:02 (3)	09:02		11:00 (2)
	22:48	21:59	20:37			19:10			16:46	23	09:54 (1)	15:50	65	12:35 (4)
3	04:34	05:29	06:38			07:44			07:56		09:05 (3)	09:04		11:01 (2)
	22:47	21:56	20:34			19:07			16:44	38	12:14 (4)	15:49	63	12:35 (4)
4	04:35	05:31	06:40			07:46		09:05 (26)	07:59		09:08 (3)	09:05		11:01 (2)
	22:47	21:54	20:31			19:05	11	09:16 (26)	16:42	44	12:19 (4)	15:48	63	12:35 (4)
5	04:36	05:33	06:42			07:48		09:02 (26)	08:01		09:44 (1)	09:07		11:02 (2)
	22:46	21:52	20:28			19:02	16	09:18 (26)	16:39	42	12:20 (4)	15:47	61	12:35 (4)
6	04:38	05:35	06:44			07:51		09:00 (26)	08:04		09:43 (1)	09:09		11:03 (2)
	22:45	21:49	20:26			18:59	19	09:19 (26)	16:37	48	12:23 (4)	15:46	59	12:35 (4)
7	04:39	05:37	06:47			07:53		09:00 (26)	08:06		09:43 (1)	09:10		11:04 (2)
	22:44	21:47	20:23			18:56	20	09:20 (26)	16:35	51	12:24 (4)	15:46	58	12:35 (4)
8	04:40	05:40	06:49			07:55		08:58 (26)	08:08		09:42 (1)	09:12		11:05 (2)
	22:43	21:44	20:20			18:53	23	09:21 (26)	16:32	55	12:25 (4)	15:45	58	12:36 (4)
9	04:41	05:42	06:51			07:58		08:57 (26)	08:11		09:42 (1)	09:14		11:06 (2)
	22:42	21:42	20:17			18:50	23	09:20 (26)	16:30	59	12:27 (4)	15:44	56	12:36 (4)
10	04:43	05:44	06:53			08:00		08:57 (26)	08:13		09:42 (1)	09:15		11:06 (2)
	22:41	21:39	20:14			18:48	24	09:21 (26)	16:28	60	12:28 (4)	15:44	55	12:36 (4)
11	04:44	05:46	06:55			08:02		08:57 (26)	08:16		09:41 (1)	09:16		11:07 (2)
	22:39	21:37	20:11			18:45	23	09:20 (26)	16:26	62	12:28 (4)	15:43	54	12:36 (4)
12	04:46	05:49	06:58			08:04		08:57 (26)	08:18		09:42 (1)	09:18		11:07 (2)
	22:38	21:34	20:08			18:42	24	09:21 (26)	16:24	63	12:29 (4)	15:43	52	12:36 (4)
13	04:48	05:51	07:00			08:07		08:57 (26)	08:20		09:42 (1)	09:19		11:10 (2)
	22:37	21:32	20:05			18:39	35	10:20 (3)	16:21	65	12:30 (4)	15:43	50	12:37 (4)
14	04:49	05:53	07:02			08:09		08:57 (26)	08:23		09:43 (1)	09:20		11:11 (2)
	22:35	21:29	20:02			18:36	39	10:23 (3)	16:19	74	12:31 (4)	15:42	49	12:37 (4)
15	04:51	05:55	07:04			08:11		08:58 (26)	08:25		09:46 (1)	09:21		11:13 (2)
	22:34	21:26	20:00			18:34	42	10:25 (3)	16:17	76	12:31 (4)	15:42	46	12:37 (4)
16	04:53	05:58	07:06			08:14		08:58 (26)	08:27		09:51 (1)	09:22		11:14 (2)
	22:32	21:24	19:57			18:31	43	10:26 (3)	16:15	74	12:32 (4)	15:42	45	12:37 (4)
17	04:54	06:00	07:09			08:16		09:00 (26)	08:30		09:55 (1)	09:23		11:15 (2)
	22:31	21:21	19:54			18:28	43	10:28 (3)	16:13	72	12:32 (4)	15:42	43	12:37 (4)
18	04:56	06:02	07:11			08:18		09:02 (26)	08:32		09:59 (1)	09:24		11:17 (2)
	22:29	21:19	19:51			18:25	39	10:28 (3)	16:11	70	12:32 (4)	15:42	40	12:37 (4)
19	04:58	06:04	07:13		08:22 (28)	08:21		09:58 (3)	08:34		10:57 (2)	09:25		11:18 (2)
	22:27	21:16	19:48	7	08:29 (28)	18:23	31	10:29 (3)	16:10	66	12:33 (4)	15:43	41	12:38 (4)
20	05:00	06:06	07:15		08:19 (28)	08:23		09:57 (3)	08:37		10:57 (2)	09:26		11:19 (2)
	22:25	21:13	19:45	12	08:31 (28)	18:20	32	10:29 (3)	16:08	67	12:33 (4)	15:43	40	12:39 (4)
21	05:02	06:09	07:17		08:18 (28)	08:25		09:57 (3)	08:39		10:57 (2)	09:26		11:19 (2)
	22:24	21:10	19:42	15	08:33 (28)	18:17	33	10:30 (3)	16:06	67	12:33 (4)	15:43	39	12:38 (4)
22	05:04	06:11	07:20		08:16 (28)	08:28		09:56 (3)	08:41		10:57 (2)	09:27		11:20 (2)
	22:22	21:08	19:39	17	08:33 (28)	18:15	33	10:29 (3)	16:04	68	12:34 (4)	15:44	39	12:39 (4)
23	05:06	06:13	07:22		08:15 (28)	08:30		09:56 (3)	08:43		10:57 (2)	09:27		11:20 (2)
	22:20	21:05	19:36	18	08:33 (28)	18:12	34	10:30 (3)	16:03	68	12:33 (4)	15:44	40	12:40 (4)
24	05:08	06:15	07:24		08:14 (28)	08:32		09:56 (3)	08:45		10:57 (2)	09:28		11:21 (2)
	22:18	21:02	19:33	19	08:33 (28)	18:09	33	10:29 (3)	16:01	69	12:34 (4)	15:45	41	12:41 (4)
25	05:10	06:18	07:26		08:14 (28)	07:35		08:56 (3)	08:48		10:57 (2)	09:28		11:21 (2)
	22:16	20:59	19:31	18	08:32 (28)	17:07	33	09:29 (3)	15:59	69	12:34 (4)	15:45	41	12:41 (4)
26	05:12	06:20	07:28		08:14 (28)	07:37		08:57 (3)	08:50		10:58 (2)	09:28		11:21 (2)
	22:14	20:57	19:28	19	08:33 (28)	17:04	32	09:29 (3)	15:58	68	12:34 (4)	15:46	42	12:42 (4)
27	05:14	06:22	07:31		08:14 (28)	07:40		08:56 (3)	08:52		10:57 (2)	09:28		11:20 (2)
	22:12	20:54	19:25	18	08:32 (28)	17:02	32	09:28 (3)	15:57	69	12:34 (4)	15:47	43	12:42 (4)
28	05:16	06:24	07:33		08:15 (28)	07:42		08:57 (3)	08:54		10:58 (2)	09:29		11:20 (2)
	22:10	20:51	19:22	15	08:30 (28)	16:59	31	09:28 (3)	15:55	68	12:35 (4)	15:48	44	12:43 (4)
29	05:18	06:27	07:35		08:15 (28)	07:44		08:58 (3)	08:56		10:59 (2)	09:29		11:18 (2)
	22:08	20:48	19:19	13	08:28 (28)	16:56	29	09:27 (3)	15:54	67	12:35 (4)	15:49	47	12:43 (4)
30	05:20	06:29	07:37		08:18 (28)	07:47		08:58 (3)	08:58		10:59 (2)	09:28		11:18 (2)
	22:05	20:45	19:16	8	08:26 (28)	16:54	28	09:26 (3)	15:53	65	12:34 (4)	15:50	49	12:44 (4)
31	05:22	06:31				07:49		09:00 (3)				09:28		11:16 (2)
	22:03	20:43				16:51	25	09:25 (3)				15:51	52	12:44 (4)
Potential sun hours	545	478	386			319			236			200		
Total, worst case				179			830			1810			1540	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:37	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33		20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		06:30	05:13	04:28	04:49	05:53	07:02		08:05 (4)	08:09	08:23	09:20
	16:15	17:28	18:36		20:47	21:56	22:47	22:35	21:29	20:03	10	08:15 (4)	18:37	16:20	15:43
15	09:16	08:13	06:56		06:27	05:11	04:28	04:51	05:55	07:04		08:02 (4)	08:11	08:25	09:21
	16:17	17:31	18:38		20:49	21:58	22:47	22:34	21:27	20:00	14	08:16 (4)	18:34	16:18	15:42
16	09:15	08:10	06:53		06:24	05:09	04:28	04:53	05:58	07:06		08:00 (4)	08:14	08:27	09:22
	16:19	17:33	18:40		20:51	22:00	22:48	22:32	21:24	19:57	17	08:17 (4)	18:31	16:16	15:42
17	09:13	08:08	06:50		06:22	05:06	04:27	04:54	06:00	07:09		07:59 (4)	08:16	08:30	09:23
	16:21	17:36	18:43		20:54	22:02	22:49	22:31	21:21	19:54	18	08:17 (4)	18:28	16:14	15:42
18	09:12	08:05	06:47		06:19	05:04	04:27	04:56	06:02	07:11		07:58 (4)	08:18	08:32	09:24
	16:24	17:38	18:45		20:56	22:04	22:49	22:29	21:19	19:51	19	08:17 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45	07:25 (4)	06:16	05:02	04:27	04:58	06:04	07:13		07:57 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	3 07:28 (4)	20:58	22:06	22:50	22:27	21:16	19:48	20	08:17 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:22 (4)	06:13	05:00	04:27	05:00	06:07	07:15		07:57 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	8 07:30 (4)	21:01	22:08	22:50	22:26	21:13	19:45	19	08:16 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:19 (4)	06:11	04:58	04:27	05:02	06:09	07:17		08:00 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	11 07:30 (4)	21:03	22:10	22:50	22:24	21:11	19:42	16	08:16 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36	07:15 (4)	06:08	04:56	04:27	05:04	06:11	07:20		08:02 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	16 07:31 (4)	21:05	22:12	22:51	22:22	21:08	19:39	13	08:15 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:11 (4)	06:05	04:55	04:28	05:06	06:13	07:22		08:05 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	20 07:31 (4)	21:08	22:14	22:51	22:20	21:05	19:36	9	08:14 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30	07:11 (4)	06:03	04:53	04:28	05:08	06:16	07:24		08:08 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	19 07:30 (4)	21:10	22:16	22:51	22:18	21:02	19:34	4	08:12 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27	07:10 (4)	06:00	04:51	04:28	05:10	06:18	07:26			07:35	08:48	09:28
	16:40	17:55	19:01	20 07:30 (4)	21:12	22:18	22:51	22:16	21:00	19:31			17:07	16:00	15:46
26	08:58	07:44	06:24	07:10 (4)	05:57	04:49	04:29	05:12	06:20	07:29			07:37	08:50	09:28
	16:42	17:58	19:03	19 07:29 (4)	21:15	22:20	22:51	22:14	20:57	19:28			17:04	15:58	15:46
27	08:56	07:41	06:21	07:11 (4)	05:55	04:48	04:29	05:14	06:22	07:31			07:40	08:52	09:29
	16:44	18:00	19:06	17 07:28 (4)	21:17	22:22	22:50	22:12	20:54	19:25			17:02	15:57	15:47
28	08:54	07:38	06:19	07:12 (4)	05:52	04:46	04:30	05:16	06:25	07:33			07:42	08:54	09:29
	16:47	18:03	19:08	14 07:26 (4)	21:19	22:24	22:50	22:10	20:51	19:22			16:59	15:55	15:48
29	08:52		07:16	08:13 (4)	05:49	04:44	04:31	05:18	06:27	07:35			07:44	08:56	09:29
	16:49		20:10	11 08:24 (4)	21:22	22:26	22:50	22:08	20:48	19:19			16:57	15:54	15:49
30	08:50		07:13	08:18 (4)	05:47	04:43	04:32	05:20	06:29	07:37			07:47	08:58	09:29
	16:51		20:12	2 08:20 (4)	21:24	22:27	22:49	22:05	20:46	19:16			16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31				07:49		09:28
	16:54		20:15			22:29		22:03	20:43				16:52		15:52
Potential sun hours	221	260	365		432	521	547	545	478	386			319	236	200
Total, worst case				160							159				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		07:35 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33	8	07:43 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		07:32 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36	13	07:45 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56		07:30 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38	16	07:46 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:17	15:42
16	09:15	08:10	06:53		07:28 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40	19	07:47 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:15	15:42
17	09:13	08:08	06:50		07:27 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	08:30	09:23
	16:21	17:36	18:43	20	07:47 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28	16:14	15:42
18	09:12	08:05	06:47		07:26 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:18 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	21	07:47 (4)	20:56	22:04	22:49	22:29	21:19	19:51	9 08:27 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45		07:26 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:15 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	21	07:47 (4)	20:58	22:06	22:50	22:27	21:16	19:48	14 08:29 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42		07:27 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:13 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	21	07:48 (4)	21:01	22:08	22:50	22:26	21:13	19:45	17 08:30 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39		07:26 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:13 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	21	07:47 (4)	21:03	22:10	22:50	22:24	21:11	19:42	18 08:31 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36		07:27 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:11 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	19	07:46 (4)	21:05	22:12	22:51	22:22	21:08	19:39	20 08:31 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33		07:27 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:10 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	17	07:44 (4)	21:08	22:14	22:51	22:20	21:05	19:36	21 08:31 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30		07:28 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:10 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	15	07:43 (4)	21:10	22:16	22:51	22:18	21:02	19:34	21 08:31 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27		07:30 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:09 (4)	07:35	08:48	09:28
	16:39	17:55	19:01	10	07:40 (4)	21:12	22:18	22:51	22:16	21:00	19:31	21 08:30 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20	07:28	08:10 (4)	07:37	08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57	19:28	20 08:30 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:10 (4)	07:40	08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54	19:25	19 08:29 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:10 (4)	07:42	08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51	19:22	18 08:28 (4)	16:59	15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:11 (4)	07:44	08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48	19:19	15 08:26 (4)	16:57	15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:13 (4)	07:47	08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46	19:16	11 08:24 (4)	16:54	15:53	15:50
31	08:48		07:10				04:41		05:22	06:31			07:49		09:28
	16:54		20:15				22:29		22:03	20:43			16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				221							224			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Nedre Skøyen vei 2 .
NO-0276 Oslo
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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February	March		April	May	June	July	August	September		October		November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40		08:36 (4)	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	24	09:00 (4)	16:49	15:51
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42		08:35 (4)	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	25	09:00 (4)	16:47	15:50
3	09:27	08:41	07:30	08:05 (4)	07:01	05:39	04:37	04:34	05:29	06:38		07:44		08:34 (4)	07:56	09:04
	15:56	17:01	18:10	12 08:17 (4)	20:22	21:31	22:34	22:47	21:56	20:34		19:08	25	08:59 (4)	16:44	15:49
4	09:27	08:39	07:27	08:02 (4)	06:58	05:37	04:36	04:35	05:31	06:40		07:46		08:34 (4)	07:59	09:05
	15:57	17:04	18:12	17 08:19 (4)	20:24	21:33	22:35	22:47	21:54	20:31		19:05	26	09:00 (4)	16:42	15:48
5	09:26	08:37	07:24	08:01 (4)	06:56	05:34	04:35	04:36	05:33	06:42		07:49		08:34 (4)	08:01	09:07
	15:59	17:06	18:14	19 08:20 (4)	20:26	21:35	22:37	22:46	21:52	20:28		19:02	25	08:59 (4)	16:39	15:47
6	09:25	08:35	07:22	07:59 (4)	06:53	05:32	04:34	04:38	05:35	06:44		07:51		08:34 (4)	08:04	09:09
	16:00	17:09	18:17	22 08:21 (4)	20:28	21:38	22:38	22:45	21:49	20:26		18:59	24	08:58 (4)	16:37	15:47
7	09:25	08:32	07:19	07:58 (4)	06:50	05:29	04:33	04:39	05:38	06:47		07:53		08:35 (4)	08:06	09:10
	16:02	17:11	18:19	23 08:21 (4)	20:31	21:40	22:39	22:44	21:47	20:23		18:56	22	08:57 (4)	16:35	15:46
8	09:24	08:30	07:16	07:58 (4)	06:47	05:27	04:32	04:40	05:40	06:49		07:55		08:35 (4)	08:08	09:12
	16:04	17:14	18:22	24 08:22 (4)	20:33	21:42	22:41	22:43	21:44	20:20		18:53	21	08:56 (4)	16:32	15:45
9	09:23	08:28	07:13	07:57 (4)	06:44	05:24	04:31	04:42	05:42	06:51		07:58		08:36 (4)	08:11	09:14
	16:06	17:16	18:24	25 08:22 (4)	20:35	21:44	22:42	22:42	21:42	20:17		18:50	18	08:54 (4)	16:30	15:44
10	09:22	08:25	07:10	07:57 (4)	06:41	05:22	04:31	04:43	05:44	06:53		08:00		08:38 (4)	08:13	09:15
	16:07	17:19	18:26	25 08:22 (4)	20:38	21:47	22:43	22:41	21:39	20:14		18:48	15	08:53 (4)	16:28	15:44
11	09:21	08:23	07:07	07:57 (4)	06:38	05:20	04:30	04:45	05:46	06:55		08:02		08:41 (4)	08:16	09:16
	16:09	17:21	18:29	25 08:22 (4)	20:40	21:49	22:44	22:39	21:37	20:11		18:45	8	08:49 (4)	16:26	15:43
12	09:20	08:20	07:05	07:57 (4)	06:36	05:17	04:29	04:46	05:49	06:58		08:04			08:18	09:18
	16:11	17:24	18:31	24 08:21 (4)	20:42	21:51	22:45	22:38	21:34	20:08		18:42			16:24	15:43
13	09:19	08:18	07:02	07:57 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07			08:20	09:19
	16:13	17:26	18:33	23 08:20 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39			16:22	15:43
14	09:17	08:15	06:59	07:57 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09			08:23	09:20
	16:15	17:28	18:36	22 08:19 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:36			16:19	15:42
15	09:16	08:13	06:56	07:58 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11			08:25	09:21
	16:17	17:31	18:38	20 08:18 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34			16:17	15:42
16	09:15	08:10	06:53	07:59 (4)	06:24	05:09	04:27	04:53	05:58	07:06		08:14			08:27	09:22
	16:19	17:33	18:40	17 08:16 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31			16:15	15:42
17	09:13	08:08	06:50	08:00 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16			08:30	09:23
	16:21	17:36	18:43	14 08:14 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28			16:14	15:42
18	09:12	08:05	06:47	08:04 (4)	06:19	05:04	04:27	04:56	06:02	07:11		08:18			08:32	09:24
	16:24	17:38	18:45	5 08:09 (4)	20:56	22:04	22:49	22:29	21:19	19:51		18:25			16:12	15:42
19	09:10	08:02	06:45		06:16	05:02	04:27	04:58	06:04	07:13		08:21			08:34	09:25
	16:26	17:41	18:47		20:58	22:06	22:50	22:27	21:16	19:48		18:23			16:10	15:43
20	09:09	08:00	06:42		06:13	05:00	04:27	05:00	06:07	07:15		08:23			08:37	09:26
	16:28	17:43	18:49		21:01	22:08	22:50	22:26	21:13	19:45		18:20			16:08	15:43
21	09:07	07:57	06:39		06:11	04:58	04:27	05:02	06:09	07:17		08:25			08:39	09:26
	16:30	17:46	18:52		21:03	22:10	22:50	22:24	21:11	19:42		18:17			16:06	15:43
22	09:05	07:55	06:36		06:08	04:56	04:27	05:04	06:11	07:20		08:28			08:41	09:27
	16:32	17:48	18:54		21:05	22:12	22:51	22:22	21:08	19:39		18:15			16:04	15:44
23	09:04	07:52	06:33		06:05	04:55	04:28	05:06	06:13	07:22		08:30			08:43	09:27
	16:35	17:50	18:56		21:08	22:14	22:51	22:20	21:05	19:36		18:12			16:03	15:44
24	09:02	07:49	06:30		06:03	04:53	04:28	05:08	06:16	07:24		08:32			08:45	09:28
	16:37	17:53	18:59		21:10	22:16	22:51	22:18	21:02	19:34		18:09			16:01	15:45
25	09:00	07:47	06:27		06:00	04:51	04:28	05:10	06:18	07:26		07:35			08:48	09:28
	16:39	17:55	19:01		21:12	22:18	22:51	22:16	21:00	19:31		17:07			16:00	15:46
26	08:58	07:44	06:24		05:57	04:49	04:29	05:12	06:20	07:28	08:44 (4)	07:37			08:50	09:28
	16:42	17:58	19:03		21:15	22:20	22:51	22:14	20:57	19:28	11 08:55 (4)	17:04			15:58	15:46
27	08:56	07:41	06:21		05:55	04:48	04:29	05:14	06:22	07:31	08:41 (4)	07:40			08:52	09:29
	16:44	18:00	19:05		21:17	22:22	22:50	22:12	20:54	19:25	16 08:57 (4)	17:02			15:57	15:47
28	08:54	07:38	06:19		05:52	04:46	04:30	05:16	06:24	07:33	08:39 (4)	07:42			08:54	09:29
	16:47	18:03	19:08		21:19	22:24	22:50	22:10	20:51	19:22	19 08:58 (4)	16:59			15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35	08:37 (4)	07:44			08:56	09:29
	16:49		20:10		21:22	22:26	22:50	22:08	20:48	19:19	22 08:59 (4)	16:57			15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37	08:37 (4)	07:47			08:58	09:29
	16:51		20:12		21:24	22:27	22:49	22:05	20:46	19:16	23 09:00 (4)	16:54			15:53	15:50
31	08:48		07:10			04:41		05:22	06:31			07:49				09:28
	16:54		20:15			22:29		22:03	20:43			16:52				15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319		236	200	
Total, worst case				317							91		233			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:36		09:02 (2)	07:07	04:40	04:32	05:24	06:33		07:40		08:45 (4)	07:52	09:00
	15:53	16:56		18:05	4	09:06 (2)	20:17	21:26	22:31	22:49	22:01	20:40		19:13	28	09:13 (4)	16:49	15:51
2	09:28	08:44		07:33			07:04	05:42	04:39	04:33	05:27	06:36		07:42		08:44 (4)	07:54	09:02
	15:54	16:59		18:07			20:19	21:28	22:32	22:48	21:59	20:37		19:10	29	09:13 (4)	16:47	15:50
3	09:27	08:41		07:30		08:17 (4)	07:01	05:39	04:37	04:34	05:29	06:38		07:44		08:43 (4)	07:56	09:04
	15:56	17:01		18:10	10	08:27 (4)	20:22	21:31	22:34	22:47	21:56	20:34		19:08	29	09:12 (4)	16:44	15:49
4	09:27	08:39		07:27		08:13 (4)	06:58	05:37	04:36	04:35	05:31	06:40		07:46		08:44 (4)	07:59	09:05
	15:57	17:04		18:12	17	08:30 (4)	20:24	21:33	22:35	22:47	21:54	20:31		19:05	28	09:12 (4)	16:42	15:48
5	09:26	08:37		07:24		08:11 (4)	06:56	05:34	04:35	04:36	05:33	06:42		07:49		08:44 (4)	08:01	09:07
	15:59	17:06		18:14	20	08:31 (4)	20:26	21:35	22:37	22:46	21:52	20:28		19:02	27	09:11 (4)	16:39	15:47
6	09:25	08:35		07:22		08:09 (4)	06:53	05:32	04:34	04:38	05:35	06:44		07:51		08:44 (4)	08:04	09:09
	16:00	17:09		18:17	24	08:33 (4)	20:28	21:38	22:38	22:45	21:49	20:26		18:59	26	09:10 (4)	16:37	15:47
7	09:25	08:32		07:19		08:08 (4)	06:50	05:29	04:33	04:39	05:38	06:47		07:53		08:45 (4)	08:06	09:10
	16:02	17:11		18:19	25	08:33 (4)	20:31	21:40	22:39	22:44	21:47	20:23		18:56	24	09:09 (4)	16:35	15:46
8	09:24	08:30		07:16		08:07 (4)	06:47	05:27	04:32	04:40	05:40	06:49		07:55		08:46 (4)	08:08	09:12
	16:04	17:14		18:22	27	08:34 (4)	20:33	21:42	22:41	22:43	21:44	20:20		18:53	22	09:08 (4)	16:32	15:45
9	09:23	08:28		07:13		08:07 (4)	06:44	05:24	04:31	04:42	05:42	06:51		07:58		08:47 (4)	08:11	09:14
	16:06	17:16		18:24	28	08:35 (4)	20:35	21:44	22:42	22:42	21:42	20:17		18:50	18	09:05 (4)	16:30	15:44
10	09:22	08:25		07:10		08:06 (4)	06:41	05:22	04:31	04:43	05:44	06:53		08:00		08:49 (4)	08:13	09:15
	16:07	17:19		18:26	29	08:35 (4)	20:38	21:47	22:43	22:41	21:39	20:14		18:48	15	09:04 (4)	16:28	15:44
11	09:21	08:23		07:07		08:06 (4)	06:38	05:20	04:30	04:45	05:46	06:55		08:02		08:53 (4)	08:16	09:16
	16:09	17:21		18:29	29	08:35 (4)	20:40	21:49	22:44	22:39	21:37	20:11		18:45	6	08:59 (4)	16:26	15:43
12	09:20	08:20		07:05		08:05 (4)	06:36	05:17	04:29	04:46	05:49	06:58		08:04			08:18	09:18
	16:11	17:23		18:31	29	08:34 (4)	20:42	21:51	22:45	22:38	21:34	20:08		18:42			16:24	15:43
13	09:19	08:18		07:02		08:05 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07		09:33 (2)	08:20	09:19
	16:13	17:26		18:33	29	08:34 (4)	20:44	21:53	22:46	22:37	21:32	20:05		18:39	7	09:40 (2)	16:22	15:43
14	09:17	08:15		06:59		08:05 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09		09:30 (2)	08:23	09:20
	16:15	17:28		18:36	28	08:33 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:36	12	09:42 (2)	16:19	15:42
15	09:16	08:13		06:56		07:33 (3)	06:27	05:11	04:28	04:51	05:55	07:04		08:11		09:29 (2)	08:25	09:21
	16:17	17:31		18:38	32	08:32 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	15	09:44 (2)	16:17	15:42
16	09:15	08:10		06:53		07:30 (3)	06:24	05:09	04:27	04:53	05:58	07:06		08:14		09:27 (2)	08:27	09:22
	16:19	17:33		18:40	36	08:31 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	17	09:44 (2)	16:15	15:42
17	09:13	08:08	09:01 (2)	06:50		07:28 (3)	06:22	05:06	04:27	04:54	06:00	07:09	08:18 (3)	08:16		09:27 (2)	08:30	09:23
	16:21	17:36	9 09:10 (2)	18:43	38	08:30 (4)	20:54	22:02	22:49	22:31	21:21	19:54	5 08:23 (3)	18:28	18	09:45 (2)	16:14	15:42
18	09:12	08:05	08:58 (2)	06:47		07:27 (3)	06:19	05:04	04:27	04:56	06:02	07:11	08:14 (3)	08:18		09:26 (2)	08:32	09:24
	16:24	17:38	14 09:12 (2)	18:45	36	08:28 (4)	20:56	22:04	22:49	22:29	21:19	19:51	11 08:25 (3)	18:25	19	09:45 (2)	16:12	15:42
19	09:10	08:02	08:57 (2)	06:45		07:25 (3)	06:16	05:02	04:27	04:58	06:04	07:13	08:12 (3)	08:21		09:26 (2)	08:34	09:25
	16:26	17:41	16 09:13 (2)	18:47	34	08:25 (4)	20:58	22:06	22:50	22:27	21:16	19:48	14 08:26 (3)	18:23	19	09:45 (2)	16:10	15:43
20	09:09	08:00	08:56 (2)	06:42		07:25 (3)	06:13	05:00	04:27	05:00	06:07	07:15	08:10 (3)	08:23		09:25 (2)	08:37	09:26
	16:28	17:43	17 09:13 (2)	18:49	30	08:23 (4)	21:01	22:08	22:50	22:26	21:13	19:45	17 08:27 (3)	18:20	19	09:44 (2)	16:08	15:43
21	09:07	07:57	08:55 (2)	06:39		07:25 (3)	06:11	04:58	04:27	05:02	06:09	07:17	08:10 (3)	08:25		09:26 (2)	08:39	09:26
	16:30	17:46	18 09:13 (2)	18:52	18	07:43 (3)	21:03	22:10	22:50	22:24	21:10	19:42	18 08:28 (3)	18:17	18	09:44 (2)	16:06	15:43
22	09:05	07:55	08:55 (2)	06:36		07:24 (3)	06:08	04:56	04:27	05:04	06:11	07:20	08:09 (3)	08:28		09:26 (2)	08:41	09:27
	16:32	17:48	19 09:14 (2)	18:54	18	07:42 (3)	21:05	22:12	22:51	22:22	21:08	19:39	19 08:28 (3)	18:15	17	09:43 (2)	16:04	15:44
23	09:04	07:52	08:55 (2)	06:33		07:25 (3)	06:05	04:55	04:28	05:06	06:13	07:22	08:09 (3)	08:30		09:27 (2)	08:43	09:27
	16:35	17:50	19 09:14 (2)	18:56	16	07:41 (3)	21:08	22:14	22:51	22:20	21:05	19:36	27 09:06 (4)	18:12	15	09:42 (2)	16:03	15:44
24	09:02	07:49	08:55 (2)	06:30		07:25 (3)	06:02	04:53	04:28	05:08	06:16	07:24	08:08 (3)	08:32		09:29 (2)	08:45	09:28
	16:37	17:53	19 09:14 (2)	18:59	15	07:40 (3)	21:10	22:16	22:51	22:18	21:02	19:33	35 09:09 (4)	18:09	12	09:41 (2)	16:01	15:45
25	09:00	07:46	08:55 (2)	06:27		07:26 (3)	06:00	04:51	04:28	05:10	06:18	07:26	08:09 (3)	07:35		08:31 (2)	08:48	09:28
	16:39	17:55	18 09:13 (2)	19:01	12	07:38 (3)	21:12	22:18	22:51	22:16	21:00	19:31	35 09:10 (4)	17:07	7	08:38 (2)	16:00	15:46
26	08:58	07:44	08:55 (2)	06:24		07:28 (3)	05:57	04:49	04:29	05:12	06:20	07:28	08:11 (3)	07:37			08:50	09:28
	16:42	17:58	17 09:12 (2)	19:03	7	07:35 (3)	21:15	22:20	22:51	22:14	20:57	19:28	36 09:12 (4)	17:04			15:58	15:46
27	08:56	07:41	08:56 (2)	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:11 (3)	07:40			08:52	09:29
	16:44	18:00	15 09:11 (2)	19:05			21:17	22:22	22:50	22:12	20:54	19:25	37 09:13 (4)	17:02			15:57	15:47
28	08:54	07:38	08:58 (2)	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:13 (3)	07:42			08:54	09:29
	16:47	18:03	11 09:09 (2)	19:08			21:19	22:24	22:50	22:10	20:51	19:22	34 09:13 (4)	16:59			15:55	15:48
29	08:52			07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:45 (4)	07:44			08:56	09:29
	16:49			20:10			21:21	22:26	22:50	22:08	20:48	19:19	28 09:13 (4)	16:57			15:54	15:49
30	08:50			07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:45 (4)	07:47			08:58	09:28
	16:51			20:12			21:24	22:27	22:49	22:05	20:46	19:16	29 09:14 (4)	16:54			15:53	15:50
31	08:48			07:10				04:41		05:22	06:31			07:49				09:28
	16:54			20:15				22:29		22:03	20:43			16:52				15:51
Potential sun hours	221	260		365		432	521	547	545	478	386		319		236	200	
Total, worst case			192		591							345		447			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:18 (2)	08:46	10:00 (3)	07:35	07:07	05:44	04:40
	15:53	49	12:27 (4)	16:56	25	10:25 (3)	18:05	20:17	21:26	22:31
2	09:28		11:18 (2)	08:44	09:59 (3)	07:33	07:04	05:41	04:39
	15:54	50	12:28 (4)	16:59	25	10:24 (3)	18:07	20:19	21:28	22:32
3	09:27		11:18 (2)	08:41	10:00 (3)	07:30	07:01	05:39	04:37
	15:56	51	12:28 (4)	17:01	25	10:25 (3)	18:10	20:21	21:31	22:34
4	09:27		11:18 (2)	08:39	09:59 (3)	07:27	06:58	05:36	04:36
	15:57	51	12:28 (4)	17:04	26	10:25 (3)	18:12	20:24	21:33	22:35
5	09:26		11:19 (2)	08:37	10:00 (3)	07:24	06:55	05:34	04:35
	15:59	51	12:29 (4)	17:06	26	10:26 (3)	18:14	20:26	21:35	22:37
6	09:25		11:19 (2)	08:35	10:00 (3)	07:22	06:53	05:31	04:34
	16:00	51	12:29 (4)	17:09	25	10:25 (3)	18:17	20:28	21:38	22:38
7	09:25		11:20 (2)	08:32	10:00 (3)	07:19	06:50	05:29	04:33
	16:02	51	12:30 (4)	17:11	25	10:25 (3)	18:19	20:31	21:40	22:39
8	09:24		11:20 (2)	08:30	10:01 (3)	07:16	06:47	05:27	04:32
	16:04	51	12:30 (4)	17:13	24	10:25 (3)	18:21	20:33	21:42	22:41
9	09:23		11:21 (2)	08:28	10:01 (3)	07:13	06:44	05:24	04:31
	16:05	51	12:31 (4)	17:16	23	10:24 (3)	18:24	20:35	21:44	22:42
10	09:22		11:21 (2)	08:25	10:03 (3)	07:10	06:41	05:22	04:30
	16:07	51	12:31 (4)	17:18	21	10:24 (3)	18:26	20:38	21:47	22:43
11	09:21		11:22 (2)	08:23	09:07 (26)	07:07	06:38	05:20	04:30
	16:09	50	12:31 (4)	17:21	25	10:22 (3)	18:28	20:40	21:49	22:44
12	09:20		11:22 (2)	08:20	09:04 (26)	07:05	06:36	05:17	04:29
	16:11	49	12:31 (4)	17:23	27	10:20 (3)	18:31	20:42	21:51	22:45
13	09:19		11:23 (2)	08:18	09:03 (26)	07:02	06:33	05:15	04:28
	16:13	49	12:32 (4)	17:26	26	10:18 (3)	18:33	20:44	21:53	22:46
14	09:17		11:24 (2)	08:15	09:02 (26)	06:59	06:30	05:13	04:28
	16:15	47	12:32 (4)	17:28	17	09:19 (26)	18:35	20:47	21:56	22:47
15	09:16		11:24 (2)	08:13	09:01 (26)	06:56	06:27	05:11	04:28
	16:17	47	12:32 (4)	17:31	19	09:20 (26)	18:38	20:49	21:58	22:47
16	09:15		11:25 (2)	08:10	09:00 (26)	06:53	06:24	05:08	04:27
	16:19	44	12:31 (4)	17:33	20	09:20 (26)	18:40	20:51	22:00	22:48
17	09:13		11:27 (2)	08:08	09:01 (26)	06:50	06:22	05:06	04:27
	16:21	42	12:32 (4)	17:36	20	09:21 (26)	18:42	20:54	22:02	22:49
18	09:12		11:28 (2)	08:05	09:00 (26)	06:47	06:19	05:04	04:27
	16:23	39	12:32 (4)	17:38	21	09:21 (26)	18:45	20:56	22:04	22:49
19	09:10		11:29 (2)	08:02	09:00 (26)	06:44	06:16	05:02	04:27
	16:26	35	12:31 (4)	17:41	20	09:20 (26)	18:47	20:58	22:06	22:50
20	09:09		11:31 (2)	08:00	09:00 (26)	06:42	06:13	05:00	04:27
	16:28	30	12:31 (4)	17:43	19	09:19 (26)	18:49	21:01	22:08	22:50
21	09:07		12:09 (4)	07:57	09:01 (26)	06:39	06:11	04:58	04:27
	16:30	21	12:30 (4)	17:46	17	09:18 (26)	18:52	21:03	22:10	22:50
22	09:05		12:11 (4)	07:55	09:02 (26)	06:36	06:08	04:56	04:27
	16:32	19	12:30 (4)	17:48	16	09:18 (26)	18:54	21:05	22:12	22:51
23	09:04		12:12 (4)	07:52	09:04 (26)	06:33	06:05	04:54	04:27
	16:35	17	12:29 (4)	17:50	12	09:16 (26)	18:56	21:08	22:14	22:51
24	09:02		10:08 (3)	07:49	09:06 (26)	06:30	06:02	04:53	04:28
	16:37	16	12:26 (4)	17:53	7	09:13 (26)	18:59	21:10	22:16	22:51
25	09:00		10:05 (3)	07:46		06:27	06:00	04:51	04:28
	16:39	14	12:22 (4)	17:55		19:01	21:12	22:18	22:51
26	08:58		10:03 (3)	07:44		06:24	05:57	04:49	04:29
	16:42	15	10:18 (3)	17:58		19:03	21:15	22:20	22:51
27	08:56		10:03 (3)	07:41		06:21	05:54	04:47	04:29
	16:44	17	10:20 (3)	18:00		19:05	21:17	22:22	22:50
28	08:54		10:01 (3)	07:38		06:18	05:52	04:46	04:30
	16:46	20	10:21 (3)	18:02		19:08	21:19	22:24	22:50
29	08:52		10:01 (3)			07:16	05:49	04:44	04:31
	16:49	21	10:22 (3)			20:10	21:21	22:26	22:50
30	08:50		10:01 (3)			07:13	05:47	04:43	04:31
	16:51	22	10:23 (3)			20:12	21:24	22:27	22:49
31	08:48		10:00 (3)			07:10		04:41	
	16:54	24	10:24 (3)			20:15		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1145			511				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:40			07:52		09:32 (3)	09:00		11:04 (2)
	22:49		22:01		20:40		19:13			16:49	21	09:53 (3)	15:51	51	12:14 (4)
2	04:33		05:26		06:35		07:42			07:54		09:31 (3)	09:02		11:04 (2)
	22:48		21:59		20:37		19:10			16:46	22	09:53 (3)	15:50	51	12:14 (4)
3	04:34		05:29		06:38		07:44			07:56		09:31 (3)	09:04		11:04 (2)
	22:47		21:56		20:34		19:07			16:44	23	09:54 (3)	15:49	51	12:14 (4)
4	04:35		05:31		06:40		07:46			07:59		09:30 (3)	09:05		11:04 (2)
	22:47		21:54		20:31		19:05			16:42	25	09:55 (3)	15:48	51	12:14 (4)
5	04:36		05:33		06:42		07:49			08:01		09:29 (3)	09:07		11:05 (2)
	22:46		21:52		20:28		19:02			16:39	26	09:55 (3)	15:47	51	12:15 (4)
6	04:38		05:35		06:44		07:51			08:04		09:30 (3)	09:09		11:05 (2)
	22:45		21:49		20:26		18:59			16:37	25	09:55 (3)	15:46	51	12:15 (4)
7	04:39		05:37		06:47		07:53			08:06		09:30 (3)	09:10		11:06 (2)
	22:44		21:47		20:23		18:56			16:35	26	09:56 (3)	15:46	51	12:16 (4)
8	04:40		05:40		06:49		07:55			08:08		09:29 (3)	09:12		11:06 (2)
	22:43		21:44		20:20		18:53			16:32	26	09:55 (3)	15:45	51	12:16 (4)
9	04:41		05:42		06:51		07:58			08:11		09:30 (3)	09:14		11:07 (2)
	22:42		21:42		20:17		18:50			16:30	25	09:55 (3)	15:44	51	12:17 (4)
10	04:43		05:44		06:53		08:00			08:13		09:31 (3)	09:15		11:07 (2)
	22:41		21:39		20:14		18:48			16:28	24	09:55 (3)	15:44	51	12:17 (4)
11	04:44		05:46		06:55		08:02			08:16		09:31 (3)	09:16		11:08 (2)
	22:39		21:37		20:11		18:45			16:26	23	09:54 (3)	15:43	49	12:17 (4)
12	04:46		05:49		06:58		08:04			08:18		09:32 (3)	09:18		11:08 (2)
	22:38		21:34		20:08		18:42			16:24	22	09:54 (3)	15:43	49	12:17 (4)
13	04:48		05:51		07:00		08:07			08:20		09:33 (3)	09:19		11:09 (2)
	22:37		21:32		20:05		18:39			16:21	21	09:54 (3)	15:43	49	12:18 (4)
14	04:49		05:53		07:02		08:09			08:23		09:34 (3)	09:20		11:09 (2)
	22:35		21:29		20:02		18:36			16:19	20	09:54 (3)	15:42	49	12:18 (4)
15	04:51		05:55		07:04		08:11			08:25		09:35 (3)	09:21		11:10 (2)
	22:34		21:26		20:00		18:34			16:17	17	09:52 (3)	15:42	49	12:19 (4)
16	04:53		05:58		07:06		08:14			08:27		09:36 (3)	09:22		11:11 (2)
	22:32		21:24		19:57		18:31			16:15	15	09:51 (3)	15:42	48	12:20 (4)
17	04:54		06:00		07:09		08:16			08:30		09:39 (3)	09:23		11:12 (2)
	22:31		21:21		19:54		18:28			16:13	15	11:56 (4)	15:42	48	12:20 (4)
18	04:56		06:02		07:11		08:18		09:36 (26)	08:32		09:42 (3)	09:24		11:11 (2)
	22:29		21:19		19:51		18:25	10	09:46 (26)	16:11	16	12:00 (4)	15:42	48	12:20 (4)
19	04:58		06:04		07:13		08:21		09:34 (26)	08:34		11:46 (4)	09:25		11:12 (2)
	22:27		21:16		19:48		18:23	14	09:48 (26)	16:10	17	12:03 (4)	15:42	47	12:20 (4)
20	05:00		06:06		07:15		08:23		09:32 (26)	08:37		11:46 (4)	09:26		11:13 (2)
	22:26		21:13		19:45		18:20	17	09:49 (26)	16:08	19	12:05 (4)	15:43	48	12:21 (4)
21	05:02		06:09		07:17		08:25		09:32 (26)	08:39		11:44 (4)	09:26		11:14 (2)
	22:24		21:10		19:42		18:17	18	09:50 (26)	16:06	21	12:05 (4)	15:43	47	12:22 (4)
22	05:04		06:11		07:20		08:28		09:30 (26)	08:41		11:07 (2)	09:27		11:14 (2)
	22:22		21:08		19:39		18:15	20	09:50 (26)	16:04	30	12:07 (4)	15:44	47	12:22 (4)
23	05:06		06:13		07:22		08:30		09:30 (26)	08:43		11:05 (2)	09:27		11:14 (2)
	22:20		21:05		19:36		18:12	20	09:50 (26)	16:03	36	12:08 (4)	15:44	48	12:22 (4)
24	05:08		06:15		07:24		08:32		09:31 (26)	08:45		11:05 (2)	09:28		11:15 (2)
	22:18		21:02		19:33		18:09	20	09:51 (26)	16:01	39	12:09 (4)	15:45	48	12:23 (4)
25	05:10		06:18		07:26		07:35		08:30 (26)	08:48		11:04 (2)	09:28		11:15 (2)
	22:16		20:59		19:31		17:07	20	08:50 (26)	15:59	42	12:09 (4)	15:45	48	12:24 (4)
26	05:12		06:20		07:28		07:37		08:31 (26)	08:50		11:04 (2)	09:28		11:16 (2)
	22:14		20:57		19:28		17:04	19	08:50 (26)	15:58	43	12:10 (4)	15:46	48	12:24 (4)
27	05:14		06:22		07:31		07:40		08:30 (26)	08:52		11:03 (2)	09:29		11:16 (2)
	22:12		20:54		19:25		17:02	19	08:49 (26)	15:57	47	12:11 (4)	15:47	48	12:25 (4)
28	05:16		06:24		07:33		07:42		08:31 (26)	08:54		11:04 (2)	09:29		11:17 (2)
	22:10		20:51		19:22		16:59	17	08:48 (26)	15:55	47	12:12 (4)	15:48	48	12:25 (4)
29	05:18		06:27		07:35		07:44		08:33 (26)	08:56		11:03 (2)	09:29		11:16 (2)
	22:08		20:48		19:19		16:56	26	09:48 (3)	15:54	49	12:12 (4)	15:49	49	12:25 (4)
30	05:20		06:29		07:37		07:47		08:34 (26)	08:58		11:03 (2)	09:28		11:17 (2)
	22:05		20:45		19:16		16:54	27	09:50 (3)	15:53	50	12:12 (4)	15:50	49	12:26 (4)
31	05:22		06:31				07:49		08:37 (26)				09:28		11:18 (2)
	22:03		20:43				16:51	25	09:52 (3)				15:51	49	12:27 (4)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								272			832			1523	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		11:00 (1)	08:46		09:41 (26)	07:35	08:28 (28)	07:07	05:44	04:40
	15:53	67	13:34 (4)	16:56	27	11:17 (3)	18:05	19	08:47 (28)	20:17	21:26	22:31
2	09:28		11:00 (1)	08:44		09:37 (26)	07:33		08:27 (28)	07:04	05:41	04:39
	15:54	68	13:34 (4)	16:59	32	11:16 (3)	18:07	20	08:47 (28)	20:19	21:28	22:32
3	09:27		11:00 (1)	08:41		09:35 (26)	07:30		08:27 (28)	07:01	05:39	04:37
	15:56	69	13:34 (4)	17:01	35	11:15 (3)	18:10	20	08:47 (28)	20:21	21:31	22:34
4	09:27		11:00 (1)	08:39		09:34 (26)	07:27		08:27 (28)	06:58	05:36	04:36
	15:57	69	13:35 (4)	17:04	33	11:13 (3)	18:12	19	08:46 (28)	20:24	21:33	22:35
5	09:26		11:00 (1)	08:37		09:33 (26)	07:24		08:28 (28)	06:55	05:34	04:35
	15:59	69	13:35 (4)	17:06	33	11:12 (3)	18:14	17	08:45 (28)	20:26	21:35	22:37
6	09:25		11:00 (1)	08:35		09:32 (26)	07:22		08:28 (28)	06:53	05:31	04:34
	16:00	69	13:35 (4)	17:08	23	11:06 (3)	18:17	16	08:44 (28)	20:28	21:38	22:38
7	09:25		10:54 (3)	08:32		09:31 (26)	07:19		08:29 (28)	06:50	05:29	04:33
	16:02	75	13:36 (4)	17:11	22	09:53 (26)	18:19	13	08:42 (28)	20:31	21:40	22:39
8	09:24		10:53 (3)	08:30		09:32 (26)	07:16		08:31 (28)	06:47	05:27	04:32
	16:04	77	13:37 (4)	17:13	22	09:54 (26)	18:21	8	08:39 (28)	20:33	21:42	22:41
9	09:23		10:52 (3)	08:28		09:31 (26)	07:13			06:44	05:24	04:31
	16:05	76	13:37 (4)	17:16	23	09:54 (26)	18:24			20:35	21:44	22:42
10	09:22		10:51 (3)	08:25		09:32 (26)	07:10			06:41	05:22	04:30
	16:07	78	13:37 (4)	17:18	23	09:55 (26)	18:26			20:38	21:47	22:43
11	09:21		10:50 (3)	08:23		09:31 (26)	07:07			06:38	05:20	04:30
	16:09	78	13:38 (4)	17:21	24	09:55 (26)	18:28			20:40	21:49	22:44
12	09:20		10:49 (3)	08:20		09:31 (26)	07:05			06:36	05:17	04:29
	16:11	76	13:37 (4)	17:23	23	09:54 (26)	18:31			20:42	21:51	22:45
13	09:19		10:50 (3)	08:18		09:31 (26)	07:02			06:33	05:15	04:28
	16:13	74	13:38 (4)	17:26	23	09:54 (26)	18:33			20:44	21:53	22:46
14	09:17		10:49 (3)	08:15		09:33 (26)	06:59			06:30	05:13	04:28
	16:15	73	13:38 (4)	17:28	21	09:54 (26)	18:35			20:47	21:55	22:47
15	09:16		10:48 (3)	08:13		09:33 (26)	06:56			06:27	05:11	04:28
	16:17	69	13:38 (4)	17:31	20	09:53 (26)	18:38			20:49	21:58	22:47
16	09:15		10:48 (3)	08:10		09:34 (26)	06:53			06:24	05:08	04:27
	16:19	62	13:37 (4)	17:33	17	09:51 (26)	18:40			20:51	22:00	22:48
17	09:13		10:49 (3)	08:08		09:36 (26)	06:50			06:22	05:06	04:27
	16:21	61	13:38 (4)	17:36	14	09:50 (26)	18:42			20:54	22:02	22:49
18	09:12		10:48 (3)	08:05		09:39 (26)	06:47			06:19	05:04	04:27
	16:23	61	13:38 (4)	17:38	8	09:47 (26)	18:45			20:56	22:04	22:49
19	09:10		10:48 (3)	08:02			06:44			06:16	05:02	04:27
	16:26	58	13:37 (4)	17:41			18:47			20:58	22:06	22:50
20	09:09		10:48 (3)	08:00			06:42			06:13	05:00	04:27
	16:28	57	13:37 (4)	17:43			18:49			21:01	22:08	22:50
21	09:07		10:48 (3)	07:57			06:39			06:10	04:58	04:27
	16:30	53	13:36 (4)	17:45			18:52			21:03	22:10	22:50
22	09:05		10:49 (3)	07:54			06:36			06:08	04:56	04:27
	16:32	49	13:35 (4)	17:48			18:54			21:05	22:12	22:51
23	09:04		10:49 (3)	07:52			06:33			06:05	04:54	04:27
	16:35	43	13:33 (4)	17:50			18:56			21:08	22:14	22:51
24	09:02		10:48 (3)	07:49		08:36 (28)	06:30			06:02	04:53	04:28
	16:37	29	11:17 (3)	17:53	5	08:41 (28)	18:59			21:10	22:16	22:51
25	09:00		10:49 (3)	07:46		08:32 (28)	06:27			06:00	04:51	04:28
	16:39	29	11:18 (3)	17:55	12	08:44 (28)	19:01			21:12	22:18	22:51
26	08:58		10:49 (3)	07:44		08:30 (28)	06:24			05:57	04:49	04:29
	16:42	29	11:18 (3)	17:58	15	08:45 (28)	19:03			21:14	22:20	22:51
27	08:56		10:50 (3)	07:41		08:29 (28)	06:21			05:54	04:47	04:29
	16:44	29	11:19 (3)	18:00	17	08:46 (28)	19:05			21:17	22:22	22:50
28	08:54		10:50 (3)	07:38		08:29 (28)	06:18			05:52	04:46	04:30
	16:46	28	11:18 (3)	18:02	18	08:47 (28)	19:08			21:19	22:24	22:50
29	08:52		10:51 (3)				07:16			05:49	04:44	04:30
	16:49	27	11:18 (3)				20:10			21:21	22:26	22:50
30	08:50		10:51 (3)				07:13			05:47	04:43	04:31
	16:51	26	11:17 (3)				20:12			21:24	22:27	22:49
31	08:48		10:52 (3)				07:10				04:41	
	16:54	25	11:17 (3)				20:15				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		1753			490			132				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:52		09:00 (26)	09:00		10:33 (3)
	22:49		22:01		20:40		19:13			16:49	24	09:24 (26)	15:51	76	13:20 (4)
2	04:33		05:26		06:35		07:42			07:54		09:01 (26)	09:02		10:34 (3)
	22:48		21:59		20:37		19:10			16:46	23	09:24 (26)	15:50	78	13:20 (4)
3	04:34		05:29		06:38		07:44			07:56		09:01 (26)	09:04		10:35 (3)
	22:47		21:56		20:34		19:07			16:44	23	09:24 (26)	15:49	78	13:20 (4)
4	04:35		05:31		06:40		07:46			07:59		09:02 (26)	09:05		10:37 (3)
	22:47		21:54		20:31		19:05			16:42	22	09:24 (26)	15:48	77	13:21 (4)
5	04:36		05:33		06:42		07:48		09:11 (28)	08:01		09:02 (26)	09:07		10:39 (3)
	22:46		21:52		20:28		19:02	3	09:14 (28)	16:39	26	10:37 (3)	15:47	76	13:21 (4)
6	04:37		05:35		06:44		07:51		09:06 (28)	08:04		09:03 (26)	09:09		10:46 (1)
	22:45		21:49		20:26		18:59	11	09:17 (28)	16:37	32	10:42 (3)	15:46	70	13:22 (4)
7	04:39		05:37		06:47		07:53		09:05 (28)	08:06		09:05 (26)	09:10		10:47 (1)
	22:44		21:47		20:23		18:56	15	09:20 (28)	16:35	34	10:44 (3)	15:46	69	13:22 (4)
8	04:40		05:40		06:49		07:55		09:03 (28)	08:08		09:05 (26)	09:12		10:48 (1)
	22:43		21:44		20:20		18:53	17	09:20 (28)	16:32	35	10:45 (3)	15:45	69	13:23 (4)
9	04:41		05:42		06:51		07:58		09:02 (28)	08:11		09:08 (26)	09:14		10:49 (1)
	22:42		21:42		20:17		18:50	18	09:20 (28)	16:30	33	10:47 (3)	15:44	68	13:23 (4)
10	04:43		05:44		06:53		08:00		09:02 (28)	08:13		09:13 (26)	09:15		10:49 (1)
	22:41		21:39		20:14		18:48	19	09:21 (28)	16:28	25	10:48 (3)	15:44	69	13:23 (4)
11	04:44		05:46		06:55		08:02		09:01 (28)	08:16		10:22 (3)	09:16		10:50 (1)
	22:39		21:37		20:11		18:45	20	09:21 (28)	16:26	26	10:48 (3)	15:43	69	13:24 (4)
12	04:46		05:49		06:58		08:04		09:01 (28)	08:18		10:22 (3)	09:18		10:50 (1)
	22:38		21:34		20:08		18:42	20	09:21 (28)	16:24	27	10:49 (3)	15:43	67	13:24 (4)
13	04:47		05:51		07:00		08:07		09:01 (28)	08:20		10:22 (3)	09:19		10:51 (1)
	22:37		21:32		20:05		18:39	19	09:20 (28)	16:21	28	10:50 (3)	15:43	68	13:25 (4)
14	04:49		05:53		07:02		08:09		09:01 (28)	08:23		10:23 (3)	09:20		10:52 (1)
	22:35		21:29		20:02		18:36	18	09:19 (28)	16:19	28	10:51 (3)	15:42	67	13:25 (4)
15	04:51		05:55		07:04		08:11		09:02 (28)	08:25		10:22 (3)	09:21		10:52 (1)
	22:34		21:26		20:00		18:34	16	09:18 (28)	16:17	29	10:51 (3)	15:42	66	13:25 (4)
16	04:53		05:57		07:06		08:14		09:03 (28)	08:27		10:22 (3)	09:22		10:53 (1)
	22:32		21:24		19:57		18:31	13	09:16 (28)	16:15	29	10:51 (3)	15:42	64	13:25 (4)
17	04:54		06:00		07:09		08:16		09:05 (28)	08:30		10:23 (3)	09:23		10:54 (1)
	22:31		21:21		19:54		18:28	10	09:15 (28)	16:13	29	10:52 (3)	15:42	67	13:27 (4)
18	04:56		06:02		07:11		08:18			08:32		10:22 (3)	09:24		10:54 (1)
	22:29		21:19		19:51		18:25			16:11	29	10:51 (3)	15:42	64	13:26 (4)
19	04:58		06:04		07:13		08:21			08:34		10:23 (3)	09:25		10:55 (1)
	22:27		21:16		19:48		18:23			16:10	43	13:07 (4)	15:42	65	13:27 (4)
20	05:00		06:06		07:15		08:23			08:37		10:24 (3)	09:26		10:55 (1)
	22:25		21:13		19:45		18:20			16:08	49	13:10 (4)	15:43	66	13:28 (4)
21	05:02		06:09		07:17		08:25			08:39		10:23 (3)	09:26		10:56 (1)
	22:24		21:10		19:42		18:17			16:06	53	13:11 (4)	15:43	66	13:29 (4)
22	05:04		06:11		07:20		08:28			08:41		10:24 (3)	09:27		10:56 (1)
	22:22		21:08		19:39		18:15			16:04	57	13:13 (4)	15:44	65	13:28 (4)
23	05:06		06:13		07:22		08:30			08:43		10:24 (3)	09:27		10:56 (1)
	22:20		21:05		19:36		18:12			16:03	58	13:13 (4)	15:44	66	13:29 (4)
24	05:08		06:15		07:24		08:32		10:07 (26)	08:45		10:26 (3)	09:28		10:58 (1)
	22:18		21:02		19:33		18:09	10	10:17 (26)	16:01	60	13:15 (4)	15:45	64	13:30 (4)
25	05:10		06:18		07:26		07:35		09:05 (26)	08:48		10:26 (3)	09:28		10:58 (1)
	22:16		20:59		19:30		17:07	15	09:20 (26)	15:59	61	13:15 (4)	15:45	65	13:30 (4)
26	05:12		06:20		07:28		07:37		09:04 (26)	08:50		10:27 (3)	09:28		10:58 (1)
	22:14		20:57		19:28		17:04	18	09:22 (26)	15:58	62	13:16 (4)	15:46	66	13:31 (4)
27	05:14		06:22		07:31		07:40		09:02 (26)	08:52		10:28 (3)	09:28		10:58 (1)
	22:12		20:54		19:25		17:02	20	09:22 (26)	15:56	67	13:17 (4)	15:47	66	13:31 (4)
28	05:16		06:24		07:33		07:42		09:02 (26)	08:54		10:29 (3)	09:29		10:59 (1)
	22:10		20:51		19:22		16:59	21	09:23 (26)	15:55	72	13:18 (4)	15:48	67	13:32 (4)
29	05:18		06:27		07:35		07:44		09:02 (26)	08:56		10:30 (3)	09:29		10:58 (1)
	22:08		20:48		19:19		16:56	22	09:24 (26)	15:54	74	13:18 (4)	15:49	67	13:32 (4)
30	05:20		06:29		07:37		07:47		09:01 (26)	08:58		10:31 (3)	09:28		10:59 (1)
	22:05		20:45		19:16		16:54	23	09:24 (26)	15:53	75	13:18 (4)	15:50	66	13:32 (4)
31	05:22		06:31				07:49		09:01 (26)				09:28		11:00 (1)
	22:03		20:43				16:51	23	09:24 (26)				15:51	66	13:33 (4)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								351			1233			2117	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		11:05 (1)	08:46		09:41 (26)	07:35	08:31 (28)	07:07	05:44	04:40
	15:53	69	13:41 (4)	16:56	36	11:24 (3)	18:05	20	08:51 (28)	20:17	21:26	22:31
2	09:28		11:05 (1)	08:44		09:40 (26)	07:33		08:31 (28)	07:04	05:41	04:39
	15:54	68	13:41 (4)	16:59	35	11:22 (3)	18:07	20	08:51 (28)	20:19	21:28	22:32
3	09:27		11:05 (1)	08:41		09:39 (26)	07:30		08:31 (28)	07:01	05:39	04:37
	15:56	69	13:41 (4)	17:01	35	11:21 (3)	18:10	19	08:50 (28)	20:21	21:31	22:34
4	09:27		11:00 (3)	08:39		09:38 (26)	07:27		08:31 (28)	06:58	05:36	04:36
	15:57	74	13:42 (4)	17:04	32	11:19 (3)	18:12	19	08:50 (28)	20:24	21:33	22:35
5	09:26		10:59 (3)	08:37		09:38 (26)	07:24		08:32 (28)	06:55	05:34	04:35
	15:59	76	13:42 (4)	17:06	22	10:00 (26)	18:14	16	08:48 (28)	20:26	21:35	22:37
6	09:25		10:58 (3)	08:35		09:37 (26)	07:22		08:33 (28)	06:53	05:31	04:34
	16:00	77	13:43 (4)	17:08	23	10:00 (26)	18:17	14	08:47 (28)	20:28	21:38	22:38
7	09:25		10:58 (3)	08:32		09:36 (26)	07:19		08:35 (28)	06:50	05:29	04:33
	16:02	76	13:43 (4)	17:11	24	10:00 (26)	18:19	9	08:44 (28)	20:31	21:40	22:39
8	09:24		10:57 (3)	08:30		09:37 (26)	07:16			06:47	05:27	04:32
	16:04	78	13:44 (4)	17:13	24	10:01 (26)	18:21			20:33	21:42	22:41
9	09:23		10:57 (3)	08:28		09:36 (26)	07:13			06:44	05:24	04:31
	16:05	77	13:44 (4)	17:16	24	10:00 (26)	18:24			20:35	21:44	22:42
10	09:22		10:56 (3)	08:25		09:37 (26)	07:10			06:41	05:22	04:30
	16:07	77	13:44 (4)	17:18	24	10:01 (26)	18:26			20:38	21:47	22:43
11	09:21		10:56 (3)	08:23		09:37 (26)	07:07			06:38	05:20	04:30
	16:09	76	13:45 (4)	17:21	23	10:00 (26)	18:28			20:40	21:49	22:44
12	09:20		10:56 (3)	08:20		09:37 (26)	07:05			06:36	05:17	04:29
	16:11	74	13:44 (4)	17:23	23	10:00 (26)	18:31			20:42	21:51	22:45
13	09:19		10:56 (3)	08:18		09:38 (26)	07:02			06:33	05:15	04:28
	16:13	73	13:45 (4)	17:26	21	09:59 (26)	18:33			20:44	21:53	22:46
14	09:17		10:56 (3)	08:15		09:39 (26)	06:59			06:30	05:13	04:28
	16:15	69	13:45 (4)	17:28	20	09:59 (26)	18:35			20:47	21:55	22:47
15	09:16		10:55 (3)	08:13		09:40 (26)	06:56			06:27	05:11	04:28
	16:17	61	13:45 (4)	17:31	17	09:57 (26)	18:38			20:49	21:58	22:47
16	09:15		10:55 (3)	08:10		09:42 (26)	06:53			06:24	05:08	04:27
	16:19	59	13:44 (4)	17:33	13	09:55 (26)	18:40			20:51	22:00	22:48
17	09:13		10:56 (3)	08:08		09:45 (26)	06:50			06:21	05:06	04:27
	16:21	59	13:45 (4)	17:36	8	09:53 (26)	18:42			20:54	22:02	22:49
18	09:12		10:56 (3)	08:05			06:47			06:19	05:04	04:27
	16:23	58	13:45 (4)	17:38			18:45			20:56	22:04	22:49
19	09:10		10:56 (3)	08:02			06:44			06:16	05:02	04:27
	16:26	55	13:44 (4)	17:41			18:47			20:58	22:06	22:50
20	09:09		10:56 (3)	08:00			06:42			06:13	05:00	04:27
	16:28	54	13:44 (4)	17:43			18:49			21:01	22:08	22:50
21	09:07		10:56 (3)	07:57			06:39			06:10	04:58	04:27
	16:30	50	13:43 (4)	17:45			18:52			21:03	22:10	22:50
22	09:05		10:56 (3)	07:54			06:36			06:08	04:56	04:27
	16:32	45	13:42 (4)	17:48			18:54			21:05	22:12	22:51
23	09:04		10:57 (3)	07:52		08:40 (28)	06:33			06:05	04:54	04:27
	16:35	40	13:40 (4)	17:50	5	08:45 (28)	18:56			21:08	22:14	22:51
24	09:02		10:56 (3)	07:49		08:36 (28)	06:30			06:02	04:53	04:28
	16:37	32	13:36 (4)	17:53	12	08:48 (28)	18:59			21:10	22:16	22:51
25	09:00		10:57 (3)	07:46		08:34 (28)	06:27			06:00	04:51	04:28
	16:39	29	11:26 (3)	17:55	15	08:49 (28)	19:01			21:12	22:18	22:51
26	08:58		10:57 (3)	07:44		08:33 (28)	06:24			05:57	04:49	04:29
	16:42	29	11:26 (3)	17:58	17	08:50 (28)	19:03			21:14	22:20	22:51
27	08:56		10:58 (3)	07:41		08:32 (28)	06:21			05:54	04:47	04:29
	16:44	28	11:26 (3)	18:00	18	08:50 (28)	19:05			21:17	22:22	22:50
28	08:54		10:58 (3)	07:38		08:32 (28)	06:18			05:52	04:46	04:30
	16:46	28	11:26 (3)	18:02	19	08:51 (28)	19:08			21:19	22:24	22:50
29	08:52		10:59 (3)				07:16			05:49	04:44	04:30
	16:49	27	11:26 (3)				20:10			21:21	22:26	22:50
30	08:50		10:59 (3)				07:13			05:47	04:43	04:31
	16:51	26	11:25 (3)				20:12			21:24	22:27	22:49
31	08:48		09:43 (26)				07:10				04:41	
	16:54	32	11:24 (3)				20:15				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		1745			490			117				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December		
1	04:32	05:24	06:33	07:39		07:51		09:06 (26)	09:00	10:39 (3)
	22:49	22:01	20:40	19:13		16:49	24	09:30 (26)	15:51	75 13:27 (4)
2	04:33	05:26	06:35	07:42		07:54		09:06 (26)	09:02	10:39 (3)
	22:48	21:59	20:37	19:10		16:46	24	09:30 (26)	15:50	77 13:27 (4)
3	04:34	05:29	06:38	07:44		07:56		09:06 (26)	09:04	10:40 (3)
	22:47	21:56	20:34	19:07		16:44	24	09:30 (26)	15:49	78 13:27 (4)
4	04:35	05:31	06:40	07:46		07:59		09:07 (26)	09:05	10:41 (3)
	22:47	21:54	20:31	19:05		16:42	23	09:30 (26)	15:48	79 13:28 (4)
5	04:36	05:33	06:42	07:48		08:01		09:07 (26)	09:07	10:43 (3)
	22:46	21:52	20:28	19:02		16:39	22	09:29 (26)	15:47	76 13:28 (4)
6	04:37	05:35	06:44	07:51	09:12 (28)	08:04		09:08 (26)	09:09	10:44 (3)
	22:45	21:49	20:26	18:59	7 09:19 (28)	16:37	21	09:29 (26)	15:46	77 13:29 (4)
7	04:39	05:37	06:47	07:53	09:10 (28)	08:06		09:09 (26)	09:10	10:46 (3)
	22:44	21:47	20:23	18:56	12 09:22 (28)	16:35	32	10:50 (3)	15:46	76 13:29 (4)
8	04:40	05:40	06:49	07:55	09:08 (28)	08:08		09:09 (26)	09:12	10:48 (3)
	22:43	21:44	20:20	18:53	15 09:23 (28)	16:32	34	10:51 (3)	15:45	74 13:30 (4)
9	04:41	05:42	06:51	07:58	09:06 (28)	08:11		09:10 (26)	09:14	10:51 (3)
	22:42	21:42	20:17	18:50	18 09:24 (28)	16:30	36	10:53 (3)	15:44	72 13:30 (4)
10	04:43	05:44	06:53	08:00	09:06 (28)	08:13		09:12 (26)	09:15	10:54 (1)
	22:41	21:39	20:14	18:48	19 09:25 (28)	16:28	35	10:55 (3)	15:44	68 13:30 (4)
11	04:44	05:46	06:55	08:02	09:05 (28)	08:16		09:14 (26)	09:16	10:55 (1)
	22:39	21:37	20:11	18:45	19 09:24 (28)	16:26	33	10:55 (3)	15:43	68 13:31 (4)
12	04:46	05:49	06:58	08:04	09:05 (28)	08:18		10:31 (3)	09:18	10:55 (1)
	22:38	21:34	20:08	18:42	20 09:25 (28)	16:24	26	10:57 (3)	15:43	68 13:31 (4)
13	04:47	05:51	07:00	08:07	09:04 (28)	08:20		10:31 (3)	09:19	10:56 (1)
	22:37	21:32	20:05	18:39	20 09:24 (28)	16:21	27	10:58 (3)	15:43	68 13:32 (4)
14	04:49	05:53	07:02	08:09	09:04 (28)	08:23		10:31 (3)	09:20	10:57 (1)
	22:35	21:29	20:02	18:36	19 09:23 (28)	16:19	28	10:59 (3)	15:42	67 13:32 (4)
15	04:51	05:55	07:04	08:11	09:05 (28)	08:25		10:30 (3)	09:21	10:57 (1)
	22:34	21:26	20:00	18:34	18 09:23 (28)	16:17	28	10:58 (3)	15:42	68 13:32 (4)
16	04:53	05:57	07:06	08:14	09:05 (28)	08:27		10:30 (3)	09:22	10:57 (1)
	22:32	21:24	19:57	18:31	16 09:21 (28)	16:15	29	10:59 (3)	15:42	68 13:32 (4)
17	04:54	06:00	07:09	08:16	09:07 (28)	08:30		10:31 (3)	09:23	10:59 (1)
	22:31	21:21	19:54	18:28	14 09:21 (28)	16:13	29	11:00 (3)	15:42	66 13:34 (4)
18	04:56	06:02	07:11	08:18	09:08 (28)	08:32		10:30 (3)	09:24	10:59 (1)
	22:29	21:19	19:51	18:25	10 09:18 (28)	16:11	32	13:10 (4)	15:42	66 13:33 (4)
19	04:58	06:04	07:13	08:21		08:34		10:31 (3)	09:25	10:59 (1)
	22:27	21:16	19:48	18:23		16:10	40	13:14 (4)	15:42	67 13:34 (4)
20	05:00	06:06	07:15	08:23		08:37		10:31 (3)	09:26	11:00 (1)
	22:25	21:13	19:45	18:20		16:08	45	13:17 (4)	15:43	66 13:35 (4)
21	05:02	06:09	07:17	08:25		08:39		10:31 (3)	09:26	11:01 (1)
	22:24	21:10	19:42	18:17		16:06	50	13:18 (4)	15:43	66 13:35 (4)
22	05:04	06:11	07:20	08:28		08:41		10:32 (3)	09:27	11:01 (1)
	22:22	21:08	19:39	18:15		16:04	54	13:20 (4)	15:44	66 13:35 (4)
23	05:06	06:13	07:22	08:30		08:43		10:32 (3)	09:27	11:01 (1)
	22:20	21:05	19:36	18:12		16:03	55	13:20 (4)	15:44	66 13:36 (4)
24	05:08	06:15	07:24	08:32		08:45		10:33 (3)	09:28	11:02 (1)
	22:18	21:02	19:33	18:09		16:01	58	13:22 (4)	15:45	66 13:37 (4)
25	05:10	06:18	07:26	07:35	09:13 (26)	08:48		10:33 (3)	09:28	11:03 (1)
	22:16	20:59	19:30	17:07	10 09:23 (26)	15:59	59	13:22 (4)	15:45	66 13:37 (4)
26	05:12	06:20	07:28	07:37	09:11 (26)	08:50		10:34 (3)	09:28	11:03 (1)
	22:14	20:57	19:28	17:04	15 09:26 (26)	15:58	60	13:24 (4)	15:46	67 13:38 (4)
27	05:14	06:22	07:31	07:40	09:09 (26)	08:52		10:34 (3)	09:28	11:03 (1)
	22:12	20:54	19:25	17:01	18 09:27 (26)	15:56	62	13:24 (4)	15:47	68 13:38 (4)
28	05:16	06:24	07:33	07:42	09:08 (26)	08:54		10:36 (3)	09:29	11:04 (1)
	22:10	20:51	19:22	16:59	20 09:28 (26)	15:55	69	13:25 (4)	15:48	66 13:39 (4)
29	05:18	06:27	07:35	07:44	09:08 (26)	08:56		10:36 (3)	09:29	11:03 (1)
	22:08	20:48	19:19	16:56	21 09:29 (26)	15:54	72	13:25 (4)	15:49	68 13:39 (4)
30	05:20	06:29	07:37	07:47	09:07 (26)	08:58		10:37 (3)	09:28	11:04 (1)
	22:05	20:45	19:16	16:54	22 09:29 (26)	15:53	74	13:26 (4)	15:50	68 13:39 (4)
31	05:22	06:31		07:49	09:07 (26)				09:28	11:05 (1)
	22:03	20:43		16:51	23 09:30 (26)				15:51	68 13:40 (4)
Potential sun hours	546	478	386	319		236			199	
Total, worst case					336		1205			2159

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February	March		April	May	June	July	August	September		October		November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40		08:16 (4)	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	3	08:19 (4)	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42			07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10			16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44			07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08			16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46			07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05			16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49			08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02			16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51			08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59			16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53			08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56			16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55			08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53			16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58			08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51			16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00			08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48			16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02			08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45			16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05			08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42			16:24	15:43
13	09:19	08:18	07:02		07:33 (4)	06:33	05:15	04:29	04:48	05:51		07:00			08:20	09:19
	16:13	17:26	18:33	9	07:42 (4)	20:45	21:53	22:46	22:37	21:32		20:05			16:22	15:43
14	09:17	08:15	06:59		07:31 (4)	06:30	05:13	04:28	04:49	05:53		07:02			08:23	09:20
	16:15	17:28	18:36	13	07:44 (4)	20:47	21:56	22:47	22:35	21:29		20:03			16:20	15:43
15	09:16	08:13	06:56		07:29 (4)	06:27	05:11	04:28	04:51	05:55		07:04			08:25	09:21
	16:17	17:31	18:38	16	07:45 (4)	20:49	21:58	22:47	22:34	21:27		20:00			16:17	15:42
16	09:15	08:10	06:53		07:28 (4)	06:24	05:09	04:28	04:53	05:58		07:06			08:27	09:22
	16:19	17:33	18:40	18	07:46 (4)	20:51	22:00	22:48	22:32	21:24		19:57			16:15	15:42
17	09:13	08:08	06:50		07:26 (4)	06:22	05:06	04:27	04:54	06:00		07:09			08:30	09:23
	16:21	17:36	18:43	20	07:46 (4)	20:54	22:02	22:49	22:31	21:21		19:54			16:14	15:42
18	09:12	08:05	06:47		07:26 (4)	06:19	05:04	04:27	04:56	06:02		07:11		08:19 (4)	08:32	09:24
	16:24	17:38	18:45	20	07:46 (4)	20:56	22:04	22:49	22:29	21:19		19:51	5	08:24 (4)	16:12	15:42
19	09:10	08:03	06:45		07:25 (4)	06:16	05:02	04:27	04:58	06:04		07:13		08:15 (4)	08:34	09:25
	16:26	17:41	18:47	21	07:46 (4)	20:58	22:06	22:50	22:27	21:16		19:48	12	08:27 (4)	16:10	15:43
20	09:09	08:00	06:42		07:26 (4)	06:13	05:00	04:27	05:00	06:07		07:15		08:13 (4)	08:37	09:26
	16:28	17:43	18:49	20	07:46 (4)	21:01	22:08	22:50	22:26	21:13		19:45	15	08:28 (4)	16:08	15:43
21	09:07	07:57	06:39		07:26 (4)	06:11	04:58	04:27	05:02	06:09		07:17		08:12 (4)	08:39	09:26
	16:30	17:46	18:52	20	07:46 (4)	21:03	22:10	22:50	22:24	21:11		19:42	18	08:30 (4)	16:06	15:43
22	09:05	07:55	06:36		07:26 (4)	06:08	04:56	04:27	05:04	06:11		07:20		08:11 (4)	08:41	09:27
	16:33	17:48	18:54	19	07:45 (4)	21:05	22:12	22:51	22:22	21:08		19:39	19	08:30 (4)	16:04	15:44
23	09:04	07:52	06:33		07:27 (4)	06:05	04:55	04:28	05:06	06:13		07:22		08:10 (4)	08:43	09:27
	16:35	17:51	18:56	16	07:43 (4)	21:08	22:14	22:51	22:20	21:05		19:36	20	08:30 (4)	16:03	15:44
24	09:02	07:49	06:30		07:28 (4)	06:03	04:53	04:28	05:08	06:16		07:24		08:09 (4)	08:46	09:28
	16:37	17:53	18:59	13	07:41 (4)	21:10	22:16	22:51	22:18	21:02		19:34	21	08:30 (4)	16:01	15:45
25	09:00	07:47	06:27		07:30 (4)	06:00	04:51	04:28	05:10	06:18		07:26		08:09 (4)	08:48	09:28
	16:39	17:55	19:01	8	07:38 (4)	21:12	22:18	22:51	22:16	21:00		19:31	20	08:29 (4)	16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20		07:28		08:09 (4)	08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57		19:28	20	08:29 (4)	15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22		07:31		08:09 (4)	08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54		19:25	19	08:28 (4)	15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24		07:33		08:09 (4)	08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51		19:22	18	08:27 (4)	15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27		07:35		08:10 (4)	08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48		19:19	15	08:25 (4)	15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29		07:37		08:12 (4)	08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46		19:16	12	08:24 (4)	15:53	15:50
31	08:48		07:10				04:41		05:22	06:31				07:49		09:28
	16:54		20:15				22:29		22:03	20:43				16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319		236	200	
Total, worst case				213							214		3			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:26 (2)	08:46	10:08 (3)	07:35	07:07	05:44	04:40
	15:53	51	12:42 (4)	16:56	26	10:34 (3)	18:05	20:17	21:26	22:31
2	09:28		11:26 (2)	08:44	10:07 (3)	07:33	07:04	05:41	04:39
	15:54	51	12:42 (4)	16:59	27	10:34 (3)	18:07	20:19	21:28	22:32
3	09:27		11:26 (2)	08:41	10:08 (3)	07:30	07:01	05:39	04:37
	15:56	52	12:42 (4)	17:01	26	10:34 (3)	18:10	20:21	21:31	22:34
4	09:27		11:27 (2)	08:39	10:07 (3)	07:27	06:58	05:36	04:36
	15:57	52	12:43 (4)	17:04	27	10:34 (3)	18:12	20:24	21:33	22:35
5	09:26		11:27 (2)	08:37	10:08 (3)	07:24	06:55	05:34	04:35
	15:59	52	12:43 (4)	17:06	26	10:34 (3)	18:14	20:26	21:35	22:37
6	09:25		11:28 (2)	08:35	10:08 (3)	07:22	06:53	05:31	04:34
	16:00	51	12:43 (4)	17:09	26	10:34 (3)	18:17	20:28	21:38	22:38
7	09:25		11:28 (2)	08:32	10:08 (3)	07:19	06:50	05:29	04:33
	16:02	52	12:44 (4)	17:11	25	10:33 (3)	18:19	20:31	21:40	22:39
8	09:24		10:35 (1)	08:30	10:10 (3)	07:16	06:47	05:27	04:32
	16:04	58	12:45 (4)	17:13	23	10:33 (3)	18:21	20:33	21:42	22:41
9	09:23		10:34 (1)	08:28	10:10 (3)	07:13	06:44	05:24	04:31
	16:05	60	12:45 (4)	17:16	22	10:32 (3)	18:24	20:35	21:44	22:42
10	09:22		10:33 (1)	08:25	09:11 (26)	07:10	06:41	05:22	04:30
	16:07	62	12:45 (4)	17:18	27	10:31 (3)	18:26	20:38	21:47	22:43
11	09:21		10:33 (1)	08:23	09:09 (26)	07:07	06:38	05:20	04:30
	16:09	63	12:46 (4)	17:21	28	10:29 (3)	18:28	20:40	21:49	22:44
12	09:20		10:32 (1)	08:20	09:07 (26)	07:05	06:36	05:17	04:29
	16:11	64	12:46 (4)	17:23	27	10:27 (3)	18:31	20:42	21:51	22:45
13	09:19		10:33 (1)	08:18	09:06 (26)	07:02	06:33	05:15	04:28
	16:13	64	12:46 (4)	17:26	18	09:24 (26)	18:33	20:44	21:53	22:46
14	09:17		10:32 (1)	08:15	09:05 (26)	06:59	06:30	05:13	04:28
	16:15	64	12:46 (4)	17:28	20	09:25 (26)	18:35	20:47	21:56	22:47
15	09:16		10:32 (1)	08:13	09:05 (26)	06:56	06:27	05:11	04:28
	16:17	63	12:46 (4)	17:31	20	09:25 (26)	18:38	20:49	21:58	22:47
16	09:15		10:31 (1)	08:10	09:04 (26)	06:53	06:24	05:08	04:27
	16:19	63	12:46 (4)	17:33	21	09:25 (26)	18:40	20:51	22:00	22:48
17	09:13		10:32 (1)	08:08	09:05 (26)	06:50	06:22	05:06	04:27
	16:21	60	12:46 (4)	17:36	21	09:26 (26)	18:42	20:54	22:02	22:49
18	09:12		10:32 (1)	08:05	09:05 (26)	06:47	06:19	05:04	04:27
	16:23	58	12:46 (4)	17:38	20	09:25 (26)	18:45	20:56	22:04	22:49
19	09:10		10:32 (1)	08:02	09:05 (26)	06:44	06:16	05:02	04:27
	16:26	53	12:46 (4)	17:41	20	09:25 (26)	18:47	20:58	22:06	22:50
20	09:09		10:33 (1)	08:00	09:05 (26)	06:42	06:13	05:00	04:27
	16:28	42	12:45 (4)	17:43	19	09:24 (26)	18:49	21:01	22:08	22:50
21	09:07		10:33 (1)	07:57	09:05 (26)	06:39	06:11	04:58	04:27
	16:30	42	12:45 (4)	17:46	18	09:23 (26)	18:52	21:03	22:10	22:50
22	09:05		10:16 (3)	07:54	09:07 (26)	06:36	06:08	04:56	04:27
	16:32	44	12:44 (4)	17:48	15	09:22 (26)	18:54	21:05	22:12	22:51
23	09:04		10:13 (3)	07:52	09:09 (26)	06:33	06:05	04:54	04:27
	16:35	48	12:43 (4)	17:50	11	09:20 (26)	18:56	21:08	22:14	22:51
24	09:02		10:11 (3)	07:49	09:13 (26)	06:30	06:02	04:53	04:28
	16:37	45	12:40 (4)	17:53	3	09:16 (26)	18:59	21:10	22:16	22:51
25	09:00		10:10 (3)	07:46		06:27	06:00	04:51	04:28
	16:39	40	12:37 (4)	17:55		19:01	21:12	22:18	22:51
26	08:58		10:09 (3)	07:44		06:24	05:57	04:49	04:29
	16:42	36	10:52 (1)	17:58		19:03	21:15	22:20	22:51
27	08:56		10:09 (3)	07:41		06:21	05:54	04:47	04:29
	16:44	37	10:52 (1)	18:00		19:05	21:17	22:22	22:50
28	08:54		10:08 (3)	07:38		06:18	05:52	04:46	04:30
	16:46	35	10:50 (1)	18:02		19:08	21:19	22:24	22:50
29	08:52		10:08 (3)			07:16	05:49	04:44	04:30
	16:49	33	10:49 (1)			20:10	21:21	22:26	22:50
30	08:50		10:08 (3)			07:13	05:47	04:43	04:31
	16:51	25	10:33 (3)			20:12	21:24	22:27	22:49
31	08:48		10:07 (3)			07:10		04:41	
	16:54	26	10:33 (3)			20:15		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1546			516				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:40			07:52		08:41 (26)	09:00		10:15 (1)
	22:49	22:01	20:40	19:13			16:49	27	10:01 (3)	15:51	63	12:28 (4)
2	04:33	05:26	06:35	07:42			07:54		09:40 (3)	09:02		10:16 (1)
	22:48	21:59	20:37	19:10			16:46	22	10:02 (3)	15:50	62	12:28 (4)
3	04:34	05:29	06:38	07:44			07:56		09:39 (3)	09:04		10:17 (1)
	22:47	21:56	20:34	19:07			16:44	24	10:03 (3)	15:49	60	12:28 (4)
4	04:35	05:31	06:40	07:46			07:59		09:39 (3)	09:05		10:19 (1)
	22:47	21:54	20:31	19:05			16:42	25	10:04 (3)	15:48	57	12:29 (4)
5	04:36	05:33	06:42	07:48			08:01		09:38 (3)	09:07		11:13 (2)
	22:46	21:52	20:28	19:02			16:39	26	10:04 (3)	15:47	52	12:29 (4)
6	04:37	05:35	06:44	07:51			08:04		09:38 (3)	09:09		11:14 (2)
	22:45	21:49	20:26	18:59			16:37	26	10:04 (3)	15:46	52	12:30 (4)
7	04:39	05:37	06:47	07:53			08:06		09:38 (3)	09:10		11:14 (2)
	22:44	21:47	20:23	18:56			16:35	27	10:05 (3)	15:46	52	12:30 (4)
8	04:40	05:40	06:49	07:55			08:08		09:37 (3)	09:12		11:15 (2)
	22:43	21:44	20:20	18:53			16:32	27	10:04 (3)	15:45	52	12:31 (4)
9	04:41	05:42	06:51	07:58			08:11		09:38 (3)	09:14		11:16 (2)
	22:42	21:42	20:17	18:50			16:30	26	10:04 (3)	15:44	51	12:31 (4)
10	04:43	05:44	06:53	08:00			08:13		09:38 (3)	09:15		11:15 (2)
	22:41	21:39	20:14	18:48			16:28	27	10:05 (3)	15:44	52	12:31 (4)
11	04:44	05:46	06:55	08:02			08:16		09:38 (3)	09:16		11:16 (2)
	22:39	21:37	20:11	18:45			16:26	26	10:04 (3)	15:43	51	12:32 (4)
12	04:46	05:49	06:58	08:04			08:18		09:39 (3)	09:18		11:16 (2)
	22:38	21:34	20:08	18:42			16:24	25	10:04 (3)	15:43	51	12:32 (4)
13	04:48	05:51	07:00	08:07			08:20		09:40 (3)	09:19		11:17 (2)
	22:37	21:32	20:05	18:39			16:21	33	10:21 (1)	15:43	51	12:33 (4)
14	04:49	05:53	07:02	08:09			08:23		09:41 (3)	09:20		11:18 (2)
	22:35	21:29	20:02	18:36			16:19	35	10:23 (1)	15:42	50	12:33 (4)
15	04:51	05:55	07:04	08:11			08:25		09:41 (3)	09:21		11:18 (2)
	22:34	21:26	20:00	18:34			16:17	37	10:24 (1)	15:42	50	12:33 (4)
16	04:53	05:58	07:06	08:14			08:27		09:42 (3)	09:22		11:19 (2)
	22:32	21:24	19:57	18:31			16:15	36	10:25 (1)	15:42	50	12:34 (4)
17	04:54	06:00	07:09	08:16			08:30		09:44 (3)	09:23		11:20 (2)
	22:31	21:21	19:54	18:28			16:13	40	12:11 (4)	15:42	50	12:35 (4)
18	04:56	06:02	07:11	08:18		09:42 (26)	08:32		09:45 (3)	09:24		11:19 (2)
	22:29	21:19	19:51	18:25	7	09:49 (26)	16:11	45	12:14 (4)	15:42	49	12:34 (4)
19	04:58	06:04	07:13	08:21		09:39 (26)	08:34		09:47 (3)	09:25		11:20 (2)
	22:27	21:16	19:48	18:23	13	09:52 (26)	16:10	48	12:17 (4)	15:42	50	12:35 (4)
20	05:00	06:06	07:15	08:23		09:37 (26)	08:37		09:51 (3)	09:26		11:21 (2)
	22:26	21:13	19:45	18:20	16	09:53 (26)	16:08	44	12:19 (4)	15:43	50	12:36 (4)
21	05:02	06:09	07:17	08:25		09:36 (26)	08:39		10:08 (1)	09:26		11:22 (2)
	22:24	21:10	19:42	18:17	18	09:54 (26)	16:06	42	12:20 (4)	15:43	49	12:36 (4)
22	05:04	06:11	07:20	08:28		09:35 (26)	08:41		10:09 (1)	09:27		11:22 (2)
	22:22	21:08	19:39	18:15	19	09:54 (26)	16:04	42	12:21 (4)	15:44	49	12:36 (4)
23	05:06	06:13	07:22	08:30		09:35 (26)	08:43		10:08 (1)	09:27		11:22 (2)
	22:20	21:05	19:36	18:12	20	09:55 (26)	16:03	54	12:22 (4)	15:44	49	12:36 (4)
24	05:08	06:15	07:24	08:32		09:34 (26)	08:45		10:09 (1)	09:28		11:23 (2)
	22:18	21:02	19:33	18:09	21	09:55 (26)	16:01	58	12:23 (4)	15:45	50	12:38 (4)
25	05:10	06:18	07:26	07:35		08:34 (26)	08:48		10:09 (1)	09:28		11:23 (2)
	22:16	20:59	19:31	17:07	21	08:55 (26)	15:59	61	12:24 (4)	15:45	49	12:38 (4)
26	05:12	06:20	07:28	07:37		08:34 (26)	08:50		10:10 (1)	09:28		11:24 (2)
	22:14	20:57	19:28	17:04	21	08:55 (26)	15:58	62	12:25 (4)	15:46	49	12:38 (4)
27	05:14	06:22	07:31	07:40		08:34 (26)	08:52		10:11 (1)	09:29		11:24 (2)
	22:12	20:54	19:25	17:02	20	08:54 (26)	15:57	63	12:25 (4)	15:47	50	12:39 (4)
28	05:16	06:24	07:33	07:42		08:35 (26)	08:54		10:12 (1)	09:29		11:25 (2)
	22:10	20:51	19:22	16:59	19	08:54 (26)	15:55	63	12:26 (4)	15:48	50	12:40 (4)
29	05:18	06:27	07:35	07:44		08:36 (26)	08:56		10:13 (1)	09:29		11:24 (2)
	22:08	20:48	19:19	16:56	21	09:53 (3)	15:54	64	12:26 (4)	15:49	50	12:39 (4)
30	05:20	06:29	07:37	07:47		08:36 (26)	08:58		10:13 (1)	09:28		11:25 (2)
	22:05	20:45	19:16	16:54	29	09:57 (3)	15:53	65	12:27 (4)	15:50	50	12:40 (4)
31	05:22	06:31		07:49		08:38 (26)				09:28		11:26 (2)
	22:03	20:43		16:51	29	09:59 (3)				15:51	51	12:41 (4)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					274			1200			1601	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February			March			April	May	June	July	August	September			October			November	December
1	09:28	08:46			07:36		08:20 (4)	07:07	05:44	04:40	04:32	05:24	06:33			07:40		08:51 (4)	07:52	09:00
	15:53	16:56			18:05	13	08:33 (4)	20:17	21:26	22:31	22:49	22:01	20:40			19:13	25	09:16 (4)	16:49	15:51
2	09:28	08:44			07:33		08:18 (4)	07:04	05:42	04:39	04:33	05:27	06:36			07:42		08:49 (4)	07:54	09:02
	15:54	16:59			18:07	17	08:35 (4)	20:19	21:28	22:32	22:48	21:59	20:37			19:10	27	09:16 (4)	16:47	15:50
3	09:27	08:41			07:30		08:16 (4)	07:01	05:39	04:37	04:34	05:29	06:38			07:44		08:48 (4)	07:56	09:04
	15:56	17:01			18:10	20	08:36 (4)	20:22	21:31	22:34	22:47	21:56	20:34			19:08	28	09:16 (4)	16:44	15:49
4	09:27	08:39			07:27		08:14 (4)	06:58	05:37	04:36	04:35	05:31	06:40			07:46		08:49 (4)	07:59	09:05
	15:57	17:04			18:12	23	08:37 (4)	20:24	21:33	22:35	22:47	21:54	20:31			19:05	27	09:16 (4)	16:42	15:48
5	09:26	08:37			07:24		08:13 (4)	06:56	05:34	04:35	04:36	05:33	06:42			07:49		08:48 (4)	08:01	09:07
	15:59	17:06			18:14	25	08:38 (4)	20:26	21:35	22:37	22:46	21:52	20:28			19:02	28	09:16 (4)	16:39	15:47
6	09:25	08:35			07:22		08:12 (4)	06:53	05:32	04:34	04:38	05:35	06:44			07:51		08:47 (4)	08:04	09:09
	16:00	17:09			18:17	26	08:38 (4)	20:28	21:38	22:38	22:45	21:49	20:26			18:59	28	09:15 (4)	16:37	15:47
7	09:25	08:32			07:19		08:11 (4)	06:50	05:29	04:33	04:39	05:38	06:47			07:53		08:48 (4)	08:06	09:10
	16:02	17:11			18:19	27	08:38 (4)	20:31	21:40	22:39	22:44	21:47	20:23			18:56	27	09:15 (4)	16:35	15:46
8	09:24	08:30			07:16		08:11 (4)	06:47	05:27	04:32	04:40	05:40	06:49			07:55		08:48 (4)	08:08	09:12
	16:04	17:14			18:22	27	08:38 (4)	20:33	21:42	22:41	22:43	21:44	20:20			18:53	26	09:14 (4)	16:32	15:45
9	09:23	08:28			07:13		08:11 (4)	06:44	05:24	04:31	04:42	05:42	06:51			07:58		08:48 (4)	08:11	09:14
	16:06	17:16			18:24	28	08:39 (4)	20:35	21:44	22:42	22:42	21:42	20:17			18:50	24	09:12 (4)	16:30	15:44
10	09:22	08:25			07:10		08:11 (4)	06:41	05:22	04:31	04:43	05:44	06:53			08:00		08:50 (4)	08:13	09:15
	16:07	17:19			18:26	28	08:39 (4)	20:38	21:47	22:43	22:41	21:39	20:14			18:48	22	09:12 (4)	16:28	15:44
11	09:21	08:23			07:07		08:11 (4)	06:38	05:20	04:30	04:45	05:46	06:55			08:02		08:50 (4)	08:16	09:16
	16:09	17:21			18:29	27	08:38 (4)	20:40	21:49	22:44	22:39	21:37	20:11			18:45	20	09:10 (4)	16:26	15:43
12	09:20	08:20			07:05		08:11 (4)	06:36	05:17	04:29	04:46	05:49	06:58			08:04		08:53 (4)	08:18	09:18
	16:11	17:23			18:31	26	08:37 (4)	20:42	21:51	22:45	22:38	21:34	20:08			18:42	15	09:08 (4)	16:24	15:43
13	09:19	08:18			07:02		08:12 (4)	06:33	05:15	04:29	04:48	05:51	07:00			08:07		08:55 (4)	08:20	09:19
	16:13	17:26			18:33	24	08:36 (4)	20:45	21:53	22:46	22:37	21:32	20:05			18:39	10	09:05 (4)	16:22	15:43
14	09:17	08:15			06:59		08:12 (4)	06:30	05:13	04:28	04:49	05:53	07:02			08:09			08:23	09:20
	16:15	17:28			18:36	23	08:35 (4)	20:47	21:56	22:47	22:35	21:29	20:03			18:36			16:19	15:42
15	09:16	08:13			06:56		08:13 (4)	06:27	05:11	04:28	04:51	05:55	07:04			08:11			08:25	09:21
	16:17	17:31			18:38	20	08:33 (4)	20:49	21:58	22:47	22:34	21:27	20:00			18:34			16:17	15:42
16	09:15	08:10			06:53		08:15 (4)	06:24	05:09	04:27	04:53	05:58	07:06			08:14			08:27	09:22
	16:19	17:33			18:40	15	08:30 (4)	20:51	22:00	22:48	22:32	21:24	19:57			18:31			16:15	15:42
17	09:13	08:08			06:50		08:17 (4)	06:22	05:06	04:27	04:54	06:00	07:09			08:16			08:30	09:23
	16:21	17:36			18:43	10	08:27 (4)	20:54	22:02	22:49	22:31	21:21	19:54			18:28			16:14	15:42
18	09:12	08:05			06:47			06:19	05:04	04:27	04:56	06:02	07:11			08:18			08:32	09:24
	16:24	17:38			18:45			20:56	22:04	22:49	22:29	21:19	19:51			18:25			16:12	15:42
19	09:10	08:02			06:45			06:16	05:02	04:27	04:58	06:04	07:13			08:21			08:34	09:25
	16:26	17:41			18:47			20:58	22:06	22:50	22:27	21:16	19:48			18:23			16:10	15:43
20	09:09	08:00			06:42			06:13	05:00	04:27	05:00	06:07	07:15			08:23			08:37	09:26
	16:28	17:43			18:49			21:01	22:08	22:50	22:26	21:13	19:45			18:20			16:08	15:43
21	09:07	07:57			06:39			06:11	04:58	04:27	05:02	06:09	07:17			08:25			08:39	09:26
	16:30	17:46			18:52			21:03	22:10	22:50	22:24	21:10	19:42			18:17			16:06	15:43
22	09:05	07:55			06:36			06:08	04:56	04:27	05:04	06:11	07:20			08:28			08:41	09:27
	16:32	17:48			18:54			21:05	22:12	22:51	22:22	21:08	19:39			18:15			16:04	15:44
23	09:04	07:52			06:33			06:05	04:55	04:28	05:06	06:13	07:22			08:30			08:43	09:27
	16:35	17:50			18:56			21:08	22:14	22:51	22:20	21:05	19:36			18:12			16:03	15:44
24	09:02	07:49			06:30			06:02	04:53	04:28	05:08	06:16	07:24			08:32			08:45	09:28
	16:37	17:53			18:59			21:10	22:16	22:51	22:18	21:02	19:33			18:09			16:01	15:45
25	09:00	07:46			06:27			06:00	04:51	04:28	05:10	06:18	07:26			07:35			08:48	09:28
	16:39	17:55			19:01			21:12	22:18	22:51	22:16	21:00	19:31			17:07			16:00	15:46
26	08:58	07:44			06:24			05:57	04:49	04:29	05:12	06:20	07:28		09:02 (4)	07:37			08:50	09:28
	16:42	17:58			19:03			21:15	22:20	22:51	22:14	20:57	19:28	6	09:08 (4)	17:04			15:58	15:46
27	08:56	07:41			06:21			05:55	04:48	04:29	05:14	06:22	07:31		08:57 (4)	07:40			08:52	09:29
	16:44	18:00			19:05			21:17	22:22	22:50	22:12	20:54	19:25	14	09:11 (4)	17:02			15:57	15:47
28	08:54	07:38		08:26 (4)	06:19			05:52	04:46	04:30	05:16	06:24	07:33		08:55 (4)	07:42			08:54	09:29
	16:47	18:03	2	08:28 (4)	19:08			21:19	22:24	22:50	22:10	20:51	19:22	18	09:13 (4)	16:59			15:55	15:48
29	08:52				07:16			05:49	04:44	04:31	05:18	06:27	07:35		08:53 (4)	07:44			08:56	09:29
	16:49				20:10			21:21	22:26	22:50	22:08	20:48	19:19	21	09:14 (4)	16:57			15:54	15:49
30	08:50				07:13			05:47	04:43	04:31	05:20	06:29	07:37		08:52 (4)	07:47			08:58	09:28
	16:51				20:12			21:24	22:27	22:49	22:05	20:46	19:16	24	09:16 (4)	16:54			15:53	15:50
31	08:48				07:10				04:41		05:22	06:31				07:49				09:28
	16:54				20:15				22:29		22:03	20:43				16:52				15:51
Potential sun hours	221	260			365			432	521	547	545	478	386			319			236	200
Total, worst case			2			379								83			307			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November		December		
1	09:28		12:21 (28)	08:46		10:00 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:36 (32)	09:00	10:51 (27)
	15:53	20	12:41 (28)	16:56	20	10:20 (32)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6	09:42 (32)	15:51	28	12:23 (28)
2	09:28		12:22 (28)	08:44		09:59 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:34 (32)	09:02		10:51 (27)
	15:54	19	12:41 (28)	16:58	21	10:20 (32)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11	09:45 (32)	15:50	30	12:24 (28)
3	09:27		12:22 (28)	08:41		10:00 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:33 (32)	09:04		10:52 (27)
	15:55	19	12:41 (28)	17:01	20	10:20 (32)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14	09:47 (32)	15:49	29	12:25 (28)
4	09:27		11:12 (27)	08:39		10:00 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:31 (32)	09:05		10:53 (27)
	15:57	22	12:41 (28)	17:03	20	10:20 (32)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17	09:48 (32)	15:48	30	12:26 (28)
5	09:26		11:11 (27)	08:37		10:01 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:31 (32)	09:07		10:54 (27)
	15:58	26	12:42 (28)	17:06	19	10:20 (32)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18	09:49 (32)	15:47	29	12:27 (28)
6	09:25		11:10 (27)	08:35		10:01 (32)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		09:30 (32)	09:09		10:56 (27)
	16:00	28	12:42 (28)	17:08	18	10:19 (32)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20	09:50 (32)	15:46	28	12:28 (28)
7	09:25		11:09 (27)	08:32		10:01 (32)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		09:30 (32)	09:10		10:58 (27)
	16:02	29	12:42 (28)	17:11	17	10:18 (32)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20	09:50 (32)	15:45	26	12:29 (28)
8	09:24		11:09 (27)	08:30		10:03 (32)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		09:30 (32)	09:12		11:00 (27)
	16:03	30	12:42 (28)	17:13	15	10:18 (32)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20	09:50 (32)	15:45	23	12:30 (28)
9	09:23		11:09 (27)	08:27		10:04 (32)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		09:30 (32)	09:13		12:11 (28)
	16:05	30	12:42 (28)	17:16	12	10:16 (32)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20	09:50 (32)	15:44	19	12:30 (28)
10	09:22		11:08 (27)	08:25		10:07 (32)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		09:31 (32)	09:15		12:11 (28)
	16:07	30	12:41 (28)	17:18	5	10:12 (32)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20	09:51 (32)	15:44	19	12:30 (28)
11	09:21		11:09 (27)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		09:30 (32)	09:16		12:11 (28)
	16:09	28	12:41 (28)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20	09:50 (32)	15:43	20	12:31 (28)
12	09:20		11:08 (27)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		09:31 (32)	09:18		12:11 (28)
	16:11	27	12:40 (28)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27	10:58 (27)	15:43	20	12:31 (28)
13	09:19		11:08 (27)	08:18			07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20		09:32 (32)	09:19		12:12 (28)
	16:13	25	12:39 (28)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31	11:01 (27)	15:42	21	12:33 (28)
14	09:17		11:08 (27)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		09:33 (32)	09:20		12:12 (28)
	16:15	20	11:28 (27)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32	11:03 (27)	15:42	21	12:33 (28)
15	09:16		11:08 (27)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		09:34 (32)	09:21		12:12 (28)
	16:17	21	11:29 (27)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31	11:03 (27)	15:42	21	12:33 (28)
16	09:15		11:08 (27)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27		09:36 (32)	09:22		12:13 (28)
	16:19	21	11:29 (27)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31	11:05 (27)	15:42	20	12:33 (28)
17	09:13		11:09 (27)	08:08			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		09:38 (32)	09:23		12:14 (28)
	16:21	22	11:31 (27)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28	11:06 (27)	15:42	21	12:35 (28)
18	09:12		11:09 (27)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		10:44 (27)	09:24		12:14 (28)
	16:23	22	11:31 (27)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22	11:06 (27)	15:42	21	12:35 (28)
19	09:10		11:09 (27)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34		10:45 (27)	09:25		12:14 (28)
	16:25	22	11:31 (27)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22	11:07 (27)	15:42	21	12:35 (28)
20	09:09		11:09 (27)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		10:45 (27)	09:26		12:15 (28)
	16:28	23	11:32 (27)	17:43			18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22	11:07 (27)	15:43	21	12:36 (28)
21	09:07		11:09 (27)	07:57			06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39		10:45 (27)	09:26		12:16 (28)
	16:30	23	11:32 (27)	17:45			18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	11:07 (27)	15:43	21	12:37 (28)
22	09:05		11:10 (27)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		10:45 (27)	09:27		12:16 (28)
	16:32	22	11:32 (27)	17:48			18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	11:08 (27)	15:43	21	12:37 (28)
23	09:03		11:10 (27)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		10:45 (27)	09:27		12:16 (28)
	16:34	22	11:32 (27)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	11:08 (27)	15:44	21	12:37 (28)
24	09:02		11:10 (27)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		10:46 (27)	09:28		12:17 (28)
	16:37	22	11:32 (27)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22	11:08 (27)	15:45	21	12:38 (28)
25	09:00		10:04 (32)	07:46			06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		10:46 (27)	09:28		12:17 (28)
	16:39	28	11:32 (27)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22	11:08 (27)	15:45	21	12:38 (28)
26	08:58		10:03 (32)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		10:47 (27)	09:28		12:18 (28)
	16:42	31	11:32 (27)	17:57			19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21	11:08 (27)	15:46	21	12:39 (28)
27	08:56		10:02 (32)	07:41			06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52		10:47 (27)	09:28		12:18 (28)
	16:44	31	11:31 (27)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21	11:08 (27)	15:47	21	12:39 (28)
28	08:54		10:00 (32)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		10:48 (27)	09:29		12:19 (28)
	16:46	32	11:30 (27)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21	11:09 (27)	15:48	21	12:40 (28)
29	08:52		10:00 (32)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		10:49 (27)	09:29		12:19 (28)
	16:49	31	11:29 (27)				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22	12:18 (28)	15:49	21	12:40 (28)
30	08:50		09:59 (32)				07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58		10:49 (27)	09:28		12:20 (28)
	16:51	27	11:26 (27)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28	12:21 (28)	15:50	20	12:40 (28)
31	08:48		09:59 (32)				07:10		04:41		05:22	06:31		07:49				09:28		12:21 (28)
	16:54	20	10:19 (32)				20:14		22:29		22:03	20:43		16:51				15:51	20	12:41 (28)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236			199		
Total, worst case		773			167											657			697	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April		May	June
1	09:27	08:45		07:35			07:06		05:44	04:40
	15:53	16:56		18:04			20:16		21:25	22:30
2	09:27	08:43		07:32			07:04		05:41	04:38
	15:54	16:58		18:07			20:19		21:28	22:31
3	09:26	08:41		07:29			07:01		05:39	04:37
	15:55	17:01		18:09			20:21		21:30	22:33
4	09:26	08:39		07:27			06:58	19:38 (67)	05:36	04:36
	15:57	17:03		18:12			20:23	2 19:40 (67)	21:32	22:34
5	09:25	08:36		07:24			06:55	19:34 (67)	05:34	04:35
	15:58	17:06		18:14			20:25	8 19:42 (67)	21:35	22:36
6	09:25	08:34		07:21			06:52	19:32 (67)	05:31	04:34
	16:00	17:08		18:16			20:28	11 19:43 (67)	21:37	22:37
7	09:24	08:32		07:18			06:49	19:31 (67)	05:29	04:33
	16:02	17:11		18:19			20:30	12 19:43 (67)	21:39	22:39
8	09:23	08:29		07:15			06:46	19:31 (67)	05:26	04:32
	16:03	17:13		18:21			20:32	13 19:44 (67)	21:41	22:40
9	09:22	08:27		07:13			06:44	19:31 (67)	05:24	04:31
	16:05	17:16		18:23			20:35	12 19:43 (67)	21:44	22:41
10	09:21	08:24		07:10			06:41	19:31 (67)	05:22	04:30
	16:07	17:18		18:26			20:37	11 19:42 (67)	21:46	22:42
11	09:20	08:22		07:07			06:38	19:32 (67)	05:19	04:30
	16:09	17:21		18:28			20:39	8 19:40 (67)	21:48	22:43
12	09:19	08:20		07:04			06:35	19:34 (67)	05:17	04:29
	16:11	17:23		18:30			20:42	4 19:38 (67)	21:50	22:44
13	09:18	08:17		07:01			06:32		05:15	04:28
	16:13	17:25		18:33			20:44		21:53	22:45
14	09:17	08:15		06:58			06:29		05:13	04:28
	16:15	17:28		18:35			20:46		21:55	22:46
15	09:15	08:12		06:55			06:27	19:48 (66)	05:10	04:27
	16:17	17:30		18:37			20:48	9 19:57 (66)	21:57	22:47
16	09:14	08:10	16:48 (70)	06:53			06:24	19:47 (66)	05:08	04:27
	16:19	17:33	1 16:49 (70)	18:40			20:51	13 20:00 (66)	21:59	22:47
17	09:13	08:07	16:44 (70)	06:50			06:21	19:45 (66)	05:06	04:27
	16:21	17:35	8 16:52 (70)	18:42			20:53	15 20:00 (66)	22:01	22:48
18	09:11	08:04	16:42 (70)	06:47			06:18	19:44 (66)	05:04	04:27
	16:23	17:38	12 16:54 (70)	18:44			20:55	16 20:00 (66)	22:03	22:48
19	09:09	08:02	16:41 (70)	06:44			06:16	19:44 (66)	05:02	04:27
	16:25	17:40	13 16:54 (70)	18:47			20:58	17 20:01 (66)	22:05	22:49
20	09:08	07:59	16:42 (70)	06:41			06:13	19:43 (66)	05:00	04:27
	16:28	17:43	13 16:55 (70)	18:49			21:00	18 20:01 (66)	22:08	22:49
21	09:06	07:57	16:41 (70)	06:38		18:02 (69)	06:10	19:42 (66)	04:58	04:27
	16:30	17:45	14 16:55 (70)	18:51	2	18:04 (69)	21:02	18 20:00 (66)	22:10	22:49
22	09:05	07:54	16:41 (70)	06:35		17:58 (69)	06:07	19:43 (66)	04:56	04:27
	16:32	17:48	13 16:54 (70)	18:53	9	18:07 (69)	21:05	17 20:00 (66)	22:12	22:50
23	09:03	07:51	16:42 (70)	06:32		17:56 (69)	06:05	19:43 (66)	04:54	04:27
	16:34	17:50	11 16:53 (70)	18:56	12	18:08 (69)	21:07	16 19:59 (66)	22:14	22:50
24	09:01	07:49	16:43 (70)	06:30		17:55 (69)	06:02	19:44 (66)	04:52	04:28
	16:37	17:52	9 16:52 (70)	18:58	14	18:09 (69)	21:09	15 19:59 (66)	22:16	22:50
25	08:59	07:46	16:45 (70)	06:27		17:54 (69)	05:59	19:45 (66)	04:51	04:28
	16:39	17:55	4 16:49 (70)	19:00	15	18:09 (69)	21:12	12 19:57 (66)	22:17	22:50
26	08:57	07:43		06:24		17:53 (69)	05:57	19:47 (66)	04:49	04:28
	16:41	17:57		19:03	15	18:08 (69)	21:14	8 19:55 (66)	22:19	22:50
27	08:55	07:40		06:21		17:54 (69)	05:54		04:47	04:29
	16:44	18:00		19:05	15	18:09 (69)	21:16		22:21	22:49
28	08:53	07:38		06:18		17:55 (69)	05:51		04:46	04:30
	16:46	18:02		19:07	13	18:08 (69)	21:18		22:23	22:49
29	08:51			07:15		18:55 (69)	05:49		04:44	04:30
	16:49			20:09	11	19:06 (69)	21:21		22:25	22:49
30	08:49			07:12		18:57 (69)	05:46		04:43	04:31
	16:51			20:12	6	19:03 (69)	21:23		22:26	22:48
31	08:47			07:09					04:41	
	16:53			20:14					22:28	
Potential sun hours	222	260		365			432		521	547
Total, worst case			98		112			255		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August			September			October			November	December
1	04:32	05:24			06:33		19:31 (67)	07:39			07:51	08:59
	22:48	22:00			20:39	8	19:39 (67)	19:13			16:49	15:51
2	04:33	05:26			06:35		19:29 (67)	07:41			07:53	09:01
	22:47	21:58			20:36	11	19:40 (67)	19:10			16:46	15:50
3	04:34	05:28			06:37		19:29 (67)	07:43			07:56	09:03
	22:47	21:56			20:34	12	19:41 (67)	19:07			16:44	15:49
4	04:35	05:31			06:39		19:28 (67)	07:46			07:58	09:05
	22:46	21:53			20:31	13	19:41 (67)	19:04			16:41	15:48
5	04:36	05:33			06:42		19:28 (67)	07:48			08:00	09:06
	22:45	21:51			20:28	12	19:40 (67)	19:01			16:39	15:47
6	04:37	05:35			06:44		19:28 (67)	07:50			08:03	09:08
	22:44	21:48			20:25	11	19:39 (67)	18:58			16:37	15:46
7	04:39	05:37			06:46		19:29 (67)	07:52			08:05	09:10
	22:43	21:46			20:22	8	19:37 (67)	18:56			16:34	15:45
8	04:40	05:39			06:48		19:31 (67)	07:55			08:08	09:11
	22:42	21:44			20:19	3	19:34 (67)	18:53			16:32	15:45
9	04:41	05:42			06:50			07:57			08:10	09:13
	22:41	21:41			20:16			18:50			16:30	15:44
10	04:43	05:44			06:53			07:59			08:12	09:14
	22:40	21:39			20:13			18:47			16:28	15:44
11	04:44	05:46			06:55			08:02			08:15	09:16
	22:39	21:36			20:11			18:44			16:25	15:43
12	04:46	05:48			06:57			08:04			08:17	09:17
	22:37	21:34			20:08			18:42			16:23	15:43
13	04:47	05:50			06:59		18:49 (69)	08:06			08:20	09:18
	22:36	21:31			20:05	5	18:54 (69)	18:39			16:21	15:42
14	04:49	05:53			07:01		18:46 (69)	08:08			08:22	09:19
	22:34	21:28			20:02	10	18:56 (69)	18:36			16:19	15:42
15	04:51	05:55			07:04		18:44 (69)	08:11			08:24	09:20
	22:33	21:26			19:59	13	18:57 (69)	18:33			16:17	15:42
16	04:52	05:57		19:56 (66)	07:06		18:43 (69)	08:13			08:27	09:21
	22:31	21:23	4	20:00 (66)	19:56	14	18:57 (69)	18:30			16:15	15:42
17	04:54	05:59		19:53 (66)	07:08		18:42 (69)	08:15		17:16 (70)	08:29	09:22
	22:30	21:21	9	20:02 (66)	19:53	15	18:57 (69)	18:28	6	17:22 (70)	16:13	15:42
18	04:56	06:02		19:51 (66)	07:10		18:41 (69)	08:18		17:14 (70)	08:31	09:23
	22:28	21:18	13	20:04 (66)	19:50	15	18:56 (69)	18:25	10	17:24 (70)	16:11	15:42
19	04:58	06:04		19:49 (66)	07:12		18:42 (69)	08:20		17:13 (70)	08:34	09:24
	22:26	21:15	15	20:04 (66)	19:47	14	18:56 (69)	18:22	12	17:25 (70)	16:09	15:42
20	05:00	06:06		19:48 (66)	07:15		18:42 (69)	08:22		17:12 (70)	08:36	09:25
	22:25	21:12	17	20:05 (66)	19:44	13	18:55 (69)	18:20	14	17:26 (70)	16:08	15:43
21	05:01	06:08		19:48 (66)	07:17		18:43 (69)	08:25		17:12 (70)	08:38	09:26
	22:23	21:10	17	20:05 (66)	19:42	10	18:53 (69)	18:17	13	17:25 (70)	16:06	15:43
22	05:03	06:11		19:47 (66)	07:19		18:45 (69)	08:27		17:12 (70)	08:40	09:26
	22:21	21:07	18	20:05 (66)	19:39	5	18:50 (69)	18:14	13	17:25 (70)	16:04	15:43
23	05:05	06:13		19:48 (66)	07:21			08:29		17:12 (70)	08:43	09:27
	22:19	21:04	18	20:06 (66)	19:36			18:12	12	17:24 (70)	16:02	15:44
24	05:07	06:15		19:48 (66)	07:23			08:32		17:13 (70)	08:45	09:27
	22:17	21:02	17	20:05 (66)	19:33			18:09	10	17:23 (70)	16:01	15:45
25	05:09	06:17		19:48 (66)	07:26			07:34		16:14 (70)	08:47	09:27
	22:15	20:59	16	20:04 (66)	19:30			17:06	7	16:21 (70)	15:59	15:45
26	05:11	06:20		19:48 (66)	07:28			07:37			08:49	09:28
	22:13	20:56	15	20:03 (66)	19:27			17:04			15:58	15:46
27	05:13	06:22		19:49 (66)	07:30			07:39			08:51	09:28
	22:11	20:53	12	20:01 (66)	19:24			17:01			15:56	15:47
28	05:16	06:24		19:50 (66)	07:32			07:41			08:53	09:28
	22:09	20:50	9	19:59 (66)	19:21			16:59			15:55	15:48
29	05:18	06:26			07:35			07:44			08:55	09:28
	22:07	20:48			19:18			16:56			15:54	15:49
30	05:20	06:28			07:37			07:46			08:57	09:28
	22:05	20:45			19:16			16:54			15:52	15:50
31	05:22	06:31		19:33 (67)				07:48				09:27
	22:02	20:42	5	19:38 (67)				16:51				15:51
Potential sun hours	545	478			386			319			236	200
Total, worst case			185			192			97			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April		May	June
1	09:27	08:45		07:35			07:06	19:00 (69)	05:44	04:40
	15:53	16:56		18:04			20:16	4 19:04 (69)	21:25	22:30
2	09:27	08:43		07:32			07:04		05:41	04:38
	15:54	16:58		18:07			20:19		21:28	22:31
3	09:26	08:41		07:29			07:01		05:39	04:37
	15:55	17:01		18:09			20:21		21:30	22:33
4	09:26	08:39		07:27			06:58		05:36	04:36
	15:57	17:03		18:12			20:23		21:32	22:34
5	09:25	08:36		07:24			06:55		05:34	04:35
	15:58	17:06		18:14			20:25		21:35	22:36
6	09:25	08:34		07:21			06:52	19:37 (67)	05:31	04:34
	16:00	17:08		18:16			20:28	6 19:43 (67)	21:37	22:37
7	09:24	08:32		07:18			06:49	19:35 (67)	05:29	04:33
	16:02	17:11		18:19			20:30	10 19:45 (67)	21:39	22:39
8	09:23	08:29		07:15			06:46	19:34 (67)	05:26	04:32
	16:03	17:13		18:21			20:32	12 19:46 (67)	21:41	22:40
9	09:22	08:27		07:13			06:44	19:33 (67)	05:24	04:31
	16:05	17:16		18:23			20:35	13 19:46 (67)	21:44	22:41
10	09:21	08:24		07:10			06:41	19:33 (67)	05:22	04:30
	16:07	17:18		18:26			20:37	12 19:45 (67)	21:46	22:42
11	09:20	08:22		07:07			06:38	19:33 (67)	05:19	04:30
	16:09	17:21		18:28			20:39	11 19:44 (67)	21:48	22:43
12	09:19	08:20		07:04			06:35	19:33 (67)	05:17	04:29
	16:11	17:23		18:30			20:42	10 19:43 (67)	21:50	22:44
13	09:18	08:17		07:01			06:32	19:35 (67)	05:15	04:28
	16:13	17:25		18:33			20:44	7 19:42 (67)	21:53	22:45
14	09:17	08:15		06:58			06:29		05:13	04:28
	16:15	17:28		18:35			20:46		21:55	22:46
15	09:15	08:12		06:55			06:27		05:10	04:27
	16:17	17:30		18:37			20:48		21:57	22:47
16	09:14	08:10		06:53			06:24		05:08	04:27
	16:19	17:33		18:40			20:51		21:59	22:47
17	09:13	08:07		06:50			06:21	19:53 (66)	05:06	04:27
	16:21	17:35		18:42			20:53	8 20:01 (66)	22:01	22:48
18	09:11	08:04	16:45 (70)	06:47			06:18	19:50 (66)	05:04	04:27
	16:23	17:38	8 16:53 (70)	18:44			20:55	12 20:02 (66)	22:03	22:48
19	09:09	08:02	16:43 (70)	06:44			06:16	19:49 (66)	05:02	04:27
	16:25	17:40	12 16:55 (70)	18:47			20:58	15 20:04 (66)	22:05	22:49
20	09:08	07:59	16:43 (70)	06:41			06:13	19:48 (66)	05:00	04:27
	16:28	17:43	13 16:56 (70)	18:49			21:00	16 20:04 (66)	22:08	22:49
21	09:06	07:57	16:43 (70)	06:38			06:10	19:46 (66)	04:58	04:27
	16:30	17:45	13 16:56 (70)	18:51			21:02	18 20:04 (66)	22:10	22:49
22	09:05	07:54	16:42 (70)	06:35			06:07	19:47 (66)	04:56	04:27
	16:32	17:48	14 16:56 (70)	18:53			21:05	17 20:04 (66)	22:12	22:50
23	09:03	07:51	16:42 (70)	06:32		18:01 (69)	06:05	19:46 (66)	04:54	04:27
	16:34	17:50	13 16:55 (70)	18:56	7	18:08 (69)	21:07	18 20:04 (66)	22:14	22:50
24	09:01	07:49	16:43 (70)	06:30		17:59 (69)	06:02	19:46 (66)	04:52	04:28
	16:37	17:52	11 16:54 (70)	18:58	11	18:10 (69)	21:09	18 20:04 (66)	22:16	22:50
25	08:59	07:46	16:44 (70)	06:27		17:57 (69)	05:59	19:46 (66)	04:51	04:28
	16:39	17:55	9 16:53 (70)	19:00	14	18:11 (69)	21:12	17 20:03 (66)	22:17	22:50
26	08:57	07:43	16:47 (70)	06:24		17:56 (69)	05:57	19:47 (66)	04:49	04:28
	16:41	17:57	4 16:51 (70)	19:03	15	18:11 (69)	21:14	16 20:03 (66)	22:19	22:50
27	08:55	07:40		06:21		17:56 (69)	05:54	19:47 (66)	04:47	04:29
	16:44	18:00		19:05	16	18:12 (69)	21:16	14 20:01 (66)	22:21	22:49
28	08:53	07:38		06:18		17:56 (69)	05:51	19:49 (66)	04:46	04:30
	16:46	18:02		19:07	15	18:11 (69)	21:18	11 20:00 (66)	22:23	22:49
29	08:51			07:15		18:56 (69)	05:49	19:50 (66)	04:44	04:30
	16:49			20:09	14	19:10 (69)	21:21	7 19:57 (66)	22:25	22:49
30	08:49			07:12		18:56 (69)	05:46		04:43	04:31
	16:51			20:12	13	19:09 (69)	21:23		22:26	22:48
31	08:47			07:09		18:57 (69)			04:41	
	16:53			20:14	10	19:07 (69)			22:28	
Potential sun hours	222	260		365			432		521	547
Total, worst case			97		115			272		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August			September			October			November	December
1	04:32	05:24			06:33		19:32 (67)	07:39			07:51	08:59
	22:48	22:00			20:39	11	19:43 (67)	19:13			16:49	15:51
2	04:33	05:26			06:35		19:31 (67)	07:41			07:53	09:01
	22:47	21:58			20:36	12	19:43 (67)	19:10			16:46	15:50
3	04:34	05:28			06:37		19:31 (67)	07:43			07:56	09:03
	22:47	21:56			20:34	13	19:44 (67)	19:07			16:44	15:49
4	04:35	05:31			06:39		19:31 (67)	07:46			07:58	09:05
	22:46	21:53			20:31	12	19:43 (67)	19:04			16:41	15:48
5	04:36	05:33			06:42		19:32 (67)	07:48			08:00	09:06
	22:45	21:51			20:28	10	19:42 (67)	19:01			16:39	15:47
6	04:37	05:35			06:44		19:33 (67)	07:50			08:03	09:08
	22:44	21:48			20:25	7	19:40 (67)	18:58			16:37	15:46
7	04:39	05:37			06:46			07:52			08:05	09:10
	22:43	21:46			20:22			18:56			16:34	15:45
8	04:40	05:39			06:48			07:55			08:08	09:11
	22:42	21:44			20:19			18:53			16:32	15:45
9	04:41	05:42			06:50			07:57			08:10	09:13
	22:41	21:41			20:16			18:50			16:30	15:44
10	04:43	05:44			06:53			07:59			08:12	09:14
	22:40	21:39			20:13			18:47			16:28	15:44
11	04:44	05:46			06:55		18:54 (69)	08:02			08:15	09:16
	22:39	21:36			20:11	1	18:55 (69)	18:44			16:25	15:43
12	04:46	05:48			06:57		18:50 (69)	08:04			08:17	09:17
	22:37	21:34			20:08	9	18:59 (69)	18:42			16:23	15:43
13	04:47	05:50			06:59		18:48 (69)	08:06			08:20	09:18
	22:36	21:31			20:05	12	19:00 (69)	18:39			16:21	15:42
14	04:49	05:53		19:58 (66)	07:01		18:47 (69)	08:08			08:22	09:19
	22:34	21:28	8	20:06 (66)	20:02	14	19:01 (69)	18:36			16:19	15:42
15	04:51	05:55		19:56 (66)	07:04		18:46 (69)	08:11			08:24	09:20
	22:33	21:26	12	20:08 (66)	19:59	15	19:01 (69)	18:33			16:17	15:42
16	04:52	05:57		19:54 (66)	07:06		18:45 (69)	08:13		17:18 (70)	08:27	09:21
	22:31	21:23	15	20:09 (66)	19:56	15	19:00 (69)	18:30	7	17:25 (70)	16:15	15:42
17	04:54	05:59		19:53 (66)	07:08		18:45 (69)	08:15		17:15 (70)	08:29	09:22
	22:30	21:21	16	20:09 (66)	19:53	14	18:59 (69)	18:28	11	17:26 (70)	16:13	15:42
18	04:56	06:02		19:52 (66)	07:10		18:45 (69)	08:18		17:14 (70)	08:31	09:23
	22:28	21:18	18	20:10 (66)	19:50	13	18:58 (69)	18:25	13	17:27 (70)	16:11	15:42
19	04:58	06:04		19:52 (66)	07:12		18:46 (69)	08:20		17:13 (70)	08:34	09:24
	22:26	21:15	18	20:10 (66)	19:47	12	18:58 (69)	18:22	14	17:27 (70)	16:09	15:42
20	05:00	06:06		19:51 (66)	07:15		18:47 (69)	08:22		17:13 (70)	08:36	09:25
	22:25	21:12	18	20:09 (66)	19:44	8	18:55 (69)	18:20	14	17:27 (70)	16:08	15:43
21	05:01	06:08		19:51 (66)	07:17			08:25		17:13 (70)	08:38	09:26
	22:23	21:10	18	20:09 (66)	19:42			18:17	13	17:26 (70)	16:06	15:43
22	05:03	06:11		19:51 (66)	07:19			08:27		17:14 (70)	08:40	09:26
	22:21	21:07	17	20:08 (66)	19:39			18:14	12	17:26 (70)	16:04	15:43
23	05:05	06:13		19:52 (66)	07:21			08:29		17:14 (70)	08:43	09:27
	22:19	21:04	17	20:09 (66)	19:36			18:12	10	17:24 (70)	16:02	15:44
24	05:07	06:15		19:53 (66)	07:23			08:32		17:16 (70)	08:45	09:27
	22:17	21:02	14	20:07 (66)	19:33			18:09	7	17:23 (70)	16:01	15:45
25	05:09	06:17		19:54 (66)	07:26			07:34			08:47	09:27
	22:15	20:59	12	20:06 (66)	19:30			17:06			15:59	15:45
26	05:11	06:20		19:56 (66)	07:28			07:37			08:49	09:28
	22:13	20:56	7	20:03 (66)	19:27			17:04			15:58	15:46
27	05:13	06:22			07:30			07:39			08:51	09:28
	22:11	20:53			19:24			17:01			15:56	15:47
28	05:16	06:24			07:32			07:41			08:53	09:28
	22:09	20:50			19:21			16:59			15:55	15:48
29	05:18	06:26			07:35			07:44			08:55	09:28
	22:07	20:48			19:18			16:56			15:54	15:49
30	05:20	06:28		19:35 (67)	07:37			07:46			08:57	09:28
	22:05	20:45	7	19:42 (67)	19:16			16:54			15:52	15:50
31	05:22	06:31		19:33 (67)				07:48				09:27
	22:02	20:42	10	19:43 (67)				16:51				15:51
Potential sun hours	545	478			386			319			236	200
Total, worst case			207			178			101			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Vedlegg 3.2

Grafisk Moifjellet og Mellomstrand vindkraftverk

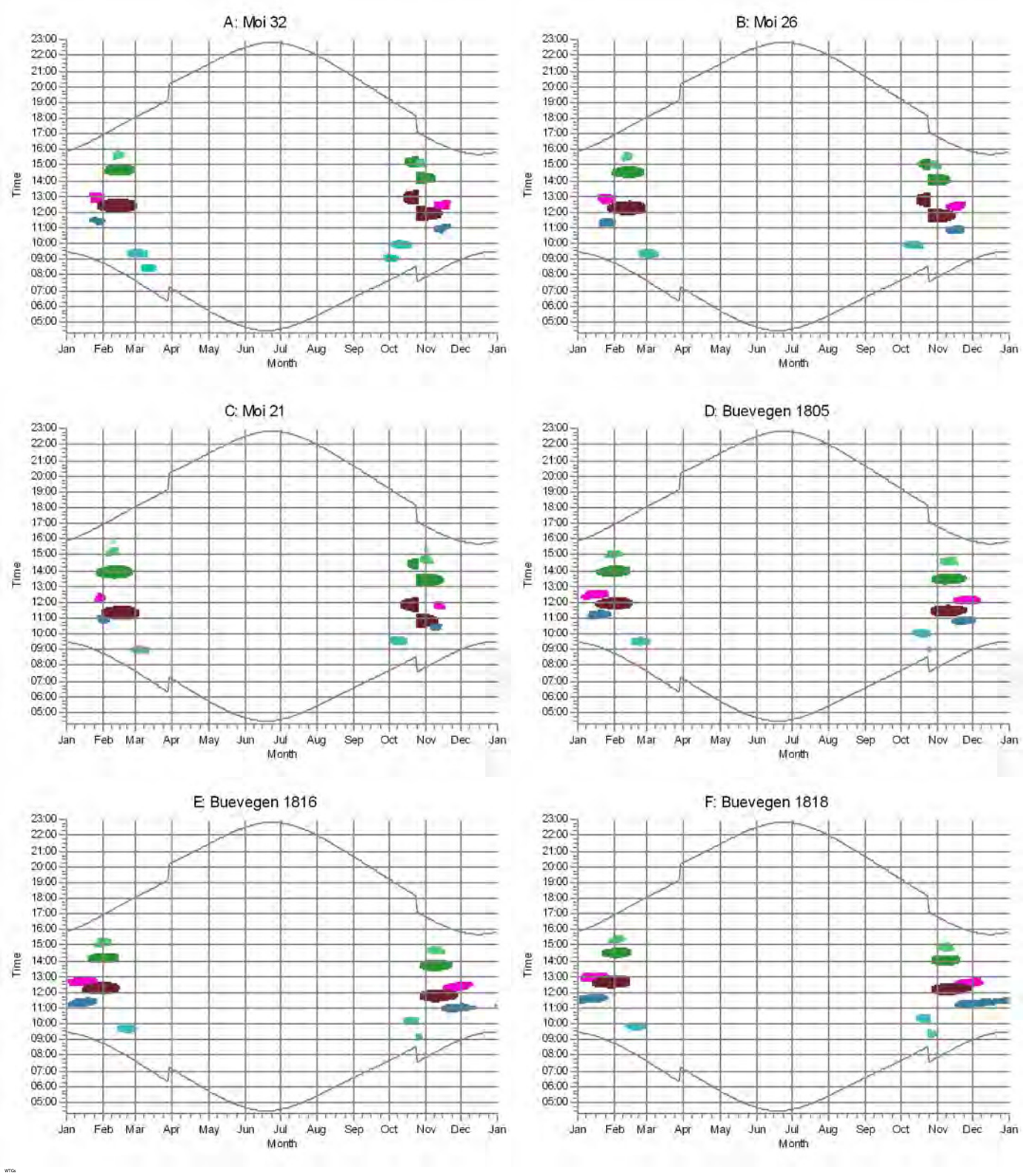
Med nærliggende – worst case

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere

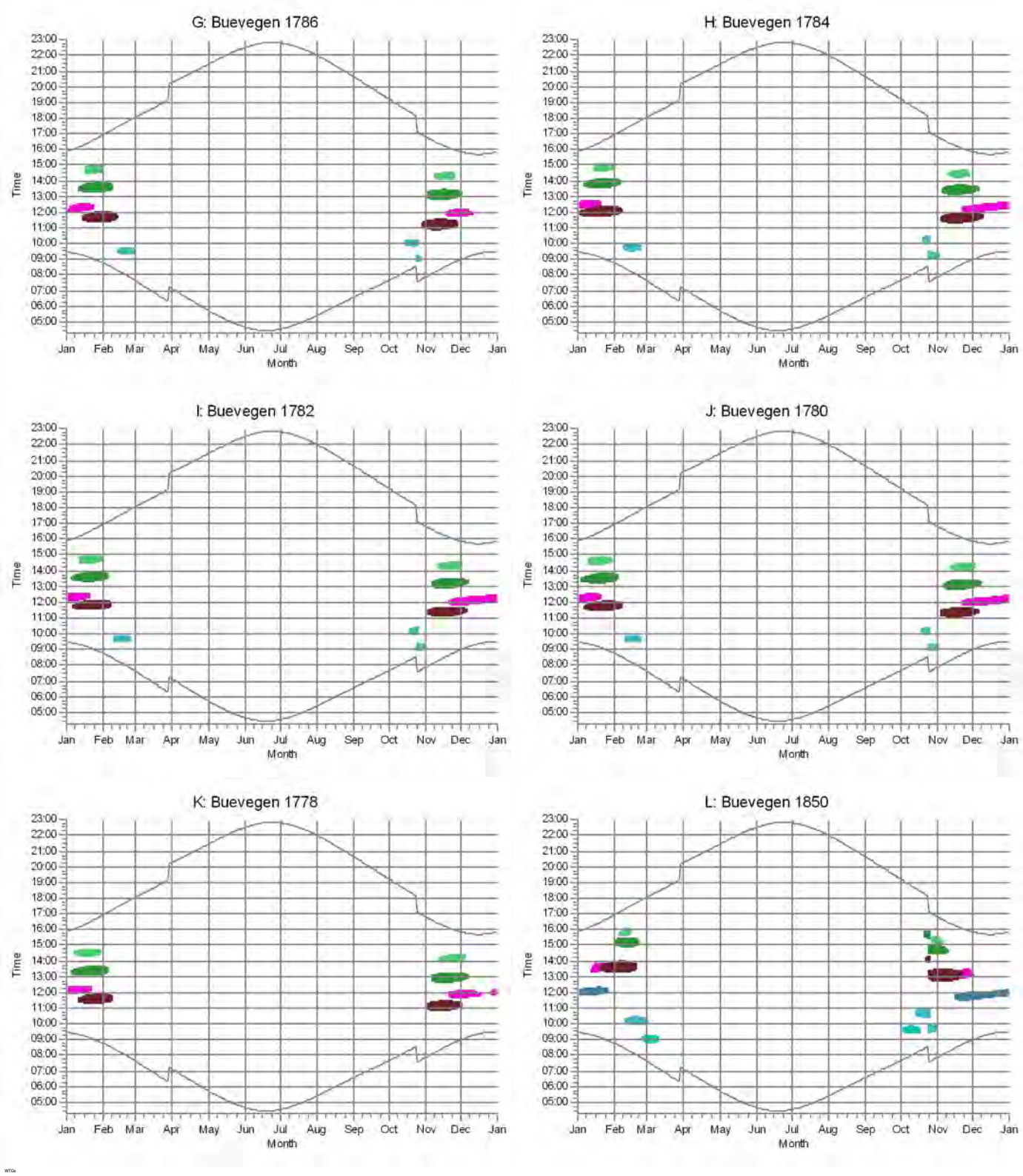


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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere

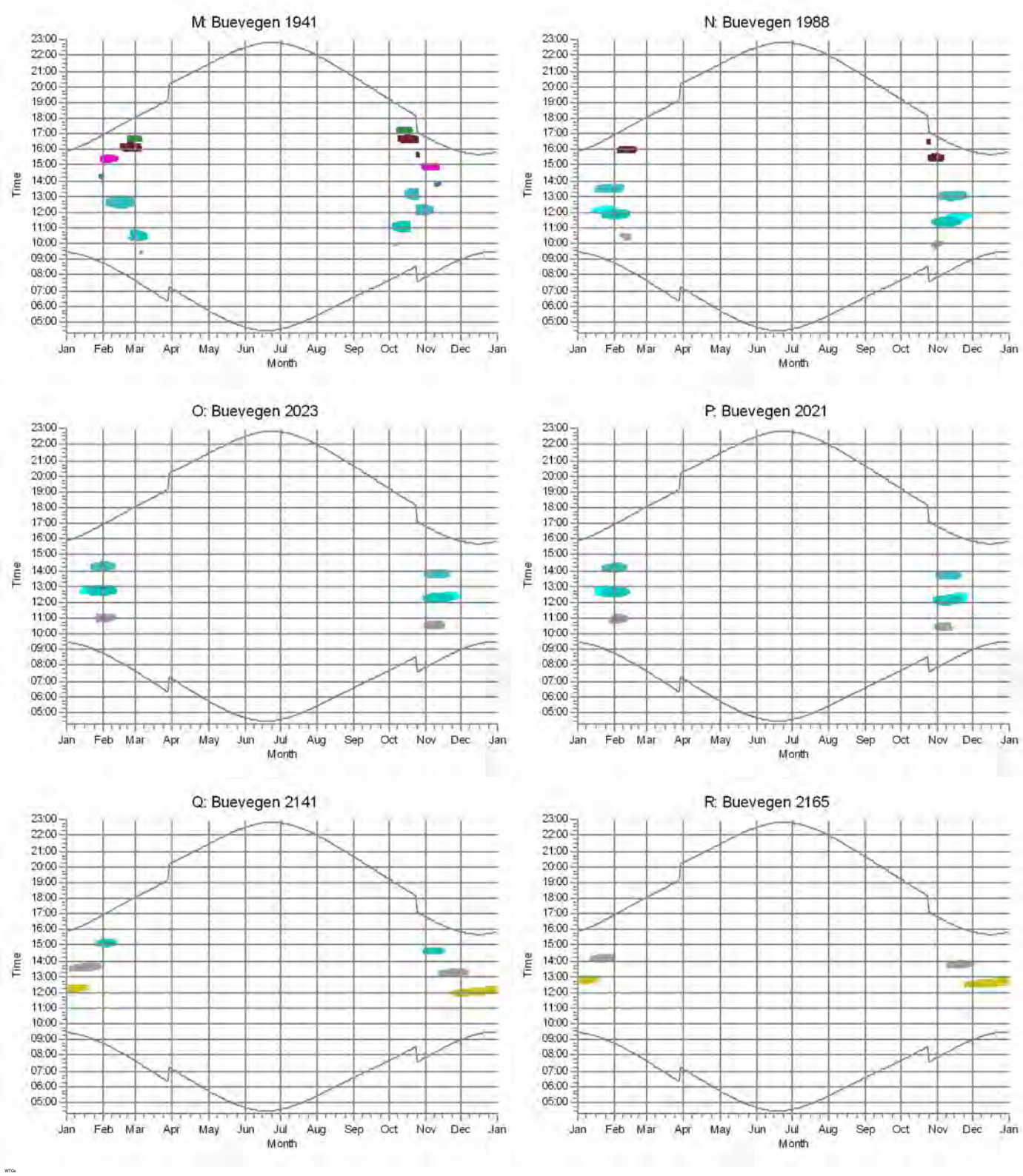


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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere

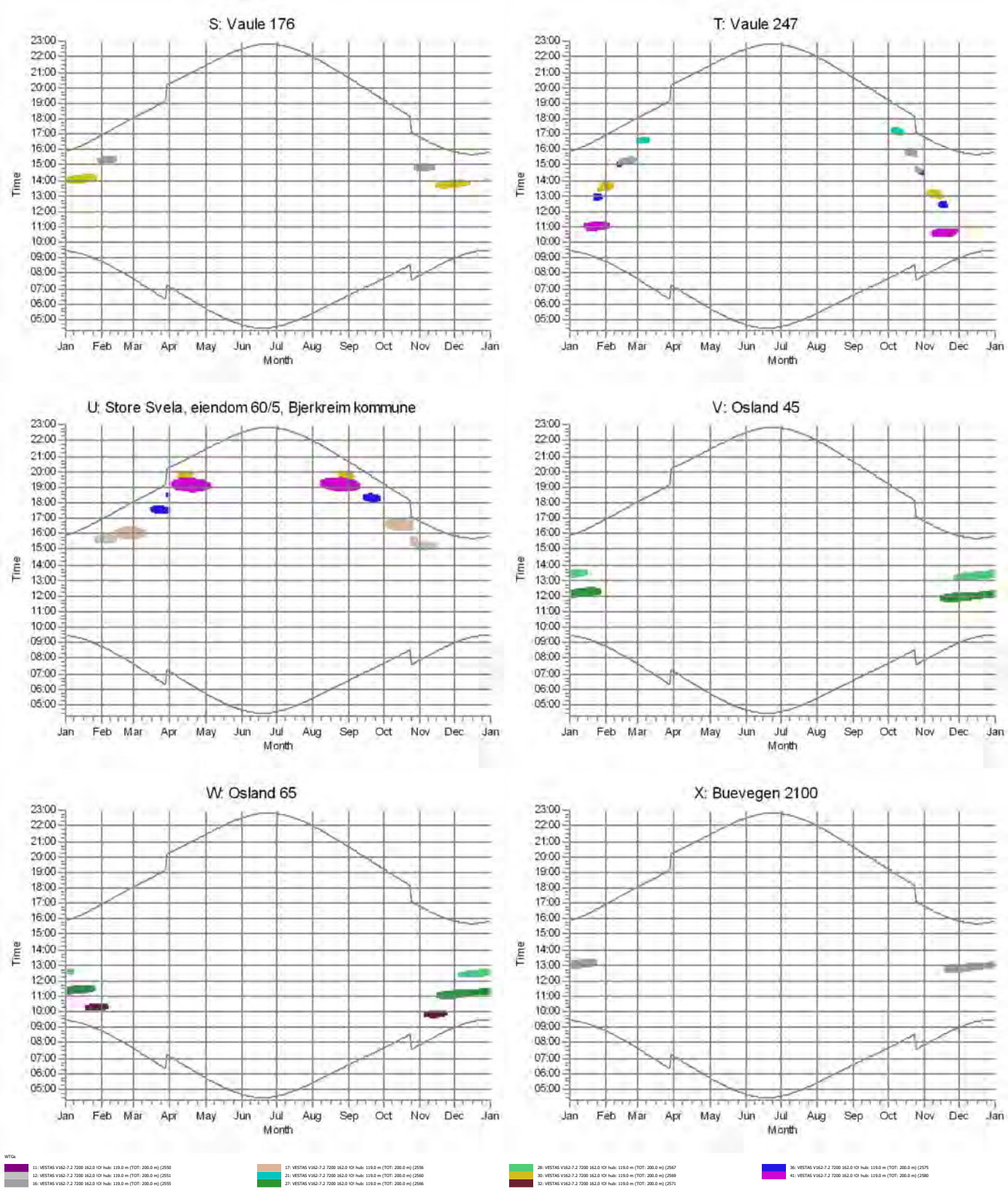


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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere

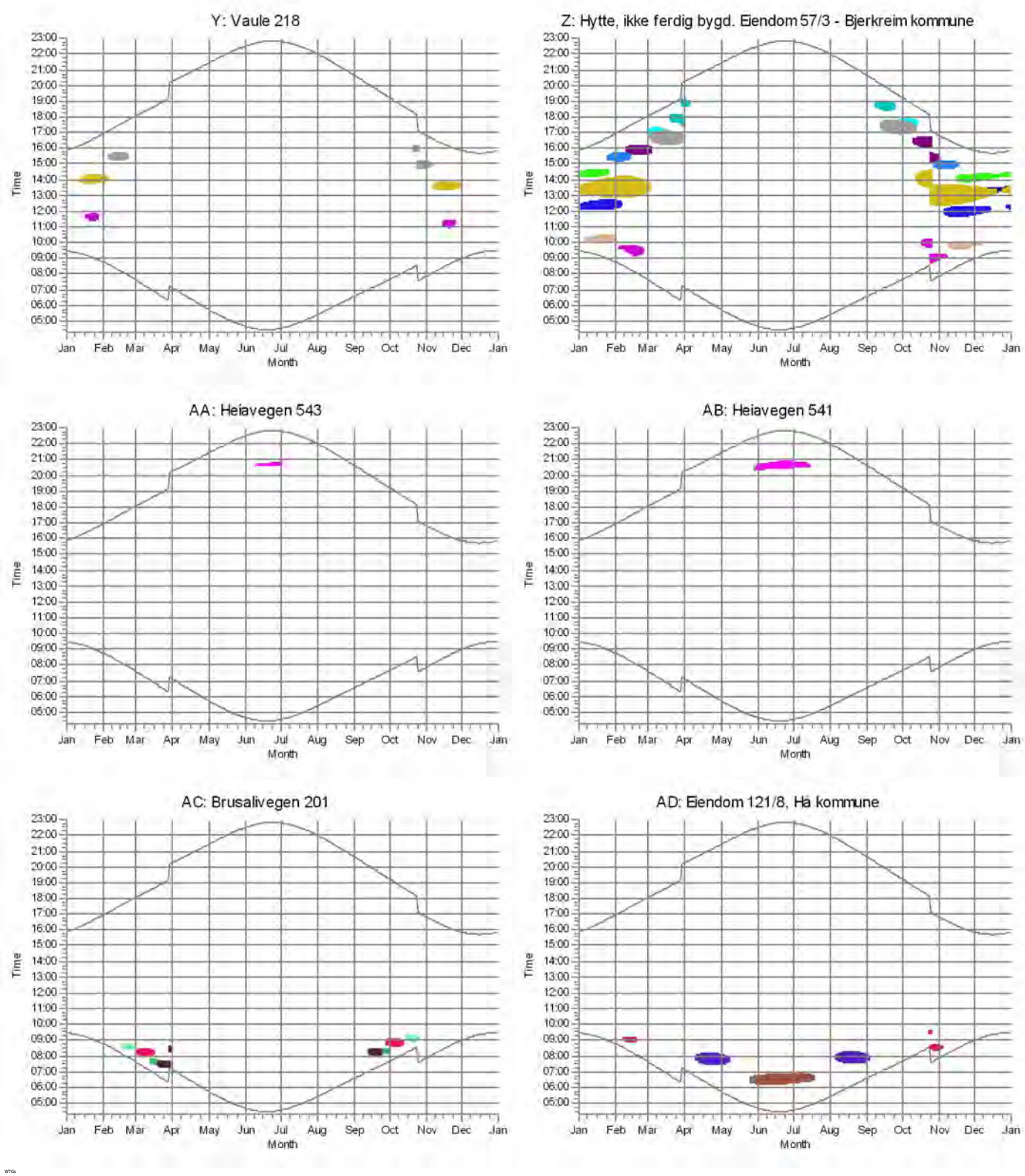


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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere

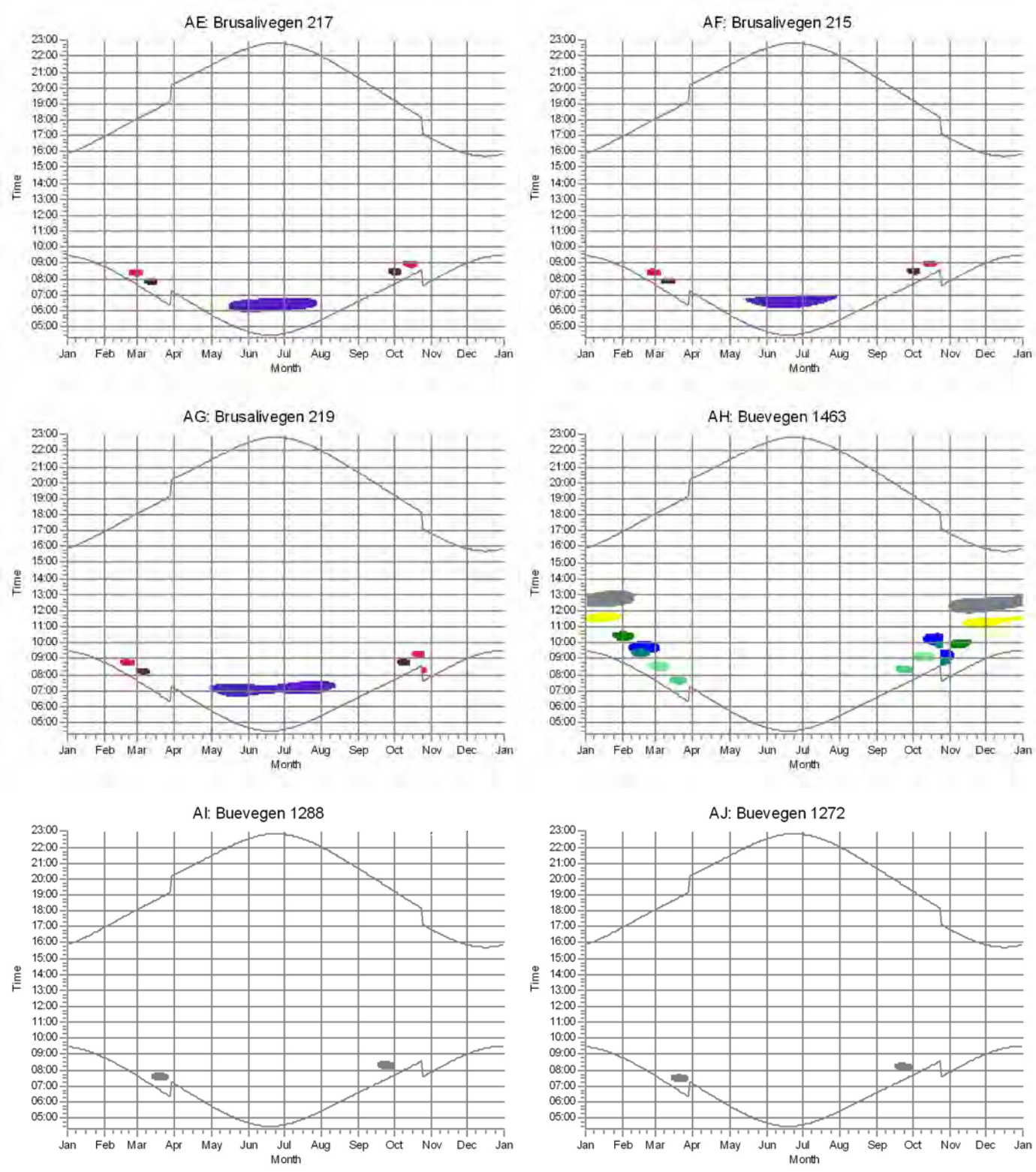


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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere

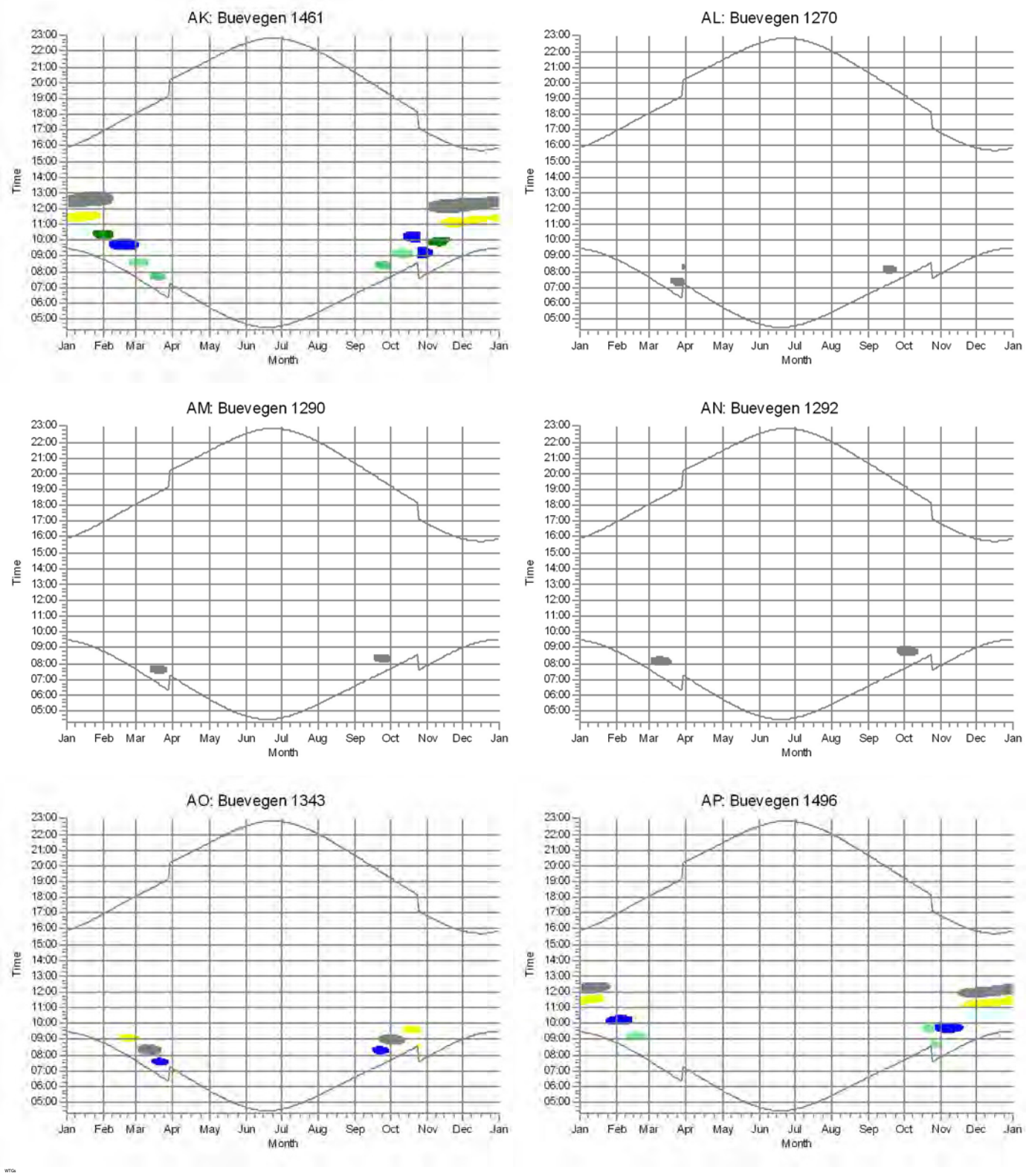


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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere

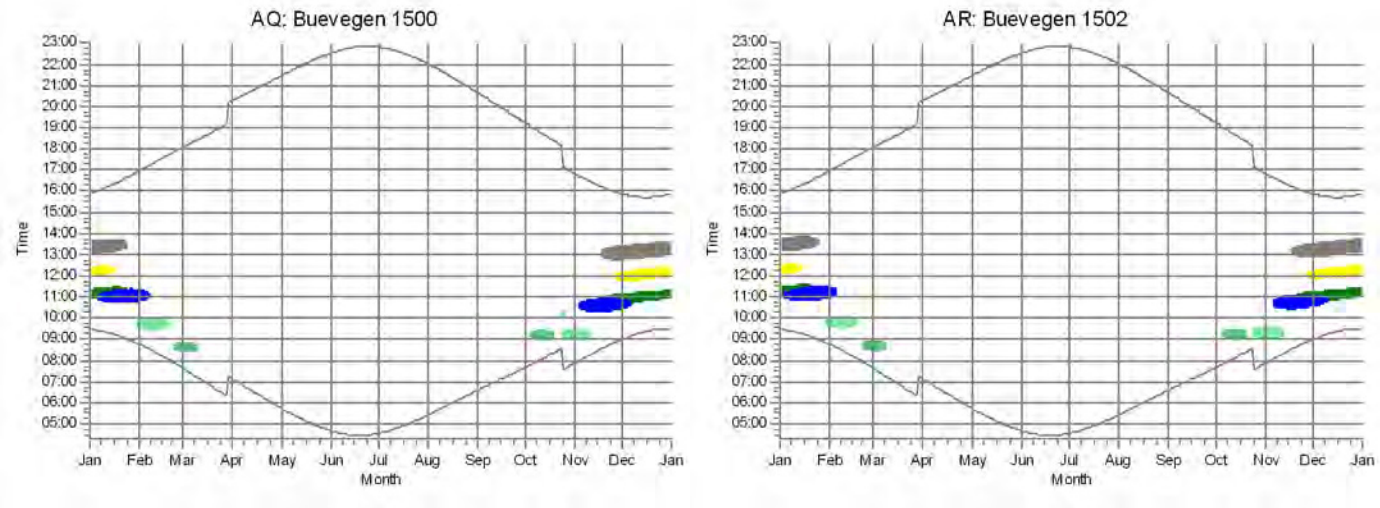


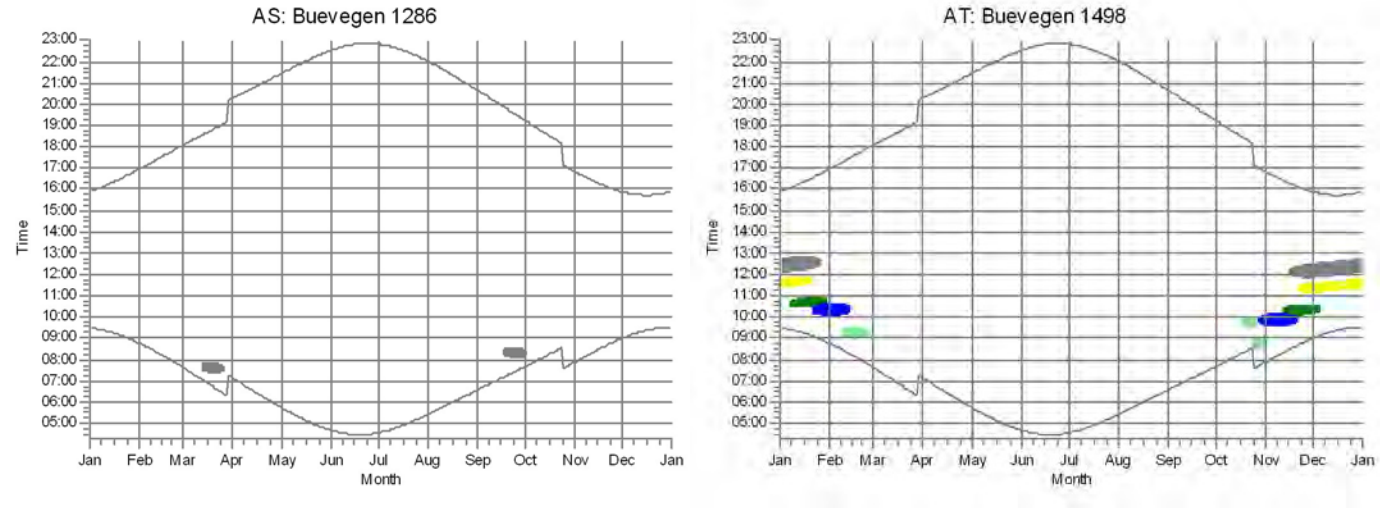
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Martine / martine.bjugg@multiconsult.no

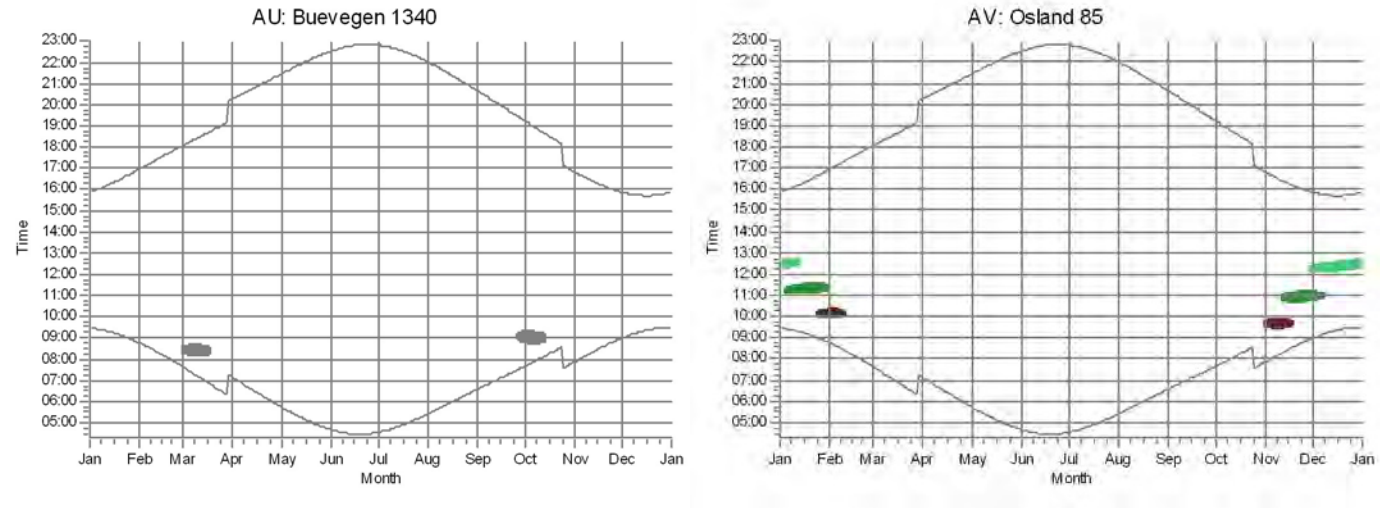
Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere





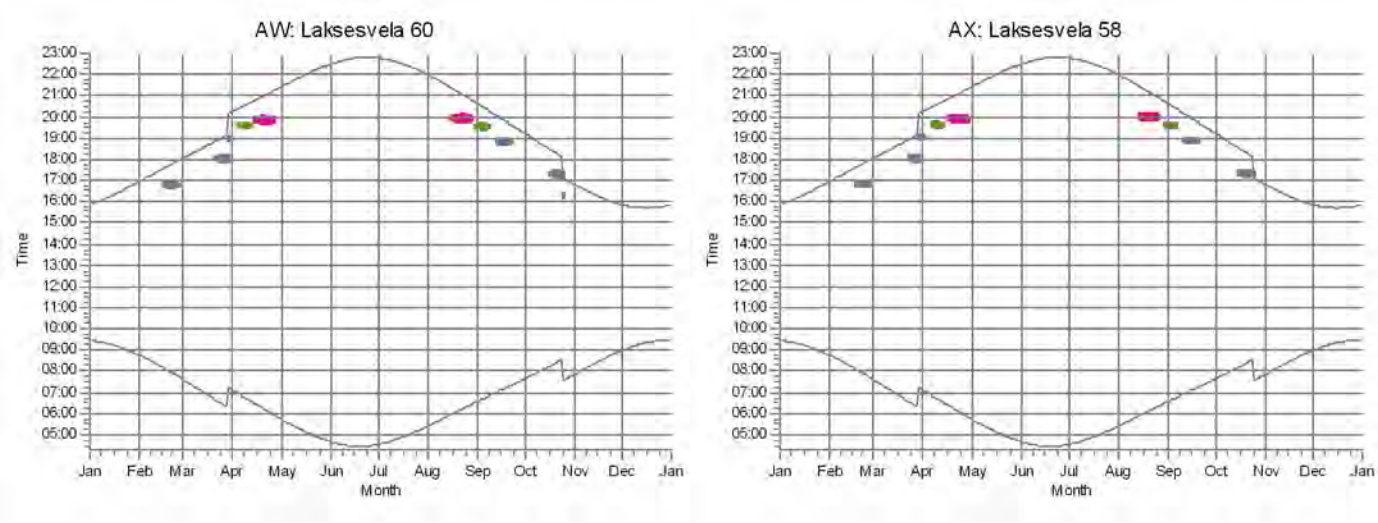


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Calculated:
19.11.2025 14:56/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - worst case - mottakere



Vedlegg 4.1

Tabell Moifjellet og Mellomstrand vindkraftverk

Med nærliggende – realistic case

Project:

Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:19 (37)	07:35		09:10 (19)	07:07	05:44	04:40
	15:53			16:56	51	13:02 (24)	18:05	24	09:34 (19)	20:17	21:26	22:30
2	09:27			08:43		11:24 (37)	07:33		09:10 (19)	07:04	05:41	04:38
	15:54			16:58	34	12:41 (32)	18:07	25	09:35 (19)	20:19	21:28	22:32
3	09:27			08:41		12:08 (32)	07:30		09:10 (19)	07:01	05:39	04:37
	15:55			17:01	43	14:41 (27)	18:09	24	09:34 (19)	20:21	21:30	22:34
4	09:26			08:39		12:07 (32)	07:27		09:10 (19)	06:58	05:36	04:36
	15:57			17:03	56	14:50 (27)	18:12	24	09:34 (19)	20:24	21:33	22:35
5	09:26			08:37		12:06 (32)	07:24		09:10 (19)	06:55	05:34	04:35
	15:58			17:06	61	14:52 (27)	18:14	23	09:33 (19)	20:26	21:35	22:37
6	09:25			08:34		12:06 (32)	07:21		08:24 (21)	06:52	05:31	04:34
	16:00			17:08	66	14:54 (27)	18:17	28	09:32 (19)	20:28	21:37	22:38
7	09:24			08:32		12:05 (32)	07:19		08:21 (21)	06:50	05:29	04:33
	16:02			17:11	69	14:54 (27)	18:19	32	09:30 (19)	20:30	21:40	22:39
8	09:24			08:30		12:05 (32)	07:16		08:19 (21)	06:47	05:26	04:32
	16:03			17:13	72	14:56 (27)	18:21	32	09:28 (19)	20:33	21:42	22:40
9	09:23			08:27		12:04 (32)	07:13		08:18 (21)	06:44	05:24	04:31
	16:05			17:16	75	14:57 (27)	18:24	29	09:26 (19)	20:35	21:44	22:42
10	09:22			08:25		12:04 (32)	07:10		08:17 (21)	06:41	05:22	04:30
	16:07			17:18	80	15:35 (28)	18:26	18	08:35 (21)	20:37	21:46	22:43
11	09:21			08:23		12:04 (32)	07:07		08:17 (21)	06:38	05:19	04:29
	16:09			17:21	91	15:40 (28)	18:28	18	08:35 (21)	20:40	21:49	22:44
12	09:20			08:20		12:04 (32)	07:04		08:17 (21)	06:35	05:17	04:29
	16:11			17:23	99	15:47 (28)	18:31	19	08:36 (21)	20:42	21:51	22:45
13	09:18			08:18		12:03 (32)	07:01		08:17 (21)	06:32	05:15	04:28
	16:13			17:26	101	15:48 (28)	18:33	18	08:35 (21)	20:44	21:53	22:46
14	09:17			08:15		12:04 (32)	06:59		08:17 (21)	06:30	05:13	04:28
	16:15			17:28	99	15:48 (28)	18:35	17	08:34 (21)	20:47	21:55	22:47
15	09:16			08:13		12:04 (32)	06:56		08:18 (21)	06:27	05:10	04:27
	16:17			17:31	96	15:46 (28)	18:38	15	08:33 (21)	20:49	21:58	22:47
16	09:15			08:10		12:03 (32)	06:53		08:19 (21)	06:24	05:08	04:27
	16:19			17:33	92	15:44 (28)	18:40	12	08:31 (21)	20:51	22:00	22:48
17	09:13			08:07		12:03 (32)	06:50		08:22 (21)	06:21	05:06	04:27
	16:21			17:36	86	15:41 (28)	18:42	5	08:27 (21)	20:53	22:02	22:49
18	09:12			08:05		12:04 (32)	06:47			06:19	05:04	04:27
	16:23			17:38	78	14:58 (27)	18:45			20:56	22:04	22:49
19	09:10			08:02		12:05 (32)	06:44			06:16	05:02	04:27
	16:25			17:40	76	14:58 (27)	18:47			20:58	22:06	22:50
20	09:08			08:00		12:05 (32)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:57 (27)	18:49			21:00	22:08	22:50
21	09:07		11:29 (37)	07:57		12:05 (32)	06:38			06:10	04:58	04:27
	16:30	8	13:08 (24)	17:45	71	14:56 (27)	18:51			21:03	22:10	22:50
22	09:05		11:28 (37)	07:54		12:06 (32)	06:36			06:08	04:56	04:27
	16:32	22	13:07 (24)	17:48	66	14:55 (27)	18:54			21:05	22:12	22:50
23	09:03		11:29 (37)	07:52		09:20 (19)	06:33			06:05	04:54	04:27
	16:34	21	13:08 (24)	17:50	69	14:54 (27)	18:56			21:07	22:14	22:50
24	09:02		11:28 (37)	07:49		09:16 (19)	06:30			06:02	04:52	04:27
	16:37	33	13:08 (24)	17:53	69	14:52 (27)	18:58			21:10	22:16	22:51
25	09:00		11:27 (37)	07:46		09:14 (19)	06:27			05:59	04:51	04:28
	16:39	33	13:08 (24)	17:55	64	14:49 (27)	19:01			21:12	22:18	22:50
26	08:58		11:22 (37)	07:44		09:13 (19)	06:24			05:57	04:49	04:28
	16:41	37	13:08 (24)	17:57	54	14:45 (27)	19:03			21:14	22:20	22:50
27	08:56		11:14 (37)	07:41		09:12 (19)	06:21			05:54	04:47	04:29
	16:44	43	13:07 (24)	18:00	41	12:35 (32)	19:05			21:17	22:22	22:50
28	08:54		11:14 (37)	07:38		09:11 (19)	06:18			05:52	04:46	04:30
	16:46	52	13:07 (24)	18:02	33	12:29 (32)	19:07			21:19	22:24	22:50
29	08:52		11:15 (37)				07:15			05:49	04:44	04:30
	16:49	56	13:07 (24)				20:10			21:21	22:25	22:50
30	08:50		11:15 (37)				07:12			05:46	04:43	04:31
	16:51	59	13:06 (24)				20:12			21:24	22:27	22:49
31	08:48		11:17 (37)				07:10				04:41	
	16:54	57	13:05 (24)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		421			1966			363				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,64			0,61			0,73				
Total reduction		0,26			0,24			0,29				
Total, real		108			479			106				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September			October		November			December	
1	04:32		05:24		06:33			07:39		08:56 (21)	07:51		11:33 (32)	09:00
	22:49		22:01		20:40			19:13	19	09:15 (21)	16:49	78	14:57 (28)	15:51
2	04:33		05:26		06:35			07:42		08:56 (21)	07:54		11:34 (32)	09:02
	22:48		21:58		20:37			19:10	18	09:14 (21)	16:46	74	14:26 (27)	15:50
3	04:34		05:28		06:37			07:44		08:55 (21)	07:56		11:35 (32)	09:03
	22:47		21:56		20:34			19:07	19	09:14 (21)	16:44	71	14:25 (27)	15:49
4	04:35		05:31		06:40			07:46		08:55 (21)	07:59		11:35 (32)	09:05
	22:47		21:54		20:31			19:04	26	10:01 (19)	16:41	69	14:24 (27)	15:48
5	04:36		05:33		06:42			07:48		08:56 (21)	08:01		11:36 (32)	09:07
	22:46		21:51		20:28			19:02	31	10:05 (19)	16:39	64	14:23 (27)	15:47
6	04:37		05:35		06:44			07:51		08:57 (21)	08:03		11:37 (32)	09:09
	22:45		21:49		20:25			18:59	32	10:06 (19)	16:37	61	14:22 (27)	15:46
7	04:39		05:37		06:46			07:53		08:58 (21)	08:06		11:37 (32)	09:10
	22:44		21:47		20:22			18:56	31	10:07 (19)	16:34	53	14:17 (27)	15:45
8	04:40		05:39		06:49			07:55		09:03 (21)	08:08		11:39 (32)	09:12
	22:43		21:44		20:20			18:53	23	10:08 (19)	16:32	42	14:11 (27)	15:45
9	04:41		05:42		06:51			07:57		09:45 (19)	08:11		10:53 (37)	09:13
	22:42		21:42		20:17			18:50	23	10:08 (19)	16:30	37	12:12 (32)	15:44
10	04:43		05:44		06:53			08:00		09:45 (19)	08:13		10:50 (37)	09:15
	22:40		21:39		20:14			18:47	24	10:09 (19)	16:28	52	12:34 (24)	15:44
11	04:44		05:46		06:55			08:02		09:44 (19)	08:15		10:48 (37)	09:16
	22:39		21:37		20:11			18:45	24	10:08 (19)	16:25	57	12:36 (24)	15:43
12	04:46		05:48		06:57			08:04		09:43 (19)	08:18		10:47 (37)	09:18
	22:38		21:34		20:08			18:42	24	10:07 (19)	16:23	58	12:37 (24)	15:43
13	04:47		05:51		07:00			08:07		09:44 (19)	08:20		10:47 (37)	09:19
	22:37		21:31		20:05			18:39	23	10:07 (19)	16:21	57	12:39 (24)	15:42
14	04:49		05:53		07:02			08:09		09:44 (19)	08:22		10:46 (37)	09:20
	22:35		21:29		20:02			18:36	37	13:05 (32)	16:19	52	12:39 (24)	15:42
15	04:51		05:55		07:04			08:11		09:45 (19)	08:25		10:47 (37)	09:21
	22:34		21:26		19:59			18:33	44	13:09 (32)	16:17	43	12:40 (24)	15:42
16	04:52		05:57		07:06			08:13		09:45 (19)	08:27		10:55 (37)	09:22
	22:32		21:24		19:56			18:31	59	15:19 (27)	16:15	37	12:41 (24)	15:42
17	04:54		06:00		07:08			08:16		09:47 (19)	08:29		11:00 (37)	09:23
	22:30		21:21		19:54			18:28	66	15:22 (27)	16:13	33	12:41 (24)	15:42
18	04:56		06:02		07:11			08:18		09:48 (19)	08:32		11:02 (37)	09:24
	22:29		21:18		19:51			18:25	71	15:24 (27)	16:11	33	12:42 (24)	15:42
19	04:58		06:04		07:13			08:20		09:52 (19)	08:34		11:04 (37)	09:25
	22:27		21:16		19:48			18:22	70	15:26 (27)	16:09	21	12:43 (24)	15:42
20	05:00		06:06		07:15			08:23		12:37 (32)	08:36		11:03 (37)	09:26
	22:25		21:13		19:45			18:20	68	15:26 (27)	16:08	22	12:42 (24)	15:43
21	05:01		06:08		07:17			08:25		12:36 (32)	08:39		11:04 (37)	09:26
	22:24		21:10		19:42			18:17	71	15:27 (27)	16:06	8	12:43 (24)	15:43
22	05:03		06:11		07:19			08:27		12:35 (32)	08:41			09:27
	22:22		21:08		19:39			18:14	74	15:27 (27)	16:04			15:43
23	05:05		06:13		07:22			08:30		12:35 (32)	08:43			09:27
	22:20		21:05		19:36			18:12	76	15:28 (27)	16:02			15:44
24	05:07		06:15		07:24			08:32		12:34 (32)	08:45			09:28
	22:18		21:02		19:33			18:09	78	15:28 (27)	16:01			15:44
25	05:09		06:17		07:26			07:35		11:34 (32)	08:47			09:28
	22:16		20:59		19:30			17:06	86	15:12 (28)	15:59			15:45
26	05:11		06:20		07:28			07:37		11:33 (32)	08:50			09:28
	22:14		20:56		19:27			17:04	94	15:14 (28)	15:58			15:46
27	05:13		06:22		07:30		09:02 (21)	07:39		11:33 (32)	08:52			09:28
	22:12		20:54		19:25	10	09:12 (21)	17:01	97	15:16 (28)	15:56			15:47
28	05:16		06:24		07:33		09:00 (21)	07:42		11:33 (32)	08:54			09:28
	22:10		20:51		19:22	13	09:13 (21)	16:59	101	15:18 (28)	15:55			15:48
29	05:18		06:26		07:35		08:58 (21)	07:44		11:33 (32)	08:56			09:28
	22:07		20:48		19:19	16	09:14 (21)	16:56	102	15:18 (28)	15:54			15:49
30	05:20		06:29		07:37		08:56 (21)	07:47		11:33 (32)	08:58			09:28
	22:05		20:45		19:16	18	09:14 (21)	16:54	99	15:15 (28)	15:52			15:50
31	05:22		06:31					07:49		11:34 (32)				09:28
	22:03		20:42					16:51	90	15:09 (28)				15:51
Potential sun hours	546		478		386			319			236			199
Total, worst case						57			1700			1022		
Sun reduction						0,50			0,50			0,50		
Oper. time red.						0,80			0,80			0,80		
Wind dir. red.						0,72			0,63			0,62		
Total reduction						0,29			0,25			0,25		
Total, real						16			428			255		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:16 (37)	07:35		09:09 (19)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (27)	18:05	23	09:32 (19)	20:17	21:26	22:30
2	09:27			08:43		12:00 (32)	07:33		09:09 (19)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (27)	18:07	24	09:33 (19)	20:19	21:28	22:32
3	09:27			08:41		11:58 (32)	07:30		09:09 (19)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (27)	18:09	24	09:33 (19)	20:21	21:30	22:34
4	09:26			08:39		11:58 (32)	07:27		09:09 (19)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (27)	18:12	23	09:32 (19)	20:24	21:33	22:35
5	09:26			08:37		11:57 (32)	07:24		09:10 (19)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (27)	18:14	21	09:31 (19)	20:26	21:35	22:37
6	09:25			08:34		11:57 (32)	07:21		09:10 (19)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (27)	18:17	20	09:30 (19)	20:28	21:37	22:38
7	09:24			08:32		11:56 (32)	07:19		09:11 (19)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (27)	18:19	17	09:28 (19)	20:30	21:40	22:39
8	09:24			08:30		11:56 (32)	07:16		09:13 (19)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (28)	18:21	12	09:25 (19)	20:33	21:42	22:40
9	09:23			08:27		11:56 (32)	07:13		09:16 (19)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (28)	18:24	5	09:21 (19)	20:35	21:44	22:42
10	09:22			08:25		11:55 (32)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (28)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (32)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (28)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (32)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (28)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (32)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (28)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (32)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (28)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (32)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (28)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (32)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (27)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (32)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (27)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (32)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (27)	18:45			20:56	22:04	22:49
19	09:10		12:54 (24)	08:02		11:57 (32)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (24)	17:40	70	14:48 (27)	18:47			20:58	22:06	22:50
20	09:08		11:12 (37)	08:00		11:57 (32)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (24)	17:43	68	14:47 (27)	18:49			21:00	22:08	22:50
21	09:07		11:11 (37)	07:57		11:58 (32)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (24)	17:45	64	14:46 (27)	18:51			21:03	22:10	22:50
22	09:05		11:11 (37)	07:54		11:59 (32)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (24)	17:48	58	14:44 (27)	18:54			21:05	22:12	22:50
23	09:03		11:11 (37)	07:52		09:17 (19)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (24)	17:50	62	14:43 (27)	18:56			21:07	22:14	22:50
24	09:02		11:10 (37)	07:49		09:14 (19)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (24)	17:53	57	14:39 (27)	18:58			21:10	22:16	22:51
25	09:00		11:08 (37)	07:46		09:13 (19)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (24)	17:55	42	12:28 (32)	19:01			21:12	22:18	22:50
26	08:58		11:09 (37)	07:44		09:11 (19)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (24)	17:57	38	12:24 (32)	19:03			21:14	22:20	22:50
27	08:56		11:09 (37)	07:41		09:10 (19)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (24)	18:00	22	09:32 (19)	19:05			21:17	22:22	22:50
28	08:54		11:10 (37)	07:38		09:09 (19)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (24)	18:02	23	09:32 (19)	19:07			21:19	22:24	22:50
29	08:52		11:12 (37)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (24)				20:10			21:21	22:25	22:50
30	08:50		11:12 (37)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (24)				20:12			21:24	22:27	22:49
31	08:48		11:14 (37)				07:10				04:41	
	16:54	56	14:29 (27)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,65			0,61			0,74				
Total reduction		0,26			0,24			0,29				
Total, real		151			468			50				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:25 (32)	09:00
	22:49	22:01	20:40	19:13			16:49	96	15:09 (28)	15:51
2	04:33	05:26	06:35	07:42			07:54		11:25 (32)	09:02
	22:48	21:58	20:37	19:10			16:46	90	15:04 (28)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:26 (32)	09:03
	22:47	21:56	20:34	19:07			16:44	82	14:58 (28)	15:49
4	04:35	05:31	06:40	07:46			07:59		11:26 (32)	09:05
	22:47	21:54	20:31	19:04			16:41	72	14:17 (27)	15:48
5	04:36	05:33	06:42	07:48		09:51 (19)	08:01		11:27 (32)	09:07
	22:46	21:51	20:28	19:02	10	10:01 (19)	16:39	70	14:17 (27)	15:47
6	04:37	05:35	06:44	07:51		09:48 (19)	08:03		11:28 (32)	09:09
	22:45	21:49	20:25	18:59	15	10:03 (19)	16:37	65	14:16 (27)	15:46
7	04:39	05:37	06:46	07:53		09:46 (19)	08:06		11:28 (32)	09:10
	22:44	21:47	20:22	18:56	18	10:04 (19)	16:34	62	14:14 (27)	15:45
8	04:40	05:39	06:49	07:55		09:45 (19)	08:08		11:29 (32)	09:12
	22:43	21:44	20:20	18:53	21	10:06 (19)	16:32	57	14:13 (27)	15:45
9	04:41	05:42	06:51	07:57		09:44 (19)	08:11		11:30 (32)	09:13
	22:42	21:42	20:17	18:50	22	10:06 (19)	16:30	53	14:12 (27)	15:44
10	04:43	05:44	06:53	08:00		09:44 (19)	08:13		10:47 (37)	09:15
	22:40	21:39	20:14	18:47	23	10:07 (19)	16:28	58	14:10 (27)	15:44
11	04:44	05:46	06:55	08:02		09:43 (19)	08:15		10:45 (37)	09:16
	22:39	21:37	20:11	18:45	23	10:06 (19)	16:25	55	13:59 (27)	15:43
12	04:46	05:48	06:57	08:04		09:42 (19)	08:18		10:44 (37)	09:18
	22:38	21:34	20:08	18:42	24	10:06 (19)	16:23	57	12:31 (24)	15:43
13	04:47	05:51	07:00	08:07		09:43 (19)	08:20		10:43 (37)	09:19
	22:37	21:31	20:05	18:39	23	10:06 (19)	16:21	59	12:32 (24)	15:42
14	04:49	05:53	07:02	08:09		09:42 (19)	08:22		10:42 (37)	09:20
	22:35	21:29	20:02	18:36	23	10:05 (19)	16:19	58	12:33 (24)	15:42
15	04:51	05:55	07:04	08:11		09:43 (19)	08:25		10:42 (37)	09:21
	22:34	21:26	19:59	18:33	33	12:54 (32)	16:17	53	12:34 (24)	15:42
16	04:52	05:57	07:06	08:13		09:44 (19)	08:27		10:42 (37)	09:22
	22:32	21:24	19:56	18:31	39	12:58 (32)	16:15	45	12:35 (24)	15:42
17	04:54	06:00	07:08	08:16		09:45 (19)	08:29		10:41 (37)	09:23
	22:30	21:21	19:54	18:28	46	15:07 (27)	16:13	47	12:35 (24)	15:42
18	04:56	06:02	07:11	08:18		09:46 (19)	08:32		10:44 (37)	09:24
	22:29	21:18	19:51	18:25	59	15:12 (27)	16:11	46	12:36 (24)	15:42
19	04:58	06:04	07:13	08:20		09:49 (19)	08:34		10:46 (37)	09:25
	22:27	21:16	19:48	18:22	62	15:15 (27)	16:09	45	12:37 (24)	15:42
20	05:00	06:06	07:15	08:23		12:30 (32)	08:36		10:46 (37)	09:26
	22:25	21:13	19:45	18:20	60	15:16 (27)	16:08	45	12:37 (24)	15:43
21	05:01	06:08	07:17	08:25		12:29 (32)	08:39		10:46 (37)	09:26
	22:24	21:10	19:42	18:17	65	15:17 (27)	16:06	36	12:37 (24)	15:43
22	05:03	06:11	07:19	08:27		12:27 (32)	08:41		10:48 (37)	09:27
	22:22	21:08	19:39	18:14	70	15:18 (27)	16:04	30	12:38 (24)	15:43
23	05:05	06:13	07:22	08:30		12:27 (32)	08:43		12:30 (24)	09:27
	22:20	21:05	19:36	18:12	72	15:19 (27)	16:02	5	12:35 (24)	15:44
24	05:07	06:15	07:24	08:32		12:26 (32)	08:45			09:28
	22:18	21:02	19:33	18:09	75	15:19 (27)	16:01			15:44
25	05:09	06:17	07:26	07:35		11:26 (32)	08:47			09:28
	22:16	20:59	19:30	17:06	76	14:20 (27)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:25 (32)	08:50			09:28
	22:14	20:56	19:27	17:04	81	15:04 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:25 (32)	08:52			09:28
	22:12	20:54	19:25	17:01	91	15:08 (28)	15:56			15:47
28	05:16	06:24	07:33	07:42		11:25 (32)	08:54			09:28
	22:10	20:51	19:22	16:59	95	15:10 (28)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:24 (32)	08:56			09:28
	22:07	20:48	19:19	16:56	99	15:11 (28)	15:54			15:49
30	05:20	06:29	07:37	07:47		11:25 (32)	08:58			09:28
	22:05	20:45	19:16	16:54	99	15:12 (28)	15:52			15:50
31	05:22	06:31		07:49		11:25 (32)				09:28
	22:03	20:42		16:51	101	15:13 (28)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1425			1286		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,63			0,62		
Total reduction					0,25			0,25		
Total, real					357			321		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		10:42 (37)	07:35		08:50 (19)	07:07	05:44	04:40
	15:53			16:56	72	14:06 (27)	18:05	39	11:29 (32)	20:17	21:26	22:30
2	09:27			08:43		10:44 (37)	07:33		08:50 (19)	07:04	05:41	04:38
	15:54			16:58	72	14:08 (27)	18:07	31	11:25 (32)	20:19	21:28	22:32
3	09:27			08:41		10:46 (37)	07:30		08:49 (19)	07:01	05:39	04:37
	15:55			17:01	71	14:10 (27)	18:09	21	09:10 (19)	20:21	21:31	22:34
4	09:26			08:39		10:47 (37)	07:27		08:48 (19)	06:58	05:36	04:36
	15:57			17:03	77	15:02 (28)	18:12	22	09:10 (19)	20:24	21:33	22:35
5	09:26			08:37		10:50 (37)	07:24		08:48 (19)	06:55	05:34	04:35
	15:58			17:06	77	15:05 (28)	18:14	21	09:09 (19)	20:26	21:35	22:37
6	09:25			08:34		11:05 (32)	07:21		08:48 (19)	06:52	05:31	04:34
	16:00			17:08	82	15:12 (28)	18:17	21	09:09 (19)	20:28	21:37	22:38
7	09:24			08:32		11:03 (32)	07:19		08:48 (19)	06:50	05:29	04:33
	16:02			17:11	92	15:18 (28)	18:19	20	09:08 (19)	20:30	21:40	22:39
8	09:24			08:30		11:03 (32)	07:16		08:48 (19)	06:47	05:26	04:32
	16:03			17:13	101	15:25 (28)	18:21	19	09:07 (19)	20:33	21:42	22:40
9	09:23			08:27		11:02 (32)	07:13		08:48 (19)	06:44	05:24	04:31
	16:05			17:16	112	15:55 (26)	18:24	18	09:06 (19)	20:35	21:44	22:42
10	09:22			08:25		11:01 (32)	07:10		08:49 (19)	06:41	05:22	04:30
	16:07			17:18	104	15:51 (26)	18:26	15	09:04 (19)	20:37	21:46	22:43
11	09:21			08:23		11:01 (32)	07:07		08:51 (19)	06:38	05:19	04:29
	16:09			17:21	101	15:23 (28)	18:28	10	09:01 (19)	20:40	21:49	22:44
12	09:20			08:20		11:00 (32)	07:04			06:35	05:17	04:29
	16:11			17:23	98	15:21 (28)	18:31			20:42	21:51	22:45
13	09:18			08:18		10:59 (32)	07:02			06:33	05:15	04:28
	16:13			17:26	94	15:18 (28)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:00 (32)	06:59			06:30	05:13	04:28
	16:15			17:28	83	14:14 (27)	18:35			20:47	21:55	22:47
15	09:16			08:13		10:59 (32)	06:56			06:27	05:10	04:27
	16:17			17:31	83	14:13 (27)	18:38			20:49	21:58	22:47
16	09:15			08:10		10:59 (32)	06:53			06:24	05:08	04:27
	16:19			17:33	81	14:12 (27)	18:40			20:51	22:00	22:48
17	09:13			08:07		10:59 (32)	06:50			06:21	05:06	04:27
	16:21			17:36	81	14:12 (27)	18:42			20:53	22:02	22:49
18	09:12			08:05		10:59 (32)	06:47			06:19	05:04	04:27
	16:23			17:38	80	14:12 (27)	18:45			20:56	22:04	22:49
19	09:10			08:02		10:59 (32)	06:44			06:16	05:02	04:27
	16:25			17:40	78	14:11 (27)	18:47			20:58	22:06	22:50
20	09:08			08:00		10:59 (32)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:09 (27)	18:49			21:00	22:08	22:50
21	09:07			07:57		10:59 (32)	06:39			06:10	04:58	04:27
	16:30			17:45	71	14:08 (27)	18:51			21:03	22:10	22:50
22	09:05			07:54		11:00 (32)	06:36			06:08	04:56	04:27
	16:32			17:48	66	14:06 (27)	18:54			21:05	22:12	22:50
23	09:03			07:52		11:01 (32)	06:33			06:05	04:54	04:27
	16:34			17:50	60	14:04 (27)	18:56			21:07	22:14	22:50
24	09:02			07:49		11:01 (32)	06:30			06:02	04:52	04:27
	16:37			17:53	50	14:00 (27)	18:58			21:10	22:16	22:51
25	09:00			07:46		11:02 (32)	06:27			06:00	04:51	04:28
	16:39			17:55	36	11:38 (32)	19:01			21:12	22:18	22:50
26	08:58		12:05 (24)	07:44		08:58 (19)	06:24			05:57	04:49	04:28
	16:41	5	12:10 (24)	17:57	36	11:36 (32)	19:03			21:14	22:20	22:50
27	08:56		12:05 (24)	07:41		08:54 (19)	06:21			05:54	04:47	04:29
	16:44	19	13:53 (27)	18:00	41	11:34 (32)	19:05			21:17	22:22	22:50
28	08:54		11:00 (37)	07:38		08:52 (19)	06:18			05:52	04:46	04:30
	16:46	40	13:59 (27)	18:02	41	11:32 (32)	19:08			21:19	22:24	22:50
29	08:52		10:56 (37)				07:15			05:49	04:44	04:30
	16:49	47	14:02 (27)				20:10			21:21	22:25	22:50
30	08:50		10:50 (37)				07:13			05:46	04:43	04:31
	16:51	55	14:03 (27)				20:12			21:24	22:27	22:49
31	08:48		10:44 (37)				07:10				04:41	
	16:54	62	14:05 (27)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		228			2114			237				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,62			0,63			0,73				
Total reduction		0,25			0,25			0,29				
Total, real		56			530			69				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December
1	04:32		05:24		06:33		07:39			07:51		10:30 (32)	09:00
	22:49		22:01		20:40		19:13			16:49	107	15:21 (26)	15:51
2	04:33		05:26		06:35		07:42		09:32 (19)	07:54		10:32 (32)	09:02
	22:48		21:58		20:37		19:10	7	09:39 (19)	16:46	110	15:25 (26)	15:50
3	04:34		05:28		06:37		07:44		09:28 (19)	07:56		10:33 (32)	09:03
	22:47		21:56		20:34		19:07	13	09:41 (19)	16:44	97	14:53 (28)	15:49
4	04:35		05:31		06:40		07:46		09:26 (19)	07:59		10:33 (32)	09:05
	22:47		21:54		20:31		19:04	16	09:42 (19)	16:41	89	14:46 (28)	15:48
5	04:36		05:33		06:42		07:48		09:25 (19)	08:01		10:35 (32)	09:07
	22:46		21:51		20:28		19:02	19	09:44 (19)	16:39	81	14:41 (28)	15:47
6	04:37		05:35		06:44		07:51		09:24 (19)	08:03		10:20 (37)	09:09
	22:45		21:49		20:25		18:59	20	09:44 (19)	16:37	77	14:35 (28)	15:46
7	04:39		05:37		06:46		07:53		09:23 (19)	08:06		10:16 (37)	09:10
	22:44		21:47		20:22		18:56	21	09:44 (19)	16:34	77	14:32 (28)	15:45
8	04:40		05:39		06:49		07:55		09:23 (19)	08:08		10:15 (37)	09:12
	22:43		21:44		20:20		18:53	22	09:45 (19)	16:32	71	13:39 (27)	15:45
9	04:41		05:42		06:51		07:57		09:22 (19)	08:11		10:15 (37)	09:13
	22:42		21:42		20:17		18:50	22	09:44 (19)	16:30	72	13:39 (27)	15:44
10	04:43		05:44		06:53		08:00		09:23 (19)	08:13		10:14 (37)	09:15
	22:40		21:39		20:14		18:47	21	09:44 (19)	16:28	71	13:38 (27)	15:44
11	04:44		05:46		06:55		08:02		09:23 (19)	08:15		10:15 (37)	09:16
	22:39		21:37		20:11		18:45	20	09:43 (19)	16:25	61	13:36 (27)	15:43
12	04:46		05:48		06:57		08:04		09:23 (19)	08:18		10:24 (37)	09:18
	22:38		21:34		20:08		18:42	36	12:00 (32)	16:23	52	13:35 (27)	15:43
13	04:47		05:51		07:00		08:07		09:24 (19)	08:20		10:28 (37)	09:19
	22:37		21:31		20:05		18:39	40	12:04 (32)	16:21	47	13:33 (27)	15:42
14	04:49		05:53		07:02		08:09		09:25 (19)	08:22		10:32 (37)	09:20
	22:35		21:29		20:02		18:36	42	12:06 (32)	16:19	39	13:30 (27)	15:42
15	04:51		05:55		07:04		08:11		09:28 (19)	08:25		11:38 (24)	09:21
	22:34		21:26		19:59		18:33	40	12:08 (32)	16:17	19	13:26 (27)	15:42
16	04:52		05:57		07:06		08:13		11:35 (32)	08:27		11:38 (24)	09:22
	22:32		21:24		19:56		18:31	34	12:09 (32)	16:15	4	11:42 (24)	15:42
17	04:54		06:00		07:08		08:16		11:34 (32)	08:29			09:23
	22:30		21:21		19:54		18:28	36	12:10 (32)	16:13			15:42
18	04:56		06:02		07:11		08:18		11:32 (32)	08:32			09:24
	22:29		21:18		19:51		18:25	55	14:33 (27)	16:11			15:42
19	04:58		06:04		07:13		08:20		11:32 (32)	08:34			09:25
	22:27		21:16		19:48		18:22	62	14:36 (27)	16:09			15:42
20	05:00		06:06		07:15		08:23		11:31 (32)	08:36			09:26
	22:25		21:13		19:45		18:20	67	14:37 (27)	16:08			15:43
21	05:01		06:09		07:17		08:25		11:30 (32)	08:39			09:26
	22:24		21:10		19:42		18:17	72	14:39 (27)	16:06			15:43
22	05:03		06:11		07:19		08:27		11:29 (32)	08:41			09:27
	22:22		21:08		19:39		18:14	75	14:40 (27)	16:04			15:43
23	05:05		06:13		07:22		08:30		11:29 (32)	08:43			09:27
	22:20		21:05		19:36		18:12	78	14:41 (27)	16:02			15:44
24	05:07		06:15		07:24		08:32		11:29 (32)	08:45			09:28
	22:18		21:02		19:33		18:09	79	14:41 (27)	16:01			15:45
25	05:09		06:17		07:26		07:35		10:29 (32)	08:47			09:28
	22:16		20:59		19:30		17:07	81	13:42 (27)	15:59			15:45
26	05:11		06:20		07:28		07:37		10:29 (32)	08:50			09:28
	22:14		20:57		19:27		17:04	82	13:43 (27)	15:58			15:46
27	05:13		06:22		07:30		07:39		10:29 (32)	08:52			09:28
	22:12		20:54		19:25		17:01	81	13:42 (27)	15:56			15:47
28	05:16		06:24		07:33		07:42		10:29 (32)	08:54			09:28
	22:10		20:51		19:22		16:59	87	14:45 (28)	15:55			15:48
29	05:18		06:26		07:35		07:44		10:29 (32)	08:56			09:28
	22:07		20:48		19:19		16:56	95	14:48 (28)	15:54			15:49
30	05:20		06:29		07:37		07:47		10:30 (32)	08:58			09:28
	22:05		20:45		19:16		16:54	99	14:51 (28)	15:52			15:50
31	05:22		06:31				07:49		10:31 (32)				09:28
	22:03		20:42				16:51	99	14:52 (28)				15:51
Potential sun hours	546		478		386		319			236			199
Total, worst case								1521			1074		
Sun reduction								0,50			0,50		
Oper. time red.								0,80			0,80		
Wind dir. red.								0,65			0,62		
Total reduction								0,26			0,25		
Total, real								396			264		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:46		11:39 (32)	07:35	09:25 (19)	07:07	05:44	04:40
	15:53		16:56	88	15:12 (28)	18:05	9 09:34 (19)	20:17	21:26	22:31
2	09:27		08:43		11:39 (32)	07:33		07:04	05:41	04:38
	15:54		16:58	88	15:13 (28)	18:07		20:19	21:28	22:32
3	09:27		08:41		11:40 (32)	07:30		07:01	05:39	04:37
	15:55		17:01	85	15:12 (28)	18:09		20:21	21:31	22:34
4	09:27		08:39		11:39 (32)	07:27		06:58	05:36	04:36
	15:57		17:03	83	15:11 (28)	18:12		20:24	21:33	22:35
5	09:26	12:20 (24)	08:37		11:39 (32)	07:24		06:55	05:34	04:35
	15:58	1 12:21 (24)	17:06	80	15:09 (28)	18:14		20:26	21:35	22:37
6	09:25	12:19 (24)	08:34		11:40 (32)	07:21		06:52	05:31	04:34
	16:00	5 12:24 (24)	17:08	74	15:08 (28)	18:17		20:28	21:37	22:38
7	09:24	12:17 (24)	08:32		11:40 (32)	07:19		06:50	05:29	04:33
	16:02	11 12:28 (24)	17:11	62	14:11 (27)	18:19		20:30	21:40	22:39
8	09:24	12:17 (24)	08:30		11:41 (32)	07:16		06:47	05:26	04:32
	16:03	13 12:30 (24)	17:13	61	14:11 (27)	18:21		20:33	21:42	22:40
9	09:23	12:18 (24)	08:27		11:42 (32)	07:13		06:44	05:24	04:31
	16:05	16 12:34 (24)	17:16	57	14:10 (27)	18:24		20:35	21:44	22:42
10	09:22	11:06 (37)	08:25		11:42 (32)	07:10		06:41	05:22	04:30
	16:07	25 12:39 (24)	17:18	54	14:09 (27)	18:26		20:37	21:46	22:43
11	09:21	11:02 (37)	08:23		11:44 (32)	07:07		06:38	05:19	04:29
	16:09	31 12:41 (24)	17:21	48	14:08 (27)	18:28		20:40	21:49	22:44
12	09:20	11:01 (37)	08:20		11:45 (32)	07:04		06:35	05:17	04:29
	16:11	40 12:41 (24)	17:23	42	14:06 (27)	18:31		20:42	21:51	22:45
13	09:18	11:02 (37)	08:18		11:46 (32)	07:02		06:32	05:15	04:28
	16:13	42 12:42 (24)	17:26	32	14:02 (27)	18:33		20:44	21:53	22:46
14	09:17	11:02 (37)	08:15		11:49 (32)	06:59		06:30	05:13	04:28
	16:15	42 12:42 (24)	17:28	18	12:07 (32)	18:35		20:47	21:55	22:47
15	09:16	11:02 (37)	08:13		11:52 (32)	06:56		06:27	05:10	04:27
	16:17	43 12:42 (24)	17:31	12	12:04 (32)	18:38		20:49	21:58	22:47
16	09:15	11:02 (37)	08:10		09:29 (19)	06:53		06:24	05:08	04:27
	16:19	43 12:42 (24)	17:33	5	09:34 (19)	18:40		20:51	22:00	22:48
17	09:13	11:02 (37)	08:07		09:25 (19)	06:50		06:21	05:06	04:27
	16:21	45 12:42 (24)	17:36	12	09:37 (19)	18:42		20:53	22:02	22:49
18	09:12	11:03 (37)	08:05		09:24 (19)	06:47		06:19	05:04	04:27
	16:23	57 13:55 (27)	17:38	16	09:40 (19)	18:45		20:56	22:04	22:49
19	09:10	11:03 (37)	08:02		09:23 (19)	06:44		06:16	05:02	04:27
	16:25	70 13:59 (27)	17:40	17	09:40 (19)	18:47		20:58	22:06	22:50
20	09:08	11:04 (37)	08:00		09:22 (19)	06:41		06:13	05:00	04:27
	16:28	75 14:01 (27)	17:43	19	09:41 (19)	18:49		21:00	22:08	22:50
21	09:07	11:04 (37)	07:57		09:21 (19)	06:39		06:10	04:58	04:27
	16:30	80 14:03 (27)	17:45	20	09:41 (19)	18:51		21:03	22:10	22:50
22	09:05	11:05 (37)	07:54		09:20 (19)	06:36		06:08	04:56	04:27
	16:32	82 14:05 (27)	17:48	21	09:41 (19)	18:54		21:05	22:12	22:50
23	09:03	11:05 (37)	07:52		09:21 (19)	06:33		06:05	04:54	04:27
	16:34	83 14:05 (27)	17:50	21	09:42 (19)	18:56		21:07	22:14	22:51
24	09:02	11:06 (37)	07:49		09:21 (19)	06:30		06:02	04:52	04:27
	16:37	84 14:07 (27)	17:53	20	09:41 (19)	18:58		21:10	22:16	22:51
25	09:00	11:07 (37)	07:46		09:21 (19)	06:27		05:59	04:51	04:28
	16:39	84 14:52 (28)	17:55	20	09:41 (19)	19:01		21:12	22:18	22:51
26	08:58	11:09 (37)	07:44		09:21 (19)	06:24		05:57	04:49	04:28
	16:41	79 14:57 (28)	17:57	19	09:40 (19)	19:03		21:14	22:20	22:50
27	08:56	11:10 (37)	07:41		09:22 (19)	06:21		05:54	04:47	04:29
	16:44	86 15:12 (28)	18:00	16	09:38 (19)	19:05		21:17	22:22	22:50
28	08:54	11:13 (37)	07:38		09:23 (19)	06:18		05:52	04:46	04:30
	16:46	90 15:13 (28)	18:02	14	09:37 (19)	19:08		21:19	22:24	22:50
29	08:52	11:40 (32)				07:15		05:49	04:44	04:30
	16:49	88 15:14 (28)				20:10		21:21	22:25	22:50
30	08:50	11:39 (32)				07:12		05:46	04:42	04:31
	16:51	88 15:13 (28)				20:12		21:24	22:27	22:49
31	08:48	11:39 (32)				07:10			04:41	
	16:54	88 15:13 (28)				20:14			22:29	
Potential sun hours	221		260			365		432	521	547
Total, worst case		1491		1104		9				
Sun reduction		0,50		0,50		0,50				
Oper. time red.		0,80		0,80		0,80				
Wind dir. red.		0,62		0,63		0,73				
Total reduction		0,25		0,25		0,29				
Total, real		371		276		3				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:12 (32)	09:00		10:44 (37)
	22:49	22:01	20:40	19:13			16:49	53	13:38 (27)	15:51	31	12:23 (24)
2	04:33	05:26	06:35	07:42			07:54		11:11 (32)	09:02		10:48 (37)
	22:48	21:58	20:37	19:10			16:46	58	13:40 (27)	15:50	27	12:23 (24)
3	04:34	05:28	06:37	07:44			07:56		11:11 (32)	09:03		12:01 (24)
	22:47	21:56	20:34	19:07			16:44	60	13:41 (27)	15:49	17	12:18 (24)
4	04:35	05:31	06:40	07:46			07:59		11:10 (32)	09:05		12:01 (24)
	22:47	21:54	20:31	19:04			16:41	63	13:41 (27)	15:48	13	12:14 (24)
5	04:36	05:33	06:42	07:48			08:01		11:10 (32)	09:07		12:02 (24)
	22:46	21:51	20:28	19:02			16:39	75	14:38 (28)	15:47	11	12:13 (24)
6	04:37	05:35	06:44	07:51			08:03		11:10 (32)	09:09		12:05 (24)
	22:45	21:49	20:25	18:59			16:37	79	14:40 (28)	15:46	5	12:10 (24)
7	04:39	05:37	06:46	07:53			08:06		11:09 (32)	09:10		12:07 (24)
	22:44	21:47	20:22	18:56			16:34	84	14:41 (28)	15:45	2	12:09 (24)
8	04:40	05:39	06:49	07:55			08:08		11:09 (32)	09:12		
	22:43	21:44	20:20	18:53			16:32	87	14:42 (28)	15:45		
9	04:41	05:42	06:51	07:57			08:11		11:10 (32)	09:13		
	22:42	21:42	20:17	18:50			16:30	87	14:43 (28)	15:44		
10	04:43	05:44	06:53	08:00			08:13		11:10 (32)	09:15		
	22:41	21:39	20:14	18:47			16:28	88	14:44 (28)	15:43		
11	04:44	05:46	06:55	08:02			08:15		11:10 (32)	09:16		
	22:39	21:37	20:11	18:45			16:25	88	14:44 (28)	15:43		
12	04:46	05:48	06:57	08:04		10:02 (19)	08:18		11:11 (32)	09:18		
	22:38	21:34	20:08	18:42	2	10:04 (19)	16:23	88	14:45 (28)	15:43		
13	04:47	05:51	07:00	08:07		09:58 (19)	08:20		11:12 (32)	09:19		
	22:37	21:32	20:05	18:39	11	10:09 (19)	16:21	86	14:45 (28)	15:42		
14	04:49	05:53	07:02	08:09		09:55 (19)	08:22		10:45 (37)	09:20		
	22:35	21:29	20:02	18:36	15	10:10 (19)	16:19	89	14:45 (28)	15:42		
15	04:51	05:55	07:04	08:11		09:54 (19)	08:25		10:42 (37)	09:21		
	22:34	21:26	19:59	18:33	18	10:12 (19)	16:17	87	14:45 (28)	15:42		
16	04:52	05:57	07:06	08:13		09:53 (19)	08:27		10:41 (37)	09:22		
	22:32	21:24	19:56	18:31	19	10:12 (19)	16:15	81	14:30 (28)	15:42		
17	04:54	06:00	07:08	08:16		09:53 (19)	08:30		10:41 (37)	09:23		
	22:30	21:21	19:54	18:28	20	10:13 (19)	16:13	83	14:25 (28)	15:42		
18	04:56	06:02	07:11	08:18		09:52 (19)	08:32		10:40 (37)	09:24		
	22:29	21:18	19:51	18:25	21	10:13 (19)	16:11	84	13:41 (27)	15:42		
19	04:58	06:04	07:13	08:20		09:52 (19)	08:34		10:40 (37)	09:25		
	22:27	21:16	19:48	18:22	21	10:13 (19)	16:09	83	13:40 (27)	15:42		
20	05:00	06:06	07:15	08:23		09:52 (19)	08:36		10:39 (37)	09:26		
	22:25	21:13	19:45	18:20	20	10:12 (19)	16:08	82	13:39 (27)	15:43		
21	05:01	06:08	07:17	08:25		09:52 (19)	08:39		10:39 (37)	09:26		
	22:24	21:10	19:42	18:17	20	10:12 (19)	16:06	80	13:38 (27)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (19)	08:41		10:40 (37)	09:27		
	22:22	21:08	19:39	18:14	19	10:11 (19)	16:04	75	13:37 (27)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (19)	08:43		10:39 (37)	09:27		
	22:20	21:05	19:36	18:12	17	10:10 (19)	16:02	69	13:35 (27)	15:44		
24	05:07	06:15	07:24	08:32		09:54 (19)	08:45		10:40 (37)	09:28		
	22:18	21:02	19:33	18:09	14	10:08 (19)	16:01	58	13:32 (27)	15:44		
25	05:09	06:17	07:26	07:35		08:56 (19)	08:47		10:40 (37)	09:28		
	22:16	20:59	19:30	17:06	11	09:07 (19)	15:59	45	12:20 (24)	15:45		
26	05:11	06:20	07:28	07:37		09:01 (19)	08:50		10:41 (37)	09:28		
	22:14	20:57	19:27	17:04	2	09:03 (19)	15:58	43	12:21 (24)	15:46		
27	05:13	06:22	07:30	07:39		11:20 (32)	08:52		10:41 (37)	09:28		
	22:12	20:54	19:25	17:01	14	11:34 (32)	15:56	43	12:21 (24)	15:47		
28	05:16	06:24	07:33	07:42		11:18 (32)	08:54		10:42 (37)	09:28		
	22:10	20:51	19:22	16:59	19	11:37 (32)	15:55	42	12:22 (24)	15:48		
29	05:18	06:26	07:35	07:44		11:15 (32)	08:56		10:42 (37)	09:28		
	22:07	20:48	19:19	16:56	34	13:32 (27)	15:54	42	12:22 (24)	15:49		
30	05:20	06:29	07:37	07:47		11:14 (32)	08:58		10:42 (37)	09:28		
	22:05	20:45	19:16	16:54	42	13:35 (27)	15:52	40	12:22 (24)	15:50		
31	05:22	06:31		07:49		11:13 (32)				09:28		
	22:03	20:42		16:51	50	13:38 (27)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					389			2122			106	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,69			0,61			0,64	
Total reduction					0,27			0,25			0,25	
Total, real					107			520			27	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:12 (37)	08:46		11:58 (32)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (37)	16:56	88	15:21 (28)	18:05	20:17	21:26	22:30
2	09:27		11:11 (37)	08:43		11:59 (32)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (37)	16:58	85	15:21 (28)	18:07	20:19	21:28	22:32
3	09:27		11:11 (37)	08:41		12:00 (32)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (24)	17:01	84	15:21 (28)	18:09	20:21	21:31	22:34
4	09:27		11:11 (37)	08:39		11:59 (32)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (24)	17:03	82	15:20 (28)	18:12	20:24	21:33	22:35
5	09:26		11:11 (37)	08:37		11:59 (32)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (24)	17:06	81	15:19 (28)	18:14	20:26	21:35	22:37
6	09:25		11:11 (37)	08:34		12:00 (32)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (24)	17:08	75	15:18 (28)	18:17	20:28	21:37	22:38
7	09:24		11:11 (37)	08:32		12:01 (32)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (24)	17:11	64	15:14 (28)	18:19	20:30	21:40	22:39
8	09:24		11:11 (37)	08:30		12:02 (32)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (24)	17:13	57	14:25 (27)	18:21	20:33	21:42	22:40
9	09:23		11:12 (37)	08:27		12:03 (32)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (24)	17:16	53	14:24 (27)	18:24	20:35	21:44	22:42
10	09:22		11:11 (37)	08:25		12:04 (32)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (24)	17:18	48	14:23 (27)	18:26	20:37	21:46	22:43
11	09:21		11:12 (37)	08:23		12:06 (32)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (24)	17:21	43	14:22 (27)	18:28	20:40	21:49	22:44
12	09:20		11:12 (37)	08:20		12:07 (32)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (24)	17:23	35	14:20 (27)	18:31	20:42	21:51	22:45
13	09:18		11:12 (37)	08:18		12:10 (32)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (24)	17:26	22	14:16 (27)	18:33	20:44	21:53	22:46
14	09:17		11:12 (37)	08:15		09:38 (19)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (24)	17:28	10	12:19 (32)	18:35	20:47	21:55	22:47
15	09:16		11:12 (37)	08:13		09:35 (19)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (24)	17:31	12	09:47 (19)	18:38	20:49	21:58	22:47
16	09:15		11:12 (37)	08:10		09:33 (19)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (24)	17:33	16	09:49 (19)	18:40	20:51	22:00	22:48
17	09:13		11:13 (37)	08:07		09:32 (19)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (24)	17:36	18	09:50 (19)	18:42	20:53	22:02	22:49
18	09:12		11:14 (37)	08:05		09:31 (19)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (24)	17:38	20	09:51 (19)	18:45	20:56	22:04	22:49
19	09:10		11:15 (37)	08:02		09:31 (19)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (24)	17:40	20	09:51 (19)	18:47	20:58	22:06	22:50
20	09:08		11:15 (37)	08:00		09:30 (19)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (27)	17:43	21	09:51 (19)	18:49	21:00	22:08	22:50
21	09:07		11:16 (37)	07:57		09:30 (19)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (27)	17:45	21	09:51 (19)	18:51	21:03	22:10	22:50
22	09:05		11:16 (37)	07:54		09:29 (19)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (27)	17:48	22	09:51 (19)	18:54	21:05	22:12	22:50
23	09:03		11:17 (37)	07:52		09:30 (19)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (27)	17:50	21	09:51 (19)	18:56	21:07	22:14	22:51
24	09:02		11:19 (37)	07:49		09:31 (19)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (27)	17:53	19	09:50 (19)	18:58	21:10	22:16	22:51
25	09:00		11:20 (37)	07:46		09:31 (19)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (27)	17:55	18	09:49 (19)	19:01	21:12	22:18	22:51
26	08:58		11:23 (37)	07:44		09:32 (19)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (28)	17:57	15	09:47 (19)	19:03	21:14	22:20	22:50
27	08:56		11:58 (32)	07:41		09:34 (19)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (28)	18:00	11	09:45 (19)	19:05	21:17	22:22	22:50
28	08:54		11:58 (32)	07:38		09:38 (19)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (28)	18:02	2	09:40 (19)	19:07	21:19	22:24	22:50
29	08:52		11:59 (32)				07:15	05:49	04:44	04:30
	16:49	83	15:18 (28)				20:10	21:21	22:25	22:50
30	08:50		11:58 (32)				07:12	05:46	04:42	04:31
	16:51	86	15:21 (28)				20:12	21:24	22:27	22:49
31	08:48		11:58 (32)				07:10		04:41	
	16:54	88	15:22 (28)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1646			1063					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,63			0,63					
Total reduction		0,25			0,25					
Total, real		411			265					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:33 (32)	09:00		10:54 (37)
	22:49		22:01		20:40		19:13			16:49	50	13:53 (27)	15:51	43	12:35 (24)
2	04:33		05:26		06:35		07:42			07:54		11:32 (32)	09:02		10:54 (37)
	22:48		21:58		20:37		19:10			16:46	54	13:54 (27)	15:50	42	12:35 (24)
3	04:34		05:28		06:37		07:44			07:56		11:32 (32)	09:03		10:55 (37)
	22:47		21:56		20:34		19:07			16:44	57	13:55 (27)	15:49	40	12:35 (24)
4	04:35		05:31		06:40		07:46			07:59		11:30 (32)	09:05		10:56 (37)
	22:47		21:54		20:31		19:04			16:41	68	14:45 (28)	15:48	39	12:35 (24)
5	04:36		05:33		06:42		07:48			08:01		11:30 (32)	09:07		10:56 (37)
	22:46		21:51		20:28		19:02			16:39	76	14:48 (28)	15:47	39	12:36 (24)
6	04:37		05:35		06:44		07:51			08:03		11:30 (32)	09:09		10:57 (37)
	22:45		21:49		20:25		18:59			16:37	78	14:49 (28)	15:46	30	12:36 (24)
7	04:39		05:37		06:46		07:53			08:06		11:29 (32)	09:10		10:58 (37)
	22:44		21:47		20:22		18:56			16:34	83	14:50 (28)	15:45	29	12:36 (24)
8	04:40		05:39		06:49		07:55			08:08		11:29 (32)	09:12		10:59 (37)
	22:43		21:44		20:20		18:53			16:32	86	14:51 (28)	15:45	15	12:33 (24)
9	04:41		05:42		06:51		07:57			08:11		11:29 (32)	09:13		11:00 (37)
	22:42		21:42		20:17		18:50			16:30	87	14:52 (28)	15:44	12	12:34 (24)
10	04:43		05:44		06:53		08:00			08:13		11:30 (32)	09:15		11:00 (37)
	22:41		21:39		20:14		18:47			16:28	88	14:53 (28)	15:43	4	12:31 (24)
11	04:44		05:46		06:55		08:02			08:15		11:29 (32)	09:16		11:02 (37)
	22:39		21:37		20:11		18:45			16:25	87	14:52 (28)	15:43	2	11:04 (37)
12	04:46		05:48		06:57		08:04			08:18		11:30 (32)	09:18		11:02 (37)
	22:38		21:34		20:08		18:42			16:23	87	14:53 (28)	15:43	2	11:04 (37)
13	04:47		05:51		07:00		08:07			08:20		11:30 (32)	09:19		
	22:37		21:31		20:05		18:39			16:21	83	14:50 (28)	15:42		
14	04:49		05:53		07:02		08:09		10:08 (19)	08:22		11:30 (32)	09:20		
	22:35		21:29		20:02		18:36	8	10:16 (19)	16:19	74	14:42 (28)	15:42		
15	04:51		05:55		07:04		08:11		10:06 (19)	08:25		11:31 (32)	09:21		
	22:34		21:26		19:59		18:33	13	10:19 (19)	16:17	68	14:38 (28)	15:42		
16	04:52		05:57		07:06		08:13		10:04 (19)	08:27		10:56 (37)	09:22		
	22:32		21:24		19:56		18:31	16	10:20 (19)	16:15	69	14:36 (28)	15:42		
17	04:54		06:00		07:08		08:16		10:03 (19)	08:30		10:54 (37)	09:23		
	22:30		21:21		19:54		18:28	18	10:21 (19)	16:13	73	13:55 (27)	15:42		
18	04:56		06:02		07:11		08:18		10:02 (19)	08:32		10:52 (37)	09:24		
	22:29		21:18		19:51		18:25	20	10:22 (19)	16:11	78	13:54 (27)	15:42		
19	04:58		06:04		07:13		08:20		10:01 (19)	08:34		10:52 (37)	09:25		
	22:27		21:16		19:48		18:22	21	10:22 (19)	16:09	81	13:54 (27)	15:42		
20	05:00		06:06		07:15		08:23		10:01 (19)	08:36		10:51 (37)	09:26		
	22:25		21:13		19:45		18:20	21	10:22 (19)	16:08	80	13:52 (27)	15:43		
21	05:01		06:08		07:17		08:25		10:01 (19)	08:39		10:51 (37)	09:26		
	22:24		21:10		19:42		18:17	21	10:22 (19)	16:06	78	13:51 (27)	15:43		
22	05:03		06:11		07:19		08:27		10:00 (19)	08:41		10:51 (37)	09:27		
	22:22		21:08		19:39		18:14	21	10:21 (19)	16:04	75	13:50 (27)	15:43		
23	05:05		06:13		07:22		08:30		10:01 (19)	08:43		10:51 (37)	09:27		
	22:20		21:05		19:36		18:12	20	10:21 (19)	16:02	64	12:31 (24)	15:44		
24	05:07		06:15		07:24		08:32		10:01 (19)	08:45		10:51 (37)	09:28		
	22:18		21:02		19:33		18:09	19	10:20 (19)	16:01	63	12:32 (24)	15:44		
25	05:09		06:17		07:26		07:35		09:02 (19)	08:47		10:51 (37)	09:28		
	22:16		20:59		19:30		17:06	18	09:20 (19)	15:59	60	12:32 (24)	15:45		
26	05:11		06:20		07:28		07:37		09:03 (19)	08:50		10:52 (37)	09:28		
	22:14		20:57		19:27		17:04	15	09:18 (19)	15:58	56	12:33 (24)	15:46		
27	05:13		06:22		07:30		07:39		09:05 (19)	08:52		10:51 (37)	09:28		
	22:12		20:54		19:25		17:01	11	09:16 (19)	15:56	53	12:33 (24)	15:47		
28	05:16		06:24		07:33		07:42		09:08 (19)	08:54		10:52 (37)	09:28		
	22:10		20:51		19:22		16:59	13	11:51 (32)	15:55	44	12:34 (24)	15:48		
29	05:18		06:26		07:35		07:44		11:38 (32)	08:56		10:53 (37)	09:28		
	22:07		20:48		19:19		16:56	26	13:46 (27)	15:54	43	12:34 (24)	15:49		
30	05:20		06:29		07:37		07:47		11:36 (32)	08:58		10:53 (37)	09:28		
	22:05		20:45		19:16		16:54	37	13:50 (27)	15:52	43	12:34 (24)	15:50		
31	05:22		06:31				07:49		11:35 (32)				09:28		11:11 (37)
	22:03		20:42				16:51	44	13:52 (27)				15:51	1	11:12 (37)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								362			2086			298	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,69			0,61			0,65	
Total reduction								0,28			0,24			0,26	
Total, real								100			508			77	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:23 (37)	08:46		12:23 (32)	07:35	07:07	05:44	04:40
	15:53	17	11:40 (37)	16:56	82	15:30 (28)	18:05	20:17	21:26	22:30
2	09:27		11:23 (37)	08:43		12:24 (32)	07:33	07:04	05:41	04:38
	15:54	17	11:40 (37)	16:58	86	15:34 (28)	18:07	20:19	21:28	22:32
3	09:27		11:23 (37)	08:41		12:25 (32)	07:30	07:01	05:39	04:37
	15:55	18	11:41 (37)	17:01	84	15:34 (28)	18:09	20:21	21:31	22:34
4	09:26		11:23 (37)	08:39		12:25 (32)	07:27	06:58	05:36	04:36
	15:57	23	12:52 (24)	17:03	85	15:34 (28)	18:12	20:24	21:33	22:35
5	09:26		11:23 (37)	08:37		12:25 (32)	07:24	06:55	05:34	04:35
	15:58	25	12:53 (24)	17:06	82	15:33 (28)	18:14	20:26	21:35	22:37
6	09:25		11:24 (37)	08:34		12:26 (32)	07:21	06:52	05:31	04:34
	16:00	31	13:06 (24)	17:08	79	15:33 (28)	18:17	20:28	21:37	22:38
7	09:24		11:24 (37)	08:32		12:26 (32)	07:19	06:50	05:29	04:33
	16:02	34	13:07 (24)	17:11	74	15:31 (28)	18:19	20:30	21:40	22:39
8	09:24		11:24 (37)	08:30		12:28 (32)	07:16	06:47	05:26	04:32
	16:03	41	13:07 (24)	17:13	68	15:30 (28)	18:21	20:33	21:42	22:40
9	09:23		11:24 (37)	08:27		12:28 (32)	07:13	06:44	05:24	04:31
	16:05	42	13:07 (24)	17:16	60	15:26 (28)	18:24	20:35	21:44	22:42
10	09:22		11:25 (37)	08:25		12:29 (32)	07:10	06:41	05:22	04:30
	16:07	42	13:08 (24)	17:18	51	14:44 (27)	18:26	20:37	21:46	22:43
11	09:21		11:25 (37)	08:23		12:32 (32)	07:07	06:38	05:19	04:29
	16:09	43	13:09 (24)	17:21	45	14:43 (27)	18:28	20:40	21:49	22:44
12	09:20		11:25 (37)	08:20		09:49 (19)	07:04	06:35	05:17	04:29
	16:11	44	13:09 (24)	17:23	45	14:42 (27)	18:31	20:42	21:51	22:45
13	09:18		11:26 (37)	08:18		09:45 (19)	07:01	06:32	05:15	04:28
	16:13	44	13:10 (24)	17:26	43	14:40 (27)	18:33	20:44	21:53	22:46
14	09:17		11:26 (37)	08:15		09:44 (19)	06:59	06:30	05:13	04:28
	16:15	54	13:10 (24)	17:28	27	14:38 (27)	18:35	20:47	21:55	22:47
15	09:16		11:26 (37)	08:13		09:43 (19)	06:56	06:27	05:10	04:27
	16:17	57	13:10 (24)	17:31	18	10:01 (19)	18:38	20:49	21:58	22:47
16	09:15		11:27 (37)	08:10		09:42 (19)	06:53	06:24	05:08	04:27
	16:19	60	13:10 (24)	17:33	20	10:02 (19)	18:40	20:51	22:00	22:48
17	09:13		11:27 (37)	08:07		09:41 (19)	06:50	06:21	05:06	04:27
	16:21	63	13:10 (24)	17:35	21	10:02 (19)	18:42	20:53	22:02	22:49
18	09:12		11:28 (37)	08:05		09:41 (19)	06:47	06:19	05:04	04:27
	16:23	64	13:11 (24)	17:38	22	10:03 (19)	18:45	20:56	22:04	22:49
19	09:10		11:29 (37)	08:02		09:40 (19)	06:44	06:16	05:02	04:27
	16:25	63	13:11 (24)	17:40	23	10:03 (19)	18:47	20:58	22:06	22:50
20	09:08		11:30 (37)	08:00		09:40 (19)	06:41	06:13	05:00	04:27
	16:28	63	13:11 (24)	17:43	23	10:03 (19)	18:49	21:00	22:08	22:50
21	09:07		11:31 (37)	07:57		09:40 (19)	06:38	06:10	04:58	04:27
	16:30	62	13:11 (24)	17:45	22	10:02 (19)	18:51	21:03	22:10	22:50
22	09:05		11:31 (37)	07:54		09:40 (19)	06:36	06:08	04:56	04:27
	16:32	60	13:09 (24)	17:48	22	10:02 (19)	18:54	21:05	22:12	22:50
23	09:03		11:33 (37)	07:52		09:42 (19)	06:33	06:05	04:54	04:27
	16:34	66	14:33 (27)	17:50	20	10:02 (19)	18:56	21:07	22:14	22:50
24	09:02		11:35 (37)	07:49		09:42 (19)	06:30	06:02	04:52	04:27
	16:37	67	14:36 (27)	17:53	18	10:00 (19)	18:58	21:10	22:16	22:51
25	09:00		11:39 (37)	07:46		09:43 (19)	06:27	05:59	04:51	04:28
	16:39	58	14:38 (27)	17:55	16	09:59 (19)	19:01	21:12	22:18	22:50
26	08:58		12:24 (32)	07:44		09:45 (19)	06:24	05:57	04:49	04:28
	16:41	55	14:40 (27)	17:57	11	09:56 (19)	19:03	21:14	22:20	22:50
27	08:56		12:23 (32)	07:41		09:49 (19)	06:21	05:54	04:47	04:29
	16:44	57	14:40 (27)	18:00	2	09:51 (19)	19:05	21:17	22:22	22:50
28	08:54		12:23 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	61	15:15 (28)	18:02			19:07	21:19	22:24	22:50
29	08:52		12:24 (32)				07:15	05:49	04:44	04:30
	16:49	67	15:19 (28)				20:10	21:21	22:25	22:50
30	08:50		12:23 (32)				07:12	05:46	04:42	04:31
	16:51	74	15:23 (28)				20:12	21:24	22:27	22:49
31	08:48		12:24 (32)				07:10		04:41	
	16:53	77	15:26 (28)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1549			1149					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,62			0,62					
Total reduction		0,25			0,25					
Total, real		386			284					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:59 (32)	09:00		11:07 (37)
	22:49		22:01		20:40		19:13			16:49	51	14:13 (27)	15:51	43	12:51 (24)
2	04:33		05:26		06:35		07:42			07:54		11:58 (32)	09:02		11:08 (37)
	22:48		21:58		20:37		19:10			16:46	61	14:57 (28)	15:50	42	12:51 (24)
3	04:34		05:28		06:37		07:44			07:56		11:57 (32)	09:03		11:08 (37)
	22:47		21:56		20:34		19:07			16:44	71	15:00 (28)	15:49	42	12:51 (24)
4	04:35		05:31		06:40		07:46			07:59		11:56 (32)	09:05		11:09 (37)
	22:47		21:54		20:31		19:04			16:41	76	15:01 (28)	15:48	41	12:52 (24)
5	04:36		05:33		06:42		07:48			08:01		11:55 (32)	09:07		11:09 (37)
	22:46		21:51		20:28		19:02			16:39	80	15:02 (28)	15:47	35	12:52 (24)
6	04:37		05:35		06:44		07:51			08:03		11:55 (32)	09:09		11:10 (37)
	22:45		21:49		20:25		18:59			16:37	82	15:03 (28)	15:46	31	12:52 (24)
7	04:38		05:37		06:46		07:53			08:06		11:54 (32)	09:10		11:11 (37)
	22:44		21:47		20:22		18:56			16:34	84	15:03 (28)	15:45	24	12:40 (24)
8	04:40		05:39		06:49		07:55			08:08		11:54 (32)	09:12		11:11 (37)
	22:43		21:44		20:20		18:53			16:32	87	15:04 (28)	15:45	24	12:41 (24)
9	04:41		05:42		06:51		07:57			08:11		11:55 (32)	09:13		11:12 (37)
	22:42		21:42		20:17		18:50			16:30	87	15:05 (28)	15:44	20	12:37 (24)
10	04:43		05:44		06:53		08:00			08:13		11:55 (32)	09:15		11:12 (37)
	22:40		21:39		20:14		18:47			16:28	81	15:01 (28)	15:43	17	11:29 (37)
11	04:44		05:46		06:55		08:02			08:15		11:54 (32)	09:16		11:14 (37)
	22:39		21:37		20:11		18:45			16:25	78	14:57 (28)	15:43	16	11:30 (37)
12	04:46		05:48		06:57		08:04			08:18		11:55 (32)	09:18		11:14 (37)
	22:38		21:34		20:08		18:42			16:23	74	14:55 (28)	15:43	15	11:29 (37)
13	04:47		05:51		07:00		08:07			08:20		11:56 (32)	09:19		11:15 (37)
	22:37		21:31		20:05		18:39			16:21	67	14:51 (28)	15:42	15	11:30 (37)
14	04:49		05:53		07:02		08:09			08:22		11:55 (32)	09:20		11:16 (37)
	22:35		21:29		20:02		18:36			16:19	62	14:47 (28)	15:42	14	11:30 (37)
15	04:51		05:55		07:04		08:11		10:19 (19)	08:25		11:56 (32)	09:21		11:16 (37)
	22:34		21:26		19:59		18:33	8	10:27 (19)	16:17	57	14:13 (27)	15:42	14	11:30 (37)
16	04:52		05:57		07:06		08:13		10:16 (19)	08:27		11:57 (32)	09:22		11:17 (37)
	22:32		21:24		19:56		18:31	13	10:29 (19)	16:15	54	14:12 (27)	15:42	12	11:29 (37)
17	04:54		06:00		07:08		08:16		10:15 (19)	08:29		11:12 (37)	09:23		11:17 (37)
	22:30		21:21		19:54		18:28	16	10:31 (19)	16:13	58	14:11 (27)	15:42	12	11:29 (37)
18	04:56		06:02		07:11		08:18		10:13 (19)	08:32		11:09 (37)	09:24		11:18 (37)
	22:29		21:18		19:51		18:25	19	10:32 (19)	16:11	67	14:10 (27)	15:42	11	11:29 (37)
19	04:58		06:04		07:13		08:20		10:12 (19)	08:34		11:08 (37)	09:25		11:19 (37)
	22:27		21:16		19:48		18:22	21	10:33 (19)	16:09	66	14:08 (27)	15:42	11	11:30 (37)
20	05:00		06:06		07:15		08:23		10:11 (19)	08:36		11:06 (37)	09:26		11:20 (37)
	22:25		21:13		19:45		18:20	22	10:33 (19)	16:08	60	12:44 (24)	15:43	10	11:30 (37)
21	05:01		06:08		07:17		08:25		10:11 (19)	08:39		11:06 (37)	09:26		11:20 (37)
	22:24		21:10		19:42		18:17	23	10:34 (19)	16:06	62	12:46 (24)	15:43	10	11:30 (37)
22	05:03		06:11		07:19		08:27		10:10 (19)	08:41		11:06 (37)	09:27		11:21 (37)
	22:22		21:08		19:39		18:14	23	10:33 (19)	16:04	63	12:47 (24)	15:43	10	11:31 (37)
23	05:05		06:13		07:22		08:30		10:11 (19)	08:43		11:05 (37)	09:27		11:21 (37)
	22:20		21:05		19:36		18:12	22	10:33 (19)	16:02	63	12:47 (24)	15:44	10	11:31 (37)
24	05:07		06:15		07:24		08:32		10:10 (19)	08:45		11:05 (37)	09:28		11:22 (37)
	22:18		21:02		19:33		18:09	22	10:32 (19)	16:01	64	12:48 (24)	15:44	10	11:32 (37)
25	05:09		06:17		07:26		07:35		09:11 (19)	08:47		11:05 (37)	09:28		11:22 (37)
	22:16		20:59		19:30		17:06	21	09:32 (19)	15:59	63	12:48 (24)	15:45	11	11:33 (37)
26	05:11		06:20		07:28		07:37		09:11 (19)	08:50		11:06 (37)	09:28		11:22 (37)
	22:14		20:56		19:27		17:04	20	09:31 (19)	15:58	59	12:49 (24)	15:46	12	11:34 (37)
27	05:13		06:22		07:30		07:39		09:12 (19)	08:52		11:05 (37)	09:28		11:23 (37)
	22:12		20:54		19:25		17:01	18	09:30 (19)	15:56	57	12:49 (24)	15:47	11	11:34 (37)
28	05:16		06:24		07:33		07:42		09:14 (19)	08:54		11:06 (37)	09:28		11:23 (37)
	22:10		20:51		19:22		16:59	28	14:08 (27)	15:55	53	12:50 (24)	15:48	13	11:36 (37)
29	05:18		06:26		07:35		07:44		09:15 (19)	08:56		11:06 (37)	09:28		11:22 (37)
	22:07		20:48		19:19		16:56	44	14:10 (27)	15:54	44	12:50 (24)	15:49	14	11:36 (37)
30	05:20		06:29		07:37		07:47		09:19 (19)	08:58		11:06 (37)	09:28		11:23 (37)
	22:05		20:45		19:16		16:54	44	14:11 (27)	15:52	43	12:50 (24)	15:50	15	11:38 (37)
31	05:22		06:31				07:49		12:01 (32)				09:28		11:23 (37)
	22:03		20:42				16:51	46	14:13 (27)				15:51	15	11:38 (37)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								410			1974			580	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,68			0,61			0,65	
Total reduction								0,27			0,24			0,26	
Total, real								112			477			151	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		08:46		11:27 (32)	07:35	07:07	05:44	04:40
	15:53		16:56	70	14:51 (28)	18:05	20:17	21:26	22:31
2	09:27	12:04 (24)	08:43		11:27 (32)	07:33	07:04	05:41	04:38
	15:54	1 12:05 (24)	16:58	60	13:50 (27)	18:07	20:19	21:28	22:32
3	09:27	12:04 (24)	08:41		11:28 (32)	07:30	07:01	05:39	04:37
	15:55	4 12:08 (24)	17:01	58	13:50 (27)	18:09	20:21	21:31	22:34
4	09:27	12:04 (24)	08:39		11:28 (32)	07:27	06:58	05:36	04:36
	15:57	7 12:11 (24)	17:03	54	13:48 (27)	18:12	20:24	21:33	22:35
5	09:26	12:04 (24)	08:37		11:28 (32)	07:24	06:55	05:34	04:35
	15:58	17 12:21 (24)	17:06	52	13:47 (27)	18:14	20:26	21:35	22:37
6	09:25	12:05 (24)	08:34		11:29 (32)	07:21	06:52	05:31	04:34
	16:00	16 12:21 (24)	17:08	49	13:47 (27)	18:17	20:28	21:37	22:38
7	09:24	12:05 (24)	08:32		11:29 (32)	07:19	06:50	05:29	04:33
	16:02	19 12:26 (24)	17:11	43	13:44 (27)	18:19	20:30	21:40	22:39
8	09:24	12:05 (24)	08:30		11:31 (32)	07:16	06:47	05:26	04:32
	16:03	22 12:27 (24)	17:13	35	13:42 (27)	18:21	20:33	21:42	22:40
9	09:23	12:06 (24)	08:27		11:32 (32)	07:13	06:44	05:24	04:31
	16:05	22 12:28 (24)	17:16	22	11:54 (32)	18:24	20:35	21:44	22:42
10	09:22	12:06 (24)	08:25		11:34 (32)	07:10	06:41	05:22	04:30
	16:07	22 12:28 (24)	17:18	18	11:52 (32)	18:26	20:37	21:46	22:43
11	09:21	12:07 (24)	08:23		11:37 (32)	07:07	06:38	05:19	04:29
	16:09	22 12:29 (24)	17:21	14	11:51 (32)	18:28	20:40	21:49	22:44
12	09:20	12:07 (24)	08:20		11:41 (32)	07:04	06:35	05:17	04:29
	16:11	28 13:33 (27)	17:23	4	11:45 (32)	18:31	20:42	21:51	22:45
13	09:18	12:08 (24)	08:18			07:02	06:32	05:15	04:28
	16:13	33 13:37 (27)	17:26			18:33	20:44	21:53	22:46
14	09:17	12:08 (24)	08:15		09:30 (19)	06:59	06:30	05:13	04:28
	16:15	36 13:38 (27)	17:28	5	09:35 (19)	18:35	20:47	21:55	22:47
15	09:16	11:34 (32)	08:13		09:27 (19)	06:56	06:27	05:10	04:27
	16:17	47 13:40 (27)	17:31	11	09:38 (19)	18:38	20:49	21:58	22:47
16	09:15	11:32 (32)	08:10		09:25 (19)	06:53	06:24	05:08	04:27
	16:19	54 13:41 (27)	17:33	14	09:39 (19)	18:40	20:51	22:00	22:48
17	09:13	11:31 (32)	08:07		09:23 (19)	06:50	06:21	05:06	04:27
	16:21	57 13:43 (27)	17:36	17	09:40 (19)	18:42	20:53	22:02	22:49
18	09:12	11:30 (32)	08:05		09:23 (19)	06:47	06:19	05:04	04:27
	16:23	72 14:53 (28)	17:38	18	09:41 (19)	18:45	20:56	22:04	22:49
19	09:10	11:29 (32)	08:02		09:22 (19)	06:44	06:16	05:02	04:27
	16:25	85 14:53 (28)	17:40	19	09:41 (19)	18:47	20:58	22:06	22:50
20	09:09	11:28 (32)	08:00		09:22 (19)	06:41	06:13	05:00	04:27
	16:28	88 14:54 (28)	17:43	19	09:41 (19)	18:49	21:00	22:08	22:50
21	09:07	11:28 (32)	07:57		09:22 (19)	06:39	06:10	04:58	04:27
	16:30	88 14:54 (28)	17:45	19	09:41 (19)	18:51	21:03	22:10	22:50
22	09:05	11:28 (32)	07:54		09:22 (19)	06:36	06:08	04:56	04:27
	16:32	89 14:55 (28)	17:48	19	09:41 (19)	18:54	21:05	22:12	22:50
23	09:03	11:26 (32)	07:52		09:23 (19)	06:33	06:05	04:54	04:27
	16:34	87 14:54 (28)	17:50	18	09:41 (19)	18:56	21:07	22:14	22:51
24	09:02	11:26 (32)	07:49		09:23 (19)	06:30	06:02	04:52	04:27
	16:37	81 14:55 (28)	17:53	17	09:40 (19)	18:58	21:10	22:16	22:51
25	09:00	11:26 (32)	07:46		09:24 (19)	06:27	05:59	04:51	04:28
	16:39	82 14:55 (28)	17:55	14	09:38 (19)	19:01	21:12	22:18	22:51
26	08:58	11:26 (32)	07:44		09:25 (19)	06:24	05:57	04:49	04:28
	16:41	83 14:55 (28)	17:57	11	09:36 (19)	19:03	21:14	22:20	22:50
27	08:56	11:25 (32)	07:41		09:30 (19)	06:21	05:54	04:47	04:29
	16:44	83 14:54 (28)	18:00	1	09:31 (19)	19:05	21:17	22:22	22:50
28	08:54	11:26 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	82 14:54 (28)	18:02			19:08	21:19	22:24	22:50
29	08:52	11:26 (32)				07:15	05:49	04:44	04:30
	16:49	80 14:54 (28)				20:10	21:21	22:25	22:50
30	08:50	11:26 (32)				07:13	05:46	04:42	04:31
	16:51	79 14:53 (28)				20:12	21:24	22:27	22:49
31	08:48	11:26 (32)				07:10		04:41	
	16:54	76 14:52 (28)				20:14		22:29	
Potential sun hours	221		260			365	432	521	547
Total, worst case		1562		681					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,61		0,66					
Total reduction		0,24		0,26					
Total, real		382		180					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:03 (32)	09:00		11:49 (24)
	22:49		22:01		20:40		19:13			16:49	19	11:22 (32)	15:51	22	12:11 (24)
2	04:33		05:26		06:35		07:42			07:54		11:01 (32)	09:02		11:49 (24)
	22:48		21:59		20:37		19:10			16:46	23	11:24 (32)	15:50	22	12:11 (24)
3	04:34		05:28		06:37		07:44			07:56		11:01 (32)	09:03		11:49 (24)
	22:47		21:56		20:34		19:07			16:44	36	13:12 (27)	15:49	22	12:11 (24)
4	04:35		05:31		06:40		07:46			07:59		10:59 (32)	09:05		11:50 (24)
	22:47		21:54		20:31		19:04			16:41	43	13:14 (27)	15:48	21	12:11 (24)
5	04:36		05:33		06:42		07:48			08:01		10:59 (32)	09:07		11:50 (24)
	22:46		21:51		20:28		19:02			16:39	48	13:16 (27)	15:47	21	12:11 (24)
6	04:37		05:35		06:44		07:51			08:03		10:58 (32)	09:09		11:51 (24)
	22:45		21:49		20:25		18:59			16:37	53	13:18 (27)	15:46	16	12:07 (24)
7	04:39		05:37		06:46		07:53			08:06		10:57 (32)	09:10		11:51 (24)
	22:44		21:47		20:23		18:56			16:34	55	13:18 (27)	15:45	17	12:08 (24)
8	04:40		05:39		06:49		07:55			08:08		10:57 (32)	09:12		11:52 (24)
	22:43		21:44		20:20		18:53			16:32	58	13:19 (27)	15:45	8	12:00 (24)
9	04:41		05:42		06:51		07:57			08:11		10:57 (32)	09:13		11:53 (24)
	22:42		21:42		20:17		18:50			16:30	63	14:18 (28)	15:44	4	11:57 (24)
10	04:43		05:44		06:53		08:00			08:13		10:58 (32)	09:15		11:53 (24)
	22:41		21:39		20:14		18:47			16:28	71	14:22 (28)	15:43	1	11:54 (24)
11	04:44		05:46		06:55		08:02			08:15		10:57 (32)	09:16		
	22:39		21:37		20:11		18:45			16:25	76	14:23 (28)	15:43		
12	04:46		05:48		06:57		08:04			08:18		10:57 (32)	09:18		
	22:38		21:34		20:08		18:42			16:23	80	14:25 (28)	15:43		
13	04:47		05:51		07:00		08:07			08:20		10:58 (32)	09:19		
	22:37		21:32		20:05		18:39			16:21	81	14:26 (28)	15:42		
14	04:49		05:53		07:02		08:09			08:22		10:58 (32)	09:20		
	22:35		21:29		20:02		18:36			16:19	82	14:26 (28)	15:42		
15	04:51		05:55		07:04		08:11		10:00 (19)	08:25		10:58 (32)	09:21		
	22:34		21:26		19:59		18:33	7	10:07 (19)	16:17	83	14:27 (28)	15:42		
16	04:52		05:57		07:06		08:13		09:57 (19)	08:27		10:59 (32)	09:22		
	22:32		21:24		19:56		18:31	12	10:09 (19)	16:15	83	14:28 (28)	15:42		
17	04:54		06:00		07:08		08:16		09:56 (19)	08:30		11:00 (32)	09:23		
	22:31		21:21		19:54		18:28	15	10:11 (19)	16:13	83	14:29 (28)	15:42		
18	04:56		06:02		07:11		08:18		09:54 (19)	08:32		11:00 (32)	09:24		
	22:29		21:18		19:51		18:25	17	10:11 (19)	16:11	81	14:29 (28)	15:42		
19	04:58		06:04		07:13		08:20		09:54 (19)	08:34		11:01 (32)	09:25		
	22:27		21:16		19:48		18:22	18	10:12 (19)	16:09	87	14:29 (28)	15:42		
20	05:00		06:06		07:15		08:23		09:53 (19)	08:36		11:02 (32)	09:26		
	22:25		21:13		19:45		18:20	19	10:12 (19)	16:08	88	14:29 (28)	15:43		
21	05:01		06:08		07:17		08:25		09:53 (19)	08:39		11:03 (32)	09:26		
	22:24		21:10		19:42		18:17	19	10:12 (19)	16:06	88	14:29 (28)	15:43		
22	05:03		06:11		07:19		08:27		09:52 (19)	08:41		11:04 (32)	09:27		
	22:22		21:08		19:39		18:14	20	10:12 (19)	16:04	88	14:30 (28)	15:43		
23	05:05		06:13		07:22		08:30		09:53 (19)	08:43		11:05 (32)	09:27		
	22:20		21:05		19:36		18:12	19	10:12 (19)	16:02	84	14:29 (28)	15:44		
24	05:07		06:15		07:24		08:32		09:53 (19)	08:45		11:07 (32)	09:28		
	22:18		21:02		19:33		18:09	17	10:10 (19)	16:01	72	14:30 (28)	15:44		
25	05:09		06:17		07:26		07:35		08:54 (19)	08:47		11:08 (32)	09:28		
	22:16		20:59		19:30		17:06	16	09:10 (19)	15:59	58	13:20 (27)	15:45		
26	05:11		06:20		07:28		07:37		08:55 (19)	08:50		11:11 (32)	09:28		
	22:14		20:57		19:27		17:04	14	09:09 (19)	15:58	53	13:20 (27)	15:46		
27	05:13		06:22		07:30		07:39		08:56 (19)	08:52		11:13 (32)	09:28		
	22:12		20:54		19:25		17:01	10	09:06 (19)	15:56	47	13:19 (27)	15:47		
28	05:16		06:24		07:33		07:42			08:54		11:48 (24)	09:28		
	22:10		20:51		19:22		16:59			15:55	35	13:18 (27)	15:48		
29	05:18		06:26		07:35		07:44			08:56		11:48 (24)	09:28		
	22:07		20:48		19:19		16:56			15:54	33	13:17 (27)	15:49		
30	05:20		06:29		07:37		07:47		11:09 (32)	08:58		11:48 (24)	09:28		
	22:05		20:45		19:16		16:54	7	11:16 (32)	15:52	30	13:15 (27)	15:50		
31	05:22		06:31				07:49		11:06 (32)				09:28		
	22:03		20:42				16:51	15	11:21 (32)				15:51		
Potential sun hours	546		478		386		319			236			199		
Total, worst case								225			1881			154	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,61			0,64	
Total reduction								0,29			0,25			0,25	
Total, real								65			461			39	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:18 (24)	08:46	11:53 (32)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (24)	16:56	49	14:04 (27)	18:05	20:17	21:26	22:31
2	09:27		12:18 (24)	08:43	11:54 (32)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (24)	16:58	44	14:02 (27)	18:07	20:19	21:28	22:32
3	09:27		11:54 (32)	08:41	11:56 (32)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (24)	17:01	39	14:01 (27)	18:09	20:21	21:31	22:34
4	09:27		11:52 (32)	08:39	11:57 (32)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (24)	17:03	32	13:59 (27)	18:12	20:24	21:33	22:35
5	09:26		11:51 (32)	08:37	11:59 (32)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (24)	17:06	19	13:55 (27)	18:14	20:26	21:35	22:37
6	09:25		11:50 (32)	08:34	12:04 (32)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (24)	17:08	5	12:09 (32)	18:17	20:28	21:37	22:38
7	09:24		11:50 (32)	08:32		07:19	06:50	05:29	04:33
	16:02	42	13:46 (27)	17:11			18:19	20:30	21:40	22:39
8	09:24		11:50 (32)	08:30		07:16	06:47	05:26	04:32
	16:03	48	13:49 (27)	17:13			18:21	20:33	21:42	22:40
9	09:23		11:50 (32)	08:27		09:42 (19)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (27)	17:16	7	09:49 (19)	18:24	20:35	21:44	22:42
10	09:22		11:49 (32)	08:25		09:40 (19)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (27)	17:18	12	09:52 (19)	18:26	20:37	21:46	22:43
11	09:21		11:49 (32)	08:23		09:39 (19)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (27)	17:21	15	09:54 (19)	18:28	20:40	21:49	22:44
12	09:20		11:48 (32)	08:20		09:37 (19)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (27)	17:23	17	09:54 (19)	18:31	20:42	21:51	22:45
13	09:18		11:49 (32)	08:18		09:36 (19)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (27)	17:26	19	09:55 (19)	18:33	20:44	21:53	22:46
14	09:17		11:48 (32)	08:15		09:37 (19)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (27)	17:28	19	09:56 (19)	18:35	20:47	21:55	22:47
15	09:16		11:48 (32)	08:13		09:36 (19)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (28)	17:31	20	09:56 (19)	18:38	20:49	21:58	22:47
16	09:15		11:47 (32)	08:10		09:36 (19)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (28)	17:33	20	09:56 (19)	18:40	20:51	22:00	22:48
17	09:13		11:48 (32)	08:07		09:36 (19)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (28)	17:36	19	09:55 (19)	18:42	20:53	22:02	22:49
18	09:12		11:48 (32)	08:05		09:37 (19)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (28)	17:38	19	09:56 (19)	18:45	20:56	22:04	22:49
19	09:10		11:48 (32)	08:02		09:37 (19)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (28)	17:40	18	09:55 (19)	18:47	20:58	22:06	22:50
20	09:08		11:48 (32)	08:00		09:38 (19)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (28)	17:43	15	09:53 (19)	18:49	21:00	22:08	22:50
21	09:07		11:48 (32)	07:57		09:39 (19)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (28)	17:45	13	09:52 (19)	18:51	21:03	22:10	22:50
22	09:05		11:48 (32)	07:54		09:41 (19)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (28)	17:48	8	09:49 (19)	18:54	21:05	22:12	22:50
23	09:03		11:48 (32)	07:52			06:33	06:05	04:54	04:27
	16:34	80	15:02 (28)	17:50			18:56	21:07	22:14	22:51
24	09:02		11:48 (32)	07:49			06:30	06:02	04:52	04:27
	16:37	80	15:02 (28)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:49 (32)	07:46			06:27	05:59	04:51	04:28
	16:39	80	15:02 (28)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:49 (32)	07:44			06:24	05:57	04:49	04:28
	16:41	79	15:02 (28)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:49 (32)	07:41			06:21	05:54	04:47	04:29
	16:44	75	15:01 (28)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:50 (32)	07:38			06:18	05:52	04:46	04:30
	16:46	73	15:01 (28)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:51 (32)				07:15	05:49	04:44	04:30
	16:49	69	15:00 (28)				20:10	21:21	22:25	22:50
30	08:50		11:51 (32)				07:12	05:46	04:42	04:31
	16:51	64	14:58 (28)				20:12	21:24	22:27	22:49
31	08:48		11:52 (32)				07:10		04:41	
	16:54	55	14:55 (28)				20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1930		409					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,60		0,67					
Total reduction		0,24		0,27					
Total, real		465		110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (19)	09:00		11:31 (32)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (19)	15:51	60	13:37 (27)
2	04:33	05:26	06:35	07:42			07:54		09:12 (19)	09:02		11:32 (32)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (19)	15:50	56	13:36 (27)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (27)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (32)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (27)
5	04:36	05:33	06:42	07:48			08:01		11:32 (32)	09:07		11:35 (32)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (32)	15:47	43	13:32 (27)
6	04:37	05:35	06:44	07:51			08:03		11:29 (32)	09:09		11:37 (32)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (27)	15:46	36	12:27 (24)
7	04:38	05:37	06:46	07:53			08:06		11:27 (32)	09:10		11:38 (32)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (27)	15:45	34	12:27 (24)
8	04:40	05:39	06:49	07:55			08:08		11:25 (32)	09:12		11:40 (32)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (27)	15:45	32	12:28 (24)
9	04:41	05:42	06:51	07:57			08:11		11:25 (32)	09:13		11:42 (32)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (27)	15:44	28	12:28 (24)
10	04:43	05:44	06:53	08:00			08:13		11:24 (32)	09:15		12:07 (24)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (27)	15:43	21	12:28 (24)
11	04:44	05:46	06:55	08:02			08:15		11:23 (32)	09:16		12:08 (24)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (28)	15:43	21	12:29 (24)
12	04:46	05:48	06:57	08:04			08:18		11:23 (32)	09:18		12:08 (24)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (28)	15:43	21	12:29 (24)
13	04:47	05:51	07:00	08:07			08:20		11:23 (32)	09:19		12:09 (24)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (28)	15:42	21	12:30 (24)
14	04:49	05:53	07:02	08:09			08:22		11:22 (32)	09:20		12:09 (24)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (28)	15:42	21	12:30 (24)
15	04:51	05:55	07:04	08:11			08:25		11:22 (32)	09:21		12:09 (24)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (28)	15:42	21	12:30 (24)
16	04:52	05:57	07:06	08:13			08:27		11:22 (32)	09:22		12:10 (24)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (28)	15:42	20	12:30 (24)
17	04:54	06:00	07:08	08:16			08:30		11:23 (32)	09:23		12:10 (24)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (28)	15:42	21	12:31 (24)
18	04:56	06:02	07:11	08:18			08:32		11:22 (32)	09:24		12:11 (24)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (28)	15:42	20	12:31 (24)
19	04:58	06:04	07:13	08:20			08:34		11:23 (32)	09:25		12:12 (24)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (28)	15:42	20	12:32 (24)
20	05:00	06:06	07:15	08:23		10:11 (19)	08:36		11:22 (32)	09:26		12:12 (24)
	22:25	21:13	19:45	18:20	10	10:21 (19)	16:08	82	14:37 (28)	15:43	20	12:32 (24)
21	05:01	06:08	07:17	08:25		10:10 (19)	08:39		11:23 (32)	09:26		12:12 (24)
	22:24	21:10	19:42	18:17	13	10:23 (19)	16:06	80	14:37 (28)	15:43	20	12:32 (24)
22	05:03	06:11	07:19	08:27		10:08 (19)	08:41		11:24 (32)	09:27		12:13 (24)
	22:22	21:08	19:39	18:14	16	10:24 (19)	16:04	79	14:38 (28)	15:43	20	12:33 (24)
23	05:05	06:13	07:22	08:30		10:07 (19)	08:43		11:24 (32)	09:27		12:13 (24)
	22:20	21:05	19:36	18:12	18	10:25 (19)	16:02	84	14:38 (28)	15:44	20	12:33 (24)
24	05:07	06:15	07:24	08:32		10:06 (19)	08:45		11:25 (32)	09:28		12:14 (24)
	22:18	21:02	19:33	18:09	19	10:25 (19)	16:01	88	14:38 (28)	15:44	21	12:35 (24)
25	05:09	06:17	07:26	07:35		09:06 (19)	08:47		11:25 (32)	09:28		12:15 (24)
	22:16	20:59	19:30	17:06	20	09:26 (19)	15:59	88	14:38 (28)	15:45	20	12:35 (24)
26	05:11	06:20	07:28	07:37		09:06 (19)	08:50		11:26 (32)	09:28		12:15 (24)
	22:14	20:57	19:27	17:04	20	09:26 (19)	15:58	81	14:37 (28)	15:46	20	12:35 (24)
27	05:13	06:22	07:30	07:39		09:06 (19)	08:52		11:27 (32)	09:28		12:16 (24)
	22:12	20:54	19:25	17:01	19	09:25 (19)	15:56	73	14:26 (28)	15:47	20	12:36 (24)
28	05:16	06:24	07:33	07:42		09:06 (19)	08:54		11:28 (32)	09:28		12:16 (24)
	22:10	20:51	19:22	16:59	19	09:25 (19)	15:55	65	13:38 (27)	15:48	21	12:37 (24)
29	05:18	06:26	07:35	07:44		09:06 (19)	08:56		11:29 (32)	09:28		12:16 (24)
	22:07	20:48	19:19	16:56	18	09:24 (19)	15:54	64	13:37 (27)	15:49	20	12:36 (24)
30	05:20	06:29	07:37	07:47		09:07 (19)	08:58		11:29 (32)	09:28		12:17 (24)
	22:05	20:45	19:16	16:54	17	09:24 (19)	15:52	62	13:37 (27)	15:50	20	12:37 (24)
31	05:22	06:31		07:49		09:08 (19)				09:28		12:16 (24)
	22:03	20:42		16:51	15	09:23 (19)				15:51	21	12:37 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,60			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			410			210	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:08 (24)	08:46	11:39 (32)	07:35	07:07	05:44	04:40
	15:53	21	12:29 (24)	16:56 49	13:50 (27)	18:05	20:17	21:26	22:31
2	09:27		12:08 (24)	08:43	11:40 (32)	07:33	07:04	05:41	04:38
	15:54	21	12:29 (24)	16:58 44	13:48 (27)	18:07	20:19	21:28	22:32
3	09:27		12:09 (24)	08:41	11:41 (32)	07:30	07:01	05:39	04:37
	15:55	20	12:29 (24)	17:01 39	13:47 (27)	18:09	20:21	21:31	22:34
4	09:27		12:09 (24)	08:39	11:42 (32)	07:27	06:58	05:36	04:36
	15:57	21	12:30 (24)	17:03 32	13:45 (27)	18:12	20:24	21:33	22:35
5	09:26		12:09 (24)	08:37	11:43 (32)	07:24	06:55	05:34	04:35
	15:58	21	12:30 (24)	17:06 19	12:02 (32)	18:14	20:26	21:35	22:37
6	09:25		12:10 (24)	08:34	11:46 (32)	07:21	06:52	05:31	04:34
	16:00	25	13:32 (27)	17:08 14	12:00 (32)	18:17	20:28	21:37	22:38
7	09:24		11:43 (32)	08:32	11:50 (32)	07:19	06:50	05:29	04:33
	16:02	33	13:35 (27)	17:11 6	11:56 (32)	18:19	20:30	21:40	22:39
8	09:24		11:41 (32)	08:30		07:16	06:47	05:26	04:32
	16:03	41	13:37 (27)	17:13		18:21	20:33	21:42	22:41
9	09:23		11:40 (32)	08:27		07:13	06:44	05:24	04:31
	16:05	47	13:39 (27)	17:16		18:24	20:35	21:44	22:42
10	09:22		11:38 (32)	08:25	09:39 (19)	07:10	06:41	05:22	04:30
	16:07	51	13:40 (27)	17:18 3	09:42 (19)	18:26	20:37	21:46	22:43
11	09:21		11:38 (32)	08:23	09:36 (19)	07:07	06:38	05:19	04:29
	16:09	55	13:42 (27)	17:21 10	09:46 (19)	18:28	20:40	21:49	22:44
12	09:20		11:37 (32)	08:20	09:34 (19)	07:04	06:35	05:17	04:29
	16:11	60	14:46 (28)	17:23 14	09:48 (19)	18:31	20:42	21:51	22:45
13	09:18		11:37 (32)	08:18	09:33 (19)	07:02	06:32	05:15	04:28
	16:13	72	14:49 (28)	17:26 16	09:49 (19)	18:33	20:44	21:53	22:46
14	09:17		11:36 (32)	08:15	09:33 (19)	06:59	06:30	05:13	04:28
	16:15	83	14:49 (28)	17:28 17	09:50 (19)	18:35	20:47	21:55	22:47
15	09:16		11:36 (32)	08:13	09:32 (19)	06:56	06:27	05:10	04:27
	16:17	87	14:50 (28)	17:31 18	09:50 (19)	18:38	20:49	21:58	22:47
16	09:15		11:35 (32)	08:10	09:31 (19)	06:53	06:24	05:08	04:27
	16:19	86	14:50 (28)	17:33 19	09:50 (19)	18:40	20:51	22:00	22:48
17	09:13		11:36 (32)	08:07	09:31 (19)	06:50	06:21	05:06	04:27
	16:21	87	14:51 (28)	17:36 19	09:50 (19)	18:42	20:53	22:02	22:49
18	09:12		11:36 (32)	08:05	09:32 (19)	06:47	06:19	05:04	04:27
	16:23	89	14:52 (28)	17:38 19	09:51 (19)	18:45	20:56	22:04	22:49
19	09:10		11:36 (32)	08:02	09:32 (19)	06:44	06:16	05:02	04:27
	16:25	87	14:52 (28)	17:40 18	09:50 (19)	18:47	20:58	22:06	22:50
20	09:09		11:35 (32)	08:00	09:32 (19)	06:41	06:13	05:00	04:27
	16:28	85	14:53 (28)	17:43 17	09:49 (19)	18:49	21:00	22:08	22:50
21	09:07		11:35 (32)	07:57	09:33 (19)	06:39	06:10	04:58	04:27
	16:30	79	14:53 (28)	17:45 15	09:48 (19)	18:51	21:03	22:10	22:50
22	09:05		11:36 (32)	07:54	09:34 (19)	06:36	06:08	04:56	04:27
	16:32	79	14:53 (28)	17:48 12	09:46 (19)	18:54	21:05	22:12	22:50
23	09:03		11:35 (32)	07:52	09:38 (19)	06:33	06:05	04:54	04:27
	16:34	79	14:52 (28)	17:50 6	09:44 (19)	18:56	21:07	22:14	22:51
24	09:02		11:35 (32)	07:49		06:30	06:02	04:52	04:27
	16:37	79	14:52 (28)	17:53		18:58	21:10	22:16	22:51
25	09:00		11:35 (32)	07:46		06:27	05:59	04:51	04:28
	16:39	78	14:52 (28)	17:55		19:01	21:12	22:18	22:51
26	08:58		11:36 (32)	07:44		06:24	05:57	04:49	04:28
	16:41	77	14:52 (28)	17:57		19:03	21:14	22:20	22:50
27	08:56		11:36 (32)	07:41		06:21	05:54	04:47	04:29
	16:44	74	14:51 (28)	18:00		19:05	21:17	22:22	22:50
28	08:54		11:36 (32)	07:38		06:18	05:52	04:46	04:30
	16:46	71	14:50 (28)	18:02		19:08	21:19	22:24	22:50
29	08:52		11:37 (32)			07:15	05:49	04:44	04:30
	16:49	66	14:49 (28)			20:10	21:21	22:25	22:50
30	08:50		11:37 (32)			07:13	05:46	04:42	04:31
	16:51	56	14:45 (28)			20:12	21:24	22:27	22:49
31	08:48		11:38 (32)			07:10		04:41	
	16:54	51	13:50 (27)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1881		406					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,61		0,68					
Total reduction		0,24		0,27					
Total, real		457		110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (32)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (27)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (32)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (27)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (27)
4	04:35	05:31	06:40	07:46			07:59		11:18 (32)	09:05		11:25 (32)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (32)	15:48	42	13:22 (27)
5	04:36	05:33	06:42	07:48			08:01		11:15 (32)	09:07		11:28 (32)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (32)	15:47	34	13:21 (27)
6	04:37	05:35	06:44	07:51			08:03		11:14 (32)	09:09		11:56 (24)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (32)	15:46	26	13:19 (27)
7	04:38	05:37	06:46	07:53			08:06		11:12 (32)	09:10		11:56 (24)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (27)	15:45	21	12:17 (24)
8	04:40	05:39	06:49	07:55			08:08		11:11 (32)	09:12		11:57 (24)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (27)	15:45	21	12:18 (24)
9	04:41	05:42	06:51	07:57			08:11		11:10 (32)	09:13		11:58 (24)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (27)	15:44	20	12:18 (24)
10	04:43	05:44	06:53	08:00			08:13		11:10 (32)	09:15		11:58 (24)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (27)	15:43	20	12:18 (24)
11	04:44	05:46	06:55	08:02			08:15		11:09 (32)	09:16		11:58 (24)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (27)	15:43	21	12:19 (24)
12	04:46	05:48	06:57	08:04			08:18		11:09 (32)	09:18		11:58 (24)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (28)	15:43	21	12:19 (24)
13	04:47	05:51	07:00	08:07			08:20		11:09 (32)	09:19		12:00 (24)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (28)	15:42	20	12:20 (24)
14	04:49	05:53	07:02	08:09			08:23		11:08 (32)	09:20		12:00 (24)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (28)	15:42	20	12:20 (24)
15	04:51	05:55	07:04	08:11			08:25		11:08 (32)	09:21		12:00 (24)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (28)	15:42	20	12:20 (24)
16	04:52	05:57	07:06	08:13			08:27		11:09 (32)	09:22		12:01 (24)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (28)	15:42	19	12:20 (24)
17	04:54	06:00	07:08	08:16			08:30		11:09 (32)	09:23		12:01 (24)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (28)	15:42	20	12:21 (24)
18	04:56	06:02	07:11	08:18			08:32		11:09 (32)	09:24		12:02 (24)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (28)	15:42	19	12:21 (24)
19	04:58	06:04	07:13	08:20		10:07 (19)	08:34		11:10 (32)	09:25		12:02 (24)
	22:27	21:16	19:48	18:22	9	10:16 (19)	16:09	79	14:27 (28)	15:42	20	12:22 (24)
20	05:00	06:06	07:15	08:23		10:05 (19)	08:36		11:10 (32)	09:26		12:03 (24)
	22:25	21:13	19:45	18:20	13	10:18 (19)	16:08	79	14:27 (28)	15:43	19	12:22 (24)
21	05:01	06:08	07:17	08:25		10:04 (19)	08:39		11:10 (32)	09:26		12:03 (24)
	22:24	21:10	19:42	18:17	15	10:19 (19)	16:06	79	14:28 (28)	15:43	19	12:22 (24)
22	05:03	06:11	07:19	08:27		10:02 (19)	08:41		11:11 (32)	09:27		12:04 (24)
	22:22	21:08	19:39	18:14	17	10:19 (19)	16:04	84	14:29 (28)	15:43	19	12:23 (24)
23	05:05	06:13	07:22	08:30		10:02 (19)	08:43		11:12 (32)	09:27		12:04 (24)
	22:20	21:05	19:36	18:12	18	10:20 (19)	16:02	86	14:28 (28)	15:44	19	12:23 (24)
24	05:07	06:15	07:24	08:32		10:01 (19)	08:45		11:13 (32)	09:28		12:05 (24)
	22:18	21:02	19:33	18:09	19	10:20 (19)	16:01	88	14:29 (28)	15:44	19	12:24 (24)
25	05:09	06:17	07:26	07:35		09:01 (19)	08:47		11:13 (32)	09:28		12:06 (24)
	22:16	20:59	19:30	17:06	19	09:20 (19)	15:59	88	14:29 (28)	15:45	19	12:25 (24)
26	05:11	06:20	07:28	07:37		09:02 (19)	08:50		11:14 (32)	09:28		12:06 (24)
	22:14	20:57	19:27	17:04	19	09:21 (19)	15:58	87	14:29 (28)	15:46	19	12:25 (24)
27	05:13	06:22	07:30	07:39		09:01 (19)	08:52		11:15 (32)	09:28		12:06 (24)
	22:12	20:54	19:25	17:01	19	09:20 (19)	15:56	86	14:29 (28)	15:47	20	12:26 (24)
28	05:16	06:24	07:33	07:42		09:02 (19)	08:54		11:16 (32)	09:28		12:07 (24)
	22:10	20:51	19:22	16:59	17	09:19 (19)	15:55	82	14:29 (28)	15:48	20	12:27 (24)
29	05:18	06:26	07:35	07:44		09:02 (19)	08:56		11:17 (32)	09:28		12:07 (24)
	22:07	20:48	19:19	16:56	16	09:18 (19)	15:54	72	14:29 (28)	15:49	19	12:26 (24)
30	05:20	06:29	07:37	07:47		09:04 (19)	08:58		11:18 (32)	09:28		12:07 (24)
	22:05	20:45	19:16	16:54	13	09:17 (19)	15:52	60	14:28 (28)	15:50	20	12:27 (24)
31	05:22	06:31		07:49		09:06 (19)				09:28		12:07 (24)
	22:03	20:42		16:51	9	09:15 (19)				15:51	20	12:27 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			420			190	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:05 (24)	08:46	11:36 (32)	07:35	07:07	05:44	04:40
	15:53	21 12:26 (24)	16:56	45 13:44 (27)	18:05	20:17	21:26	22:31
2	09:27	12:06 (24)	08:43	11:37 (32)	07:33	07:04	05:41	04:38
	15:54	20 12:26 (24)	16:58	40 13:42 (27)	18:07	20:19	21:28	22:32
3	09:27	12:06 (24)	08:41	11:38 (32)	07:30	07:01	05:39	04:37
	15:55	20 12:26 (24)	17:01	34 13:40 (27)	18:09	20:21	21:31	22:34
4	09:27	12:06 (24)	08:39	11:39 (32)	07:27	06:58	05:36	04:36
	15:57	21 12:27 (24)	17:03	20 11:59 (32)	18:12	20:24	21:33	22:35
5	09:26	12:06 (24)	08:37	11:41 (32)	07:24	06:55	05:34	04:35
	15:58	28 13:28 (27)	17:06	16 11:57 (32)	18:14	20:26	21:35	22:37
6	09:25	12:07 (24)	08:34	11:44 (32)	07:21	06:52	05:31	04:34
	16:00	32 13:31 (27)	17:08	11 11:55 (32)	18:17	20:28	21:37	22:38
7	09:24	11:39 (32)	08:32		07:19	06:50	05:29	04:33
	16:02	38 13:32 (27)	17:11		18:19	20:30	21:40	22:39
8	09:24	11:37 (32)	08:30		07:16	06:47	05:26	04:32
	16:03	46 13:34 (27)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:36 (32)	08:27		07:13	06:44	05:24	04:31
	16:05	50 13:36 (27)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:35 (32)	08:25	09:37 (19)	07:10	06:41	05:22	04:30
	16:07	58 14:41 (28)	17:18	6 09:43 (19)	18:26	20:37	21:46	22:43
11	09:21	11:34 (32)	08:23	09:35 (19)	07:07	06:38	05:19	04:29
	16:09	71 14:43 (28)	17:21	11 09:46 (19)	18:28	20:40	21:49	22:44
12	09:20	11:33 (32)	08:20	09:33 (19)	07:04	06:35	05:17	04:29
	16:11	79 14:44 (28)	17:23	15 09:48 (19)	18:31	20:42	21:51	22:45
13	09:18	11:34 (32)	08:18	09:32 (19)	07:02	06:32	05:15	04:28
	16:13	81 14:45 (28)	17:26	16 09:48 (19)	18:33	20:44	21:53	22:46
14	09:17	11:33 (32)	08:15	09:32 (19)	06:59	06:30	05:13	04:28
	16:15	84 14:45 (28)	17:28	18 09:50 (19)	18:35	20:47	21:55	22:47
15	09:16	11:32 (32)	08:13	09:31 (19)	06:56	06:27	05:10	04:27
	16:17	86 14:46 (28)	17:31	19 09:50 (19)	18:38	20:49	21:58	22:47
16	09:15	11:32 (32)	08:10	09:31 (19)	06:53	06:24	05:08	04:27
	16:19	87 14:46 (28)	17:33	19 09:50 (19)	18:40	20:51	22:00	22:48
17	09:13	11:32 (32)	08:07	09:31 (19)	06:50	06:21	05:06	04:27
	16:21	87 14:47 (28)	17:36	19 09:50 (19)	18:42	20:53	22:02	22:49
18	09:12	11:32 (32)	08:05	09:32 (19)	06:47	06:19	05:04	04:27
	16:23	88 14:48 (28)	17:38	18 09:50 (19)	18:45	20:56	22:04	22:49
19	09:10	11:32 (32)	08:02	09:32 (19)	06:44	06:16	05:02	04:27
	16:25	86 14:48 (28)	17:40	17 09:49 (19)	18:47	20:58	22:06	22:50
20	09:09	11:32 (32)	08:00	09:32 (19)	06:41	06:13	05:00	04:27
	16:28	79 14:48 (28)	17:43	16 09:48 (19)	18:49	21:00	22:08	22:50
21	09:07	11:32 (32)	07:57	09:33 (19)	06:39	06:10	04:58	04:27
	16:30	77 14:48 (28)	17:45	14 09:47 (19)	18:51	21:03	22:10	22:50
22	09:05	11:32 (32)	07:54	09:35 (19)	06:36	06:08	04:56	04:27
	16:32	79 14:49 (28)	17:48	10 09:45 (19)	18:54	21:05	22:12	22:50
23	09:03	11:31 (32)	07:52		06:33	06:05	04:54	04:27
	16:34	78 14:48 (28)	17:50		18:56	21:07	22:14	22:51
24	09:02	11:32 (32)	07:49		06:30	06:02	04:52	04:27
	16:37	77 14:48 (28)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:32 (32)	07:46		06:27	05:59	04:51	04:28
	16:39	75 14:47 (28)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:33 (32)	07:44		06:24	05:57	04:49	04:28
	16:41	73 14:47 (28)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:32 (32)	07:41		06:21	05:54	04:47	04:29
	16:44	70 14:45 (28)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:33 (32)	07:38		06:18	05:52	04:46	04:30
	16:46	66 14:44 (28)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:34 (32)			07:15	05:49	04:44	04:30
	16:49	57 14:41 (28)			20:10	21:21	22:25	22:50
30	08:50	11:34 (32)			07:13	05:46	04:42	04:31
	16:51	52 13:45 (27)			20:12	21:24	22:27	22:49
31	08:48	11:35 (32)			07:10		04:41	
	16:54	48 13:44 (27)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1914		364				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,61		0,69				
Total reduction		0,24		0,27				
Total, real		467		100				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:08 (19)	09:00		11:16 (32)
	22:49	22:01	20:40	19:13			16:49	4	09:12 (19)	15:51	74	14:26 (28)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:18 (32)
	22:48	21:59	20:37	19:10			16:46			15:50	58	14:24 (28)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:19 (32)
	22:47	21:56	20:34	19:07			16:44			15:49	51	13:19 (27)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:21 (32)
	22:47	21:54	20:31	19:04			16:41			15:48	46	13:18 (27)
5	04:36	05:33	06:42	07:48			08:01		11:13 (32)	09:07		11:23 (32)
	22:46	21:51	20:28	19:02			16:39	12	11:25 (32)	15:47	39	13:18 (27)
6	04:37	05:35	06:44	07:51			08:03		11:11 (32)	09:09		11:53 (24)
	22:45	21:49	20:25	18:59			16:37	17	11:28 (32)	15:46	32	13:17 (27)
7	04:38	05:37	06:46	07:53			08:06		11:10 (32)	09:10		11:54 (24)
	22:44	21:47	20:23	18:56			16:34	22	13:06 (27)	15:45	28	13:16 (27)
8	04:40	05:39	06:49	07:55			08:08		11:08 (32)	09:12		11:54 (24)
	22:43	21:44	20:20	18:53			16:32	34	13:10 (27)	15:45	22	13:13 (27)
9	04:41	05:42	06:51	07:57			08:11		11:07 (32)	09:13		11:55 (24)
	22:42	21:42	20:17	18:50			16:30	41	13:13 (27)	15:44	20	12:15 (24)
10	04:43	05:44	06:53	08:00			08:13		11:07 (32)	09:15		11:55 (24)
	22:41	21:39	20:14	18:47			16:28	46	13:15 (27)	15:43	20	12:15 (24)
11	04:44	05:46	06:55	08:02			08:15		11:06 (32)	09:16		11:56 (24)
	22:39	21:37	20:11	18:45			16:25	48	13:15 (27)	15:43	20	12:16 (24)
12	04:46	05:48	06:57	08:04			08:18		11:06 (32)	09:18		11:56 (24)
	22:38	21:34	20:08	18:42			16:23	52	13:17 (27)	15:43	20	12:16 (24)
13	04:47	05:51	07:00	08:07			08:20		11:06 (32)	09:19		11:57 (24)
	22:37	21:32	20:05	18:39			16:21	58	14:14 (28)	15:42	20	12:17 (24)
14	04:49	05:53	07:02	08:09			08:23		11:05 (32)	09:20		11:57 (24)
	22:35	21:29	20:02	18:36			16:19	66	14:16 (28)	15:42	20	12:17 (24)
15	04:51	05:55	07:04	08:11			08:25		11:05 (32)	09:21		11:57 (24)
	22:34	21:26	19:59	18:33			16:17	70	14:18 (28)	15:42	20	12:17 (24)
16	04:52	05:57	07:06	08:13			08:27		11:06 (32)	09:22		11:58 (24)
	22:32	21:24	19:56	18:31			16:15	73	14:20 (28)	15:42	19	12:17 (24)
17	04:54	06:00	07:08	08:16			08:30		11:06 (32)	09:23		11:58 (24)
	22:31	21:21	19:54	18:28			16:13	75	14:21 (28)	15:42	19	12:17 (24)
18	04:56	06:02	07:11	08:18			08:32		11:06 (32)	09:24		11:59 (24)
	22:29	21:18	19:51	18:25			16:11	77	14:22 (28)	15:42	19	12:18 (24)
19	04:58	06:04	07:13	08:20		10:09 (19)	08:34		11:06 (32)	09:25		11:59 (24)
	22:27	21:16	19:48	18:22	5	10:14 (19)	16:09	78	14:23 (28)	15:42	20	12:19 (24)
20	05:00	06:06	07:15	08:23		10:05 (19)	08:36		11:06 (32)	09:26		12:00 (24)
	22:25	21:13	19:45	18:20	11	10:16 (19)	16:08	79	14:23 (28)	15:43	19	12:19 (24)
21	05:01	06:08	07:17	08:25		10:04 (19)	08:39		11:07 (32)	09:26		12:00 (24)
	22:24	21:10	19:42	18:17	14	10:18 (19)	16:06	77	14:23 (28)	15:43	19	12:19 (24)
22	05:03	06:11	07:19	08:27		10:02 (19)	08:41		11:08 (32)	09:27		12:01 (24)
	22:22	21:08	19:39	18:14	17	10:19 (19)	16:04	77	14:24 (28)	15:43	19	12:20 (24)
23	05:05	06:13	07:22	08:30		10:02 (19)	08:43		11:08 (32)	09:27		12:01 (24)
	22:20	21:05	19:36	18:12	18	10:20 (19)	16:02	86	14:24 (28)	15:44	19	12:20 (24)
24	05:07	06:15	07:24	08:32		10:01 (19)	08:45		11:09 (32)	09:28		12:02 (24)
	22:18	21:02	19:33	18:09	18	10:19 (19)	16:01	87	14:25 (28)	15:44	19	12:21 (24)
25	05:09	06:17	07:26	07:35		09:01 (19)	08:47		11:10 (32)	09:28		12:03 (24)
	22:16	20:59	19:30	17:06	19	09:20 (19)	15:59	87	14:25 (28)	15:45	19	12:22 (24)
26	05:11	06:20	07:28	07:37		09:01 (19)	08:50		11:11 (32)	09:28		12:03 (24)
	22:14	20:57	19:27	17:04	19	09:20 (19)	15:58	87	14:25 (28)	15:46	19	12:22 (24)
27	05:13	06:22	07:30	07:39		09:01 (19)	08:52		11:11 (32)	09:28		12:03 (24)
	22:12	20:54	19:25	17:01	18	09:19 (19)	15:56	86	14:25 (28)	15:47	20	12:23 (24)
28	05:16	06:24	07:33	07:42		09:02 (19)	08:54		11:13 (32)	09:28		12:04 (24)
	22:10	20:51	19:22	16:59	17	09:19 (19)	15:55	85	14:26 (28)	15:48	20	12:24 (24)
29	05:18	06:26	07:35	07:44		09:02 (19)	08:56		11:14 (32)	09:28		12:04 (24)
	22:07	20:48	19:19	16:56	16	09:18 (19)	15:54	82	14:25 (28)	15:49	19	12:23 (24)
30	05:20	06:29	07:37	07:47		09:03 (19)	08:58		11:14 (32)	09:28		12:04 (24)
	22:05	20:45	19:16	16:54	14	09:17 (19)	15:52	80	14:25 (28)	15:50	20	12:24 (24)
31	05:22	06:31		07:49		09:05 (19)				09:28		12:04 (24)
	22:03	20:42		16:51	11	09:16 (19)				15:51	20	12:24 (24)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					197			1686			799	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					57			411			201	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December	
1	09:28	11:58 (24)	08:46	11:24 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00	11:44 (24)
	15:53 16	12:14 (24)	16:56 49	13:35 (27)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51 57	14:20 (28)
2	09:28	11:58 (24)	08:43	11:24 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02	11:44 (24)
	15:54 18	12:16 (24)	16:58 47	13:34 (27)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50 50	14:19 (28)
3	09:27	11:58 (24)	08:41	11:25 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56	11:02 (32)	09:03	11:44 (24)
	15:55 20	12:18 (24)	17:01 42	13:33 (27)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44 12	11:14 (32)	15:49 40	14:19 (28)
4	09:27	11:58 (24)	08:39	11:26 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	10:59 (32)	09:05	11:44 (24)
	15:57 21	12:19 (24)	17:03 35	13:30 (27)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41 17	11:16 (32)	15:48 34	14:19 (28)
5	09:26	11:59 (24)	08:37	11:26 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	10:58 (32)	09:07	11:45 (24)
	15:58 20	12:19 (24)	17:06 23	11:49 (32)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39 20	11:18 (32)	15:47 31	13:06 (27)
6	09:25	11:59 (24)	08:34	11:28 (32)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	10:57 (32)	09:09	11:45 (24)
	16:00 26	13:18 (27)	17:08 20	11:48 (32)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 23	11:20 (32)	15:46 27	13:05 (27)
7	09:25	12:00 (24)	08:32	11:30 (32)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	10:56 (32)	09:10	11:46 (24)
	16:02 30	13:21 (27)	17:11 16	11:46 (32)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34 37	13:01 (27)	15:45 20	12:06 (24)
8	09:24	12:00 (24)	08:30	11:33 (32)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	10:55 (32)	09:12	11:47 (24)
	16:03 34	14:35 (28)	17:13 11	11:44 (32)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 43	13:03 (27)	15:45 20	12:07 (24)
9	09:23	12:01 (24)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	10:54 (32)	09:13	11:47 (24)
	16:05 41	14:36 (28)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 48	13:05 (27)	15:44 20	12:07 (24)
10	09:22	12:01 (24)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	10:54 (32)	09:15	11:47 (24)
	16:07 50	14:36 (28)	17:18		18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28 51	13:06 (27)	15:43 19	12:07 (24)
11	09:21	12:02 (24)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	10:54 (32)	09:16	11:48 (24)
	16:09 57	14:37 (28)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25 52	13:06 (27)	15:43 16	12:04 (24)
12	09:20	11:28 (32)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	10:54 (32)	09:18	11:48 (24)
	16:11 68	14:38 (28)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 55	13:08 (27)	15:43 11	11:59 (24)
13	09:18	11:26 (32)	08:18		07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20	10:54 (32)	09:19	11:49 (24)
	16:13 75	14:39 (28)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 62	14:08 (28)	15:42 11	12:00 (24)
14	09:17	11:25 (32)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	10:53 (32)	09:20	11:50 (24)
	16:15 78	14:39 (28)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 69	14:10 (28)	15:42 7	12:00 (24)
15	09:16	11:24 (32)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	10:54 (32)	09:21	11:50 (24)
	16:17 82	14:40 (28)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 71	14:12 (28)	15:42 3	11:53 (24)
16	09:15	11:23 (32)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	10:54 (32)	09:22	11:50 (24)
	16:19 85	14:40 (28)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15 75	14:14 (28)	15:42 3	11:53 (24)
17	09:13	11:23 (32)	08:07		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	10:55 (32)	09:23	11:51 (24)
	16:21 86	14:41 (28)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 77	14:15 (28)	15:42 1	11:52 (24)
18	09:12	11:23 (32)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:55 (32)	09:24	
	16:23 87	14:42 (28)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 76	14:15 (28)	15:42	
19	09:10	11:22 (32)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	10:56 (32)	09:25	
	16:25 88	14:42 (28)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09 77	14:16 (28)	15:42	
20	09:09	11:22 (32)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:56 (32)	09:26	
	16:28 86	14:42 (28)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08 77	14:16 (28)	15:43	
21	09:07	11:22 (32)	07:57		06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39	10:57 (32)	09:26	
	16:30 83	14:42 (28)	17:45		18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 83	14:17 (28)	15:43	
22	09:05	11:22 (32)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41	10:58 (32)	09:27	
	16:32 77	14:42 (28)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04 86	14:18 (28)	15:43	
23	09:03	11:21 (32)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:58 (32)	09:27	
	16:34 77	14:41 (28)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 88	14:18 (28)	15:44	
24	09:02	11:21 (32)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	11:00 (32)	09:28	
	16:37 76	14:41 (28)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 87	14:19 (28)	15:44	
25	09:00	11:21 (32)	07:46		06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47	11:00 (32)	09:28	
	16:39 77	14:41 (28)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59 86	14:18 (28)	15:45	
26	08:58	11:22 (32)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	11:02 (32)	09:28	
	16:41 74	14:41 (28)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58 85	14:19 (28)	15:46	
27	08:56	11:21 (32)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52	11:03 (32)	09:28	11:56 (24)
	16:44 71	14:39 (28)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 83	14:19 (28)	15:47 3	11:59 (24)
28	08:54	11:21 (32)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	11:05 (32)	09:28	11:57 (24)
	16:46 69	14:38 (28)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 79	14:19 (28)	15:48 3	12:00 (24)
29	08:52	11:22 (32)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	11:07 (32)	09:28	11:56 (24)
	16:49 61	14:36 (28)			20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54 73	14:19 (28)	15:49 5	12:07 (24)
30	08:50	11:22 (32)			07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58	11:08 (32)	09:28	11:57 (24)
	16:51 55	13:36 (27)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 69	14:19 (28)	15:50 11	12:08 (24)
31	08:48	11:23 (32)			07:10		04:41		05:22	06:31		07:49			09:28	11:57 (24)
	16:54 53	13:36 (27)			20:14		22:29		22:03	20:42		16:51			15:51 11	12:08 (24)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199	
Total, worst case	1841		243										1761		403	
Sun reduction	0,50		0,50										0,50		0,50	
Oper. time red.	0,80		0,80										0,80		0,80	
Wind dir. red.	0,62		0,65										0,62		0,62	
Total reduction	0,25		0,26										0,25		0,25	
Total, real	452		63										435		100	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28		11:52 (37)	08:46		13:17 (32)	07:35		08:53 (21)	07:07	05:44	04:40
	15:53	17	12:09 (37)	16:56	36	13:53 (32)	18:05	19	09:12 (21)	20:17	21:26	22:30
2	09:27		11:51 (37)	08:43		13:18 (32)	07:32		08:53 (21)	07:04	05:41	04:38
	15:54	19	12:10 (37)	16:58	43	15:13 (27)	18:07	20	09:13 (21)	20:19	21:28	22:32
3	09:27		11:51 (37)	08:41		13:17 (32)	07:30		08:52 (21)	07:01	05:39	04:37
	15:55	19	12:10 (37)	17:01	52	15:18 (27)	18:09	21	09:13 (21)	20:21	21:30	22:34
4	09:26		11:51 (37)	08:39		13:18 (32)	07:27		08:52 (21)	06:58	05:36	04:36
	15:57	20	12:11 (37)	17:03	54	15:20 (27)	18:12	20	09:12 (21)	20:24	21:33	22:35
5	09:26		11:52 (37)	08:37		13:17 (32)	07:24		08:52 (21)	06:55	05:34	04:35
	15:58	20	12:12 (37)	17:06	58	15:21 (27)	18:14	20	09:12 (21)	20:26	21:35	22:37
6	09:25		11:52 (37)	08:34		13:18 (32)	07:21		08:52 (21)	06:52	05:31	04:34
	16:00	20	12:12 (37)	17:08	62	15:43 (28)	18:16	19	09:11 (21)	20:28	21:37	22:38
7	09:24		11:52 (37)	08:32		13:17 (32)	07:19		08:53 (21)	06:49	05:29	04:33
	16:02	21	12:13 (37)	17:11	68	15:46 (28)	18:19	17	09:10 (21)	20:30	21:40	22:39
8	09:24		11:53 (37)	08:30		13:18 (32)	07:16		08:54 (21)	06:47	05:26	04:32
	16:03	21	12:14 (37)	17:13	72	15:51 (28)	18:21	14	09:08 (21)	20:33	21:42	22:40
9	09:23		11:52 (37)	08:27		13:18 (32)	07:13		08:55 (21)	06:44	05:24	04:31
	16:05	22	12:14 (37)	17:16	78	15:59 (28)	18:24	10	09:05 (21)	20:35	21:44	22:42
10	09:22		11:53 (37)	08:25		13:18 (32)	07:10			06:41	05:22	04:30
	16:07	22	12:15 (37)	17:18	82	16:00 (28)	18:26			20:37	21:46	22:43
11	09:21		11:54 (37)	08:23		10:11 (19)	07:07			06:38	05:19	04:29
	16:09	22	12:16 (37)	17:21	84	16:00 (28)	18:28			20:40	21:49	22:44
12	09:20		11:53 (37)	08:20		10:06 (19)	07:04			06:35	05:17	04:29
	16:11	23	12:16 (37)	17:23	89	15:59 (28)	18:31			20:42	21:51	22:45
13	09:18		11:53 (37)	08:18		10:04 (19)	07:01			06:32	05:15	04:28
	16:13	29	13:27 (24)	17:26	90	15:58 (28)	18:33			20:44	21:53	22:46
14	09:17		11:54 (37)	08:15		10:03 (19)	06:59			06:30	05:13	04:28
	16:15	38	13:37 (24)	17:28	87	15:57 (28)	18:35			20:47	21:55	22:46
15	09:16		11:55 (37)	08:13		10:02 (19)	06:56			06:27	05:10	04:27
	16:17	44	13:43 (24)	17:31	81	15:54 (28)	18:38			20:49	21:57	22:47
16	09:15		11:55 (37)	08:10		10:01 (19)	06:53			06:24	05:08	04:27
	16:19	45	13:44 (24)	17:33	72	15:24 (27)	18:40			20:51	22:00	22:48
17	09:13		11:55 (37)	08:07		10:00 (19)	06:50			06:21	05:06	04:27
	16:21	45	13:44 (24)	17:35	67	15:23 (27)	18:42			20:53	22:02	22:49
18	09:12		11:57 (37)	08:05		10:00 (19)	06:47			06:19	05:04	04:27
	16:23	44	13:46 (24)	17:38	61	15:23 (27)	18:45			20:56	22:04	22:49
19	09:10		11:57 (37)	08:02		10:00 (19)	06:44			06:16	05:02	04:27
	16:25	44	13:46 (24)	17:40	43	15:21 (27)	18:47			20:58	22:06	22:50
20	09:08		11:58 (37)	08:00		09:59 (19)	06:41			06:13	05:00	04:27
	16:28	43	13:46 (24)	17:43	41	15:19 (27)	18:49			21:00	22:08	22:50
21	09:07		11:59 (37)	07:57		09:59 (19)	06:38			06:10	04:58	04:27
	16:30	40	13:46 (24)	17:45	32	15:15 (27)	18:51			21:03	22:10	22:50
22	09:05		11:59 (37)	07:54		09:59 (19)	06:36			06:08	04:56	04:27
	16:32	40	13:46 (24)	17:48	25	10:24 (19)	18:54			21:05	22:12	22:50
23	09:03		12:01 (37)	07:52		10:00 (19)	06:33			06:05	04:54	04:27
	16:34	36	13:46 (24)	17:50	24	10:24 (19)	18:56			21:07	22:14	22:50
24	09:02		12:03 (37)	07:49		10:01 (19)	06:30			06:02	04:52	04:27
	16:37	34	13:46 (24)	17:53	22	10:23 (19)	18:58			21:10	22:16	22:51
25	09:00		12:05 (37)	07:46		09:00 (21)	06:27			05:59	04:51	04:28
	16:39	32	13:46 (32)	17:55	27	10:22 (19)	19:01			21:12	22:18	22:50
26	08:58		13:21 (32)	07:43		08:57 (21)	06:24			05:57	04:49	04:28
	16:41	27	13:48 (32)	17:57	30	10:20 (19)	19:03			21:14	22:20	22:50
27	08:56		13:20 (32)	07:41		08:55 (21)	06:21			05:54	04:47	04:29
	16:44	28	13:48 (32)	18:00	28	10:17 (19)	19:05			21:17	22:22	22:50
28	08:54		13:19 (32)	07:38		08:54 (21)	06:18			05:52	04:46	04:30
	16:46	31	13:50 (32)	18:02	22	10:13 (19)	19:07			21:19	22:24	22:50
29	08:52		13:19 (32)				07:15			05:49	04:44	04:30
	16:49	32	13:51 (32)				20:10			21:21	22:25	22:50
30	08:50		13:18 (32)				07:12			05:46	04:42	04:31
	16:51	33	13:51 (32)				20:12			21:24	22:27	22:49
31	08:48		13:18 (32)				07:10				04:41	
	16:53	34	13:52 (32)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		945			1530			160				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,61			0,61			0,74				
Total reduction		0,24			0,24			0,29				
Total, real		230			370			47				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		12:48 (32)	09:00		11:36 (37)
	22:49	22:01	20:40	19:13			16:49	83	15:30 (28)	15:51	22	11:58 (37)
2	04:33	05:26	06:35	07:42			07:54		12:48 (32)	09:02		11:36 (37)
	22:48	21:58	20:37	19:10			16:46	76	15:28 (28)	15:50	22	11:58 (37)
3	04:34	05:28	06:37	07:44			07:56		12:48 (32)	09:03		11:36 (37)
	22:47	21:56	20:34	19:07			16:44	71	15:20 (28)	15:49	22	11:58 (37)
4	04:35	05:31	06:40	07:46		09:34 (21)	07:59		12:47 (32)	09:05		11:37 (37)
	22:47	21:54	20:31	19:04	7	09:41 (21)	16:41	66	15:15 (28)	15:48	21	11:58 (37)
5	04:36	05:33	06:42	07:48		09:32 (21)	08:01		12:47 (32)	09:07		11:37 (37)
	22:46	21:51	20:28	19:01	12	09:44 (21)	16:39	62	15:13 (28)	15:47	21	11:58 (37)
6	04:37	05:35	06:44	07:51		09:30 (21)	08:03		12:48 (32)	09:09		11:38 (37)
	22:45	21:49	20:25	18:59	15	09:45 (21)	16:37	57	14:51 (27)	15:46	21	11:59 (37)
7	04:38	05:37	06:46	07:53		09:28 (21)	08:06		12:47 (32)	09:10		11:39 (37)
	22:44	21:47	20:22	18:56	18	09:46 (21)	16:34	55	14:50 (27)	15:45	20	11:59 (37)
8	04:40	05:39	06:48	07:55		09:28 (21)	08:08		12:48 (32)	09:12		11:40 (37)
	22:43	21:44	20:20	18:53	19	09:47 (21)	16:32	50	14:48 (27)	15:45	19	11:59 (37)
9	04:41	05:42	06:51	07:57		09:27 (21)	08:11		12:48 (32)	09:13		11:41 (37)
	22:42	21:42	20:17	18:50	20	09:47 (21)	16:30	42	14:43 (27)	15:44	19	12:00 (37)
10	04:43	05:44	06:53	08:00		09:27 (21)	08:13		12:49 (32)	09:15		11:41 (37)
	22:40	21:39	20:14	18:47	20	09:47 (21)	16:28	35	13:24 (32)	15:43	18	11:59 (37)
11	04:44	05:46	06:55	08:02		09:26 (21)	08:15		12:49 (32)	09:16		11:42 (37)
	22:39	21:37	20:11	18:45	20	09:46 (21)	16:25	34	13:23 (32)	15:43	18	12:00 (37)
12	04:46	05:48	06:57	08:04		09:26 (21)	08:18		12:50 (32)	09:18		11:42 (37)
	22:38	21:34	20:08	18:42	19	09:45 (21)	16:23	33	13:23 (32)	15:43	17	11:59 (37)
13	04:47	05:51	07:00	08:06		09:27 (21)	08:20		12:51 (32)	09:19		11:43 (37)
	22:37	21:31	20:05	18:39	18	09:45 (21)	16:21	32	13:23 (32)	15:42	17	12:00 (37)
14	04:49	05:53	07:02	08:09		09:27 (21)	08:22		12:51 (32)	09:20		11:44 (37)
	22:35	21:29	20:02	18:36	26	10:48 (19)	16:19	31	13:22 (32)	15:42	16	12:00 (37)
15	04:51	05:55	07:04	08:11		09:29 (21)	08:25		12:53 (32)	09:21		11:44 (37)
	22:34	21:26	19:59	18:33	29	10:51 (19)	16:17	28	13:21 (32)	15:42	16	12:00 (37)
16	04:52	05:57	07:06	08:13		09:30 (21)	08:27		12:54 (32)	09:22		11:45 (37)
	22:32	21:24	19:56	18:31	28	10:52 (19)	16:15	27	13:21 (32)	15:42	15	12:00 (37)
17	04:54	05:59	07:08	08:16		10:33 (19)	08:29		11:38 (37)	09:23		11:45 (37)
	22:30	21:21	19:54	18:28	21	10:54 (19)	16:13	32	13:19 (32)	15:42	15	12:00 (37)
18	04:56	06:02	07:10	08:18		10:31 (19)	08:32		11:36 (37)	09:24		11:46 (37)
	22:29	21:18	19:51	18:25	23	10:54 (19)	16:11	35	13:20 (24)	15:42	15	12:01 (37)
19	04:58	06:04	07:13	08:20		10:31 (19)	08:34		11:36 (37)	09:25		11:47 (37)
	22:27	21:16	19:48	18:22	24	10:55 (19)	16:09	36	13:21 (24)	15:42	14	12:01 (37)
20	05:00	06:06	07:15	08:23		10:30 (19)	08:36		11:34 (37)	09:26		11:48 (37)
	22:25	21:13	19:45	18:20	25	10:55 (19)	16:08	40	13:21 (24)	15:42	14	12:02 (37)
21	05:01	06:08	07:17	08:25		10:30 (19)	08:39		11:34 (37)	09:26		11:48 (37)
	22:24	21:10	19:42	18:17	37	15:48 (27)	16:06	40	13:21 (24)	15:43	14	12:02 (37)
22	05:03	06:11	07:19	08:27		10:29 (19)	08:41		11:34 (37)	09:27		11:49 (37)
	22:22	21:08	19:39	18:14	42	15:50 (27)	16:04	43	13:22 (24)	15:43	14	12:03 (37)
23	05:05	06:13	07:22	08:30		10:30 (19)	08:43		11:33 (37)	09:27		11:49 (37)
	22:20	21:05	19:36	18:12	50	15:52 (27)	16:02	44	13:22 (24)	15:44	14	12:03 (37)
24	05:07	06:15	07:24	08:32		10:29 (19)	08:45		11:34 (37)	09:28		11:50 (37)
	22:18	21:02	19:33	18:09	63	15:52 (27)	16:01	44	13:23 (24)	15:44	14	12:04 (37)
25	05:09	06:17	07:26	07:35		09:30 (19)	08:47		11:33 (37)	09:28		11:50 (37)
	22:16	20:59	19:30	17:06	69	14:54 (27)	15:59	44	13:22 (24)	15:45	14	12:04 (37)
26	05:11	06:20	07:28	07:37		09:30 (19)	08:50		11:34 (37)	09:28		11:50 (37)
	22:14	20:56	19:27	17:04	74	14:54 (27)	15:58	44	13:23 (24)	15:46	15	12:05 (37)
27	05:13	06:22	07:30	07:39		09:31 (19)	08:52		11:34 (37)	09:28		11:50 (37)
	22:12	20:54	19:24	17:01	82	15:24 (28)	15:56	44	13:23 (24)	15:47	16	12:06 (37)
28	05:16	06:24	07:33	07:42		09:33 (19)	08:54		11:35 (37)	09:28		11:50 (37)
	22:10	20:51	19:22	16:59	89	15:27 (28)	15:55	37	13:17 (24)	15:48	16	12:06 (37)
29	05:18	06:26	07:35	07:44		09:34 (19)	08:56		11:35 (37)	09:28		11:50 (37)
	22:07	20:48	19:19	16:56	90	15:28 (28)	15:54	29	13:09 (24)	15:49	16	12:06 (37)
30	05:20	06:29	07:37	07:47		09:36 (19)	08:58		11:35 (37)	09:28		11:51 (37)
	22:05	20:45	19:16	16:54	90	15:29 (28)	15:52	23	13:03 (24)	15:50	17	12:08 (37)
31	05:22	06:31		07:49		12:49 (32)				09:28		11:51 (37)
	22:03	20:42		16:51	81	15:30 (28)				15:51	17	12:08 (37)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					1111			1317			529	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,64			0,59			0,64	
Total reduction					0,26			0,23			0,26	
Total, real					286			308			135	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:46	14:11 (37)	07:35	10:14 (21)	07:07	05:44	04:40
	15:53		16:56 18	15:31 (24)	18:05 73	16:49 (27)	20:17	21:26	22:30
2	09:27		08:43	15:15 (24)	07:32	10:15 (21)	07:04	05:41	04:38
	15:54		16:58 17	15:32 (24)	18:07 70	16:50 (27)	20:19	21:28	22:32
3	09:27		08:41	15:14 (24)	07:30	10:16 (21)	07:01	05:39	04:37
	15:55		17:01 19	15:33 (24)	18:09 63	16:48 (27)	20:21	21:30	22:34
4	09:26		08:39	12:33 (19)	07:27	10:16 (21)	06:58	05:36	04:36
	15:57		17:03 32	15:33 (24)	18:12 54	16:47 (27)	20:23	21:33	22:35
5	09:26		08:37	12:30 (19)	07:24	09:25 (16)	06:55	05:34	04:35
	15:58		17:06 37	15:33 (24)	18:14 37	16:44 (27)	20:26	21:35	22:36
6	09:25		08:34	12:29 (19)	07:21	09:21 (16)	06:52	05:31	04:34
	16:00		17:08 40	15:34 (24)	18:16 27	10:42 (21)	20:28	21:37	22:38
7	09:24		08:32	12:27 (19)	07:18	10:19 (21)	06:49	05:29	04:33
	16:02		17:11 43	15:33 (24)	18:19 20	10:39 (21)	20:30	21:40	22:39
8	09:24		08:30	12:26 (19)	07:16	10:21 (21)	06:47	05:26	04:32
	16:03		17:13 46	15:34 (24)	18:21 15	10:36 (21)	20:33	21:42	22:40
9	09:23		08:27	12:25 (19)	07:13	10:24 (21)	06:44	05:24	04:31
	16:05		17:16 46	15:33 (24)	18:24 8	10:32 (21)	20:35	21:44	22:42
10	09:22		08:25	12:24 (19)	07:10		06:41	05:22	04:30
	16:07		17:18 45	15:31 (24)	18:26		20:37	21:46	22:43
11	09:21		08:22	12:24 (19)	07:07		06:38	05:19	04:29
	16:09		17:21 43	15:30 (24)	18:28		20:40	21:49	22:44
12	09:20		08:20	12:23 (19)	07:04		06:35	05:17	04:29
	16:11		17:23 38	15:27 (24)	18:31		20:42	21:51	22:45
13	09:18		08:18	12:22 (19)	07:01		06:32	05:15	04:28
	16:13		17:26 35	12:57 (19)	18:33		20:44	21:53	22:46
14	09:17		08:15	12:23 (19)	06:59		06:30	05:12	04:28
	16:15		17:28 35	12:58 (19)	18:35		20:46	21:55	22:46
15	09:16		08:12	12:22 (19)	06:56		06:27	05:10	04:27
	16:17		17:30 35	12:57 (19)	18:38		20:49	21:57	22:47
16	09:14		08:10	12:22 (19)	06:53		06:24	05:08	04:27
	16:19		17:33 43	16:12 (32)	18:40		20:51	22:00	22:48
17	09:13		08:07	12:22 (19)	06:50		06:21	05:06	04:27
	16:21		17:35 49	16:15 (32)	18:42		20:53	22:02	22:48
18	09:12		08:05	12:23 (19)	06:47		06:18	05:04	04:27
	16:23		17:38 51	16:17 (32)	18:44		20:56	22:04	22:49
19	09:10		08:02	12:23 (19)	06:44		06:16	05:02	04:27
	16:25		17:40 54	16:18 (32)	18:47		20:58	22:06	22:49
20	09:08		08:00	12:23 (19)	06:41		06:13	05:00	04:27
	16:28		17:43 55	16:19 (32)	18:49		21:00	22:08	22:50
21	09:07		07:57	12:23 (19)	06:38		06:10	04:58	04:27
	16:30		17:45 56	16:20 (32)	18:51		21:03	22:10	22:50
22	09:05		07:54	12:24 (19)	06:36		06:07	04:56	04:27
	16:32		17:48 61	16:42 (27)	18:54		21:05	22:12	22:50
23	09:03		07:52	12:26 (19)	06:33		06:05	04:54	04:27
	16:34		17:50 66	16:48 (27)	18:56		21:07	22:14	22:50
24	09:01		07:49	10:20 (21)	06:30		06:02	04:52	04:27
	16:37		17:52 68	16:49 (27)	18:58		21:10	22:16	22:50
25	09:00		07:46	10:16 (21)	06:27		05:59	04:51	04:28
	16:39		17:55 89	16:50 (27)	19:01		21:12	22:18	22:50
26	08:58		07:43	10:15 (21)	06:24		05:57	04:49	04:28
	16:41		17:57 92	16:50 (27)	19:03		21:14	22:20	22:50
27	08:56		07:41	10:15 (21)	06:21		05:54	04:47	04:29
	16:44		18:00 77	16:50 (27)	19:05		21:17	22:22	22:50
28	08:54		07:38	10:15 (21)	06:18		05:51	04:45	04:29
	16:46		18:02 75	16:50 (27)	19:07		21:19	22:24	22:50
29	08:52				07:15		05:49	04:44	04:30
	16:49				20:10		21:21	22:25	22:49
30	08:50	14:16 (37)			07:12		05:46	04:42	04:31
	16:51 3	14:19 (37)			20:12		21:23	22:27	22:49
31	08:48	14:08 (37)			07:10			04:41	
	16:53 21	15:27 (24)			20:14			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	24		1365		367				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,55		0,60		0,65				
Total reduction	0,22		0,24		0,26				
Total, real	5		328		96				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:53 (19)	09:00
	22:48	22:01	20:40	19:13			16:49	46	15:01 (24)	15:51
2	04:33	05:26	06:35	07:41			07:54		11:55 (19)	09:01
	22:48	21:58	20:37	19:10			16:46	45	15:02 (24)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:56 (19)	09:03
	22:47	21:56	20:34	19:07			16:44	45	15:03 (24)	15:49
4	04:35	05:31	06:40	07:46			07:58		11:57 (19)	09:05
	22:46	21:54	20:31	19:04			16:41	43	15:03 (24)	15:48
5	04:36	05:33	06:42	07:48		10:59 (21)	08:01		11:58 (19)	09:07
	22:46	21:51	20:28	19:01	13	11:12 (21)	16:39	41	15:03 (24)	15:47
6	04:37	05:35	06:44	07:50		10:56 (21)	08:03		12:01 (19)	09:09
	22:45	21:49	20:25	18:59	19	11:15 (21)	16:37	36	15:04 (24)	15:46
7	04:38	05:37	06:46	07:53		09:54 (16)	08:06		12:03 (19)	09:10
	22:44	21:47	20:22	18:56	24	11:16 (21)	16:34	31	15:03 (24)	15:45
8	04:40	05:39	06:48	07:55		09:58 (16)	08:08		14:45 (24)	09:12
	22:43	21:44	20:20	18:53	33	17:18 (27)	16:32	18	15:03 (24)	15:45
9	04:41	05:42	06:51	07:57		10:01 (16)	08:10		14:46 (24)	09:13
	22:42	21:42	20:17	18:50	49	17:20 (27)	16:30	17	15:03 (24)	15:44
10	04:43	05:44	06:53	08:00		10:49 (21)	08:13		13:42 (37)	09:15
	22:40	21:39	20:14	18:47	59	17:21 (27)	16:28	20	15:03 (24)	15:43
11	04:44	05:46	06:55	08:02		10:49 (21)	08:15		13:39 (37)	09:16
	22:39	21:37	20:11	18:44	67	17:23 (27)	16:25	20	14:58 (24)	15:43
12	04:46	05:48	06:57	08:04		10:48 (21)	08:18		13:48 (37)	09:17
	22:38	21:34	20:08	18:42	72	17:23 (27)	16:23	3	13:51 (37)	15:43
13	04:47	05:50	06:59	08:06		10:48 (21)	08:20			09:19
	22:36	21:31	20:05	18:39	73	17:23 (27)	16:21			15:42
14	04:49	05:53	07:02	08:09		10:47 (21)	08:22			09:20
	22:35	21:29	20:02	18:36	77	17:23 (27)	16:19			15:42
15	04:50	05:55	07:04	08:11		10:48 (21)	08:25			09:21
	22:34	21:26	19:59	18:33	86	17:23 (27)	16:17			15:42
16	04:52	05:57	07:06	08:13		10:47 (21)	08:27			09:22
	22:32	21:24	19:56	18:31	93	17:22 (27)	16:15			15:42
17	04:54	05:59	07:08	08:16		10:48 (21)	08:29			09:23
	22:30	21:21	19:53	18:28	85	17:22 (27)	16:13			15:42
18	04:56	06:02	07:10	08:18		12:58 (19)	08:32			09:24
	22:29	21:18	19:51	18:25	66	17:20 (27)	16:11			15:42
19	04:58	06:04	07:13	08:20		12:57 (19)	08:34			09:25
	22:27	21:16	19:48	18:22	64	17:17 (27)	16:09			15:42
20	04:59	06:06	07:15	08:23		12:55 (19)	08:36			09:25
	22:25	21:13	19:45	18:20	58	17:12 (27)	16:07			15:42
21	05:01	06:08	07:17	08:25		12:54 (19)	08:39			09:26
	22:23	21:10	19:42	18:17	56	16:51 (32)	16:06			15:43
22	05:03	06:11	07:19	08:27		12:53 (19)	08:41			09:27
	22:22	21:07	19:39	18:14	55	16:49 (32)	16:04			15:43
23	05:05	06:13	07:21	08:30		12:53 (19)	08:43			09:27
	22:20	21:05	19:36	18:12	53	16:48 (32)	16:02			15:44
24	05:07	06:15	07:24	08:32		12:52 (19)	08:45			09:28
	22:18	21:02	19:33	18:09	52	16:46 (32)	16:01			15:44
25	05:09	06:17	07:26	07:34		11:52 (19)	08:47			09:28
	22:16	20:59	19:30	17:06	47	15:44 (32)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:51 (19)	08:49			09:28
	22:14	20:56	19:27	17:04	39	15:39 (32)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:52 (19)	08:52			09:28
	22:12	20:54	19:24	17:01	35	12:27 (19)	15:56			15:47
28	05:15	06:24	07:33	07:42		11:52 (19)	08:54			09:28
	22:10	20:51	19:22	16:59	35	12:27 (19)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:52 (19)	08:56			09:28
	22:07	20:48	19:19	16:56	34	12:26 (19)	15:53			15:49
30	05:20	06:29	07:37	07:46		11:53 (19)	08:58			09:28
	22:05	20:45	19:16	16:54	40	14:58 (24)	15:52			15:50
31	05:22	06:31		07:49		11:53 (19)				09:28
	22:03	20:42		16:51	44	15:00 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1428			365		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,62			0,58		
Total reduction					0,25			0,23		
Total, real					353			85		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	11:38 (21)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:44 (16)	09:00
	15:53	16:56 63	13:43 (19)	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13	16:49 56	15:37 (32)	15:51
2	09:27	08:43	11:39 (21)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54	09:56 (16)	09:01
	15:54	16:58 59	13:43 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46 51	15:37 (32)	15:50
3	09:27	08:41	11:38 (21)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56	09:57 (16)	09:03
	15:55	17:01 51	13:42 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07	16:44 55	15:36 (32)	15:49
4	09:26	08:39	11:39 (21)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46	07:58	10:02 (16)	09:05
	15:57	17:03 51	15:59 (32)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41 56	15:35 (32)	15:48
5	09:26	08:37	11:39 (21)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	10:04 (16)	09:07
	15:58	17:06 56	16:02 (32)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39 58	15:34 (32)	15:47
6	09:25	08:34	10:34 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	11:10 (21)	09:09
	16:00	17:08 57	16:05 (32)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 55	15:33 (32)	15:46
7	09:24	08:32	10:32 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53	08:06	11:09 (21)	09:10
	16:02	17:11 55	16:05 (32)	18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56	16:34 49	13:12 (19)	15:45
8	09:24	08:30	10:27 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55	08:08	11:09 (21)	09:12
	16:03	17:13 53	16:07 (32)	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53	16:32 50	13:13 (19)	15:45
9	09:23	08:27	10:26 (16)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:10	11:09 (21)	09:13
	16:05	17:16 49	16:07 (32)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 60	13:14 (19)	15:44
10	09:22	08:25	10:15 (16)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	11:10 (21)	09:15
	16:07	17:18 58	16:07 (32)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:28 61	13:14 (19)	15:43
11	09:21	08:22	10:16 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	11:10 (21)	09:16
	16:09	17:21 55	16:08 (32)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44	16:25 63	13:14 (19)	15:43
12	09:20	08:20	10:17 (16)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	11:10 (21)	09:17
	16:11	17:23 48	16:08 (32)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 66	13:15 (19)	15:43
13	09:18	08:17	10:18 (16)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	11:11 (21)	09:19
	16:13	17:26 33	16:07 (32)	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 65	13:15 (19)	15:42
14	09:17 12:02 (13)	08:15	10:21 (16)	06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09	08:22	11:11 (21)	09:20
	16:15 8 12:10 (13)	17:28 28	16:08 (32)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 66	13:15 (19)	15:42
15	09:16 12:02 (13)	08:12	15:50 (32)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	11:13 (21)	09:21
	16:17 9 12:11 (13)	17:30 17	16:07 (32)	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17 64	13:15 (19)	15:42
16	09:14 12:02 (13)	08:10	15:51 (32)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	11:14 (21)	09:22
	16:19 11 12:13 (13)	17:33 14	16:05 (32)	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15 62	13:15 (19)	15:42
17	09:13 12:02 (13)	08:07	15:52 (32)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	11:15 (21)	09:23
	16:21 20 13:30 (19)	17:35 12	16:04 (32)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 61	13:14 (19)	15:42
18	09:12 11:58 (13)	08:05	15:56 (32)	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18	08:32	11:16 (21)	09:24
	16:23 30 13:34 (19)	17:38 6	16:02 (32)	18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 60	13:14 (19)	15:42
19	09:10 11:58 (13)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20	08:34	11:19 (21)	09:25
	16:25 33 13:35 (19)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22	16:09 55	13:14 (19)	15:42
20	09:08 11:58 (13)	08:00		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	11:21 (21)	09:25
	16:27 36 13:37 (19)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 47	13:13 (19)	15:42
21	09:07 11:58 (13)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39	11:33 (13)	09:26
	16:30 39 13:38 (19)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 39	13:13 (19)	15:43
22	09:05 11:46 (21)	07:54		06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41	11:34 (13)	09:27
	16:32 47 13:38 (19)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04 36	13:13 (19)	15:43
23	09:03 11:44 (21)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	11:34 (13)	09:27
	16:34 55 13:39 (19)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02 33	13:12 (19)	15:44
24	09:01 11:42 (21)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32 16:24 (32)	08:45	11:35 (13)	09:28
	16:37 60 13:40 (19)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09 8 16:32 (32)	16:01 30	13:11 (19)	15:44
25	09:00 11:42 (21)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34 15:22 (32)	08:47	11:41 (13)	09:28
	16:39 61 13:41 (19)	17:55		19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06 12 15:34 (32)	15:59 20	13:09 (19)	15:45
26	08:58 11:41 (21)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37 15:20 (32)	08:49	11:41 (13)	09:28
	16:41 62 13:42 (19)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 15 15:35 (32)	15:58 11	11:52 (13)	15:46
27	08:56 11:40 (21)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39 15:19 (32)	08:52	11:41 (13)	09:28
	16:44 64 13:42 (19)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01 17 15:36 (32)	15:56 10	11:51 (13)	15:47
28	08:54 11:40 (21)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42 09:50 (16)	08:54	11:42 (13)	09:28
	16:46 65 13:43 (19)	18:02		19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59 28 15:37 (32)	15:55 8	11:50 (13)	15:48
29	08:52 11:39 (21)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44 09:47 (16)	08:56		09:28
	16:49 65 13:43 (19)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56 37 15:37 (32)	15:53		15:49
30	08:50 11:39 (21)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46 09:46 (16)	08:58		09:28
	16:51 65 13:43 (19)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54 49 15:37 (32)	15:52		15:50
31	08:48 11:39 (21)			07:09		04:41		05:22	06:31		07:49 09:46 (16)			09:28
	16:53 63 13:43 (19)			20:14		22:29		22:03	20:42		16:51 55 15:38 (32)			15:51
Potential sun hours	221	260	365	432	521	547	546	478	386	319	236			199
Total, worst case	793	765								221	1347			
Sun reduction	0,50	0,50								0,50	0,50			
Oper. time red.	0,80	0,80								0,80	0,80			
Wind dir. red.	0,62	0,61								0,60	0,62			
Total reduction	0,25	0,24								0,24	0,25			
Total, real	197	187								53	334			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:50 (16)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39		07:51	10:27 (16)	09:00
	15:53		16:56	74	14:26 (19)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	30 13:49 (19)	15:51
2	09:27		08:43		10:51 (16)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:25 (16)	09:01
	15:54		16:58	73	14:27 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	45 13:52 (19)	15:50
3	09:27		08:41		10:50 (16)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:24 (16)	09:03
	15:55		17:01	74	14:27 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	54 13:54 (19)	15:49
4	09:26		08:39		10:51 (16)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:22 (16)	09:05
	15:57		17:03	71	14:27 (19)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	61 13:55 (19)	15:48
5	09:26		08:37		10:51 (16)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:22 (16)	09:07
	15:58		17:06	68	14:26 (19)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	65 13:56 (19)	15:47
6	09:25		08:34		10:53 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:22 (16)	09:09
	16:00		17:08	64	14:26 (19)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	69 13:57 (19)	15:46
7	09:24		08:32		10:53 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:21 (16)	09:10
	16:02		17:11	59	14:25 (19)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	72 13:57 (19)	15:45
8	09:24		08:30		10:55 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:21 (16)	09:12
	16:03		17:13	52	14:24 (19)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73 13:57 (19)	15:45
9	09:23		08:27		10:56 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:21 (16)	09:13
	16:05		17:16	43	14:22 (19)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75 13:58 (19)	15:44
10	09:22		08:25		10:58 (16)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:22 (16)	09:15
	16:07		17:18	26	14:18 (19)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	72 13:58 (19)	15:43
11	09:21		08:22		12:44 (21)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:21 (16)	09:16
	16:09		17:21	5	12:49 (21)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	75 13:58 (19)	15:43
12	09:20		08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:22 (16)	09:17
	16:11		17:23			18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	72 13:58 (19)	15:42
13	09:18	12:39 (13)	08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:23 (16)	09:19
	16:13	5 12:44 (13)	17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	72 13:58 (19)	15:42
14	09:17	12:39 (13)	08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	10:23 (16)	09:20
	16:15	7 12:46 (13)	17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	68 13:57 (19)	15:42
15	09:16	12:39 (13)	08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	10:24 (16)	09:21
	16:17	15 12:54 (13)	17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	63 13:57 (19)	15:42
16	09:14	12:38 (13)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	10:30 (16)	09:22
	16:19	17 12:55 (13)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	50 13:57 (19)	15:42
17	09:13	12:38 (13)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:05 (21)	09:23
	16:21	18 12:56 (13)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45 13:55 (19)	15:42
18	09:12	12:37 (13)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:07 (21)	09:24
	16:23	19 12:56 (13)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	42 13:55 (19)	15:42
19	09:10	12:38 (13)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:08 (21)	09:25
	16:25	20 12:58 (13)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	39 13:54 (19)	15:42
20	09:08	12:37 (21)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:09 (21)	09:25
	16:27	22 12:59 (13)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	33 13:51 (19)	15:42
21	09:07	12:35 (21)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:11 (21)	09:26
	16:30	23 12:58 (13)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	23 12:34 (13)	15:43
22	09:05	12:34 (21)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:13 (21)	09:27
	16:32	33 14:16 (19)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	22 12:35 (13)	15:43
23	09:03	12:33 (21)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:14 (13)	09:27
	16:34	39 14:19 (19)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	20 12:34 (13)	15:44
24	09:01	12:33 (21)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:15 (13)	09:28
	16:37	42 14:21 (19)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	20 12:35 (13)	15:44
25	09:00	12:32 (21)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:16 (13)	09:28
	16:39	45 14:22 (19)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	18 12:34 (13)	15:45
26	08:58	10:57 (16)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49	12:17 (13)	09:28
	16:41	50 14:24 (19)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58	17 12:34 (13)	15:46
27	08:56	10:51 (16)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52	12:18 (13)	09:28
	16:44	64 14:24 (19)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56	15 12:33 (13)	15:47
28	08:54	10:51 (16)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54	12:19 (13)	09:28
	16:46	69 14:25 (19)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59		15:55	7 12:26 (13)	15:48
29	08:52	10:51 (16)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56	12:20 (13)	09:28
	16:49	70 14:26 (19)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53	5 12:25 (13)	15:49
30	08:50	10:50 (16)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		08:58		09:28
	16:51	72 14:26 (19)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54		15:52		15:50
31	08:48	10:51 (16)				07:09		04:41		05:22	06:31		07:49	12:13 (21)			09:28
	16:53	74 14:27 (19)				20:14		22:29		22:03	20:42		16:51	7 12:20 (21)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236			199
Total, worst case	704		609										7	1322			
Sun reduction	0,50		0,50										0,50	0,50			
Oper. time red.	0,80		0,80										0,80	0,80			
Wind dir. red.	0,62		0,63										0,63	0,62			
Total reduction	0,25		0,25										0,25	0,25			
Total, real	174		153										2	328			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:45 (16)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		10:19 (16)	09:00
	15:53		16:56	73	14:22 (19)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	43	13:46 (19)	15:51
2	09:27		08:43		10:46 (16)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		10:18 (16)	09:01
	15:54		16:58	74	14:23 (19)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	53	13:48 (19)	15:50
3	09:27		08:41		10:45 (16)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		10:18 (16)	09:03
	15:55		17:01	74	14:22 (19)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	59	13:50 (19)	15:49
4	09:26		08:39		10:46 (16)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:16 (16)	09:05
	15:57		17:03	73	14:23 (19)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	65	13:51 (19)	15:48
5	09:26		08:37		10:46 (16)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:16 (16)	09:07
	15:58		17:06	71	14:22 (19)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	70	13:52 (19)	15:47
6	09:25		08:34		10:47 (16)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		10:16 (16)	09:09
	16:00		17:08	68	14:22 (19)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	73	13:53 (19)	15:46
7	09:24		08:32		10:47 (16)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		10:16 (16)	09:10
	16:02		17:11	65	14:21 (19)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	73	13:52 (19)	15:45
8	09:24		08:30		10:48 (16)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		10:16 (16)	09:12
	16:03		17:13	58	14:20 (19)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73	13:53 (19)	15:45
9	09:23		08:27		10:49 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10		10:16 (16)	09:13
	16:05		17:16	50	14:18 (19)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75	13:53 (19)	15:44
10	09:22		08:25		10:50 (16)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13		10:17 (16)	09:15
	16:07		17:18	40	14:16 (19)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	74	13:54 (19)	15:43
11	09:21		08:22		10:53 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		10:17 (16)	09:16
	16:09		17:21	22	12:47 (21)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	69	13:53 (19)	15:43
12	09:20		08:20		12:38 (21)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		10:18 (16)	09:17
	16:11		17:23	4	12:42 (21)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	54	13:53 (19)	15:42
13	09:18		08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		10:20 (16)	09:19
	16:13		17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	53	13:53 (19)	15:42
14	09:17		08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:57 (21)	09:20
	16:15		17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	51	13:52 (19)	15:42
15	09:16		08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:58 (21)	09:21
	16:17		17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	50	13:52 (19)	15:42
16	09:14		08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:59 (21)	09:22
	16:19		17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	49	13:52 (19)	15:42
17	09:13		08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		12:00 (21)	09:23
	16:21	5	12:50 (13)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45	13:50 (19)	15:42
18	09:12		12:33 (13)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		12:01 (21)	09:24
	16:23	18	12:51 (13)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	43	13:50 (19)	15:42
19	09:10		12:34 (13)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		12:03 (21)	09:25
	16:25	19	12:53 (13)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	38	13:49 (19)	15:42
20	09:08		12:34 (13)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		12:04 (21)	09:25
	16:27	20	12:54 (13)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	27	13:41 (19)	15:42
21	09:07		12:31 (21)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		12:07 (21)	09:26
	16:30	22	12:53 (13)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	22	12:29 (13)	15:43
22	09:05		12:29 (21)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		12:10 (13)	09:27
	16:32	27	14:06 (19)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	20	12:30 (13)	15:43
23	09:03		12:28 (21)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		12:10 (13)	09:27
	16:34	38	14:14 (19)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	19	12:29 (13)	15:44
24	09:01		12:27 (21)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45		12:11 (13)	09:28
	16:37	43	14:16 (19)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	18	12:29 (13)	15:44
25	09:00		12:27 (21)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47		12:11 (13)	09:28
	16:39	45	14:17 (19)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	5	12:28 (13)	15:45
26	08:58		12:26 (21)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49			09:28
	16:41	49	14:19 (19)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58			15:46
27	08:56		12:25 (21)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52			09:28
	16:44	50	14:19 (19)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56			15:47
28	08:54		12:25 (21)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54			09:28
	16:46	51	14:20 (19)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59		15:55			15:48
29	08:52		10:48 (16)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56			09:28
	16:49	53	14:21 (19)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53			15:49
30	08:50		10:46 (16)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	12:06 (21)	08:58			09:28
	16:51	55	14:21 (19)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	7 12:13 (21)	15:52			15:50
31	08:48		10:46 (16)			07:09		04:41		05:22	06:31		07:49	10:22 (16)				09:28
	16:53	69	14:22 (19)			20:14		22:29		22:03	20:42		16:51	25 12:17 (21)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236				199
Total, worst case		564		672									32		1221			
Sun reduction		0,50		0,50									0,50		0,50			
Oper. time red.		0,80		0,80									0,80		0,80			
Wind dir. red.		0,61		0,63									0,66		0,62			
Total reduction		0,24		0,25									0,26		0,25			
Total, real		138		169									8		303			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:03 (30)	08:45	14:59 (21)	07:35	07:07	05:44	04:39
	15:52	20 12:23 (30)	16:56	18 15:17 (21)	18:04	20:16	21:26	22:30
2	09:27	12:03 (30)	08:43	14:59 (21)	07:32	07:04	05:41	04:38
	15:54	20 12:23 (30)	16:58	19 15:18 (21)	18:07	20:19	21:28	22:32
3	09:27	12:03 (30)	08:41	14:58 (21)	07:30	07:01	05:38	04:37
	15:55	20 12:23 (30)	17:01	19 15:17 (21)	18:09	20:21	21:30	22:33
4	09:26	12:03 (30)	08:39	14:59 (21)	07:27	06:58	05:36	04:36
	15:57	21 12:24 (30)	17:03	19 15:18 (21)	18:12	20:23	21:33	22:35
5	09:26	12:04 (30)	08:37	14:59 (21)	07:24	06:55	05:33	04:34
	15:58	26 13:33 (16)	17:06	19 15:18 (21)	18:14	20:26	21:35	22:36
6	09:25	12:04 (30)	08:34	15:00 (21)	07:21	06:52	05:31	04:33
	16:00	29 13:35 (16)	17:08	18 15:18 (21)	18:16	20:28	21:37	22:38
7	09:24	12:05 (30)	08:32	15:00 (21)	07:18	06:49	05:29	04:32
	16:01	31 13:37 (16)	17:11	17 15:17 (21)	18:19	20:30	21:39	22:39
8	09:23	12:06 (30)	08:30	15:00 (21)	07:16	06:46	05:26	04:31
	16:03	33 13:39 (16)	17:13	16 15:16 (21)	18:21	20:33	21:42	22:40
9	09:23	12:06 (30)	08:27	15:02 (21)	07:13	06:44	05:24	04:31
	16:05	33 13:39 (16)	17:15	14 15:16 (21)	18:23	20:35	21:44	22:42
10	09:22	12:07 (30)	08:25	15:03 (21)	07:10	06:41	05:21	04:30
	16:07	35 13:41 (16)	17:18	11 15:14 (21)	18:26	20:37	21:46	22:43
11	09:21	12:07 (30)	08:22	15:07 (21)	07:07	06:38	05:19	04:29
	16:09	35 13:41 (16)	17:20	5 15:12 (21)	18:28	20:39	21:49	22:44
12	09:19	12:08 (30)	08:20		07:04	06:35	05:17	04:29
	16:11	35 13:42 (16)	17:23		18:30	20:42	21:51	22:45
13	09:18	12:09 (30)	08:17		07:01	06:32	05:15	04:28
	16:12	35 13:43 (16)	17:25		18:33	20:44	21:53	22:46
14	09:17	12:10 (30)	08:15		06:58	06:29	05:12	04:28
	16:14	35 13:44 (16)	17:28		18:35	20:46	21:55	22:46
15	09:16	12:11 (30)	08:12		06:56	06:27	05:10	04:27
	16:17	34 13:45 (16)	17:30		18:37	20:49	21:57	22:47
16	09:14	12:12 (30)	08:10		06:53	06:24	05:08	04:27
	16:19	32 13:45 (16)	17:33		18:40	20:51	22:00	22:48
17	09:13	12:14 (30)	08:07		06:50	06:21	05:06	04:27
	16:21	29 13:45 (16)	17:35		18:42	20:53	22:02	22:48
18	09:11	12:16 (30)	08:05		06:47	06:18	05:04	04:26
	16:23	26 13:46 (16)	17:38		18:44	20:56	22:04	22:49
19	09:10	13:25 (16)	08:02		06:44	06:16	05:02	04:26
	16:25	21 13:46 (16)	17:40		18:47	20:58	22:06	22:49
20	09:08	13:25 (16)	07:59		06:41	06:13	05:00	04:26
	16:27	22 13:47 (16)	17:43		18:49	21:00	22:08	22:50
21	09:07	13:26 (16)	07:57		06:38	06:10	04:58	04:26
	16:30	21 13:47 (16)	17:45		18:51	21:03	22:10	22:50
22	09:05	13:26 (16)	07:54		06:35	06:07	04:56	04:27
	16:32	21 13:47 (16)	17:48		18:54	21:05	22:12	22:50
23	09:03	13:27 (16)	07:51		06:33	06:05	04:54	04:27
	16:34	20 13:47 (16)	17:50		18:56	21:07	22:14	22:50
24	09:01	13:28 (16)	07:49		06:30	06:02	04:52	04:27
	16:37	19 13:47 (16)	17:52		18:58	21:09	22:16	22:50
25	09:00	13:29 (16)	07:46		06:27	05:59	04:50	04:28
	16:39	18 13:47 (16)	17:55		19:00	21:12	22:18	22:50
26	08:58	13:30 (16)	07:43		06:24	05:57	04:49	04:28
	16:41	17 13:47 (16)	17:57		19:03	21:14	22:20	22:50
27	08:56	13:30 (16)	07:41		06:21	05:54	04:47	04:29
	16:44	20 15:09 (21)	18:00		19:05	21:16	22:22	22:50
28	08:54	13:32 (16)	07:38		06:18	05:51	04:45	04:29
	16:46	23 15:12 (21)	18:02		19:07	21:19	22:23	22:50
29	08:52	13:35 (16)			07:15	05:49	04:44	04:30
	16:48	21 15:14 (21)			20:10	21:21	22:25	22:49
30	08:50	15:00 (21)			07:12	05:46	04:42	04:31
	16:51	15 15:15 (21)			20:12	21:23	22:27	22:49
31	08:48	15:00 (21)			07:09		04:41	
	16:53	16 15:16 (21)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		783		175				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,60		0,55				
Total reduction		0,24		0,22				
Total, real		187		39				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (21)	08:59		11:49 (30)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (21)	15:51	35	13:23 (16)
2	04:33	05:26	06:35	07:41			07:54		14:31 (21)	09:01		11:50 (30)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (21)	15:50	35	13:24 (16)
3	04:34	05:28	06:37	07:44			07:56		14:31 (21)	09:03		11:50 (30)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (21)	15:49	33	13:23 (16)
4	04:35	05:30	06:39	07:46			07:58		14:29 (21)	09:05		11:50 (30)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (21)	15:48	33	13:23 (16)
5	04:36	05:33	06:42	07:48			08:01		14:29 (21)	09:07		11:50 (30)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (21)	15:47	31	13:22 (16)
6	04:37	05:35	06:44	07:50			08:03		14:29 (21)	09:08		11:50 (30)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (21)	15:46	30	13:22 (16)
7	04:38	05:37	06:46	07:53			08:06		14:29 (21)	09:10		11:51 (30)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (21)	15:45	27	13:21 (16)
8	04:40	05:39	06:48	07:55			08:08		14:29 (21)	09:12		11:51 (30)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (21)	15:44	21	12:12 (30)
9	04:41	05:41	06:51	07:57			08:10		14:30 (21)	09:13		11:51 (30)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (21)	15:44	21	12:12 (30)
10	04:42	05:44	06:53	07:59			08:13		14:29 (21)	09:15		11:52 (30)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (21)	15:43	20	12:12 (30)
11	04:44	05:46	06:55	08:02			08:15		14:30 (21)	09:16		11:53 (30)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (21)	15:43	20	12:13 (30)
12	04:45	05:48	06:57	08:04			08:18		14:32 (21)	09:17		11:53 (30)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (21)	15:42	20	12:13 (30)
13	04:47	05:50	06:59	08:06			08:20		13:07 (16)	09:19		11:54 (30)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (21)	15:42	20	12:14 (30)
14	04:49	05:53	07:02	08:09			08:22		13:04 (16)	09:20		11:54 (30)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (21)	15:42	20	12:14 (30)
15	04:50	05:55	07:04	08:11			08:25		13:03 (16)	09:21		11:54 (30)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (21)	15:42	20	12:14 (30)
16	04:52	05:57	07:06	08:13			08:27		13:03 (16)	09:22		11:55 (30)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (16)	15:42	20	12:15 (30)
17	04:54	05:59	07:08	08:16			08:29		13:02 (16)	09:23		11:55 (30)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (16)	15:42	20	12:15 (30)
18	04:56	06:02	07:10	08:18			08:32		13:02 (16)	09:24		11:56 (30)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (16)	15:42	19	12:15 (30)
19	04:57	06:04	07:13	08:20			08:34		13:02 (16)	09:25		11:56 (30)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (16)	15:42	20	12:16 (30)
20	04:59	06:06	07:15	08:23			08:36		13:01 (16)	09:25		11:57 (30)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (16)	15:42	20	12:17 (30)
21	05:01	06:08	07:17	08:25			08:38		13:02 (16)	09:26		11:57 (30)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (16)	15:43	20	12:17 (30)
22	05:03	06:10	07:19	08:27			08:41		13:02 (16)	09:27		11:58 (30)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (16)	15:43	20	12:18 (30)
23	05:05	06:13	07:21	08:30			08:43		13:02 (16)	09:27		11:58 (30)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (16)	15:44	20	12:18 (30)
24	05:07	06:15	07:24	08:32			08:45		11:55 (30)	09:27		11:58 (30)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (16)	15:44	20	12:18 (30)
25	05:09	06:17	07:26	07:34			08:47		11:52 (30)	09:28		11:59 (30)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (16)	15:45	20	12:19 (30)
26	05:11	06:19	07:28	07:37			08:49		11:51 (30)	09:28		12:00 (30)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (16)	15:46	20	12:20 (30)
27	05:13	06:22	07:30	07:39			08:51		11:50 (30)	09:28		12:00 (30)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (16)	15:47	20	12:20 (30)
28	05:15	06:24	07:32	07:42			08:54		11:49 (30)	09:28		12:00 (30)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (16)	15:48	20	12:20 (30)
29	05:17	06:26	07:35	07:44			08:56		11:50 (30)	09:28		12:01 (30)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (16)	15:49	20	12:21 (30)
30	05:20	06:28	07:37	07:46			08:58		11:49 (30)	09:28		12:01 (30)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (16)	15:50	21	12:22 (30)
31	05:22	06:31		07:49		14:35 (21)				09:28		12:01 (30)
	22:03	20:42		16:51	6	14:41 (21)				15:51	21	12:22 (30)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,58			0,63	
Total reduction					0,22			0,23			0,25	
Total, real					1			151			178	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:35 (30)	08:45	14:09 (16)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51		08:59		12:23 (30)
	15:52 20	12:55 (30)	16:56 5	14:14 (16)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51	18	12:41 (30)
2	09:27	12:36 (30)	08:43		07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01		12:23 (30)
	15:54 21	12:57 (30)	16:58		18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50	19	12:42 (30)
3	09:27	12:36 (30)	08:41		07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03		12:23 (30)
	15:55 21	12:57 (30)	17:01		18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49	20	12:43 (30)
4	09:26	12:37 (30)	08:39		07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05		12:23 (30)
	15:57 20	12:57 (30)	17:03		18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48	20	12:43 (30)
5	09:26	12:37 (30)	08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07		12:24 (30)
	15:58 20	12:57 (30)	17:06		18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47	20	12:44 (30)
6	09:25	12:38 (30)	08:34		07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:08		12:24 (30)
	16:00 20	12:58 (30)	17:08		18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46	20	12:44 (30)
7	09:24	12:38 (30)	08:32		07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10		12:24 (30)
	16:01 20	12:58 (30)	17:11		18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34		15:45	21	12:45 (30)
8	09:23	12:39 (30)	08:30		07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12		12:25 (30)
	16:03 20	12:59 (30)	17:13		18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44	20	12:45 (30)
9	09:23	12:39 (30)	08:27		07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10		09:13		12:24 (30)
	16:05 19	12:58 (30)	17:15		18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30		15:44	21	12:45 (30)
10	09:22	12:40 (30)	08:25		07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	13:40 (16)	09:15		12:25 (30)
	16:07 19	12:59 (30)	17:18		18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27 5	13:45 (16)	15:43	21	12:46 (30)
11	09:21	12:40 (30)	08:22		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	13:37 (16)	09:16		12:26 (30)
	16:09 19	12:59 (30)	17:20		18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25 11	13:48 (16)	15:43	21	12:47 (30)
12	09:19	12:42 (30)	08:20		07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	13:36 (16)	09:17		12:26 (30)
	16:10 24	14:10 (16)	17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 14	13:50 (16)	15:42	20	12:46 (30)
13	09:18	12:42 (30)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	13:35 (16)	09:19		12:27 (30)
	16:12 27	14:11 (16)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 17	13:52 (16)	15:42	20	12:47 (30)
14	09:17	12:44 (30)	08:15		06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22	13:34 (16)	09:20		12:27 (30)
	16:14 27	14:13 (16)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 18	13:52 (16)	15:42	21	12:48 (30)
15	09:16	12:45 (30)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	13:34 (16)	09:21		12:27 (30)
	16:17 27	14:14 (16)	17:30		18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17 19	13:53 (16)	15:42	21	12:48 (30)
16	09:14	12:46 (30)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	13:34 (16)	09:22		12:28 (30)
	16:19 27	14:15 (16)	17:33		18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15 20	13:54 (16)	15:42	20	12:48 (30)
17	09:13	12:48 (30)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	13:33 (16)	09:23		12:28 (30)
	16:21 25	14:16 (16)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 20	13:53 (16)	15:42	20	12:48 (30)
18	09:11	13:59 (16)	08:05		06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	13:34 (16)	09:24		12:29 (30)
	16:23 18	14:17 (16)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11 20	13:54 (16)	15:42	20	12:49 (30)
19	09:10	13:59 (16)	08:02		06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34	13:34 (16)	09:25		12:30 (30)
	16:25 19	14:18 (16)	17:40		18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 21	13:55 (16)	15:42	20	12:50 (30)
20	09:08	13:59 (16)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	13:34 (16)	09:25		12:30 (30)
	16:27 19	14:18 (16)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 20	13:54 (16)	15:42	20	12:50 (30)
21	09:07	13:59 (16)	07:57		06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	13:35 (16)	09:26		12:30 (30)
	16:30 20	14:19 (16)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 20	13:55 (16)	15:43	20	12:50 (30)
22	09:05	13:59 (16)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41	13:35 (16)	09:27		12:31 (30)
	16:32 20	14:19 (16)	17:47		18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04 19	13:54 (16)	15:43	20	12:51 (30)
23	09:03	13:59 (16)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	13:36 (16)	09:27		12:31 (30)
	16:34 21	14:20 (16)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02 19	13:55 (16)	15:44	20	12:51 (30)
24	09:01	14:00 (16)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	13:37 (16)	09:27		12:31 (30)
	16:36 20	14:20 (16)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	13:55 (16)	15:44	21	12:52 (30)
25	09:00	14:00 (16)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:26 (30)	09:28		12:33 (30)
	16:39 21	14:21 (16)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 25	13:54 (16)	15:45	20	12:53 (30)
26	08:58	14:01 (16)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:25 (30)	09:28		12:33 (30)
	16:41 20	14:21 (16)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 26	13:54 (16)	15:46	20	12:53 (30)
27	08:56	14:01 (16)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	12:24 (30)	09:28		12:34 (30)
	16:44 19	14:20 (16)	18:00		19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 28	13:54 (16)	15:47	20	12:54 (30)
28	08:54	14:02 (16)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:23 (30)	09:28		12:33 (30)
	16:46 18	14:20 (16)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55 28	13:53 (16)	15:47	21	12:54 (30)
29	08:52	14:04 (16)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:23 (30)	09:28		12:34 (30)
	16:48 16	14:20 (16)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 27	13:52 (16)	15:49	20	12:54 (30)
30	08:50	14:04 (16)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:23 (30)	09:28		12:35 (30)
	16:51 14	14:18 (16)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 24	13:51 (16)	15:50	20	12:55 (30)
31	08:48	14:07 (16)			07:09		04:41		05:22	06:31		07:49			09:28		12:35 (30)
	16:53 10	14:17 (16)			20:14		22:29		22:03	20:42		16:51			15:51	20	12:55 (30)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	631		5										419		625		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,58		0,55										0,56		0,62		
Total reduction	0,23		0,22										0,23		0,25		
Total, real	147		1										94		154		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28		13:54 (30)	08:45		15:12 (16)	07:35	07:06	05:43	04:39
	15:52	9	14:03 (30)	16:56	14	15:26 (16)	18:04	20:16	21:26	22:30
2	09:27		13:54 (30)	08:43		15:12 (16)	07:32	07:04	05:41	04:38
	15:54	11	14:05 (30)	16:58	16	15:28 (16)	18:07	20:19	21:28	22:32
3	09:27		13:54 (30)	08:41		15:11 (16)	07:29	07:01	05:38	04:37
	15:55	12	14:06 (30)	17:01	17	15:28 (16)	18:09	20:21	21:30	22:33
4	09:26		13:54 (30)	08:39		15:11 (16)	07:27	06:58	05:36	04:36
	15:57	13	14:07 (30)	17:03	18	15:29 (16)	18:12	20:23	21:33	22:35
5	09:26		13:53 (30)	08:37		15:11 (16)	07:24	06:55	05:33	04:34
	15:58	15	14:08 (30)	17:06	18	15:29 (16)	18:14	20:26	21:35	22:36
6	09:25		13:53 (30)	08:34		15:11 (16)	07:21	06:52	05:31	04:33
	16:00	16	14:09 (30)	17:08	19	15:30 (16)	18:16	20:28	21:37	22:38
7	09:24		13:54 (30)	08:32		15:11 (16)	07:18	06:49	05:29	04:32
	16:01	16	14:10 (30)	17:10	19	15:30 (16)	18:19	20:30	21:39	22:39
8	09:23		13:54 (30)	08:30		15:11 (16)	07:15	06:46	05:26	04:31
	16:03	17	14:11 (30)	17:13	18	15:29 (16)	18:21	20:32	21:42	22:40
9	09:23		13:53 (30)	08:27		15:12 (16)	07:13	06:44	05:24	04:31
	16:05	18	14:11 (30)	17:15	18	15:30 (16)	18:23	20:35	21:44	22:41
10	09:22		13:53 (30)	08:25		15:12 (16)	07:10	06:41	05:21	04:30
	16:07	19	14:12 (30)	17:18	17	15:29 (16)	18:26	20:37	21:46	22:43
11	09:20		13:53 (30)	08:22		15:13 (16)	07:07	06:38	05:19	04:29
	16:09	19	14:12 (30)	17:20	14	15:27 (16)	18:28	20:39	21:48	22:44
12	09:19		13:54 (30)	08:20		15:16 (16)	07:04	06:35	05:17	04:28
	16:10	19	14:13 (30)	17:23	11	15:27 (16)	18:30	20:42	21:51	22:45
13	09:18		13:53 (30)	08:17		15:18 (16)	07:01	06:32	05:14	04:28
	16:12	21	14:14 (30)	17:25	5	15:23 (16)	18:33	20:44	21:53	22:45
14	09:17		13:54 (30)	08:15			06:58	06:29	05:12	04:27
	16:14	21	14:15 (30)	17:28			18:35	20:46	21:55	22:46
15	09:16		13:54 (30)	08:12			06:56	06:27	05:10	04:27
	16:16	21	14:15 (30)	17:30			18:37	20:49	21:57	22:47
16	09:14		13:54 (30)	08:10			06:53	06:24	05:08	04:27
	16:19	21	14:15 (30)	17:33			18:40	20:51	21:59	22:48
17	09:13		13:54 (30)	08:07			06:50	06:21	05:06	04:27
	16:21	22	14:16 (30)	17:35			18:42	20:53	22:02	22:48
18	09:11		13:55 (30)	08:05			06:47	06:18	05:04	04:26
	16:23	21	14:16 (30)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:55 (30)	08:02			06:44	06:15	05:02	04:26
	16:25	21	14:16 (30)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:56 (30)	07:59			06:41	06:13	05:00	04:26
	16:27	20	14:16 (30)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:56 (30)	07:57			06:38	06:10	04:58	04:26
	16:30	20	14:16 (30)	17:45			18:51	21:02	22:10	22:50
22	09:05		13:57 (30)	07:54			06:35	06:07	04:56	04:27
	16:32	19	14:16 (30)	17:47			18:53	21:05	22:12	22:50
23	09:03		13:58 (30)	07:51			06:32	06:05	04:54	04:27
	16:34	18	14:16 (30)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:59 (30)	07:49			06:30	06:02	04:52	04:27
	16:36	17	14:16 (30)	17:52			18:58	21:09	22:16	22:50
25	08:59		14:01 (30)	07:46			06:27	05:59	04:50	04:28
	16:39	14	14:15 (30)	17:55			19:00	21:12	22:18	22:50
26	08:58		14:02 (30)	07:43			06:24	05:57	04:49	04:28
	16:41	11	14:13 (30)	17:57			19:03	21:14	22:20	22:50
27	08:56		14:05 (30)	07:41			06:21	05:54	04:47	04:29
	16:44	6	14:11 (30)	18:00			19:05	21:16	22:22	22:50
28	08:54			07:38			06:18	05:51	04:45	04:29
	16:46			18:02			19:07	21:19	22:23	22:50
29	08:52						07:15	05:49	04:44	04:30
	16:48						20:10	21:21	22:25	22:49
30	08:50		15:15 (16)				07:12	05:46	04:42	04:31
	16:51	8	15:23 (16)				20:12	21:23	22:27	22:49
31	08:48		15:14 (16)				07:09		04:41	
	16:53	11	15:25 (16)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		476			204					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,55			0,55					
Total reduction		0,22			0,22					
Total, real		104			45					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		14:42 (16)	08:59		13:35 (30)
	22:48		22:01		20:39		19:13			16:48	16	14:58 (16)	15:51	19	13:54 (30)
2	04:33		05:26		06:35		07:41			07:53		14:41 (16)	09:01		13:37 (30)
	22:48		21:58		20:37		19:10			16:46	18	14:59 (16)	15:50	18	13:55 (30)
3	04:34		05:28		06:37		07:44			07:56		14:40 (16)	09:03		13:37 (30)
	22:47		21:56		20:34		19:07			16:44	19	14:59 (16)	15:49	18	13:55 (30)
4	04:35		05:30		06:39		07:46			07:58		14:40 (16)	09:05		13:38 (30)
	22:46		21:54		20:31		19:04			16:41	20	15:00 (16)	15:48	17	13:55 (30)
5	04:36		05:32		06:42		07:48			08:01		14:41 (16)	09:07		13:39 (30)
	22:45		21:51		20:28		19:01			16:39	19	15:00 (16)	15:47	16	13:55 (30)
6	04:37		05:35		06:44		07:50			08:03		14:41 (16)	09:08		13:40 (30)
	22:45		21:49		20:25		18:58			16:36	19	15:00 (16)	15:46	15	13:55 (30)
7	04:38		05:37		06:46		07:53			08:06		14:41 (16)	09:10		13:41 (30)
	22:44		21:46		20:22		18:56			16:34	18	14:59 (16)	15:45	14	13:55 (30)
8	04:40		05:39		06:48		07:55			08:08		14:42 (16)	09:12		13:42 (30)
	22:43		21:44		20:19		18:53			16:32	17	14:59 (16)	15:44	13	13:55 (30)
9	04:41		05:41		06:50		07:57			08:10		14:43 (16)	09:13		13:42 (30)
	22:41		21:41		20:16		18:50			16:30	16	14:59 (16)	15:44	12	13:54 (30)
10	04:42		05:44		06:53		07:59			08:13		14:43 (16)	09:15		13:43 (30)
	22:40		21:39		20:14		18:47			16:27	14	14:57 (16)	15:43	11	13:54 (30)
11	04:44		05:46		06:55		08:02			08:15		14:45 (16)	09:16		13:45 (30)
	22:39		21:36		20:11		18:44			16:25	11	14:56 (16)	15:43	9	13:54 (30)
12	04:45		05:48		06:57		08:04			08:18		14:47 (16)	09:17		13:46 (30)
	22:38		21:34		20:08		18:41			16:23	7	14:54 (16)	15:42	7	13:53 (30)
13	04:47		05:50		06:59		08:06			08:20			09:19		13:48 (30)
	22:36		21:31		20:05		18:39			16:21			15:42	5	13:53 (30)
14	04:49		05:53		07:01		08:09			08:22			09:20		13:49 (30)
	22:35		21:29		20:02		18:36			16:19			15:42	3	13:52 (30)
15	04:50		05:55		07:04		08:11			08:25		13:37 (30)	09:21		
	22:33		21:26		19:59		18:33			16:17	7	13:44 (30)	15:42		
16	04:52		05:57		07:06		08:13			08:27		13:36 (30)	09:22		
	22:32		21:23		19:56		18:30			16:15	11	13:47 (30)	15:42		
17	04:54		05:59		07:08		08:16			08:29		13:34 (30)	09:23		
	22:30		21:21		19:53		18:28			16:13	14	13:48 (30)	15:42		
18	04:56		06:01		07:10		08:18			08:32		13:33 (30)	09:24		
	22:29		21:18		19:50		18:25			16:11	17	13:50 (30)	15:42		
19	04:57		06:04		07:12		08:20			08:34		13:33 (30)	09:25		
	22:27		21:15		19:47		18:22			16:09	18	13:51 (30)	15:42		
20	04:59		06:06		07:15		08:23			08:36		13:32 (30)	09:25		
	22:25		21:13		19:45		18:19			16:07	19	13:51 (30)	15:42		
21	05:01		06:08		07:17		08:25			08:38		13:32 (30)	09:26		
	22:23		21:10		19:42		18:17			16:06	20	13:52 (30)	15:43		
22	05:03		06:10		07:19		08:27			08:41		13:32 (30)	09:27		
	22:21		21:07		19:39		18:14			16:04	20	13:52 (30)	15:43		
23	05:05		06:13		07:21		08:30			08:43		13:32 (30)	09:27		
	22:20		21:05		19:36		18:11			16:02	21	13:53 (30)	15:44		
24	05:07		06:15		07:23		08:32			08:45		13:33 (30)	09:27		
	22:18		21:02		19:33		18:09			16:00	21	13:54 (30)	15:44		
25	05:09		06:17		07:26		07:34			08:47		13:33 (30)	09:28		
	22:16		20:59		19:30		17:06			15:59	21	13:54 (30)	15:45		
26	05:11		06:19		07:28		07:37			08:49		13:33 (30)	09:28		
	22:14		20:56		19:27		17:04			15:57	21	13:54 (30)	15:46		
27	05:13		06:22		07:30		07:39			08:51		13:33 (30)	09:28		
	22:11		20:53		19:24		17:01			15:56	21	13:54 (30)	15:47		
28	05:15		06:24		07:32		07:41			08:53		13:33 (30)	09:28		
	22:09		20:51		19:21		16:58			15:55	21	13:54 (30)	15:47		
29	05:17		06:26		07:35		07:44		14:47 (16)	08:55		13:35 (30)	09:28		
	22:07		20:48		19:18		16:56	7	14:54 (16)	15:53	20	13:55 (30)	15:48		
30	05:19		06:28		07:37		07:46		14:45 (16)	08:57		13:35 (30)	09:28		13:56 (30)
	22:05		20:45		19:16		16:53	11	14:56 (16)	15:52	20	13:55 (30)	15:50	4	14:00 (30)
31	05:22		06:31				07:49		14:42 (16)				09:28		13:55 (30)
	22:03		20:42				16:51	15	14:57 (16)				15:51	6	14:01 (30)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								33			486			187	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,55			0,55			0,55	
Total reduction								0,22			0,22			0,22	
Total, real								7			107			41	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:45		10:57 (41)	07:35		16:28 (21)	07:06	05:44	04:39
	15:52			16:56	40	13:50 (30)	18:04	11	16:39 (21)	20:16	21:26	22:30
2	09:27			08:43		10:59 (41)	07:32		16:27 (21)	07:04	05:41	04:38
	15:54			16:58	37	13:51 (30)	18:07	13	16:40 (21)	20:19	21:28	22:32
3	09:27			08:41		11:02 (41)	07:30		16:27 (21)	07:01	05:38	04:37
	15:55			17:01	28	13:49 (30)	18:09	14	16:41 (21)	20:21	21:30	22:33
4	09:26			08:39		13:29 (30)	07:27		16:27 (21)	06:58	05:36	04:36
	15:57			17:03	20	13:49 (30)	18:12	17	16:44 (21)	20:23	21:33	22:35
5	09:26			08:37		13:30 (30)	07:24		16:27 (21)	06:55	05:33	04:34
	15:58			17:06	17	13:47 (30)	18:14	19	16:46 (21)	20:26	21:35	22:36
6	09:25			08:34		13:33 (30)	07:21		16:28 (21)	06:52	05:31	04:33
	16:00			17:08	12	13:45 (30)	18:16	17	16:45 (21)	20:28	21:37	22:38
7	09:24			08:32			07:18		16:29 (21)	06:49	05:29	04:32
	16:01			17:11			18:19	15	16:44 (21)	20:30	21:39	22:39
8	09:23			08:30			07:15		16:30 (21)	06:46	05:26	04:32
	16:03			17:13			18:21	12	16:42 (21)	20:32	21:42	22:40
9	09:23			08:27			07:13		16:33 (21)	06:44	05:24	04:31
	16:05			17:15			18:23	6	16:39 (21)	20:35	21:44	22:41
10	09:22			08:25			07:10			06:41	05:21	04:30
	16:07			17:18			18:26			20:37	21:46	22:43
11	09:20			08:22			07:07			06:38	05:19	04:29
	16:09			17:20			18:28			20:39	21:48	22:44
12	09:19			08:20		14:57 (11)	07:04			06:35	05:17	04:29
	16:11			17:23	8	15:05 (11)	18:30			20:42	21:51	22:45
13	09:18			08:17		14:59 (11)	07:01			06:32	05:15	04:28
	16:12			17:25	11	15:10 (11)	18:33			20:44	21:53	22:45
14	09:17		11:05 (41)	08:15		15:02 (11)	06:58			06:29	05:12	04:28
	16:14	3	11:08 (41)	17:28	12	15:14 (16)	18:35			20:46	21:55	22:46
15	09:16		10:59 (41)	08:12		15:06 (16)	06:56			06:27	05:10	04:27
	16:17	10	11:09 (41)	17:30	12	15:18 (16)	18:37			20:49	21:57	22:47
16	09:14		10:52 (41)	08:10		15:06 (16)	06:53			06:24	05:08	04:27
	16:19	18	11:10 (41)	17:33	15	15:21 (16)	18:40			20:51	21:59	22:48
17	09:13		10:51 (41)	08:07		15:05 (16)	06:50			06:21	05:06	04:27
	16:21	19	11:10 (41)	17:35	16	15:21 (16)	18:42			20:53	22:02	22:48
18	09:11		10:51 (41)	08:05		15:05 (16)	06:47			06:18	05:04	04:26
	16:23	20	11:11 (41)	17:38	15	15:20 (16)	18:44			20:56	22:04	22:49
19	09:10		10:51 (41)	08:02		15:06 (16)	06:44			06:16	05:02	04:26
	16:25	21	11:12 (41)	17:40	16	15:22 (16)	18:47			20:58	22:06	22:49
20	09:08		10:51 (41)	07:59		15:07 (16)	06:41			06:13	05:00	04:26
	16:27	22	11:13 (41)	17:43	17	15:24 (16)	18:49			21:00	22:08	22:50
21	09:07		10:51 (41)	07:57		15:07 (16)	06:38			06:10	04:58	04:26
	16:30	22	11:13 (41)	17:45	20	15:27 (16)	18:51			21:02	22:10	22:50
22	09:05		10:51 (41)	07:54		15:08 (16)	06:35			06:07	04:56	04:27
	16:32	27	12:49 (36)	17:47	20	15:28 (16)	18:53			21:05	22:12	22:50
23	09:03		10:51 (41)	07:51		15:09 (16)	06:32			06:05	04:54	04:27
	16:34	39	13:02 (36)	17:50	18	15:27 (16)	18:56			21:07	22:14	22:50
24	09:01		10:52 (41)	07:49		15:12 (16)	06:30			06:02	04:52	04:27
	16:37	40	13:04 (36)	17:52	13	15:25 (16)	18:58			21:09	22:16	22:50
25	08:59		10:52 (41)	07:46		15:16 (16)	06:27			05:59	04:50	04:28
	16:39	39	13:04 (36)	17:55	5	15:21 (16)	19:00			21:12	22:18	22:50
26	08:58		10:52 (41)	07:43			06:24			05:57	04:49	04:28
	16:41	39	13:24 (30)	17:57			19:03			21:14	22:20	22:50
27	08:56		10:53 (41)	07:41			06:21			05:54	04:47	04:29
	16:44	39	13:28 (30)	18:00			19:05			21:16	22:22	22:50
28	08:54		10:53 (41)	07:38		16:32 (21)	06:18			05:51	04:45	04:29
	16:46	41	13:35 (30)	18:02	4	16:36 (21)	19:07			21:19	22:23	22:50
29	08:52		10:54 (41)				07:15			05:49	04:44	04:30
	16:48	41	13:44 (30)				20:10			21:21	22:25	22:49
30	08:50		10:55 (41)				07:12			05:46	04:42	04:31
	16:51	42	13:47 (30)				20:12			21:23	22:27	22:49
31	08:48		10:56 (41)				07:09				04:41	
	16:53	42	13:49 (30)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		524			356			124				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,67			0,57			0,57				
Total reduction		0,27			0,23			0,23				
Total, real		139			81			28				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51			08:59
	22:48	22:01	20:39	19:13			16:48			15:51
2	04:33	05:26	06:35	07:41			07:54			09:01
	22:48	21:58	20:37	19:10			16:46			15:50
3	04:34	05:28	06:37	07:44			07:56			09:03
	22:47	21:56	20:34	19:07			16:44			15:49
4	04:35	05:30	06:39	07:46			07:58		13:07 (30)	09:05
	22:46	21:54	20:31	19:04			16:41	4	13:11 (30)	15:48
5	04:36	05:33	06:42	07:48		17:09 (21)	08:01		13:02 (30)	09:07
	22:45	21:51	20:28	19:01	9	17:18 (21)	16:39	13	13:15 (30)	15:47
6	04:37	05:35	06:44	07:50		17:06 (21)	08:03		13:01 (30)	09:08
	22:45	21:49	20:25	18:58	14	17:20 (21)	16:36	17	13:18 (30)	15:46
7	04:38	05:37	06:46	07:53		17:04 (21)	08:06		12:58 (30)	09:10
	22:44	21:46	20:22	18:56	16	17:20 (21)	16:34	21	13:19 (30)	15:45
8	04:40	05:39	06:48	07:55		17:03 (21)	08:08		10:32 (41)	09:12
	22:43	21:44	20:19	18:53	18	17:21 (21)	16:32	29	13:20 (30)	15:44
9	04:41	05:41	06:50	07:57		17:02 (21)	08:10		10:30 (41)	09:13
	22:41	21:41	20:16	18:50	18	17:20 (21)	16:30	37	13:22 (30)	15:44
10	04:42	05:44	06:53	07:59		17:01 (21)	08:13		10:28 (41)	09:15
	22:40	21:39	20:14	18:47	16	17:17 (21)	16:27	40	13:21 (30)	15:43
11	04:44	05:46	06:55	08:02		17:01 (21)	08:15		10:27 (41)	09:16
	22:39	21:36	20:11	18:44	14	17:15 (21)	16:25	41	13:19 (30)	15:43
12	04:45	05:48	06:57	08:04		17:01 (21)	08:18		10:27 (41)	09:17
	22:38	21:34	20:08	18:41	12	17:13 (21)	16:23	42	13:19 (30)	15:42
13	04:47	05:50	06:59	08:06		17:02 (21)	08:20		10:25 (41)	09:19
	22:36	21:31	20:05	18:39	10	17:12 (21)	16:21	41	13:15 (30)	15:42
14	04:49	05:53	07:01	08:09		17:06 (21)	08:22		10:25 (41)	09:20
	22:35	21:29	20:02	18:36	2	17:08 (21)	16:19	41	13:07 (30)	15:42
15	04:50	05:55	07:04	08:11			08:25		10:25 (41)	09:21
	22:33	21:26	19:59	18:33			16:17	40	13:01 (30)	15:42
16	04:52	05:57	07:06	08:13			08:27		10:26 (41)	09:22
	22:32	21:23	19:56	18:30			16:15	39	12:58 (30)	15:42
17	04:54	05:59	07:08	08:16		15:45 (16)	08:29		10:25 (41)	09:23
	22:30	21:21	19:53	18:28	9	15:54 (16)	16:13	39	12:37 (36)	15:42
18	04:56	06:02	07:10	08:18		15:42 (16)	08:32		10:26 (41)	09:24
	22:29	21:18	19:50	18:25	15	15:57 (16)	16:11	40	12:38 (36)	15:42
19	04:57	06:04	07:12	08:20		15:40 (16)	08:34		10:26 (41)	09:25
	22:27	21:15	19:47	18:22	18	15:58 (16)	16:09	39	12:37 (36)	15:42
20	04:59	06:06	07:15	08:23		15:39 (16)	08:36		10:26 (41)	09:25
	22:25	21:13	19:45	18:20	21	16:00 (16)	16:07	28	12:25 (36)	15:42
21	05:01	06:08	07:17	08:25		15:37 (16)	08:38		10:27 (41)	09:26
	22:23	21:10	19:42	18:17	18	15:55 (16)	16:06	22	10:49 (41)	15:43
22	05:03	06:10	07:19	08:27		15:37 (16)	08:41		10:27 (41)	09:27
	22:21	21:07	19:39	18:14	16	15:53 (16)	16:04	22	10:49 (41)	15:43
23	05:05	06:13	07:21	08:30		15:36 (16)	08:43		10:28 (41)	09:27
	22:20	21:05	19:36	18:12	16	15:52 (16)	16:02	21	10:49 (41)	15:44
24	05:07	06:15	07:24	08:32		15:35 (16)	08:45		10:29 (41)	09:27
	22:18	21:02	19:33	18:09	16	15:51 (16)	16:01	20	10:49 (41)	15:44
25	05:09	06:17	07:26	07:34		14:36 (16)	08:47		10:29 (41)	09:28
	22:16	20:59	19:30	17:06	15	14:51 (16)	15:59	19	10:48 (41)	15:45
26	05:11	06:19	07:28	07:37		14:35 (16)	08:49		10:31 (41)	09:28
	22:14	20:56	19:27	17:04	14	14:49 (16)	15:57	18	10:49 (41)	15:46
27	05:13	06:22	07:30	07:39		14:35 (16)	08:51		10:38 (41)	09:28
	22:11	20:53	19:24	17:01	12	14:47 (16)	15:56	10	10:48 (41)	15:47
28	05:15	06:24	07:32	07:41		14:30 (11)	08:53		10:44 (41)	09:28
	22:09	20:51	19:21	16:58	12	14:42 (16)	15:55	3	10:47 (41)	15:48
29	05:17	06:26	07:35	07:44		14:27 (11)	08:55			09:28
	22:07	20:48	19:19	16:56	11	14:38 (11)	15:53			15:49
30	05:20	06:28	07:37	07:46		14:26 (11)	08:57			09:28
	22:05	20:45	19:16	16:53	8	14:34 (11)	15:52			15:50
31	05:22	06:31		07:49						09:28
	22:03	20:42		16:51						15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					330			686		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,56			0,65		
Total reduction					0,22			0,26		
Total, real					73			178		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April			May			June
1	09:27			08:45		15:29 (12)	07:35		15:43 (17)	07:06			05:43		18:54 (41)	04:39
	15:52			16:56	22	15:51 (12)	18:04	38	16:21 (17)	20:16			21:25	25	19:19 (41)	22:30
2	09:27			08:43		15:29 (12)	07:32		15:44 (17)	07:04			05:41		18:56 (41)	04:38
	15:54			16:58	23	15:52 (12)	18:07	36	16:20 (17)	20:19			21:28	20	19:16 (41)	22:32
3	09:27			08:41		15:29 (12)	07:29		15:44 (17)	07:01		19:08 (41)	05:38		18:59 (41)	04:37
	15:55			17:01	23	15:52 (12)	18:09	35	16:19 (17)	20:21	9	19:17 (41)	21:30	15	19:14 (41)	22:33
4	09:26			08:39		15:29 (12)	07:27		15:45 (17)	06:58		19:03 (41)	05:36		19:04 (41)	04:36
	15:57			17:03	24	15:53 (12)	18:11	33	16:18 (17)	20:23	18	19:21 (41)	21:32	5	19:09 (41)	22:35
5	09:25			08:36		15:29 (12)	07:24		15:46 (17)	06:55		18:59 (41)	05:33			04:35
	15:58			17:06	23	15:52 (12)	18:14	32	16:18 (17)	20:25	24	19:23 (41)	21:35			22:36
6	09:25			08:34		15:28 (12)	07:21		15:48 (17)	06:52		18:57 (41)	05:31			04:33
	16:00			17:08	24	15:52 (12)	18:16	28	16:16 (17)	20:28	28	19:25 (41)	21:37			22:37
7	09:24			08:32		15:29 (12)	07:18		15:49 (17)	06:49		18:55 (41)	05:29			04:32
	16:01			17:10	24	15:53 (12)	18:19	25	16:14 (17)	20:30	31	19:26 (41)	21:39			22:39
8	09:23			08:29		15:29 (12)	07:15		15:51 (17)	06:46		18:53 (41)	05:26			04:32
	16:03			17:13	23	15:52 (12)	18:21	21	16:12 (17)	20:32	35	19:42 (30)	21:42			22:40
9	09:22			08:27		15:31 (12)	07:13		15:54 (17)	06:43		18:52 (41)	05:24			04:31
	16:05			17:15	21	15:52 (12)	18:23	15	16:09 (17)	20:35	54	19:59 (30)	21:44			22:41
10	09:21			08:25		15:31 (12)	07:10			06:41		18:51 (41)	05:21			04:30
	16:07			17:18	20	15:51 (12)	18:26			20:37	57	19:59 (30)	21:46			22:42
11	09:20			08:22		15:32 (12)	07:07			06:38		18:49 (41)	05:19			04:29
	16:09			17:20	18	15:50 (12)	18:28			20:39	60	19:59 (30)	21:48			22:43
12	09:19			08:20		15:34 (12)	07:04			06:35		18:48 (41)	05:17			04:29
	16:11			17:23	15	15:49 (12)	18:30			20:42	62	19:58 (30)	21:50			22:44
13	09:18			08:17		15:36 (12)	07:01			06:32		18:48 (41)	05:15			04:28
	16:12			17:25	22	16:09 (17)	18:33			20:44	64	19:59 (30)	21:53			22:45
14	09:17			08:15		15:54 (17)	06:58			06:29		18:47 (41)	05:12			04:28
	16:14			17:28	18	16:12 (17)	18:35			20:46	63	19:58 (30)	21:55			22:46
15	09:15			08:12		15:52 (17)	06:55			06:27		18:46 (41)	05:10			04:27
	16:17			17:30	22	16:14 (17)	18:37			20:48	63	19:57 (30)	21:57			22:47
16	09:14			08:10		15:51 (17)	06:53		17:30 (36)	06:24		18:47 (41)	05:08			04:27
	16:19			17:33	26	16:17 (17)	18:40	8	17:38 (36)	20:51	62	19:57 (30)	21:59			22:47
17	09:13			08:07		15:49 (17)	06:50		17:27 (36)	06:21		18:46 (41)	05:06			04:27
	16:21			17:35	29	16:18 (17)	18:42	13	17:40 (36)	20:53	60	19:55 (30)	22:01			22:48
18	09:11			08:04		15:47 (17)	06:47		17:25 (36)	06:18		18:45 (41)	05:04			04:26
	16:23			17:38	32	16:19 (17)	18:44	17	17:42 (36)	20:55	58	19:53 (30)	22:04			22:49
19	09:10			08:02		15:46 (17)	06:44		17:23 (36)	06:15		18:46 (41)	05:02			04:26
	16:25			17:40	33	16:19 (17)	18:46	19	17:42 (36)	20:58	53	19:52 (30)	22:06			22:49
20	09:08			07:59		15:46 (17)	06:41		17:22 (36)	06:13		18:45 (41)	05:00			04:26
	16:27			17:43	35	16:21 (17)	18:49	21	17:43 (36)	21:00	44	19:29 (41)	22:08			22:49
21	09:06			07:57		15:45 (17)	06:38		17:21 (36)	06:10		18:45 (41)	04:58			04:26
	16:30			17:45	36	16:21 (17)	18:51	22	17:43 (36)	21:02	43	19:28 (41)	22:10			22:50
22	09:05			07:54		15:44 (17)	06:35		17:21 (36)	06:07		18:46 (41)	04:56			04:27
	16:32			17:47	37	16:21 (17)	18:53	22	17:43 (36)	21:05	43	19:29 (41)	22:12			22:50
23	09:03			07:51		15:44 (17)	06:32		17:20 (36)	06:05		18:46 (41)	04:54			04:27
	16:34			17:50	38	16:22 (17)	18:56	22	17:42 (36)	21:07	41	19:27 (41)	22:14			22:50
24	09:01			07:49		15:43 (17)	06:29		17:20 (36)	06:02		18:47 (41)	04:52			04:27
	16:36			17:52	39	16:22 (17)	18:58	22	17:42 (36)	21:09	40	19:27 (41)	22:16			22:50
25	08:59			07:46		15:44 (17)	06:27		17:20 (36)	05:59		18:47 (41)	04:50			04:28
	16:39			17:55	38	16:22 (17)	19:00	21	17:41 (36)	21:12	39	19:26 (41)	22:18			22:50
26	08:57			07:43		15:43 (17)	06:24		17:20 (36)	05:57		18:48 (41)	04:49			04:28
	16:41			17:57	39	16:22 (17)	19:03	20	17:40 (36)	21:14	37	19:25 (41)	22:20			22:50
27	08:55		15:34 (12)	07:40		15:43 (17)	06:21		17:22 (36)	05:54		18:48 (41)	04:47			04:29
	16:44	10	15:44 (12)	18:00	39	16:22 (17)	19:05	17	17:39 (36)	21:16	36	19:24 (41)	22:21			22:50
28	08:54		15:33 (12)	07:38		15:43 (17)	06:18		17:24 (36)	05:51		18:50 (41)	04:45			04:29
	16:46	13	15:46 (12)	18:02	38	16:21 (17)	19:07	13	17:37 (36)	21:19	33	19:23 (41)	22:23			22:49
29	08:51		15:31 (12)				07:15		18:26 (36)	05:49		18:50 (41)	04:44			04:30
	16:48	16	15:47 (12)				20:09	8	18:34 (36)	21:21	31	19:21 (41)	22:25			22:49
30	08:49		15:31 (12)				07:12			05:46		18:52 (41)	04:42			04:31
	16:51	18	15:49 (12)				20:12			21:23	28	19:20 (41)	22:27			22:49
31	08:47		15:29 (12)				07:09						04:41			
	16:53	20	15:49 (12)				20:14						22:28			
Potential sun hours	221			260			365			432			521			547
Total, worst case		77			781			508			1216			65		
Sun reduction		0,50			0,50			0,50			0,50			0,50		
Oper. time red.		0,80			0,80			0,80			0,80			0,80		
Wind dir. red.		0,53			0,54			0,58			0,68			0,68		
Total reduction		0,21			0,22			0,23			0,27			0,27		
Total, real		16			169			118			331			18		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August			September			October			November			December
1	04:32	05:24			06:33		18:48 (41)	07:39			07:51		15:00 (12)	08:59
	22:48	22:00			20:39	60	19:58 (30)	19:13			16:48	21	15:21 (12)	15:51
2	04:33	05:26			06:35		18:49 (41)	07:41			07:53		15:00 (12)	09:01
	22:47	21:58			20:36	57	19:57 (30)	19:10			16:46	22	15:22 (12)	15:50
3	04:34	05:28			06:37		18:49 (41)	07:43			07:56		14:59 (12)	09:03
	22:47	21:56			20:34	54	19:56 (30)	19:07			16:44	23	15:22 (12)	15:49
4	04:35	05:30			06:39		18:51 (41)	07:46		16:33 (17)	07:58		14:59 (12)	09:05
	22:46	21:53			20:31	35	19:40 (30)	19:04	11	16:44 (17)	16:41	23	15:22 (12)	15:48
5	04:36	05:33			06:42		18:52 (41)	07:48		16:29 (17)	08:01		14:59 (12)	09:07
	22:45	21:51			20:28	31	19:23 (41)	19:01	18	16:47 (17)	16:39	24	15:23 (12)	15:47
6	04:37	05:35			06:44		18:53 (41)	07:50		16:26 (17)	08:03		14:58 (12)	09:08
	22:44	21:49			20:25	28	19:21 (41)	18:58	24	16:50 (17)	16:36	24	15:22 (12)	15:46
7	04:38	05:37			06:46		18:54 (41)	07:52		16:24 (17)	08:05		14:59 (12)	09:10
	22:43	21:46			20:22	25	19:19 (41)	18:55	27	16:51 (17)	16:34	23	15:22 (12)	15:45
8	04:40	05:39			06:48		18:57 (41)	07:55		16:21 (17)	08:08		14:59 (12)	09:11
	22:42	21:44			20:19	18	19:15 (41)	18:53	30	16:51 (17)	16:32	23	15:22 (12)	15:44
9	04:41	05:41		19:10 (41)	06:50		19:00 (41)	07:57		16:21 (17)	08:10		14:59 (12)	09:13
	22:41	21:41	10	19:20 (41)	20:16	11	19:11 (41)	18:50	32	16:53 (17)	16:30	23	15:22 (12)	15:44
10	04:42	05:44		19:07 (41)	06:53			07:59		16:19 (17)	08:13		15:00 (12)	09:14
	22:40	21:39	17	19:24 (41)	20:13			18:47	34	16:53 (17)	16:27	21	15:21 (12)	15:43
11	04:44	05:46		19:04 (41)	06:55			08:02		16:18 (17)	08:15		15:01 (12)	09:16
	22:39	21:36	22	19:26 (41)	20:11			18:44	36	16:54 (17)	16:25	20	15:21 (12)	15:43
12	04:45	05:48		19:02 (41)	06:57			08:04		16:17 (17)	08:17		15:02 (12)	09:17
	22:37	21:34	26	19:28 (41)	20:08			18:41	37	16:54 (17)	16:23	19	15:21 (12)	15:42
13	04:47	05:50		19:00 (41)	06:59			08:06		16:16 (17)	08:20		15:03 (12)	09:18
	22:36	21:31	29	19:29 (41)	20:05			18:39	38	16:54 (17)	16:21	16	15:19 (12)	15:42
14	04:49	05:53		18:58 (41)	07:01		18:17 (36)	08:08		16:16 (17)	08:22		15:05 (12)	09:20
	22:35	21:28	32	19:30 (41)	20:02	7	18:24 (36)	18:36	38	16:54 (17)	16:19	13	15:18 (12)	15:42
15	04:50	05:55		18:57 (41)	07:04		18:13 (36)	08:11		16:15 (17)	08:24		15:07 (12)	09:21
	22:33	21:26	34	19:31 (41)	19:59	13	18:26 (36)	18:33	39	16:54 (17)	16:17	10	15:17 (12)	15:42
16	04:52	05:57		18:56 (41)	07:06		18:11 (36)	08:13		16:15 (17)	08:27			09:22
	22:32	21:23	36	19:32 (41)	19:56	16	18:27 (36)	18:30	39	16:54 (17)	16:15			15:42
17	04:54	05:59		18:54 (41)	07:08		18:09 (36)	08:15		16:15 (17)	08:29			09:23
	22:30	21:21	38	19:32 (41)	19:53	19	18:28 (36)	18:28	38	16:53 (17)	16:13			15:42
18	04:56	06:01		18:53 (41)	07:10		18:08 (36)	08:18		16:15 (17)	08:31			09:24
	22:28	21:18	40	19:33 (41)	19:50	20	18:28 (36)	18:25	39	16:54 (17)	16:11			15:42
19	04:57	06:04		18:52 (41)	07:12		18:08 (36)	08:20		16:15 (17)	08:34			09:24
	22:27	21:15	41	19:33 (41)	19:47	21	18:29 (36)	18:22	38	16:53 (17)	16:09			15:42
20	04:59	06:06		18:51 (41)	07:15		18:07 (36)	08:22		16:16 (17)	08:36			09:25
	22:25	21:13	42	19:33 (41)	19:44	22	18:29 (36)	18:19	36	16:52 (17)	16:07			15:42
21	05:01	06:08		18:50 (41)	07:17		18:06 (36)	08:25		16:16 (17)	08:38			09:26
	22:23	21:10	43	19:33 (41)	19:42	22	18:28 (36)	18:17	35	16:51 (17)	16:06			15:43
22	05:03	06:10		18:50 (41)	07:19		18:06 (36)	08:27		16:17 (17)	08:40			09:26
	22:21	21:07	43	19:33 (41)	19:39	22	18:28 (36)	18:14	34	16:51 (17)	16:04			15:43
23	05:05	06:13		18:49 (41)	07:21		18:06 (36)	08:29		16:17 (17)	08:43			09:27
	22:19	21:04	44	19:33 (41)	19:36	21	18:27 (36)	18:11	32	16:49 (17)	16:02			15:44
24	05:07	06:15		18:49 (41)	07:23		18:07 (36)	08:32		16:18 (17)	08:45			09:27
	22:17	21:02	54	19:55 (30)	19:33	19	18:26 (36)	18:09	31	16:49 (17)	16:01			15:44
25	05:09	06:17		18:49 (41)	07:26		18:07 (36)	07:34		15:18 (17)	08:47			09:28
	22:15	20:59	58	19:57 (30)	19:30	18	18:25 (36)	17:06	29	15:47 (17)	15:59			15:45
26	05:11	06:19		18:49 (41)	07:28		18:08 (36)	07:37		15:20 (17)	08:49			09:28
	22:13	20:56	60	19:58 (30)	19:27	15	18:23 (36)	17:04	25	15:45 (17)	15:57			15:46
27	05:13	06:22		18:48 (41)	07:30		18:09 (36)	07:39		15:22 (17)	08:51			09:28
	22:11	20:53	63	19:59 (30)	19:24	11	18:20 (36)	17:01	22	15:44 (17)	15:56			15:47
28	05:15	06:24		18:48 (41)	07:32			07:41		15:08 (12)	08:53			09:28
	22:09	20:51	63	19:59 (30)	19:21			16:58	22	15:41 (17)	15:55			15:48
29	05:17	06:26		18:48 (41)	07:34			07:44		15:05 (12)	08:55			09:28
	22:07	20:48	63	19:59 (30)	19:18			16:56	21	15:37 (17)	15:53			15:49
30	05:20	06:28		18:48 (41)	07:37			07:46		15:03 (12)	08:57			09:28
	22:05	20:45	63	19:59 (30)	19:16			16:53	16	15:19 (12)	15:52			15:50
31	05:22	06:30		18:48 (41)				07:49		15:01 (12)				09:28
	22:03	20:42	62	19:58 (30)				16:51	18	15:19 (12)				15:51
Potential sun hours	545	478			386			319			236			200
Total, worst case			983			565			839			305		
Sun reduction			0,50			0,50			0,50			0,50		
Oper. time red.			0,80			0,80			0,80			0,80		
Wind dir. red.			0,68			0,65			0,55			0,53		
Total reduction			0,27			0,26			0,22			0,21		
Total, real			268			147			184			64		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (27)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (27)
	15:53	39	13:36 (28)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (28)
2	09:28		12:01 (27)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (27)
	15:54	41	13:36 (28)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (28)
3	09:27		12:01 (27)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (27)
	15:55	41	13:36 (28)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (28)
4	09:27		12:01 (27)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (27)
	15:57	41	13:36 (28)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (28)
5	09:26		12:01 (27)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (27)
	15:58	43	13:37 (28)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (28)
6	09:25		12:02 (27)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (27)
	16:00	41	13:37 (28)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (28)
7	09:25		12:02 (27)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (27)
	16:02	41	13:37 (28)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (28)
8	09:24		12:02 (27)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (27)
	16:03	42	13:38 (28)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (28)
9	09:23		12:03 (27)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (27)
	16:05	41	13:38 (28)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (28)
10	09:22		12:03 (27)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (27)
	16:07	40	13:37 (28)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (28)
11	09:21		12:03 (27)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (27)
	16:09	41	13:38 (28)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (28)
12	09:20		12:03 (27)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (27)
	16:11	39	13:37 (28)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (28)
13	09:19		12:04 (27)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (27)
	16:13	37	13:37 (28)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (28)
14	09:17		12:04 (27)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (27)
	16:15	35	13:36 (28)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (28)
15	09:16		12:04 (27)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (27)	09:21		11:54 (27)
	16:17	32	13:35 (28)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (27)	15:42	38	13:27 (28)
16	09:15		12:04 (27)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (27)	09:22		11:55 (27)
	16:19	24	12:28 (27)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (27)	15:42	37	13:28 (28)
17	09:13		12:06 (27)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (27)	09:23		11:55 (27)
	16:21	24	12:30 (27)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (27)	15:42	37	13:28 (28)
18	09:12		12:06 (27)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (27)	09:24		11:56 (27)
	16:23	24	12:30 (27)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (27)	15:42	36	13:29 (28)
19	09:10		12:06 (27)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (27)	09:25		11:57 (27)
	16:25	24	12:30 (27)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (27)	15:42	36	13:29 (28)
20	09:09		12:07 (27)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (27)	09:26		11:58 (27)
	16:28	23	12:30 (27)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (27)	15:43	36	13:30 (28)
21	09:07		12:08 (27)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (27)	09:26		11:59 (27)
	16:30	21	12:29 (27)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (27)	15:43	35	13:31 (28)
22	09:05		12:09 (27)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (27)	09:27		11:58 (27)
	16:32	20	12:29 (27)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (27)	15:43	36	13:31 (28)
23	09:03		12:09 (27)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (27)	09:27		11:59 (27)
	16:34	19	12:28 (27)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (27)	15:44	36	13:31 (28)
24	09:02		12:10 (27)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (27)	09:28		12:00 (27)
	16:37	17	12:27 (27)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (27)	15:44	36	13:32 (28)
25	09:00		12:12 (27)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (27)	09:28		12:00 (27)
	16:39	15	12:27 (27)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (27)	15:45	37	13:33 (28)
26	08:58		12:14 (27)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (27)	09:28		12:00 (27)
	16:41	11	12:25 (27)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (27)	15:46	37	13:33 (28)
27	08:56		12:17 (27)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (27)	09:28		12:00 (27)
	16:44	4	12:21 (27)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (28)	15:47	38	13:33 (28)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (27)	09:29		12:01 (27)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (28)	15:48	37	13:34 (28)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (27)	09:28		12:00 (27)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (28)	15:49	38	13:34 (28)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (27)	09:28		12:01 (27)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (28)	15:50	39	13:35 (28)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (27)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (28)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,62												0,63			0,61	
Total reduction		0,25												0,25			0,24	
Total, real		203												93			290	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	11:14 (27)	08:46	10:11 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (27)
	15:53 31	12:43 (28)	16:56 18	10:29 (32)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (27)
2	09:28	11:14 (27)	08:44	10:11 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (27)
	15:54 30	12:43 (28)	16:58 17	10:28 (32)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (27)
3	09:27	11:13 (27)	08:41	10:13 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (27)
	15:55 31	12:43 (28)	17:01 14	10:27 (32)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (27)
4	09:27	11:13 (27)	08:39	10:14 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (27)
	15:57 30	12:43 (28)	17:03 11	10:25 (32)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (27)
5	09:26	11:14 (27)	08:37	10:17 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (27)
	15:58 28	12:42 (28)	17:06 7	10:24 (32)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (28)
6	09:25	11:14 (27)	08:35		07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:47 (32)	09:09		11:00 (27)
	16:00 28	12:42 (28)	17:08		18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 7	09:54 (32)	15:46	28	12:28 (28)
7	09:25	11:14 (27)	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:45 (32)	09:10		11:01 (27)
	16:02 26	12:41 (28)	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34 11	09:56 (32)	15:45	29	12:30 (28)
8	09:24	11:14 (27)	08:30		07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:43 (32)	09:12		11:02 (27)
	16:03 21	11:35 (27)	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 14	09:57 (32)	15:45	30	12:31 (28)
9	09:23	11:15 (27)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:42 (32)	09:14		11:03 (27)
	16:05 21	11:36 (27)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 17	09:59 (32)	15:44	30	12:32 (28)
10	09:22	11:15 (27)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:42 (32)	09:15		11:03 (27)
	16:07 21	11:36 (27)	17:18		18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28 18	10:00 (32)	15:44	30	12:32 (28)
11	09:21	11:15 (27)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:41 (32)	09:16		11:04 (27)
	16:09 22	11:37 (27)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26 19	10:00 (32)	15:43	30	12:33 (28)
12	09:20	11:15 (27)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:41 (32)	09:18		11:04 (27)
	16:11 22	11:37 (27)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 19	10:00 (32)	15:43	31	12:34 (28)
13	09:19	11:16 (27)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:41 (32)	09:19		11:05 (27)
	16:13 22	11:38 (27)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 20	10:01 (32)	15:42	31	12:35 (28)
14	09:17	11:16 (27)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:42 (32)	09:20		11:06 (27)
	16:15 22	11:38 (27)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 19	10:01 (32)	15:42	30	12:35 (28)
15	09:16	11:16 (27)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:41 (32)	09:21		11:06 (27)
	16:17 22	11:38 (27)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 20	10:01 (32)	15:42	31	12:36 (28)
16	09:15	11:16 (27)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:42 (32)	09:22		11:08 (27)
	16:19 22	11:38 (27)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15 19	10:01 (32)	15:42	30	12:37 (28)
17	09:13	11:18 (27)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:43 (32)	09:23		11:09 (27)
	16:21 21	11:39 (27)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 26	11:08 (27)	15:42	30	12:38 (28)
18	09:12	11:18 (27)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:43 (32)	09:24		11:08 (27)
	16:23 21	11:39 (27)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 29	11:10 (27)	15:42	30	12:37 (28)
19	09:10	10:13 (32)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:44 (32)	09:25		11:09 (27)
	16:25 27	11:39 (27)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09 31	11:12 (27)	15:42	29	12:38 (28)
20	09:09	10:12 (32)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	09:45 (32)	09:26		11:10 (27)
	16:28 30	11:39 (27)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08 32	11:13 (27)	15:43	30	12:39 (28)
21	09:07	10:11 (32)	07:57		06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39	09:46 (32)	09:26		11:11 (27)
	16:30 32	11:39 (27)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 32	11:14 (27)	15:43	29	12:40 (28)
22	09:05	10:10 (32)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	09:48 (32)	09:27		11:11 (27)
	16:32 32	11:38 (27)	17:48		18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04 29	11:15 (27)	15:43	29	12:40 (28)
23	09:03	10:09 (32)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	09:49 (32)	09:27		11:11 (27)
	16:34 31	11:37 (27)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 27	11:15 (27)	15:44	30	12:40 (28)
24	09:02	10:09 (32)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:55 (27)	09:28		11:12 (27)
	16:37 29	11:36 (27)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 21	11:16 (27)	15:45	30	12:41 (28)
25	09:00	10:09 (32)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:55 (27)	09:28		11:12 (27)
	16:39 26	11:34 (27)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59 21	11:16 (27)	15:45	29	12:41 (28)
26	08:58	10:09 (32)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:55 (27)	09:28		11:13 (27)
	16:41 19	10:28 (32)	17:57		19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58 22	11:17 (27)	15:46	30	12:42 (28)
27	08:56	10:09 (32)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:55 (27)	09:28		11:13 (27)
	16:44 20	10:29 (32)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 22	11:17 (27)	15:47	30	12:42 (28)
28	08:54	10:09 (32)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:56 (27)	09:29		11:13 (27)
	16:46 19	10:28 (32)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 22	11:18 (27)	15:48	31	12:43 (28)
29	08:52	10:09 (32)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:56 (27)	09:29		11:13 (27)
	16:49 20	10:29 (32)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54 22	11:18 (27)	15:49	30	12:42 (28)
30	08:50	10:09 (32)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:56 (27)	09:28		11:13 (27)
	16:51 19	10:28 (32)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 22	11:18 (27)	15:50	31	12:43 (28)
31	08:48	10:10 (32)			07:10		04:41		05:22	06:31		07:49			09:28		11:14 (27)
	16:54 19	10:29 (32)			20:14		22:29		22:03	20:43		16:51			15:51	30	12:43 (28)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	764		67										541		888		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,68		0,72										0,70		0,65		
Total reduction	0,27		0,29										0,28		0,26		
Total, real	208		19										151		231		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:55 (16)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51			09:00		12:38 (16)
	15:52	16	13:11 (16)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48			15:51	20	12:58 (16)
2	09:27		12:55 (16)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54			09:01		12:39 (16)
	15:54	16	13:11 (16)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46			15:50	20	12:59 (16)
3	09:27		12:55 (16)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56			09:03		12:40 (16)
	15:55	17	13:12 (16)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44			15:49	20	13:00 (16)
4	09:26		12:55 (16)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58			09:05		12:40 (16)
	15:57	17	13:12 (16)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41			15:48	20	13:00 (16)
5	09:26		12:55 (16)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01			09:07		12:41 (16)
	15:58	18	13:13 (16)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39			15:47	19	13:00 (16)
6	09:25		12:55 (16)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03			09:09		12:41 (16)
	16:00	19	13:14 (16)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36			15:46	19	13:00 (16)
7	09:24		12:55 (16)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06			09:10		12:42 (16)
	16:01	20	13:15 (16)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34			15:45	18	13:00 (16)
8	09:24		12:56 (16)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08			09:12		12:43 (16)
	16:03	19	13:15 (16)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32			15:44	18	13:01 (16)
9	09:23		12:55 (16)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10			09:13		12:43 (16)
	16:05	20	13:15 (16)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	17	13:00 (16)
10	09:22		12:56 (16)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13			09:15		12:44 (16)
	16:07	20	13:16 (16)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27			15:43	17	13:01 (16)
11	09:21		12:57 (16)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		12:45 (16)
	16:09	20	13:17 (16)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25			15:43	16	13:01 (16)
12	09:19		12:57 (16)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18			09:17		12:45 (16)
	16:11	20	13:17 (16)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:42	16	13:01 (16)
13	09:18		12:57 (16)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20			09:19		12:46 (16)
	16:12	20	13:17 (16)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21			15:42	16	13:02 (16)
14	09:17		12:58 (16)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22			09:20		12:47 (16)
	16:14	20	13:18 (16)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19			15:42	14	13:01 (16)
15	09:16		12:58 (16)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25			09:21		12:47 (16)
	16:17	20	13:18 (16)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17			15:42	14	13:01 (16)
16	09:14		12:58 (16)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27			09:22		12:48 (16)
	16:19	20	13:18 (16)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15			15:42	13	13:01 (16)
17	09:13		12:59 (16)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29			09:23		12:48 (16)
	16:21	19	13:18 (16)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13			15:42	14	13:02 (16)
18	09:11		12:59 (16)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32			09:24		12:49 (16)
	16:23	19	13:18 (16)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11			15:42	13	13:02 (16)
19	09:10		13:01 (16)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34		12:41 (16)	09:25		12:50 (16)
	16:25	18	13:19 (16)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09	9	12:50 (16)	15:42	13	13:03 (16)
20	09:08		13:02 (16)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36		12:39 (16)	09:25		12:51 (16)
	16:27	16	13:18 (16)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07	12	12:51 (16)	15:42	12	13:03 (16)
21	09:07		13:02 (16)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38		12:38 (16)	09:26		12:51 (16)
	16:30	15	13:17 (16)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15	12:53 (16)	15:43	12	13:03 (16)
22	09:05		13:04 (16)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41		12:38 (16)	09:27		12:52 (16)
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	16:39			17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59	19	12:56 (16)	15:45	13	13:06 (16)
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	16:41			17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57	20	12:57 (16)	15:46	13	13:06 (16)
27	08:56			07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		12:37 (16)	09:28		12:54 (16)
	16:44			18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56	20	12:57 (16)	15:47	13	13:07 (16)
28	08:54			07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54		12:37 (16)	09:28		12:53 (16)
	16:46			18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55	20	12:57 (16)	15:48	14	13:07 (16)
29	08:52				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56		12:38 (16)	09:28		12:53 (16)
	16:48				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53	20	12:58 (16)	15:49	15	13:08 (16)
30	08:50				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58		12:38 (16)	09:28		12:54 (16)
	16:51				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52	20	12:58 (16)	15:50	15	13:09 (16)
31	08:48				07:09		04:41		05:22	06:31		07:49				09:28		12:54 (16)
	16:53				20:14		22:29		22:03	20:42		16:51				15:51	15	13:09 (16)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		410												207			475	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,61												0,61			0,61	
Total reduction		0,24												0,24			0,24	
Total, real		99												50			115	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:45	13:54 (30)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39		07:51	14:48 (16)	08:59
	15:52		16:56 19	14:13 (30)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13		16:48 19	15:07 (16)	15:51
2	09:27		08:43	13:56 (30)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:53	14:49 (16)	09:01
	15:54		16:58 16	14:12 (30)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 17	15:06 (16)	15:50
3	09:27		08:41	13:58 (30)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44		07:56	14:49 (16)	09:03
	15:55		17:01 12	14:10 (30)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07		16:44 15	15:04 (16)	15:49
4	09:26		08:39	14:02 (30)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46		07:58	14:52 (16)	09:05
	15:57		17:03 5	14:07 (30)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 10	15:02 (16)	15:48
5	09:26		08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48		08:01	14:56 (16)	09:07
	15:58		17:06		18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01		16:39 2	14:58 (16)	15:47
6	09:25		08:34	15:25 (16)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50		08:03		09:08
	16:00		17:08 4	15:29 (16)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58		16:36		15:46
7	09:24		08:32	15:22 (16)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53		08:06	13:31 (30)	09:10
	16:01		17:11 11	15:33 (16)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56		16:34 7	13:38 (30)	15:45
8	09:23		08:30	15:20 (16)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55		08:08	13:28 (30)	09:12
	16:03		17:13 15	15:35 (16)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53		16:32 13	13:41 (30)	15:44
9	09:23		08:27	15:19 (16)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57		08:10	13:27 (30)	09:13
	16:05		17:15 18	15:37 (16)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50		16:30 16	13:43 (30)	15:44
10	09:22		08:25	15:18 (16)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59		08:13	13:25 (30)	09:15
	16:07		17:18 19	15:37 (16)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:27 19	13:44 (30)	15:43
11	09:20		08:22	15:17 (16)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	13:24 (30)	09:16
	16:09		17:20 21	15:38 (16)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44		16:25 21	13:45 (30)	15:43
12	09:19		08:20	15:17 (16)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04		08:17	13:24 (30)	09:17
	16:10		17:23 22	15:39 (16)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41		16:23 22	13:46 (30)	15:42
13	09:18	13:53 (30)	08:17	15:17 (16)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	13:23 (30)	09:19
	16:12 5	13:58 (30)	17:25 22	15:39 (16)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39		16:21 23	13:46 (30)	15:42
14	09:17	13:51 (30)	08:15	15:16 (16)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09		08:22	13:23 (30)	09:20
	16:14 9	14:00 (30)	17:28 23	15:39 (16)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 24	13:47 (30)	15:42
15	09:16	13:50 (30)	08:12	15:17 (16)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:07 (41)	09:21
	16:17 11	14:01 (30)	17:30 22	15:39 (16)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33		16:17 33	13:48 (30)	15:42
16	09:14	13:50 (30)	08:10	15:17 (16)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:06 (41)	09:22
	16:19 17	14:07 (30)	17:33 22	15:39 (16)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30		16:15 36	13:48 (30)	15:42
17	09:13	13:49 (30)	08:07	15:17 (16)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	11:04 (41)	09:23
	16:21 21	14:10 (30)	17:35 21	15:38 (16)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 40	13:48 (30)	15:42
18	09:11	11:38 (41)	08:05	15:18 (16)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18		08:32	11:03 (41)	09:24
	16:23 27	14:11 (30)	17:38 19	15:37 (16)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25		16:11 42	13:49 (30)	15:42
19	09:10	11:35 (41)	08:02	15:20 (16)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20		08:34	11:03 (41)	09:25
	16:25 32	14:12 (30)	17:40 17	15:37 (16)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22		16:09 44	13:49 (30)	15:42
20	09:08	11:32 (41)	07:59	15:21 (16)	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	11:02 (41)	09:25
	16:27 36	14:12 (30)	17:43 14	15:35 (16)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19		16:07 45	13:49 (30)	15:42
21	09:07	11:29 (41)	07:57	15:24 (16)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	15:53 (16)	08:38	11:05 (41)	09:26
	16:30 42	14:13 (30)	17:45 8	15:32 (16)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17 10	16:03 (16)	16:06 42	13:49 (30)	15:43
22	09:05	11:27 (41)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	15:51 (16)	08:41	11:08 (41)	09:27
	16:32 45	14:14 (30)	17:47		18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14 15	16:06 (16)	16:04 36	13:48 (30)	15:43
23	09:03	11:28 (41)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	15:49 (16)	08:43	11:12 (41)	09:27
	16:34 44	14:14 (30)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11 17	16:06 (16)	16:02 32	13:49 (30)	15:44
24	09:01	11:29 (41)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:23	08:32	15:48 (16)	08:45	11:16 (41)	09:27
	16:36 42	14:15 (30)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09 19	16:07 (16)	16:01 28	13:49 (30)	15:44
25	08:59	11:31 (41)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	14:48 (16)	08:47	13:27 (30)	09:28
	16:39 40	14:15 (30)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06 20	15:08 (16)	15:59 21	13:48 (30)	15:45
26	08:58	11:32 (41)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	14:46 (16)	08:49	13:29 (30)	09:28
	16:41 37	14:15 (30)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 22	15:08 (16)	15:57 17	13:46 (30)	15:46
27	08:56	11:34 (41)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	14:46 (16)	08:51	13:29 (30)	09:28
	16:44 33	14:15 (30)	18:00		19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01 23	15:09 (16)	15:56 12	13:41 (30)	15:47
28	08:54	13:51 (30)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41	14:46 (16)	08:53	13:30 (30)	09:28
	16:46 24	14:15 (30)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58 22	15:08 (16)	15:55 9	13:39 (30)	15:47
29	08:52	13:51 (30)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	14:46 (16)	08:55	13:35 (30)	09:28
	16:48 23	14:14 (30)			20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56 22	15:08 (16)	15:53 5	13:40 (30)	15:49
30	08:50	13:52 (30)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	14:47 (16)	08:57		09:28
	16:51 22	14:14 (30)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53 21	15:08 (16)	15:52		15:50
31	08:48	13:54 (30)			07:09		04:41		05:22	06:31		07:49	14:47 (16)			09:28
	16:53 20	14:14 (30)			20:14		22:29		22:03	20:42		16:51 20	15:07 (16)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		530		330									211		650	
Sun reduction		0,50		0,50									0,50		0,50	
Oper. time red.		0,80		0,80									0,80		0,80	
Wind dir. red.		0,58		0,55									0,54		0,57	
Total reduction		0,23		0,22									0,22		0,23	
Total, real		122		72									46		148	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

Shadow receptor: Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April		May	June
1	09:28		12:11 (36)	08:45		10:15 (17)	07:35		13:26 (30)	07:07		18:42 (21)	05:44	04:39
	15:52	47	14:26 (18)	16:56	119	15:37 (39)	18:04	35	17:05 (13)	20:16	19	19:01 (21)	21:26	22:30
2	09:27		12:11 (36)	08:43		12:16 (36)	07:32		15:45 (11)	07:04		18:43 (21)	05:41	04:38
	15:54	53	14:28 (18)	16:58	114	15:38 (39)	18:07	27	17:09 (13)	20:19	16	18:59 (21)	21:28	22:32
3	09:27		12:10 (36)	08:41		12:17 (36)	07:30		16:34 (16)	07:01		18:46 (21)	05:38	04:37
	15:55	58	14:29 (18)	17:01	113	15:38 (39)	18:09	33	17:12 (13)	20:21	11	18:57 (21)	21:30	22:33
4	09:26		12:10 (36)	08:39		09:39 (41)	07:27		16:31 (16)	06:58			05:36	04:36
	15:57	61	14:29 (18)	17:03	109	15:39 (39)	18:12	43	17:15 (13)	20:23			21:33	22:35
5	09:26		12:10 (36)	08:36		09:39 (41)	07:24		16:29 (16)	06:55			05:34	04:35
	15:58	64	14:30 (18)	17:06	105	15:39 (39)	18:14	46	17:15 (13)	20:26			21:35	22:36
6	09:25		12:09 (36)	08:34		09:40 (41)	07:21		16:26 (16)	06:52			05:31	04:34
	16:00	70	14:31 (18)	17:08	95	15:39 (39)	18:16	49	17:15 (13)	20:28			21:37	22:38
7	09:24		10:10 (17)	08:32		09:40 (41)	07:18		16:25 (16)	06:49			05:29	04:33
	16:01	78	14:32 (18)	17:11	96	15:39 (39)	18:19	50	17:15 (13)	20:30			21:39	22:39
8	09:23		10:10 (17)	08:30		09:38 (41)	07:15		16:23 (16)	06:46			05:26	04:32
	16:03	84	14:33 (18)	17:13	96	15:38 (39)	18:21	52	17:15 (13)	20:32			21:42	22:40
9	09:22		10:10 (17)	08:27		09:36 (41)	07:13		16:22 (16)	06:44			05:24	04:31
	16:05	86	14:33 (18)	17:16	98	15:38 (39)	18:23	53	17:15 (13)	20:35			21:44	22:41
10	09:21		10:11 (17)	08:25		09:33 (41)	07:10		16:20 (16)	06:41			05:21	04:30
	16:07	91	14:34 (18)	17:18	107	15:57 (11)	18:26	54	17:14 (13)	20:37			21:46	22:42
11	09:20		10:10 (17)	08:22		09:29 (41)	07:07		16:19 (16)	06:38			05:19	04:29
	16:09	97	14:34 (18)	17:20	114	16:00 (11)	18:28	54	17:13 (13)	20:39			21:48	22:44
12	09:19		10:09 (17)	08:20		09:27 (41)	07:04		16:18 (16)	06:35			05:17	04:29
	16:11	102	14:35 (18)	17:23	118	16:03 (11)	18:30	54	17:12 (13)	20:42			21:51	22:44
13	09:18		10:09 (17)	08:17		09:24 (41)	07:01		16:18 (16)	06:32			05:15	04:28
	16:13	105	14:35 (18)	17:25	118	16:04 (11)	18:33	52	17:10 (13)	20:44			21:53	22:45
14	09:17		10:10 (17)	08:15		09:21 (41)	06:58		16:17 (16)	06:29			05:12	04:28
	16:15	107	14:36 (18)	17:28	114	16:05 (11)	18:35	51	17:08 (13)	20:46			21:55	22:46
15	09:16		10:10 (17)	08:12		09:18 (41)	06:56		16:17 (16)	06:27			05:10	04:27
	16:17	112	14:37 (18)	17:30	120	16:07 (11)	18:37	47	17:04 (13)	20:49			21:57	22:47
16	09:14		10:02 (17)	08:10		09:13 (41)	06:53		16:17 (16)	06:24			05:08	04:27
	16:19	119	14:37 (18)	17:33	125	16:08 (11)	18:40	46	17:03 (16)	20:51			21:59	22:48
17	09:13		10:02 (17)	08:07		09:13 (41)	06:50		16:17 (16)	06:21			05:06	04:27
	16:21	126	14:37 (18)	17:35	123	16:08 (11)	18:42	46	17:03 (16)	20:53			22:02	22:48
18	09:11		10:02 (17)	08:05		09:13 (41)	06:47		16:16 (16)	06:18			05:04	04:27
	16:23	127	14:37 (18)	17:38	121	16:08 (11)	18:44	46	17:02 (16)	20:56			22:04	22:49
19	09:10		10:02 (17)	08:02		09:15 (41)	06:44		16:16 (16)	06:16			05:02	04:26
	16:25	129	14:37 (18)	17:40	118	16:09 (11)	18:47	56	18:01 (21)	20:58			22:06	22:49
20	09:08		10:02 (17)	07:59		09:16 (41)	06:41		16:16 (16)	06:13			05:00	04:26
	16:27	130	14:37 (18)	17:43	114	16:09 (11)	18:49	60	18:03 (21)	21:00			22:08	22:50
21	09:07		10:03 (17)	07:57		09:17 (41)	06:38		16:16 (16)	06:10			04:58	04:27
	16:30	131	14:37 (18)	17:45	110	16:09 (11)	18:51	64	18:05 (21)	21:02			22:10	22:50
22	09:05		10:03 (17)	07:54		09:18 (41)	06:35		16:17 (16)	06:07			04:56	04:27
	16:32	129	14:36 (18)	17:48	104	16:08 (11)	18:54	63	18:05 (21)	21:05			22:12	22:50
23	09:03		10:04 (17)	07:51		09:20 (41)	06:32		16:17 (16)	06:05			04:54	04:27
	16:34	131	14:36 (18)	17:50	95	16:08 (11)	18:56	64	18:06 (21)	21:07			22:14	22:50
24	09:01		10:04 (17)	07:49		13:09 (30)	06:30		16:18 (16)	06:02			04:52	04:27
	16:37	128	14:35 (18)	17:52	77	16:08 (11)	18:58	64	18:06 (21)	21:09			22:16	22:50
25	08:59		10:05 (17)	07:46		13:11 (30)	06:27		16:18 (16)	05:59			04:50	04:28
	16:39	125	14:34 (18)	17:55	71	16:07 (11)	19:00	62	18:06 (21)	21:12			22:18	22:50
26	08:58		10:05 (17)	07:43		13:13 (30)	06:24		16:20 (16)	05:57			04:49	04:28
	16:41	124	15:28 (39)	17:57	66	16:06 (11)	19:03	61	18:07 (21)	21:14			22:20	22:50
27	08:56		10:06 (17)	07:41		13:16 (30)	06:21		16:22 (16)	05:54			04:47	04:29
	16:44	127	15:30 (39)	18:00	58	16:05 (11)	19:05	57	18:07 (21)	21:16			22:22	22:50
28	08:54		10:07 (17)	07:38		13:19 (30)	06:18		16:23 (16)	05:51			04:45	04:29
	16:46	130	15:33 (39)	18:02	49	16:04 (11)	19:07	54	18:06 (21)	21:19			22:23	22:50
29	08:52		10:08 (17)				07:15		17:26 (16)	05:49			04:44	04:30
	16:48	131	15:35 (39)				20:10	47	19:05 (21)	21:21			22:25	22:49
30	08:50		10:09 (17)				07:12		17:29 (16)	05:46			04:42	04:31
	16:51	129	15:36 (39)				20:12	38	19:04 (21)	21:23			22:27	22:49
31	08:47		10:12 (17)				07:09		18:41 (21)				04:41	
	16:53	126	15:37 (39)				20:14	22	19:03 (21)				22:29	
Potential sun hours	221			260			365			432			521	547
Total, worst case		3257			2867			1550			46			
Sun reduction		0,50			0,50			0,50			0,50			
Oper. time red.		0,80			0,80			0,80			0,80			
Wind dir. red.		0,60			0,59			0,58			0,62			
Total reduction		0,24			0,24			0,23			0,25			
Total, real		786			675			361			11			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

Shadow receptor: Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December		
1	04:32	05:24	06:33		07:39		16:57 (16)	07:51	09:03 (41)	08:59	09:52 (17)
	22:48	22:01	20:39		19:13	53	17:50 (13)	16:49 107	15:26 (11)	15:51 96	14:16 (18)
2	04:33	05:26	06:35		07:41		16:58 (16)	07:53	09:06 (41)	09:01	09:53 (17)
	22:48	21:58	20:37		19:10	54	17:52 (13)	16:46 98	15:08 (39)	15:50 91	14:16 (18)
3	04:34	05:28	06:37		07:44		16:58 (16)	07:56	09:08 (41)	09:03	09:54 (17)
	22:47	21:56	20:34		19:07	54	17:52 (13)	16:44 96	15:08 (39)	15:49 88	14:17 (18)
4	04:35	05:30	06:39		07:46		16:58 (16)	07:58	09:10 (41)	09:05	09:54 (17)
	22:46	21:54	20:31		19:04	54	17:52 (13)	16:41 94	15:08 (39)	15:48 83	14:17 (18)
5	04:36	05:33	06:42		07:48		17:00 (16)	08:01	09:10 (41)	09:07	09:55 (17)
	22:45	21:51	20:28		19:01	52	17:52 (13)	16:39 95	15:09 (39)	15:47 77	14:17 (18)
6	04:37	05:35	06:44		07:50		17:00 (16)	08:03	09:10 (41)	09:08	09:57 (17)
	22:45	21:49	20:25		18:58	52	17:52 (13)	16:37 105	15:09 (39)	15:46 71	14:17 (18)
7	04:38	05:37	06:46		07:53		17:01 (16)	08:06	09:08 (41)	09:10	11:57 (36)
	22:44	21:46	20:22		18:56	50	17:51 (13)	16:34 111	15:09 (39)	15:45 64	14:17 (18)
8	04:40	05:39	06:48		07:55		17:03 (16)	08:08	11:48 (36)	09:12	11:57 (36)
	22:43	21:44	20:19		18:53	48	17:51 (13)	16:32 112	15:09 (39)	15:44 62	14:17 (18)
9	04:41	05:41	06:51	18:40 (21)	07:57		17:04 (16)	08:10	11:47 (36)	09:13	11:59 (36)
	22:41	21:41	20:16 10	18:50 (21)	18:50	46	17:50 (13)	16:30 113	15:09 (39)	15:44 57	14:17 (18)
10	04:42	05:44	06:53	18:37 (21)	07:59		17:06 (16)	08:13	09:45 (17)	09:15	12:00 (36)
	22:40	21:39	20:14 15	18:52 (21)	18:47	40	17:48 (13)	16:27 121	15:08 (39)	15:43 53	14:17 (18)
11	04:44	05:46	06:55	18:35 (21)	08:02		16:22 (11)	08:15	09:42 (17)	09:16	12:01 (36)
	22:39	21:36	20:11 19	18:54 (21)	18:44	36	17:45 (13)	16:25 127	15:08 (39)	15:43 47	14:16 (18)
12	04:45	05:48	06:57	18:34 (21)	08:04		16:18 (11)	08:17	09:41 (17)	09:17	12:03 (36)
	22:38	21:34	20:08 21	18:55 (21)	18:42	25	17:41 (13)	16:23 130	15:08 (39)	15:42 44	14:17 (18)
13	04:47	05:50	06:59	17:21 (16)	08:06		13:56 (30)	08:20	09:39 (17)	09:19	12:04 (36)
	22:36	21:31	20:05 37	18:55 (21)	18:39	42	17:38 (13)	16:21 131	15:06 (39)	15:42 39	14:17 (18)
14	04:49	05:53	07:02	17:17 (16)	08:09		13:50 (30)	08:22	09:39 (17)	09:20	12:07 (36)
	22:35	21:29	20:02 45	18:55 (21)	18:36	53	16:37 (11)	16:19 131	15:05 (39)	15:42 34	14:17 (18)
15	04:50	05:55	07:04	17:13 (16)	08:11		13:46 (30)	08:25	09:39 (17)	09:21	13:06 (30)
	22:33	21:26	19:59 52	18:55 (21)	18:33	62	16:37 (11)	16:17 128	15:03 (39)	15:42 26	14:16 (18)
16	04:52	05:57	07:06	17:11 (16)	08:13		13:44 (30)	08:27	09:39 (17)	09:22	13:08 (30)
	22:32	21:23	19:56 56	18:55 (21)	18:30	69	16:39 (11)	16:15 124	15:02 (39)	15:42 22	14:15 (18)
17	04:54	05:59	07:08	17:08 (16)	08:16		13:41 (30)	08:29	09:38 (17)	09:23	13:10 (30)
	22:30	21:21	19:53 59	18:54 (21)	18:28	75	16:39 (11)	16:13 125	14:07 (18)	15:42 18	14:15 (18)
18	04:56	06:02	07:10	17:07 (16)	08:18		09:55 (41)	08:32	09:38 (17)	09:24	13:12 (30)
	22:29	21:18	19:50 63	18:55 (21)	18:25	86	16:39 (11)	16:11 129	14:09 (18)	15:42 16	14:15 (18)
19	04:58	06:04	07:12	17:06 (16)	08:20		09:51 (41)	08:34	09:39 (17)	09:25	13:16 (7)
	22:27	21:15	19:47 63	18:54 (21)	18:22	98	16:39 (11)	16:09 131	14:11 (18)	15:42 11	14:15 (18)
20	04:59	06:06	07:15	17:04 (16)	08:23		09:49 (41)	08:36	09:38 (17)	09:25	13:16 (7)
	22:25	21:13	19:45 65	18:53 (21)	18:20	106	16:40 (11)	16:07 129	14:11 (18)	15:42 9	14:14 (18)
21	05:01	06:08	07:17	17:03 (16)	08:25		09:46 (41)	08:38	09:39 (17)	09:26	13:17 (7)
	22:23	21:10	19:42 64	18:51 (21)	18:17	113	16:39 (11)	16:06 131	14:13 (18)	15:43 9	14:15 (18)
22	05:03	06:11	07:19	17:01 (16)	08:27		09:45 (41)	08:41	09:38 (17)	09:26	13:18 (7)
	22:21	21:07	19:39 64	18:50 (21)	18:14	116	16:39 (11)	16:04 131	14:13 (18)	15:43 9	14:16 (18)
23	05:05	06:13	07:21	17:00 (16)	08:30		09:44 (41)	08:43	09:39 (17)	09:27	13:18 (7)
	22:19	21:05	19:36 62	18:48 (21)	18:12	119	16:38 (11)	16:02 128	14:14 (18)	15:44 9	14:16 (18)
24	05:07	06:15	07:24	17:00 (16)	08:32		09:43 (41)	08:45	09:39 (17)	09:27	13:18 (7)
	22:18	21:02	19:33 58	18:46 (21)	18:09	122	16:38 (11)	16:01 127	14:14 (18)	15:44 11	14:17 (18)
25	05:09	06:17	07:26	16:59 (16)	07:34		08:43 (41)	08:47	09:40 (17)	09:28	13:15 (30)
	22:16	20:59	19:30 46	17:45 (16)	17:06	123	15:38 (11)	15:59 124	14:15 (18)	15:45 14	14:17 (18)
26	05:11	06:19	07:28	16:58 (16)	07:37		08:44 (41)	08:49	09:40 (17)	09:28	13:14 (30)
	22:14	20:56	19:27 47	17:45 (16)	17:04	122	15:37 (11)	15:58 119	14:15 (18)	15:46 17	14:18 (18)
27	05:13	06:22	07:30	16:58 (16)	07:39		08:48 (41)	08:51	09:49 (17)	09:28	13:13 (30)
	22:11	20:53	19:24 46	17:44 (16)	17:01	118	15:36 (11)	15:56 112	14:16 (18)	15:47 20	14:19 (18)
28	05:15	06:24	07:32	16:58 (16)	07:41		08:51 (41)	08:53	09:49 (17)	09:28	13:12 (30)
	22:09	20:51	19:21 46	17:44 (16)	16:59	115	15:35 (11)	15:55 109	14:16 (18)	15:48 24	14:21 (18)
29	05:17	06:26	07:35	16:58 (16)	07:44		08:54 (41)	08:55	09:50 (17)	09:28	12:14 (36)
	22:07	20:48	19:19 50	17:48 (13)	16:56	119	15:34 (11)	15:53 106	14:16 (18)	15:49 31	14:23 (18)
30	05:20	06:28	07:37	16:57 (16)	07:46		08:57 (41)	08:57	09:50 (17)	09:28	12:13 (36)
	22:05	20:45	19:16 52	17:49 (13)	16:53	117	15:32 (11)	15:52 103	14:16 (18)	15:50 37	14:25 (18)
31	05:22	06:31			07:49		08:59 (41)			09:28	12:12 (36)
	22:03	20:42			16:51	115	15:29 (11)			15:51 41	14:25 (18)
Potential sun hours	546	478	386		319			236		199	
Total, worst case				1040		2454			3527		1230
Sun reduction				0,50		0,50			0,50		0,50
Oper. time red.				0,80		0,80			0,80		0,80
Wind dir. red.				0,59		0,59			0,60		0,59
Total reduction				0,24		0,24			0,24		0,24
Total, real				245		577			846		289

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (5)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (5)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (5)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43 1	20:40 (5)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (5)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44 1	20:41 (5)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (5)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45 1	20:40 (5)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (5)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46 1	20:41 (5)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (5)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47 2	20:42 (5)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (5)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47 2	20:42 (5)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (5)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48 2	20:42 (5)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (5)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48 2	20:43 (5)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (5)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49 2	20:43 (5)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (5)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49 2	20:43 (5)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (5)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49 2	20:43 (5)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (5)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50 2	20:43 (5)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (5)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50 2	20:44 (5)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (5)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50 2	20:44 (5)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (5)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50 2	20:44 (5)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (5)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50 2	20:44 (5)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (5)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49 2	20:44 (5)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (5)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49 1	20:44 (5)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (5)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49 2	20:45 (5)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (5)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48 1	20:44 (5)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case						34		1						
Sun reduction						0,50		0,50						
Oper. time red.						0,80		0,80						
Wind dir. red.						0,74		0,74						
Total reduction						0,29		0,29						
Total, real						10		0						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	20:27 (5) 04:32	20:33 (5) 05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	8 20:35 (5) 22:48	15 20:48 (5) 22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	20:27 (5) 04:33	20:33 (5) 05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	11 20:38 (5) 22:47	15 20:48 (5) 21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	20:27 (5) 04:34	20:33 (5) 05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	12 20:39 (5) 22:47	15 20:48 (5) 21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36	20:27 (5) 04:35	20:33 (5) 05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34	12 20:39 (5) 22:46	14 20:47 (5) 21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	20:27 (5) 04:36	20:33 (5) 05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	13 20:40 (5) 22:45	14 20:47 (5) 21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	20:27 (5) 04:37	20:34 (5) 05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	13 20:40 (5) 22:44	13 20:47 (5) 21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	20:28 (5) 04:39	20:34 (5) 05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38	14 20:42 (5) 22:43	12 20:46 (5) 21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	20:28 (5) 04:40	20:34 (5) 05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	14 20:42 (5) 22:42	12 20:46 (5) 21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31	20:28 (5) 04:41	20:35 (5) 05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	14 20:42 (5) 22:41	11 20:46 (5) 21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	20:29 (5) 04:43	20:35 (5) 05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	14 20:43 (5) 22:40	11 20:46 (5) 21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:28 (5) 04:44	20:35 (5) 05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	16 20:44 (5) 22:39	9 20:44 (5) 21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:29 (5) 04:46	20:35 (5) 05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	16 20:45 (5) 22:37	4 20:39 (5) 21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:29 (5) 04:47	20:35 (5) 05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	16 20:45 (5) 22:36	3 20:38 (5) 21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:29 (5) 04:49	20:35 (5) 05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	17 20:46 (5) 22:34	2 20:37 (5) 21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:30 (5) 04:51	05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	17 20:47 (5) 22:33	21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:30 (5) 04:52	05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	17 20:47 (5) 22:31	21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:30 (5) 04:54	05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	18 20:48 (5) 22:30	21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:31 (5) 04:56	06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	17 20:48 (5) 22:28	21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:31 (5) 04:58	06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	18 20:49 (5) 22:26	21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:31 (5) 05:00	06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	18 20:49 (5) 22:25	21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58	04:27	20:31 (5) 05:01	06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	18 20:49 (5) 22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:31 (5) 05:03	06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	18 20:49 (5) 22:21	21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:31 (5) 05:05	06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	18 20:49 (5) 22:19	21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:32 (5) 05:07	06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	17 20:49 (5) 22:17	21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:32 (5) 05:09	06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	17 20:49 (5) 22:15	20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:32 (5) 05:11	06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	18 20:50 (5) 22:13	20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:32 (5) 05:13	06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	17 20:49 (5) 22:11	20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:32 (5) 05:15	06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	17 20:49 (5) 22:09	20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:33 (5) 05:18	06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	17 20:50 (5) 22:07	20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42	20:27 (5) 04:31	20:32 (5) 05:20	06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	2 20:29 (5) 22:48	17 20:49 (5) 22:05	20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41	20:27 (5)	05:22	06:31		07:48		09:27
	16:53		20:14		22:28	3 20:30 (5)	22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case					5	469	150					
Sun reduction					0,50	0,50	0,50					
Oper. time red.					0,80	0,80	0,80					
Wind dir. red.					0,73	0,73	0,73					
Total reduction					0,29	0,29	0,29					
Total, real					1	138	44					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:35		07:07	05:44	04:40	04:32	05:24	06:33		07:39	08:39 (86)	07:51	09:00
	15:53	16:56		18:05		20:17	21:26	22:30	22:48	22:01	20:40		19:13 22	09:01 (89)	16:49	15:52
2	09:27	08:43		07:33	08:13 (89)	07:04	05:42	04:39	04:33	05:27	06:35		07:42	08:36 (86)	07:54	09:01
	15:54	16:59		18:07 6	08:19 (89)	20:19	21:28	22:32	22:48	21:58	20:37		19:10 25	09:01 (89)	16:47	15:50
3	09:27	08:41		07:30	08:10 (89)	07:01	05:39	04:38	04:34	05:29	06:38		07:44	08:35 (86)	07:56	09:03
	15:56	17:01		18:10 12	08:22 (89)	20:21	21:30	22:33	22:47	21:56	20:34		19:07 26	09:01 (89)	16:44	15:49
4	09:26	08:39		07:27	08:07 (89)	06:58	05:36	04:36	04:35	05:31	06:40		07:46	08:34 (86)	07:59	09:05
	15:57	17:04		18:12 16	08:23 (89)	20:24	21:33	22:35	22:46	21:54	20:31		19:05 28	09:02 (89)	16:42	15:48
5	09:26	08:37		07:24	08:00 (86)	06:55	05:34	04:35	04:37	05:33	06:42		07:48	08:34 (86)	08:01	09:07
	15:59	17:06		18:14 24	08:24 (89)	20:26	21:35	22:36	22:45	21:51	20:28		19:02 28	09:02 (89)	16:39	15:47
6	09:25	08:34		07:21	07:58 (86)	06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:33 (86)	08:03	09:08
	16:00	17:09		18:17 26	08:24 (89)	20:28	21:37	22:38	22:45	21:49	20:25		18:59 28	09:01 (89)	16:37	15:47
7	09:24	08:32		07:19	07:57 (86)	06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:34 (86)	08:06	09:10
	16:02	17:11		18:19 28	08:25 (89)	20:30	21:40	22:39	22:44	21:47	20:23		18:56 27	09:01 (89)	16:35	15:46
8	09:23	08:30		07:16	07:56 (86)	06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:35 (86)	08:08	09:12
	16:04	17:14		18:21 28	08:24 (89)	20:33	21:42	22:40	22:43	21:44	20:20		18:53 25	09:00 (89)	16:32	15:45
9	09:23	08:27		07:13	07:56 (86)	06:44	05:24	04:31	04:42	05:42	06:51		07:57	08:36 (86)	08:11	09:13
	16:06	17:16		18:24 28	08:24 (89)	20:35	21:44	22:41	22:41	21:42	20:17		18:50 22	08:58 (89)	16:30	15:44
10	09:22	08:25		07:10	07:56 (86)	06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:43 (89)	08:13	09:15
	16:07	17:18		18:26 27	08:23 (89)	20:37	21:46	22:43	22:40	21:39	20:14		18:48 14	08:57 (89)	16:28	15:44
11	09:21	08:23		07:07	07:58 (86)	06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:44 (89)	08:15	09:16
	16:09	17:21		18:28 26	08:24 (89)	20:40	21:49	22:44	22:39	21:37	20:11		18:45 10	08:54 (89)	16:26	15:43
12	09:19	08:20		07:04	07:59 (86)	06:36	05:17	04:29	04:46	05:49	06:58		08:04		08:18	09:17
	16:11	17:23		18:31 23	08:22 (89)	20:42	21:51	22:45	22:38	21:34	20:08		18:42		16:24	15:43
13	09:18	08:18		07:02	07:37 (85)	06:33	05:15	04:29	04:48	05:51	07:00	08:13 (88)	08:07		08:20	09:19
	16:13	17:26		18:33 20	08:21 (89)	20:44	21:53	22:45	22:36	21:31	20:05 8	08:21 (88)	18:39		16:22	15:43
14	09:17	08:15		06:59	07:35 (85)	06:30	05:13	04:28	04:49	05:53	07:02	08:10 (88)	08:09		08:22	09:20
	16:15	17:28		18:35 20	08:18 (89)	20:47	21:55	22:46	22:35	21:29	20:02 13	08:23 (88)	18:36		16:19	15:43
15	09:16	08:13		06:56	07:33 (85)	06:27	05:11	04:28	04:51	05:55	07:04	08:08 (88)	08:11		08:25	09:21
	16:17	17:31		18:38 14	08:14 (89)	20:49	21:57	22:47	22:33	21:26	19:59 16	08:24 (88)	18:34		16:17	15:42
16	09:14	08:10		06:53	07:32 (85)	06:24	05:09	04:28	04:53	05:58	07:06	08:08 (88)	08:13	09:01 (87)	08:27	09:22
	16:19	17:33		18:40 12	07:44 (85)	20:51	22:00	22:48	22:32	21:24	19:57 17	08:25 (88)	18:31 9	09:10 (87)	16:15	15:42
17	09:13	08:07		06:50	07:32 (85)	06:22	05:06	04:27	04:54	06:00	07:08	08:07 (88)	08:16	09:00 (87)	08:29	09:23
	16:21	17:36		18:42 12	07:44 (85)	20:53	22:02	22:48	22:30	21:21	19:54 18	08:25 (88)	18:28 12	09:12 (87)	16:13	15:42
18	09:12	08:05	08:36 (87)	06:47	07:32 (85)	06:19	05:04	04:27	04:56	06:02	07:11	08:06 (88)	08:18	08:59 (87)	08:32	09:24
	16:24	17:38 3	08:39 (87)	18:45 11	07:43 (85)	20:56	22:04	22:49	22:29	21:18	19:51 19	08:25 (88)	18:25 13	09:12 (87)	16:12	15:42
19	09:10	08:02	08:33 (87)	06:44	07:26 (88)	06:16	05:02	04:27	04:58	06:04	07:13	08:05 (88)	08:20	08:59 (87)	08:34	09:25
	16:26	17:41 7	08:40 (87)	18:47 16	07:42 (85)	20:58	22:06	22:49	22:27	21:16	19:48 19	08:24 (88)	18:23 14	09:13 (87)	16:10	15:43
20	09:08	08:00	08:30 (87)	06:42	07:23 (88)	06:13	05:00	04:27	05:00	06:07	07:15	08:05 (88)	08:23	08:58 (87)	08:36	09:25
	16:28	17:43 11	08:41 (87)	18:49 17	07:40 (85)	21:00	22:08	22:50	22:25	21:13	19:45 19	08:24 (88)	18:20 14	09:12 (87)	16:08	15:43
21	09:07	07:57	08:27 (87)	06:39	07:21 (88)	06:11	04:58	04:27	05:02	06:09	07:17	08:05 (88)	08:25	08:58 (87)	08:39	09:26
	16:30	17:46 14	08:41 (87)	18:52 15	07:36 (88)	21:03	22:10	22:50	22:23	21:10	19:42 17	08:22 (88)	18:17 14	09:12 (87)	16:06	15:43
22	09:05	07:54	08:27 (87)	06:36	07:20 (88)	06:08	04:56	04:27	05:04	06:11	07:19	08:06 (88)	08:27	09:01 (87)	08:41	09:27
	16:32	17:48 14	08:41 (87)	18:54 18	07:38 (88)	21:05	22:12	22:50	22:22	21:08	19:39 16	08:22 (88)	18:15 10	09:11 (87)	16:04	15:44
23	09:03	07:52	08:28 (87)	06:33	07:19 (88)	06:05	04:55	04:28	05:06	06:13	07:22	08:07 (88)	08:30	09:04 (87)	08:43	09:27
	16:35	17:50 13	08:41 (87)	18:56 19	07:38 (88)	21:07	22:14	22:50	22:20	21:05	19:36 17	08:24 (85)	18:12 6	09:10 (87)	16:03	15:44
24	09:01	07:49	08:28 (87)	06:30	07:19 (88)	06:02	04:53	04:28	05:08	06:15	07:24	08:09 (88)	08:32	09:06 (87)	08:45	09:27
	16:37	17:53 13	08:41 (87)	18:58 19	07:38 (88)	21:10	22:16	22:50	22:18	21:02	19:33 16	08:25 (85)	18:09 2	09:08 (87)	16:01	15:45
25	09:00	07:46	08:29 (87)	06:27	07:18 (88)	06:00	04:51	04:28	05:10	06:18	07:26	08:15 (85)	07:35		08:47	09:28
	16:39	17:55 10	08:39 (87)	19:01 19	07:37 (88)	21:12	22:18	22:50	22:16	20:59	19:30 11	08:26 (85)	17:07		16:00	15:46
26	08:58	07:44	08:30 (87)	06:24	07:18 (88)	05:57	04:49	04:29	05:12	06:20	07:28	08:14 (85)	07:37		08:49	09:28
	16:42	17:58 7	08:37 (87)	19:03 19	07:37 (88)	21:14	22:20	22:50	22:14	20:57	19:28 12	08:26 (85)	17:04		15:58	15:46
27	08:56	07:41		06:21	07:18 (88)	05:54	04:48	04:29	05:14	06:22	07:31	08:14 (85)	07:39		08:52	09:28
	16:44	18:00		19:05 18	07:36 (88)	21:17	22:22	22:50	22:12	20:54	19:25 12	08:26 (85)	17:02		15:57	15:47
28	08:54	07:38		06:18	07:18 (88)	05:52	04:46	04:30	05:16	06:24	07:33	08:14 (85)	07:42		08:54	09:28
	16:47	18:02		19:08 16	07:34 (88)	21:19	22:23	22:50	22:09	20:51	19:22 12	08:26 (85)	16:59		15:55	15:48
29	08:52			07:16	08:19 (88)	05:49	04:44	04:31	05:18	06:27	07:35	08:14 (85)	07:44		08:56	09:28
	16:49			20:10 14	08:33 (88)	21:21	22:25	22:49	22:07	20:48	19:19 19	08:57 (89)	16:56		15:54	15:49
30	08:50			07:13	08:21 (88)	05:47	04:43	04:32	05:20	06:29	07:37	08:15 (85)	07:47		08:58	09:28
	16:51			20:12 9	08:30 (88)	21:24	22:27	22:49	22:05	20:45	19:16 21	08:59 (89)	16:54		15:53	15:50
31	08:48			07:10			04:41		05:22	06:31			07:49			09:28
	16:54			20:14			22:29		22:03	20:43			16:51			15:51
Potential sun hours	222	260		365		432	521	547	545	478	386		319		236	200
Total, worst case			92		532							282		349		
Sun reduction			0,50		0,50							0,50		0,50		
Oper. time red.			0,80		0,80							0,80		0,80		
Wind dir. red.			0,73		0,70							0,69		0,72		
Total reduction			0,29		0,28							0,28		0,29		
Total, real			27		149							78		100		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April		May			June		
1	09:28	08:46		07:35	07:07		05:44		07:31 (42)	04:40		06:17 (40)
	15:53	16:56		18:05	20:17		21:26	31	08:02 (42)	22:30	23	06:40 (40)
2	09:27	08:43		07:33	07:04		05:42		07:32 (42)	04:39		06:16 (40)
	15:54	16:59		18:07	20:19		21:28	29	08:01 (42)	22:32	24	06:40 (40)
3	09:27	08:41		07:30	07:01		05:39		07:32 (42)	04:37		06:16 (40)
	15:56	17:01		18:10	20:21		21:31	27	07:59 (42)	22:34	25	06:41 (40)
4	09:26	08:39		07:27	06:58		05:36		07:34 (42)	04:36		06:16 (40)
	15:57	17:04		18:12	20:24		21:33	24	07:58 (42)	22:35	26	06:42 (40)
5	09:26	08:37		07:24	06:55		05:34		07:36 (42)	04:35		06:16 (40)
	15:59	17:06		18:14	20:26		21:35	20	07:56 (42)	22:36	27	06:43 (40)
6	09:25	08:34		07:21	06:53		05:32		07:38 (42)	04:34		06:16 (40)
	16:00	17:09		18:17	20:28		21:37	16	07:54 (42)	22:38	27	06:43 (40)
7	09:24	08:32		07:19	06:50		05:29		07:40 (42)	04:33		06:16 (40)
	16:02	17:11		18:19	20:31		21:40	10	07:50 (42)	22:39	27	06:43 (40)
8	09:24	08:30	09:03 (89)	07:16	06:47		05:27			04:32		06:15 (40)
	16:04	17:14	2 09:05 (89)	18:21	20:33		21:42			22:40	29	06:44 (40)
9	09:23	08:27	09:00 (89)	07:13	06:44		05:24			04:31		06:16 (40)
	16:06	17:16	7 09:07 (89)	18:24	20:35		21:44			22:42	29	06:45 (40)
10	09:22	08:25	08:58 (89)	07:10	06:41		07:48 (42)	05:22		04:31		06:15 (40)
	16:07	17:18	10 09:08 (89)	18:26	20:37	10	07:58 (42)	21:46		22:43	30	06:45 (40)
11	09:21	08:23	08:56 (89)	07:07	06:38		07:45 (42)	05:20		04:30		06:16 (40)
	16:09	17:21	13 09:09 (89)	18:28	20:40	17	08:02 (42)	21:49		22:44	29	06:45 (40)
12	09:20	08:20	08:55 (89)	07:04	06:36		07:41 (42)	05:17		04:29		06:15 (40)
	16:11	17:23	14 09:09 (89)	18:31	20:42	22	08:03 (42)	21:51		22:45	30	06:45 (40)
13	09:18	08:18	08:55 (89)	07:02	06:33		07:37 (42)	05:15		04:29		06:16 (40)
	16:13	17:26	14 09:09 (89)	18:33	20:44	27	08:04 (42)	21:53		22:46	30	06:46 (40)
14	09:17	08:15	08:56 (89)	06:59	06:30		07:35 (42)	05:13		04:28		06:16 (40)
	16:15	17:28	13 09:09 (89)	18:35	20:47	30	08:05 (42)	21:55		22:46	30	06:46 (40)
15	09:16	08:13	08:56 (89)	06:56	06:27		07:34 (42)	05:11		04:28		06:15 (40)
	16:17	17:31	13 09:09 (89)	18:38	20:49	33	08:07 (42)	21:57		22:47	31	06:46 (40)
16	09:14	08:10	08:56 (89)	06:53	06:24		07:33 (42)	05:09		04:28		06:16 (40)
	16:19	17:33	11 09:07 (89)	18:40	20:51	34	08:07 (42)	22:00		22:48	30	06:46 (40)
17	09:13	08:07	08:58 (89)	06:50	06:22		07:32 (42)	05:06		04:27		06:16 (40)
	16:21	17:36	7 09:05 (89)	18:42	20:54	35	08:07 (42)	22:02		22:48	31	06:47 (40)
18	09:12	08:05		06:47	06:19		07:31 (42)	05:04		04:27		06:16 (40)
	16:24	17:38		18:45	20:56	37	08:08 (42)	22:04		22:49	31	06:47 (40)
19	09:10	08:02		06:44	06:16		07:30 (42)	05:02		04:27		06:16 (40)
	16:26	17:41		18:47	20:58	38	08:08 (42)	22:06		22:49	31	06:47 (40)
20	09:08	08:00		06:42	06:13		07:30 (42)	05:00		04:27		06:16 (40)
	16:28	17:43		18:49	21:00	39	08:09 (42)	22:08		22:50	31	06:47 (40)
21	09:07	07:57		06:39	06:11		07:30 (42)	04:58		04:27		06:16 (40)
	16:30	17:46		18:52	21:03	38	08:08 (42)	22:10		22:50	31	06:47 (40)
22	09:05	07:54		06:36	06:08		07:29 (42)	04:56		04:27		06:17 (40)
	16:32	17:48		18:54	21:05	39	08:08 (42)	22:12		22:50	31	06:48 (40)
23	09:03	07:52		06:33	06:05		07:29 (42)	04:55		04:28		06:17 (40)
	16:35	17:50		18:56	21:07	39	08:08 (42)	22:14		22:50	31	06:48 (40)
24	09:02	07:49		06:30	06:02		07:29 (42)	04:53		04:28		06:17 (40)
	16:37	17:53		18:58	21:10	38	08:07 (42)	22:16		22:50	31	06:48 (40)
25	09:00	07:46		06:27	06:00		07:29 (42)	04:51		04:28		06:18 (40)
	16:39	17:55		19:01	21:12	38	08:07 (42)	22:18		22:50	31	06:49 (40)
26	08:58	07:44		06:24	05:57		07:29 (42)	04:49	06:24 (40)	04:29		06:18 (40)
	16:42	17:58		19:03	21:14	37	08:06 (42)	22:20	8 06:32 (40)	22:50	31	06:49 (40)
27	08:56	07:41		06:21	05:54		07:29 (42)	04:48	06:21 (40)	04:29		06:19 (40)
	16:44	18:00		19:05	21:17	37	08:06 (42)	22:22	13 06:34 (40)	22:50	30	06:49 (40)
28	08:54	07:38		06:18	05:52		07:29 (42)	04:46	06:20 (40)	04:30		06:18 (40)
	16:47	18:02		19:08	21:19	36	08:05 (42)	22:24	16 06:36 (40)	22:50	31	06:49 (40)
29	08:52			07:16	05:49		07:30 (42)	04:44	06:19 (40)	04:31		06:19 (40)
	16:49			20:10	21:21	34	08:04 (42)	22:25	18 06:37 (40)	22:49	30	06:49 (40)
30	08:50			07:13	05:47		07:30 (42)	04:43	06:19 (40)	04:31		06:19 (40)
	16:51			20:12	21:24	33	08:03 (42)	22:27	20 06:39 (40)	22:49	30	06:49 (40)
31	08:48			07:10				04:41	06:17 (40)			
	16:54			20:14				22:29	22 06:39 (40)			
Potential sun hours	221	260		365	432			521		547		
Total, worst case			104			691			254		878	
Sun reduction			0,50			0,50			0,50		0,50	
Oper. time red.			0,80			0,80			0,80		0,80	
Wind dir. red.			0,74			0,65			0,62		0,58	
Total reduction			0,29			0,26			0,25		0,23	
Total, real			31			178			63		204	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October		November		December
1	04:32	06:20 (40)	05:24		06:33	07:44 (42)	07:39		07:51	08:28 (89)	09:00
	22:48 30	06:50 (40)	22:01		20:40 17	08:01 (42)	19:13		16:49 9	08:37 (89)	15:51
2	04:33	06:20 (40)	05:27		06:35	07:47 (42)	07:42		07:54	08:30 (89)	09:01
	22:48 30	06:50 (40)	21:58		20:37 10	07:57 (42)	19:10		16:47 6	08:36 (89)	15:50
3	04:34	06:20 (40)	05:29		06:38		07:44		07:56	08:33 (89)	09:03
	22:47 29	06:49 (40)	21:56		20:34		19:07		16:44 1	08:34 (89)	15:49
4	04:35	06:20 (40)	05:31		06:40		07:46		07:59		09:05
	22:46 29	06:49 (40)	21:54		20:31		19:05		16:42		15:48
5	04:36	06:21 (40)	05:33		06:42		07:48		08:01		09:07
	22:46 28	06:49 (40)	21:51		20:28		19:02		16:39		15:47
6	04:38	06:21 (40)	05:35	07:49 (42)	06:44		07:51		08:03		09:09
	22:45 28	06:49 (40)	21:49 13	08:02 (42)	20:25		18:59		16:37		15:47
7	04:39	06:23 (40)	05:38	07:46 (42)	06:47		07:53		08:06		09:10
	22:44 27	06:50 (40)	21:47 18	08:04 (42)	20:23		18:56		16:35		15:46
8	04:40	06:23 (40)	05:40	07:44 (42)	06:49		07:55		08:08		09:12
	22:43 26	06:49 (40)	21:44 22	08:06 (42)	20:20		18:53		16:32		15:45
9	04:42	06:23 (40)	05:42	07:43 (42)	06:51		07:57		08:11		09:13
	22:42 26	06:49 (40)	21:42 25	08:08 (42)	20:17		18:50		16:30		15:44
10	04:43	06:24 (40)	05:44	07:41 (42)	06:53		08:00		08:13		09:15
	22:40 24	06:48 (40)	21:39 28	08:09 (42)	20:14		18:48		16:28		15:44
11	04:45	06:25 (40)	05:46	07:40 (42)	06:55		08:02		08:15		09:16
	22:39 23	06:48 (40)	21:37 30	08:10 (42)	20:11		18:45		16:26		15:43
12	04:46	06:25 (40)	05:49	07:39 (42)	06:58		08:04		08:18		09:17
	22:38 23	06:48 (40)	21:34 32	08:11 (42)	20:08		18:42		16:24		15:43
13	04:48	06:26 (40)	05:51	07:38 (42)	07:00		08:07		08:20		09:19
	22:36 21	06:47 (40)	21:32 33	08:11 (42)	20:05		18:39		16:22		15:43
14	04:49	06:28 (40)	05:53	07:37 (42)	07:02		08:09		08:22		09:20
	22:35 18	06:46 (40)	21:29 35	08:12 (42)	20:02		18:36		16:19		15:43
15	04:51	06:28 (40)	05:55	07:36 (42)	07:04		08:11		08:25		09:21
	22:34 17	06:45 (40)	21:26 36	08:12 (42)	19:59		18:34		16:17		15:42
16	04:53	06:30 (40)	05:58	07:36 (42)	07:06		08:14		08:27		09:22
	22:32 14	06:44 (40)	21:24 37	08:13 (42)	19:57		18:31		16:15		15:42
17	04:54	06:31 (40)	06:00	07:35 (42)	07:09		08:16		08:29		09:23
	22:30 11	06:42 (40)	21:21 38	08:13 (42)	19:54		18:28		16:13		15:42
18	04:56	06:35 (40)	06:02	07:36 (42)	07:11		08:18		08:32		09:24
	22:29 5	06:40 (40)	21:18 38	08:14 (42)	19:51		18:25		16:12		15:42
19	04:58		06:04	07:35 (42)	07:13		08:21		08:34		09:25
	22:27		21:16 39	08:14 (42)	19:48		18:23		16:10		15:43
20	05:00		06:07	07:35 (42)	07:15		08:23		08:36		09:25
	22:25		21:13 38	08:13 (42)	19:45		18:20		16:08		15:43
21	05:02		06:09	07:34 (42)	07:17		08:25		08:39		09:26
	22:23		21:10 39	08:13 (42)	19:42		18:17		16:06		15:43
22	05:04		06:11	07:34 (42)	07:20		08:28		08:41		09:27
	22:22		21:08 39	08:13 (42)	19:39		18:15		16:04		15:44
23	05:06		06:13	07:34 (42)	07:22		08:30		08:43		09:27
	22:20		21:05 38	08:12 (42)	19:36		18:12		16:03		15:44
24	05:08		06:15	07:34 (42)	07:24		08:32	09:30 (89)	08:45		09:28
	22:18		21:02 37	08:11 (42)	19:33		18:09 3	09:33 (89)	16:01		15:45
25	05:10		06:18	07:34 (42)	07:26		07:35	08:28 (89)	08:47		09:28
	22:16		20:59 37	08:11 (42)	19:30		17:07 8	08:36 (89)	16:00		15:46
26	05:12		06:20	07:34 (42)	07:28		07:37	08:27 (89)	08:50		09:28
	22:14		20:57 36	08:10 (42)	19:28		17:04 11	08:38 (89)	15:58		15:46
27	05:14		06:22	07:35 (42)	07:31		07:39	08:25 (89)	08:52		09:28
	22:12		20:54 34	08:09 (42)	19:25		17:02 13	08:38 (89)	15:57		15:47
28	05:16		06:24	07:35 (42)	07:33		07:42	08:25 (89)	08:54		09:28
	22:10		20:51 32	08:07 (42)	19:22		16:59 14	08:39 (89)	15:55		15:48
29	05:18		06:27	07:36 (42)	07:35		07:44	08:24 (89)	08:56		09:28
	22:07		20:48 30	08:06 (42)	19:19		16:56 14	08:38 (89)	15:54		15:49
30	05:20		06:29	07:38 (42)	07:37		07:47	08:25 (89)	08:58		09:28
	22:05		20:45 27	08:05 (42)	19:16		16:54 13	08:38 (89)	15:53		15:50
31	05:22		06:31	07:41 (42)			07:49	08:26 (89)			09:28
	22:03		20:43 22	08:03 (42)			16:51 12	08:38 (89)			15:51
Potential sun hours	545		478		386		319		236		200
Total, worst case	409		833		27		88		16		
Sun reduction	0,50		0,50		0,50		0,50		0,50		
Oper. time red.	0,80		0,80		0,80		0,80		0,80		
Wind dir. red.	0,58		0,65		0,65		0,74		0,74		
Total reduction	0,23		0,26		0,26		0,29		0,29		
Total, real	95		215		7		26		5		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February			March			April			May			June		
1	09:28		08:46			07:35		08:16 (89)	07:07			05:44			04:40		06:01 (42)
	15:53		16:56			18:05	15	08:31 (89)	20:17			21:26			22:30	34	06:35 (42)
2	09:27		08:43			07:33		08:17 (89)	07:04			05:42			04:39		06:01 (42)
	15:54		16:59			18:07	13	08:30 (89)	20:19			21:28			22:32	35	06:36 (42)
3	09:27		08:41			07:30		08:18 (89)	07:01			05:39			04:38		06:01 (42)
	15:56		17:01			18:10	10	08:28 (89)	20:21			21:30			22:33	35	06:36 (42)
4	09:26		08:39			07:27		08:20 (89)	06:58			05:37			04:36		06:00 (42)
	15:57		17:04			18:12	5	08:25 (89)	20:24			21:33			22:35	36	06:36 (42)
5	09:26		08:37			07:24			06:55			05:34			04:35		06:01 (42)
	15:59		17:06			18:14			20:26			21:35			22:36	36	06:37 (42)
6	09:25		08:34			07:21			06:53			05:32			04:34		06:01 (42)
	16:00		17:09			18:17			20:28			21:37			22:38	36	06:37 (42)
7	09:24		08:32			07:19			06:50			05:29			04:33		06:01 (42)
	16:02		17:11			18:19			20:31			21:40			22:39	36	06:37 (42)
8	09:24		08:30			07:16		07:46 (88)	06:47			05:27			04:32		06:01 (42)
	16:04		17:14			18:21	7	07:53 (88)	20:33			21:42			22:40	36	06:37 (42)
9	09:23		08:27			07:13		07:44 (88)	06:44			05:24			04:31		06:02 (42)
	16:06		17:16			18:24	10	07:54 (88)	20:35			21:44			22:41	36	06:38 (42)
10	09:22		08:25			07:10		07:43 (88)	06:41			05:22			04:31		06:01 (42)
	16:07		17:19			18:26	13	07:56 (88)	20:37			21:46			22:43	37	06:38 (42)
11	09:21		08:23			07:07		07:42 (88)	06:38			05:20			04:30		06:02 (42)
	16:09		17:21			18:28	14	07:56 (88)	20:40			21:49			22:44	37	06:39 (42)
12	09:20		08:20			07:04		07:42 (88)	06:36			05:17			04:29		06:02 (42)
	16:11		17:23			18:31	14	07:56 (88)	20:42			21:51			22:45	36	06:38 (42)
13	09:18		08:18			07:02		07:41 (88)	06:33			05:15			04:29		06:02 (42)
	16:13		17:26			18:33	15	07:56 (88)	20:44			21:53			22:46	37	06:39 (42)
14	09:17		08:15			06:59		07:42 (88)	06:30			05:13			04:28		06:03 (42)
	16:15		17:28			18:35	13	07:55 (88)	20:47			21:55			22:46	36	06:39 (42)
15	09:16		08:13			06:56		07:42 (88)	06:27			05:11			04:28		06:02 (42)
	16:17		17:31			18:38	11	07:53 (88)	20:49			21:57			22:47	37	06:39 (42)
16	09:14		08:10			06:53		07:44 (88)	06:24			05:09			04:28		06:02 (42)
	16:19		17:33			18:40	7	07:51 (88)	20:51			22:00			22:48	37	06:39 (42)
17	09:13		08:07			06:50			06:22			05:06		06:12 (42)	04:27		06:03 (42)
	16:21		17:36			18:42			20:54			22:02	10	06:22 (42)	22:48	37	06:40 (42)
18	09:12		08:05			06:47			06:19			05:04		06:11 (42)	04:27		06:03 (42)
	16:24		17:38			18:45			20:56			22:04	14	06:25 (42)	22:49	37	06:40 (42)
19	09:10		08:02			06:44			06:16			05:02		06:09 (42)	04:27		06:03 (42)
	16:26		17:41			18:47			20:58			22:06	18	06:27 (42)	22:49	37	06:40 (42)
20	09:08		08:00			06:42			06:13			05:00		06:08 (42)	04:27		06:03 (42)
	16:28		17:43			18:49			21:00			22:08	20	06:28 (42)	22:50	37	06:40 (42)
21	09:07		07:57			06:39			06:11			04:58		06:06 (42)	04:27		06:03 (42)
	16:30		17:46			18:52			21:03			22:10	23	06:29 (42)	22:50	37	06:40 (42)
22	09:05		07:54			06:36			06:08			04:56		06:05 (42)	04:27		06:04 (42)
	16:32		17:48			18:54			21:05			22:12	25	06:30 (42)	22:50	37	06:41 (42)
23	09:03		07:52		08:21 (89)	06:33			06:05			04:55		06:03 (42)	04:28		06:04 (42)
	16:35		17:50	8	08:29 (89)	18:56			21:07			22:14	28	06:31 (42)	22:50	37	06:41 (42)
24	09:02		07:49		08:18 (89)	06:30			06:02			04:53		06:03 (42)	04:28		06:04 (42)
	16:37		17:53	12	08:30 (89)	18:58			21:10			22:16	29	06:32 (42)	22:50	37	06:41 (42)
25	09:00		07:46		08:17 (89)	06:27			06:00			04:51		06:02 (42)	04:28		06:05 (42)
	16:39		17:55	14	08:31 (89)	19:01			21:12			22:18	30	06:32 (42)	22:50	37	06:42 (42)
26	08:58		07:44		08:16 (89)	06:24			05:57			04:49		06:02 (42)	04:29		06:05 (42)
	16:42		17:58	15	08:31 (89)	19:03			21:14			22:20	31	06:33 (42)	22:50	36	06:41 (42)
27	08:56		07:41		08:15 (89)	06:21			05:54			04:48		06:01 (42)	04:29		06:05 (42)
	16:44		18:00	16	08:31 (89)	19:05			21:17			22:22	32	06:33 (42)	22:50	37	06:42 (42)
28	08:54		07:38		08:15 (89)	06:18			05:52			04:46		06:01 (42)	04:30		06:05 (42)
	16:47		18:02	15	08:30 (89)	19:08			21:19			22:24	33	06:34 (42)	22:50	37	06:42 (42)
29	08:52					07:16			05:49			04:44		06:01 (42)	04:31		06:05 (42)
	16:49					20:10			21:21			22:25	34	06:35 (42)	22:49	37	06:42 (42)
30	08:50					07:13			05:47			04:43		06:01 (42)	04:32		06:06 (42)
	16:51					20:12			21:24			22:27	34	06:35 (42)	22:49	37	06:43 (42)
31	08:48					07:10						04:41		06:01 (42)			
	16:54					20:14						22:29	34	06:35 (42)			
Potential sun hours	221		260			365			432			521			547		
Total, worst case				80			147						395			1094	
Sun reduction				0,50			0,50						0,50			0,50	
Oper. time red.				0,80			0,80						0,80			0,80	
Wind dir. red.				0,72			0,71						0,58			0,58	
Total reduction				0,29			0,28						0,23			0,23	
Total, real				23			42						91			252	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July			August	September			October			November	December
1	04:32		06:06 (42)	05:24	06:33			07:39		08:21 (88)	07:51	09:00
	22:48	37	06:43 (42)	22:01	20:40			19:13	14	08:35 (88)	16:49	15:52
2	04:33		06:07 (42)	05:27	06:35			07:42		08:20 (88)	07:54	09:01
	22:48	36	06:43 (42)	21:58	20:37			19:10	15	08:35 (88)	16:47	15:50
3	04:34		06:06 (42)	05:29	06:38			07:44		08:20 (88)	07:56	09:03
	22:47	37	06:43 (42)	21:56	20:34			19:07	13	08:33 (88)	16:44	15:49
4	04:35		06:06 (42)	05:31	06:40			07:46		08:21 (88)	07:59	09:05
	22:46	37	06:43 (42)	21:54	20:31			19:05	12	08:33 (88)	16:42	15:48
5	04:37		06:06 (42)	05:33	06:42			07:48		08:22 (88)	08:01	09:07
	22:46	37	06:43 (42)	21:51	20:28			19:02	9	08:31 (88)	16:39	15:47
6	04:38		06:08 (42)	05:35	06:44			07:51			08:03	09:09
	22:45	36	06:44 (42)	21:49	20:25			18:59			16:37	15:47
7	04:39		06:08 (42)	05:38	06:47			07:53			08:06	09:10
	22:44	36	06:44 (42)	21:47	20:23			18:56			16:35	15:46
8	04:40		06:08 (42)	05:40	06:49			07:55			08:08	09:12
	22:43	36	06:44 (42)	21:44	20:20			18:53			16:32	15:45
9	04:42		06:08 (42)	05:42	06:51			07:57			08:11	09:13
	22:42	36	06:44 (42)	21:42	20:17			18:50			16:30	15:44
10	04:43		06:08 (42)	05:44	06:53			08:00		08:54 (89)	08:13	09:15
	22:40	35	06:43 (42)	21:39	20:14			18:48	7	09:01 (89)	16:28	15:44
11	04:45		06:09 (42)	05:46	06:55			08:02		08:51 (89)	08:15	09:16
	22:39	35	06:44 (42)	21:37	20:11			18:45	11	09:02 (89)	16:26	15:43
12	04:46		06:09 (42)	05:49	06:58			08:04		08:49 (89)	08:18	09:17
	22:38	35	06:44 (42)	21:34	20:08			18:42	14	09:03 (89)	16:24	15:43
13	04:48		06:09 (42)	05:51	07:00			08:07		08:49 (89)	08:20	09:19
	22:36	34	06:43 (42)	21:31	20:05			18:39	15	09:04 (89)	16:22	15:43
14	04:49		06:10 (42)	05:53	07:02			08:09		08:48 (89)	08:22	09:20
	22:35	33	06:43 (42)	21:29	20:02			18:36	15	09:03 (89)	16:19	15:43
15	04:51		06:10 (42)	05:55	07:04			08:11		08:48 (89)	08:25	09:21
	22:34	33	06:43 (42)	21:26	19:59			18:34	16	09:04 (89)	16:17	15:42
16	04:53		06:11 (42)	05:58	07:06			08:14		08:48 (89)	08:27	09:22
	22:32	32	06:43 (42)	21:24	19:57			18:31	15	09:03 (89)	16:15	15:42
17	04:54		06:11 (42)	06:00	07:09			08:16		08:49 (89)	08:29	09:23
	22:30	31	06:42 (42)	21:21	19:54			18:28	13	09:02 (89)	16:14	15:42
18	04:56		06:12 (42)	06:02	07:11			08:18		08:50 (89)	08:32	09:24
	22:29	30	06:42 (42)	21:18	19:51			18:25	11	09:01 (89)	16:12	15:42
19	04:58		06:13 (42)	06:04	07:13			08:20		08:53 (89)	08:34	09:25
	22:27	29	06:42 (42)	21:16	19:48			18:23	6	08:59 (89)	16:10	15:43
20	05:00		06:13 (42)	06:07	07:15			08:23			08:36	09:25
	22:25	28	06:41 (42)	21:13	19:45			18:20			16:08	15:43
21	05:02		06:14 (42)	06:09	07:17			08:25			08:39	09:26
	22:23	27	06:41 (42)	21:10	19:42			18:17			16:06	15:43
22	05:04		06:16 (42)	06:11	07:20			08:28			08:41	09:27
	22:22	24	06:40 (42)	21:08	19:39			18:15			16:04	15:44
23	05:06		06:17 (42)	06:13	07:22			08:30			08:43	09:27
	22:20	21	06:38 (42)	21:05	19:36			18:12			16:03	15:44
24	05:08		06:18 (42)	06:15	07:24			08:32			08:45	09:28
	22:18	19	06:37 (42)	21:02	19:33			18:09			16:01	15:45
25	05:10		06:20 (42)	06:18	07:26			07:35			08:47	09:28
	22:16	16	06:36 (42)	20:59	19:30			17:07			16:00	15:46
26	05:12		06:22 (42)	06:20	07:28			07:37			08:49	09:28
	22:14	12	06:34 (42)	20:57	19:28			17:04			15:58	15:46
27	05:14		06:25 (42)	06:22	07:31		08:27 (88)	07:39			08:52	09:28
	22:12	6	06:31 (42)	20:54	19:25	5	08:32 (88)	17:02			15:57	15:47
28	05:16			06:24	07:33		08:24 (88)	07:42			08:54	09:28
	22:10			20:51	19:22	10	08:34 (88)	16:59			15:55	15:48
29	05:18			06:27	07:35		08:22 (88)	07:44			08:56	09:28
	22:07			20:48	19:19	12	08:34 (88)	16:56			15:54	15:49
30	05:20			06:29	07:37		08:21 (88)	07:47			08:58	09:28
	22:05			20:45	19:16	14	08:35 (88)	16:54			15:53	15:50
31	05:22			06:31				07:49				09:28
	22:03			20:43				16:51				15:51
Potential sun hours	545			478	386			319			236	200
Total, worst case		808				41			186			
Sun reduction		0,50				0,50			0,50			
Oper. time red.		0,80				0,80			0,80			
Wind dir. red.		0,58				0,70			0,72			
Total reduction		0,23				0,28			0,29			
Total, real		186				11			53			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February			March			April	May			June		
1	09:28	08:46			07:35		08:18 (89)	07:07	05:44			04:40		06:18 (42)
	15:53	16:56			18:05	13	08:31 (89)	20:17	21:26			22:30	28	06:46 (42)
2	09:27	08:43			07:33		08:19 (89)	07:04	05:42			04:39		06:18 (42)
	15:54	16:59			18:07	10	08:29 (89)	20:19	21:28			22:32	28	06:46 (42)
3	09:27	08:41			07:30		08:21 (89)	07:01	05:39			04:38		06:17 (42)
	15:56	17:01			18:10	5	08:26 (89)	20:21	21:31			22:33	29	06:46 (42)
4	09:26	08:39			07:27			06:58	05:37			04:36		06:16 (42)
	15:57	17:04			18:12			20:24	21:33			22:35	30	06:46 (42)
5	09:26	08:37			07:24			06:55	05:34			04:35		06:16 (42)
	15:59	17:06			18:14			20:26	21:35			22:36	31	06:47 (42)
6	09:25	08:34			07:21			06:53	05:32			04:34		06:15 (42)
	16:00	17:09			18:17			20:28	21:37			22:38	32	06:47 (42)
7	09:24	08:32			07:19		07:48 (88)	06:50	05:29			04:33		06:14 (42)
	16:02	17:11			18:19	6	07:54 (88)	20:31	21:40			22:39	32	06:46 (42)
8	09:24	08:30			07:16		07:46 (88)	06:47	05:27			04:32		06:13 (42)
	16:04	17:14			18:21	10	07:56 (88)	20:33	21:42			22:40	33	06:46 (42)
9	09:23	08:27			07:13		07:44 (88)	06:44	05:24			04:31		06:14 (42)
	16:06	17:16			18:24	13	07:57 (88)	20:35	21:44			22:41	33	06:47 (42)
10	09:22	08:25			07:10		07:44 (88)	06:41	05:22			04:31		06:13 (42)
	16:07	17:19			18:26	14	07:58 (88)	20:37	21:46			22:43	33	06:46 (42)
11	09:21	08:23			07:07		07:44 (88)	06:38	05:20			04:30		06:14 (42)
	16:09	17:21			18:28	14	07:58 (88)	20:40	21:49			22:44	33	06:47 (42)
12	09:20	08:20			07:04		07:44 (88)	06:36	05:17			04:29		06:14 (42)
	16:11	17:23			18:31	13	07:57 (88)	20:42	21:51			22:45	32	06:46 (42)
13	09:18	08:18			07:02		07:44 (88)	06:33	05:15			04:29		06:14 (42)
	16:13	17:26			18:33	12	07:56 (88)	20:44	21:53			22:46	33	06:47 (42)
14	09:17	08:15			06:59		07:45 (88)	06:30	05:13			04:28		06:15 (42)
	16:15	17:28			18:35	10	07:55 (88)	20:47	21:55			22:46	32	06:47 (42)
15	09:16	08:13			06:56		07:46 (88)	06:27	05:11			04:28		06:15 (42)
	16:17	17:31			18:38	6	07:52 (88)	20:49	21:57			22:47	32	06:47 (42)
16	09:14	08:10			06:53			06:24	05:09		06:39 (42)	04:28		06:15 (42)
	16:19	17:33			18:40			20:51	22:00	2	06:41 (42)	22:48	32	06:47 (42)
17	09:13	08:07			06:50			06:22	05:06		06:37 (42)	04:27		06:15 (42)
	16:21	17:36			18:42			20:54	22:02	4	06:41 (42)	22:48	32	06:47 (42)
18	09:12	08:05			06:47			06:19	05:04		06:36 (42)	04:27		06:16 (42)
	16:24	17:38			18:45			20:56	22:04	7	06:43 (42)	22:49	31	06:47 (42)
19	09:10	08:02			06:44			06:16	05:02		06:35 (42)	04:27		06:16 (42)
	16:26	17:41			18:47			20:58	22:06	8	06:43 (42)	22:49	31	06:47 (42)
20	09:08	08:00			06:42			06:13	05:00		06:33 (42)	04:27		06:16 (42)
	16:28	17:43			18:49			21:00	22:08	10	06:43 (42)	22:50	31	06:47 (42)
21	09:07	07:57			06:39			06:11	04:58		06:31 (42)	04:27		06:16 (42)
	16:30	17:46			18:52			21:03	22:10	12	06:43 (42)	22:50	31	06:47 (42)
22	09:05	07:54		08:23 (89)	06:36			06:08	04:56		06:30 (42)	04:27		06:17 (42)
	16:32	17:48	5	08:28 (89)	18:54			21:05	22:12	14	06:44 (42)	22:50	31	06:48 (42)
23	09:03	07:52		08:21 (89)	06:33			06:05	04:55		06:29 (42)	04:28		06:17 (42)
	16:35	17:50	10	08:31 (89)	18:56			21:07	22:14	15	06:44 (42)	22:50	31	06:48 (42)
24	09:02	07:49		08:18 (89)	06:30			06:02	04:53		06:28 (42)	04:28		06:17 (42)
	16:37	17:53	13	08:31 (89)	18:58			21:10	22:16	17	06:45 (42)	22:50	31	06:48 (42)
25	09:00	07:46		08:17 (89)	06:27			06:00	04:51		06:26 (42)	04:28		06:18 (42)
	16:39	17:55	15	08:32 (89)	19:01			21:12	22:18	19	06:45 (42)	22:50	31	06:49 (42)
26	08:58	07:44		08:17 (89)	06:24			05:57	04:49		06:25 (42)	04:29		06:17 (42)
	16:42	17:58	15	08:32 (89)	19:03			21:14	22:20	20	06:45 (42)	22:50	32	06:49 (42)
27	08:56	07:41		08:17 (89)	06:21			05:54	04:48		06:23 (42)	04:29		06:18 (42)
	16:44	18:00	14	08:31 (89)	19:05			21:17	22:22	22	06:45 (42)	22:50	32	06:50 (42)
28	08:54	07:38		08:17 (89)	06:18			05:52	04:46		06:23 (42)	04:30		06:17 (42)
	16:47	18:02	14	08:31 (89)	19:08			21:19	22:24	22	06:45 (42)	22:50	32	06:49 (42)
29	08:52				07:16			05:49	04:44		06:22 (42)	04:31		06:18 (42)
	16:49				20:10			21:21	22:25	24	06:46 (42)	22:49	32	06:50 (42)
30	08:50				07:13			05:47	04:43		06:21 (42)	04:32		06:18 (42)
	16:51				20:12			21:24	22:27	25	06:46 (42)	22:49	33	06:51 (42)
31	08:48				07:10				04:41		06:19 (42)			
	16:54				20:14				22:29	26	06:45 (42)			
Potential sun hours	221	260			365			432	521			547		
Total, worst case			86			126				247			944	
Sun reduction			0,50			0,50				0,50			0,50	
Oper. time red.			0,80			0,80				0,80			0,80	
Wind dir. red.			0,73			0,71				0,58			0,58	
Total reduction			0,29			0,28				0,23			0,23	
Total, real			25			36				58			220	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July			August		September			October			November	December
1	04:32		06:18 (42)	05:24		06:33			07:39		08:23 (88)	07:51	09:00
	22:48	33	06:51 (42)	22:01		20:40			19:13	13	08:36 (88)	16:49	15:52
2	04:33		06:19 (42)	05:27		06:35			07:42		08:22 (88)	07:54	09:01
	22:48	33	06:52 (42)	21:58		20:37			19:10	14	08:36 (88)	16:47	15:50
3	04:34		06:18 (42)	05:29		06:38			07:44		08:21 (88)	07:56	09:03
	22:47	33	06:51 (42)	21:56		20:34			19:07	14	08:35 (88)	16:44	15:49
4	04:35		06:18 (42)	05:31		06:40			07:46		08:22 (88)	07:59	09:05
	22:46	33	06:51 (42)	21:54		20:31			19:05	13	08:35 (88)	16:42	15:48
5	04:37		06:19 (42)	05:33		06:42			07:48		08:22 (88)	08:01	09:07
	22:46	33	06:52 (42)	21:51		20:28			19:02	12	08:34 (88)	16:39	15:47
6	04:38		06:21 (42)	05:35		06:44			07:51		08:23 (88)	08:03	09:09
	22:45	32	06:53 (42)	21:49		20:25			18:59	9	08:32 (88)	16:37	15:47
7	04:39		06:22 (42)	05:38		06:47			07:53			08:06	09:10
	22:44	31	06:53 (42)	21:47		20:23			18:56			16:35	15:46
8	04:40		06:23 (42)	05:40		06:49			07:55			08:08	09:12
	22:43	30	06:53 (42)	21:44		20:20			18:53			16:32	15:45
9	04:42		06:24 (42)	05:42		06:51			07:57			08:11	09:13
	22:42	29	06:53 (42)	21:42		20:17			18:50			16:30	15:44
10	04:43		06:25 (42)	05:44		06:53			08:00			08:13	09:15
	22:40	28	06:53 (42)	21:39		20:14			18:48			16:28	15:44
11	04:45		06:26 (42)	05:46		06:55			08:02		08:54 (89)	08:15	09:16
	22:39	28	06:54 (42)	21:37		20:11			18:45	7	09:01 (89)	16:26	15:43
12	04:46		06:27 (42)	05:49		06:58			08:04		08:51 (89)	08:18	09:17
	22:38	27	06:54 (42)	21:34		20:08			18:42	12	09:03 (89)	16:24	15:43
13	04:48		06:28 (42)	05:51		07:00			08:07		08:51 (89)	08:20	09:19
	22:36	26	06:54 (42)	21:32		20:05			18:39	13	09:04 (89)	16:22	15:43
14	04:49		06:30 (42)	05:53		07:02			08:09		08:49 (89)	08:22	09:20
	22:35	24	06:54 (42)	21:29		20:02			18:36	15	09:04 (89)	16:19	15:43
15	04:51		06:31 (42)	05:55		07:04			08:11		08:49 (89)	08:25	09:21
	22:34	23	06:54 (42)	21:26		19:59			18:34	15	09:04 (89)	16:17	15:42
16	04:53		06:33 (42)	05:58		07:06			08:14		08:49 (89)	08:27	09:22
	22:32	22	06:55 (42)	21:24		19:57			18:31	15	09:04 (89)	16:15	15:42
17	04:54		06:33 (42)	06:00		07:09			08:16		08:50 (89)	08:29	09:23
	22:30	21	06:54 (42)	21:21		19:54			18:28	14	09:04 (89)	16:14	15:42
18	04:56		06:35 (42)	06:02		07:11			08:18		08:50 (89)	08:32	09:24
	22:29	20	06:55 (42)	21:18		19:51			18:25	12	09:02 (89)	16:12	15:42
19	04:58		06:37 (42)	06:04		07:13			08:21		08:53 (89)	08:34	09:25
	22:27	18	06:55 (42)	21:16		19:48			18:23	8	09:01 (89)	16:10	15:43
20	05:00		06:38 (42)	06:07		07:15			08:23		08:55 (89)	08:36	09:25
	22:25	16	06:54 (42)	21:13		19:45			18:20	3	08:58 (89)	16:08	15:43
21	05:02		06:39 (42)	06:09		07:17			08:25			08:39	09:26
	22:23	15	06:54 (42)	21:10		19:42			18:17			16:06	15:43
22	05:04		06:41 (42)	06:11		07:20			08:28			08:41	09:27
	22:22	13	06:54 (42)	21:08		19:39			18:15			16:04	15:44
23	05:06		06:42 (42)	06:13		07:22			08:30			08:43	09:27
	22:20	11	06:53 (42)	21:05		19:36			18:12			16:03	15:44
24	05:08		06:44 (42)	06:15		07:24			08:32			08:45	09:28
	22:18	9	06:53 (42)	21:02		19:33			18:09			16:01	15:45
25	05:10		06:45 (42)	06:18		07:26			07:35			08:47	09:28
	22:16	8	06:53 (42)	20:59		19:30			17:07			16:00	15:46
26	05:12		06:47 (42)	06:20		07:28			07:37			08:49	09:28
	22:14	6	06:53 (42)	20:57		19:28			17:04			15:58	15:46
27	05:14		06:49 (42)	06:22		07:31			07:39			08:52	09:28
	22:12	3	06:52 (42)	20:54		19:25			17:02			15:57	15:47
28	05:16		06:51 (42)	06:24		07:33		08:29 (88)	07:42			08:54	09:28
	22:10	1	06:52 (42)	20:51		19:22	3	08:32 (88)	16:59			15:55	15:48
29	05:18			06:27		07:35		08:25 (88)	07:44			08:56	09:28
	22:07			20:48		19:19	9	08:34 (88)	16:56			15:54	15:49
30	05:20			06:29		07:37		08:23 (88)	07:47			08:58	09:28
	22:05			20:45		19:16	12	08:35 (88)	16:54			15:53	15:50
31	05:22			06:31					07:49				09:28
	22:03			20:43					16:51				15:51
Potential sun hours	545			478		386			319			236	200
Total, worst case		606					24			189			
Sun reduction		0,50					0,50			0,50			
Oper. time red.		0,80					0,80			0,80			
Wind dir. red.		0,58					0,70			0,72			
Total reduction		0,23					0,28			0,29			
Total, real		141					7			54			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February			March			April		May			June		
1	09:28	08:46			07:35		08:11 (88)	07:07		05:44		07:08 (42)	04:40		06:45 (42)
	15:53	16:56			18:05	6	08:17 (88)	20:17		21:26	1	07:09 (42)	22:30	32	07:17 (42)
2	09:27	08:43			07:33		08:08 (88)	07:04		05:42		07:06 (42)	04:39		06:46 (42)
	15:54	16:59			18:07	11	08:19 (88)	20:19		21:28	6	07:12 (42)	22:32	31	07:17 (42)
3	09:27	08:41			07:30		08:06 (88)	07:01		05:39		07:04 (42)	04:38		06:46 (42)
	15:56	17:01			18:10	13	08:19 (88)	20:21		21:31	9	07:13 (42)	22:33	31	07:17 (42)
4	09:26	08:39			07:27		08:05 (88)	06:58		05:37		07:02 (42)	04:36		06:47 (42)
	15:57	17:04			18:12	14	08:19 (88)	20:24		21:33	13	07:15 (42)	22:35	29	07:16 (42)
5	09:26	08:37			07:24		08:05 (88)	06:55		05:34		07:00 (42)	04:35		06:48 (42)
	15:59	17:06			18:14	14	08:19 (88)	20:26		21:35	16	07:16 (42)	22:36	29	07:17 (42)
6	09:25	08:34			07:21		08:05 (88)	06:53		05:32		06:58 (42)	04:34		06:49 (42)
	16:00	17:09			18:17	13	08:18 (88)	20:28		21:37	19	07:17 (42)	22:38	27	07:16 (42)
7	09:24	08:32			07:19		08:05 (88)	06:50		05:29		06:55 (42)	04:33		06:49 (42)
	16:02	17:11			18:19	12	08:17 (88)	20:31		21:40	22	07:17 (42)	22:39	27	07:16 (42)
8	09:24	08:30			07:16		08:06 (88)	06:47		05:27		06:54 (42)	04:32		06:49 (42)
	16:04	17:14			18:21	10	08:16 (88)	20:33		21:42	24	07:18 (42)	22:40	26	07:15 (42)
9	09:23	08:27			07:13		08:08 (88)	06:44		05:24		06:52 (42)	04:31		06:50 (42)
	16:06	17:16			18:24	5	08:13 (88)	20:35		21:44	27	07:19 (42)	22:42	26	07:16 (42)
10	09:22	08:25			07:10			06:41		05:22		06:50 (42)	04:31		06:51 (42)
	16:07	17:18			18:26			20:37		21:46	29	07:19 (42)	22:43	24	07:15 (42)
11	09:21	08:23			07:07			06:38		05:20		06:48 (42)	04:30		06:52 (42)
	16:09	17:21			18:28			20:40		21:49	32	07:20 (42)	22:44	23	07:15 (42)
12	09:20	08:20			07:04			06:36		05:17		06:46 (42)	04:29		06:52 (42)
	16:11	17:23			18:31			20:42		21:51	34	07:20 (42)	22:45	22	07:14 (42)
13	09:18	08:18			07:02			06:33		05:15		06:45 (42)	04:29		06:53 (42)
	16:13	17:26			18:33			20:44		21:53	35	07:20 (42)	22:46	21	07:14 (42)
14	09:17	08:15			06:59			06:30		05:13		06:43 (42)	04:28		06:53 (42)
	16:15	17:28			18:35			20:47		21:55	37	07:20 (42)	22:46	22	07:15 (42)
15	09:16	08:13		08:44 (89)	06:56			06:27		05:11		06:41 (42)	04:28		06:53 (42)
	16:17	17:31	6	08:50 (89)	18:38			20:49		21:57	39	07:20 (42)	22:47	21	07:14 (42)
16	09:14	08:10		08:42 (89)	06:53			06:24		05:09		06:41 (42)	04:28		06:54 (42)
	16:19	17:33	10	08:52 (89)	18:40			20:51		22:00	39	07:20 (42)	22:48	20	07:14 (42)
17	09:13	08:07		08:40 (89)	06:50			06:22		05:06		06:40 (42)	04:27		06:54 (42)
	16:21	17:36	13	08:53 (89)	18:42			20:54		22:02	40	07:20 (42)	22:48	20	07:14 (42)
18	09:12	08:05		08:40 (89)	06:47			06:19		05:04		06:41 (42)	04:27		06:55 (42)
	16:24	17:38	14	08:54 (89)	18:45			20:56		22:04	40	07:21 (42)	22:49	19	07:14 (42)
19	09:10	08:02		08:39 (89)	06:44			06:16		05:02		06:41 (42)	04:27		06:55 (42)
	16:26	17:41	15	08:54 (89)	18:47			20:58		22:06	40	07:21 (42)	22:49	19	07:14 (42)
20	09:08	08:00		08:39 (89)	06:42			06:13		05:00		06:41 (42)	04:27		06:55 (42)
	16:28	17:43	15	08:54 (89)	18:49			21:00		22:08	39	07:20 (42)	22:50	19	07:14 (42)
21	09:07	07:57		08:39 (89)	06:39			06:11		04:58		06:41 (42)	04:27		06:55 (42)
	16:30	17:46	14	08:53 (89)	18:52			21:03		22:10	39	07:20 (42)	22:50	19	07:14 (42)
22	09:05	07:54		08:39 (89)	06:36			06:08		04:56		06:41 (42)	04:27		06:56 (42)
	16:32	17:48	13	08:52 (89)	18:54			21:05		22:12	39	07:20 (42)	22:50	19	07:15 (42)
23	09:03	07:52		08:41 (89)	06:33			06:05		04:55		06:41 (42)	04:28		06:56 (42)
	16:35	17:50	11	08:52 (89)	18:56			21:07		22:14	39	07:20 (42)	22:50	19	07:15 (42)
24	09:02	07:49		08:42 (89)	06:30			06:02		04:53		06:42 (42)	04:28		06:56 (42)
	16:37	17:53	8	08:50 (89)	18:58			21:10		22:16	38	07:20 (42)	22:50	19	07:15 (42)
25	09:00	07:46			06:27			06:00		04:51		06:42 (42)	04:28		06:57 (42)
	16:39	17:55			19:01			21:12		22:18	37	07:19 (42)	22:50	19	07:16 (42)
26	08:58	07:44			06:24			05:57		04:49		06:43 (42)	04:29		06:56 (42)
	16:42	17:58			19:03			21:14		22:20	37	07:20 (42)	22:50	20	07:16 (42)
27	08:56	07:41			06:21			05:54		04:48		06:43 (42)	04:29		06:56 (42)
	16:44	18:00			19:05			21:17		22:22	36	07:19 (42)	22:50	21	07:17 (42)
28	08:54	07:38			06:18			05:52		04:46		06:43 (42)	04:30		06:56 (42)
	16:47	18:02			19:08			21:19		22:24	36	07:19 (42)	22:50	21	07:17 (42)
29	08:52				07:16			05:49		04:44		06:44 (42)	04:31		06:56 (42)
	16:49				20:10			21:21		22:25	35	07:19 (42)	22:49	21	07:17 (42)
30	08:50				07:13			05:47		04:43		06:45 (42)	04:32		06:56 (42)
	16:51				20:12			21:24		22:27	34	07:19 (42)	22:49	22	07:18 (42)
31	08:48				07:10					04:41		06:44 (42)			
	16:54				20:14					22:29	34	07:18 (42)			
Potential sun hours	221	260			365			432		521			547		
Total, worst case			119			98				945			688		
Sun reduction			0,50			0,50				0,50			0,50		
Oper. time red.			0,80			0,80				0,80			0,80		
Wind dir. red.			0,74			0,72				0,59			0,59		
Total reduction			0,29			0,29				0,24			0,24		
Total, real			35			28				224			163		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September	October		November	December
1	04:32	06:56 (42)	05:24	06:57 (42)	06:33	07:39		07:51	09:00
	22:48	23 07:19 (42)	22:01	33 07:30 (42)	20:40	19:13		16:49	15:52
2	04:33	06:56 (42)	05:27	06:59 (42)	06:35	07:42		07:54	09:01
	22:48	24 07:20 (42)	21:58	31 07:30 (42)	20:37	19:10		16:47	15:50
3	04:34	06:55 (42)	05:29	07:01 (42)	06:38	07:44		07:56	09:03
	22:47	25 07:20 (42)	21:56	28 07:29 (42)	20:34	19:07		16:44	15:49
4	04:35	06:55 (42)	05:31	07:03 (42)	06:40	07:46		07:59	09:05
	22:46	25 07:20 (42)	21:54	26 07:29 (42)	20:31	19:05		16:42	15:48
5	04:37	06:54 (42)	05:33	07:05 (42)	06:42	07:48	08:44 (88)	08:01	09:07
	22:46	27 07:21 (42)	21:51	23 07:28 (42)	20:28	19:02	8 08:52 (88)	16:39	15:47
6	04:38	06:55 (42)	05:35	07:06 (42)	06:44	07:51	08:42 (88)	08:03	09:09
	22:45	28 07:23 (42)	21:49	21 07:27 (42)	20:25	18:59	11 08:53 (88)	16:37	15:47
7	04:39	06:55 (42)	05:38	07:08 (42)	06:47	07:53	08:41 (88)	08:06	09:10
	22:44	28 07:23 (42)	21:47	18 07:26 (42)	20:23	18:56	13 08:54 (88)	16:35	15:46
8	04:40	06:54 (42)	05:40	07:10 (42)	06:49	07:55	08:40 (88)	08:08	09:12
	22:43	30 07:24 (42)	21:44	15 07:25 (42)	20:20	18:53	14 08:54 (88)	16:32	15:45
9	04:42	06:54 (42)	05:42	07:12 (42)	06:51	07:57	08:39 (88)	08:11	09:13
	22:42	30 07:24 (42)	21:42	12 07:24 (42)	20:17	18:50	15 08:54 (88)	16:30	15:44
10	04:43	06:53 (42)	05:44	07:13 (42)	06:53	08:00	08:40 (88)	08:13	09:15
	22:40	31 07:24 (42)	21:39	9 07:22 (42)	20:14	18:48	14 08:54 (88)	16:28	15:44
11	04:45	06:54 (42)	05:46	07:15 (42)	06:55	08:02	08:40 (88)	08:15	09:16
	22:39	32 07:26 (42)	21:37	5 07:20 (42)	20:11	18:45	13 08:53 (88)	16:26	15:43
12	04:46	06:53 (42)	05:49		06:58	08:04	08:42 (88)	08:18	09:17
	22:38	33 07:26 (42)	21:34		20:08	18:42	9 08:51 (88)	16:24	15:43
13	04:48	06:53 (42)	05:51		07:00	08:07	08:45 (88)	08:20	09:19
	22:36	33 07:26 (42)	21:32		20:05	18:39	4 08:49 (88)	16:22	15:43
14	04:49	06:53 (42)	05:53		07:02	08:09		08:22	09:20
	22:35	34 07:27 (42)	21:29		20:02	18:36		16:19	15:43
15	04:51	06:52 (42)	05:55		07:04	08:11		08:25	09:21
	22:34	35 07:27 (42)	21:26		19:59	18:34		16:17	15:42
16	04:53	06:52 (42)	05:58		07:06	08:14		08:27	09:22
	22:32	36 07:28 (42)	21:24		19:57	18:31		16:15	15:42
17	04:54	06:52 (42)	06:00		07:09	08:16	09:17 (89)	08:29	09:23
	22:30	36 07:28 (42)	21:21		19:54	18:28	2 09:19 (89)	16:13	15:42
18	04:56	06:52 (42)	06:02		07:11	08:18	09:13 (89)	08:32	09:24
	22:29	37 07:29 (42)	21:18		19:51	18:25	9 09:22 (89)	16:12	15:42
19	04:58	06:52 (42)	06:04		07:13	08:21	09:12 (89)	08:34	09:25
	22:27	38 07:30 (42)	21:16		19:48	18:23	12 09:24 (89)	16:10	15:43
20	05:00	06:51 (42)	06:07		07:15	08:23	09:10 (89)	08:36	09:25
	22:25	38 07:29 (42)	21:13		19:45	18:20	14 09:24 (89)	16:08	15:43
21	05:02	06:51 (42)	06:09		07:17	08:25	09:10 (89)	08:39	09:26
	22:23	39 07:30 (42)	21:10		19:42	18:17	15 09:25 (89)	16:06	15:43
22	05:04	06:52 (42)	06:11		07:19	08:28	09:09 (89)	08:41	09:27
	22:22	39 07:31 (42)	21:08		19:39	18:15	15 09:24 (89)	16:04	15:44
23	05:06	06:51 (42)	06:13		07:22	08:30	09:09 (89)	08:43	09:27
	22:20	39 07:30 (42)	21:05		19:36	18:12	15 09:24 (89)	16:03	15:44
24	05:08	06:51 (42)	06:15		07:24	08:32	09:09 (89)	08:45	09:28
	22:18	40 07:31 (42)	21:02		19:33	18:09	14 09:23 (89)	16:01	15:45
25	05:10	06:51 (42)	06:18		07:26	07:35	08:10 (89)	08:47	09:28
	22:16	40 07:31 (42)	20:59		19:30	17:07	13 08:23 (89)	16:00	15:46
26	05:12	06:51 (42)	06:20		07:28	07:37	08:13 (89)	08:49	09:28
	22:14	40 07:31 (42)	20:57		19:28	17:04	9 08:22 (89)	15:58	15:46
27	05:14	06:52 (42)	06:22		07:31	07:39	08:14 (89)	08:52	09:28
	22:12	39 07:31 (42)	20:54		19:25	17:02	5 08:19 (89)	15:57	15:47
28	05:16	06:52 (42)	06:24		07:33	07:42		08:54	09:28
	22:10	39 07:31 (42)	20:51		19:22	16:59		15:55	15:48
29	05:18	06:52 (42)	06:27		07:35	07:44		08:56	09:28
	22:07	38 07:30 (42)	20:48		19:19	16:56		15:54	15:49
30	05:20	06:54 (42)	06:29		07:37	07:47		08:58	09:28
	22:05	36 07:30 (42)	20:45		19:16	16:54		15:53	15:50
31	05:22	06:55 (42)	06:31			07:49			09:28
	22:03	35 07:30 (42)	20:43			16:51			15:51
Potential sun hours	545		478		386	319		236	200
Total, worst case		1047		221			224		
Sun reduction		0,50		0,50			0,50		
Oper. time red.		0,80		0,80			0,80		
Wind dir. red.		0,59		0,59			0,73		
Total reduction		0,24		0,24			0,29		
Total, real		248		52			65		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:24 (2)	08:46	10:12 (1)	07:35	08:22 (26)	07:07	05:44	04:40
	15:53	50 12:55 (4)	16:56	65 13:08 (4)	18:05	42 09:51 (3)	20:17	21:26	22:31
2	09:28	11:22 (2)	08:44	10:12 (1)	07:33	08:21 (26)	07:04	05:41	04:39
	15:54	54 12:56 (4)	16:59	63 13:07 (4)	18:07	37 09:47 (3)	20:19	21:28	22:32
3	09:27	11:20 (2)	08:41	10:13 (1)	07:30	08:21 (26)	07:01	05:39	04:37
	15:56	57 12:56 (4)	17:01	61 13:07 (4)	18:10	24 08:45 (26)	20:21	21:31	22:34
4	09:27	11:20 (2)	08:39	10:13 (1)	07:27	08:20 (26)	06:58	05:36	04:36
	15:57	58 12:57 (4)	17:04	57 13:05 (4)	18:12	25 08:45 (26)	20:24	21:33	22:35
5	09:26	11:20 (2)	08:37	10:14 (1)	07:24	08:20 (26)	06:55	05:34	04:35
	15:59	60 12:58 (4)	17:06	54 13:05 (4)	18:14	24 08:44 (26)	20:26	21:35	22:37
6	09:25	11:20 (2)	08:35	10:15 (1)	07:22	08:20 (26)	06:53	05:31	04:34
	16:00	61 12:58 (4)	17:09	49 13:03 (4)	18:17	24 08:44 (26)	20:28	21:38	22:38
7	09:25	11:20 (2)	08:32	09:40 (3)	07:19	08:20 (26)	06:50	05:29	04:33
	16:02	62 12:59 (4)	17:11	47 13:01 (4)	18:19	23 08:43 (26)	20:31	21:40	22:39
8	09:24	11:21 (2)	08:30	09:36 (3)	07:16	08:21 (26)	06:47	05:27	04:32
	16:04	63 13:00 (4)	17:13	49 12:59 (4)	18:21	20 08:41 (26)	20:33	21:42	22:41
9	09:23	11:21 (2)	08:28	09:21 (6)	07:13	08:22 (26)	06:44	05:24	04:31
	16:05	65 13:01 (4)	17:16	44 12:56 (4)	18:24	19 08:41 (26)	20:35	21:44	22:42
10	09:22	11:21 (2)	08:25	09:18 (6)	07:10	08:24 (26)	06:41	05:22	04:30
	16:07	65 13:01 (4)	17:18	32 09:54 (3)	18:26	15 08:39 (26)	20:38	21:47	22:43
11	09:21	11:21 (2)	08:23	09:16 (6)	07:07	08:26 (26)	06:38	05:20	04:30
	16:09	68 13:03 (4)	17:21	39 09:56 (3)	18:28	10 08:36 (26)	20:40	21:49	22:44
12	09:20	11:21 (2)	08:20	09:14 (6)	07:05		06:36	05:17	04:29
	16:11	68 13:03 (4)	17:23	42 09:56 (3)	18:31		20:42	21:51	22:45
13	09:19	11:22 (2)	08:18	09:13 (6)	07:02		06:33	05:15	04:29
	16:13	68 13:04 (4)	17:26	44 09:57 (3)	18:33		20:44	21:53	22:46
14	09:17	11:22 (2)	08:15	09:13 (6)	06:59	07:37 (28)	06:30	05:13	04:28
	16:15	68 13:04 (4)	17:28	46 09:59 (3)	18:35	4 07:41 (28)	20:47	21:55	22:47
15	09:16	11:22 (2)	08:13	09:13 (6)	06:56	07:33 (28)	06:27	05:11	04:28
	16:17	70 13:05 (4)	17:31	46 09:59 (3)	18:38	11 07:44 (28)	20:49	21:58	22:47
16	09:15	11:22 (2)	08:10	09:12 (6)	06:53	07:31 (28)	06:24	05:08	04:27
	16:19	71 13:05 (4)	17:33	47 09:59 (3)	18:40	15 07:46 (28)	20:51	22:00	22:48
17	09:13	11:23 (2)	08:08	09:13 (6)	06:50	07:30 (28)	06:22	05:06	04:27
	16:21	71 13:06 (4)	17:36	47 10:00 (3)	18:42	16 07:46 (28)	20:54	22:02	22:49
18	09:12	11:23 (2)	08:05	09:13 (6)	06:47	07:29 (28)	06:19	05:04	04:27
	16:23	72 13:07 (4)	17:38	47 10:00 (3)	18:45	18 07:47 (28)	20:56	22:04	22:49
19	09:10	11:24 (2)	08:02	09:14 (6)	06:44	07:28 (28)	06:16	05:02	04:27
	16:26	70 13:07 (4)	17:41	46 10:00 (3)	18:47	19 07:47 (28)	20:58	22:06	22:50
20	09:09	11:24 (2)	08:00	09:14 (6)	06:42	07:27 (28)	06:13	05:00	04:27
	16:28	71 13:08 (4)	17:43	46 10:00 (3)	18:49	19 07:46 (28)	21:01	22:08	22:50
21	09:07	11:25 (2)	07:57	09:15 (6)	06:39	07:28 (28)	06:11	04:58	04:27
	16:30	70 13:08 (4)	17:46	44 09:59 (3)	18:52	19 07:47 (28)	21:03	22:10	22:50
22	09:05	11:25 (2)	07:54	09:19 (6)	06:36	07:28 (28)	06:08	04:56	04:27
	16:32	70 13:08 (4)	17:48	40 10:00 (3)	18:54	18 07:46 (28)	21:05	22:12	22:50
23	09:04	11:25 (2)	07:52	09:26 (3)	06:33	07:28 (28)	06:05	04:54	04:27
	16:35	69 13:08 (4)	17:50	33 09:59 (3)	18:56	17 07:45 (28)	21:08	22:14	22:51
24	09:02	11:26 (2)	07:49	08:32 (26)	06:30	07:29 (28)	06:02	04:53	04:28
	16:37	68 13:08 (4)	17:53	35 09:58 (3)	18:59	14 07:43 (28)	21:10	22:16	22:51
25	09:00	10:27 (1)	07:46	08:28 (26)	06:27	07:31 (28)	06:00	04:51	04:28
	16:39	72 13:09 (4)	17:55	42 09:57 (3)	19:01	10 07:41 (28)	21:12	22:18	22:51
26	08:58	10:23 (1)	07:44	08:25 (26)	06:24		05:57	04:49	04:29
	16:42	74 13:09 (4)	17:58	45 09:56 (3)	19:03		21:14	22:20	22:50
27	08:56	10:20 (1)	07:41	08:23 (26)	06:21		05:54	04:47	04:29
	16:44	75 13:09 (4)	18:00	45 09:54 (3)	19:05		21:17	22:22	22:50
28	08:54	10:15 (1)	07:38	08:23 (26)	06:18		05:52	04:46	04:30
	16:46	76 13:08 (4)	18:02	44 09:53 (3)	19:08		21:19	22:24	22:50
29	08:52	10:11 (1)			07:16		05:49	04:44	04:31
	16:49	73 13:09 (4)			20:10		21:21	22:26	22:50
30	08:50	10:11 (1)			07:13		05:47	04:43	04:31
	16:51	67 13:08 (4)			20:12		21:24	22:27	22:49
31	08:48	10:11 (1)			07:10			04:41	
	16:54	67 13:08 (4)			20:15			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case		2073		1299		443			
Sun reduction		0,50		0,50		0,50			
Oper. time red.		0,80		0,80		0,80			
Wind dir. red.		0,64		0,71		0,71			
Total reduction		0,26		0,28		0,29			
Total, real		532		366		126			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December	
1	04:32	05:24	06:33		07:40		07:52	08:47 (6)	09:00	11:03 (2)
	22:49	22:01	20:40		19:13		16:49 36	12:20 (4)	15:51 67	12:45 (4)
2	04:33	05:26	06:35		07:42	09:06 (26)	07:54	09:03 (3)	09:02	11:04 (2)
	22:48	21:59	20:37		19:10 6	09:12 (26)	16:46 43	12:26 (4)	15:50 66	12:45 (4)
3	04:34	05:29	06:38		07:44	09:02 (26)	07:56	09:06 (3)	09:04	11:04 (2)
	22:47	21:56	20:34		19:07 13	09:15 (26)	16:44 50	12:29 (4)	15:49 64	12:44 (4)
4	04:35	05:31	06:40		07:46	09:00 (26)	07:59	09:46 (1)	09:05	11:05 (2)
	22:47	21:54	20:31		19:05 17	09:17 (26)	16:42 44	12:32 (4)	15:48 63	12:44 (4)
5	04:36	05:33	06:42		07:48	08:58 (26)	08:01	09:44 (1)	09:07	11:05 (2)
	22:46	21:52	20:28		19:02 20	09:18 (26)	16:39 51	12:33 (4)	15:47 62	12:44 (4)
6	04:38	05:35	06:44		07:51	08:57 (26)	08:04	09:44 (1)	09:09	11:06 (2)
	22:45	21:49	20:26		18:59 22	09:19 (26)	16:37 55	12:35 (4)	15:46 61	12:45 (4)
7	04:39	05:37	06:47		07:53	08:57 (26)	08:06	09:44 (1)	09:10	11:07 (2)
	22:44	21:47	20:23		18:56 23	09:20 (26)	16:35 58	12:36 (4)	15:46 60	12:45 (4)
8	04:40	05:40	06:49		07:55	08:55 (26)	08:08	09:43 (1)	09:12	11:08 (2)
	22:43	21:44	20:20		18:53 24	09:19 (26)	16:32 60	12:36 (4)	15:45 58	12:45 (4)
9	04:41	05:42	06:51		07:58	08:55 (26)	08:11	09:43 (1)	09:14	11:09 (2)
	22:42	21:42	20:17		18:50 24	09:19 (26)	16:30 64	12:38 (4)	15:44 57	12:45 (4)
10	04:43	05:44	06:53		08:00	08:55 (26)	08:13	09:43 (1)	09:15	11:11 (2)
	22:41	21:39	20:14		18:48 24	09:19 (26)	16:28 65	12:39 (4)	15:44 54	12:45 (4)
11	04:44	05:46	06:55		08:02	08:54 (26)	08:16	09:42 (1)	09:16	11:14 (2)
	22:39	21:37	20:11		18:45 32	10:18 (3)	16:26 67	12:39 (4)	15:43 51	12:45 (4)
12	04:46	05:49	06:58		08:04	08:55 (26)	08:18	09:43 (1)	09:18	11:15 (2)
	22:38	21:34	20:08		18:42 39	10:23 (3)	16:24 67	12:40 (4)	15:43 48	12:45 (4)
13	04:48	05:51	07:00		08:07	08:55 (26)	08:20	09:43 (1)	09:19	11:18 (2)
	22:37	21:32	20:05		18:39 43	10:25 (3)	16:21 73	12:41 (4)	15:43 46	12:46 (4)
14	04:49	05:53	07:02		08:09	08:55 (26)	08:23	09:48 (1)	09:20	11:20 (2)
	22:35	21:29	20:02		18:36 46	10:26 (3)	16:19 75	12:41 (4)	15:42 44	12:46 (4)
15	04:51	05:55	07:04		08:11	08:57 (26)	08:25	09:52 (1)	09:21	11:21 (2)
	22:34	21:26	20:00		18:34 46	10:28 (3)	16:17 75	12:41 (4)	15:42 42	12:46 (4)
16	04:53	05:58	07:06		08:14	08:58 (26)	08:27	09:56 (1)	09:22	11:22 (2)
	22:32	21:24	19:57		18:31 44	10:28 (3)	16:15 74	12:42 (4)	15:42 41	12:46 (4)
17	04:54	06:00	07:09		08:16	09:01 (26)	08:30	10:01 (1)	09:23	11:24 (2)
	22:31	21:21	19:54		18:28 41	10:29 (3)	16:13 71	12:42 (4)	15:42 38	12:46 (4)
18	04:56	06:02	07:11	08:19 (28)	08:18	09:57 (3)	08:32	11:00 (2)	09:24	11:25 (2)
	22:29	21:19	19:51 9	08:28 (28)	18:25 32	10:29 (3)	16:11 68	12:42 (4)	15:42 37	12:47 (4)
19	04:58	06:04	07:13	08:16 (28)	08:21	09:57 (3)	08:34	11:00 (2)	09:25	11:27 (2)
	22:27	21:16	19:48 13	08:29 (28)	18:23 33	10:30 (3)	16:10 69	12:43 (4)	15:43 36	12:47 (4)
20	05:00	06:06	07:15	08:14 (28)	08:23	09:48 (6)	08:37	11:00 (2)	09:26	11:28 (2)
	22:25	21:13	19:45 16	08:30 (28)	18:20 42	10:30 (3)	16:08 70	12:43 (4)	15:43 35	12:48 (4)
21	05:02	06:09	07:17	08:14 (28)	08:25	09:46 (6)	08:39	11:00 (2)	09:26	11:28 (2)
	22:24	21:10	19:42 17	08:31 (28)	18:17 45	10:31 (3)	16:06 70	12:43 (4)	15:43 35	12:48 (4)
22	05:04	06:11	07:20	08:13 (28)	08:28	09:44 (6)	08:41	11:00 (2)	09:27	11:29 (2)
	22:22	21:08	19:39 18	08:31 (28)	18:15 46	10:30 (3)	16:04 71	12:44 (4)	15:44 35	12:49 (4)
23	05:06	06:13	07:22	08:12 (28)	08:30	09:44 (6)	08:43	11:00 (2)	09:27	11:29 (2)
	22:20	21:05	19:36 19	08:31 (28)	18:12 46	10:30 (3)	16:03 70	12:43 (4)	15:44 35	12:49 (4)
24	05:08	06:15	07:24	08:12 (28)	08:32	09:42 (6)	08:45	11:00 (2)	09:28	11:30 (2)
	22:18	21:02	19:33 19	08:31 (28)	18:09 47	10:29 (3)	16:01 72	12:44 (4)	15:45 35	12:50 (4)
25	05:10	06:18	07:26	08:11 (28)	07:35	08:42 (6)	08:48	11:00 (2)	09:28	11:29 (2)
	22:16	20:59	19:31 19	08:30 (28)	17:07 47	09:29 (3)	15:59 71	12:43 (4)	15:45 36	12:50 (4)
26	05:12	06:20	07:28	08:12 (28)	07:37	08:43 (6)	08:50	11:01 (2)	09:28	11:29 (2)
	22:14	20:57	19:28 17	08:29 (28)	17:04 46	09:29 (3)	15:58 71	12:44 (4)	15:46 37	12:51 (4)
27	05:14	06:22	07:31	08:13 (28)	07:40	08:42 (6)	08:52	11:01 (2)	09:28	11:29 (2)
	22:12	20:54	19:25 15	08:28 (28)	17:02 46	09:28 (3)	15:57 71	12:44 (4)	15:47 39	12:52 (4)
28	05:16	06:24	07:33	08:14 (28)	07:42	08:43 (6)	08:54	11:02 (2)	09:29	11:28 (2)
	22:10	20:51	19:22 12	08:26 (28)	16:59 45	09:28 (3)	15:55 68	12:44 (4)	15:48 40	12:52 (4)
29	05:18	06:27	07:35	08:15 (28)	07:44	08:44 (6)	08:56	11:02 (2)	09:29	11:27 (2)
	22:08	20:48	19:19 8	08:23 (28)	16:56 43	09:27 (3)	15:54 68	12:44 (4)	15:49 42	12:52 (4)
30	05:20	06:29	07:37		07:47	08:44 (6)	08:58	11:02 (2)	09:28	11:26 (2)
	22:05	20:45	19:16		16:54 42	09:26 (3)	15:53 68	12:44 (4)	15:50 44	12:53 (4)
31	05:22	06:31			07:49	08:45 (6)			09:28	11:25 (2)
	22:03	20:43			16:51 38	09:25 (3)			15:51 48	12:54 (4)
Potential sun hours	545	478	386		319		236		200	
Total, worst case			182		1062		1935		1456	
Sun reduction			0,50		0,50		0,50		0,50	
Oper. time red.			0,80		0,80		0,80		0,80	
Wind dir. red.			0,70		0,73		0,65		0,63	
Total reduction			0,28		0,29		0,26		0,25	
Total, real			51		310		503		369	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		07:34 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33	5	07:39 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		07:30 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36	12	07:42 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56		07:28 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38	15	07:43 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:17	15:42
16	09:15	08:10	06:53		07:26 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40	18	07:44 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:16	15:42
17	09:13	08:08	06:50		07:25 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	08:30	09:23
	16:21	17:36	18:43	19	07:44 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28	16:14	15:42
18	09:12	08:05	06:47		07:24 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:16 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	20	07:44 (4)	20:56	22:04	22:49	22:29	21:19	19:51	8 08:24 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45		07:24 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:13 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	20	07:44 (4)	20:58	22:06	22:50	22:27	21:16	19:48	13 08:26 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42		07:25 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:11 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	20	07:45 (4)	21:01	22:08	22:50	22:26	21:13	19:45	16 08:27 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39		07:25 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:11 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	19	07:44 (4)	21:03	22:10	22:50	22:24	21:11	19:42	17 08:28 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36		07:25 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:09 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	18	07:43 (4)	21:05	22:12	22:51	22:22	21:08	19:39	20 08:29 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33		07:25 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:08 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	17	07:42 (4)	21:08	22:14	22:51	22:20	21:05	19:36	20 08:28 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30		07:26 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:08 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	14	07:40 (4)	21:10	22:16	22:51	22:18	21:02	19:34	20 08:28 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27		07:28 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:07 (4)	07:35	08:48	09:28
	16:39	17:55	19:01	9	07:37 (4)	21:12	22:18	22:51	22:16	21:00	19:31	20 08:27 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20	07:29	08:08 (4)	07:37	08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57	19:28	19 08:27 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:08 (4)	07:40	08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54	19:25	18 08:26 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:08 (4)	07:42	08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51	19:22	17 08:25 (4)	16:59	15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:09 (4)	07:44	08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48	19:19	14 08:23 (4)	16:57	15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:13 (4)	07:47	08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46	19:16	8 08:21 (4)	16:54	15:53	15:50
31	08:48		07:10				04:41		05:22	06:31			07:49		09:28
	16:54		20:15				22:29		22:03	20:43			16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				206							210			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,70							0,70			
Total reduction				0,28							0,28			
Total, real				57							58			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:37	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33		20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36		20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56	07:25 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38 10	07:35 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:18	15:42
16	09:15	08:10	06:53	07:23 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40 13	07:36 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:16	15:42
17	09:13	08:08	06:50	07:21 (4)	06:22	05:06	04:27	04:54	06:00	07:09	08:13 (4)	08:16	08:30	09:23
	16:21	17:36	18:43 16	07:37 (4)	20:54	22:02	22:49	22:31	21:21	19:54 4	08:17 (4)	18:28	16:14	15:42
18	09:12	08:05	06:47	07:20 (4)	06:19	05:04	04:27	04:56	06:02	07:11	08:09 (4)	08:18	08:32	09:24
	16:24	17:38	18:45 18	07:38 (4)	20:56	22:04	22:49	22:29	21:19	19:51 11	08:20 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45	07:19 (4)	06:16	05:02	04:27	04:58	06:04	07:13	08:07 (4)	08:21	08:34	09:25
	16:26	17:41	18:47 19	07:38 (4)	20:58	22:06	22:50	22:27	21:16	19:48 14	08:21 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:19 (4)	06:13	05:00	04:27	05:00	06:07	07:15	08:05 (4)	08:23	08:37	09:26
	16:28	17:43	18:49 20	07:39 (4)	21:01	22:08	22:50	22:26	21:13	19:45 17	08:22 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:19 (4)	06:11	04:58	04:27	05:02	06:09	07:17	08:05 (4)	08:25	08:39	09:26
	16:30	17:46	18:52 19	07:38 (4)	21:03	22:10	22:50	22:24	21:11	19:42 18	08:23 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36	07:19 (4)	06:08	04:56	04:27	05:04	06:11	07:20	08:04 (4)	08:28	08:41	09:27
	16:33	17:48	18:54 18	07:37 (4)	21:05	22:12	22:51	22:22	21:08	19:39 19	08:23 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:19 (4)	06:05	04:55	04:28	05:06	06:13	07:22	08:03 (4)	08:30	08:43	09:27
	16:35	17:51	18:56 17	07:36 (4)	21:08	22:14	22:51	22:20	21:05	19:36 19	08:22 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30	07:20 (4)	06:03	04:53	04:28	05:08	06:16	07:24	08:03 (4)	08:32	08:46	09:28
	16:37	17:53	18:59 15	07:35 (4)	21:10	22:16	22:51	22:18	21:02	19:34 19	08:22 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27	07:21 (4)	06:00	04:51	04:28	05:10	06:18	07:26	08:02 (4)	07:35	08:48	09:28
	16:40	17:55	19:01 12	07:33 (4)	21:12	22:18	22:51	22:16	21:00	19:31 19	08:21 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24	07:23 (4)	05:57	04:49	04:29	05:12	06:20	07:29	08:04 (4)	07:37	08:50	09:28
	16:42	17:58	19:03 7	07:30 (4)	21:15	22:20	22:51	22:14	20:57	19:28 16	08:20 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21		05:55	04:48	04:29	05:14	06:22	07:31	08:04 (4)	07:40	08:52	09:29
	16:44	18:00	19:06		21:17	22:22	22:50	22:12	20:54	19:25 15	08:19 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19		05:52	04:46	04:30	05:16	06:25	07:33	08:05 (4)	07:42	08:54	09:29
	16:47	18:03	19:08		21:19	22:24	22:50	22:10	20:51	19:22 11	08:16 (4)	16:59	15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35	08:08 (4)	07:44	08:56	09:29
	16:49		20:10		21:22	22:26	22:50	22:08	20:48	19:19 4	08:12 (4)	16:57	15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37		07:47	08:58	09:29
	16:51		20:12		21:24	22:27	22:49	22:06	20:46	19:16		16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31			07:49		09:28
	16:54		20:15			22:29		22:03	20:43			16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				184							186			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,69							0,69			
Total reduction				0,28							0,28			
Total, real				51							51			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:17 (2)	08:46	10:11 (1)	07:35	08:24 (26)	07:07	05:44	04:40
	15:53 54	12:46 (4)	16:56 61	12:57 (4)	18:05 32	09:46 (3)	20:17	21:26	22:31
2	09:28	11:17 (2)	08:44	10:11 (1)	07:33	08:23 (26)	07:04	05:41	04:39
	15:54 54	12:46 (4)	16:59 58	12:56 (4)	18:07 24	08:47 (26)	20:19	21:28	22:32
3	09:27	11:17 (2)	08:41	10:12 (1)	07:30	08:23 (26)	07:01	05:39	04:37
	15:56 56	12:47 (4)	17:01 55	12:55 (4)	18:10 24	08:47 (26)	20:21	21:31	22:34
4	09:27	11:17 (2)	08:39	10:12 (1)	07:27	08:23 (26)	06:58	05:36	04:36
	15:57 57	12:48 (4)	17:04 52	12:54 (4)	18:12 23	08:46 (26)	20:24	21:33	22:35
5	09:26	11:17 (2)	08:37	10:14 (1)	07:24	08:23 (26)	06:55	05:34	04:35
	15:59 58	12:48 (4)	17:06 46	12:53 (4)	18:14 22	08:45 (26)	20:26	21:35	22:37
6	09:25	11:17 (2)	08:35	10:14 (1)	07:22	08:23 (26)	06:53	05:31	04:34
	16:00 59	12:49 (4)	17:09 41	12:50 (4)	18:17 22	08:45 (26)	20:28	21:38	22:38
7	09:25	11:17 (2)	08:32	09:37 (3)	07:19	08:24 (26)	06:50	05:29	04:33
	16:02 61	12:50 (4)	17:11 43	12:47 (4)	18:19 19	08:43 (26)	20:31	21:40	22:39
8	09:24	11:17 (2)	08:30	09:35 (3)	07:16	08:24 (26)	06:47	05:27	04:32
	16:04 63	12:51 (4)	17:13 36	12:44 (4)	18:21 18	08:42 (26)	20:33	21:42	22:41
9	09:23	11:18 (2)	08:28	09:32 (3)	07:13	08:27 (26)	06:44	05:24	04:31
	16:05 63	12:52 (4)	17:16 21	09:53 (3)	18:24 13	08:40 (26)	20:35	21:44	22:42
10	09:22	11:17 (2)	08:25	09:31 (3)	07:10	08:30 (26)	06:41	05:22	04:30
	16:07 65	12:52 (4)	17:18 24	09:55 (3)	18:26 7	08:37 (26)	20:38	21:47	22:43
11	09:21	11:18 (2)	08:23	09:30 (3)	07:07		06:38	05:20	04:30
	16:09 65	12:53 (4)	17:21 26	09:56 (3)	18:28		20:40	21:49	22:44
12	09:20	11:18 (2)	08:20	09:29 (3)	07:05		06:36	05:17	04:29
	16:11 66	12:53 (4)	17:23 28	09:57 (3)	18:31		20:42	21:51	22:45
13	09:19	11:18 (2)	08:18	09:28 (3)	07:02	07:40 (28)	06:33	05:15	04:29
	16:13 67	12:54 (4)	17:26 29	09:57 (3)	18:33 5	07:45 (28)	20:44	21:53	22:46
14	09:17	11:18 (2)	08:15	09:28 (3)	06:59	07:36 (28)	06:30	05:13	04:28
	16:15 68	12:55 (4)	17:28 31	09:59 (3)	18:35 11	07:47 (28)	20:47	21:55	22:47
15	09:16	11:18 (2)	08:13	09:27 (3)	06:56	07:34 (28)	06:27	05:11	04:28
	16:17 69	12:55 (4)	17:31 32	09:59 (3)	18:38 15	07:49 (28)	20:49	21:58	22:47
16	09:15	11:19 (2)	08:10	09:26 (3)	06:53	07:33 (28)	06:24	05:08	04:27
	16:19 68	12:55 (4)	17:33 33	09:59 (3)	18:40 16	07:49 (28)	20:51	22:00	22:48
17	09:13	11:20 (2)	08:08	09:27 (3)	06:50	07:32 (28)	06:22	05:06	04:27
	16:21 69	12:57 (4)	17:36 33	10:00 (3)	18:42 18	07:50 (28)	20:54	22:02	22:49
18	09:12	11:20 (2)	08:05	09:26 (3)	06:47	07:31 (28)	06:19	05:04	04:27
	16:23 69	12:57 (4)	17:38 34	10:00 (3)	18:45 19	07:50 (28)	20:56	22:04	22:49
19	09:10	11:20 (2)	08:02	09:26 (3)	06:44	07:31 (28)	06:16	05:02	04:27
	16:26 69	12:57 (4)	17:41 33	09:59 (3)	18:47 18	07:49 (28)	20:58	22:06	22:50
20	09:09	11:21 (2)	08:00	09:26 (3)	06:42	07:30 (28)	06:13	05:00	04:27
	16:28 69	12:58 (4)	17:43 33	09:59 (3)	18:49 19	07:49 (28)	21:01	22:08	22:50
21	09:07	11:22 (2)	07:57	09:26 (3)	06:39	07:32 (28)	06:11	04:58	04:27
	16:30 67	12:58 (4)	17:46 32	09:58 (3)	18:52 17	07:49 (28)	21:03	22:10	22:50
22	09:05	11:22 (2)	07:54	09:27 (3)	06:36	07:32 (28)	06:08	04:56	04:27
	16:32 67	12:58 (4)	17:48 32	09:59 (3)	18:54 15	07:47 (28)	21:05	22:12	22:50
23	09:04	11:22 (2)	07:52	09:27 (3)	06:33	07:33 (28)	06:05	04:54	04:27
	16:35 66	12:58 (4)	17:50 31	09:58 (3)	18:56 13	07:46 (28)	21:08	22:14	22:51
24	09:02	10:25 (1)	07:49	08:30 (26)	06:30	07:35 (28)	06:02	04:53	04:28
	16:37 70	12:58 (4)	17:53 41	09:57 (3)	18:59 8	07:43 (28)	21:10	22:16	22:51
25	09:00	10:21 (1)	07:46	08:28 (26)	06:27		06:00	04:51	04:28
	16:39 72	12:58 (4)	17:55 42	09:55 (3)	19:01		21:12	22:18	22:51
26	08:58	10:18 (1)	07:44	08:26 (26)	06:24		05:57	04:49	04:29
	16:42 74	12:59 (4)	17:58 44	09:54 (3)	19:03		21:14	22:20	22:50
27	08:56	10:14 (1)	07:41	08:25 (26)	06:21		05:54	04:47	04:29
	16:44 76	12:59 (4)	18:00 41	09:52 (3)	19:05		21:17	22:22	22:50
28	08:54	10:10 (1)	07:38	08:25 (26)	06:18		05:52	04:46	04:30
	16:46 74	12:58 (4)	18:02 38	09:50 (3)	19:08		21:19	22:24	22:50
29	08:52	10:10 (1)			07:16		05:49	04:44	04:31
	16:49 65	12:58 (4)			20:10		21:21	22:26	22:50
30	08:50	10:10 (1)			07:13		05:47	04:43	04:31
	16:51 63	12:57 (4)			20:12		21:24	22:27	22:49
31	08:48	10:11 (1)			07:10			04:41	
	16:54 61	12:57 (4)			20:15			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	2024		1050		378				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,65		0,71		0,71				
Total reduction	0,26		0,28		0,29				
Total, real	524		297		108				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December	
1	04:32	05:24	06:33		07:40		07:52		09:00 (3)	09:00		11:00 (2)
	22:49	22:01	20:40		19:13		16:49	23	09:23 (3)	15:51	65	12:35 (4)
2	04:33	05:26	06:35		07:42		07:54		09:02 (3)	09:02		11:00 (2)
	22:48	21:59	20:37		19:10		16:46	23	09:54 (1)	15:50	65	12:35 (4)
3	04:34	05:29	06:38		07:44		07:56		09:05 (3)	09:04		11:01 (2)
	22:47	21:56	20:34		19:07		16:44	38	12:14 (4)	15:49	63	12:35 (4)
4	04:35	05:31	06:40		07:46		09:05 (26)	07:59		09:08 (3)	09:05		11:01 (2)
	22:47	21:54	20:31		19:05	11	09:16 (26)	16:42	44	12:19 (4)	15:48	63	12:35 (4)
5	04:36	05:33	06:42		07:48		09:02 (26)	08:01		09:44 (1)	09:07		11:02 (2)
	22:46	21:52	20:28		19:02	16	09:18 (26)	16:39	42	12:20 (4)	15:47	61	12:35 (4)
6	04:38	05:35	06:44		07:51		09:00 (26)	08:04		09:43 (1)	09:09		11:03 (2)
	22:45	21:49	20:26		18:59	19	09:19 (26)	16:37	48	12:23 (4)	15:46	59	12:35 (4)
7	04:39	05:37	06:47		07:53		09:00 (26)	08:06		09:43 (1)	09:10		11:04 (2)
	22:44	21:47	20:23		18:56	20	09:20 (26)	16:35	51	12:24 (4)	15:46	58	12:35 (4)
8	04:40	05:40	06:49		07:55		08:58 (26)	08:08		09:42 (1)	09:12		11:05 (2)
	22:43	21:44	20:20		18:53	23	09:21 (26)	16:32	55	12:25 (4)	15:45	58	12:36 (4)
9	04:41	05:42	06:51		07:58		08:57 (26)	08:11		09:42 (1)	09:14		11:06 (2)
	22:42	21:42	20:17		18:50	23	09:20 (26)	16:30	59	12:27 (4)	15:44	56	12:36 (4)
10	04:43	05:44	06:53		08:00		08:57 (26)	08:13		09:42 (1)	09:15		11:06 (2)
	22:41	21:39	20:14		18:48	24	09:21 (26)	16:28	60	12:28 (4)	15:44	55	12:36 (4)
11	04:44	05:46	06:55		08:02		08:57 (26)	08:16		09:41 (1)	09:16		11:07 (2)
	22:39	21:37	20:11		18:45	23	09:20 (26)	16:26	62	12:28 (4)	15:43	54	12:36 (4)
12	04:46	05:49	06:58		08:04		08:57 (26)	08:18		09:42 (1)	09:18		11:07 (2)
	22:38	21:34	20:08		18:42	24	09:21 (26)	16:24	63	12:29 (4)	15:43	52	12:36 (4)
13	04:48	05:51	07:00		08:07		08:57 (26)	08:20		09:42 (1)	09:19		11:10 (2)
	22:37	21:32	20:05		18:39	35	10:20 (3)	16:21	65	12:30 (4)	15:43	50	12:37 (4)
14	04:49	05:53	07:02		08:09		08:57 (26)	08:23		09:43 (1)	09:20		11:11 (2)
	22:35	21:29	20:02		18:36	39	10:23 (3)	16:19	74	12:31 (4)	15:42	49	12:37 (4)
15	04:51	05:55	07:04		08:11		08:58 (26)	08:25		09:46 (1)	09:21		11:13 (2)
	22:34	21:26	20:00		18:34	42	10:25 (3)	16:17	76	12:31 (4)	15:42	46	12:37 (4)
16	04:53	05:58	07:06		08:14		08:58 (26)	08:27		09:51 (1)	09:22		11:14 (2)
	22:32	21:24	19:57		18:31	43	10:26 (3)	16:15	74	12:32 (4)	15:42	45	12:37 (4)
17	04:54	06:00	07:09		08:16		09:00 (26)	08:30		09:55 (1)	09:23		11:15 (2)
	22:31	21:21	19:54		18:28	43	10:28 (3)	16:13	72	12:32 (4)	15:42	43	12:37 (4)
18	04:56	06:02	07:11		08:18		09:02 (26)	08:32		09:59 (1)	09:24		11:17 (2)
	22:29	21:19	19:51		18:25	39	10:28 (3)	16:11	70	12:32 (4)	15:42	40	12:37 (4)
19	04:58	06:04	07:13	08:22 (28)	08:21		09:58 (3)	08:34		10:57 (2)	09:25		11:18 (2)
	22:27	21:16	19:48	7 08:29 (28)	18:23	31	10:29 (3)	16:10	66	12:33 (4)	15:43	41	12:38 (4)
20	05:00	06:06	07:15	08:19 (28)	08:23		09:57 (3)	08:37		10:57 (2)	09:26		11:19 (2)
	22:25	21:13	19:45	12 08:31 (28)	18:20	32	10:29 (3)	16:08	67	12:33 (4)	15:43	40	12:39 (4)
21	05:02	06:09	07:17	08:18 (28)	08:25		09:57 (3)	08:39		10:57 (2)	09:26		11:19 (2)
	22:24	21:10	19:42	15 08:33 (28)	18:17	33	10:30 (3)	16:06	67	12:33 (4)	15:43	39	12:38 (4)
22	05:04	06:11	07:20	08:16 (28)	08:28		09:56 (3)	08:41		10:57 (2)	09:27		11:20 (2)
	22:22	21:08	19:39	17 08:33 (28)	18:15	33	10:29 (3)	16:04	68	12:34 (4)	15:44	39	12:39 (4)
23	05:06	06:13	07:22	08:15 (28)	08:30		09:56 (3)	08:43		10:57 (2)	09:27		11:20 (2)
	22:20	21:05	19:36	18 08:33 (28)	18:12	34	10:30 (3)	16:03	68	12:33 (4)	15:44	40	12:40 (4)
24	05:08	06:15	07:24	08:14 (28)	08:32		09:56 (3)	08:45		10:57 (2)	09:28		11:21 (2)
	22:18	21:02	19:33	19 08:33 (28)	18:09	33	10:29 (3)	16:01	69	12:34 (4)	15:45	41	12:41 (4)
25	05:10	06:18	07:26	08:14 (28)	07:35		08:56 (3)	08:48		10:57 (2)	09:28		11:21 (2)
	22:16	20:59	19:31	18 08:32 (28)	17:07	33	09:29 (3)	15:59	69	12:34 (4)	15:45	41	12:41 (4)
26	05:12	06:20	07:28	08:14 (28)	07:37		08:57 (3)	08:50		10:58 (2)	09:28		11:21 (2)
	22:14	20:57	19:28	19 08:33 (28)	17:04	32	09:29 (3)	15:58	68	12:34 (4)	15:46	42	12:42 (4)
27	05:14	06:22	07:31	08:14 (28)	07:40		08:56 (3)	08:52		10:57 (2)	09:28		11:20 (2)
	22:12	20:54	19:25	18 08:32 (28)	17:02	32	09:28 (3)	15:57	69	12:34 (4)	15:47	43	12:42 (4)
28	05:16	06:24	07:33	08:15 (28)	07:42		08:57 (3)	08:54		10:58 (2)	09:29		11:20 (2)
	22:10	20:51	19:22	15 08:30 (28)	16:59	31	09:28 (3)	15:55	68	12:35 (4)	15:48	44	12:43 (4)
29	05:18	06:27	07:35	08:15 (28)	07:44		08:58 (3)	08:56		10:59 (2)	09:29		11:18 (2)
	22:08	20:48	19:19	13 08:28 (28)	16:56	29	09:27 (3)	15:54	67	12:35 (4)	15:49	47	12:43 (4)
30	05:20	06:29	07:37	08:18 (28)	07:47		08:58 (3)	08:58		10:59 (2)	09:28		11:18 (2)
	22:05	20:45	19:16	8 08:26 (28)	16:54	28	09:26 (3)	15:53	65	12:34 (4)	15:50	49	12:44 (4)
31	05:22	06:31			07:49		09:00 (3)				09:28		11:16 (2)
	22:03	20:43			16:51	25	09:25 (3)				15:51	52	12:44 (4)
Potential sun hours	545	478	386		319		236		200			
Total, worst case				179		830		1810		1540		
Sun reduction				0,50		0,50		0,50		0,50		
Oper. time red.				0,80		0,80		0,80		0,80		
Wind dir. red.				0,70		0,73		0,66		0,64		
Total reduction				0,28		0,29		0,26		0,26		
Total, real				50		242		475		394		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:37	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02		06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33		20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		06:30	05:13	04:28	04:49	05:53	07:02		08:05 (4)	08:09	08:23	09:20
	16:15	17:28	18:36		20:47	21:56	22:47	22:35	21:29	20:03	10	08:15 (4)	18:37	16:20	15:43
15	09:16	08:13	06:56		06:27	05:11	04:28	04:51	05:55	07:04		08:02 (4)	08:11	08:25	09:21
	16:17	17:31	18:38		20:49	21:58	22:47	22:34	21:27	20:00	14	08:16 (4)	18:34	16:18	15:42
16	09:15	08:10	06:53		06:24	05:09	04:28	04:53	05:58	07:06		08:00 (4)	08:14	08:27	09:22
	16:19	17:33	18:40		20:51	22:00	22:48	22:32	21:24	19:57	17	08:17 (4)	18:31	16:16	15:42
17	09:13	08:08	06:50		06:22	05:06	04:27	04:54	06:00	07:09		07:59 (4)	08:16	08:30	09:23
	16:21	17:36	18:43		20:54	22:02	22:49	22:31	21:21	19:54	18	08:17 (4)	18:28	16:14	15:42
18	09:12	08:05	06:47		06:19	05:04	04:27	04:56	06:02	07:11		07:58 (4)	08:18	08:32	09:24
	16:24	17:38	18:45		20:56	22:04	22:49	22:29	21:19	19:51	19	08:17 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45	07:25 (4)	06:16	05:02	04:27	04:58	06:04	07:13		07:57 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	3 07:28 (4)	20:58	22:06	22:50	22:27	21:16	19:48	20	08:17 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:22 (4)	06:13	05:00	04:27	05:00	06:07	07:15		07:57 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	8 07:30 (4)	21:01	22:08	22:50	22:26	21:13	19:45	19	08:16 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:19 (4)	06:11	04:58	04:27	05:02	06:09	07:17		08:00 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	11 07:30 (4)	21:03	22:10	22:50	22:24	21:11	19:42	16	08:16 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36	07:15 (4)	06:08	04:56	04:27	05:04	06:11	07:20		08:02 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	16 07:31 (4)	21:05	22:12	22:51	22:22	21:08	19:39	13	08:15 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:11 (4)	06:05	04:55	04:28	05:06	06:13	07:22		08:05 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	20 07:31 (4)	21:08	22:14	22:51	22:20	21:05	19:36	9	08:14 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30	07:11 (4)	06:03	04:53	04:28	05:08	06:16	07:24		08:08 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	19 07:30 (4)	21:10	22:16	22:51	22:18	21:02	19:34	4	08:12 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27	07:10 (4)	06:00	04:51	04:28	05:10	06:18	07:26			07:35	08:48	09:28
	16:40	17:55	19:01	20 07:30 (4)	21:12	22:18	22:51	22:16	21:00	19:31			17:07	16:00	15:46
26	08:58	07:44	06:24	07:10 (4)	05:57	04:49	04:29	05:12	06:20	07:29			07:37	08:50	09:28
	16:42	17:58	19:03	19 07:29 (4)	21:15	22:20	22:51	22:14	20:57	19:28			17:04	15:58	15:46
27	08:56	07:41	06:21	07:11 (4)	05:55	04:48	04:29	05:14	06:22	07:31			07:40	08:52	09:29
	16:44	18:00	19:06	17 07:28 (4)	21:17	22:22	22:50	22:12	20:54	19:25			17:02	15:57	15:47
28	08:54	07:38	06:19	07:12 (4)	05:52	04:46	04:30	05:16	06:25	07:33			07:42	08:54	09:29
	16:47	18:03	19:08	14 07:26 (4)	21:19	22:24	22:50	22:10	20:51	19:22			16:59	15:55	15:48
29	08:52		07:16	08:13 (4)	05:49	04:44	04:31	05:18	06:27	07:35			07:44	08:56	09:29
	16:49		20:10	11 08:24 (4)	21:22	22:26	22:50	22:08	20:48	19:19			16:57	15:54	15:49
30	08:50		07:13	08:18 (4)	05:47	04:43	04:32	05:20	06:29	07:37			07:47	08:58	09:29
	16:51		20:12	2 08:20 (4)	21:24	22:27	22:49	22:05	20:46	19:16			16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31				07:49		09:28
	16:54		20:15			22:29		22:03	20:43				16:52		15:52
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				160							159			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,69							0,69			
Total reduction				0,27							0,27			
Total, real				44							44			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October	November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40	07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42	07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10	16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44	07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08	16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46	07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05	16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49	08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02	16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59	16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56	16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53	16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58	08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51	16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48	16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05	08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	16:24	15:43
13	09:19	08:18	07:02	07:35 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:20	09:19
	16:13	17:26	18:33	8 07:43 (4)	20:45	21:53	22:46	22:37	21:32	20:05		18:39	16:22	15:43
14	09:17	08:15	06:59	07:32 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:23	09:20
	16:15	17:28	18:36	13 07:45 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:37	16:20	15:43
15	09:16	08:13	06:56	07:30 (4)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:25	09:21
	16:17	17:31	18:38	16 07:46 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	16:17	15:42
16	09:15	08:10	06:53	07:28 (4)	06:24	05:09	04:28	04:53	05:58	07:06		08:14	08:27	09:22
	16:19	17:33	18:40	19 07:47 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	16:15	15:42
17	09:13	08:08	06:50	07:27 (4)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	08:30	09:23
	16:21	17:36	18:43	20 07:47 (4)	20:54	22:02	22:49	22:31	21:21	19:54		18:28	16:14	15:42
18	09:12	08:05	06:47	07:26 (4)	06:19	05:04	04:27	04:56	06:02	07:11		08:18 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	21 07:47 (4)	20:56	22:04	22:49	22:29	21:19	19:51	9	08:27 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45	07:26 (4)	06:16	05:02	04:27	04:58	06:04	07:13		08:15 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	21 07:47 (4)	20:58	22:06	22:50	22:27	21:16	19:48	14	08:29 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:27 (4)	06:13	05:00	04:27	05:00	06:07	07:15		08:13 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	21 07:48 (4)	21:01	22:08	22:50	22:26	21:13	19:45	17	08:30 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:26 (4)	06:11	04:58	04:27	05:02	06:09	07:17		08:13 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	21 07:47 (4)	21:03	22:10	22:50	22:24	21:11	19:42	18	08:31 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36	07:27 (4)	06:08	04:56	04:27	05:04	06:11	07:20		08:11 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	19 07:46 (4)	21:05	22:12	22:51	22:22	21:08	19:39	20	08:31 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:27 (4)	06:05	04:55	04:28	05:06	06:13	07:22		08:10 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	17 07:44 (4)	21:08	22:14	22:51	22:20	21:05	19:36	21	08:31 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30	07:28 (4)	06:03	04:53	04:28	05:08	06:16	07:24		08:10 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	15 07:43 (4)	21:10	22:16	22:51	22:18	21:02	19:34	21	08:31 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27	07:30 (4)	06:00	04:51	04:28	05:10	06:18	07:26		08:09 (4)	07:35	08:48	09:28
	16:39	17:55	19:01	10 07:40 (4)	21:12	22:18	22:51	22:16	21:00	19:31	21	08:30 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24		05:57	04:49	04:29	05:12	06:20	07:28		08:10 (4)	07:37	08:50	09:28
	16:42	17:58	19:03		21:15	22:20	22:51	22:14	20:57	19:28	20	08:30 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21		05:55	04:48	04:29	05:14	06:22	07:31		08:10 (4)	07:40	08:52	09:29
	16:44	18:00	19:06		21:17	22:22	22:50	22:12	20:54	19:25	19	08:29 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19		05:52	04:46	04:30	05:16	06:24	07:33		08:10 (4)	07:42	08:54	09:29
	16:47	18:03	19:08		21:19	22:24	22:50	22:10	20:51	19:22	18	08:28 (4)	16:59	15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35		08:11 (4)	07:44	08:56	09:29
	16:49		20:10		21:22	22:26	22:50	22:08	20:48	19:19	15	08:26 (4)	16:57	15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37		08:13 (4)	07:47	08:58	09:29
	16:51		20:12		21:24	22:27	22:49	22:05	20:46	19:16	11	08:24 (4)	16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31				07:49		09:28
	16:54		20:15			22:29		22:03	20:43				16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319	236	200
Total, worst case				221							224			
Sun reduction				0,50							0,50			
Oper. time red.				0,80							0,80			
Wind dir. red.				0,70							0,70			
Total reduction				0,28							0,28			
Total, real				61							62			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March			April	May	June	July	August	September			October			November	December
1	09:28	08:46	07:36			07:07	05:44	04:40	04:32	05:24	06:33			07:40		08:36 (4)	07:52	09:00
	15:53	16:56	18:05			20:17	21:26	22:31	22:49	22:01	20:40			19:13	24	09:00 (4)	16:49	15:51
2	09:28	08:44	07:33			07:04	05:42	04:39	04:33	05:27	06:36			07:42		08:35 (4)	07:54	09:02
	15:54	16:59	18:07			20:19	21:28	22:32	22:48	21:59	20:37			19:10	25	09:00 (4)	16:47	15:50
3	09:27	08:41	07:30		08:05 (4)	07:01	05:39	04:37	04:34	05:29	06:38			07:44		08:34 (4)	07:56	09:04
	15:56	17:01	18:10	12	08:17 (4)	20:22	21:31	22:34	22:47	21:56	20:34			19:08	25	08:59 (4)	16:44	15:49
4	09:27	08:39	07:27		08:02 (4)	06:58	05:37	04:36	04:35	05:31	06:40			07:46		08:34 (4)	07:59	09:05
	15:57	17:04	18:12	17	08:19 (4)	20:24	21:33	22:35	22:47	21:54	20:31			19:05	26	09:00 (4)	16:42	15:48
5	09:26	08:37	07:24		08:01 (4)	06:56	05:34	04:35	04:36	05:33	06:42			07:49		08:34 (4)	08:01	09:07
	15:59	17:06	18:14	19	08:20 (4)	20:26	21:35	22:37	22:46	21:52	20:28			19:02	25	08:59 (4)	16:39	15:47
6	09:25	08:35	07:22		07:59 (4)	06:53	05:32	04:34	04:38	05:35	06:44			07:51		08:34 (4)	08:04	09:09
	16:00	17:09	18:17	22	08:21 (4)	20:28	21:38	22:38	22:45	21:49	20:26			18:59	24	08:58 (4)	16:37	15:47
7	09:25	08:32	07:19		07:58 (4)	06:50	05:29	04:33	04:39	05:38	06:47			07:53		08:35 (4)	08:06	09:10
	16:02	17:11	18:19	23	08:21 (4)	20:31	21:40	22:39	22:44	21:47	20:23			18:56	22	08:57 (4)	16:35	15:46
8	09:24	08:30	07:16		07:58 (4)	06:47	05:27	04:32	04:40	05:40	06:49			07:55		08:35 (4)	08:08	09:12
	16:04	17:14	18:22	24	08:22 (4)	20:33	21:42	22:41	22:43	21:44	20:20			18:53	21	08:56 (4)	16:32	15:45
9	09:23	08:28	07:13		07:57 (4)	06:44	05:24	04:31	04:42	05:42	06:51			07:58		08:36 (4)	08:11	09:14
	16:06	17:16	18:24	25	08:22 (4)	20:35	21:44	22:42	22:42	21:42	20:17			18:50	18	08:54 (4)	16:30	15:44
10	09:22	08:25	07:10		07:57 (4)	06:41	05:22	04:31	04:43	05:44	06:53			08:00		08:38 (4)	08:13	09:15
	16:07	17:19	18:26	25	08:22 (4)	20:38	21:47	22:43	22:41	21:39	20:14			18:48	15	08:53 (4)	16:28	15:44
11	09:21	08:23	07:07		07:57 (4)	06:38	05:20	04:30	04:45	05:46	06:55			08:02		08:41 (4)	08:16	09:16
	16:09	17:21	18:29	25	08:22 (4)	20:40	21:49	22:44	22:39	21:37	20:11			18:45	8	08:49 (4)	16:26	15:43
12	09:20	08:20	07:05		07:57 (4)	06:36	05:17	04:29	04:46	05:49	06:58			08:04			08:18	09:18
	16:11	17:24	18:31	24	08:21 (4)	20:42	21:51	22:45	22:38	21:34	20:08			18:42			16:24	15:43
13	09:19	08:18	07:02		07:57 (4)	06:33	05:15	04:29	04:48	05:51	07:00			08:07			08:20	09:19
	16:13	17:26	18:33	23	08:20 (4)	20:45	21:53	22:46	22:37	21:32	20:05			18:39			16:22	15:43
14	09:17	08:15	06:59		07:57 (4)	06:30	05:13	04:28	04:49	05:53	07:02			08:09			08:23	09:20
	16:15	17:28	18:36	22	08:19 (4)	20:47	21:56	22:47	22:35	21:29	20:03			18:36			16:19	15:42
15	09:16	08:13	06:56		07:58 (4)	06:27	05:11	04:28	04:51	05:55	07:04			08:11			08:25	09:21
	16:17	17:31	18:38	20	08:18 (4)	20:49	21:58	22:47	22:34	21:27	20:00			18:34			16:17	15:42
16	09:15	08:10	06:53		07:59 (4)	06:24	05:09	04:27	04:53	05:58	07:06			08:14			08:27	09:22
	16:19	17:33	18:40	17	08:16 (4)	20:51	22:00	22:48	22:32	21:24	19:57			18:31			16:15	15:42
17	09:13	08:08	06:50		08:00 (4)	06:22	05:06	04:27	04:54	06:00	07:09			08:16			08:30	09:23
	16:21	17:36	18:43	14	08:14 (4)	20:54	22:02	22:49	22:31	21:21	19:54			18:28			16:14	15:42
18	09:12	08:05	06:47		08:04 (4)	06:19	05:04	04:27	04:56	06:02	07:11			08:18			08:32	09:24
	16:24	17:38	18:45	5	08:09 (4)	20:56	22:04	22:49	22:29	21:19	19:51			18:25			16:12	15:42
19	09:10	08:02	06:45			06:16	05:02	04:27	04:58	06:04	07:13			08:21			08:34	09:25
	16:26	17:41	18:47			20:58	22:06	22:50	22:27	21:16	19:48			18:23			16:10	15:43
20	09:09	08:00	06:42			06:13	05:00	04:27	05:00	06:07	07:15			08:23			08:37	09:26
	16:28	17:43	18:49			21:01	22:08	22:50	22:26	21:13	19:45			18:20			16:08	15:43
21	09:07	07:57	06:39			06:11	04:58	04:27	05:02	06:09	07:17			08:25			08:39	09:26
	16:30	17:46	18:52			21:03	22:10	22:50	22:24	21:11	19:42			18:17			16:06	15:43
22	09:05	07:55	06:36			06:08	04:56	04:27	05:04	06:11	07:20			08:28			08:41	09:27
	16:32	17:48	18:54			21:05	22:12	22:51	22:22	21:08	19:39			18:15			16:04	15:44
23	09:04	07:52	06:33			06:05	04:55	04:28	05:06	06:13	07:22			08:30			08:43	09:27
	16:35	17:50	18:56			21:08	22:14	22:51	22:20	21:05	19:36			18:12			16:03	15:44
24	09:02	07:49	06:30			06:03	04:53	04:28	05:08	06:16	07:24			08:32			08:45	09:28
	16:37	17:53	18:59			21:10	22:16	22:51	22:18	21:02	19:34			18:09			16:01	15:45
25	09:00	07:47	06:27			06:00	04:51	04:28	05:10	06:18	07:26			07:35			08:48	09:28
	16:39	17:55	19:01			21:12	22:18	22:51	22:16	21:00	19:31			17:07			16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20	07:28		08:44 (4)	07:37			08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57	19:28	11	08:55 (4)	17:04			15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22	07:31		08:41 (4)	07:40			08:52	09:29
	16:44	18:00	19:05			21:17	22:22	22:50	22:12	20:54	19:25	16	08:57 (4)	17:02			15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24	07:33		08:39 (4)	07:42			08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51	19:22	19	08:58 (4)	16:59			15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27	07:35		08:37 (4)	07:44			08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48	19:19	22	08:59 (4)	16:57			15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29	07:37		08:37 (4)	07:47			08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46	19:16	23	09:00 (4)	16:54			15:53	15:50
31	08:48		07:10				04:41		05:22	06:31				07:49				09:28
	16:54		20:15				22:29		22:03	20:43				16:52				15:51
Potential sun hours	221	260	365			432	521	547	545	478	386			319			236	200
Total, worst case				317								91			233			
Sun reduction				0,50								0,50			0,50			
Oper. time red.				0,80								0,80			0,80			
Wind dir. red.				0,71								0,71			0,71			
Total reduction				0,28								0,28			0,28			
Total, real				90								26			66			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:36		09:02 (2)	07:07	05:44	04:40	04:32	05:24	06:33		07:40		08:45 (4)	07:52	09:00
	15:53	16:56		18:05	4	09:06 (2)	20:17	21:26	22:31	22:49	22:01	20:40		19:13	28	09:13 (4)	16:49	15:51
2	09:28	08:44		07:33			07:04	05:42	04:39	04:33	05:27	06:36		07:42		08:44 (4)	07:54	09:02
	15:54	16:59		18:07			20:19	21:28	22:32	22:48	21:59	20:37		19:10	29	09:13 (4)	16:47	15:50
3	09:27	08:41		07:30		08:17 (4)	07:01	05:39	04:37	04:34	05:29	06:38		07:44		08:43 (4)	07:56	09:04
	15:56	17:01		18:10	10	08:27 (4)	20:22	21:31	22:34	22:47	21:56	20:34		19:08	29	09:12 (4)	16:44	15:49
4	09:27	08:39		07:27		08:13 (4)	06:58	05:37	04:36	04:35	05:31	06:40		07:46		08:44 (4)	07:59	09:05
	15:57	17:04		18:12	17	08:30 (4)	20:24	21:33	22:35	22:47	21:54	20:31		19:05	28	09:12 (4)	16:42	15:48
5	09:26	08:37		07:24		08:11 (4)	06:56	05:34	04:35	04:36	05:33	06:42		07:49		08:44 (4)	08:01	09:07
	15:59	17:06		18:14	20	08:31 (4)	20:26	21:35	22:37	22:46	21:52	20:28		19:02	27	09:11 (4)	16:39	15:47
6	09:25	08:35		07:22		08:09 (4)	06:53	05:32	04:34	04:38	05:35	06:44		07:51		08:44 (4)	08:04	09:09
	16:00	17:09		18:17	24	08:33 (4)	20:28	21:38	22:38	22:45	21:49	20:26		18:59	26	09:10 (4)	16:37	15:47
7	09:25	08:32		07:19		08:08 (4)	06:50	05:29	04:33	04:39	05:38	06:47		07:53		08:45 (4)	08:06	09:10
	16:02	17:11		18:19	25	08:33 (4)	20:31	21:40	22:39	22:44	21:47	20:23		18:56	24	09:09 (4)	16:35	15:46
8	09:24	08:30		07:16		08:07 (4)	06:47	05:27	04:32	04:40	05:40	06:49		07:55		08:46 (4)	08:08	09:12
	16:04	17:14		18:22	27	08:34 (4)	20:33	21:42	22:41	22:43	21:44	20:20		18:53	22	09:08 (4)	16:32	15:45
9	09:23	08:28		07:13		08:07 (4)	06:44	05:24	04:31	04:42	05:42	06:51		07:58		08:47 (4)	08:11	09:14
	16:06	17:16		18:24	28	08:35 (4)	20:35	21:44	22:42	22:42	21:42	20:17		18:50	18	09:05 (4)	16:30	15:44
10	09:22	08:25		07:10		08:06 (4)	06:41	05:22	04:31	04:43	05:44	06:53		08:00		08:49 (4)	08:13	09:15
	16:07	17:19		18:26	29	08:35 (4)	20:38	21:47	22:43	22:41	21:39	20:14		18:48	15	09:04 (4)	16:28	15:44
11	09:21	08:23		07:07		08:06 (4)	06:38	05:20	04:30	04:45	05:46	06:55		08:02		08:53 (4)	08:16	09:16
	16:09	17:21		18:29	29	08:35 (4)	20:40	21:49	22:44	22:39	21:37	20:11		18:45	6	08:59 (4)	16:26	15:43
12	09:20	08:20		07:05		08:05 (4)	06:36	05:17	04:29	04:46	05:49	06:58		08:04			08:18	09:18
	16:11	17:23		18:31	29	08:34 (4)	20:42	21:51	22:45	22:38	21:34	20:08		18:42			16:24	15:43
13	09:19	08:18		07:02		08:05 (4)	06:33	05:15	04:29	04:48	05:51	07:00		08:07		09:33 (2)	08:20	09:19
	16:13	17:26		18:33	29	08:34 (4)	20:44	21:53	22:46	22:37	21:32	20:05		18:39	7	09:40 (2)	16:22	15:43
14	09:17	08:15		06:59		08:05 (4)	06:30	05:13	04:28	04:49	05:53	07:02		08:09		09:30 (2)	08:23	09:20
	16:15	17:28		18:36	28	08:33 (4)	20:47	21:56	22:47	22:35	21:29	20:03		18:36	12	09:42 (2)	16:19	15:42
15	09:16	08:13		06:56		07:33 (3)	06:27	05:11	04:28	04:51	05:55	07:04		08:11		09:29 (2)	08:25	09:21
	16:17	17:31		18:38	32	08:32 (4)	20:49	21:58	22:47	22:34	21:27	20:00		18:34	15	09:44 (2)	16:17	15:42
16	09:15	08:10		06:53		07:30 (3)	06:24	05:09	04:27	04:53	05:58	07:06		08:14		09:27 (2)	08:27	09:22
	16:19	17:33		18:40	36	08:31 (4)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	17	09:44 (2)	16:15	15:42
17	09:13	08:08	09:01 (2)	06:50		07:28 (3)	06:22	05:06	04:27	04:54	06:00	07:09	08:18 (3)	08:16		09:27 (2)	08:30	09:23
	16:21	17:36	9 09:10 (2)	18:43	38	08:30 (4)	20:54	22:02	22:49	22:31	21:21	19:54	5 08:23 (3)	18:28	18	09:45 (2)	16:14	15:42
18	09:12	08:05	08:58 (2)	06:47		07:27 (3)	06:19	05:04	04:27	04:56	06:02	07:11	08:14 (3)	08:18		09:26 (2)	08:32	09:24
	16:24	17:38	14 09:12 (2)	18:45	36	08:28 (4)	20:56	22:04	22:49	22:29	21:19	19:51	11 08:25 (3)	18:25	19	09:45 (2)	16:12	15:42
19	09:10	08:02	08:57 (2)	06:45		07:25 (3)	06:16	05:02	04:27	04:58	06:04	07:13	08:12 (3)	08:21		09:26 (2)	08:34	09:25
	16:26	17:41	16 09:13 (2)	18:47	34	08:25 (4)	20:58	22:06	22:50	22:27	21:16	19:48	14 08:26 (3)	18:23	19	09:45 (2)	16:10	15:43
20	09:09	08:00	08:56 (2)	06:42		07:25 (3)	06:13	05:00	04:27	05:00	06:07	07:15	08:10 (3)	08:23		09:25 (2)	08:37	09:26
	16:28	17:43	17 09:13 (2)	18:49	30	08:23 (4)	21:01	22:08	22:50	22:26	21:13	19:45	17 08:27 (3)	18:20	19	09:44 (2)	16:08	15:43
21	09:07	07:57	08:55 (2)	06:39		07:25 (3)	06:11	04:58	04:27	05:02	06:09	07:17	08:10 (3)	08:25		09:26 (2)	08:39	09:26
	16:30	17:46	18 09:13 (2)	18:52	18	07:43 (3)	21:03	22:10	22:50	22:24	21:10	19:42	18 08:28 (3)	18:17	18	09:44 (2)	16:06	15:43
22	09:05	07:55	08:55 (2)	06:36		07:24 (3)	06:08	04:56	04:27	05:04	06:11	07:20	08:09 (3)	08:28		09:26 (2)	08:41	09:27
	16:32	17:48	19 09:14 (2)	18:54	18	07:42 (3)	21:05	22:12	22:51	22:22	21:08	19:39	19 08:28 (3)	18:15	17	09:43 (2)	16:04	15:44
23	09:04	07:52	08:55 (2)	06:33		07:25 (3)	06:05	04:55	04:28	05:06	06:13	07:22	08:09 (3)	08:30		09:27 (2)	08:43	09:27
	16:35	17:50	19 09:14 (2)	18:56	16	07:41 (3)	21:08	22:14	22:51	22:20	21:05	19:36	27 09:06 (4)	18:12	15	09:42 (2)	16:03	15:44
24	09:02	07:49	08:55 (2)	06:30		07:25 (3)	06:02	04:53	04:28	05:08	06:16	07:24	08:08 (3)	08:32		09:29 (2)	08:45	09:28
	16:37	17:53	19 09:14 (2)	18:59	15	07:40 (3)	21:10	22:16	22:51	22:18	21:02	19:33	35 09:09 (4)	18:09	12	09:41 (2)	16:01	15:45
25	09:00	07:46	08:55 (2)	06:27		07:26 (3)	06:00	04:51	04:28	05:10	06:18	07:26	08:09 (3)	07:35		08:31 (2)	08:48	09:28
	16:39	17:55	18 09:13 (2)	19:01	12	07:38 (3)	21:12	22:18	22:51	22:16	21:00	19:31	35 09:10 (4)	17:07	7	08:38 (2)	16:00	15:46
26	08:58	07:44	08:55 (2)	06:24		07:28 (3)	05:57	04:49	04:29	05:12	06:20	07:28	08:11 (3)	07:37			08:50	09:28
	16:42	17:58	17 09:12 (2)	19:03	7	07:35 (3)	21:15	22:20	22:51	22:14	20:57	19:28	36 09:12 (4)	17:04			15:58	15:46
27	08:56	07:41	08:56 (2)	06:21			05:55	04:48	04:29	05:14	06:22	07:31	08:11 (3)	07:40			08:52	09:29
	16:44	18:00	15 09:11 (2)	19:05			21:17	22:22	22:50	22:12	20:54	19:25	37 09:13 (4)	17:02			15:57	15:47
28	08:54	07:38	08:58 (2)	06:19			05:52	04:46	04:30	05:16	06:24	07:33	08:13 (3)	07:42			08:54	09:29
	16:47	18:03	11 09:09 (2)	19:08			21:19	22:24	22:50	22:10	20:51	19:22	34 09:13 (4)	16:59			15:55	15:48
29	08:52			07:16			05:49	04:44	04:31	05:18	06:27	07:35	08:45 (4)	07:44			08:56	09:29
	16:49			20:10			21:21	22:26	22:50	22:08	20:48	19:19	28 09:13 (4)	16:57			15:54	15:49
30	08:50			07:13			05:47	04:43	04:31	05:20	06:29	07:37	08:45 (4)	07:47			08:58	09:28
	16:51			20:12			21:24	22:27	22:49	22:05	20:46	19:16	29 09:14 (4)	16:54			15:53	15:50
31	08:48			07:10				04:41		05:22	06:31			07:49				09:28
	16:54			20:15				22:29		22:03	20:43			16:52				15:51
Potential sun hours	221	260		365		432	521	547	545	478	386		319		236	200
Total, worst case			192		591							345		447				
Sun reduction			0,50		0,50							0,50		0,50				
Oper. time red.			0,80		0,80							0,80		0,80				
Wind dir. red.			0,74		0,71							0,71		0,73				
Total reduction			0,29		0,28							0,28		0,29				
Total, real			57		168							97		130				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:18 (2)	08:46	10:00 (3)	07:35	07:07	05:44	04:40
	15:53	49	12:27 (4)	16:56	25	10:25 (3)	18:05	20:17	21:26	22:31
2	09:28		11:18 (2)	08:44	09:59 (3)	07:33	07:04	05:41	04:39
	15:54	50	12:28 (4)	16:59	25	10:24 (3)	18:07	20:19	21:28	22:32
3	09:27		11:18 (2)	08:41	10:00 (3)	07:30	07:01	05:39	04:37
	15:56	51	12:28 (4)	17:01	25	10:25 (3)	18:10	20:21	21:31	22:34
4	09:27		11:18 (2)	08:39	09:59 (3)	07:27	06:58	05:36	04:36
	15:57	51	12:28 (4)	17:04	26	10:25 (3)	18:12	20:24	21:33	22:35
5	09:26		11:19 (2)	08:37	10:00 (3)	07:24	06:55	05:34	04:35
	15:59	51	12:29 (4)	17:06	26	10:26 (3)	18:14	20:26	21:35	22:37
6	09:25		11:19 (2)	08:35	10:00 (3)	07:22	06:53	05:31	04:34
	16:00	51	12:29 (4)	17:09	25	10:25 (3)	18:17	20:28	21:38	22:38
7	09:25		11:20 (2)	08:32	10:00 (3)	07:19	06:50	05:29	04:33
	16:02	51	12:30 (4)	17:11	25	10:25 (3)	18:19	20:31	21:40	22:39
8	09:24		11:20 (2)	08:30	10:01 (3)	07:16	06:47	05:27	04:32
	16:04	51	12:30 (4)	17:13	24	10:25 (3)	18:21	20:33	21:42	22:41
9	09:23		11:21 (2)	08:28	10:01 (3)	07:13	06:44	05:24	04:31
	16:05	51	12:31 (4)	17:16	23	10:24 (3)	18:24	20:35	21:44	22:42
10	09:22		11:21 (2)	08:25	10:03 (3)	07:10	06:41	05:22	04:30
	16:07	51	12:31 (4)	17:18	21	10:24 (3)	18:26	20:38	21:47	22:43
11	09:21		11:22 (2)	08:23	09:07 (26)	07:07	06:38	05:20	04:30
	16:09	50	12:31 (4)	17:21	25	10:22 (3)	18:28	20:40	21:49	22:44
12	09:20		11:22 (2)	08:20	09:04 (26)	07:05	06:36	05:17	04:29
	16:11	49	12:31 (4)	17:23	27	10:20 (3)	18:31	20:42	21:51	22:45
13	09:19		11:23 (2)	08:18	09:03 (26)	07:02	06:33	05:15	04:28
	16:13	49	12:32 (4)	17:26	26	10:18 (3)	18:33	20:44	21:53	22:46
14	09:17		11:24 (2)	08:15	09:02 (26)	06:59	06:30	05:13	04:28
	16:15	47	12:32 (4)	17:28	17	09:19 (26)	18:35	20:47	21:56	22:47
15	09:16		11:24 (2)	08:13	09:01 (26)	06:56	06:27	05:11	04:28
	16:17	47	12:32 (4)	17:31	19	09:20 (26)	18:38	20:49	21:58	22:47
16	09:15		11:25 (2)	08:10	09:00 (26)	06:53	06:24	05:08	04:27
	16:19	44	12:31 (4)	17:33	20	09:20 (26)	18:40	20:51	22:00	22:48
17	09:13		11:27 (2)	08:08	09:01 (26)	06:50	06:22	05:06	04:27
	16:21	42	12:32 (4)	17:36	20	09:21 (26)	18:42	20:54	22:02	22:49
18	09:12		11:28 (2)	08:05	09:00 (26)	06:47	06:19	05:04	04:27
	16:23	39	12:32 (4)	17:38	21	09:21 (26)	18:45	20:56	22:04	22:49
19	09:10		11:29 (2)	08:02	09:00 (26)	06:44	06:16	05:02	04:27
	16:26	35	12:31 (4)	17:41	20	09:20 (26)	18:47	20:58	22:06	22:50
20	09:09		11:31 (2)	08:00	09:00 (26)	06:42	06:13	05:00	04:27
	16:28	30	12:31 (4)	17:43	19	09:19 (26)	18:49	21:01	22:08	22:50
21	09:07		12:09 (4)	07:57	09:01 (26)	06:39	06:11	04:58	04:27
	16:30	21	12:30 (4)	17:46	17	09:18 (26)	18:52	21:03	22:10	22:50
22	09:05		12:11 (4)	07:55	09:02 (26)	06:36	06:08	04:56	04:27
	16:32	19	12:30 (4)	17:48	16	09:18 (26)	18:54	21:05	22:12	22:51
23	09:04		12:12 (4)	07:52	09:04 (26)	06:33	06:05	04:54	04:27
	16:35	17	12:29 (4)	17:50	12	09:16 (26)	18:56	21:08	22:14	22:51
24	09:02		10:08 (3)	07:49	09:06 (26)	06:30	06:02	04:53	04:28
	16:37	16	12:26 (4)	17:53	7	09:13 (26)	18:59	21:10	22:16	22:51
25	09:00		10:05 (3)	07:46		06:27	06:00	04:51	04:28
	16:39	14	12:22 (4)	17:55		19:01	21:12	22:18	22:51
26	08:58		10:03 (3)	07:44		06:24	05:57	04:49	04:29
	16:42	15	10:18 (3)	17:58		19:03	21:15	22:20	22:51
27	08:56		10:03 (3)	07:41		06:21	05:54	04:47	04:29
	16:44	17	10:20 (3)	18:00		19:05	21:17	22:22	22:50
28	08:54		10:01 (3)	07:38		06:18	05:52	04:46	04:30
	16:46	20	10:21 (3)	18:02		19:08	21:19	22:24	22:50
29	08:52		10:01 (3)			07:16	05:49	04:44	04:31
	16:49	21	10:22 (3)			20:10	21:21	22:26	22:50
30	08:50		10:01 (3)			07:13	05:47	04:43	04:31
	16:51	22	10:23 (3)			20:12	21:24	22:27	22:49
31	08:48		10:00 (3)			07:10		04:41	
	16:54	24	10:24 (3)			20:15		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1145			511				
Sun reduction		0,50			0,50				
Oper. time red.		0,80			0,80				
Wind dir. red.		0,66			0,73				
Total reduction		0,26			0,29				
Total, real		300			149				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:40			07:52		09:32 (3)	09:00		11:04 (2)
	22:49	22:01	20:40	19:13			16:49	21	09:53 (3)	15:51	51	12:14 (4)
2	04:33	05:26	06:35	07:42			07:54		09:31 (3)	09:02		11:04 (2)
	22:48	21:59	20:37	19:10			16:46	22	09:53 (3)	15:50	51	12:14 (4)
3	04:34	05:29	06:38	07:44			07:56		09:31 (3)	09:04		11:04 (2)
	22:47	21:56	20:34	19:07			16:44	23	09:54 (3)	15:49	51	12:14 (4)
4	04:35	05:31	06:40	07:46			07:59		09:30 (3)	09:05		11:04 (2)
	22:47	21:54	20:31	19:05			16:42	25	09:55 (3)	15:48	51	12:14 (4)
5	04:36	05:33	06:42	07:49			08:01		09:29 (3)	09:07		11:05 (2)
	22:46	21:52	20:28	19:02			16:39	26	09:55 (3)	15:47	51	12:15 (4)
6	04:38	05:35	06:44	07:51			08:04		09:30 (3)	09:09		11:05 (2)
	22:45	21:49	20:26	18:59			16:37	25	09:55 (3)	15:46	51	12:15 (4)
7	04:39	05:37	06:47	07:53			08:06		09:30 (3)	09:10		11:06 (2)
	22:44	21:47	20:23	18:56			16:35	26	09:56 (3)	15:46	51	12:16 (4)
8	04:40	05:40	06:49	07:55			08:08		09:29 (3)	09:12		11:06 (2)
	22:43	21:44	20:20	18:53			16:32	26	09:55 (3)	15:45	51	12:16 (4)
9	04:41	05:42	06:51	07:58			08:11		09:30 (3)	09:14		11:07 (2)
	22:42	21:42	20:17	18:50			16:30	25	09:55 (3)	15:44	51	12:17 (4)
10	04:43	05:44	06:53	08:00			08:13		09:31 (3)	09:15		11:07 (2)
	22:41	21:39	20:14	18:48			16:28	24	09:55 (3)	15:44	51	12:17 (4)
11	04:44	05:46	06:55	08:02			08:16		09:31 (3)	09:16		11:08 (2)
	22:39	21:37	20:11	18:45			16:26	23	09:54 (3)	15:43	49	12:17 (4)
12	04:46	05:49	06:58	08:04			08:18		09:32 (3)	09:18		11:08 (2)
	22:38	21:34	20:08	18:42			16:24	22	09:54 (3)	15:43	49	12:17 (4)
13	04:48	05:51	07:00	08:07			08:20		09:33 (3)	09:19		11:09 (2)
	22:37	21:32	20:05	18:39			16:21	21	09:54 (3)	15:43	49	12:18 (4)
14	04:49	05:53	07:02	08:09			08:23		09:34 (3)	09:20		11:09 (2)
	22:35	21:29	20:02	18:36			16:19	20	09:54 (3)	15:42	49	12:18 (4)
15	04:51	05:55	07:04	08:11			08:25		09:35 (3)	09:21		11:10 (2)
	22:34	21:26	20:00	18:34			16:17	17	09:52 (3)	15:42	49	12:19 (4)
16	04:53	05:58	07:06	08:14			08:27		09:36 (3)	09:22		11:11 (2)
	22:32	21:24	19:57	18:31			16:15	15	09:51 (3)	15:42	48	12:20 (4)
17	04:54	06:00	07:09	08:16			08:30		09:39 (3)	09:23		11:12 (2)
	22:31	21:21	19:54	18:28			16:13	15	11:56 (4)	15:42	48	12:20 (4)
18	04:56	06:02	07:11	08:18		09:36 (26)	08:32		09:42 (3)	09:24		11:11 (2)
	22:29	21:19	19:51	18:25	10	09:46 (26)	16:11	16	12:00 (4)	15:42	48	12:20 (4)
19	04:58	06:04	07:13	08:21		09:34 (26)	08:34		11:46 (4)	09:25		11:12 (2)
	22:27	21:16	19:48	18:23	14	09:48 (26)	16:10	17	12:03 (4)	15:42	47	12:20 (4)
20	05:00	06:06	07:15	08:23		09:32 (26)	08:37		11:46 (4)	09:26		11:13 (2)
	22:26	21:13	19:45	18:20	17	09:49 (26)	16:08	19	12:05 (4)	15:43	48	12:21 (4)
21	05:02	06:09	07:17	08:25		09:32 (26)	08:39		11:44 (4)	09:26		11:14 (2)
	22:24	21:10	19:42	18:17	18	09:50 (26)	16:06	21	12:05 (4)	15:43	47	12:22 (4)
22	05:04	06:11	07:20	08:28		09:30 (26)	08:41		11:07 (2)	09:27		11:14 (2)
	22:22	21:08	19:39	18:15	20	09:50 (26)	16:04	30	12:07 (4)	15:44	47	12:22 (4)
23	05:06	06:13	07:22	08:30		09:30 (26)	08:43		11:05 (2)	09:27		11:14 (2)
	22:20	21:05	19:36	18:12	20	09:50 (26)	16:03	36	12:08 (4)	15:44	48	12:22 (4)
24	05:08	06:15	07:24	08:32		09:31 (26)	08:45		11:05 (2)	09:28		11:15 (2)
	22:18	21:02	19:33	18:09	20	09:51 (26)	16:01	39	12:09 (4)	15:45	48	12:23 (4)
25	05:10	06:18	07:26	07:35		08:30 (26)	08:48		11:04 (2)	09:28		11:15 (2)
	22:16	20:59	19:31	17:07	20	08:50 (26)	15:59	42	12:09 (4)	15:45	48	12:24 (4)
26	05:12	06:20	07:28	07:37		08:31 (26)	08:50		11:04 (2)	09:28		11:16 (2)
	22:14	20:57	19:28	17:04	19	08:50 (26)	15:58	43	12:10 (4)	15:46	48	12:24 (4)
27	05:14	06:22	07:31	07:40		08:30 (26)	08:52		11:03 (2)	09:29		11:16 (2)
	22:12	20:54	19:25	17:02	19	08:49 (26)	15:57	47	12:11 (4)	15:47	48	12:25 (4)
28	05:16	06:24	07:33	07:42		08:31 (26)	08:54		11:04 (2)	09:29		11:17 (2)
	22:10	20:51	19:22	16:59	17	08:48 (26)	15:55	47	12:12 (4)	15:48	48	12:25 (4)
29	05:18	06:27	07:35	07:44		08:33 (26)	08:56		11:03 (2)	09:29		11:16 (2)
	22:08	20:48	19:19	16:56	26	09:48 (3)	15:54	49	12:12 (4)	15:49	49	12:25 (4)
30	05:20	06:29	07:37	07:47		08:34 (26)	08:58		11:03 (2)	09:28		11:17 (2)
	22:05	20:45	19:16	16:54	27	09:50 (3)	15:53	50	12:12 (4)	15:50	49	12:26 (4)
31	05:22	06:31		07:49		08:37 (26)				09:28		11:18 (2)
	22:03	20:43		16:51	25	09:52 (3)				15:51	49	12:27 (4)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					272			832			1523	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,68			0,65	
Total reduction					0,29			0,27			0,26	
Total, real					80			226			394	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:00 (1)	08:46		09:41 (26)	07:35	08:28 (28)	07:07	05:44	04:40
	15:53	67 13:34 (4)	16:56	27	11:17 (3)	18:05	19 08:47 (28)	20:17	21:26	22:31
2	09:28	11:00 (1)	08:44		09:37 (26)	07:33	08:27 (28)	07:04	05:41	04:39
	15:54	68 13:34 (4)	16:59	32	11:16 (3)	18:07	20 08:47 (28)	20:19	21:28	22:32
3	09:27	11:00 (1)	08:41		09:35 (26)	07:30	08:27 (28)	07:01	05:39	04:37
	15:56	69 13:34 (4)	17:01	35	11:15 (3)	18:10	20 08:47 (28)	20:21	21:31	22:34
4	09:27	11:00 (1)	08:39		09:34 (26)	07:27	08:27 (28)	06:58	05:36	04:36
	15:57	69 13:35 (4)	17:04	33	11:13 (3)	18:12	19 08:46 (28)	20:24	21:33	22:35
5	09:26	11:00 (1)	08:37		09:33 (26)	07:24	08:28 (28)	06:55	05:34	04:35
	15:59	69 13:35 (4)	17:06	33	11:12 (3)	18:14	17 08:45 (28)	20:26	21:35	22:37
6	09:25	11:00 (1)	08:35		09:32 (26)	07:22	08:28 (28)	06:53	05:31	04:34
	16:00	69 13:35 (4)	17:08	23	11:06 (3)	18:17	16 08:44 (28)	20:28	21:38	22:38
7	09:25	10:54 (3)	08:32		09:31 (26)	07:19	08:29 (28)	06:50	05:29	04:33
	16:02	75 13:36 (4)	17:11	22	09:53 (26)	18:19	13 08:42 (28)	20:31	21:40	22:39
8	09:24	10:53 (3)	08:30		09:32 (26)	07:16	08:31 (28)	06:47	05:27	04:32
	16:04	77 13:37 (4)	17:13	22	09:54 (26)	18:21	8 08:39 (28)	20:33	21:42	22:41
9	09:23	10:52 (3)	08:28		09:31 (26)	07:13		06:44	05:24	04:31
	16:05	76 13:37 (4)	17:16	23	09:54 (26)	18:24		20:35	21:44	22:42
10	09:22	10:51 (3)	08:25		09:32 (26)	07:10		06:41	05:22	04:30
	16:07	78 13:37 (4)	17:18	23	09:55 (26)	18:26		20:38	21:47	22:43
11	09:21	10:50 (3)	08:23		09:31 (26)	07:07		06:38	05:20	04:30
	16:09	78 13:38 (4)	17:21	24	09:55 (26)	18:28		20:40	21:49	22:44
12	09:20	10:49 (3)	08:20		09:31 (26)	07:05		06:36	05:17	04:29
	16:11	76 13:37 (4)	17:23	23	09:54 (26)	18:31		20:42	21:51	22:45
13	09:19	10:50 (3)	08:18		09:31 (26)	07:02		06:33	05:15	04:28
	16:13	74 13:38 (4)	17:26	23	09:54 (26)	18:33		20:44	21:53	22:46
14	09:17	10:49 (3)	08:15		09:33 (26)	06:59		06:30	05:13	04:28
	16:15	73 13:38 (4)	17:28	21	09:54 (26)	18:35		20:47	21:55	22:47
15	09:16	10:48 (3)	08:13		09:33 (26)	06:56		06:27	05:11	04:28
	16:17	69 13:38 (4)	17:31	20	09:53 (26)	18:38		20:49	21:58	22:47
16	09:15	10:48 (3)	08:10		09:34 (26)	06:53		06:24	05:08	04:27
	16:19	62 13:37 (4)	17:33	17	09:51 (26)	18:40		20:51	22:00	22:48
17	09:13	10:49 (3)	08:08		09:36 (26)	06:50		06:22	05:06	04:27
	16:21	61 13:38 (4)	17:36	14	09:50 (26)	18:42		20:54	22:02	22:49
18	09:12	10:48 (3)	08:05		09:39 (26)	06:47		06:19	05:04	04:27
	16:23	61 13:38 (4)	17:38	8	09:47 (26)	18:45		20:56	22:04	22:49
19	09:10	10:48 (3)	08:02			06:44		06:16	05:02	04:27
	16:26	58 13:37 (4)	17:41			18:47		20:58	22:06	22:50
20	09:09	10:48 (3)	08:00			06:42		06:13	05:00	04:27
	16:28	57 13:37 (4)	17:43			18:49		21:01	22:08	22:50
21	09:07	10:48 (3)	07:57			06:39		06:10	04:58	04:27
	16:30	53 13:36 (4)	17:45			18:52		21:03	22:10	22:50
22	09:05	10:49 (3)	07:54			06:36		06:08	04:56	04:27
	16:32	49 13:35 (4)	17:48			18:54		21:05	22:12	22:51
23	09:04	10:49 (3)	07:52			06:33		06:05	04:54	04:27
	16:35	43 13:33 (4)	17:50			18:56		21:08	22:14	22:51
24	09:02	10:48 (3)	07:49		08:36 (28)	06:30		06:02	04:53	04:28
	16:37	29 11:17 (3)	17:53	5	08:41 (28)	18:59		21:10	22:16	22:51
25	09:00	10:49 (3)	07:46		08:32 (28)	06:27		06:00	04:51	04:28
	16:39	29 11:18 (3)	17:55	12	08:44 (28)	19:01		21:12	22:18	22:51
26	08:58	10:49 (3)	07:44		08:30 (28)	06:24		05:57	04:49	04:29
	16:42	29 11:18 (3)	17:58	15	08:45 (28)	19:03		21:14	22:20	22:51
27	08:56	10:50 (3)	07:41		08:29 (28)	06:21		05:54	04:47	04:29
	16:44	29 11:19 (3)	18:00	17	08:46 (28)	19:05		21:17	22:22	22:50
28	08:54	10:50 (3)	07:38		08:29 (28)	06:18		05:52	04:46	04:30
	16:46	28 11:18 (3)	18:02	18	08:47 (28)	19:08		21:19	22:24	22:50
29	08:52	10:51 (3)				07:16		05:49	04:44	04:30
	16:49	27 11:18 (3)				20:10		21:21	22:26	22:50
30	08:50	10:51 (3)				07:13		05:47	04:43	04:31
	16:51	26 11:17 (3)				20:12		21:24	22:27	22:49
31	08:48	10:52 (3)				07:10			04:41	
	16:54	25 11:17 (3)				20:15			22:29	
Potential sun hours	221		260			365		432	521	547
Total, worst case		1753		490			132			
Sun reduction		0,50		0,50			0,50			
Oper. time red.		0,80		0,80			0,80			
Wind dir. red.		0,65		0,72			0,73			
Total reduction		0,26		0,29			0,29			
Total, real		456		141			38			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:52		09:00 (26)	09:00		10:33 (3)
	22:49		22:01		20:40		19:13			16:49	24	09:24 (26)	15:51	76	13:20 (4)
2	04:33		05:26		06:35		07:42			07:54		09:01 (26)	09:02		10:34 (3)
	22:48		21:59		20:37		19:10			16:46	23	09:24 (26)	15:50	78	13:20 (4)
3	04:34		05:29		06:38		07:44			07:56		09:01 (26)	09:04		10:35 (3)
	22:47		21:56		20:34		19:07			16:44	23	09:24 (26)	15:49	78	13:20 (4)
4	04:35		05:31		06:40		07:46			07:59		09:02 (26)	09:05		10:37 (3)
	22:47		21:54		20:31		19:05			16:42	22	09:24 (26)	15:48	77	13:21 (4)
5	04:36		05:33		06:42		07:48		09:11 (28)	08:01		09:02 (26)	09:07		10:39 (3)
	22:46		21:52		20:28		19:02	3	09:14 (28)	16:39	26	10:37 (3)	15:47	76	13:21 (4)
6	04:37		05:35		06:44		07:51		09:06 (28)	08:04		09:03 (26)	09:09		10:46 (1)
	22:45		21:49		20:26		18:59	11	09:17 (28)	16:37	32	10:42 (3)	15:46	70	13:22 (4)
7	04:39		05:37		06:47		07:53		09:05 (28)	08:06		09:05 (26)	09:10		10:47 (1)
	22:44		21:47		20:23		18:56	15	09:20 (28)	16:35	34	10:44 (3)	15:46	69	13:22 (4)
8	04:40		05:40		06:49		07:55		09:03 (28)	08:08		09:05 (26)	09:12		10:48 (1)
	22:43		21:44		20:20		18:53	17	09:20 (28)	16:32	35	10:45 (3)	15:45	69	13:23 (4)
9	04:41		05:42		06:51		07:58		09:02 (28)	08:11		09:08 (26)	09:14		10:49 (1)
	22:42		21:42		20:17		18:50	18	09:20 (28)	16:30	33	10:47 (3)	15:44	68	13:23 (4)
10	04:43		05:44		06:53		08:00		09:02 (28)	08:13		09:13 (26)	09:15		10:49 (1)
	22:41		21:39		20:14		18:48	19	09:21 (28)	16:28	25	10:48 (3)	15:44	69	13:23 (4)
11	04:44		05:46		06:55		08:02		09:01 (28)	08:16		10:22 (3)	09:16		10:50 (1)
	22:39		21:37		20:11		18:45	20	09:21 (28)	16:26	26	10:48 (3)	15:43	69	13:24 (4)
12	04:46		05:49		06:58		08:04		09:01 (28)	08:18		10:22 (3)	09:18		10:50 (1)
	22:38		21:34		20:08		18:42	20	09:21 (28)	16:24	27	10:49 (3)	15:43	67	13:24 (4)
13	04:47		05:51		07:00		08:07		09:01 (28)	08:20		10:22 (3)	09:19		10:51 (1)
	22:37		21:32		20:05		18:39	19	09:20 (28)	16:21	28	10:50 (3)	15:43	68	13:25 (4)
14	04:49		05:53		07:02		08:09		09:01 (28)	08:23		10:23 (3)	09:20		10:52 (1)
	22:35		21:29		20:02		18:36	18	09:19 (28)	16:19	28	10:51 (3)	15:42	67	13:25 (4)
15	04:51		05:55		07:04		08:11		09:02 (28)	08:25		10:22 (3)	09:21		10:52 (1)
	22:34		21:26		20:00		18:34	16	09:18 (28)	16:17	29	10:51 (3)	15:42	66	13:25 (4)
16	04:53		05:57		07:06		08:14		09:03 (28)	08:27		10:22 (3)	09:22		10:53 (1)
	22:32		21:24		19:57		18:31	13	09:16 (28)	16:15	29	10:51 (3)	15:42	64	13:25 (4)
17	04:54		06:00		07:09		08:16		09:05 (28)	08:30		10:23 (3)	09:23		10:54 (1)
	22:31		21:21		19:54		18:28	10	09:15 (28)	16:13	29	10:52 (3)	15:42	67	13:27 (4)
18	04:56		06:02		07:11		08:18			08:32		10:22 (3)	09:24		10:54 (1)
	22:29		21:19		19:51		18:25			16:11	29	10:51 (3)	15:42	64	13:26 (4)
19	04:58		06:04		07:13		08:21			08:34		10:23 (3)	09:25		10:55 (1)
	22:27		21:16		19:48		18:23			16:10	43	13:07 (4)	15:42	65	13:27 (4)
20	05:00		06:06		07:15		08:23			08:37		10:24 (3)	09:26		10:55 (1)
	22:25		21:13		19:45		18:20			16:08	49	13:10 (4)	15:43	66	13:28 (4)
21	05:02		06:09		07:17		08:25			08:39		10:23 (3)	09:26		10:56 (1)
	22:24		21:10		19:42		18:17			16:06	53	13:11 (4)	15:43	66	13:29 (4)
22	05:04		06:11		07:20		08:28			08:41		10:24 (3)	09:27		10:56 (1)
	22:22		21:08		19:39		18:15			16:04	57	13:13 (4)	15:44	65	13:28 (4)
23	05:06		06:13		07:22		08:30			08:43		10:24 (3)	09:27		10:56 (1)
	22:20		21:05		19:36		18:12			16:03	58	13:13 (4)	15:44	66	13:29 (4)
24	05:08		06:15		07:24		08:32		10:07 (26)	08:45		10:26 (3)	09:28		10:58 (1)
	22:18		21:02		19:33		18:09	10	10:17 (26)	16:01	60	13:15 (4)	15:45	64	13:30 (4)
25	05:10		06:18		07:26		07:35		09:05 (26)	08:48		10:26 (3)	09:28		10:58 (1)
	22:16		20:59		19:30		17:07	15	09:20 (26)	15:59	61	13:15 (4)	15:45	65	13:30 (4)
26	05:12		06:20		07:28		07:37		09:04 (26)	08:50		10:27 (3)	09:28		10:58 (1)
	22:14		20:57		19:28		17:04	18	09:22 (26)	15:58	62	13:16 (4)	15:46	66	13:31 (4)
27	05:14		06:22		07:31		07:40		09:02 (26)	08:52		10:28 (3)	09:28		10:58 (1)
	22:12		20:54		19:25		17:02	20	09:22 (26)	15:56	67	13:17 (4)	15:47	66	13:31 (4)
28	05:16		06:24		07:33		07:42		09:02 (26)	08:54		10:29 (3)	09:29		10:59 (1)
	22:10		20:51		19:22		16:59	21	09:23 (26)	15:55	72	13:18 (4)	15:48	67	13:32 (4)
29	05:18		06:27		07:35		07:44		09:02 (26)	08:56		10:30 (3)	09:29		10:58 (1)
	22:08		20:48		19:19		16:56	22	09:24 (26)	15:54	74	13:18 (4)	15:49	67	13:32 (4)
30	05:20		06:29		07:37		07:47		09:01 (26)	08:58		10:31 (3)	09:28		10:59 (1)
	22:05		20:45		19:16		16:54	23	09:24 (26)	15:53	75	13:18 (4)	15:50	66	13:32 (4)
31	05:22		06:31				07:49		09:01 (26)				09:28		11:00 (1)
	22:03		20:43				16:51	23	09:24 (26)				15:51	66	13:33 (4)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								351			1233			2117	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,68			0,63	
Total reduction								0,29			0,27			0,25	
Total, real								102			333			533	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28	11:05 (1)	08:46	09:41 (26)	07:35	08:31 (28)	07:07	05:44	04:40
	15:53 69	13:41 (4)	16:56 36	11:24 (3)	18:05 20	08:51 (28)	20:17	21:26	22:31
2	09:28	11:05 (1)	08:44	09:40 (26)	07:33	08:31 (28)	07:04	05:41	04:39
	15:54 68	13:41 (4)	16:59 35	11:22 (3)	18:07 20	08:51 (28)	20:19	21:28	22:32
3	09:27	11:05 (1)	08:41	09:39 (26)	07:30	08:31 (28)	07:01	05:39	04:37
	15:56 69	13:41 (4)	17:01 35	11:21 (3)	18:10 19	08:50 (28)	20:21	21:31	22:34
4	09:27	11:00 (3)	08:39	09:38 (26)	07:27	08:31 (28)	06:58	05:36	04:36
	15:57 74	13:42 (4)	17:04 32	11:19 (3)	18:12 19	08:50 (28)	20:24	21:33	22:35
5	09:26	10:59 (3)	08:37	09:38 (26)	07:24	08:32 (28)	06:55	05:34	04:35
	15:59 76	13:42 (4)	17:06 22	10:00 (26)	18:14 16	08:48 (28)	20:26	21:35	22:37
6	09:25	10:58 (3)	08:35	09:37 (26)	07:22	08:33 (28)	06:53	05:31	04:34
	16:00 77	13:43 (4)	17:08 23	10:00 (26)	18:17 14	08:47 (28)	20:28	21:38	22:38
7	09:25	10:58 (3)	08:32	09:36 (26)	07:19	08:35 (28)	06:50	05:29	04:33
	16:02 76	13:43 (4)	17:11 24	10:00 (26)	18:19 9	08:44 (28)	20:31	21:40	22:39
8	09:24	10:57 (3)	08:30	09:37 (26)	07:16		06:47	05:27	04:32
	16:04 78	13:44 (4)	17:13 24	10:01 (26)	18:21		20:33	21:42	22:41
9	09:23	10:57 (3)	08:28	09:36 (26)	07:13		06:44	05:24	04:31
	16:05 77	13:44 (4)	17:16 24	10:00 (26)	18:24		20:35	21:44	22:42
10	09:22	10:56 (3)	08:25	09:37 (26)	07:10		06:41	05:22	04:30
	16:07 77	13:44 (4)	17:18 24	10:01 (26)	18:26		20:38	21:47	22:43
11	09:21	10:56 (3)	08:23	09:37 (26)	07:07		06:38	05:20	04:30
	16:09 76	13:45 (4)	17:21 23	10:00 (26)	18:28		20:40	21:49	22:44
12	09:20	10:56 (3)	08:20	09:37 (26)	07:05		06:36	05:17	04:29
	16:11 74	13:44 (4)	17:23 23	10:00 (26)	18:31		20:42	21:51	22:45
13	09:19	10:56 (3)	08:18	09:38 (26)	07:02		06:33	05:15	04:28
	16:13 73	13:45 (4)	17:26 21	09:59 (26)	18:33		20:44	21:53	22:46
14	09:17	10:56 (3)	08:15	09:39 (26)	06:59		06:30	05:13	04:28
	16:15 69	13:45 (4)	17:28 20	09:59 (26)	18:35		20:47	21:55	22:47
15	09:16	10:55 (3)	08:13	09:40 (26)	06:56		06:27	05:11	04:28
	16:17 61	13:45 (4)	17:31 17	09:57 (26)	18:38		20:49	21:58	22:47
16	09:15	10:55 (3)	08:10	09:42 (26)	06:53		06:24	05:08	04:27
	16:19 59	13:44 (4)	17:33 13	09:55 (26)	18:40		20:51	22:00	22:48
17	09:13	10:56 (3)	08:08	09:45 (26)	06:50		06:21	05:06	04:27
	16:21 59	13:45 (4)	17:36 8	09:53 (26)	18:42		20:54	22:02	22:49
18	09:12	10:56 (3)	08:05		06:47		06:19	05:04	04:27
	16:23 58	13:45 (4)	17:38		18:45		20:56	22:04	22:49
19	09:10	10:56 (3)	08:02		06:44		06:16	05:02	04:27
	16:26 55	13:44 (4)	17:41		18:47		20:58	22:06	22:50
20	09:09	10:56 (3)	08:00		06:42		06:13	05:00	04:27
	16:28 54	13:44 (4)	17:43		18:49		21:01	22:08	22:50
21	09:07	10:56 (3)	07:57		06:39		06:10	04:58	04:27
	16:30 50	13:43 (4)	17:45		18:52		21:03	22:10	22:50
22	09:05	10:56 (3)	07:54		06:36		06:08	04:56	04:27
	16:32 45	13:42 (4)	17:48		18:54		21:05	22:12	22:51
23	09:04	10:57 (3)	07:52	08:40 (28)	06:33		06:05	04:54	04:27
	16:35 40	13:40 (4)	17:50 5	08:45 (28)	18:56		21:08	22:14	22:51
24	09:02	10:56 (3)	07:49	08:36 (28)	06:30		06:02	04:53	04:28
	16:37 32	13:36 (4)	17:53 12	08:48 (28)	18:59		21:10	22:16	22:51
25	09:00	10:57 (3)	07:46	08:34 (28)	06:27		06:00	04:51	04:28
	16:39 29	11:26 (3)	17:55 15	08:49 (28)	19:01		21:12	22:18	22:51
26	08:58	10:57 (3)	07:44	08:33 (28)	06:24		05:57	04:49	04:29
	16:42 29	11:26 (3)	17:58 17	08:50 (28)	19:03		21:14	22:20	22:51
27	08:56	10:58 (3)	07:41	08:32 (28)	06:21		05:54	04:47	04:29
	16:44 28	11:26 (3)	18:00 18	08:50 (28)	19:05		21:17	22:22	22:50
28	08:54	10:58 (3)	07:38	08:32 (28)	06:18		05:52	04:46	04:30
	16:46 28	11:26 (3)	18:02 19	08:51 (28)	19:08		21:19	22:24	22:50
29	08:52	10:59 (3)			07:16		05:49	04:44	04:30
	16:49 27	11:26 (3)			20:10		21:21	22:26	22:50
30	08:50	10:59 (3)			07:13		05:47	04:43	04:31
	16:51 26	11:25 (3)			20:12		21:24	22:27	22:49
31	08:48	09:43 (26)			07:10			04:41	
	16:54 32	11:24 (3)			20:15			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	1745		490		117				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,65		0,72		0,73				
Total reduction	0,26		0,29		0,29				
Total, real	452		141		34				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:06 (26)	09:00		10:39 (3)
	22:49	22:01	20:40	19:13			16:49	24	09:30 (26)	15:51	75	13:27 (4)
2	04:33	05:26	06:35	07:42			07:54		09:06 (26)	09:02		10:39 (3)
	22:48	21:59	20:37	19:10			16:46	24	09:30 (26)	15:50	77	13:27 (4)
3	04:34	05:29	06:38	07:44			07:56		09:06 (26)	09:04		10:40 (3)
	22:47	21:56	20:34	19:07			16:44	24	09:30 (26)	15:49	78	13:27 (4)
4	04:35	05:31	06:40	07:46			07:59		09:07 (26)	09:05		10:41 (3)
	22:47	21:54	20:31	19:05			16:42	23	09:30 (26)	15:48	79	13:28 (4)
5	04:36	05:33	06:42	07:48			08:01		09:07 (26)	09:07		10:43 (3)
	22:46	21:52	20:28	19:02			16:39	22	09:29 (26)	15:47	76	13:28 (4)
6	04:37	05:35	06:44	07:51		09:12 (28)	08:04		09:08 (26)	09:09		10:44 (3)
	22:45	21:49	20:26	18:59	7	09:19 (28)	16:37	21	09:29 (26)	15:46	77	13:29 (4)
7	04:39	05:37	06:47	07:53		09:10 (28)	08:06		09:09 (26)	09:10		10:46 (3)
	22:44	21:47	20:23	18:56	12	09:22 (28)	16:35	32	10:50 (3)	15:46	76	13:29 (4)
8	04:40	05:40	06:49	07:55		09:08 (28)	08:08		09:09 (26)	09:12		10:48 (3)
	22:43	21:44	20:20	18:53	15	09:23 (28)	16:32	34	10:51 (3)	15:45	74	13:30 (4)
9	04:41	05:42	06:51	07:58		09:06 (28)	08:11		09:10 (26)	09:14		10:51 (3)
	22:42	21:42	20:17	18:50	18	09:24 (28)	16:30	36	10:53 (3)	15:44	72	13:30 (4)
10	04:43	05:44	06:53	08:00		09:06 (28)	08:13		09:12 (26)	09:15		10:54 (1)
	22:41	21:39	20:14	18:48	19	09:25 (28)	16:28	35	10:55 (3)	15:44	68	13:30 (4)
11	04:44	05:46	06:55	08:02		09:05 (28)	08:16		09:14 (26)	09:16		10:55 (1)
	22:39	21:37	20:11	18:45	19	09:24 (28)	16:26	33	10:55 (3)	15:43	68	13:31 (4)
12	04:46	05:49	06:58	08:04		09:05 (28)	08:18		10:31 (3)	09:18		10:55 (1)
	22:38	21:34	20:08	18:42	20	09:25 (28)	16:24	26	10:57 (3)	15:43	68	13:31 (4)
13	04:47	05:51	07:00	08:07		09:04 (28)	08:20		10:31 (3)	09:19		10:56 (1)
	22:37	21:32	20:05	18:39	20	09:24 (28)	16:21	27	10:58 (3)	15:43	68	13:32 (4)
14	04:49	05:53	07:02	08:09		09:04 (28)	08:23		10:31 (3)	09:20		10:57 (1)
	22:35	21:29	20:02	18:36	19	09:23 (28)	16:19	28	10:59 (3)	15:42	67	13:32 (4)
15	04:51	05:55	07:04	08:11		09:05 (28)	08:25		10:30 (3)	09:21		10:57 (1)
	22:34	21:26	20:00	18:34	18	09:23 (28)	16:17	28	10:58 (3)	15:42	68	13:32 (4)
16	04:53	05:57	07:06	08:14		09:05 (28)	08:27		10:30 (3)	09:22		10:57 (1)
	22:32	21:24	19:57	18:31	16	09:21 (28)	16:15	29	10:59 (3)	15:42	68	13:32 (4)
17	04:54	06:00	07:09	08:16		09:07 (28)	08:30		10:31 (3)	09:23		10:59 (1)
	22:31	21:21	19:54	18:28	14	09:21 (28)	16:13	29	11:00 (3)	15:42	66	13:34 (4)
18	04:56	06:02	07:11	08:18		09:08 (28)	08:32		10:30 (3)	09:24		10:59 (1)
	22:29	21:19	19:51	18:25	10	09:18 (28)	16:11	32	13:10 (4)	15:42	66	13:33 (4)
19	04:58	06:04	07:13	08:21			08:34		10:31 (3)	09:25		10:59 (1)
	22:27	21:16	19:48	18:23			16:10	40	13:14 (4)	15:42	67	13:34 (4)
20	05:00	06:06	07:15	08:23			08:37		10:31 (3)	09:26		11:00 (1)
	22:25	21:13	19:45	18:20			16:08	45	13:17 (4)	15:43	66	13:35 (4)
21	05:02	06:09	07:17	08:25			08:39		10:31 (3)	09:26		11:01 (1)
	22:24	21:10	19:42	18:17			16:06	50	13:18 (4)	15:43	66	13:35 (4)
22	05:04	06:11	07:20	08:28			08:41		10:32 (3)	09:27		11:01 (1)
	22:22	21:08	19:39	18:15			16:04	54	13:20 (4)	15:44	66	13:35 (4)
23	05:06	06:13	07:22	08:30			08:43		10:32 (3)	09:27		11:01 (1)
	22:20	21:05	19:36	18:12			16:03	55	13:20 (4)	15:44	66	13:36 (4)
24	05:08	06:15	07:24	08:32			08:45		10:33 (3)	09:28		11:02 (1)
	22:18	21:02	19:33	18:09			16:01	58	13:22 (4)	15:45	66	13:37 (4)
25	05:10	06:18	07:26	07:35		09:13 (26)	08:48		10:33 (3)	09:28		11:03 (1)
	22:16	20:59	19:30	17:07	10	09:23 (26)	15:59	59	13:22 (4)	15:45	66	13:37 (4)
26	05:12	06:20	07:28	07:37		09:11 (26)	08:50		10:34 (3)	09:28		11:03 (1)
	22:14	20:57	19:28	17:04	15	09:26 (26)	15:58	60	13:24 (4)	15:46	67	13:38 (4)
27	05:14	06:22	07:31	07:40		09:09 (26)	08:52		10:34 (3)	09:28		11:03 (1)
	22:12	20:54	19:25	17:01	18	09:27 (26)	15:56	62	13:24 (4)	15:47	68	13:38 (4)
28	05:16	06:24	07:33	07:42		09:08 (26)	08:54		10:36 (3)	09:29		11:04 (1)
	22:10	20:51	19:22	16:59	20	09:28 (26)	15:55	69	13:25 (4)	15:48	66	13:39 (4)
29	05:18	06:27	07:35	07:44		09:08 (26)	08:56		10:36 (3)	09:29		11:03 (1)
	22:08	20:48	19:19	16:56	21	09:29 (26)	15:54	72	13:25 (4)	15:49	68	13:39 (4)
30	05:20	06:29	07:37	07:47		09:07 (26)	08:58		10:37 (3)	09:28		11:04 (1)
	22:05	20:45	19:16	16:54	22	09:29 (26)	15:53	74	13:26 (4)	15:50	68	13:39 (4)
31	05:22	06:31		07:49		09:07 (26)				09:28		11:05 (1)
	22:03	20:43		16:51	23	09:30 (26)				15:51	68	13:40 (4)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					336			1205			2159	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,67			0,63	
Total reduction					0,29			0,27			0,25	
Total, real					98			324			541	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March		April	May	June	July	August	September		October		November	December
1	09:28	08:46	07:36		07:07	05:44	04:40	04:32	05:24	06:33		07:40		07:52	09:00
	15:53	16:56	18:05		20:17	21:26	22:31	22:49	22:01	20:40		19:13	3	16:49	15:52
2	09:28	08:44	07:33		07:04	05:42	04:39	04:33	05:27	06:36		07:42		07:54	09:02
	15:54	16:59	18:07		20:19	21:28	22:32	22:48	21:59	20:37		19:10		16:47	15:50
3	09:27	08:42	07:30		07:01	05:39	04:38	04:34	05:29	06:38		07:44		07:56	09:04
	15:56	17:01	18:10		20:22	21:31	22:34	22:47	21:56	20:34		19:08		16:44	15:49
4	09:27	08:39	07:27		06:58	05:37	04:36	04:35	05:31	06:40		07:46		07:59	09:05
	15:57	17:04	18:12		20:24	21:33	22:35	22:47	21:54	20:31		19:05		16:42	15:48
5	09:26	08:37	07:24		06:56	05:34	04:35	04:36	05:33	06:42		07:49		08:01	09:07
	15:59	17:06	18:14		20:26	21:35	22:37	22:46	21:52	20:29		19:02		16:39	15:47
6	09:25	08:35	07:22		06:53	05:32	04:34	04:38	05:35	06:44		07:51		08:04	09:09
	16:00	17:09	18:17		20:28	21:38	22:38	22:45	21:49	20:26		18:59		16:37	15:47
7	09:25	08:32	07:19		06:50	05:29	04:33	04:39	05:38	06:47		07:53		08:06	09:11
	16:02	17:11	18:19		20:31	21:40	22:39	22:44	21:47	20:23		18:56		16:35	15:46
8	09:24	08:30	07:16		06:47	05:27	04:32	04:40	05:40	06:49		07:55		08:08	09:12
	16:04	17:14	18:22		20:33	21:42	22:41	22:43	21:44	20:20		18:53		16:33	15:45
9	09:23	08:28	07:13		06:44	05:24	04:31	04:42	05:42	06:51		07:58		08:11	09:14
	16:06	17:16	18:24		20:35	21:44	22:42	22:42	21:42	20:17		18:51		16:30	15:44
10	09:22	08:25	07:10		06:41	05:22	04:31	04:43	05:44	06:53		08:00		08:13	09:15
	16:07	17:19	18:26		20:38	21:47	22:43	22:41	21:39	20:14		18:48		16:28	15:44
11	09:21	08:23	07:08		06:38	05:20	04:30	04:45	05:46	06:55		08:02		08:16	09:16
	16:09	17:21	18:29		20:40	21:49	22:44	22:39	21:37	20:11		18:45		16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:05		08:18	09:18
	16:11	17:24	18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42		16:24	15:43
13	09:19	08:18	07:02		07:33 (4)	06:33	05:15	04:29	04:48	05:51		07:00		08:07	08:20	09:19
	16:13	17:26	18:33	9	07:42 (4)	20:45	21:53	22:46	22:37	21:32		20:05		18:39	16:22	15:43
14	09:17	08:15	06:59		07:31 (4)	06:30	05:13	04:28	04:49	05:53		07:02		08:09	08:23	09:20
	16:15	17:28	18:36	13	07:44 (4)	20:47	21:56	22:47	22:35	21:29		20:03		18:37	16:20	15:43
15	09:16	08:13	06:56		07:29 (4)	06:27	05:11	04:28	04:51	05:55		07:04		08:11	08:25	09:21
	16:17	17:31	18:38	16	07:45 (4)	20:49	21:58	22:47	22:34	21:27		20:00		18:34	16:17	15:42
16	09:15	08:10	06:53		07:28 (4)	06:24	05:09	04:28	04:53	05:58		07:06		08:14	08:27	09:22
	16:19	17:33	18:40	18	07:46 (4)	20:51	22:00	22:48	22:32	21:24		19:57		18:31	16:15	15:42
17	09:13	08:08	06:50		07:26 (4)	06:22	05:06	04:27	04:54	06:00		07:09		08:16	08:30	09:23
	16:21	17:36	18:43	20	07:46 (4)	20:54	22:02	22:49	22:31	21:21		19:54		18:28	16:14	15:42
18	09:12	08:05	06:47		07:26 (4)	06:19	05:04	04:27	04:56	06:02		07:11	08:19 (4)	08:18	08:32	09:24
	16:24	17:38	18:45	20	07:46 (4)	20:56	22:04	22:49	22:29	21:19		19:51	5 08:24 (4)	18:26	16:12	15:42
19	09:10	08:03	06:45		07:25 (4)	06:16	05:02	04:27	04:58	06:04		07:13	08:15 (4)	08:21	08:34	09:25
	16:26	17:41	18:47	21	07:46 (4)	20:58	22:06	22:50	22:27	21:16		19:48	12 08:27 (4)	18:23	16:10	15:43
20	09:09	08:00	06:42		07:26 (4)	06:13	05:00	04:27	05:00	06:07		07:15	08:13 (4)	08:23	08:37	09:26
	16:28	17:43	18:49	20	07:46 (4)	21:01	22:08	22:50	22:26	21:13		19:45	15 08:28 (4)	18:20	16:08	15:43
21	09:07	07:57	06:39		07:26 (4)	06:11	04:58	04:27	05:02	06:09		07:17	08:12 (4)	08:25	08:39	09:26
	16:30	17:46	18:52	20	07:46 (4)	21:03	22:10	22:50	22:24	21:11		19:42	18 08:30 (4)	18:17	16:06	15:43
22	09:05	07:55	06:36		07:26 (4)	06:08	04:56	04:27	05:04	06:11		07:20	08:11 (4)	08:28	08:41	09:27
	16:33	17:48	18:54	19	07:45 (4)	21:05	22:12	22:51	22:22	21:08		19:39	19 08:30 (4)	18:15	16:04	15:44
23	09:04	07:52	06:33		07:27 (4)	06:05	04:55	04:28	05:06	06:13		07:22	08:10 (4)	08:30	08:43	09:27
	16:35	17:51	18:56	16	07:43 (4)	21:08	22:14	22:51	22:20	21:05		19:36	20 08:30 (4)	18:12	16:03	15:44
24	09:02	07:49	06:30		07:28 (4)	06:03	04:53	04:28	05:08	06:16		07:24	08:09 (4)	08:32	08:46	09:28
	16:37	17:53	18:59	13	07:41 (4)	21:10	22:16	22:51	22:18	21:02		19:34	21 08:30 (4)	18:09	16:01	15:45
25	09:00	07:47	06:27		07:30 (4)	06:00	04:51	04:28	05:10	06:18		07:26	08:09 (4)	07:35	08:48	09:28
	16:39	17:55	19:01	8	07:38 (4)	21:12	22:18	22:51	22:16	21:00		19:31	20 08:29 (4)	17:07	16:00	15:46
26	08:58	07:44	06:24			05:57	04:49	04:29	05:12	06:20		07:28	08:09 (4)	07:37	08:50	09:28
	16:42	17:58	19:03			21:15	22:20	22:51	22:14	20:57		19:28	20 08:29 (4)	17:04	15:58	15:46
27	08:56	07:41	06:21			05:55	04:48	04:29	05:14	06:22		07:31	08:09 (4)	07:40	08:52	09:29
	16:44	18:00	19:06			21:17	22:22	22:50	22:12	20:54		19:25	19 08:28 (4)	17:02	15:57	15:47
28	08:54	07:38	06:19			05:52	04:46	04:30	05:16	06:24		07:33	08:09 (4)	07:42	08:54	09:29
	16:47	18:03	19:08			21:19	22:24	22:50	22:10	20:51		19:22	18 08:27 (4)	16:59	15:55	15:48
29	08:52		07:16			05:49	04:44	04:31	05:18	06:27		07:35	08:10 (4)	07:44	08:56	09:29
	16:49		20:10			21:22	22:26	22:50	22:08	20:48		19:19	15 08:25 (4)	16:57	15:54	15:49
30	08:50		07:13			05:47	04:43	04:31	05:20	06:29		07:37	08:12 (4)	07:47	08:58	09:29
	16:51		20:12			21:24	22:27	22:49	22:05	20:46		19:16	12 08:24 (4)	16:54	15:53	15:50
31	08:48		07:10				04:41		05:22	06:31				07:49		09:28
	16:54		20:15				22:29		22:03	20:43				16:52		15:51
Potential sun hours	221	260	365		432	521	547	545	478	386		319		236	200
Total, worst case				213							214		3		
Sun reduction				0,50							0,50		0,50		
Oper. time red.				0,80							0,80		0,80		
Wind dir. red.				0,70							0,70		0,70		
Total reduction				0,28							0,28		0,28		
Total, real				59							59		1		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28		11:26 (2)	08:46		10:08 (3)	07:35	07:07	05:44	04:40
	15:53	51	12:42 (4)	16:56	26	10:34 (3)	18:05	20:17	21:26	22:31
2	09:28		11:26 (2)	08:44		10:07 (3)	07:33	07:04	05:41	04:39
	15:54	51	12:42 (4)	16:59	27	10:34 (3)	18:07	20:19	21:28	22:32
3	09:27		11:26 (2)	08:41		10:08 (3)	07:30	07:01	05:39	04:37
	15:56	52	12:42 (4)	17:01	26	10:34 (3)	18:10	20:21	21:31	22:34
4	09:27		11:27 (2)	08:39		10:07 (3)	07:27	06:58	05:36	04:36
	15:57	52	12:43 (4)	17:04	27	10:34 (3)	18:12	20:24	21:33	22:35
5	09:26		11:27 (2)	08:37		10:08 (3)	07:24	06:55	05:34	04:35
	15:59	52	12:43 (4)	17:06	26	10:34 (3)	18:14	20:26	21:35	22:37
6	09:25		11:28 (2)	08:35		10:08 (3)	07:22	06:53	05:31	04:34
	16:00	51	12:43 (4)	17:09	26	10:34 (3)	18:17	20:28	21:38	22:38
7	09:25		11:28 (2)	08:32		10:08 (3)	07:19	06:50	05:29	04:33
	16:02	52	12:44 (4)	17:11	25	10:33 (3)	18:19	20:31	21:40	22:39
8	09:24		10:35 (1)	08:30		10:10 (3)	07:16	06:47	05:27	04:32
	16:04	58	12:45 (4)	17:13	23	10:33 (3)	18:21	20:33	21:42	22:41
9	09:23		10:34 (1)	08:28		10:10 (3)	07:13	06:44	05:24	04:31
	16:05	60	12:45 (4)	17:16	22	10:32 (3)	18:24	20:35	21:44	22:42
10	09:22		10:33 (1)	08:25		09:11 (26)	07:10	06:41	05:22	04:30
	16:07	62	12:45 (4)	17:18	27	10:31 (3)	18:26	20:38	21:47	22:43
11	09:21		10:33 (1)	08:23		09:09 (26)	07:07	06:38	05:20	04:30
	16:09	63	12:46 (4)	17:21	28	10:29 (3)	18:28	20:40	21:49	22:44
12	09:20		10:32 (1)	08:20		09:07 (26)	07:05	06:36	05:17	04:29
	16:11	64	12:46 (4)	17:23	27	10:27 (3)	18:31	20:42	21:51	22:45
13	09:19		10:33 (1)	08:18		09:06 (26)	07:02	06:33	05:15	04:28
	16:13	64	12:46 (4)	17:26	18	09:24 (26)	18:33	20:44	21:53	22:46
14	09:17		10:32 (1)	08:15		09:05 (26)	06:59	06:30	05:13	04:28
	16:15	64	12:46 (4)	17:28	20	09:25 (26)	18:35	20:47	21:56	22:47
15	09:16		10:32 (1)	08:13		09:05 (26)	06:56	06:27	05:11	04:28
	16:17	63	12:46 (4)	17:31	20	09:25 (26)	18:38	20:49	21:58	22:47
16	09:15		10:31 (1)	08:10		09:04 (26)	06:53	06:24	05:08	04:27
	16:19	63	12:46 (4)	17:33	21	09:25 (26)	18:40	20:51	22:00	22:48
17	09:13		10:32 (1)	08:08		09:05 (26)	06:50	06:22	05:06	04:27
	16:21	60	12:46 (4)	17:36	21	09:26 (26)	18:42	20:54	22:02	22:49
18	09:12		10:32 (1)	08:05		09:05 (26)	06:47	06:19	05:04	04:27
	16:23	58	12:46 (4)	17:38	20	09:25 (26)	18:45	20:56	22:04	22:49
19	09:10		10:32 (1)	08:02		09:05 (26)	06:44	06:16	05:02	04:27
	16:26	53	12:46 (4)	17:41	20	09:25 (26)	18:47	20:58	22:06	22:50
20	09:09		10:33 (1)	08:00		09:05 (26)	06:42	06:13	05:00	04:27
	16:28	42	12:45 (4)	17:43	19	09:24 (26)	18:49	21:01	22:08	22:50
21	09:07		10:33 (1)	07:57		09:05 (26)	06:39	06:11	04:58	04:27
	16:30	42	12:45 (4)	17:46	18	09:23 (26)	18:52	21:03	22:10	22:50
22	09:05		10:16 (3)	07:54		09:07 (26)	06:36	06:08	04:56	04:27
	16:32	44	12:44 (4)	17:48	15	09:22 (26)	18:54	21:05	22:12	22:51
23	09:04		10:13 (3)	07:52		09:09 (26)	06:33	06:05	04:54	04:27
	16:35	48	12:43 (4)	17:50	11	09:20 (26)	18:56	21:08	22:14	22:51
24	09:02		10:11 (3)	07:49		09:13 (26)	06:30	06:02	04:53	04:28
	16:37	45	12:40 (4)	17:53	3	09:16 (26)	18:59	21:10	22:16	22:51
25	09:00		10:10 (3)	07:46			06:27	06:00	04:51	04:28
	16:39	40	12:37 (4)	17:55			19:01	21:12	22:18	22:51
26	08:58		10:09 (3)	07:44			06:24	05:57	04:49	04:29
	16:42	36	10:52 (1)	17:58			19:03	21:15	22:20	22:51
27	08:56		10:09 (3)	07:41			06:21	05:54	04:47	04:29
	16:44	37	10:52 (1)	18:00			19:05	21:17	22:22	22:50
28	08:54		10:08 (3)	07:38			06:18	05:52	04:46	04:30
	16:46	35	10:50 (1)	18:02			19:08	21:19	22:24	22:50
29	08:52		10:08 (3)				07:16	05:49	04:44	04:30
	16:49	33	10:49 (1)				20:10	21:21	22:26	22:50
30	08:50		10:08 (3)				07:13	05:47	04:43	04:31
	16:51	25	10:33 (3)				20:12	21:24	22:27	22:49
31	08:48		10:07 (3)				07:10		04:41	
	16:54	26	10:33 (3)				20:15		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1546			516					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,67			0,73					
Total reduction		0,27			0,29					
Total, real		411			150					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:40			07:52		08:41 (26)	09:00		10:15 (1)
	22:49		22:01		20:40		19:13			16:49	27	10:01 (3)	15:51	63	12:28 (4)
2	04:33		05:26		06:35		07:42			07:54		09:40 (3)	09:02		10:16 (1)
	22:48		21:59		20:37		19:10			16:46	22	10:02 (3)	15:50	62	12:28 (4)
3	04:34		05:29		06:38		07:44			07:56		09:39 (3)	09:04		10:17 (1)
	22:47		21:56		20:34		19:07			16:44	24	10:03 (3)	15:49	60	12:28 (4)
4	04:35		05:31		06:40		07:46			07:59		09:39 (3)	09:05		10:19 (1)
	22:47		21:54		20:31		19:05			16:42	25	10:04 (3)	15:48	57	12:29 (4)
5	04:36		05:33		06:42		07:48			08:01		09:38 (3)	09:07		11:13 (2)
	22:46		21:52		20:28		19:02			16:39	26	10:04 (3)	15:47	52	12:29 (4)
6	04:37		05:35		06:44		07:51			08:04		09:38 (3)	09:09		11:14 (2)
	22:45		21:49		20:26		18:59			16:37	26	10:04 (3)	15:46	52	12:30 (4)
7	04:39		05:37		06:47		07:53			08:06		09:38 (3)	09:10		11:14 (2)
	22:44		21:47		20:23		18:56			16:35	27	10:05 (3)	15:46	52	12:30 (4)
8	04:40		05:40		06:49		07:55			08:08		09:37 (3)	09:12		11:15 (2)
	22:43		21:44		20:20		18:53			16:32	27	10:04 (3)	15:45	52	12:31 (4)
9	04:41		05:42		06:51		07:58			08:11		09:38 (3)	09:14		11:16 (2)
	22:42		21:42		20:17		18:50			16:30	26	10:04 (3)	15:44	51	12:31 (4)
10	04:43		05:44		06:53		08:00			08:13		09:38 (3)	09:15		11:15 (2)
	22:41		21:39		20:14		18:48			16:28	27	10:05 (3)	15:44	52	12:31 (4)
11	04:44		05:46		06:55		08:02			08:16		09:38 (3)	09:16		11:16 (2)
	22:39		21:37		20:11		18:45			16:26	26	10:04 (3)	15:43	51	12:32 (4)
12	04:46		05:49		06:58		08:04			08:18		09:39 (3)	09:18		11:16 (2)
	22:38		21:34		20:08		18:42			16:24	25	10:04 (3)	15:43	51	12:32 (4)
13	04:48		05:51		07:00		08:07			08:20		09:40 (3)	09:19		11:17 (2)
	22:37		21:32		20:05		18:39			16:21	33	10:21 (1)	15:43	51	12:33 (4)
14	04:49		05:53		07:02		08:09			08:23		09:41 (3)	09:20		11:18 (2)
	22:35		21:29		20:02		18:36			16:19	35	10:23 (1)	15:42	50	12:33 (4)
15	04:51		05:55		07:04		08:11			08:25		09:41 (3)	09:21		11:18 (2)
	22:34		21:26		20:00		18:34			16:17	37	10:24 (1)	15:42	50	12:33 (4)
16	04:53		05:58		07:06		08:14			08:27		09:42 (3)	09:22		11:19 (2)
	22:32		21:24		19:57		18:31			16:15	36	10:25 (1)	15:42	50	12:34 (4)
17	04:54		06:00		07:09		08:16			08:30		09:44 (3)	09:23		11:20 (2)
	22:31		21:21		19:54		18:28			16:13	40	12:11 (4)	15:42	50	12:35 (4)
18	04:56		06:02		07:11		08:18		09:42 (26)	08:32		09:45 (3)	09:24		11:19 (2)
	22:29		21:19		19:51		18:25	7	09:49 (26)	16:11	45	12:14 (4)	15:42	49	12:34 (4)
19	04:58		06:04		07:13		08:21		09:39 (26)	08:34		09:47 (3)	09:25		11:20 (2)
	22:27		21:16		19:48		18:23	13	09:52 (26)	16:10	48	12:17 (4)	15:42	50	12:35 (4)
20	05:00		06:06		07:15		08:23		09:37 (26)	08:37		09:51 (3)	09:26		11:21 (2)
	22:26		21:13		19:45		18:20	16	09:53 (26)	16:08	44	12:19 (4)	15:43	50	12:36 (4)
21	05:02		06:09		07:17		08:25		09:36 (26)	08:39		10:08 (1)	09:26		11:22 (2)
	22:24		21:10		19:42		18:17	18	09:54 (26)	16:06	42	12:20 (4)	15:43	49	12:36 (4)
22	05:04		06:11		07:20		08:28		09:35 (26)	08:41		10:09 (1)	09:27		11:22 (2)
	22:22		21:08		19:39		18:15	19	09:54 (26)	16:04	42	12:21 (4)	15:44	49	12:36 (4)
23	05:06		06:13		07:22		08:30		09:35 (26)	08:43		10:08 (1)	09:27		11:22 (2)
	22:20		21:05		19:36		18:12	20	09:55 (26)	16:03	54	12:22 (4)	15:44	49	12:36 (4)
24	05:08		06:15		07:24		08:32		09:34 (26)	08:45		10:09 (1)	09:28		11:23 (2)
	22:18		21:02		19:33		18:09	21	09:55 (26)	16:01	58	12:23 (4)	15:45	50	12:38 (4)
25	05:10		06:18		07:26		07:35		08:34 (26)	08:48		10:09 (1)	09:28		11:23 (2)
	22:16		20:59		19:31		17:07	21	08:55 (26)	15:59	61	12:24 (4)	15:45	49	12:38 (4)
26	05:12		06:20		07:28		07:37		08:34 (26)	08:50		10:10 (1)	09:28		11:24 (2)
	22:14		20:57		19:28		17:04	21	08:55 (26)	15:58	62	12:25 (4)	15:46	49	12:38 (4)
27	05:14		06:22		07:31		07:40		08:34 (26)	08:52		10:11 (1)	09:29		11:24 (2)
	22:12		20:54		19:25		17:02	20	08:54 (26)	15:57	63	12:25 (4)	15:47	50	12:39 (4)
28	05:16		06:24		07:33		07:42		08:35 (26)	08:54		10:12 (1)	09:29		11:25 (2)
	22:10		20:51		19:22		16:59	19	08:54 (26)	15:55	63	12:26 (4)	15:48	50	12:40 (4)
29	05:18		06:27		07:35		07:44		08:36 (26)	08:56		10:13 (1)	09:29		11:24 (2)
	22:08		20:48		19:19		16:56	21	09:53 (3)	15:54	64	12:26 (4)	15:49	50	12:39 (4)
30	05:20		06:29		07:37		07:47		08:36 (26)	08:58		10:13 (1)	09:28		11:25 (2)
	22:05		20:45		19:16		16:54	29	09:57 (3)	15:53	65	12:27 (4)	15:50	50	12:40 (4)
31	05:22		06:31				07:49		08:38 (26)				09:28		11:26 (2)
	22:03		20:43				16:51	29	09:59 (3)				15:51	51	12:41 (4)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								274			1200			1601	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,69			0,64	
Total reduction								0,29			0,27			0,26	
Total, real								80			329			411	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	08:20 (4)	07:07	05:44	04:40	04:32	05:24	06:33	07:40	08:51 (4)	07:52	09:00
	15:53	16:56	18:05 13	08:33 (4)	20:17	21:26	22:31	22:49	22:01	20:40	19:13 25	09:16 (4)	16:49	15:51
2	09:28	08:44	07:33	08:18 (4)	07:04	05:42	04:39	04:33	05:27	06:36	07:42	08:49 (4)	07:54	09:02
	15:54	16:59	18:07 17	08:35 (4)	20:19	21:28	22:32	22:48	21:59	20:37	19:10 27	09:16 (4)	16:47	15:50
3	09:27	08:41	07:30	08:16 (4)	07:01	05:39	04:37	04:34	05:29	06:38	07:44	08:48 (4)	07:56	09:04
	15:56	17:01	18:10 20	08:36 (4)	20:22	21:31	22:34	22:47	21:56	20:34	19:08 28	09:16 (4)	16:44	15:49
4	09:27	08:39	07:27	08:14 (4)	06:58	05:37	04:36	04:35	05:31	06:40	07:46	08:49 (4)	07:59	09:05
	15:57	17:04	18:12 23	08:37 (4)	20:24	21:33	22:35	22:47	21:54	20:31	19:05 27	09:16 (4)	16:42	15:48
5	09:26	08:37	07:24	08:13 (4)	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:48 (4)	08:01	09:07
	15:59	17:06	18:14 25	08:38 (4)	20:26	21:35	22:37	22:46	21:52	20:28	19:02 28	09:16 (4)	16:39	15:47
6	09:25	08:35	07:22	08:12 (4)	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:47 (4)	08:04	09:09
	16:00	17:09	18:17 26	08:38 (4)	20:28	21:38	22:38	22:45	21:49	20:26	18:59 28	09:15 (4)	16:37	15:47
7	09:25	08:32	07:19	08:11 (4)	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:48 (4)	08:06	09:10
	16:02	17:11	18:19 27	08:38 (4)	20:31	21:40	22:39	22:44	21:47	20:23	18:56 27	09:15 (4)	16:35	15:46
8	09:24	08:30	07:16	08:11 (4)	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:48 (4)	08:08	09:12
	16:04	17:14	18:22 27	08:38 (4)	20:33	21:42	22:41	22:43	21:44	20:20	18:53 26	09:14 (4)	16:32	15:45
9	09:23	08:28	07:13	08:11 (4)	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:48 (4)	08:11	09:14
	16:06	17:16	18:24 28	08:39 (4)	20:35	21:44	22:42	22:42	21:42	20:17	18:50 24	09:12 (4)	16:30	15:44
10	09:22	08:25	07:10	08:11 (4)	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:50 (4)	08:13	09:15
	16:07	17:19	18:26 28	08:39 (4)	20:38	21:47	22:43	22:41	21:39	20:14	18:48 22	09:12 (4)	16:28	15:44
11	09:21	08:23	07:07	08:11 (4)	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:50 (4)	08:16	09:16
	16:09	17:21	18:29 27	08:38 (4)	20:40	21:49	22:44	22:39	21:37	20:11	18:45 20	09:10 (4)	16:26	15:43
12	09:20	08:20	07:05	08:11 (4)	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:53 (4)	08:18	09:18
	16:11	17:23	18:31 26	08:37 (4)	20:42	21:51	22:45	22:38	21:34	20:08	18:42 15	09:08 (4)	16:24	15:43
13	09:19	08:18	07:02	08:12 (4)	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:55 (4)	08:20	09:19
	16:13	17:26	18:33 24	08:36 (4)	20:45	21:53	22:46	22:37	21:32	20:05	18:39 10	09:05 (4)	16:22	15:43
14	09:17	08:15	06:59	08:12 (4)	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23	09:20
	16:15	17:28	18:36 23	08:35 (4)	20:47	21:56	22:47	22:35	21:29	20:03	18:36		16:19	15:42
15	09:16	08:13	06:56	08:13 (4)	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25	09:21
	16:17	17:31	18:38 20	08:33 (4)	20:49	21:58	22:47	22:34	21:27	20:00	18:34		16:17	15:42
16	09:15	08:10	06:53	08:15 (4)	06:24	05:09	04:27	04:53	05:58	07:06	08:14		08:27	09:22
	16:19	17:33	18:40 15	08:30 (4)	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15	15:42
17	09:13	08:08	06:50	08:17 (4)	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30	09:23
	16:21	17:36	18:43 10	08:27 (4)	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:14	15:42
18	09:12	08:05	06:47		06:19	05:04	04:27	04:56	06:02	07:11	08:18		08:32	09:24
	16:24	17:38	18:45		20:56	22:04	22:49	22:29	21:19	19:51	18:25		16:12	15:42
19	09:10	08:02	06:45		06:16	05:02	04:27	04:58	06:04	07:13	08:21		08:34	09:25
	16:26	17:41	18:47		20:58	22:06	22:50	22:27	21:16	19:48	18:23		16:10	15:43
20	09:09	08:00	06:42		06:13	05:00	04:27	05:00	06:07	07:15	08:23		08:37	09:26
	16:28	17:43	18:49		21:01	22:08	22:50	22:26	21:13	19:45	18:20		16:08	15:43
21	09:07	07:57	06:39		06:11	04:58	04:27	05:02	06:09	07:17	08:25		08:39	09:26
	16:30	17:46	18:52		21:03	22:10	22:50	22:24	21:10	19:42	18:17		16:06	15:43
22	09:05	07:55	06:36		06:08	04:56	04:27	05:04	06:11	07:20	08:28		08:41	09:27
	16:32	17:48	18:54		21:05	22:12	22:51	22:22	21:08	19:39	18:15		16:04	15:44
23	09:04	07:52	06:33		06:05	04:55	04:28	05:06	06:13	07:22	08:30		08:43	09:27
	16:35	17:50	18:56		21:08	22:14	22:51	22:20	21:05	19:36	18:12		16:03	15:44
24	09:02	07:49	06:30		06:02	04:53	04:28	05:08	06:16	07:24	08:32		08:45	09:28
	16:37	17:53	18:59		21:10	22:16	22:51	22:18	21:02	19:33	18:09		16:01	15:45
25	09:00	07:46	06:27		06:00	04:51	04:28	05:10	06:18	07:26	07:35		08:48	09:28
	16:39	17:55	19:01		21:12	22:18	22:51	22:16	21:00	19:31	17:07		16:00	15:46
26	08:58	07:44	06:24		05:57	04:49	04:29	05:12	06:20	07:28 09:02 (4)	07:37		08:50	09:28
	16:42	17:58	19:03		21:15	22:20	22:51	22:14	20:57	19:28 6 09:08 (4)	17:04		15:58	15:46
27	08:56	07:41	06:21		05:55	04:48	04:29	05:14	06:22	07:31 08:57 (4)	07:40		08:52	09:29
	16:44	18:00	19:05		21:17	22:22	22:50	22:12	20:54	19:25 14 09:11 (4)	17:02		15:57	15:47
28	08:54	07:38 08:26 (4)	06:19		05:52	04:46	04:30	05:16	06:24	07:33 08:55 (4)	07:42		08:54	09:29
	16:47	18:03 2 08:28 (4)	19:08		21:19	22:24	22:50	22:10	20:51	19:22 18 09:13 (4)	16:59		15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35 08:53 (4)	07:44		08:56	09:29
	16:49		20:10		21:21	22:26	22:50	22:08	20:48	19:19 21 09:14 (4)	16:57		15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37 08:52 (4)	07:47		08:58	09:28
	16:51		20:12		21:24	22:27	22:49	22:05	20:46	19:16 24 09:16 (4)	16:54		15:53	15:50
31	08:48		07:10			04:41		05:22	06:31		07:49			09:28
	16:54		20:15			22:29		22:03	20:43		16:52			15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case		2	379						83	307		
Sun reduction		0,50	0,50						0,50	0,50		
Oper. time red.		0,80	0,80						0,80	0,80		
Wind dir. red.		0,72	0,72						0,72	0,72		
Total reduction		0,29	0,29						0,29	0,29		
Total, real		1	109						24	88		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:21 (28)	08:46	10:00 (32)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:36 (32)	09:00	10:51 (27)	
	15:53	20 12:41 (28)	16:56	20 10:20 (32)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6 09:42 (32)	15:51	28 12:23 (28)	
2	09:28	12:22 (28)	08:44	09:59 (32)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54	09:34 (32)	09:02	10:51 (27)	
	15:54	19 12:41 (28)	16:58	21 10:20 (32)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11 09:45 (32)	15:50	30 12:24 (28)	
3	09:27	12:22 (28)	08:41	10:00 (32)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56	09:33 (32)	09:04	10:52 (27)	
	15:55	19 12:41 (28)	17:01	20 10:20 (32)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14 09:47 (32)	15:49	29 12:25 (28)	
4	09:27	11:12 (27)	08:39	10:00 (32)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:31 (32)	09:05	10:53 (27)	
	15:57	22 12:41 (28)	17:03	20 10:20 (32)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17 09:48 (32)	15:48	30 12:26 (28)	
5	09:26	11:11 (27)	08:37	10:01 (32)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	09:31 (32)	09:07	10:54 (27)	
	15:58	26 12:42 (28)	17:06	19 10:20 (32)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18 09:49 (32)	15:47	29 12:27 (28)	
6	09:25	11:10 (27)	08:35	10:01 (32)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:30 (32)	09:09	10:56 (27)	
	16:00	28 12:42 (28)	17:08	18 10:19 (32)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20 09:50 (32)	15:46	28 12:28 (28)	
7	09:25	11:09 (27)	08:32	10:01 (32)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:30 (32)	09:10	10:58 (27)	
	16:02	29 12:42 (28)	17:11	17 10:18 (32)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20 09:50 (32)	15:45	26 12:29 (28)	
8	09:24	11:09 (27)	08:30	10:03 (32)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:30 (32)	09:12	11:00 (27)	
	16:03	30 12:42 (28)	17:13	15 10:18 (32)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20 09:50 (32)	15:45	23 12:30 (28)	
9	09:23	11:09 (27)	08:27	10:04 (32)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:30 (32)	09:13	12:11 (28)	
	16:05	30 12:42 (28)	17:16	12 10:16 (32)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20 09:50 (32)	15:44	19 12:30 (28)	
10	09:22	11:08 (27)	08:25	10:07 (32)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:31 (32)	09:15	12:11 (28)	
	16:07	30 12:41 (28)	17:18	5 10:12 (32)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20 09:51 (32)	15:44	19 12:30 (28)	
11	09:21	11:09 (27)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:30 (32)	09:16	12:11 (28)	
	16:09	28 12:41 (28)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20 09:50 (32)	15:43	20 12:31 (28)	
12	09:20	11:08 (27)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:31 (32)	09:18	12:11 (28)	
	16:11	27 12:40 (28)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27 10:58 (27)	15:43	20 12:31 (28)	
13	09:19	11:08 (27)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:32 (32)	09:19	12:12 (28)	
	16:13	25 12:39 (28)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31 11:01 (27)	15:42	21 12:33 (28)	
14	09:17	11:08 (27)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:33 (32)	09:20	12:12 (28)	
	16:15	20 11:28 (27)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32 11:03 (27)	15:42	21 12:33 (28)	
15	09:16	11:08 (27)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:34 (32)	09:21	12:12 (28)	
	16:17	21 11:29 (27)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31 11:03 (27)	15:42	21 12:33 (28)	
16	09:15	11:08 (27)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:36 (32)	09:22	12:13 (28)	
	16:19	21 11:29 (27)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31 11:05 (27)	15:42	20 12:33 (28)	
17	09:13	11:09 (27)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:38 (32)	09:23	12:14 (28)	
	16:21	22 11:31 (27)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28 11:06 (27)	15:42	21 12:35 (28)	
18	09:12	11:09 (27)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:44 (27)	09:24	12:14 (28)	
	16:23	22 11:31 (27)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22 11:06 (27)	15:42	21 12:35 (28)	
19	09:10	11:09 (27)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	10:45 (27)	09:25	12:14 (28)	
	16:25	22 11:31 (27)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22 11:07 (27)	15:42	21 12:35 (28)	
20	09:09	11:09 (27)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:45 (27)	09:26	12:15 (28)	
	16:28	23 11:32 (27)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22 11:07 (27)	15:43	21 12:36 (28)	
21	09:07	11:09 (27)	07:57		06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39	10:45 (27)	09:26	12:16 (28)	
	16:30	23 11:32 (27)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22 11:07 (27)	15:43	21 12:37 (28)	
22	09:05	11:10 (27)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	10:45 (27)	09:27	12:16 (28)	
	16:32	22 11:32 (27)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23 11:08 (27)	15:43	21 12:37 (28)	
23	09:03	11:10 (27)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:45 (27)	09:27	12:16 (28)	
	16:34	22 11:32 (27)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23 11:08 (27)	15:44	21 12:37 (28)	
24	09:02	11:10 (27)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:46 (27)	09:28	12:17 (28)	
	16:37	22 11:32 (27)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22 11:08 (27)	15:45	21 12:38 (28)	
25	09:00	10:04 (32)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:46 (27)	09:28	12:17 (28)	
	16:39	28 11:32 (27)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22 11:08 (27)	15:45	21 12:38 (28)	
26	08:58	10:03 (32)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:47 (27)	09:28	12:18 (28)	
	16:42	31 11:32 (27)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21 11:08 (27)	15:46	21 12:39 (28)	
27	08:56	10:02 (32)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:47 (27)	09:28	12:18 (28)	
	16:44	31 11:31 (27)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21 11:08 (27)	15:47	21 12:39 (28)	
28	08:54	10:00 (32)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:48 (27)	09:29	12:19 (28)	
	16:46	32 11:30 (27)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21 11:09 (27)	15:48	21 12:40 (28)	
29	08:52	10:00 (32)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:49 (27)	09:29	12:19 (28)	
	16:49	31 11:29 (27)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22 12:18 (28)	15:49	21 12:40 (28)	
30	08:50	09:59 (32)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:49 (27)	09:28	12:20 (28)	
	16:51	27 11:26 (27)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28 12:21 (28)	15:50	20 12:40 (28)	
31	08:48	09:59 (32)			07:10		04:41		05:22	06:31		07:49			09:28	12:21 (28)	
	16:54	20 10:19 (32)			20:14		22:29		22:03	20:43		16:51			15:51	20 12:41 (28)	
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case		773		167										657		697	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,67		0,72										0,70		0,64	
Total reduction		0,27		0,29										0,28		0,25	
Total, real		208		48										183		177	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April		May	June
1	09:27	08:45		07:35		07:06		05:44	04:40
	15:53	16:56		18:04		20:16		21:25	22:30
2	09:27	08:43		07:32		07:04		05:41	04:38
	15:54	16:58		18:07		20:19		21:28	22:31
3	09:26	08:41		07:29		07:01		05:39	04:37
	15:55	17:01		18:09		20:21		21:30	22:33
4	09:26	08:39		07:27		06:58	19:38 (67)	05:36	04:36
	15:57	17:03		18:12		20:23	2 19:40 (67)	21:32	22:34
5	09:25	08:36		07:24		06:55	19:34 (67)	05:34	04:35
	15:58	17:06		18:14		20:25	8 19:42 (67)	21:35	22:36
6	09:25	08:34		07:21		06:52	19:32 (67)	05:31	04:34
	16:00	17:08		18:16		20:28	11 19:43 (67)	21:37	22:37
7	09:24	08:32		07:18		06:49	19:31 (67)	05:29	04:33
	16:02	17:11		18:19		20:30	12 19:43 (67)	21:39	22:39
8	09:23	08:29		07:15		06:46	19:31 (67)	05:26	04:32
	16:03	17:13		18:21		20:32	13 19:44 (67)	21:41	22:40
9	09:22	08:27		07:13		06:44	19:31 (67)	05:24	04:31
	16:05	17:16		18:23		20:35	12 19:43 (67)	21:44	22:41
10	09:21	08:24		07:10		06:41	19:31 (67)	05:22	04:30
	16:07	17:18		18:26		20:37	11 19:42 (67)	21:46	22:42
11	09:20	08:22		07:07		06:38	19:32 (67)	05:19	04:30
	16:09	17:21		18:28		20:39	8 19:40 (67)	21:48	22:43
12	09:19	08:20		07:04		06:35	19:34 (67)	05:17	04:29
	16:11	17:23		18:30		20:42	4 19:38 (67)	21:50	22:44
13	09:18	08:17		07:01		06:32		05:15	04:28
	16:13	17:25		18:33		20:44		21:53	22:45
14	09:17	08:15		06:58		06:29		05:13	04:28
	16:15	17:28		18:35		20:46		21:55	22:46
15	09:15	08:12		06:55		06:27	19:48 (66)	05:10	04:27
	16:17	17:30		18:37		20:48	9 19:57 (66)	21:57	22:47
16	09:14	08:10	16:48 (70)	06:53		06:24	19:47 (66)	05:08	04:27
	16:19	17:33	1 16:49 (70)	18:40		20:51	13 20:00 (66)	21:59	22:47
17	09:13	08:07	16:44 (70)	06:50		06:21	19:45 (66)	05:06	04:27
	16:21	17:35	8 16:52 (70)	18:42		20:53	15 20:00 (66)	22:01	22:48
18	09:11	08:04	16:42 (70)	06:47		06:18	19:44 (66)	05:04	04:27
	16:23	17:38	12 16:54 (70)	18:44		20:55	16 20:00 (66)	22:03	22:48
19	09:09	08:02	16:41 (70)	06:44		06:16	19:44 (66)	05:02	04:27
	16:25	17:40	13 16:54 (70)	18:47		20:58	17 20:01 (66)	22:05	22:49
20	09:08	07:59	16:42 (70)	06:41		06:13	19:43 (66)	05:00	04:27
	16:28	17:43	13 16:55 (70)	18:49		21:00	18 20:01 (66)	22:08	22:49
21	09:06	07:57	16:41 (70)	06:38	18:02 (69)	06:10	19:42 (66)	04:58	04:27
	16:30	17:45	14 16:55 (70)	18:51	2 18:04 (69)	21:02	18 20:00 (66)	22:10	22:49
22	09:05	07:54	16:41 (70)	06:35	17:58 (69)	06:07	19:43 (66)	04:56	04:27
	16:32	17:48	13 16:54 (70)	18:53	9 18:07 (69)	21:05	17 20:00 (66)	22:12	22:50
23	09:03	07:51	16:42 (70)	06:32	17:56 (69)	06:05	19:43 (66)	04:54	04:27
	16:34	17:50	11 16:53 (70)	18:56	12 18:08 (69)	21:07	16 19:59 (66)	22:14	22:50
24	09:01	07:49	16:43 (70)	06:30	17:55 (69)	06:02	19:44 (66)	04:52	04:28
	16:37	17:52	9 16:52 (70)	18:58	14 18:09 (69)	21:09	15 19:59 (66)	22:16	22:50
25	08:59	07:46	16:45 (70)	06:27	17:54 (69)	05:59	19:45 (66)	04:51	04:28
	16:39	17:55	4 16:49 (70)	19:00	15 18:09 (69)	21:12	12 19:57 (66)	22:17	22:50
26	08:57	07:43		06:24	17:53 (69)	05:57	19:47 (66)	04:49	04:28
	16:41	17:57		19:03	15 18:08 (69)	21:14	8 19:55 (66)	22:19	22:50
27	08:55	07:40		06:21	17:54 (69)	05:54		04:47	04:29
	16:44	18:00		19:05	15 18:09 (69)	21:16		22:21	22:49
28	08:53	07:38		06:18	17:55 (69)	05:51		04:46	04:30
	16:46	18:02		19:07	13 18:08 (69)	21:18		22:23	22:49
29	08:51			07:15	18:55 (69)	05:49		04:44	04:30
	16:49			20:09	11 19:06 (69)	21:21		22:25	22:49
30	08:49			07:12	18:57 (69)	05:46		04:43	04:31
	16:51			20:12	6 19:03 (69)	21:23		22:26	22:48
31	08:47			07:09				04:41	
	16:53			20:14				22:28	
Potential sun hours	222	260		365		432		521	547
Total, worst case			98		112		255		
Sun reduction			0,50		0,50		0,50		
Oper. time red.			0,80		0,80		0,80		
Wind dir. red.			0,57		0,62		0,69		
Total reduction			0,23		0,25		0,27		
Total, real			22		28		70		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August		September		October		November	December
1	04:32	05:24		06:33	19:31 (67)	07:39		07:51	08:59
	22:48	22:00		20:39	8 19:39 (67)	19:13		16:49	15:51
2	04:33	05:26		06:35	19:29 (67)	07:41		07:53	09:01
	22:47	21:58		20:36	11 19:40 (67)	19:10		16:46	15:50
3	04:34	05:28		06:37	19:29 (67)	07:43		07:56	09:03
	22:47	21:56		20:34	12 19:41 (67)	19:07		16:44	15:49
4	04:35	05:31		06:39	19:28 (67)	07:46		07:58	09:05
	22:46	21:53		20:31	13 19:41 (67)	19:04		16:41	15:48
5	04:36	05:33		06:42	19:28 (67)	07:48		08:00	09:06
	22:45	21:51		20:28	12 19:40 (67)	19:01		16:39	15:47
6	04:37	05:35		06:44	19:28 (67)	07:50		08:03	09:08
	22:44	21:48		20:25	11 19:39 (67)	18:58		16:37	15:46
7	04:39	05:37		06:46	19:29 (67)	07:52		08:05	09:10
	22:43	21:46		20:22	8 19:37 (67)	18:56		16:34	15:45
8	04:40	05:39		06:48	19:31 (67)	07:55		08:08	09:11
	22:42	21:44		20:19	3 19:34 (67)	18:53		16:32	15:45
9	04:41	05:42		06:50		07:57		08:10	09:13
	22:41	21:41		20:16		18:50		16:30	15:44
10	04:43	05:44		06:53		07:59		08:12	09:14
	22:40	21:39		20:13		18:47		16:28	15:44
11	04:44	05:46		06:55		08:02		08:15	09:16
	22:39	21:36		20:11		18:44		16:25	15:43
12	04:46	05:48		06:57		08:04		08:17	09:17
	22:37	21:34		20:08		18:42		16:23	15:43
13	04:47	05:50		06:59	18:49 (69)	08:06		08:20	09:18
	22:36	21:31		20:05	5 18:54 (69)	18:39		16:21	15:42
14	04:49	05:53		07:01	18:46 (69)	08:08		08:22	09:19
	22:34	21:28		20:02	10 18:56 (69)	18:36		16:19	15:42
15	04:51	05:55		07:04	18:44 (69)	08:11		08:24	09:20
	22:33	21:26		19:59	13 18:57 (69)	18:33		16:17	15:42
16	04:52	05:57	19:56 (66)	07:06	18:43 (69)	08:13		08:27	09:21
	22:31	21:23	4 20:00 (66)	19:56	14 18:57 (69)	18:30		16:15	15:42
17	04:54	05:59	19:53 (66)	07:08	18:42 (69)	08:15	17:16 (70)	08:29	09:22
	22:30	21:21	9 20:02 (66)	19:53	15 18:57 (69)	18:28	6 17:22 (70)	16:13	15:42
18	04:56	06:02	19:51 (66)	07:10	18:41 (69)	08:18	17:14 (70)	08:31	09:23
	22:28	21:18	13 20:04 (66)	19:50	15 18:56 (69)	18:25	10 17:24 (70)	16:11	15:42
19	04:58	06:04	19:49 (66)	07:12	18:42 (69)	08:20	17:13 (70)	08:34	09:24
	22:26	21:15	15 20:04 (66)	19:47	14 18:56 (69)	18:22	12 17:25 (70)	16:09	15:42
20	05:00	06:06	19:48 (66)	07:15	18:42 (69)	08:22	17:12 (70)	08:36	09:25
	22:25	21:12	17 20:05 (66)	19:44	13 18:55 (69)	18:20	14 17:26 (70)	16:08	15:43
21	05:01	06:08	19:48 (66)	07:17	18:43 (69)	08:25	17:12 (70)	08:38	09:26
	22:23	21:10	17 20:05 (66)	19:42	10 18:53 (69)	18:17	13 17:25 (70)	16:06	15:43
22	05:03	06:11	19:47 (66)	07:19	18:45 (69)	08:27	17:12 (70)	08:40	09:26
	22:21	21:07	18 20:05 (66)	19:39	5 18:50 (69)	18:14	13 17:25 (70)	16:04	15:43
23	05:05	06:13	19:48 (66)	07:21		08:29	17:12 (70)	08:43	09:27
	22:19	21:04	18 20:06 (66)	19:36		18:12	12 17:24 (70)	16:02	15:44
24	05:07	06:15	19:48 (66)	07:23		08:32	17:13 (70)	08:45	09:27
	22:17	21:02	17 20:05 (66)	19:33		18:09	10 17:23 (70)	16:01	15:45
25	05:09	06:17	19:48 (66)	07:26		07:34	16:14 (70)	08:47	09:27
	22:15	20:59	16 20:04 (66)	19:30		17:06	7 16:21 (70)	15:59	15:45
26	05:11	06:20	19:48 (66)	07:28		07:37		08:49	09:28
	22:13	20:56	15 20:03 (66)	19:27		17:04		15:58	15:46
27	05:13	06:22	19:49 (66)	07:30		07:39		08:51	09:28
	22:11	20:53	12 20:01 (66)	19:24		17:01		15:56	15:47
28	05:16	06:24	19:50 (66)	07:32		07:41		08:53	09:28
	22:09	20:50	9 19:59 (66)	19:21		16:59		15:55	15:48
29	05:18	06:26		07:35		07:44		08:55	09:28
	22:07	20:48		19:18		16:56		15:54	15:49
30	05:20	06:28		07:37		07:46		08:57	09:28
	22:05	20:45		19:16		16:54		15:52	15:50
31	05:22	06:31	19:33 (67)			07:48			09:27
	22:02	20:42	5 19:38 (67)			16:51			15:51
Potential sun hours	545	478		386		319		236	200
Total, worst case			185		192		97		
Sun reduction			0,50		0,50		0,50		
Oper. time red.			0,80		0,80		0,80		
Wind dir. red.			0,69		0,65		0,57		
Total reduction			0,28		0,26		0,23		
Total, real			51		49		22		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April		May	June
1	09:27	08:45		07:35		07:06	19:00 (69)	05:44	04:40
	15:53	16:56		18:04		20:16	4 19:04 (69)	21:25	22:30
2	09:27	08:43		07:32		07:04		05:41	04:38
	15:54	16:58		18:07		20:19		21:28	22:31
3	09:26	08:41		07:29		07:01		05:39	04:37
	15:55	17:01		18:09		20:21		21:30	22:33
4	09:26	08:39		07:27		06:58		05:36	04:36
	15:57	17:03		18:12		20:23		21:32	22:34
5	09:25	08:36		07:24		06:55		05:34	04:35
	15:58	17:06		18:14		20:25		21:35	22:36
6	09:25	08:34		07:21		06:52	19:37 (67)	05:31	04:34
	16:00	17:08		18:16		20:28	6 19:43 (67)	21:37	22:37
7	09:24	08:32		07:18		06:49	19:35 (67)	05:29	04:33
	16:02	17:11		18:19		20:30	10 19:45 (67)	21:39	22:39
8	09:23	08:29		07:15		06:46	19:34 (67)	05:26	04:32
	16:03	17:13		18:21		20:32	12 19:46 (67)	21:41	22:40
9	09:22	08:27		07:13		06:44	19:33 (67)	05:24	04:31
	16:05	17:16		18:23		20:35	13 19:46 (67)	21:44	22:41
10	09:21	08:24		07:10		06:41	19:33 (67)	05:22	04:30
	16:07	17:18		18:26		20:37	12 19:45 (67)	21:46	22:42
11	09:20	08:22		07:07		06:38	19:33 (67)	05:19	04:30
	16:09	17:21		18:28		20:39	11 19:44 (67)	21:48	22:43
12	09:19	08:20		07:04		06:35	19:33 (67)	05:17	04:29
	16:11	17:23		18:30		20:42	10 19:43 (67)	21:50	22:44
13	09:18	08:17		07:01		06:32	19:35 (67)	05:15	04:28
	16:13	17:25		18:33		20:44	7 19:42 (67)	21:53	22:45
14	09:17	08:15		06:58		06:29		05:13	04:28
	16:15	17:28		18:35		20:46		21:55	22:46
15	09:15	08:12		06:55		06:27		05:10	04:27
	16:17	17:30		18:37		20:48		21:57	22:47
16	09:14	08:10		06:53		06:24		05:08	04:27
	16:19	17:33		18:40		20:51		21:59	22:47
17	09:13	08:07		06:50		06:21	19:53 (66)	05:06	04:27
	16:21	17:35		18:42		20:53	8 20:01 (66)	22:01	22:48
18	09:11	08:04	16:45 (70)	06:47		06:18	19:50 (66)	05:04	04:27
	16:23	17:38	8 16:53 (70)	18:44		20:55	12 20:02 (66)	22:03	22:48
19	09:09	08:02	16:43 (70)	06:44		06:16	19:49 (66)	05:02	04:27
	16:25	17:40	12 16:55 (70)	18:47		20:58	15 20:04 (66)	22:05	22:49
20	09:08	07:59	16:43 (70)	06:41		06:13	19:48 (66)	05:00	04:27
	16:28	17:43	13 16:56 (70)	18:49		21:00	16 20:04 (66)	22:08	22:49
21	09:06	07:57	16:43 (70)	06:38		06:10	19:46 (66)	04:58	04:27
	16:30	17:45	13 16:56 (70)	18:51		21:02	18 20:04 (66)	22:10	22:49
22	09:05	07:54	16:42 (70)	06:35		06:07	19:47 (66)	04:56	04:27
	16:32	17:48	14 16:56 (70)	18:53		21:05	17 20:04 (66)	22:12	22:50
23	09:03	07:51	16:42 (70)	06:32	18:01 (69)	06:05	19:46 (66)	04:54	04:27
	16:34	17:50	13 16:55 (70)	18:56	7 18:08 (69)	21:07	18 20:04 (66)	22:14	22:50
24	09:01	07:49	16:43 (70)	06:30	17:59 (69)	06:02	19:46 (66)	04:52	04:28
	16:37	17:52	11 16:54 (70)	18:58	11 18:10 (69)	21:09	18 20:04 (66)	22:16	22:50
25	08:59	07:46	16:44 (70)	06:27	17:57 (69)	05:59	19:46 (66)	04:51	04:28
	16:39	17:55	9 16:53 (70)	19:00	14 18:11 (69)	21:12	17 20:03 (66)	22:17	22:50
26	08:57	07:43	16:47 (70)	06:24	17:56 (69)	05:57	19:47 (66)	04:49	04:28
	16:41	17:57	4 16:51 (70)	19:03	15 18:11 (69)	21:14	16 20:03 (66)	22:19	22:50
27	08:55	07:40		06:21	17:56 (69)	05:54	19:47 (66)	04:47	04:29
	16:44	18:00		19:05	16 18:12 (69)	21:16	14 20:01 (66)	22:21	22:49
28	08:53	07:38		06:18	17:56 (69)	05:51	19:49 (66)	04:46	04:30
	16:46	18:02		19:07	15 18:11 (69)	21:18	11 20:00 (66)	22:23	22:49
29	08:51			07:15	18:56 (69)	05:49	19:50 (66)	04:44	04:30
	16:49			20:09	14 19:10 (69)	21:21	7 19:57 (66)	22:25	22:49
30	08:49			07:12	18:56 (69)	05:46		04:43	04:31
	16:51			20:12	13 19:09 (69)	21:23		22:26	22:48
31	08:47			07:09	18:57 (69)			04:41	
	16:53			20:14	10 19:07 (69)			22:28	
Potential sun hours	222	260		365		432		521	547
Total, worst case			97		115		272		
Sun reduction			0,50		0,50		0,50		
Oper. time red.			0,80		0,80		0,80		
Wind dir. red.			0,57		0,63		0,69		
Total reduction			0,23		0,25		0,28		
Total, real			22		29		75		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August			September			October			November	December
1	04:32	05:24			06:33		19:32 (67)	07:39			07:51	08:59
	22:48	22:00			20:39	11	19:43 (67)	19:13			16:49	15:51
2	04:33	05:26			06:35		19:31 (67)	07:41			07:53	09:01
	22:47	21:58			20:36	12	19:43 (67)	19:10			16:46	15:50
3	04:34	05:28			06:37		19:31 (67)	07:43			07:56	09:03
	22:47	21:56			20:34	13	19:44 (67)	19:07			16:44	15:49
4	04:35	05:31			06:39		19:31 (67)	07:46			07:58	09:05
	22:46	21:53			20:31	12	19:43 (67)	19:04			16:41	15:48
5	04:36	05:33			06:42		19:32 (67)	07:48			08:00	09:06
	22:45	21:51			20:28	10	19:42 (67)	19:01			16:39	15:47
6	04:37	05:35			06:44		19:33 (67)	07:50			08:03	09:08
	22:44	21:48			20:25	7	19:40 (67)	18:58			16:37	15:46
7	04:39	05:37			06:46			07:52			08:05	09:10
	22:43	21:46			20:22			18:56			16:34	15:45
8	04:40	05:39			06:48			07:55			08:08	09:11
	22:42	21:44			20:19			18:53			16:32	15:45
9	04:41	05:42			06:50			07:57			08:10	09:13
	22:41	21:41			20:16			18:50			16:30	15:44
10	04:43	05:44			06:53			07:59			08:12	09:14
	22:40	21:39			20:13			18:47			16:28	15:44
11	04:44	05:46			06:55		18:54 (69)	08:02			08:15	09:16
	22:39	21:36			20:11	1	18:55 (69)	18:44			16:25	15:43
12	04:46	05:48			06:57		18:50 (69)	08:04			08:17	09:17
	22:37	21:34			20:08	9	18:59 (69)	18:42			16:23	15:43
13	04:47	05:50			06:59		18:48 (69)	08:06			08:20	09:18
	22:36	21:31			20:05	12	19:00 (69)	18:39			16:21	15:42
14	04:49	05:53		19:58 (66)	07:01		18:47 (69)	08:08			08:22	09:19
	22:34	21:28	8	20:06 (66)	20:02	14	19:01 (69)	18:36			16:19	15:42
15	04:51	05:55		19:56 (66)	07:04		18:46 (69)	08:11			08:24	09:20
	22:33	21:26	12	20:08 (66)	19:59	15	19:01 (69)	18:33			16:17	15:42
16	04:52	05:57		19:54 (66)	07:06		18:45 (69)	08:13		17:18 (70)	08:27	09:21
	22:31	21:23	15	20:09 (66)	19:56	15	19:00 (69)	18:30	7	17:25 (70)	16:15	15:42
17	04:54	05:59		19:53 (66)	07:08		18:45 (69)	08:15		17:15 (70)	08:29	09:22
	22:30	21:21	16	20:09 (66)	19:53	14	18:59 (69)	18:28	11	17:26 (70)	16:13	15:42
18	04:56	06:02		19:52 (66)	07:10		18:45 (69)	08:18		17:14 (70)	08:31	09:23
	22:28	21:18	18	20:10 (66)	19:50	13	18:58 (69)	18:25	13	17:27 (70)	16:11	15:42
19	04:58	06:04		19:52 (66)	07:12		18:46 (69)	08:20		17:13 (70)	08:34	09:24
	22:26	21:15	18	20:10 (66)	19:47	12	18:58 (69)	18:22	14	17:27 (70)	16:09	15:42
20	05:00	06:06		19:51 (66)	07:15		18:47 (69)	08:22		17:13 (70)	08:36	09:25
	22:25	21:12	18	20:09 (66)	19:44	8	18:55 (69)	18:20	14	17:27 (70)	16:08	15:43
21	05:01	06:08		19:51 (66)	07:17			08:25		17:13 (70)	08:38	09:26
	22:23	21:10	18	20:09 (66)	19:42			18:17	13	17:26 (70)	16:06	15:43
22	05:03	06:11		19:51 (66)	07:19			08:27		17:14 (70)	08:40	09:26
	22:21	21:07	17	20:08 (66)	19:39			18:14	12	17:26 (70)	16:04	15:43
23	05:05	06:13		19:52 (66)	07:21			08:29		17:14 (70)	08:43	09:27
	22:19	21:04	17	20:09 (66)	19:36			18:12	10	17:24 (70)	16:02	15:44
24	05:07	06:15		19:53 (66)	07:23			08:32		17:16 (70)	08:45	09:27
	22:17	21:02	14	20:07 (66)	19:33			18:09	7	17:23 (70)	16:01	15:45
25	05:09	06:17		19:54 (66)	07:26			07:34			08:47	09:27
	22:15	20:59	12	20:06 (66)	19:30			17:06			15:59	15:45
26	05:11	06:20		19:56 (66)	07:28			07:37			08:49	09:28
	22:13	20:56	7	20:03 (66)	19:27			17:04			15:58	15:46
27	05:13	06:22			07:30			07:39			08:51	09:28
	22:11	20:53			19:24			17:01			15:56	15:47
28	05:16	06:24			07:32			07:41			08:53	09:28
	22:09	20:50			19:21			16:59			15:55	15:48
29	05:18	06:26			07:35			07:44			08:55	09:28
	22:07	20:48			19:18			16:56			15:54	15:49
30	05:20	06:28		19:35 (67)	07:37			07:46			08:57	09:28
	22:05	20:45	7	19:42 (67)	19:16			16:54			15:52	15:50
31	05:22	06:31		19:33 (67)				07:48				09:27
	22:02	20:42	10	19:43 (67)				16:51				15:51
Potential sun hours	545	478			386			319			236	200
Total, worst case			207			178			101			
Sun reduction			0,50			0,50			0,50			
Oper. time red.			0,80			0,80			0,80			
Wind dir. red.			0,69			0,65			0,57			
Total reduction			0,28			0,26			0,23			
Total, real			57			46			23			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Vedlegg 4.2

Grafisk Moifjellet og Mellomstrand vindkraftverk

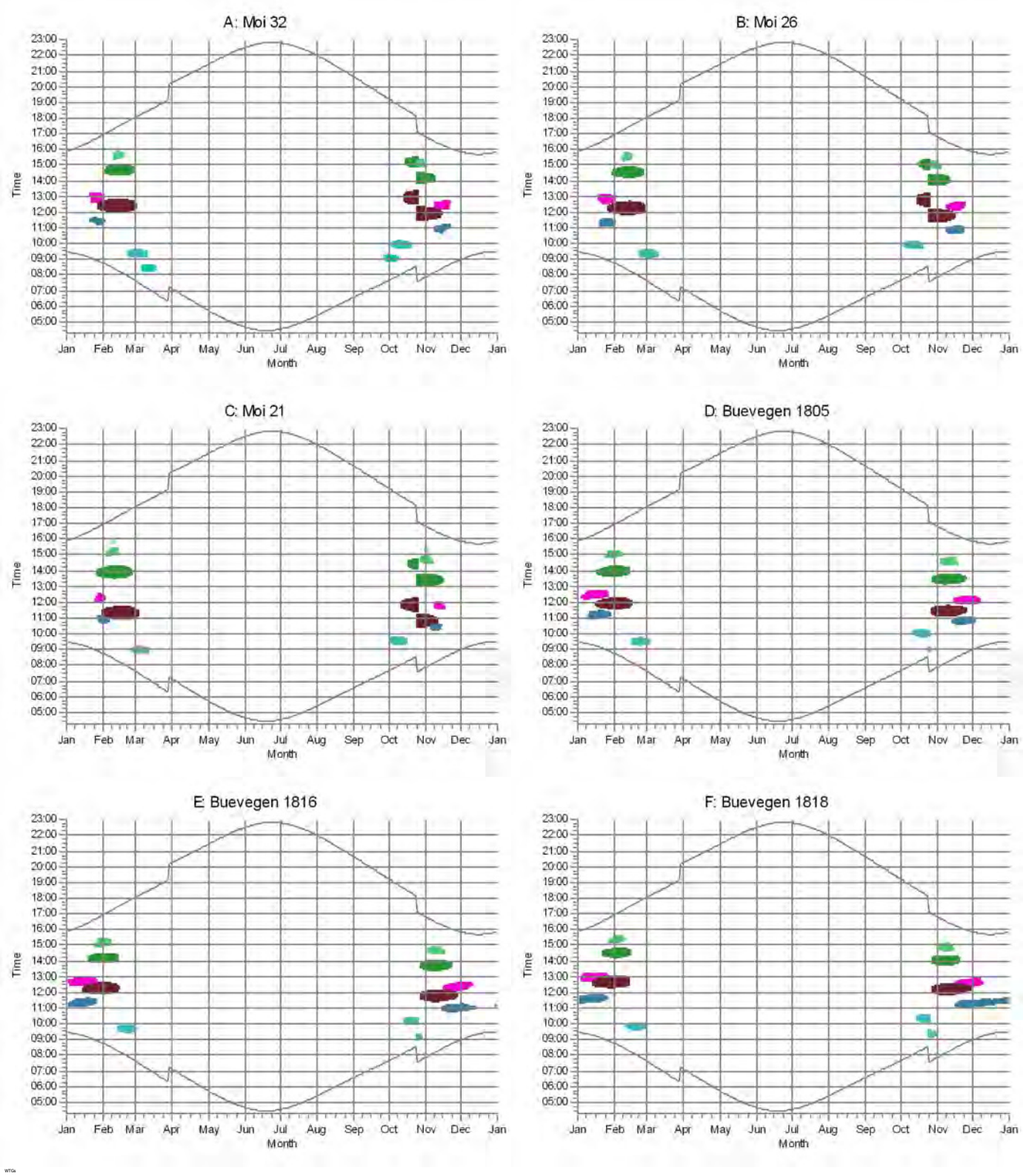
Med nærliggende – realistic case

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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

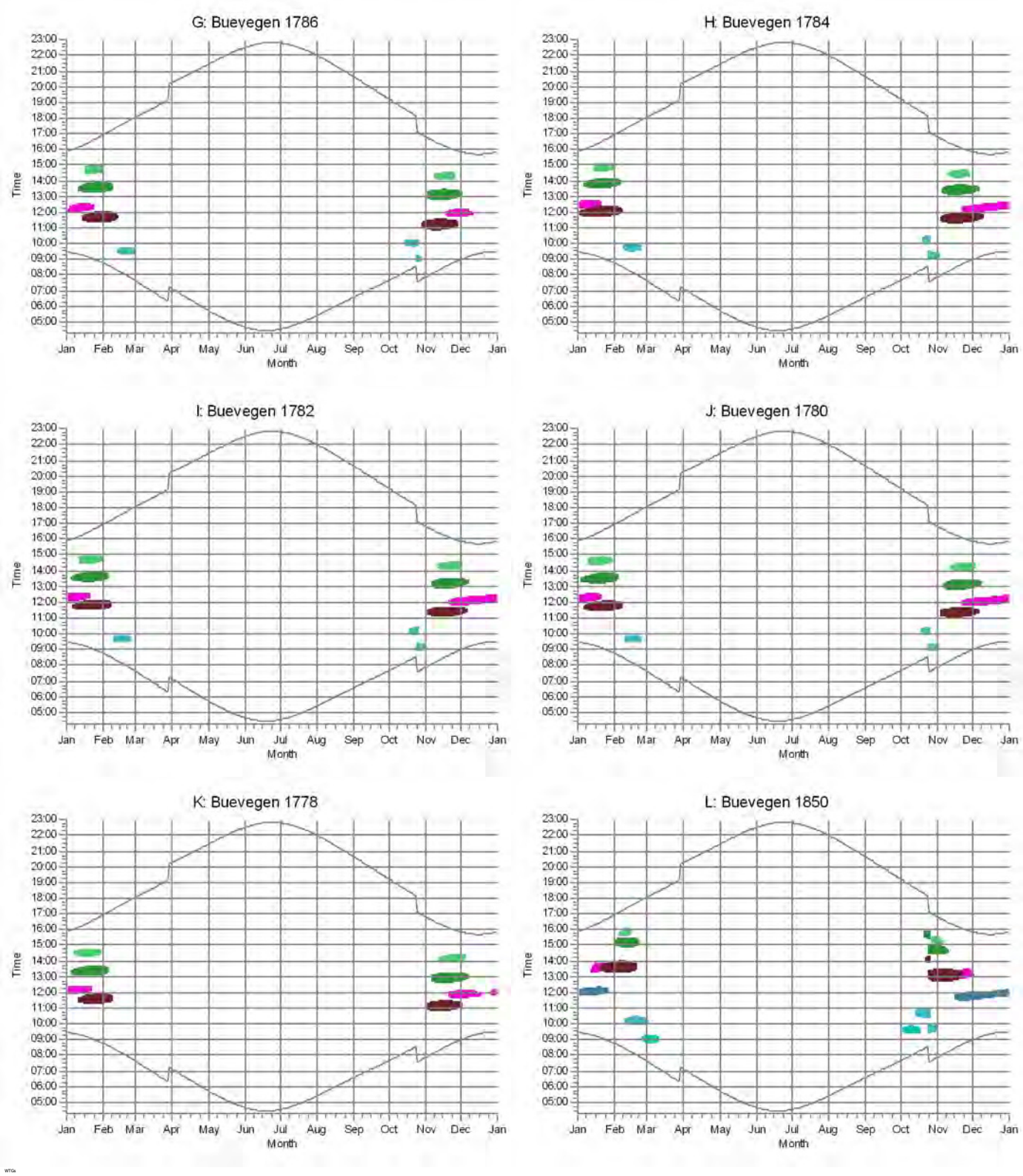


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

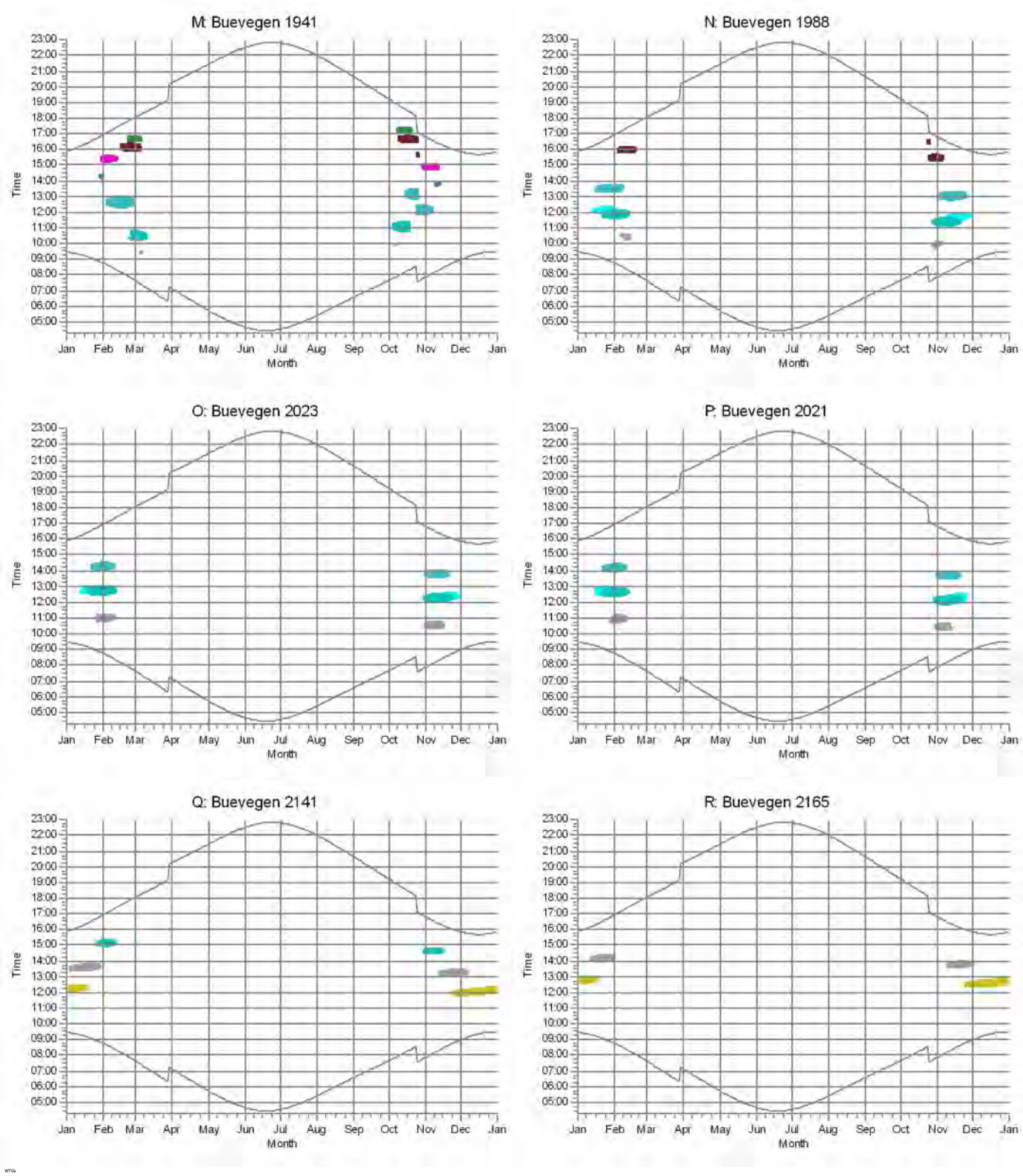


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

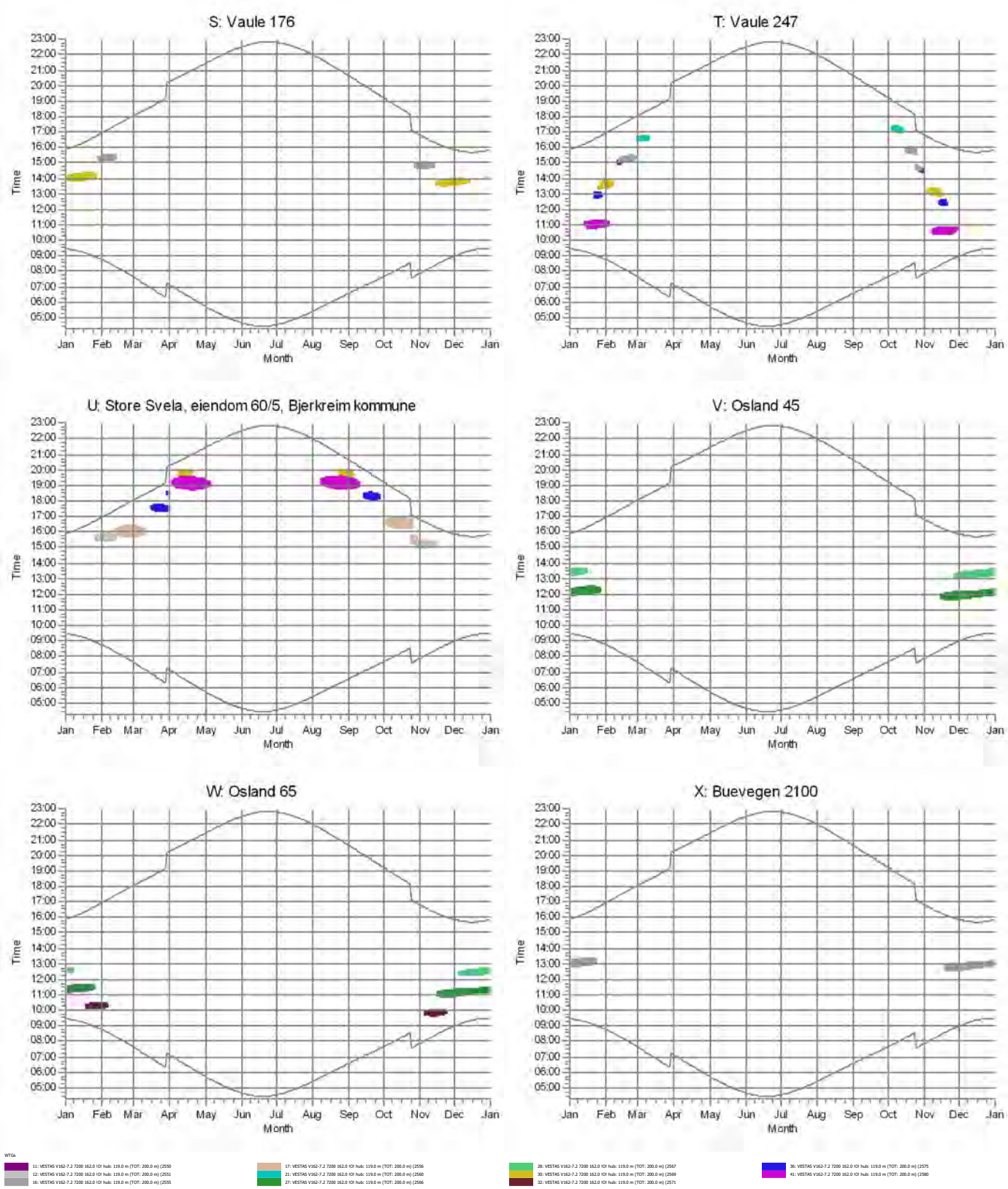


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

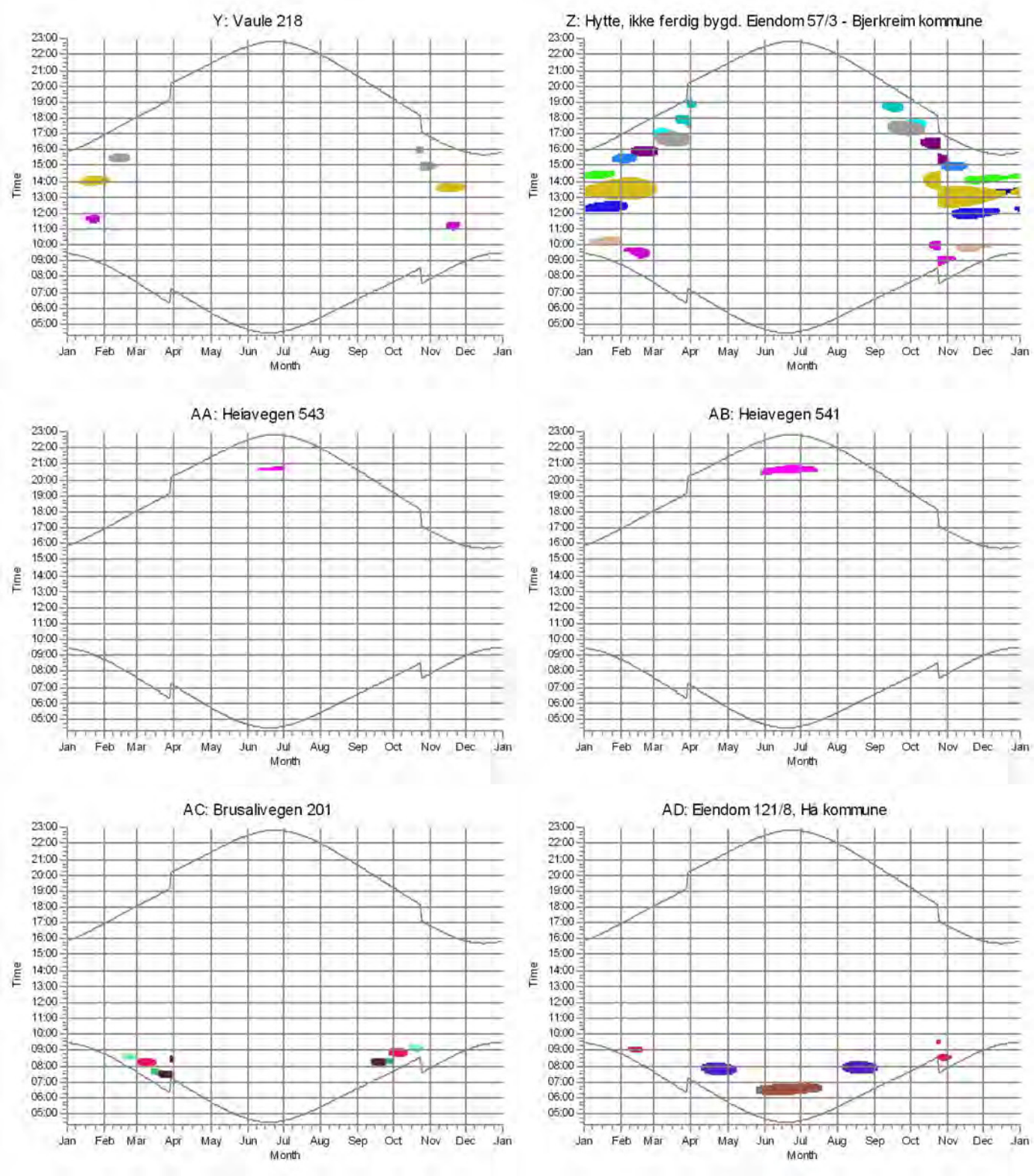


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

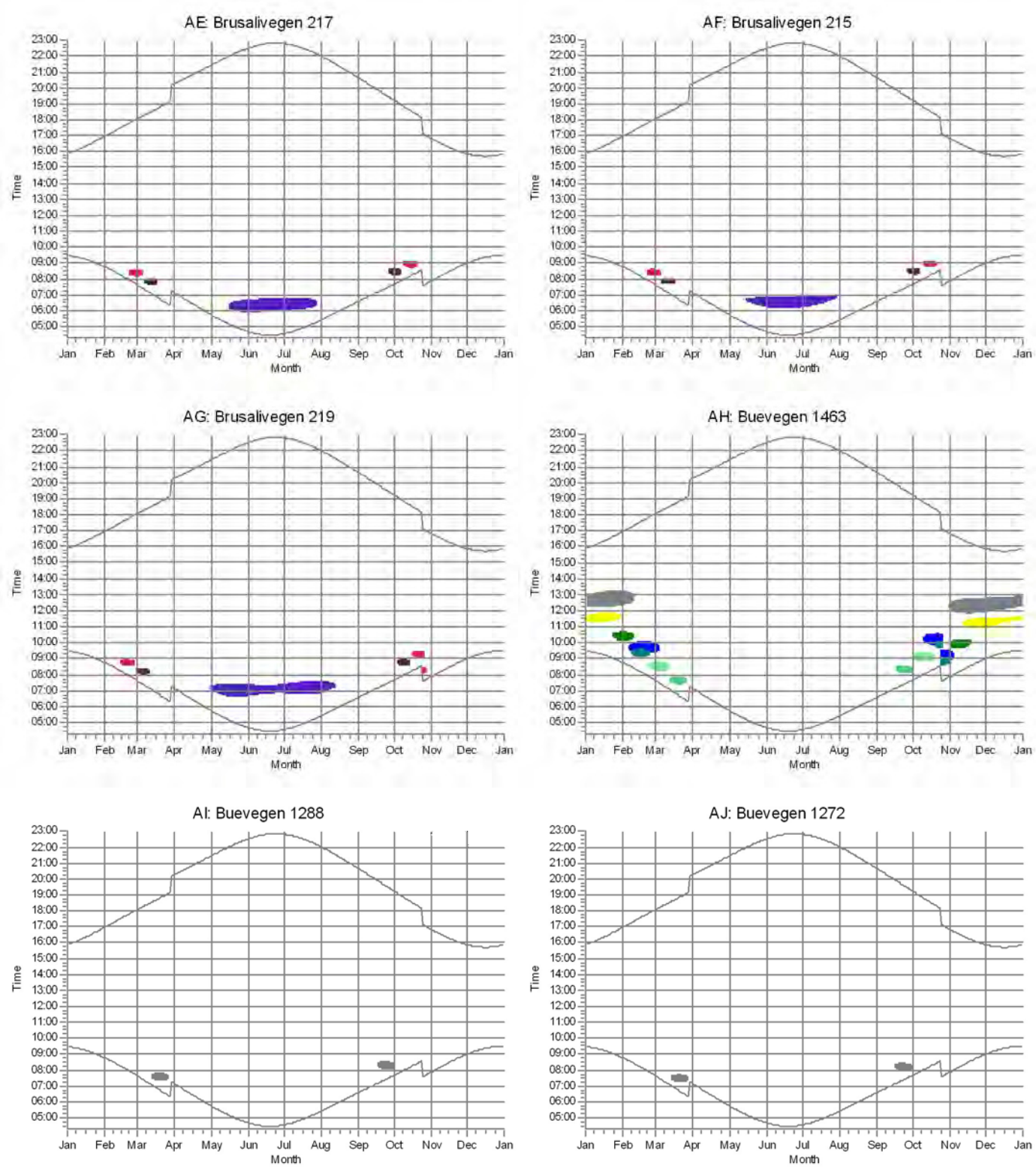


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

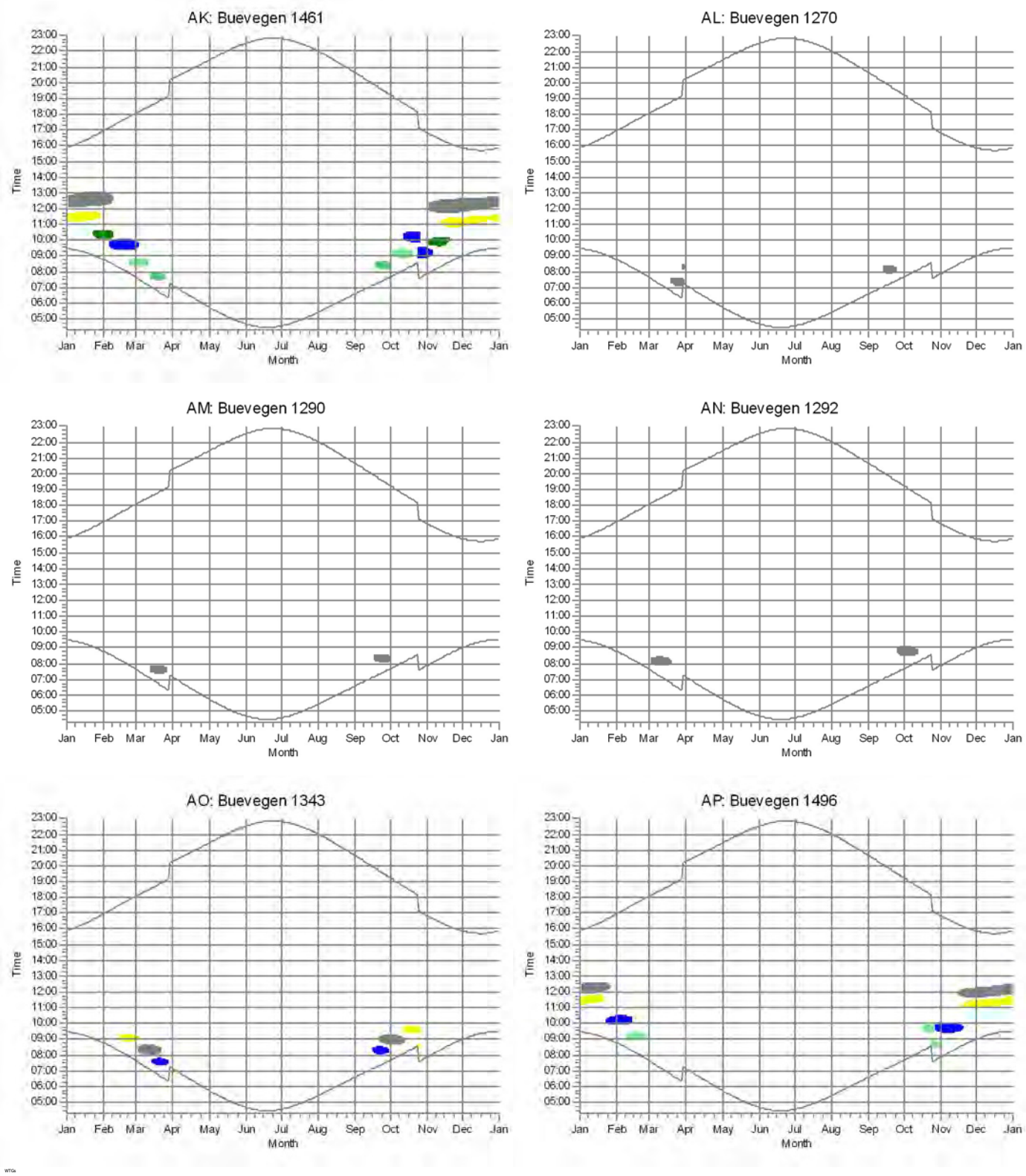


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

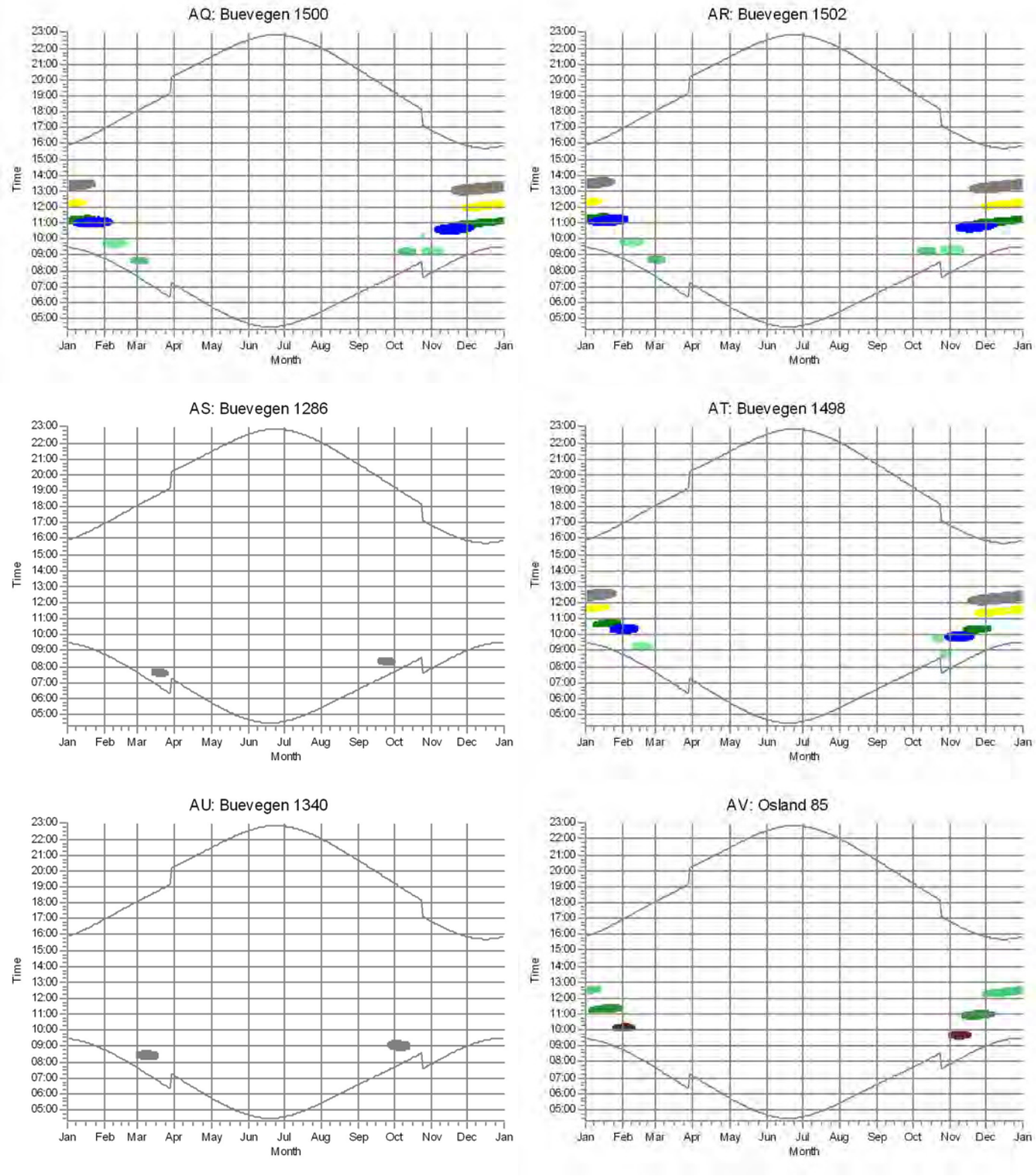


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere

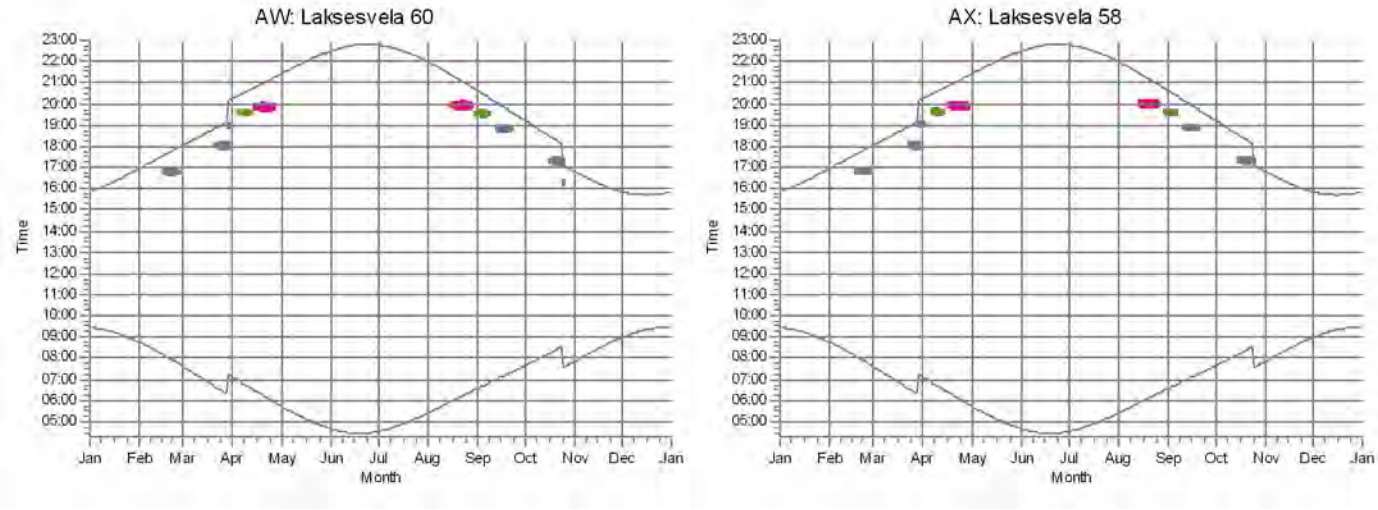


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Calculated:
19.11.2025 14:47/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet & Mellomstrand med eksisterende vkv - real case - mottakere



Vedlegg 5.1

Tabell Moifjellet vindkraftverk

Worst case

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		11:19 (33)	07:35		09:10 (15)	07:07		05:44	04:40
	15:53			16:56	51	13:02 (20)	18:05	24	09:34 (15)	20:17		21:26	22:30
2	09:27			08:43		11:24 (33)	07:33		09:10 (15)	07:04		05:41	04:38
	15:54			16:58	34	12:41 (28)	18:07	25	09:35 (15)	20:19		21:28	22:32
3	09:27			08:41		12:08 (28)	07:30		09:10 (15)	07:01		05:39	04:37
	15:55			17:01	43	14:41 (23)	18:09	24	09:34 (15)	20:21		21:30	22:34
4	09:26			08:39		12:07 (28)	07:27		09:10 (15)	06:58		05:36	04:36
	15:57			17:03	56	14:50 (23)	18:12	24	09:34 (15)	20:24		21:33	22:35
5	09:26			08:37		12:06 (28)	07:24		09:10 (15)	06:55		05:34	04:35
	15:58			17:06	61	14:52 (23)	18:14	23	09:33 (15)	20:26		21:35	22:37
6	09:25			08:34		12:06 (28)	07:21		08:24 (17)	06:52		05:31	04:34
	16:00			17:08	66	14:54 (23)	18:17	28	09:32 (15)	20:28		21:37	22:38
7	09:24			08:32		12:05 (28)	07:19		08:21 (17)	06:50		05:29	04:33
	16:02			17:11	69	14:54 (23)	18:19	32	09:30 (15)	20:30		21:40	22:39
8	09:24			08:30		12:05 (28)	07:16		08:19 (17)	06:47		05:26	04:32
	16:03			17:13	72	14:56 (23)	18:21	32	09:28 (15)	20:33		21:42	22:40
9	09:23			08:27		12:04 (28)	07:13		08:18 (17)	06:44		05:24	04:31
	16:05			17:16	75	14:57 (23)	18:24	29	09:26 (15)	20:35		21:44	22:42
10	09:22			08:25		12:04 (28)	07:10		08:17 (17)	06:41		05:22	04:30
	16:07			17:18	80	15:35 (24)	18:26	18	08:35 (17)	20:37		21:46	22:43
11	09:21			08:23		12:04 (28)	07:07		08:17 (17)	06:38		05:19	04:29
	16:09			17:21	91	15:40 (24)	18:28	18	08:35 (17)	20:40		21:49	22:44
12	09:20			08:20		12:04 (28)	07:04		08:17 (17)	06:35		05:17	04:29
	16:11			17:23	99	15:47 (24)	18:31	19	08:36 (17)	20:42		21:51	22:45
13	09:18			08:18		12:03 (28)	07:01		08:17 (17)	06:32		05:15	04:28
	16:13			17:26	101	15:48 (24)	18:33	18	08:35 (17)	20:44		21:53	22:46
14	09:17			08:15		12:04 (28)	06:59		08:17 (17)	06:30		05:13	04:28
	16:15			17:28	99	15:48 (24)	18:35	17	08:34 (17)	20:47		21:55	22:47
15	09:16			08:13		12:04 (28)	06:56		08:18 (17)	06:27		05:10	04:27
	16:17			17:31	96	15:46 (24)	18:38	15	08:33 (17)	20:49		21:58	22:47
16	09:15			08:10		12:03 (28)	06:53		08:19 (17)	06:24		05:08	04:27
	16:19			17:33	92	15:44 (24)	18:40	12	08:31 (17)	20:51		22:00	22:48
17	09:13			08:07		12:03 (28)	06:50		08:22 (17)	06:21		05:06	04:27
	16:21			17:36	86	15:41 (24)	18:42	5	08:27 (17)	20:53		22:02	22:49
18	09:12			08:05		12:04 (28)	06:47			06:19		05:04	04:27
	16:23			17:38	78	14:58 (23)	18:45			20:56		22:04	22:49
19	09:10			08:02		12:05 (28)	06:44			06:16		05:02	04:27
	16:25			17:40	76	14:58 (23)	18:47			20:58		22:06	22:50
20	09:08			08:00		12:05 (28)	06:41			06:13		05:00	04:27
	16:28			17:43	74	14:57 (23)	18:49			21:00		22:08	22:50
21	09:07		11:29 (33)	07:57		12:05 (28)	06:38			06:10		04:58	04:27
	16:30	8	13:08 (20)	17:45	71	14:56 (23)	18:51			21:03		22:10	22:50
22	09:05		11:28 (33)	07:54		12:06 (28)	06:36			06:08		04:56	04:27
	16:32	22	13:07 (20)	17:48	66	14:55 (23)	18:54			21:05		22:12	22:50
23	09:03		11:29 (33)	07:52		09:20 (15)	06:33			06:05		04:54	04:27
	16:34	21	13:08 (20)	17:50	69	14:54 (23)	18:56			21:07		22:14	22:50
24	09:02		11:28 (33)	07:49		09:16 (15)	06:30			06:02		04:52	04:27
	16:37	33	13:08 (20)	17:53	69	14:52 (23)	18:58			21:10		22:16	22:51
25	09:00		11:27 (33)	07:46		09:14 (15)	06:27			05:59		04:51	04:28
	16:39	33	13:08 (20)	17:55	64	14:49 (23)	19:01			21:12		22:18	22:50
26	08:58		11:22 (33)	07:44		09:13 (15)	06:24			05:57		04:49	04:28
	16:41	37	13:08 (20)	17:57	54	14:45 (23)	19:03			21:14		22:20	22:50
27	08:56		11:14 (33)	07:41		09:12 (15)	06:21			05:54		04:47	04:29
	16:44	43	13:07 (20)	18:00	41	12:35 (28)	19:05			21:17		22:22	22:50
28	08:54		11:14 (33)	07:38		09:11 (15)	06:18			05:52		04:46	04:30
	16:46	52	13:07 (20)	18:02	33	12:29 (28)	19:07			21:19		22:24	22:50
29	08:52		11:15 (33)				07:15			05:49		04:44	04:30
	16:49	56	13:07 (20)				20:10			21:21		22:25	22:50
30	08:50		11:15 (33)				07:12			05:46		04:43	04:31
	16:51	59	13:06 (20)				20:12			21:24		22:27	22:49
31	08:48		11:17 (33)				07:10					04:41	
	16:54	57	13:05 (20)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		421			1966			363					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October			November			December
1	04:32	05:24	06:33			07:39		08:56 (17)	07:51		11:33 (28)	09:00
	22:49	22:01	20:40			19:13	19	09:15 (17)	16:49	78	14:57 (24)	15:51
2	04:33	05:26	06:35			07:42		08:56 (17)	07:54		11:34 (28)	09:02
	22:48	21:58	20:37			19:10	18	09:14 (17)	16:46	74	14:26 (23)	15:50
3	04:34	05:28	06:37			07:44		08:55 (17)	07:56		11:35 (28)	09:03
	22:47	21:56	20:34			19:07	19	09:14 (17)	16:44	71	14:25 (23)	15:49
4	04:35	05:31	06:40			07:46		08:55 (17)	07:59		11:35 (28)	09:05
	22:47	21:54	20:31			19:04	26	10:01 (15)	16:41	69	14:24 (23)	15:48
5	04:36	05:33	06:42			07:48		08:56 (17)	08:01		11:36 (28)	09:07
	22:46	21:51	20:28			19:02	31	10:05 (15)	16:39	64	14:23 (23)	15:47
6	04:37	05:35	06:44			07:51		08:57 (17)	08:03		11:37 (28)	09:09
	22:45	21:49	20:25			18:59	32	10:06 (15)	16:37	61	14:22 (23)	15:46
7	04:39	05:37	06:46			07:53		08:58 (17)	08:06		11:37 (28)	09:10
	22:44	21:47	20:22			18:56	31	10:07 (15)	16:34	53	14:17 (23)	15:45
8	04:40	05:39	06:49			07:55		09:03 (17)	08:08		11:39 (28)	09:12
	22:43	21:44	20:20			18:53	23	10:08 (15)	16:32	42	14:11 (23)	15:45
9	04:41	05:42	06:51			07:57		09:45 (15)	08:11		10:53 (33)	09:13
	22:42	21:42	20:17			18:50	23	10:08 (15)	16:30	37	12:12 (28)	15:44
10	04:43	05:44	06:53			08:00		09:45 (15)	08:13		10:50 (33)	09:15
	22:40	21:39	20:14			18:47	24	10:09 (15)	16:28	52	12:34 (20)	15:44
11	04:44	05:46	06:55			08:02		09:44 (15)	08:15		10:48 (33)	09:16
	22:39	21:37	20:11			18:45	24	10:08 (15)	16:25	57	12:36 (20)	15:43
12	04:46	05:48	06:57			08:04		09:43 (15)	08:18		10:47 (33)	09:18
	22:38	21:34	20:08			18:42	24	10:07 (15)	16:23	58	12:37 (20)	15:43
13	04:47	05:51	07:00			08:07		09:44 (15)	08:20		10:47 (33)	09:19
	22:37	21:31	20:05			18:39	23	10:07 (15)	16:21	57	12:39 (20)	15:42
14	04:49	05:53	07:02			08:09		09:44 (15)	08:22		10:46 (33)	09:20
	22:35	21:29	20:02			18:36	37	13:05 (28)	16:19	52	12:39 (20)	15:42
15	04:51	05:55	07:04			08:11		09:45 (15)	08:25		10:47 (33)	09:21
	22:34	21:26	19:59			18:33	44	13:09 (28)	16:17	43	12:40 (20)	15:42
16	04:52	05:57	07:06			08:13		09:45 (15)	08:27		10:55 (33)	09:22
	22:32	21:24	19:56			18:31	59	15:19 (23)	16:15	37	12:41 (20)	15:42
17	04:54	06:00	07:08			08:16		09:47 (15)	08:29		11:00 (33)	09:23
	22:30	21:21	19:54			18:28	66	15:22 (23)	16:13	33	12:41 (20)	15:42
18	04:56	06:02	07:11			08:18		09:48 (15)	08:32		11:02 (33)	09:24
	22:29	21:18	19:51			18:25	71	15:24 (23)	16:11	33	12:42 (20)	15:42
19	04:58	06:04	07:13			08:20		09:52 (15)	08:34		11:04 (33)	09:25
	22:27	21:16	19:48			18:22	70	15:26 (23)	16:09	21	12:43 (20)	15:42
20	05:00	06:06	07:15			08:23		12:37 (28)	08:36		11:03 (33)	09:26
	22:25	21:13	19:45			18:20	68	15:26 (23)	16:08	22	12:42 (20)	15:43
21	05:01	06:08	07:17			08:25		12:36 (28)	08:39		11:04 (33)	09:26
	22:24	21:10	19:42			18:17	71	15:27 (23)	16:06	8	12:43 (20)	15:43
22	05:03	06:11	07:19			08:27		12:35 (28)	08:41			09:27
	22:22	21:08	19:39			18:14	74	15:27 (23)	16:04			15:43
23	05:05	06:13	07:22			08:30		12:35 (28)	08:43			09:27
	22:20	21:05	19:36			18:12	76	15:28 (23)	16:02			15:44
24	05:07	06:15	07:24			08:32		12:34 (28)	08:45			09:28
	22:18	21:02	19:33			18:09	78	15:28 (23)	16:01			15:44
25	05:09	06:17	07:26			07:35		11:34 (28)	08:47			09:28
	22:16	20:59	19:30			17:06	86	15:12 (24)	15:59			15:45
26	05:11	06:20	07:28			07:37		11:33 (28)	08:50			09:28
	22:14	20:56	19:27			17:04	94	15:14 (24)	15:58			15:46
27	05:13	06:22	07:30		09:02 (17)	07:39		11:33 (28)	08:52			09:28
	22:12	20:54	19:25	10	09:12 (17)	17:01	97	15:16 (24)	15:56			15:47
28	05:16	06:24	07:33		09:00 (17)	07:42		11:33 (28)	08:54			09:28
	22:10	20:51	19:22	13	09:13 (17)	16:59	101	15:18 (24)	15:55			15:48
29	05:18	06:26	07:35		08:58 (17)	07:44		11:33 (28)	08:56			09:28
	22:07	20:48	19:19	16	09:14 (17)	16:56	102	15:18 (24)	15:54			15:49
30	05:20	06:29	07:37		08:56 (17)	07:47		11:33 (28)	08:58			09:28
	22:05	20:45	19:16	18	09:14 (17)	16:54	99	15:15 (24)	15:52			15:50
31	05:22	06:31				07:49		11:34 (28)				09:28
	22:03	20:42				16:51	90	15:09 (24)				15:51
Potential sun hours	546	478	386			319			236			199
Total, worst case				57			1700			1022		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April	May	June
1	09:28			08:46		11:16 (33)	07:35		09:09 (15)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (23)	18:05	23	09:32 (15)	20:17	21:26	22:30
2	09:27			08:43		12:00 (28)	07:33		09:09 (15)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (23)	18:07	24	09:33 (15)	20:19	21:28	22:32
3	09:27			08:41		11:58 (28)	07:30		09:09 (15)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (23)	18:09	24	09:33 (15)	20:21	21:30	22:34
4	09:26			08:39		11:58 (28)	07:27		09:09 (15)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (23)	18:12	23	09:32 (15)	20:24	21:33	22:35
5	09:26			08:37		11:57 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (23)	18:14	21	09:31 (15)	20:26	21:35	22:37
6	09:25			08:34		11:57 (28)	07:21		09:10 (15)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (23)	18:17	20	09:30 (15)	20:28	21:37	22:38
7	09:24			08:32		11:56 (28)	07:19		09:11 (15)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (23)	18:19	17	09:28 (15)	20:30	21:40	22:39
8	09:24			08:30		11:56 (28)	07:16		09:13 (15)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (24)	18:21	12	09:25 (15)	20:33	21:42	22:40
9	09:23			08:27		11:56 (28)	07:13		09:16 (15)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (24)	18:24	5	09:21 (15)	20:35	21:44	22:42
10	09:22			08:25		11:55 (28)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (24)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (28)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (24)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (28)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (24)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (24)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (23)	18:45			20:56	22:04	22:49
19	09:10		12:54 (20)	08:02		11:57 (28)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (20)	17:40	70	14:48 (23)	18:47			20:58	22:06	22:50
20	09:08		11:12 (33)	08:00		11:57 (28)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (20)	17:43	68	14:47 (23)	18:49			21:00	22:08	22:50
21	09:07		11:11 (33)	07:57		11:58 (28)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (20)	17:45	64	14:46 (23)	18:51			21:03	22:10	22:50
22	09:05		11:11 (33)	07:54		11:59 (28)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (20)	17:48	58	14:44 (23)	18:54			21:05	22:12	22:50
23	09:03		11:11 (33)	07:52		09:17 (15)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (20)	17:50	62	14:43 (23)	18:56			21:07	22:14	22:50
24	09:02		11:10 (33)	07:49		09:14 (15)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (20)	17:53	57	14:39 (23)	18:58			21:10	22:16	22:51
25	09:00		11:08 (33)	07:46		09:13 (15)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (20)	17:55	42	12:28 (28)	19:01			21:12	22:18	22:50
26	08:58		11:09 (33)	07:44		09:11 (15)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (20)	17:57	38	12:24 (28)	19:03			21:14	22:20	22:50
27	08:56		11:09 (33)	07:41		09:10 (15)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (20)	18:00	22	09:32 (15)	19:05			21:17	22:22	22:50
28	08:54		11:10 (33)	07:38		09:09 (15)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (20)	18:02	23	09:32 (15)	19:07			21:19	22:24	22:50
29	08:52		11:12 (33)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (20)				20:10			21:21	22:25	22:50
30	08:50		11:12 (33)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (20)				20:12			21:24	22:27	22:49
31	08:48		11:14 (33)				07:10				04:41	
	16:54	56	14:29 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December
1	04:32		05:24		06:33		07:39			07:51		11:25 (28)	09:00
	22:49		22:01		20:40		19:13			16:49	96	15:09 (24)	15:51
2	04:33		05:26		06:35		07:42			07:54		11:25 (28)	09:02
	22:48		21:58		20:37		19:10			16:46	90	15:04 (24)	15:50
3	04:34		05:28		06:37		07:44			07:56		11:26 (28)	09:03
	22:47		21:56		20:34		19:07			16:44	82	14:58 (24)	15:49
4	04:35		05:31		06:40		07:46			07:59		11:26 (28)	09:05
	22:47		21:54		20:31		19:04			16:41	72	14:17 (23)	15:48
5	04:36		05:33		06:42		07:48		09:51 (15)	08:01		11:27 (28)	09:07
	22:46		21:51		20:28		19:02	10	10:01 (15)	16:39	70	14:17 (23)	15:47
6	04:37		05:35		06:44		07:51		09:48 (15)	08:03		11:28 (28)	09:09
	22:45		21:49		20:25		18:59	15	10:03 (15)	16:37	65	14:16 (23)	15:46
7	04:39		05:37		06:46		07:53		09:46 (15)	08:06		11:28 (28)	09:10
	22:44		21:47		20:22		18:56	18	10:04 (15)	16:34	62	14:14 (23)	15:45
8	04:40		05:39		06:49		07:55		09:45 (15)	08:08		11:29 (28)	09:12
	22:43		21:44		20:20		18:53	21	10:06 (15)	16:32	57	14:13 (23)	15:45
9	04:41		05:42		06:51		07:57		09:44 (15)	08:11		11:30 (28)	09:13
	22:42		21:42		20:17		18:50	22	10:06 (15)	16:30	53	14:12 (23)	15:44
10	04:43		05:44		06:53		08:00		09:44 (15)	08:13		10:47 (33)	09:15
	22:40		21:39		20:14		18:47	23	10:07 (15)	16:28	58	14:10 (23)	15:44
11	04:44		05:46		06:55		08:02		09:43 (15)	08:15		10:45 (33)	09:16
	22:39		21:37		20:11		18:45	23	10:06 (15)	16:25	55	13:59 (23)	15:43
12	04:46		05:48		06:57		08:04		09:42 (15)	08:18		10:44 (33)	09:18
	22:38		21:34		20:08		18:42	24	10:06 (15)	16:23	57	12:31 (20)	15:43
13	04:47		05:51		07:00		08:07		09:43 (15)	08:20		10:43 (33)	09:19
	22:37		21:31		20:05		18:39	23	10:06 (15)	16:21	59	12:32 (20)	15:42
14	04:49		05:53		07:02		08:09		09:42 (15)	08:22		10:42 (33)	09:20
	22:35		21:29		20:02		18:36	23	10:05 (15)	16:19	58	12:33 (20)	15:42
15	04:51		05:55		07:04		08:11		09:43 (15)	08:25		10:42 (33)	09:21
	22:34		21:26		19:59		18:33	33	12:54 (28)	16:17	53	12:34 (20)	15:42
16	04:52		05:57		07:06		08:13		09:44 (15)	08:27		10:42 (33)	09:22
	22:32		21:24		19:56		18:31	39	12:58 (28)	16:15	45	12:35 (20)	15:42
17	04:54		06:00		07:08		08:16		09:45 (15)	08:29		10:41 (33)	09:23
	22:30		21:21		19:54		18:28	46	15:07 (23)	16:13	47	12:35 (20)	15:42
18	04:56		06:02		07:11		08:18		09:46 (15)	08:32		10:44 (33)	09:24
	22:29		21:18		19:51		18:25	59	15:12 (23)	16:11	46	12:36 (20)	15:42
19	04:58		06:04		07:13		08:20		09:49 (15)	08:34		10:46 (33)	09:25
	22:27		21:16		19:48		18:22	62	15:15 (23)	16:09	45	12:37 (20)	15:42
20	05:00		06:06		07:15		08:23		12:30 (28)	08:36		10:46 (33)	09:26
	22:25		21:13		19:45		18:20	60	15:16 (23)	16:08	45	12:37 (20)	15:43
21	05:01		06:08		07:17		08:25		12:29 (28)	08:39		10:46 (33)	09:26
	22:24		21:10		19:42		18:17	65	15:17 (23)	16:06	36	12:37 (20)	15:43
22	05:03		06:11		07:19		08:27		12:27 (28)	08:41		10:48 (33)	09:27
	22:22		21:08		19:39		18:14	70	15:18 (23)	16:04	30	12:38 (20)	15:43
23	05:05		06:13		07:22		08:30		12:27 (28)	08:43		12:30 (20)	09:27
	22:20		21:05		19:36		18:12	72	15:19 (23)	16:02	5	12:35 (20)	15:44
24	05:07		06:15		07:24		08:32		12:26 (28)	08:45			09:28
	22:18		21:02		19:33		18:09	75	15:19 (23)	16:01			15:44
25	05:09		06:17		07:26		07:35		11:26 (28)	08:47			09:28
	22:16		20:59		19:30		17:06	76	14:20 (23)	15:59			15:45
26	05:11		06:20		07:28		07:37		11:25 (28)	08:50			09:28
	22:14		20:56		19:27		17:04	81	15:04 (24)	15:58			15:46
27	05:13		06:22		07:30		07:39		11:25 (28)	08:52			09:28
	22:12		20:54		19:25		17:01	91	15:08 (24)	15:56			15:47
28	05:16		06:24		07:33		07:42		11:25 (28)	08:54			09:28
	22:10		20:51		19:22		16:59	95	15:10 (24)	15:55			15:48
29	05:18		06:26		07:35		07:44		11:24 (28)	08:56			09:28
	22:07		20:48		19:19		16:56	99	15:11 (24)	15:54			15:49
30	05:20		06:29		07:37		07:47		11:25 (28)	08:58			09:28
	22:05		20:45		19:16		16:54	99	15:12 (24)	15:52			15:50
31	05:22		06:31				07:49		11:25 (28)				09:28
	22:03		20:42				16:51	101	15:13 (24)				15:51
Potential sun hours	546		478		386		319			236			199
Total, worst case								1425			1286		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		10:42 (33)	07:35		08:50 (15)	07:07		05:44	04:40
	15:53			16:56	72	14:06 (23)	18:05	39	11:29 (28)	20:17		21:26	22:30
2	09:27			08:43		10:44 (33)	07:33		08:50 (15)	07:04		05:41	04:38
	15:54			16:58	72	14:08 (23)	18:07	31	11:25 (28)	20:19		21:28	22:32
3	09:27			08:41		10:46 (33)	07:30		08:49 (15)	07:01		05:39	04:37
	15:55			17:01	71	14:10 (23)	18:09	21	09:10 (15)	20:21		21:31	22:34
4	09:26			08:39		10:47 (33)	07:27		08:48 (15)	06:58		05:36	04:36
	15:57			17:03	77	15:02 (24)	18:12	22	09:10 (15)	20:24		21:33	22:35
5	09:26			08:37		10:50 (33)	07:24		08:48 (15)	06:55		05:34	04:35
	15:58			17:06	77	15:05 (24)	18:14	21	09:09 (15)	20:26		21:35	22:37
6	09:25			08:34		11:05 (28)	07:21		08:48 (15)	06:52		05:31	04:34
	16:00			17:08	82	15:12 (24)	18:17	21	09:09 (15)	20:28		21:37	22:38
7	09:24			08:32		11:03 (28)	07:19		08:48 (15)	06:50		05:29	04:33
	16:02			17:11	92	15:18 (24)	18:19	20	09:08 (15)	20:30		21:40	22:39
8	09:24			08:30		11:03 (28)	07:16		08:48 (15)	06:47		05:26	04:32
	16:03			17:13	101	15:25 (24)	18:21	19	09:07 (15)	20:33		21:42	22:40
9	09:23			08:27		11:02 (28)	07:13		08:48 (15)	06:44		05:24	04:31
	16:05			17:16	112	15:55 (22)	18:24	18	09:06 (15)	20:35		21:44	22:42
10	09:22			08:25		11:01 (28)	07:10		08:49 (15)	06:41		05:22	04:30
	16:07			17:18	104	15:51 (22)	18:26	15	09:04 (15)	20:37		21:46	22:43
11	09:21			08:23		11:01 (28)	07:07		08:51 (15)	06:38		05:19	04:29
	16:09			17:21	101	15:23 (24)	18:28	10	09:01 (15)	20:40		21:49	22:44
12	09:20			08:20		11:00 (28)	07:04			06:35		05:17	04:29
	16:11			17:23	98	15:21 (24)	18:31			20:42		21:51	22:45
13	09:18			08:18		10:59 (28)	07:02			06:33		05:15	04:28
	16:13			17:26	94	15:18 (24)	18:33			20:44		21:53	22:46
14	09:17			08:15		11:00 (28)	06:59			06:30		05:13	04:28
	16:15			17:28	83	14:14 (23)	18:35			20:47		21:55	22:47
15	09:16			08:13		10:59 (28)	06:56			06:27		05:10	04:27
	16:17			17:31	83	14:13 (23)	18:38			20:49		21:58	22:47
16	09:15			08:10		10:59 (28)	06:53			06:24		05:08	04:27
	16:19			17:33	81	14:12 (23)	18:40			20:51		22:00	22:48
17	09:13			08:07		10:59 (28)	06:50			06:21		05:06	04:27
	16:21			17:36	81	14:12 (23)	18:42			20:53		22:02	22:49
18	09:12			08:05		10:59 (28)	06:47			06:19		05:04	04:27
	16:23			17:38	80	14:12 (23)	18:45			20:56		22:04	22:49
19	09:10			08:02		10:59 (28)	06:44			06:16		05:02	04:27
	16:25			17:40	78	14:11 (23)	18:47			20:58		22:06	22:50
20	09:08			08:00		10:59 (28)	06:41			06:13		05:00	04:27
	16:28			17:43	74	14:09 (23)	18:49			21:00		22:08	22:50
21	09:07			07:57		10:59 (28)	06:39			06:10		04:58	04:27
	16:30			17:45	71	14:08 (23)	18:51			21:03		22:10	22:50
22	09:05			07:54		11:00 (28)	06:36			06:08		04:56	04:27
	16:32			17:48	66	14:06 (23)	18:54			21:05		22:12	22:50
23	09:03			07:52		11:01 (28)	06:33			06:05		04:54	04:27
	16:34			17:50	60	14:04 (23)	18:56			21:07		22:14	22:50
24	09:02			07:49		11:01 (28)	06:30			06:02		04:52	04:27
	16:37			17:53	50	14:00 (23)	18:58			21:10		22:16	22:51
25	09:00			07:46		11:02 (28)	06:27			06:00		04:51	04:28
	16:39			17:55	36	11:38 (28)	19:01			21:12		22:18	22:50
26	08:58		12:05 (20)	07:44		08:58 (15)	06:24			05:57		04:49	04:28
	16:41	5	12:10 (20)	17:57	36	11:36 (28)	19:03			21:14		22:20	22:50
27	08:56		12:05 (20)	07:41		08:54 (15)	06:21			05:54		04:47	04:29
	16:44	19	13:53 (23)	18:00	41	11:34 (28)	19:05			21:17		22:22	22:50
28	08:54		11:00 (33)	07:38		08:52 (15)	06:18			05:52		04:46	04:30
	16:46	40	13:59 (23)	18:02	41	11:32 (28)	19:08			21:19		22:24	22:50
29	08:52		10:56 (33)				07:15			05:49		04:44	04:30
	16:49	47	14:02 (23)				20:10			21:21		22:25	22:50
30	08:50		10:50 (33)				07:13			05:46		04:43	04:31
	16:51	55	14:03 (23)				20:12			21:24		22:27	22:49
31	08:48		10:44 (33)				07:10					04:41	
	16:54	62	14:05 (23)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		228			2114			237					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51		10:30 (28)	09:00
	22:49	22:01	20:40	19:13		16:49	107	15:21 (22)	15:51
2	04:33	05:26	06:35	07:42		09:32 (15)	07:54		10:32 (28)	09:02
	22:48	21:58	20:37	19:10	7	09:39 (15)	16:46	110	15:25 (22)	15:50
3	04:34	05:28	06:37	07:44		09:28 (15)	07:56		10:33 (28)	09:03
	22:47	21:56	20:34	19:07	13	09:41 (15)	16:44	97	14:53 (24)	15:49
4	04:35	05:31	06:40	07:46		09:26 (15)	07:59		10:33 (28)	09:05
	22:47	21:54	20:31	19:04	16	09:42 (15)	16:41	89	14:46 (24)	15:48
5	04:36	05:33	06:42	07:48		09:25 (15)	08:01		10:35 (28)	09:07
	22:46	21:51	20:28	19:02	19	09:44 (15)	16:39	81	14:41 (24)	15:47
6	04:37	05:35	06:44	07:51		09:24 (15)	08:03		10:20 (33)	09:09
	22:45	21:49	20:25	18:59	20	09:44 (15)	16:37	77	14:35 (24)	15:46
7	04:39	05:37	06:46	07:53		09:23 (15)	08:06		10:16 (33)	09:10
	22:44	21:47	20:22	18:56	21	09:44 (15)	16:34	77	14:32 (24)	15:45
8	04:40	05:39	06:49	07:55		09:23 (15)	08:08		10:15 (33)	09:12
	22:43	21:44	20:20	18:53	22	09:45 (15)	16:32	71	13:39 (23)	15:45
9	04:41	05:42	06:51	07:57		09:22 (15)	08:11		10:15 (33)	09:13
	22:42	21:42	20:17	18:50	22	09:44 (15)	16:30	72	13:39 (23)	15:44
10	04:43	05:44	06:53	08:00		09:23 (15)	08:13		10:14 (33)	09:15
	22:40	21:39	20:14	18:47	21	09:44 (15)	16:28	71	13:38 (23)	15:44
11	04:44	05:46	06:55	08:02		09:23 (15)	08:15		10:15 (33)	09:16
	22:39	21:37	20:11	18:45	20	09:43 (15)	16:25	61	13:36 (23)	15:43
12	04:46	05:48	06:57	08:04		09:23 (15)	08:18		10:24 (33)	09:18
	22:38	21:34	20:08	18:42	36	12:00 (28)	16:23	52	13:35 (23)	15:43
13	04:47	05:51	07:00	08:07		09:24 (15)	08:20		10:28 (33)	09:19
	22:37	21:31	20:05	18:39	40	12:04 (28)	16:21	47	13:33 (23)	15:42
14	04:49	05:53	07:02	08:09		09:25 (15)	08:22		10:32 (33)	09:20
	22:35	21:29	20:02	18:36	42	12:06 (28)	16:19	39	13:30 (23)	15:42
15	04:51	05:55	07:04	08:11		09:28 (15)	08:25		11:38 (20)	09:21
	22:34	21:26	19:59	18:33	40	12:08 (28)	16:17	19	13:26 (23)	15:42
16	04:52	05:57	07:06	08:13		11:35 (28)	08:27		11:38 (20)	09:22
	22:32	21:24	19:56	18:31	34	12:09 (28)	16:15	4	11:42 (20)	15:42
17	04:54	06:00	07:08	08:16		11:34 (28)	08:29			09:23
	22:30	21:21	19:54	18:28	36	12:10 (28)	16:13			15:42
18	04:56	06:02	07:11	08:18		11:32 (28)	08:32			09:24
	22:29	21:18	19:51	18:25	55	14:33 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		11:32 (28)	08:34			09:25
	22:27	21:16	19:48	18:22	62	14:36 (23)	16:09			15:42
20	05:00	06:06	07:15	08:23		11:31 (28)	08:36			09:26
	22:25	21:13	19:45	18:20	67	14:37 (23)	16:08			15:43
21	05:01	06:09	07:17	08:25		11:30 (28)	08:39			09:26
	22:24	21:10	19:42	18:17	72	14:39 (23)	16:06			15:43
22	05:03	06:11	07:19	08:27		11:29 (28)	08:41			09:27
	22:22	21:08	19:39	18:14	75	14:40 (23)	16:04			15:43
23	05:05	06:13	07:22	08:30		11:29 (28)	08:43			09:27
	22:20	21:05	19:36	18:12	78	14:41 (23)	16:02			15:44
24	05:07	06:15	07:24	08:32		11:29 (28)	08:45			09:28
	22:18	21:02	19:33	18:09	79	14:41 (23)	16:01			15:45
25	05:09	06:17	07:26	07:35		10:29 (28)	08:47			09:28
	22:16	20:59	19:30	17:07	81	13:42 (23)	15:59			15:45
26	05:11	06:20	07:28	07:37		10:29 (28)	08:50			09:28
	22:14	20:57	19:27	17:04	82	13:43 (23)	15:58			15:46
27	05:13	06:22	07:30	07:39		10:29 (28)	08:52			09:28
	22:12	20:54	19:25	17:01	81	13:42 (23)	15:56			15:47
28	05:16	06:24	07:33	07:42		10:29 (28)	08:54			09:28
	22:10	20:51	19:22	16:59	87	14:45 (24)	15:55			15:48
29	05:18	06:26	07:35	07:44		10:29 (28)	08:56			09:28
	22:07	20:48	19:19	16:56	95	14:48 (24)	15:54			15:49
30	05:20	06:29	07:37	07:47		10:30 (28)	08:58			09:28
	22:05	20:45	19:16	16:54	99	14:51 (24)	15:52			15:50
31	05:22	06:31		07:49		10:31 (28)				09:28
	22:03	20:42		16:51	99	14:52 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1521			1074		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		08:46		11:39 (28)	07:35	09:25 (15)	07:07	05:44	04:40
	15:53		16:56	88	15:12 (24)	18:05	9 09:34 (15)	20:17	21:26	22:31
2	09:27		08:43		11:39 (28)	07:33		07:04	05:41	04:38
	15:54		16:58	88	15:13 (24)	18:07		20:19	21:28	22:32
3	09:27		08:41		11:40 (28)	07:30		07:01	05:39	04:37
	15:55		17:01	85	15:12 (24)	18:09		20:21	21:31	22:34
4	09:27		08:39		11:39 (28)	07:27		06:58	05:36	04:36
	15:57		17:03	83	15:11 (24)	18:12		20:24	21:33	22:35
5	09:26	12:20 (20)	08:37		11:39 (28)	07:24		06:55	05:34	04:35
	15:58	1 12:21 (20)	17:06	80	15:09 (24)	18:14		20:26	21:35	22:37
6	09:25	12:19 (20)	08:34		11:40 (28)	07:21		06:52	05:31	04:34
	16:00	5 12:24 (20)	17:08	74	15:08 (24)	18:17		20:28	21:37	22:38
7	09:24	12:17 (20)	08:32		11:40 (28)	07:19		06:50	05:29	04:33
	16:02	11 12:28 (20)	17:11	62	14:11 (23)	18:19		20:30	21:40	22:39
8	09:24	12:17 (20)	08:30		11:41 (28)	07:16		06:47	05:26	04:32
	16:03	13 12:30 (20)	17:13	61	14:11 (23)	18:21		20:33	21:42	22:40
9	09:23	12:18 (20)	08:27		11:42 (28)	07:13		06:44	05:24	04:31
	16:05	16 12:34 (20)	17:16	57	14:10 (23)	18:24		20:35	21:44	22:42
10	09:22	11:06 (33)	08:25		11:42 (28)	07:10		06:41	05:22	04:30
	16:07	25 12:39 (20)	17:18	54	14:09 (23)	18:26		20:37	21:46	22:43
11	09:21	11:02 (33)	08:23		11:44 (28)	07:07		06:38	05:19	04:29
	16:09	31 12:41 (20)	17:21	48	14:08 (23)	18:28		20:40	21:49	22:44
12	09:20	11:01 (33)	08:20		11:45 (28)	07:04		06:35	05:17	04:29
	16:11	40 12:41 (20)	17:23	42	14:06 (23)	18:31		20:42	21:51	22:45
13	09:18	11:02 (33)	08:18		11:46 (28)	07:02		06:32	05:15	04:28
	16:13	42 12:42 (20)	17:26	32	14:02 (23)	18:33		20:44	21:53	22:46
14	09:17	11:02 (33)	08:15		11:49 (28)	06:59		06:30	05:13	04:28
	16:15	42 12:42 (20)	17:28	18	12:07 (28)	18:35		20:47	21:55	22:47
15	09:16	11:02 (33)	08:13		11:52 (28)	06:56		06:27	05:10	04:27
	16:17	43 12:42 (20)	17:31	12	12:04 (28)	18:38		20:49	21:58	22:47
16	09:15	11:02 (33)	08:10		09:29 (15)	06:53		06:24	05:08	04:27
	16:19	43 12:42 (20)	17:33	5	09:34 (15)	18:40		20:51	22:00	22:48
17	09:13	11:02 (33)	08:07		09:25 (15)	06:50		06:21	05:06	04:27
	16:21	45 12:42 (20)	17:36	12	09:37 (15)	18:42		20:53	22:02	22:49
18	09:12	11:03 (33)	08:05		09:24 (15)	06:47		06:19	05:04	04:27
	16:23	57 13:55 (23)	17:38	16	09:40 (15)	18:45		20:56	22:04	22:49
19	09:10	11:03 (33)	08:02		09:23 (15)	06:44		06:16	05:02	04:27
	16:25	70 13:59 (23)	17:40	17	09:40 (15)	18:47		20:58	22:06	22:50
20	09:08	11:04 (33)	08:00		09:22 (15)	06:41		06:13	05:00	04:27
	16:28	75 14:01 (23)	17:43	19	09:41 (15)	18:49		21:00	22:08	22:50
21	09:07	11:04 (33)	07:57		09:21 (15)	06:39		06:10	04:58	04:27
	16:30	80 14:03 (23)	17:45	20	09:41 (15)	18:51		21:03	22:10	22:50
22	09:05	11:05 (33)	07:54		09:20 (15)	06:36		06:08	04:56	04:27
	16:32	82 14:05 (23)	17:48	21	09:41 (15)	18:54		21:05	22:12	22:50
23	09:03	11:05 (33)	07:52		09:21 (15)	06:33		06:05	04:54	04:27
	16:34	83 14:05 (23)	17:50	21	09:42 (15)	18:56		21:07	22:14	22:51
24	09:02	11:06 (33)	07:49		09:21 (15)	06:30		06:02	04:52	04:27
	16:37	84 14:07 (23)	17:53	20	09:41 (15)	18:58		21:10	22:16	22:51
25	09:00	11:07 (33)	07:46		09:21 (15)	06:27		05:59	04:51	04:28
	16:39	84 14:52 (24)	17:55	20	09:41 (15)	19:01		21:12	22:18	22:51
26	08:58	11:09 (33)	07:44		09:21 (15)	06:24		05:57	04:49	04:28
	16:41	79 14:57 (24)	17:57	19	09:40 (15)	19:03		21:14	22:20	22:50
27	08:56	11:10 (33)	07:41		09:22 (15)	06:21		05:54	04:47	04:29
	16:44	86 15:12 (24)	18:00	16	09:38 (15)	19:05		21:17	22:22	22:50
28	08:54	11:13 (33)	07:38		09:23 (15)	06:18		05:52	04:46	04:30
	16:46	90 15:13 (24)	18:02	14	09:37 (15)	19:08		21:19	22:24	22:50
29	08:52	11:40 (28)				07:15		05:49	04:44	04:30
	16:49	88 15:14 (24)				20:10		21:21	22:25	22:50
30	08:50	11:39 (28)				07:12		05:46	04:42	04:31
	16:51	88 15:13 (24)				20:12		21:24	22:27	22:49
31	08:48	11:39 (28)				07:10			04:41	
	16:54	88 15:13 (24)				20:14			22:29	
Potential sun hours	221		260			365		432	521	547
Total, worst case		1491		1104		9				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:12 (28)	09:00		10:44 (33)
	22:49		22:01		20:40		19:13			16:49	53	13:38 (23)	15:51	31	12:23 (20)
2	04:33		05:26		06:35		07:42			07:54		11:11 (28)	09:02		10:48 (33)
	22:48		21:58		20:37		19:10			16:46	58	13:40 (23)	15:50	27	12:23 (20)
3	04:34		05:28		06:37		07:44			07:56		11:11 (28)	09:03		12:01 (20)
	22:47		21:56		20:34		19:07			16:44	60	13:41 (23)	15:49	17	12:18 (20)
4	04:35		05:31		06:40		07:46			07:59		11:10 (28)	09:05		12:01 (20)
	22:47		21:54		20:31		19:04			16:41	63	13:41 (23)	15:48	13	12:14 (20)
5	04:36		05:33		06:42		07:48			08:01		11:10 (28)	09:07		12:02 (20)
	22:46		21:51		20:28		19:02			16:39	75	14:38 (24)	15:47	11	12:13 (20)
6	04:37		05:35		06:44		07:51			08:03		11:10 (28)	09:09		12:05 (20)
	22:45		21:49		20:25		18:59			16:37	79	14:40 (24)	15:46	5	12:10 (20)
7	04:39		05:37		06:46		07:53			08:06		11:09 (28)	09:10		12:07 (20)
	22:44		21:47		20:22		18:56			16:34	84	14:41 (24)	15:45	2	12:09 (20)
8	04:40		05:39		06:49		07:55			08:08		11:09 (28)	09:12		
	22:43		21:44		20:20		18:53			16:32	87	14:42 (24)	15:45		
9	04:41		05:42		06:51		07:57			08:11		11:10 (28)	09:13		
	22:42		21:42		20:17		18:50			16:30	87	14:43 (24)	15:44		
10	04:43		05:44		06:53		08:00			08:13		11:10 (28)	09:15		
	22:41		21:39		20:14		18:47			16:28	88	14:44 (24)	15:43		
11	04:44		05:46		06:55		08:02			08:15		11:10 (28)	09:16		
	22:39		21:37		20:11		18:45			16:25	88	14:44 (24)	15:43		
12	04:46		05:48		06:57		08:04		10:02 (15)	08:18		11:11 (28)	09:18		
	22:38		21:34		20:08		18:42	2	10:04 (15)	16:23	88	14:45 (24)	15:43		
13	04:47		05:51		07:00		08:07		09:58 (15)	08:20		11:12 (28)	09:19		
	22:37		21:32		20:05		18:39	11	10:09 (15)	16:21	86	14:45 (24)	15:42		
14	04:49		05:53		07:02		08:09		09:55 (15)	08:22		10:45 (33)	09:20		
	22:35		21:29		20:02		18:36	15	10:10 (15)	16:19	89	14:45 (24)	15:42		
15	04:51		05:55		07:04		08:11		09:54 (15)	08:25		10:42 (33)	09:21		
	22:34		21:26		19:59		18:33	18	10:12 (15)	16:17	87	14:45 (24)	15:42		
16	04:52		05:57		07:06		08:13		09:53 (15)	08:27		10:41 (33)	09:22		
	22:32		21:24		19:56		18:31	19	10:12 (15)	16:15	81	14:30 (24)	15:42		
17	04:54		06:00		07:08		08:16		09:53 (15)	08:30		10:41 (33)	09:23		
	22:30		21:21		19:54		18:28	20	10:13 (15)	16:13	83	14:25 (24)	15:42		
18	04:56		06:02		07:11		08:18		09:52 (15)	08:32		10:40 (33)	09:24		
	22:29		21:18		19:51		18:25	21	10:13 (15)	16:11	84	13:41 (23)	15:42		
19	04:58		06:04		07:13		08:20		09:52 (15)	08:34		10:40 (33)	09:25		
	22:27		21:16		19:48		18:22	21	10:13 (15)	16:09	83	13:40 (23)	15:42		
20	05:00		06:06		07:15		08:23		09:52 (15)	08:36		10:39 (33)	09:26		
	22:25		21:13		19:45		18:20	20	10:12 (15)	16:08	82	13:39 (23)	15:43		
21	05:01		06:08		07:17		08:25		09:52 (15)	08:39		10:39 (33)	09:26		
	22:24		21:10		19:42		18:17	20	10:12 (15)	16:06	80	13:38 (23)	15:43		
22	05:03		06:11		07:19		08:27		09:52 (15)	08:41		10:40 (33)	09:27		
	22:22		21:08		19:39		18:14	19	10:11 (15)	16:04	75	13:37 (23)	15:43		
23	05:05		06:13		07:22		08:30		09:53 (15)	08:43		10:39 (33)	09:27		
	22:20		21:05		19:36		18:12	17	10:10 (15)	16:02	69	13:35 (23)	15:44		
24	05:07		06:15		07:24		08:32		09:54 (15)	08:45		10:40 (33)	09:28		
	22:18		21:02		19:33		18:09	14	10:08 (15)	16:01	58	13:32 (23)	15:44		
25	05:09		06:17		07:26		07:35		08:56 (15)	08:47		10:40 (33)	09:28		
	22:16		20:59		19:30		17:06	11	09:07 (15)	15:59	45	12:20 (20)	15:45		
26	05:11		06:20		07:28		07:37		09:01 (15)	08:50		10:41 (33)	09:28		
	22:14		20:57		19:27		17:04	2	09:03 (15)	15:58	43	12:21 (20)	15:46		
27	05:13		06:22		07:30		07:39		11:20 (28)	08:52		10:41 (33)	09:28		
	22:12		20:54		19:25		17:01	14	11:34 (28)	15:56	43	12:21 (20)	15:47		
28	05:16		06:24		07:33		07:42		11:18 (28)	08:54		10:42 (33)	09:28		
	22:10		20:51		19:22		16:59	19	11:37 (28)	15:55	42	12:22 (20)	15:48		
29	05:18		06:26		07:35		07:44		11:15 (28)	08:56		10:42 (33)	09:28		
	22:07		20:48		19:19		16:56	34	13:32 (23)	15:54	42	12:22 (20)	15:49		
30	05:20		06:29		07:37		07:47		11:14 (28)	08:58		10:42 (33)	09:28		
	22:05		20:45		19:16		16:54	42	13:35 (23)	15:52	40	12:22 (20)	15:50		
31	05:22		06:31				07:49		11:13 (28)				09:28		
	22:03		20:42				16:51	50	13:38 (23)				15:51		
Potential sun hours	546		478		386		319			236			199		
Total, worst case								389			2122			106	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:12 (33)	08:46		11:58 (28)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (33)	16:56	88	15:21 (24)	18:05	20:17	21:26	22:30
2	09:27		11:11 (33)	08:43		11:59 (28)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (33)	16:58	85	15:21 (24)	18:07	20:19	21:28	22:32
3	09:27		11:11 (33)	08:41		12:00 (28)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (20)	17:01	84	15:21 (24)	18:09	20:21	21:31	22:34
4	09:27		11:11 (33)	08:39		11:59 (28)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (20)	17:03	82	15:20 (24)	18:12	20:24	21:33	22:35
5	09:26		11:11 (33)	08:37		11:59 (28)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (20)	17:06	81	15:19 (24)	18:14	20:26	21:35	22:37
6	09:25		11:11 (33)	08:34		12:00 (28)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (20)	17:08	75	15:18 (24)	18:17	20:28	21:37	22:38
7	09:24		11:11 (33)	08:32		12:01 (28)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (20)	17:11	64	15:14 (24)	18:19	20:30	21:40	22:39
8	09:24		11:11 (33)	08:30		12:02 (28)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (20)	17:13	57	14:25 (23)	18:21	20:33	21:42	22:40
9	09:23		11:12 (33)	08:27		12:03 (28)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (20)	17:16	53	14:24 (23)	18:24	20:35	21:44	22:42
10	09:22		11:11 (33)	08:25		12:04 (28)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (20)	17:18	48	14:23 (23)	18:26	20:37	21:46	22:43
11	09:21		11:12 (33)	08:23		12:06 (28)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (20)	17:21	43	14:22 (23)	18:28	20:40	21:49	22:44
12	09:20		11:12 (33)	08:20		12:07 (28)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (20)	17:23	35	14:20 (23)	18:31	20:42	21:51	22:45
13	09:18		11:12 (33)	08:18		12:10 (28)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (20)	17:26	22	14:16 (23)	18:33	20:44	21:53	22:46
14	09:17		11:12 (33)	08:15		09:38 (15)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (20)	17:28	10	12:19 (28)	18:35	20:47	21:55	22:47
15	09:16		11:12 (33)	08:13		09:35 (15)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (20)	17:31	12	09:47 (15)	18:38	20:49	21:58	22:47
16	09:15		11:12 (33)	08:10		09:33 (15)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (20)	17:33	16	09:49 (15)	18:40	20:51	22:00	22:48
17	09:13		11:13 (33)	08:07		09:32 (15)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (20)	17:36	18	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:14 (33)	08:05		09:31 (15)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (20)	17:38	20	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:15 (33)	08:02		09:31 (15)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (20)	17:40	20	09:51 (15)	18:47	20:58	22:06	22:50
20	09:08		11:15 (33)	08:00		09:30 (15)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (23)	17:43	21	09:51 (15)	18:49	21:00	22:08	22:50
21	09:07		11:16 (33)	07:57		09:30 (15)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (23)	17:45	21	09:51 (15)	18:51	21:03	22:10	22:50
22	09:05		11:16 (33)	07:54		09:29 (15)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (23)	17:48	22	09:51 (15)	18:54	21:05	22:12	22:50
23	09:03		11:17 (33)	07:52		09:30 (15)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (23)	17:50	21	09:51 (15)	18:56	21:07	22:14	22:51
24	09:02		11:19 (33)	07:49		09:31 (15)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (23)	17:53	19	09:50 (15)	18:58	21:10	22:16	22:51
25	09:00		11:20 (33)	07:46		09:31 (15)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (23)	17:55	18	09:49 (15)	19:01	21:12	22:18	22:51
26	08:58		11:23 (33)	07:44		09:32 (15)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (24)	17:57	15	09:47 (15)	19:03	21:14	22:20	22:50
27	08:56		11:58 (28)	07:41		09:34 (15)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (24)	18:00	11	09:45 (15)	19:05	21:17	22:22	22:50
28	08:54		11:58 (28)	07:38		09:38 (15)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (24)	18:02	2	09:40 (15)	19:07	21:19	22:24	22:50
29	08:52		11:59 (28)				07:15	05:49	04:44	04:30
	16:49	83	15:18 (24)				20:10	21:21	22:25	22:50
30	08:50		11:58 (28)				07:12	05:46	04:42	04:31
	16:51	86	15:21 (24)				20:12	21:24	22:27	22:49
31	08:48		11:58 (28)				07:10		04:41	
	16:54	88	15:22 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1646			1063					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:33 (28)	09:00		10:54 (33)
	22:49	22:01	20:40	19:13			16:49	50	13:53 (23)	15:51	43	12:35 (20)
2	04:33	05:26	06:35	07:42			07:54		11:32 (28)	09:02		10:54 (33)
	22:48	21:58	20:37	19:10			16:46	54	13:54 (23)	15:50	42	12:35 (20)
3	04:34	05:28	06:37	07:44			07:56		11:32 (28)	09:03		10:55 (33)
	22:47	21:56	20:34	19:07			16:44	57	13:55 (23)	15:49	40	12:35 (20)
4	04:35	05:31	06:40	07:46			07:59		11:30 (28)	09:05		10:56 (33)
	22:47	21:54	20:31	19:04			16:41	68	14:45 (24)	15:48	39	12:35 (20)
5	04:36	05:33	06:42	07:48			08:01		11:30 (28)	09:07		10:56 (33)
	22:46	21:51	20:28	19:02			16:39	76	14:48 (24)	15:47	39	12:36 (20)
6	04:37	05:35	06:44	07:51			08:03		11:30 (28)	09:09		10:57 (33)
	22:45	21:49	20:25	18:59			16:37	78	14:49 (24)	15:46	30	12:36 (20)
7	04:39	05:37	06:46	07:53			08:06		11:29 (28)	09:10		10:58 (33)
	22:44	21:47	20:22	18:56			16:34	83	14:50 (24)	15:45	29	12:36 (20)
8	04:40	05:39	06:49	07:55			08:08		11:29 (28)	09:12		10:59 (33)
	22:43	21:44	20:20	18:53			16:32	86	14:51 (24)	15:45	15	12:33 (20)
9	04:41	05:42	06:51	07:57			08:11		11:29 (28)	09:13		11:00 (33)
	22:42	21:42	20:17	18:50			16:30	87	14:52 (24)	15:44	12	12:34 (20)
10	04:43	05:44	06:53	08:00			08:13		11:30 (28)	09:15		11:00 (33)
	22:41	21:39	20:14	18:47			16:28	88	14:53 (24)	15:43	4	12:31 (20)
11	04:44	05:46	06:55	08:02			08:15		11:29 (28)	09:16		11:02 (33)
	22:39	21:37	20:11	18:45			16:25	87	14:52 (24)	15:43	2	11:04 (33)
12	04:46	05:48	06:57	08:04			08:18		11:30 (28)	09:18		11:02 (33)
	22:38	21:34	20:08	18:42			16:23	87	14:53 (24)	15:43	2	11:04 (33)
13	04:47	05:51	07:00	08:07			08:20		11:30 (28)	09:19		
	22:37	21:31	20:05	18:39			16:21	83	14:50 (24)	15:42		
14	04:49	05:53	07:02	08:09		10:08 (15)	08:22		11:30 (28)	09:20		
	22:35	21:29	20:02	18:36	8	10:16 (15)	16:19	74	14:42 (24)	15:42		
15	04:51	05:55	07:04	08:11		10:06 (15)	08:25		11:31 (28)	09:21		
	22:34	21:26	19:59	18:33	13	10:19 (15)	16:17	68	14:38 (24)	15:42		
16	04:52	05:57	07:06	08:13		10:04 (15)	08:27		10:56 (33)	09:22		
	22:32	21:24	19:56	18:31	16	10:20 (15)	16:15	69	14:36 (24)	15:42		
17	04:54	06:00	07:08	08:16		10:03 (15)	08:30		10:54 (33)	09:23		
	22:30	21:21	19:54	18:28	18	10:21 (15)	16:13	73	13:55 (23)	15:42		
18	04:56	06:02	07:11	08:18		10:02 (15)	08:32		10:52 (33)	09:24		
	22:29	21:18	19:51	18:25	20	10:22 (15)	16:11	78	13:54 (23)	15:42		
19	04:58	06:04	07:13	08:20		10:01 (15)	08:34		10:52 (33)	09:25		
	22:27	21:16	19:48	18:22	21	10:22 (15)	16:09	81	13:54 (23)	15:42		
20	05:00	06:06	07:15	08:23		10:01 (15)	08:36		10:51 (33)	09:26		
	22:25	21:13	19:45	18:20	21	10:22 (15)	16:08	80	13:52 (23)	15:43		
21	05:01	06:08	07:17	08:25		10:01 (15)	08:39		10:51 (33)	09:26		
	22:24	21:10	19:42	18:17	21	10:22 (15)	16:06	78	13:51 (23)	15:43		
22	05:03	06:11	07:19	08:27		10:00 (15)	08:41		10:51 (33)	09:27		
	22:22	21:08	19:39	18:14	21	10:21 (15)	16:04	75	13:50 (23)	15:43		
23	05:05	06:13	07:22	08:30		10:01 (15)	08:43		10:51 (33)	09:27		
	22:20	21:05	19:36	18:12	20	10:21 (15)	16:02	64	12:31 (20)	15:44		
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		10:51 (33)	09:28		
	22:18	21:02	19:33	18:09	19	10:20 (15)	16:01	63	12:32 (20)	15:44		
25	05:09	06:17	07:26	07:35		09:02 (15)	08:47		10:51 (33)	09:28		
	22:16	20:59	19:30	17:06	18	09:20 (15)	15:59	60	12:32 (20)	15:45		
26	05:11	06:20	07:28	07:37		09:03 (15)	08:50		10:52 (33)	09:28		
	22:14	20:57	19:27	17:04	15	09:18 (15)	15:58	56	12:33 (20)	15:46		
27	05:13	06:22	07:30	07:39		09:05 (15)	08:52		10:51 (33)	09:28		
	22:12	20:54	19:25	17:01	11	09:16 (15)	15:56	53	12:33 (20)	15:47		
28	05:16	06:24	07:33	07:42		09:08 (15)	08:54		10:52 (33)	09:28		
	22:10	20:51	19:22	16:59	13	11:51 (28)	15:55	44	12:34 (20)	15:48		
29	05:18	06:26	07:35	07:44		11:38 (28)	08:56		10:53 (33)	09:28		
	22:07	20:48	19:19	16:56	26	13:46 (23)	15:54	43	12:34 (20)	15:49		
30	05:20	06:29	07:37	07:47		11:36 (28)	08:58		10:53 (33)	09:28		
	22:05	20:45	19:16	16:54	37	13:50 (23)	15:52	43	12:34 (20)	15:50		
31	05:22	06:31		07:49		11:35 (28)				09:28		11:11 (33)
	22:03	20:42		16:51	44	13:52 (23)				15:51	1	11:12 (33)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					362			2086			298	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:23 (33)	08:46	12:23 (28)	07:35	07:07	05:44	04:40
	15:53	17	11:40 (33)	16:56	82	15:30 (24)	18:05	20:17	21:26	22:30
2	09:27		11:23 (33)	08:43	12:24 (28)	07:33	07:04	05:41	04:38
	15:54	17	11:40 (33)	16:58	86	15:34 (24)	18:07	20:19	21:28	22:32
3	09:27		11:23 (33)	08:41	12:25 (28)	07:30	07:01	05:39	04:37
	15:55	18	11:41 (33)	17:01	84	15:34 (24)	18:09	20:21	21:31	22:34
4	09:26		11:23 (33)	08:39	12:25 (28)	07:27	06:58	05:36	04:36
	15:57	23	12:52 (20)	17:03	85	15:34 (24)	18:12	20:24	21:33	22:35
5	09:26		11:23 (33)	08:37	12:25 (28)	07:24	06:55	05:34	04:35
	15:58	25	12:53 (20)	17:06	82	15:33 (24)	18:14	20:26	21:35	22:37
6	09:25		11:24 (33)	08:34	12:26 (28)	07:21	06:52	05:31	04:34
	16:00	31	13:06 (20)	17:08	79	15:33 (24)	18:17	20:28	21:37	22:38
7	09:24		11:24 (33)	08:32	12:26 (28)	07:19	06:50	05:29	04:33
	16:02	34	13:07 (20)	17:11	74	15:31 (24)	18:19	20:30	21:40	22:39
8	09:24		11:24 (33)	08:30	12:28 (28)	07:16	06:47	05:26	04:32
	16:03	41	13:07 (20)	17:13	68	15:30 (24)	18:21	20:33	21:42	22:40
9	09:23		11:24 (33)	08:27	12:28 (28)	07:13	06:44	05:24	04:31
	16:05	42	13:07 (20)	17:16	60	15:26 (24)	18:24	20:35	21:44	22:42
10	09:22		11:25 (33)	08:25	12:29 (28)	07:10	06:41	05:22	04:30
	16:07	42	13:08 (20)	17:18	51	14:44 (23)	18:26	20:37	21:46	22:43
11	09:21		11:25 (33)	08:23	12:32 (28)	07:07	06:38	05:19	04:29
	16:09	43	13:09 (20)	17:21	45	14:43 (23)	18:28	20:40	21:49	22:44
12	09:20		11:25 (33)	08:20	09:49 (15)	07:04	06:35	05:17	04:29
	16:11	44	13:09 (20)	17:23	45	14:42 (23)	18:31	20:42	21:51	22:45
13	09:18		11:26 (33)	08:18	09:45 (15)	07:01	06:32	05:15	04:28
	16:13	44	13:10 (20)	17:26	43	14:40 (23)	18:33	20:44	21:53	22:46
14	09:17		11:26 (33)	08:15	09:44 (15)	06:59	06:30	05:13	04:28
	16:15	54	13:10 (20)	17:28	27	14:38 (23)	18:35	20:47	21:55	22:47
15	09:16		11:26 (33)	08:13	09:43 (15)	06:56	06:27	05:10	04:27
	16:17	57	13:10 (20)	17:31	18	10:01 (15)	18:38	20:49	21:58	22:47
16	09:15		11:27 (33)	08:10	09:42 (15)	06:53	06:24	05:08	04:27
	16:19	60	13:10 (20)	17:33	20	10:02 (15)	18:40	20:51	22:00	22:48
17	09:13		11:27 (33)	08:07	09:41 (15)	06:50	06:21	05:06	04:27
	16:21	63	13:10 (20)	17:35	21	10:02 (15)	18:42	20:53	22:02	22:49
18	09:12		11:28 (33)	08:05	09:41 (15)	06:47	06:19	05:04	04:27
	16:23	64	13:11 (20)	17:38	22	10:03 (15)	18:45	20:56	22:04	22:49
19	09:10		11:29 (33)	08:02	09:40 (15)	06:44	06:16	05:02	04:27
	16:25	63	13:11 (20)	17:40	23	10:03 (15)	18:47	20:58	22:06	22:50
20	09:08		11:30 (33)	08:00	09:40 (15)	06:41	06:13	05:00	04:27
	16:28	63	13:11 (20)	17:43	23	10:03 (15)	18:49	21:00	22:08	22:50
21	09:07		11:31 (33)	07:57	09:40 (15)	06:38	06:10	04:58	04:27
	16:30	62	13:11 (20)	17:45	22	10:02 (15)	18:51	21:03	22:10	22:50
22	09:05		11:31 (33)	07:54	09:40 (15)	06:36	06:08	04:56	04:27
	16:32	60	13:09 (20)	17:48	22	10:02 (15)	18:54	21:05	22:12	22:50
23	09:03		11:33 (33)	07:52	09:42 (15)	06:33	06:05	04:54	04:27
	16:34	66	14:33 (23)	17:50	20	10:02 (15)	18:56	21:07	22:14	22:50
24	09:02		11:35 (33)	07:49	09:42 (15)	06:30	06:02	04:52	04:27
	16:37	67	14:36 (23)	17:53	18	10:00 (15)	18:58	21:10	22:16	22:51
25	09:00		11:39 (33)	07:46	09:43 (15)	06:27	05:59	04:51	04:28
	16:39	58	14:38 (23)	17:55	16	09:59 (15)	19:01	21:12	22:18	22:50
26	08:58		12:24 (28)	07:44	09:45 (15)	06:24	05:57	04:49	04:28
	16:41	55	14:40 (23)	17:57	11	09:56 (15)	19:03	21:14	22:20	22:50
27	08:56		12:23 (28)	07:41	09:49 (15)	06:21	05:54	04:47	04:29
	16:44	57	14:40 (23)	18:00	2	09:51 (15)	19:05	21:17	22:22	22:50
28	08:54		12:23 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	61	15:15 (24)	18:02			19:07	21:19	22:24	22:50
29	08:52		12:24 (28)				07:15	05:49	04:44	04:30
	16:49	67	15:19 (24)				20:10	21:21	22:25	22:50
30	08:50		12:23 (28)				07:12	05:46	04:42	04:31
	16:51	74	15:23 (24)				20:12	21:24	22:27	22:49
31	08:48		12:24 (28)				07:10		04:41	
	16:53	77	15:26 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1549			1149					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:59 (28)	09:00		11:07 (33)
	22:49		22:01		20:40		19:13			16:49	51	14:13 (23)	15:51	43	12:51 (20)
2	04:33		05:26		06:35		07:42			07:54		11:58 (28)	09:02		11:08 (33)
	22:48		21:58		20:37		19:10			16:46	61	14:57 (24)	15:50	42	12:51 (20)
3	04:34		05:28		06:37		07:44			07:56		11:57 (28)	09:03		11:08 (33)
	22:47		21:56		20:34		19:07			16:44	71	15:00 (24)	15:49	42	12:51 (20)
4	04:35		05:31		06:40		07:46			07:59		11:56 (28)	09:05		11:09 (33)
	22:47		21:54		20:31		19:04			16:41	76	15:01 (24)	15:48	41	12:52 (20)
5	04:36		05:33		06:42		07:48			08:01		11:55 (28)	09:07		11:09 (33)
	22:46		21:51		20:28		19:02			16:39	80	15:02 (24)	15:47	35	12:52 (20)
6	04:37		05:35		06:44		07:51			08:03		11:55 (28)	09:09		11:10 (33)
	22:45		21:49		20:25		18:59			16:37	82	15:03 (24)	15:46	31	12:52 (20)
7	04:38		05:37		06:46		07:53			08:06		11:54 (28)	09:10		11:11 (33)
	22:44		21:47		20:22		18:56			16:34	84	15:03 (24)	15:45	24	12:40 (20)
8	04:40		05:39		06:49		07:55			08:08		11:54 (28)	09:12		11:11 (33)
	22:43		21:44		20:20		18:53			16:32	87	15:04 (24)	15:45	24	12:41 (20)
9	04:41		05:42		06:51		07:57			08:11		11:55 (28)	09:13		11:12 (33)
	22:42		21:42		20:17		18:50			16:30	87	15:05 (24)	15:44	20	12:37 (20)
10	04:43		05:44		06:53		08:00			08:13		11:55 (28)	09:15		11:12 (33)
	22:40		21:39		20:14		18:47			16:28	81	15:01 (24)	15:43	17	11:29 (33)
11	04:44		05:46		06:55		08:02			08:15		11:54 (28)	09:16		11:14 (33)
	22:39		21:37		20:11		18:45			16:25	78	14:57 (24)	15:43	16	11:30 (33)
12	04:46		05:48		06:57		08:04			08:18		11:55 (28)	09:18		11:14 (33)
	22:38		21:34		20:08		18:42			16:23	74	14:55 (24)	15:43	15	11:29 (33)
13	04:47		05:51		07:00		08:07			08:20		11:56 (28)	09:19		11:15 (33)
	22:37		21:31		20:05		18:39			16:21	67	14:51 (24)	15:42	15	11:30 (33)
14	04:49		05:53		07:02		08:09			08:22		11:55 (28)	09:20		11:16 (33)
	22:35		21:29		20:02		18:36			16:19	62	14:47 (24)	15:42	14	11:30 (33)
15	04:51		05:55		07:04		08:11		10:19 (15)	08:25		11:56 (28)	09:21		11:16 (33)
	22:34		21:26		19:59		18:33	8	10:27 (15)	16:17	57	14:13 (23)	15:42	14	11:30 (33)
16	04:52		05:57		07:06		08:13		10:16 (15)	08:27		11:57 (28)	09:22		11:17 (33)
	22:32		21:24		19:56		18:31	13	10:29 (15)	16:15	54	14:12 (23)	15:42	12	11:29 (33)
17	04:54		06:00		07:08		08:16		10:15 (15)	08:29		11:12 (33)	09:23		11:17 (33)
	22:30		21:21		19:54		18:28	16	10:31 (15)	16:13	58	14:11 (23)	15:42	12	11:29 (33)
18	04:56		06:02		07:11		08:18		10:13 (15)	08:32		11:09 (33)	09:24		11:18 (33)
	22:29		21:18		19:51		18:25	19	10:32 (15)	16:11	67	14:10 (23)	15:42	11	11:29 (33)
19	04:58		06:04		07:13		08:20		10:12 (15)	08:34		11:08 (33)	09:25		11:19 (33)
	22:27		21:16		19:48		18:22	21	10:33 (15)	16:09	66	14:08 (23)	15:42	11	11:30 (33)
20	05:00		06:06		07:15		08:23		10:11 (15)	08:36		11:06 (33)	09:26		11:20 (33)
	22:25		21:13		19:45		18:20	22	10:33 (15)	16:08	60	12:44 (20)	15:43	10	11:30 (33)
21	05:01		06:08		07:17		08:25		10:11 (15)	08:39		11:06 (33)	09:26		11:20 (33)
	22:24		21:10		19:42		18:17	23	10:34 (15)	16:06	62	12:46 (20)	15:43	10	11:30 (33)
22	05:03		06:11		07:19		08:27		10:10 (15)	08:41		11:06 (33)	09:27		11:21 (33)
	22:22		21:08		19:39		18:14	23	10:33 (15)	16:04	63	12:47 (20)	15:43	10	11:31 (33)
23	05:05		06:13		07:22		08:30		10:11 (15)	08:43		11:05 (33)	09:27		11:21 (33)
	22:20		21:05		19:36		18:12	22	10:33 (15)	16:02	63	12:47 (20)	15:44	10	11:31 (33)
24	05:07		06:15		07:24		08:32		10:10 (15)	08:45		11:05 (33)	09:28		11:22 (33)
	22:18		21:02		19:33		18:09	22	10:32 (15)	16:01	64	12:48 (20)	15:44	10	11:32 (33)
25	05:09		06:17		07:26		07:35		09:11 (15)	08:47		11:05 (33)	09:28		11:22 (33)
	22:16		20:59		19:30		17:06	21	09:32 (15)	15:59	63	12:48 (20)	15:45	11	11:33 (33)
26	05:11		06:20		07:28		07:37		09:11 (15)	08:50		11:06 (33)	09:28		11:22 (33)
	22:14		20:56		19:27		17:04	20	09:31 (15)	15:58	59	12:49 (20)	15:46	12	11:34 (33)
27	05:13		06:22		07:30		07:39		09:12 (15)	08:52		11:05 (33)	09:28		11:23 (33)
	22:12		20:54		19:25		17:01	18	09:30 (15)	15:56	57	12:49 (20)	15:47	11	11:34 (33)
28	05:16		06:24		07:33		07:42		09:14 (15)	08:54		11:06 (33)	09:28		11:23 (33)
	22:10		20:51		19:22		16:59	28	14:08 (23)	15:55	53	12:50 (20)	15:48	13	11:36 (33)
29	05:18		06:26		07:35		07:44		09:15 (15)	08:56		11:06 (33)	09:28		11:22 (33)
	22:07		20:48		19:19		16:56	44	14:10 (23)	15:54	44	12:50 (20)	15:49	14	11:36 (33)
30	05:20		06:29		07:37		07:47		09:19 (15)	08:58		11:06 (33)	09:28		11:23 (33)
	22:05		20:45		19:16		16:54	44	14:11 (23)	15:52	43	12:50 (20)	15:50	15	11:38 (33)
31	05:22		06:31				07:49		12:01 (28)				09:28		11:23 (33)
	22:03		20:42				16:51	46	14:13 (23)				15:51	15	11:38 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								410			1974			580	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		08:46		11:27 (28)	07:35	07:07	05:44	04:40
	15:53		16:56	70	14:51 (24)	18:05	20:17	21:26	22:31
2	09:27	12:04 (20)	08:43		11:27 (28)	07:33	07:04	05:41	04:38
	15:54	1 12:05 (20)	16:58	60	13:50 (23)	18:07	20:19	21:28	22:32
3	09:27	12:04 (20)	08:41		11:28 (28)	07:30	07:01	05:39	04:37
	15:55	4 12:08 (20)	17:01	58	13:50 (23)	18:09	20:21	21:31	22:34
4	09:27	12:04 (20)	08:39		11:28 (28)	07:27	06:58	05:36	04:36
	15:57	7 12:11 (20)	17:03	54	13:48 (23)	18:12	20:24	21:33	22:35
5	09:26	12:04 (20)	08:37		11:28 (28)	07:24	06:55	05:34	04:35
	15:58	17 12:21 (20)	17:06	52	13:47 (23)	18:14	20:26	21:35	22:37
6	09:25	12:05 (20)	08:34		11:29 (28)	07:21	06:52	05:31	04:34
	16:00	16 12:21 (20)	17:08	49	13:47 (23)	18:17	20:28	21:37	22:38
7	09:24	12:05 (20)	08:32		11:29 (28)	07:19	06:50	05:29	04:33
	16:02	19 12:26 (20)	17:11	43	13:44 (23)	18:19	20:30	21:40	22:39
8	09:24	12:05 (20)	08:30		11:31 (28)	07:16	06:47	05:26	04:32
	16:03	22 12:27 (20)	17:13	35	13:42 (23)	18:21	20:33	21:42	22:40
9	09:23	12:06 (20)	08:27		11:32 (28)	07:13	06:44	05:24	04:31
	16:05	22 12:28 (20)	17:16	22	11:54 (28)	18:24	20:35	21:44	22:42
10	09:22	12:06 (20)	08:25		11:34 (28)	07:10	06:41	05:22	04:30
	16:07	22 12:28 (20)	17:18	18	11:52 (28)	18:26	20:37	21:46	22:43
11	09:21	12:07 (20)	08:23		11:37 (28)	07:07	06:38	05:19	04:29
	16:09	22 12:29 (20)	17:21	14	11:51 (28)	18:28	20:40	21:49	22:44
12	09:20	12:07 (20)	08:20		11:41 (28)	07:04	06:35	05:17	04:29
	16:11	28 13:33 (23)	17:23	4	11:45 (28)	18:31	20:42	21:51	22:45
13	09:18	12:08 (20)	08:18			07:02	06:32	05:15	04:28
	16:13	33 13:37 (23)	17:26			18:33	20:44	21:53	22:46
14	09:17	12:08 (20)	08:15		09:30 (15)	06:59	06:30	05:13	04:28
	16:15	36 13:38 (23)	17:28	5	09:35 (15)	18:35	20:47	21:55	22:47
15	09:16	11:34 (28)	08:13		09:27 (15)	06:56	06:27	05:10	04:27
	16:17	47 13:40 (23)	17:31	11	09:38 (15)	18:38	20:49	21:58	22:47
16	09:15	11:32 (28)	08:10		09:25 (15)	06:53	06:24	05:08	04:27
	16:19	54 13:41 (23)	17:33	14	09:39 (15)	18:40	20:51	22:00	22:48
17	09:13	11:31 (28)	08:07		09:23 (15)	06:50	06:21	05:06	04:27
	16:21	57 13:43 (23)	17:36	17	09:40 (15)	18:42	20:53	22:02	22:49
18	09:12	11:30 (28)	08:05		09:23 (15)	06:47	06:19	05:04	04:27
	16:23	72 14:53 (24)	17:38	18	09:41 (15)	18:45	20:56	22:04	22:49
19	09:10	11:29 (28)	08:02		09:22 (15)	06:44	06:16	05:02	04:27
	16:25	85 14:53 (24)	17:40	19	09:41 (15)	18:47	20:58	22:06	22:50
20	09:09	11:28 (28)	08:00		09:22 (15)	06:41	06:13	05:00	04:27
	16:28	88 14:54 (24)	17:43	19	09:41 (15)	18:49	21:00	22:08	22:50
21	09:07	11:28 (28)	07:57		09:22 (15)	06:39	06:10	04:58	04:27
	16:30	88 14:54 (24)	17:45	19	09:41 (15)	18:51	21:03	22:10	22:50
22	09:05	11:28 (28)	07:54		09:22 (15)	06:36	06:08	04:56	04:27
	16:32	89 14:55 (24)	17:48	19	09:41 (15)	18:54	21:05	22:12	22:50
23	09:03	11:26 (28)	07:52		09:23 (15)	06:33	06:05	04:54	04:27
	16:34	87 14:54 (24)	17:50	18	09:41 (15)	18:56	21:07	22:14	22:51
24	09:02	11:26 (28)	07:49		09:23 (15)	06:30	06:02	04:52	04:27
	16:37	81 14:55 (24)	17:53	17	09:40 (15)	18:58	21:10	22:16	22:51
25	09:00	11:26 (28)	07:46		09:24 (15)	06:27	05:59	04:51	04:28
	16:39	82 14:55 (24)	17:55	14	09:38 (15)	19:01	21:12	22:18	22:51
26	08:58	11:26 (28)	07:44		09:25 (15)	06:24	05:57	04:49	04:28
	16:41	83 14:55 (24)	17:57	11	09:36 (15)	19:03	21:14	22:20	22:50
27	08:56	11:25 (28)	07:41		09:30 (15)	06:21	05:54	04:47	04:29
	16:44	83 14:54 (24)	18:00	1	09:31 (15)	19:05	21:17	22:22	22:50
28	08:54	11:26 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	82 14:54 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52	11:26 (28)				07:15	05:49	04:44	04:30
	16:49	80 14:54 (24)				20:10	21:21	22:25	22:50
30	08:50	11:26 (28)				07:13	05:46	04:42	04:31
	16:51	79 14:53 (24)				20:12	21:24	22:27	22:49
31	08:48	11:26 (28)				07:10		04:41	
	16:54	76 14:52 (24)				20:14		22:29	
Potential sun hours	221		260			365	432	521	547
Total, worst case		1562		681					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:03 (28)	09:00		11:49 (20)
	22:49	22:01	20:40	19:13			16:49	19	11:22 (28)	15:51	22	12:11 (20)
2	04:33	05:26	06:35	07:42			07:54		11:01 (28)	09:02		11:49 (20)
	22:48	21:59	20:37	19:10			16:46	23	11:24 (28)	15:50	22	12:11 (20)
3	04:34	05:28	06:37	07:44			07:56		11:01 (28)	09:03		11:49 (20)
	22:47	21:56	20:34	19:07			16:44	36	13:12 (23)	15:49	22	12:11 (20)
4	04:35	05:31	06:40	07:46			07:59		10:59 (28)	09:05		11:50 (20)
	22:47	21:54	20:31	19:04			16:41	43	13:14 (23)	15:48	21	12:11 (20)
5	04:36	05:33	06:42	07:48			08:01		10:59 (28)	09:07		11:50 (20)
	22:46	21:51	20:28	19:02			16:39	48	13:16 (23)	15:47	21	12:11 (20)
6	04:37	05:35	06:44	07:51			08:03		10:58 (28)	09:09		11:51 (20)
	22:45	21:49	20:25	18:59			16:37	53	13:18 (23)	15:46	16	12:07 (20)
7	04:39	05:37	06:46	07:53			08:06		10:57 (28)	09:10		11:51 (20)
	22:44	21:47	20:23	18:56			16:34	55	13:18 (23)	15:45	17	12:08 (20)
8	04:40	05:39	06:49	07:55			08:08		10:57 (28)	09:12		11:52 (20)
	22:43	21:44	20:20	18:53			16:32	58	13:19 (23)	15:45	8	12:00 (20)
9	04:41	05:42	06:51	07:57			08:11		10:57 (28)	09:13		11:53 (20)
	22:42	21:42	20:17	18:50			16:30	63	14:18 (24)	15:44	4	11:57 (20)
10	04:43	05:44	06:53	08:00			08:13		10:58 (28)	09:15		11:53 (20)
	22:41	21:39	20:14	18:47			16:28	71	14:22 (24)	15:43	1	11:54 (20)
11	04:44	05:46	06:55	08:02			08:15		10:57 (28)	09:16		
	22:39	21:37	20:11	18:45			16:25	76	14:23 (24)	15:43		
12	04:46	05:48	06:57	08:04			08:18		10:57 (28)	09:18		
	22:38	21:34	20:08	18:42			16:23	80	14:25 (24)	15:43		
13	04:47	05:51	07:00	08:07			08:20		10:58 (28)	09:19		
	22:37	21:32	20:05	18:39			16:21	81	14:26 (24)	15:42		
14	04:49	05:53	07:02	08:09			08:22		10:58 (28)	09:20		
	22:35	21:29	20:02	18:36			16:19	82	14:26 (24)	15:42		
15	04:51	05:55	07:04	08:11		10:00 (15)	08:25		10:58 (28)	09:21		
	22:34	21:26	19:59	18:33	7	10:07 (15)	16:17	83	14:27 (24)	15:42		
16	04:52	05:57	07:06	08:13		09:57 (15)	08:27		10:59 (28)	09:22		
	22:32	21:24	19:56	18:31	12	10:09 (15)	16:15	83	14:28 (24)	15:42		
17	04:54	06:00	07:08	08:16		09:56 (15)	08:30		11:00 (28)	09:23		
	22:31	21:21	19:54	18:28	15	10:11 (15)	16:13	83	14:29 (24)	15:42		
18	04:56	06:02	07:11	08:18		09:54 (15)	08:32		11:00 (28)	09:24		
	22:29	21:18	19:51	18:25	17	10:11 (15)	16:11	81	14:29 (24)	15:42		
19	04:58	06:04	07:13	08:20		09:54 (15)	08:34		11:01 (28)	09:25		
	22:27	21:16	19:48	18:22	18	10:12 (15)	16:09	87	14:29 (24)	15:42		
20	05:00	06:06	07:15	08:23		09:53 (15)	08:36		11:02 (28)	09:26		
	22:25	21:13	19:45	18:20	19	10:12 (15)	16:08	88	14:29 (24)	15:43		
21	05:01	06:08	07:17	08:25		09:53 (15)	08:39		11:03 (28)	09:26		
	22:24	21:10	19:42	18:17	19	10:12 (15)	16:06	88	14:29 (24)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (15)	08:41		11:04 (28)	09:27		
	22:22	21:08	19:39	18:14	20	10:12 (15)	16:04	88	14:30 (24)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (15)	08:43		11:05 (28)	09:27		
	22:20	21:05	19:36	18:12	19	10:12 (15)	16:02	84	14:29 (24)	15:44		
24	05:07	06:15	07:24	08:32		09:53 (15)	08:45		11:07 (28)	09:28		
	22:18	21:02	19:33	18:09	17	10:10 (15)	16:01	72	14:30 (24)	15:44		
25	05:09	06:17	07:26	07:35		08:54 (15)	08:47		11:08 (28)	09:28		
	22:16	20:59	19:30	17:06	16	09:10 (15)	15:59	58	13:20 (23)	15:45		
26	05:11	06:20	07:28	07:37		08:55 (15)	08:50		11:11 (28)	09:28		
	22:14	20:57	19:27	17:04	14	09:09 (15)	15:58	53	13:20 (23)	15:46		
27	05:13	06:22	07:30	07:39		08:56 (15)	08:52		11:13 (28)	09:28		
	22:12	20:54	19:25	17:01	10	09:06 (15)	15:56	47	13:19 (23)	15:47		
28	05:16	06:24	07:33	07:42			08:54		11:48 (20)	09:28		
	22:10	20:51	19:22	16:59			15:55	35	13:18 (23)	15:48		
29	05:18	06:26	07:35	07:44			08:56		11:48 (20)	09:28		
	22:07	20:48	19:19	16:56			15:54	33	13:17 (23)	15:49		
30	05:20	06:29	07:37	07:47		11:09 (28)	08:58		11:48 (20)	09:28		
	22:05	20:45	19:16	16:54	7	11:16 (28)	15:52	30	13:15 (23)	15:50		
31	05:22	06:31		07:49		11:06 (28)				09:28		
	22:03	20:42		16:51	15	11:21 (28)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					225			1881			154	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		12:18 (20)	08:46		11:53 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (20)	16:56	49	14:04 (23)	18:05	20:17	21:26	22:31
2	09:27		12:18 (20)	08:43		11:54 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (20)	16:58	44	14:02 (23)	18:07	20:19	21:28	22:32
3	09:27		11:54 (28)	08:41		11:56 (28)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (20)	17:01	39	14:01 (23)	18:09	20:21	21:31	22:34
4	09:27		11:52 (28)	08:39		11:57 (28)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (20)	17:03	32	13:59 (23)	18:12	20:24	21:33	22:35
5	09:26		11:51 (28)	08:37		11:59 (28)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (20)	17:06	19	13:55 (23)	18:14	20:26	21:35	22:37
6	09:25		11:50 (28)	08:34		12:04 (28)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (20)	17:08	5	12:09 (28)	18:17	20:28	21:37	22:38
7	09:24		11:50 (28)	08:32			07:19	06:50	05:29	04:33
	16:02	42	13:46 (23)	17:11			18:19	20:30	21:40	22:39
8	09:24		11:50 (28)	08:30			07:16	06:47	05:26	04:32
	16:03	48	13:49 (23)	17:13			18:21	20:33	21:42	22:40
9	09:23		11:50 (28)	08:27		09:42 (15)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (23)	17:16	7	09:49 (15)	18:24	20:35	21:44	22:42
10	09:22		11:49 (28)	08:25		09:40 (15)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (23)	17:18	12	09:52 (15)	18:26	20:37	21:46	22:43
11	09:21		11:49 (28)	08:23		09:39 (15)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (23)	17:21	15	09:54 (15)	18:28	20:40	21:49	22:44
12	09:20		11:48 (28)	08:20		09:37 (15)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (23)	17:23	17	09:54 (15)	18:31	20:42	21:51	22:45
13	09:18		11:49 (28)	08:18		09:36 (15)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (23)	17:26	19	09:55 (15)	18:33	20:44	21:53	22:46
14	09:17		11:48 (28)	08:15		09:37 (15)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (23)	17:28	19	09:56 (15)	18:35	20:47	21:55	22:47
15	09:16		11:48 (28)	08:13		09:36 (15)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (24)	17:31	20	09:56 (15)	18:38	20:49	21:58	22:47
16	09:15		11:47 (28)	08:10		09:36 (15)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (24)	17:33	20	09:56 (15)	18:40	20:51	22:00	22:48
17	09:13		11:48 (28)	08:07		09:36 (15)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (24)	17:36	19	09:55 (15)	18:42	20:53	22:02	22:49
18	09:12		11:48 (28)	08:05		09:37 (15)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (24)	17:38	19	09:56 (15)	18:45	20:56	22:04	22:49
19	09:10		11:48 (28)	08:02		09:37 (15)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (24)	17:40	18	09:55 (15)	18:47	20:58	22:06	22:50
20	09:08		11:48 (28)	08:00		09:38 (15)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (24)	17:43	15	09:53 (15)	18:49	21:00	22:08	22:50
21	09:07		11:48 (28)	07:57		09:39 (15)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (24)	17:45	13	09:52 (15)	18:51	21:03	22:10	22:50
22	09:05		11:48 (28)	07:54		09:41 (15)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (24)	17:48	8	09:49 (15)	18:54	21:05	22:12	22:50
23	09:03		11:48 (28)	07:52			06:33	06:05	04:54	04:27
	16:34	80	15:02 (24)	17:50			18:56	21:07	22:14	22:51
24	09:02		11:48 (28)	07:49			06:30	06:02	04:52	04:27
	16:37	80	15:02 (24)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:49 (28)	07:46			06:27	05:59	04:51	04:28
	16:39	80	15:02 (24)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:49 (28)	07:44			06:24	05:57	04:49	04:28
	16:41	79	15:02 (24)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:49 (28)	07:41			06:21	05:54	04:47	04:29
	16:44	75	15:01 (24)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:50 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	73	15:01 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:51 (28)				07:15	05:49	04:44	04:30
	16:49	69	15:00 (24)				20:10	21:21	22:25	22:50
30	08:50		11:51 (28)				07:12	05:46	04:42	04:31
	16:51	64	14:58 (24)				20:12	21:24	22:27	22:49
31	08:48		11:52 (28)				07:10		04:41	
	16:54	55	14:55 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1930			409					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (15)	09:00		11:31 (28)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (15)	15:51	60	13:37 (23)
2	04:33	05:26	06:35	07:42			07:54		09:12 (15)	09:02		11:32 (28)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (15)	15:50	56	13:36 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (23)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (28)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (23)
5	04:36	05:33	06:42	07:48			08:01		11:32 (28)	09:07		11:35 (28)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (28)	15:47	43	13:32 (23)
6	04:37	05:35	06:44	07:51			08:03		11:29 (28)	09:09		11:37 (28)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (23)	15:46	36	12:27 (20)
7	04:38	05:37	06:46	07:53			08:06		11:27 (28)	09:10		11:38 (28)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (23)	15:45	34	12:27 (20)
8	04:40	05:39	06:49	07:55			08:08		11:25 (28)	09:12		11:40 (28)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (23)	15:45	32	12:28 (20)
9	04:41	05:42	06:51	07:57			08:11		11:25 (28)	09:13		11:42 (28)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (23)	15:44	28	12:28 (20)
10	04:43	05:44	06:53	08:00			08:13		11:24 (28)	09:15		12:07 (20)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (23)	15:43	21	12:28 (20)
11	04:44	05:46	06:55	08:02			08:15		11:23 (28)	09:16		12:08 (20)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (24)	15:43	21	12:29 (20)
12	04:46	05:48	06:57	08:04			08:18		11:23 (28)	09:18		12:08 (20)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (24)	15:43	21	12:29 (20)
13	04:47	05:51	07:00	08:07			08:20		11:23 (28)	09:19		12:09 (20)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (24)	15:42	21	12:30 (20)
14	04:49	05:53	07:02	08:09			08:22		11:22 (28)	09:20		12:09 (20)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (24)	15:42	21	12:30 (20)
15	04:51	05:55	07:04	08:11			08:25		11:22 (28)	09:21		12:09 (20)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (24)	15:42	21	12:30 (20)
16	04:52	05:57	07:06	08:13			08:27		11:22 (28)	09:22		12:10 (20)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (24)	15:42	20	12:30 (20)
17	04:54	06:00	07:08	08:16			08:30		11:23 (28)	09:23		12:10 (20)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (24)	15:42	21	12:31 (20)
18	04:56	06:02	07:11	08:18			08:32		11:22 (28)	09:24		12:11 (20)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (24)	15:42	20	12:31 (20)
19	04:58	06:04	07:13	08:20			08:34		11:23 (28)	09:25		12:12 (20)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (24)	15:42	20	12:32 (20)
20	05:00	06:06	07:15	08:23		10:11 (15)	08:36		11:22 (28)	09:26		12:12 (20)
	22:25	21:13	19:45	18:20	10	10:21 (15)	16:08	82	14:37 (24)	15:43	20	12:32 (20)
21	05:01	06:08	07:17	08:25		10:10 (15)	08:39		11:23 (28)	09:26		12:12 (20)
	22:24	21:10	19:42	18:17	13	10:23 (15)	16:06	80	14:37 (24)	15:43	20	12:32 (20)
22	05:03	06:11	07:19	08:27		10:08 (15)	08:41		11:24 (28)	09:27		12:13 (20)
	22:22	21:08	19:39	18:14	16	10:24 (15)	16:04	79	14:38 (24)	15:43	20	12:33 (20)
23	05:05	06:13	07:22	08:30		10:07 (15)	08:43		11:24 (28)	09:27		12:13 (20)
	22:20	21:05	19:36	18:12	18	10:25 (15)	16:02	84	14:38 (24)	15:44	20	12:33 (20)
24	05:07	06:15	07:24	08:32		10:06 (15)	08:45		11:25 (28)	09:28		12:14 (20)
	22:18	21:02	19:33	18:09	19	10:25 (15)	16:01	88	14:38 (24)	15:44	21	12:35 (20)
25	05:09	06:17	07:26	07:35		09:06 (15)	08:47		11:25 (28)	09:28		12:15 (20)
	22:16	20:59	19:30	17:06	20	09:26 (15)	15:59	88	14:38 (24)	15:45	20	12:35 (20)
26	05:11	06:20	07:28	07:37		09:06 (15)	08:50		11:26 (28)	09:28		12:15 (20)
	22:14	20:57	19:27	17:04	20	09:26 (15)	15:58	81	14:37 (24)	15:46	20	12:35 (20)
27	05:13	06:22	07:30	07:39		09:06 (15)	08:52		11:27 (28)	09:28		12:16 (20)
	22:12	20:54	19:25	17:01	19	09:25 (15)	15:56	73	14:26 (24)	15:47	20	12:36 (20)
28	05:16	06:24	07:33	07:42		09:06 (15)	08:54		11:28 (28)	09:28		12:16 (20)
	22:10	20:51	19:22	16:59	19	09:25 (15)	15:55	65	13:38 (23)	15:48	21	12:37 (20)
29	05:18	06:26	07:35	07:44		09:06 (15)	08:56		11:29 (28)	09:28		12:16 (20)
	22:07	20:48	19:19	16:56	18	09:24 (15)	15:54	64	13:37 (23)	15:49	20	12:36 (20)
30	05:20	06:29	07:37	07:47		09:07 (15)	08:58		11:29 (28)	09:28		12:17 (20)
	22:05	20:45	19:16	16:54	17	09:24 (15)	15:52	62	13:37 (23)	15:50	20	12:37 (20)
31	05:22	06:31		07:49		09:08 (15)				09:28		12:16 (20)
	22:03	20:42		16:51	15	09:23 (15)				15:51	21	12:37 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		12:08 (20)	08:46		11:39 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:29 (20)	16:56	49	13:50 (23)	18:05	20:17	21:26	22:31
2	09:27		12:08 (20)	08:43		11:40 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:29 (20)	16:58	44	13:48 (23)	18:07	20:19	21:28	22:32
3	09:27		12:09 (20)	08:41		11:41 (28)	07:30	07:01	05:39	04:37
	15:55	20	12:29 (20)	17:01	39	13:47 (23)	18:09	20:21	21:31	22:34
4	09:27		12:09 (20)	08:39		11:42 (28)	07:27	06:58	05:36	04:36
	15:57	21	12:30 (20)	17:03	32	13:45 (23)	18:12	20:24	21:33	22:35
5	09:26		12:09 (20)	08:37		11:43 (28)	07:24	06:55	05:34	04:35
	15:58	21	12:30 (20)	17:06	19	12:02 (28)	18:14	20:26	21:35	22:37
6	09:25		12:10 (20)	08:34		11:46 (28)	07:21	06:52	05:31	04:34
	16:00	25	13:32 (23)	17:08	14	12:00 (28)	18:17	20:28	21:37	22:38
7	09:24		11:43 (28)	08:32		11:50 (28)	07:19	06:50	05:29	04:33
	16:02	33	13:35 (23)	17:11	6	11:56 (28)	18:19	20:30	21:40	22:39
8	09:24		11:41 (28)	08:30			07:16	06:47	05:26	04:32
	16:03	41	13:37 (23)	17:13			18:21	20:33	21:42	22:41
9	09:23		11:40 (28)	08:27			07:13	06:44	05:24	04:31
	16:05	47	13:39 (23)	17:16			18:24	20:35	21:44	22:42
10	09:22		11:38 (28)	08:25		09:39 (15)	07:10	06:41	05:22	04:30
	16:07	51	13:40 (23)	17:18	3	09:42 (15)	18:26	20:37	21:46	22:43
11	09:21		11:38 (28)	08:23		09:36 (15)	07:07	06:38	05:19	04:29
	16:09	55	13:42 (23)	17:21	10	09:46 (15)	18:28	20:40	21:49	22:44
12	09:20		11:37 (28)	08:20		09:34 (15)	07:04	06:35	05:17	04:29
	16:11	60	14:46 (24)	17:23	14	09:48 (15)	18:31	20:42	21:51	22:45
13	09:18		11:37 (28)	08:18		09:33 (15)	07:02	06:32	05:15	04:28
	16:13	72	14:49 (24)	17:26	16	09:49 (15)	18:33	20:44	21:53	22:46
14	09:17		11:36 (28)	08:15		09:33 (15)	06:59	06:30	05:13	04:28
	16:15	83	14:49 (24)	17:28	17	09:50 (15)	18:35	20:47	21:55	22:47
15	09:16		11:36 (28)	08:13		09:32 (15)	06:56	06:27	05:10	04:27
	16:17	87	14:50 (24)	17:31	18	09:50 (15)	18:38	20:49	21:58	22:47
16	09:15		11:35 (28)	08:10		09:31 (15)	06:53	06:24	05:08	04:27
	16:19	86	14:50 (24)	17:33	19	09:50 (15)	18:40	20:51	22:00	22:48
17	09:13		11:36 (28)	08:07		09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87	14:51 (24)	17:36	19	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:36 (28)	08:05		09:32 (15)	06:47	06:19	05:04	04:27
	16:23	89	14:52 (24)	17:38	19	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:36 (28)	08:02		09:32 (15)	06:44	06:16	05:02	04:27
	16:25	87	14:52 (24)	17:40	18	09:50 (15)	18:47	20:58	22:06	22:50
20	09:09		11:35 (28)	08:00		09:32 (15)	06:41	06:13	05:00	04:27
	16:28	85	14:53 (24)	17:43	17	09:49 (15)	18:49	21:00	22:08	22:50
21	09:07		11:35 (28)	07:57		09:33 (15)	06:39	06:10	04:58	04:27
	16:30	79	14:53 (24)	17:45	15	09:48 (15)	18:51	21:03	22:10	22:50
22	09:05		11:36 (28)	07:54		09:34 (15)	06:36	06:08	04:56	04:27
	16:32	79	14:53 (24)	17:48	12	09:46 (15)	18:54	21:05	22:12	22:50
23	09:03		11:35 (28)	07:52		09:38 (15)	06:33	06:05	04:54	04:27
	16:34	79	14:52 (24)	17:50	6	09:44 (15)	18:56	21:07	22:14	22:51
24	09:02		11:35 (28)	07:49			06:30	06:02	04:52	04:27
	16:37	79	14:52 (24)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:35 (28)	07:46			06:27	05:59	04:51	04:28
	16:39	78	14:52 (24)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:36 (28)	07:44			06:24	05:57	04:49	04:28
	16:41	77	14:52 (24)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:36 (28)	07:41			06:21	05:54	04:47	04:29
	16:44	74	14:51 (24)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:36 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	71	14:50 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:37 (28)				07:15	05:49	04:44	04:30
	16:49	66	14:49 (24)				20:10	21:21	22:25	22:50
30	08:50		11:37 (28)				07:13	05:46	04:42	04:31
	16:51	56	14:45 (24)				20:12	21:24	22:27	22:49
31	08:48		11:38 (28)				07:10		04:41	
	16:54	51	13:50 (23)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1881			406					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (28)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (23)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (28)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (23)
4	04:35	05:31	06:40	07:46			07:59		11:18 (28)	09:05		11:25 (28)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (28)	15:48	42	13:22 (23)
5	04:36	05:33	06:42	07:48			08:01		11:15 (28)	09:07		11:28 (28)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (28)	15:47	34	13:21 (23)
6	04:37	05:35	06:44	07:51			08:03		11:14 (28)	09:09		11:56 (20)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (28)	15:46	26	13:19 (23)
7	04:38	05:37	06:46	07:53			08:06		11:12 (28)	09:10		11:56 (20)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (23)	15:45	21	12:17 (20)
8	04:40	05:39	06:49	07:55			08:08		11:11 (28)	09:12		11:57 (20)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (23)	15:45	21	12:18 (20)
9	04:41	05:42	06:51	07:57			08:11		11:10 (28)	09:13		11:58 (20)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (23)	15:44	20	12:18 (20)
10	04:43	05:44	06:53	08:00			08:13		11:10 (28)	09:15		11:58 (20)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (23)	15:43	20	12:18 (20)
11	04:44	05:46	06:55	08:02			08:15		11:09 (28)	09:16		11:58 (20)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (23)	15:43	21	12:19 (20)
12	04:46	05:48	06:57	08:04			08:18		11:09 (28)	09:18		11:58 (20)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (24)	15:43	21	12:19 (20)
13	04:47	05:51	07:00	08:07			08:20		11:09 (28)	09:19		12:00 (20)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (24)	15:42	20	12:20 (20)
14	04:49	05:53	07:02	08:09			08:23		11:08 (28)	09:20		12:00 (20)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (24)	15:42	20	12:20 (20)
15	04:51	05:55	07:04	08:11			08:25		11:08 (28)	09:21		12:00 (20)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (24)	15:42	20	12:20 (20)
16	04:52	05:57	07:06	08:13			08:27		11:09 (28)	09:22		12:01 (20)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (24)	15:42	19	12:20 (20)
17	04:54	06:00	07:08	08:16			08:30		11:09 (28)	09:23		12:01 (20)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (24)	15:42	20	12:21 (20)
18	04:56	06:02	07:11	08:18			08:32		11:09 (28)	09:24		12:02 (20)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (24)	15:42	19	12:21 (20)
19	04:58	06:04	07:13	08:20		10:07 (15)	08:34		11:10 (28)	09:25		12:02 (20)
	22:27	21:16	19:48	18:22	9	10:16 (15)	16:09	79	14:27 (24)	15:42	20	12:22 (20)
20	05:00	06:06	07:15	08:23		10:05 (15)	08:36		11:10 (28)	09:26		12:03 (20)
	22:25	21:13	19:45	18:20	13	10:18 (15)	16:08	79	14:27 (24)	15:43	19	12:22 (20)
21	05:01	06:08	07:17	08:25		10:04 (15)	08:39		11:10 (28)	09:26		12:03 (20)
	22:24	21:10	19:42	18:17	15	10:19 (15)	16:06	79	14:28 (24)	15:43	19	12:22 (20)
22	05:03	06:11	07:19	08:27		10:02 (15)	08:41		11:11 (28)	09:27		12:04 (20)
	22:22	21:08	19:39	18:14	17	10:19 (15)	16:04	84	14:29 (24)	15:43	19	12:23 (20)
23	05:05	06:13	07:22	08:30		10:02 (15)	08:43		11:12 (28)	09:27		12:04 (20)
	22:20	21:05	19:36	18:12	18	10:20 (15)	16:02	86	14:28 (24)	15:44	19	12:23 (20)
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		11:13 (28)	09:28		12:05 (20)
	22:18	21:02	19:33	18:09	19	10:20 (15)	16:01	88	14:29 (24)	15:44	19	12:24 (20)
25	05:09	06:17	07:26	07:35		09:01 (15)	08:47		11:13 (28)	09:28		12:06 (20)
	22:16	20:59	19:30	17:06	19	09:20 (15)	15:59	88	14:29 (24)	15:45	19	12:25 (20)
26	05:11	06:20	07:28	07:37		09:02 (15)	08:50		11:14 (28)	09:28		12:06 (20)
	22:14	20:57	19:27	17:04	19	09:21 (15)	15:58	87	14:29 (24)	15:46	19	12:25 (20)
27	05:13	06:22	07:30	07:39		09:01 (15)	08:52		11:15 (28)	09:28		12:06 (20)
	22:12	20:54	19:25	17:01	19	09:20 (15)	15:56	86	14:29 (24)	15:47	20	12:26 (20)
28	05:16	06:24	07:33	07:42		09:02 (15)	08:54		11:16 (28)	09:28		12:07 (20)
	22:10	20:51	19:22	16:59	17	09:19 (15)	15:55	82	14:29 (24)	15:48	20	12:27 (20)
29	05:18	06:26	07:35	07:44		09:02 (15)	08:56		11:17 (28)	09:28		12:07 (20)
	22:07	20:48	19:19	16:56	16	09:18 (15)	15:54	72	14:29 (24)	15:49	19	12:26 (20)
30	05:20	06:29	07:37	07:47		09:04 (15)	08:58		11:18 (28)	09:28		12:07 (20)
	22:05	20:45	19:16	16:54	13	09:17 (15)	15:52	60	14:28 (24)	15:50	20	12:27 (20)
31	05:22	06:31		07:49		09:06 (15)				09:28		12:07 (20)
	22:03	20:42		16:51	9	09:15 (15)				15:51	20	12:27 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28	12:05 (20)	08:46	11:36 (28)	07:35	07:07	05:44	04:40
	15:53	21 12:26 (20)	16:56	45 13:44 (23)	18:05	20:17	21:26	22:31
2	09:27	12:06 (20)	08:43	11:37 (28)	07:33	07:04	05:41	04:38
	15:54	20 12:26 (20)	16:58	40 13:42 (23)	18:07	20:19	21:28	22:32
3	09:27	12:06 (20)	08:41	11:38 (28)	07:30	07:01	05:39	04:37
	15:55	20 12:26 (20)	17:01	34 13:40 (23)	18:09	20:21	21:31	22:34
4	09:27	12:06 (20)	08:39	11:39 (28)	07:27	06:58	05:36	04:36
	15:57	21 12:27 (20)	17:03	20 11:59 (28)	18:12	20:24	21:33	22:35
5	09:26	12:06 (20)	08:37	11:41 (28)	07:24	06:55	05:34	04:35
	15:58	28 13:28 (23)	17:06	16 11:57 (28)	18:14	20:26	21:35	22:37
6	09:25	12:07 (20)	08:34	11:44 (28)	07:21	06:52	05:31	04:34
	16:00	32 13:31 (23)	17:08	11 11:55 (28)	18:17	20:28	21:37	22:38
7	09:24	11:39 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	38 13:32 (23)	17:11		18:19	20:30	21:40	22:39
8	09:24	11:37 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	46 13:34 (23)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:36 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	50 13:36 (23)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:35 (28)	08:25	09:37 (15)	07:10	06:41	05:22	04:30
	16:07	58 14:41 (24)	17:18	6 09:43 (15)	18:26	20:37	21:46	22:43
11	09:21	11:34 (28)	08:23	09:35 (15)	07:07	06:38	05:19	04:29
	16:09	71 14:43 (24)	17:21	11 09:46 (15)	18:28	20:40	21:49	22:44
12	09:20	11:33 (28)	08:20	09:33 (15)	07:04	06:35	05:17	04:29
	16:11	79 14:44 (24)	17:23	15 09:48 (15)	18:31	20:42	21:51	22:45
13	09:18	11:34 (28)	08:18	09:32 (15)	07:02	06:32	05:15	04:28
	16:13	81 14:45 (24)	17:26	16 09:48 (15)	18:33	20:44	21:53	22:46
14	09:17	11:33 (28)	08:15	09:32 (15)	06:59	06:30	05:13	04:28
	16:15	84 14:45 (24)	17:28	18 09:50 (15)	18:35	20:47	21:55	22:47
15	09:16	11:32 (28)	08:13	09:31 (15)	06:56	06:27	05:10	04:27
	16:17	86 14:46 (24)	17:31	19 09:50 (15)	18:38	20:49	21:58	22:47
16	09:15	11:32 (28)	08:10	09:31 (15)	06:53	06:24	05:08	04:27
	16:19	87 14:46 (24)	17:33	19 09:50 (15)	18:40	20:51	22:00	22:48
17	09:13	11:32 (28)	08:07	09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87 14:47 (24)	17:36	19 09:50 (15)	18:42	20:53	22:02	22:49
18	09:12	11:32 (28)	08:05	09:32 (15)	06:47	06:19	05:04	04:27
	16:23	88 14:48 (24)	17:38	18 09:50 (15)	18:45	20:56	22:04	22:49
19	09:10	11:32 (28)	08:02	09:32 (15)	06:44	06:16	05:02	04:27
	16:25	86 14:48 (24)	17:40	17 09:49 (15)	18:47	20:58	22:06	22:50
20	09:09	11:32 (28)	08:00	09:32 (15)	06:41	06:13	05:00	04:27
	16:28	79 14:48 (24)	17:43	16 09:48 (15)	18:49	21:00	22:08	22:50
21	09:07	11:32 (28)	07:57	09:33 (15)	06:39	06:10	04:58	04:27
	16:30	77 14:48 (24)	17:45	14 09:47 (15)	18:51	21:03	22:10	22:50
22	09:05	11:32 (28)	07:54	09:35 (15)	06:36	06:08	04:56	04:27
	16:32	79 14:49 (24)	17:48	10 09:45 (15)	18:54	21:05	22:12	22:50
23	09:03	11:31 (28)	07:52		06:33	06:05	04:54	04:27
	16:34	78 14:48 (24)	17:50		18:56	21:07	22:14	22:51
24	09:02	11:32 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	77 14:48 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:32 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	75 14:47 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:33 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	73 14:47 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:32 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	70 14:45 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:33 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	66 14:44 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:34 (28)			07:15	05:49	04:44	04:30
	16:49	57 14:41 (24)			20:10	21:21	22:25	22:50
30	08:50	11:34 (28)			07:13	05:46	04:42	04:31
	16:51	52 13:45 (23)			20:12	21:24	22:27	22:49
31	08:48	11:35 (28)			07:10		04:41	
	16:54	48 13:44 (23)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1914		364				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		09:08 (15)	09:00		11:16 (28)
	22:49		22:01		20:40		19:13			16:49	4	09:12 (15)	15:51	74	14:26 (24)
2	04:33		05:26		06:35		07:42			07:54			09:02		11:18 (28)
	22:48		21:59		20:37		19:10			16:46			15:50	58	14:24 (24)
3	04:34		05:28		06:37		07:44			07:56			09:03		11:19 (28)
	22:47		21:56		20:34		19:07			16:44			15:49	51	13:19 (23)
4	04:35		05:31		06:40		07:46			07:59			09:05		11:21 (28)
	22:47		21:54		20:31		19:04			16:41			15:48	46	13:18 (23)
5	04:36		05:33		06:42		07:48			08:01		11:13 (28)	09:07		11:23 (28)
	22:46		21:51		20:28		19:02			16:39	12	11:25 (28)	15:47	39	13:18 (23)
6	04:37		05:35		06:44		07:51			08:03		11:11 (28)	09:09		11:53 (20)
	22:45		21:49		20:25		18:59			16:37	17	11:28 (28)	15:46	32	13:17 (23)
7	04:38		05:37		06:46		07:53			08:06		11:10 (28)	09:10		11:54 (20)
	22:44		21:47		20:23		18:56			16:34	22	13:06 (23)	15:45	28	13:16 (23)
8	04:40		05:39		06:49		07:55			08:08		11:08 (28)	09:12		11:54 (20)
	22:43		21:44		20:20		18:53			16:32	34	13:10 (23)	15:45	22	13:13 (23)
9	04:41		05:42		06:51		07:57			08:11		11:07 (28)	09:13		11:55 (20)
	22:42		21:42		20:17		18:50			16:30	41	13:13 (23)	15:44	20	12:15 (20)
10	04:43		05:44		06:53		08:00			08:13		11:07 (28)	09:15		11:55 (20)
	22:41		21:39		20:14		18:47			16:28	46	13:15 (23)	15:43	20	12:15 (20)
11	04:44		05:46		06:55		08:02			08:15		11:06 (28)	09:16		11:56 (20)
	22:39		21:37		20:11		18:45			16:25	48	13:15 (23)	15:43	20	12:16 (20)
12	04:46		05:48		06:57		08:04			08:18		11:06 (28)	09:18		11:56 (20)
	22:38		21:34		20:08		18:42			16:23	52	13:17 (23)	15:43	20	12:16 (20)
13	04:47		05:51		07:00		08:07			08:20		11:06 (28)	09:19		11:57 (20)
	22:37		21:32		20:05		18:39			16:21	58	14:14 (24)	15:42	20	12:17 (20)
14	04:49		05:53		07:02		08:09			08:23		11:05 (28)	09:20		11:57 (20)
	22:35		21:29		20:02		18:36			16:19	66	14:16 (24)	15:42	20	12:17 (20)
15	04:51		05:55		07:04		08:11			08:25		11:05 (28)	09:21		11:57 (20)
	22:34		21:26		19:59		18:33			16:17	70	14:18 (24)	15:42	20	12:17 (20)
16	04:52		05:57		07:06		08:13			08:27		11:06 (28)	09:22		11:58 (20)
	22:32		21:24		19:56		18:31			16:15	73	14:20 (24)	15:42	19	12:17 (20)
17	04:54		06:00		07:08		08:16			08:30		11:06 (28)	09:23		11:58 (20)
	22:31		21:21		19:54		18:28			16:13	75	14:21 (24)	15:42	19	12:17 (20)
18	04:56		06:02		07:11		08:18			08:32		11:06 (28)	09:24		11:59 (20)
	22:29		21:18		19:51		18:25			16:11	77	14:22 (24)	15:42	19	12:18 (20)
19	04:58		06:04		07:13		08:20		10:09 (15)	08:34		11:06 (28)	09:25		11:59 (20)
	22:27		21:16		19:48		18:22	5	10:14 (15)	16:09	78	14:23 (24)	15:42	20	12:19 (20)
20	05:00		06:06		07:15		08:23		10:05 (15)	08:36		11:06 (28)	09:26		12:00 (20)
	22:25		21:13		19:45		18:20	11	10:16 (15)	16:08	79	14:23 (24)	15:43	19	12:19 (20)
21	05:01		06:08		07:17		08:25		10:04 (15)	08:39		11:07 (28)	09:26		12:00 (20)
	22:24		21:10		19:42		18:17	14	10:18 (15)	16:06	77	14:23 (24)	15:43	19	12:19 (20)
22	05:03		06:11		07:19		08:27		10:02 (15)	08:41		11:08 (28)	09:27		12:01 (20)
	22:22		21:08		19:39		18:14	17	10:19 (15)	16:04	77	14:24 (24)	15:43	19	12:20 (20)
23	05:05		06:13		07:22		08:30		10:02 (15)	08:43		11:08 (28)	09:27		12:01 (20)
	22:20		21:05		19:36		18:12	18	10:20 (15)	16:02	86	14:24 (24)	15:44	19	12:20 (20)
24	05:07		06:15		07:24		08:32		10:01 (15)	08:45		11:09 (28)	09:28		12:02 (20)
	22:18		21:02		19:33		18:09	18	10:19 (15)	16:01	87	14:25 (24)	15:44	19	12:21 (20)
25	05:09		06:17		07:26		07:35		09:01 (15)	08:47		11:10 (28)	09:28		12:03 (20)
	22:16		20:59		19:30		17:06	19	09:20 (15)	15:59	87	14:25 (24)	15:45	19	12:22 (20)
26	05:11		06:20		07:28		07:37		09:01 (15)	08:50		11:11 (28)	09:28		12:03 (20)
	22:14		20:57		19:27		17:04	19	09:20 (15)	15:58	87	14:25 (24)	15:46	19	12:22 (20)
27	05:13		06:22		07:30		07:39		09:01 (15)	08:52		11:11 (28)	09:28		12:03 (20)
	22:12		20:54		19:25		17:01	18	09:19 (15)	15:56	86	14:25 (24)	15:47	20	12:23 (20)
28	05:16		06:24		07:33		07:42		09:02 (15)	08:54		11:13 (28)	09:28		12:04 (20)
	22:10		20:51		19:22		16:59	17	09:19 (15)	15:55	85	14:26 (24)	15:48	20	12:24 (20)
29	05:18		06:26		07:35		07:44		09:02 (15)	08:56		11:14 (28)	09:28		12:04 (20)
	22:07		20:48		19:19		16:56	16	09:18 (15)	15:54	82	14:25 (24)	15:49	19	12:23 (20)
30	05:20		06:29		07:37		07:47		09:03 (15)	08:58		11:14 (28)	09:28		12:04 (20)
	22:05		20:45		19:16		16:54	14	09:17 (15)	15:52	80	14:25 (24)	15:50	20	12:24 (20)
31	05:22		06:31				07:49		09:05 (15)				09:28		12:04 (20)
	22:03		20:42				16:51	11	09:16 (15)				15:51	20	12:24 (20)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								197			1686			799	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February		March	April	May	June	July	August	September	October	November		December	
1	09:28	11:58 (20)	08:46	11:24 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00	11:44 (20)
	15:53	16 12:14 (20)	16:56	49 13:35 (23)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	57 14:20 (24)
2	09:28	11:58 (20)	08:43	11:24 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02	11:44 (20)
	15:54	18 12:16 (20)	16:58	47 13:34 (23)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	50 14:19 (24)
3	09:27	11:58 (20)	08:41	11:25 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56	11:02 (28)	09:03	11:44 (20)
	15:55	20 12:18 (20)	17:01	42 13:33 (23)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	12 11:14 (28)	15:49	40 14:19 (24)
4	09:27	11:58 (20)	08:39	11:26 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	10:59 (28)	09:05	11:44 (20)
	15:57	21 12:19 (20)	17:03	35 13:30 (23)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17 11:16 (28)	15:48	34 14:19 (24)
5	09:26	11:59 (20)	08:37	11:26 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	10:58 (28)	09:07	11:45 (20)
	15:58	20 12:19 (20)	17:06	23 11:49 (28)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39	20 11:18 (28)	15:47	31 13:06 (23)
6	09:25	11:59 (20)	08:34	11:28 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	10:57 (28)	09:09	11:45 (20)
	16:00	26 13:18 (23)	17:08	20 11:48 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	23 11:20 (28)	15:46	27 13:05 (23)
7	09:25	12:00 (20)	08:32	11:30 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	10:56 (28)	09:10	11:46 (20)
	16:02	30 13:21 (23)	17:11	16 11:46 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34	37 13:01 (23)	15:45	20 12:06 (20)
8	09:24	12:00 (20)	08:30	11:33 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	10:55 (28)	09:12	11:47 (20)
	16:03	34 14:35 (24)	17:13	11 11:44 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	43 13:03 (23)	15:45	20 12:07 (20)
9	09:23	12:01 (20)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	10:54 (28)	09:13	11:47 (20)
	16:05	41 14:36 (24)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	48 13:05 (23)	15:44	20 12:07 (20)
10	09:22	12:01 (20)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	10:54 (28)	09:15	11:47 (20)
	16:07	50 14:36 (24)	17:18		18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28	51 13:06 (23)	15:43	19 12:07 (20)
11	09:21	12:02 (20)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	10:54 (28)	09:16	11:48 (20)
	16:09	57 14:37 (24)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25	52 13:06 (23)	15:43	16 12:04 (20)
12	09:20	11:28 (28)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	10:54 (28)	09:18	11:48 (20)
	16:11	68 14:38 (24)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	55 13:08 (23)	15:43	11 11:59 (20)
13	09:18	11:26 (28)	08:18		07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20	10:54 (28)	09:19	11:49 (20)
	16:13	75 14:39 (24)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	62 14:08 (24)	15:42	11 12:00 (20)
14	09:17	11:25 (28)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	10:53 (28)	09:20	11:50 (20)
	16:15	78 14:39 (24)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	69 14:10 (24)	15:42	7 12:00 (20)
15	09:16	11:24 (28)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	10:54 (28)	09:21	11:50 (20)
	16:17	82 14:40 (24)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	71 14:12 (24)	15:42	3 11:53 (20)
16	09:15	11:23 (28)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	10:54 (28)	09:22	11:50 (20)
	16:19	85 14:40 (24)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	75 14:14 (24)	15:42	3 11:53 (20)
17	09:13	11:23 (28)	08:07		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	10:55 (28)	09:23	11:51 (20)
	16:21	86 14:41 (24)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	77 14:15 (24)	15:42	1 11:52 (20)
18	09:12	11:23 (28)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:55 (28)	09:24	
	16:23	87 14:42 (24)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	76 14:15 (24)	15:42	
19	09:10	11:22 (28)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	10:56 (28)	09:25	
	16:25	88 14:42 (24)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	77 14:16 (24)	15:42	
20	09:09	11:22 (28)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:56 (28)	09:26	
	16:28	86 14:42 (24)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	77 14:16 (24)	15:43	
21	09:07	11:22 (28)	07:57		06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39	10:57 (28)	09:26	
	16:30	83 14:42 (24)	17:45		18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	83 14:17 (24)	15:43	
22	09:05	11:22 (28)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41	10:58 (28)	09:27	
	16:32	77 14:42 (24)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	86 14:18 (24)	15:43	
23	09:03	11:21 (28)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:58 (28)	09:27	
	16:34	77 14:41 (24)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	88 14:18 (24)	15:44	
24	09:02	11:21 (28)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	11:00 (28)	09:28	
	16:37	76 14:41 (24)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	87 14:19 (24)	15:44	
25	09:00	11:21 (28)	07:46		06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47	11:00 (28)	09:28	
	16:39	77 14:41 (24)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59	86 14:18 (24)	15:45	
26	08:58	11:22 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	11:02 (28)	09:28	
	16:41	74 14:41 (24)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	85 14:19 (24)	15:46	
27	08:56	11:21 (28)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52	11:03 (28)	09:28	11:56 (20)
	16:44	71 14:39 (24)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	83 14:19 (24)	15:47	3 11:59 (20)
28	08:54	11:21 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	11:05 (28)	09:28	11:57 (20)
	16:46	69 14:38 (24)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	79 14:19 (24)	15:48	3 12:00 (20)
29	08:52	11:22 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	11:07 (28)	09:28	11:56 (20)
	16:49	61 14:36 (24)			20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54	73 14:19 (24)	15:49	5 12:07 (20)
30	08:50	11:22 (28)			07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58	11:08 (28)	09:28	11:57 (20)
	16:51	55 13:36 (23)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	69 14:19 (24)	15:50	11 12:08 (20)
31	08:48	11:23 (28)			07:10		04:41		05:22	06:31		07:49			09:28	11:57 (20)
	16:54	53 13:36 (23)			20:14		22:29		22:03	20:42		16:51			15:51	11 12:08 (20)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199	
Total, worst case		1841		243										1761		403

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		11:52 (33)	08:46		13:17 (28)	07:35	08:53 (17)	07:07	05:44	04:40
	15:53	17	12:09 (33)	16:56	36	13:53 (28)	18:05	19	09:12 (17)	20:17	21:26	22:30
2	09:27		11:51 (33)	08:43		13:18 (28)	07:32		08:53 (17)	07:04	05:41	04:38
	15:54	19	12:10 (33)	16:58	43	15:13 (23)	18:07	20	09:13 (17)	20:19	21:28	22:32
3	09:27		11:51 (33)	08:41		13:17 (28)	07:30		08:52 (17)	07:01	05:39	04:37
	15:55	19	12:10 (33)	17:01	52	15:18 (23)	18:09	21	09:13 (17)	20:21	21:30	22:34
4	09:26		11:51 (33)	08:39		13:18 (28)	07:27		08:52 (17)	06:58	05:36	04:36
	15:57	20	12:11 (33)	17:03	54	15:20 (23)	18:12	20	09:12 (17)	20:24	21:33	22:35
5	09:26		11:52 (33)	08:37		13:17 (28)	07:24		08:52 (17)	06:55	05:34	04:35
	15:58	20	12:12 (33)	17:06	58	15:21 (23)	18:14	20	09:12 (17)	20:26	21:35	22:37
6	09:25		11:52 (33)	08:34		13:18 (28)	07:21		08:52 (17)	06:52	05:31	04:34
	16:00	20	12:12 (33)	17:08	62	15:43 (24)	18:16	19	09:11 (17)	20:28	21:37	22:38
7	09:24		11:52 (33)	08:32		13:17 (28)	07:19		08:53 (17)	06:49	05:29	04:33
	16:02	21	12:13 (33)	17:11	68	15:46 (24)	18:19	17	09:10 (17)	20:30	21:40	22:39
8	09:24		11:53 (33)	08:30		13:18 (28)	07:16		08:54 (17)	06:47	05:26	04:32
	16:03	21	12:14 (33)	17:13	72	15:51 (24)	18:21	14	09:08 (17)	20:33	21:42	22:40
9	09:23		11:52 (33)	08:27		13:18 (28)	07:13		08:55 (17)	06:44	05:24	04:31
	16:05	22	12:14 (33)	17:16	78	15:59 (24)	18:24	10	09:05 (17)	20:35	21:44	22:42
10	09:22		11:53 (33)	08:25		13:18 (28)	07:10			06:41	05:22	04:30
	16:07	22	12:15 (33)	17:18	82	16:00 (24)	18:26			20:37	21:46	22:43
11	09:21		11:54 (33)	08:23		10:11 (15)	07:07			06:38	05:19	04:29
	16:09	22	12:16 (33)	17:21	84	16:00 (24)	18:28			20:40	21:49	22:44
12	09:20		11:53 (33)	08:20		10:06 (15)	07:04			06:35	05:17	04:29
	16:11	23	12:16 (33)	17:23	89	15:59 (24)	18:31			20:42	21:51	22:45
13	09:18		11:53 (33)	08:18		10:04 (15)	07:01			06:32	05:15	04:28
	16:13	29	13:27 (20)	17:26	90	15:58 (24)	18:33			20:44	21:53	22:46
14	09:17		11:54 (33)	08:15		10:03 (15)	06:59			06:30	05:13	04:28
	16:15	38	13:37 (20)	17:28	87	15:57 (24)	18:35			20:47	21:55	22:46
15	09:16		11:55 (33)	08:13		10:02 (15)	06:56			06:27	05:10	04:27
	16:17	44	13:43 (20)	17:31	81	15:54 (24)	18:38			20:49	21:57	22:47
16	09:15		11:55 (33)	08:10		10:01 (15)	06:53			06:24	05:08	04:27
	16:19	45	13:44 (20)	17:33	72	15:24 (23)	18:40			20:51	22:00	22:48
17	09:13		11:55 (33)	08:07		10:00 (15)	06:50			06:21	05:06	04:27
	16:21	45	13:44 (20)	17:35	67	15:23 (23)	18:42			20:53	22:02	22:49
18	09:12		11:57 (33)	08:05		10:00 (15)	06:47			06:19	05:04	04:27
	16:23	44	13:46 (20)	17:38	61	15:23 (23)	18:45			20:56	22:04	22:49
19	09:10		11:57 (33)	08:02		10:00 (15)	06:44			06:16	05:02	04:27
	16:25	44	13:46 (20)	17:40	43	15:21 (23)	18:47			20:58	22:06	22:50
20	09:08		11:58 (33)	08:00		09:59 (15)	06:41			06:13	05:00	04:27
	16:28	43	13:46 (20)	17:43	41	15:19 (23)	18:49			21:00	22:08	22:50
21	09:07		11:59 (33)	07:57		09:59 (15)	06:38			06:10	04:58	04:27
	16:30	40	13:46 (20)	17:45	32	15:15 (23)	18:51			21:03	22:10	22:50
22	09:05		11:59 (33)	07:54		09:59 (15)	06:36			06:08	04:56	04:27
	16:32	40	13:46 (20)	17:48	25	10:24 (15)	18:54			21:05	22:12	22:50
23	09:03		12:01 (33)	07:52		10:00 (15)	06:33			06:05	04:54	04:27
	16:34	36	13:46 (20)	17:50	24	10:24 (15)	18:56			21:07	22:14	22:50
24	09:02		12:03 (33)	07:49		10:01 (15)	06:30			06:02	04:52	04:27
	16:37	34	13:46 (20)	17:53	22	10:23 (15)	18:58			21:10	22:16	22:51
25	09:00		12:05 (33)	07:46		09:00 (17)	06:27			05:59	04:51	04:28
	16:39	32	13:46 (28)	17:55	27	10:22 (15)	19:01			21:12	22:18	22:50
26	08:58		13:21 (28)	07:43		08:57 (17)	06:24			05:57	04:49	04:28
	16:41	27	13:48 (28)	17:57	30	10:20 (15)	19:03			21:14	22:20	22:50
27	08:56		13:20 (28)	07:41		08:55 (17)	06:21			05:54	04:47	04:29
	16:44	28	13:48 (28)	18:00	28	10:17 (15)	19:05			21:17	22:22	22:50
28	08:54		13:19 (28)	07:38		08:54 (17)	06:18			05:52	04:46	04:30
	16:46	31	13:50 (28)	18:02	22	10:13 (15)	19:07			21:19	22:24	22:50
29	08:52		13:19 (28)				07:15			05:49	04:44	04:30
	16:49	32	13:51 (28)				20:10			21:21	22:25	22:50
30	08:50		13:18 (28)				07:12			05:46	04:42	04:31
	16:51	33	13:51 (28)				20:12			21:24	22:27	22:49
31	08:48		13:18 (28)				07:10				04:41	
	16:53	34	13:52 (28)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		945			1530			160				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December	
1	04:32	05:24	06:33	07:39		07:51		12:48 (28)	09:00		11:36 (33)
	22:49	22:01	20:40	19:13		16:49	83	15:30 (24)	15:51	22	11:58 (33)
2	04:33	05:26	06:35	07:42		07:54		12:48 (28)	09:02		11:36 (33)
	22:48	21:58	20:37	19:10		16:46	76	15:28 (24)	15:50	22	11:58 (33)
3	04:34	05:28	06:37	07:44		07:56		12:48 (28)	09:03		11:36 (33)
	22:47	21:56	20:34	19:07		16:44	71	15:20 (24)	15:49	22	11:58 (33)
4	04:35	05:31	06:40	07:46	09:34 (17)	07:59		12:47 (28)	09:05		11:37 (33)
	22:47	21:54	20:31	19:04	7 09:41 (17)	16:41	66	15:15 (24)	15:48	21	11:58 (33)
5	04:36	05:33	06:42	07:48	09:32 (17)	08:01		12:47 (28)	09:07		11:37 (33)
	22:46	21:51	20:28	19:01	12 09:44 (17)	16:39	62	15:13 (24)	15:47	21	11:58 (33)
6	04:37	05:35	06:44	07:51	09:30 (17)	08:03		12:48 (28)	09:09		11:38 (33)
	22:45	21:49	20:25	18:59	15 09:45 (17)	16:37	57	14:51 (23)	15:46	21	11:59 (33)
7	04:38	05:37	06:46	07:53	09:28 (17)	08:06		12:47 (28)	09:10		11:39 (33)
	22:44	21:47	20:22	18:56	18 09:46 (17)	16:34	55	14:50 (23)	15:45	20	11:59 (33)
8	04:40	05:39	06:48	07:55	09:28 (17)	08:08		12:48 (28)	09:12		11:40 (33)
	22:43	21:44	20:20	18:53	19 09:47 (17)	16:32	50	14:48 (23)	15:45	19	11:59 (33)
9	04:41	05:42	06:51	07:57	09:27 (17)	08:11		12:48 (28)	09:13		11:41 (33)
	22:42	21:42	20:17	18:50	20 09:47 (17)	16:30	42	14:43 (23)	15:44	19	12:00 (33)
10	04:43	05:44	06:53	08:00	09:27 (17)	08:13		12:49 (28)	09:15		11:41 (33)
	22:40	21:39	20:14	18:47	20 09:47 (17)	16:28	35	13:24 (28)	15:43	18	11:59 (33)
11	04:44	05:46	06:55	08:02	09:26 (17)	08:15		12:49 (28)	09:16		11:42 (33)
	22:39	21:37	20:11	18:45	20 09:46 (17)	16:25	34	13:23 (28)	15:43	18	12:00 (33)
12	04:46	05:48	06:57	08:04	09:26 (17)	08:18		12:50 (28)	09:18		11:42 (33)
	22:38	21:34	20:08	18:42	19 09:45 (17)	16:23	33	13:23 (28)	15:43	17	11:59 (33)
13	04:47	05:51	07:00	08:06	09:27 (17)	08:20		12:51 (28)	09:19		11:43 (33)
	22:37	21:31	20:05	18:39	18 09:45 (17)	16:21	32	13:23 (28)	15:42	17	12:00 (33)
14	04:49	05:53	07:02	08:09	09:27 (17)	08:22		12:51 (28)	09:20		11:44 (33)
	22:35	21:29	20:02	18:36	26 10:48 (15)	16:19	31	13:22 (28)	15:42	16	12:00 (33)
15	04:51	05:55	07:04	08:11	09:29 (17)	08:25		12:53 (28)	09:21		11:44 (33)
	22:34	21:26	19:59	18:33	29 10:51 (15)	16:17	28	13:21 (28)	15:42	16	12:00 (33)
16	04:52	05:57	07:06	08:13	09:30 (17)	08:27		12:54 (28)	09:22		11:45 (33)
	22:32	21:24	19:56	18:31	28 10:52 (15)	16:15	27	13:21 (28)	15:42	15	12:00 (33)
17	04:54	05:59	07:08	08:16	10:33 (15)	08:29		11:38 (33)	09:23		11:45 (33)
	22:30	21:21	19:54	18:28	21 10:54 (15)	16:13	32	13:19 (28)	15:42	15	12:00 (33)
18	04:56	06:02	07:10	08:18	10:31 (15)	08:32		11:36 (33)	09:24		11:46 (33)
	22:29	21:18	19:51	18:25	23 10:54 (15)	16:11	35	13:20 (20)	15:42	15	12:01 (33)
19	04:58	06:04	07:13	08:20	10:31 (15)	08:34		11:36 (33)	09:25		11:47 (33)
	22:27	21:16	19:48	18:22	24 10:55 (15)	16:09	36	13:21 (20)	15:42	14	12:01 (33)
20	05:00	06:06	07:15	08:23	10:30 (15)	08:36		11:34 (33)	09:26		11:48 (33)
	22:25	21:13	19:45	18:20	25 10:55 (15)	16:08	40	13:21 (20)	15:42	14	12:02 (33)
21	05:01	06:08	07:17	08:25	10:30 (15)	08:39		11:34 (33)	09:26		11:48 (33)
	22:24	21:10	19:42	18:17	37 15:48 (23)	16:06	40	13:21 (20)	15:43	14	12:02 (33)
22	05:03	06:11	07:19	08:27	10:29 (15)	08:41		11:34 (33)	09:27		11:49 (33)
	22:22	21:08	19:39	18:14	42 15:50 (23)	16:04	43	13:22 (20)	15:43	14	12:03 (33)
23	05:05	06:13	07:22	08:30	10:30 (15)	08:43		11:33 (33)	09:27		11:49 (33)
	22:20	21:05	19:36	18:12	50 15:52 (23)	16:02	44	13:22 (20)	15:44	14	12:03 (33)
24	05:07	06:15	07:24	08:32	10:29 (15)	08:45		11:34 (33)	09:28		11:50 (33)
	22:18	21:02	19:33	18:09	63 15:52 (23)	16:01	44	13:23 (20)	15:44	14	12:04 (33)
25	05:09	06:17	07:26	07:35	09:30 (15)	08:47		11:33 (33)	09:28		11:50 (33)
	22:16	20:59	19:30	17:06	69 14:54 (23)	15:59	44	13:22 (20)	15:45	14	12:04 (33)
26	05:11	06:20	07:28	07:37	09:30 (15)	08:50		11:34 (33)	09:28		11:50 (33)
	22:14	20:56	19:27	17:04	74 14:54 (23)	15:58	44	13:23 (20)	15:46	15	12:05 (33)
27	05:13	06:22	07:30	07:39	09:31 (15)	08:52		11:34 (33)	09:28		11:50 (33)
	22:12	20:54	19:24	17:01	82 15:24 (24)	15:56	44	13:23 (20)	15:47	16	12:06 (33)
28	05:16	06:24	07:33	07:42	09:33 (15)	08:54		11:35 (33)	09:28		11:50 (33)
	22:10	20:51	19:22	16:59	89 15:27 (24)	15:55	37	13:17 (20)	15:48	16	12:06 (33)
29	05:18	06:26	07:35	07:44	09:34 (15)	08:56		11:35 (33)	09:28		11:50 (33)
	22:07	20:48	19:19	16:56	90 15:28 (24)	15:54	29	13:09 (20)	15:49	16	12:06 (33)
30	05:20	06:29	07:37	07:47	09:36 (15)	08:58		11:35 (33)	09:28		11:51 (33)
	22:05	20:45	19:16	16:54	90 15:29 (24)	15:52	23	13:03 (20)	15:50	17	12:08 (33)
31	05:22	06:31		07:49	12:49 (28)				09:28		11:51 (33)
	22:03	20:42		16:51	81 15:30 (24)				15:51	17	12:08 (33)
Potential sun hours	546	478	386	319		236			199		
Total, worst case					1111		1317			529	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		14:11 (33)	07:35		10:14 (17)	07:07		05:44	04:40
	15:53			16:56	18	15:31 (20)	18:05	73	16:49 (23)	20:17		21:26	22:30
2	09:27			08:43		15:15 (20)	07:32		10:15 (17)	07:04		05:41	04:38
	15:54			16:58	17	15:32 (20)	18:07	70	16:50 (23)	20:19		21:28	22:32
3	09:27			08:41		15:14 (20)	07:30		10:16 (17)	07:01		05:39	04:37
	15:55			17:01	19	15:33 (20)	18:09	63	16:48 (23)	20:21		21:30	22:34
4	09:26			08:39		12:33 (15)	07:27		10:16 (17)	06:58		05:36	04:36
	15:57			17:03	32	15:33 (20)	18:12	54	16:47 (23)	20:23		21:33	22:35
5	09:26			08:37		12:30 (15)	07:24		09:25 (12)	06:55		05:34	04:35
	15:58			17:06	37	15:33 (20)	18:14	37	16:44 (23)	20:26		21:35	22:36
6	09:25			08:34		12:29 (15)	07:21		09:21 (12)	06:52		05:31	04:34
	16:00			17:08	40	15:34 (20)	18:16	27	10:42 (17)	20:28		21:37	22:38
7	09:24			08:32		12:27 (15)	07:18		10:19 (17)	06:49		05:29	04:33
	16:02			17:11	43	15:33 (20)	18:19	20	10:39 (17)	20:30		21:40	22:39
8	09:24			08:30		12:26 (15)	07:16		10:21 (17)	06:47		05:26	04:32
	16:03			17:13	46	15:34 (20)	18:21	15	10:36 (17)	20:33		21:42	22:40
9	09:23			08:27		12:25 (15)	07:13		10:24 (17)	06:44		05:24	04:31
	16:05			17:16	46	15:33 (20)	18:24	8	10:32 (17)	20:35		21:44	22:42
10	09:22			08:25		12:24 (15)	07:10			06:41		05:22	04:30
	16:07			17:18	45	15:31 (20)	18:26			20:37		21:46	22:43
11	09:21			08:22		12:24 (15)	07:07			06:38		05:19	04:29
	16:09			17:21	43	15:30 (20)	18:28			20:40		21:49	22:44
12	09:20			08:20		12:23 (15)	07:04			06:35		05:17	04:29
	16:11			17:23	38	15:27 (20)	18:31			20:42		21:51	22:45
13	09:18			08:18		12:22 (15)	07:01			06:32		05:15	04:28
	16:13			17:26	35	12:57 (15)	18:33			20:44		21:53	22:46
14	09:17			08:15		12:23 (15)	06:59			06:30		05:12	04:28
	16:15			17:28	35	12:58 (15)	18:35			20:46		21:55	22:46
15	09:16			08:12		12:22 (15)	06:56			06:27		05:10	04:27
	16:17			17:30	35	12:57 (15)	18:38			20:49		21:57	22:47
16	09:14			08:10		12:22 (15)	06:53			06:24		05:08	04:27
	16:19			17:33	43	16:12 (28)	18:40			20:51		22:00	22:48
17	09:13			08:07		12:22 (15)	06:50			06:21		05:06	04:27
	16:21			17:35	49	16:15 (28)	18:42			20:53		22:02	22:48
18	09:12			08:05		12:23 (15)	06:47			06:18		05:04	04:27
	16:23			17:38	51	16:17 (28)	18:44			20:56		22:04	22:49
19	09:10			08:02		12:23 (15)	06:44			06:16		05:02	04:27
	16:25			17:40	54	16:18 (28)	18:47			20:58		22:06	22:49
20	09:08			08:00		12:23 (15)	06:41			06:13		05:00	04:27
	16:28			17:43	55	16:19 (28)	18:49			21:00		22:08	22:50
21	09:07			07:57		12:23 (15)	06:38			06:10		04:58	04:27
	16:30			17:45	56	16:20 (28)	18:51			21:03		22:10	22:50
22	09:05			07:54		12:24 (15)	06:36			06:07		04:56	04:27
	16:32			17:48	61	16:42 (23)	18:54			21:05		22:12	22:50
23	09:03			07:52		12:26 (15)	06:33			06:05		04:54	04:27
	16:34			17:50	66	16:48 (23)	18:56			21:07		22:14	22:50
24	09:01			07:49		10:20 (17)	06:30			06:02		04:52	04:27
	16:37			17:52	68	16:49 (23)	18:58			21:10		22:16	22:50
25	09:00			07:46		10:16 (17)	06:27			05:59		04:51	04:28
	16:39			17:55	89	16:50 (23)	19:01			21:12		22:18	22:50
26	08:58			07:43		10:15 (17)	06:24			05:57		04:49	04:28
	16:41			17:57	92	16:50 (23)	19:03			21:14		22:20	22:50
27	08:56			07:41		10:15 (17)	06:21			05:54		04:47	04:29
	16:44			18:00	77	16:50 (23)	19:05			21:17		22:22	22:50
28	08:54			07:38		10:15 (17)	06:18			05:51		04:45	04:29
	16:46			18:02	75	16:50 (23)	19:07			21:19		22:24	22:50
29	08:52						07:15			05:49		04:44	04:30
	16:49						20:10			21:21		22:25	22:49
30	08:50		14:16 (33)				07:12			05:46		04:42	04:31
	16:51	3	14:19 (33)				20:12			21:23		22:27	22:49
31	08:48		14:08 (33)				07:10					04:41	
	16:53	21	15:27 (20)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		24			1365			367					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:53 (15)	09:00
	22:48	22:01	20:40	19:13			16:49	46	15:01 (20)	15:51
2	04:33	05:26	06:35	07:41			07:54		11:55 (15)	09:01
	22:48	21:58	20:37	19:10			16:46	45	15:02 (20)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:56 (15)	09:03
	22:47	21:56	20:34	19:07			16:44	45	15:03 (20)	15:49
4	04:35	05:31	06:40	07:46			07:58		11:57 (15)	09:05
	22:46	21:54	20:31	19:04			16:41	43	15:03 (20)	15:48
5	04:36	05:33	06:42	07:48		10:59 (17)	08:01		11:58 (15)	09:07
	22:46	21:51	20:28	19:01	13	11:12 (17)	16:39	41	15:03 (20)	15:47
6	04:37	05:35	06:44	07:50		10:56 (17)	08:03		12:01 (15)	09:09
	22:45	21:49	20:25	18:59	19	11:15 (17)	16:37	36	15:04 (20)	15:46
7	04:38	05:37	06:46	07:53		09:54 (12)	08:06		12:03 (15)	09:10
	22:44	21:47	20:22	18:56	24	11:16 (17)	16:34	31	15:03 (20)	15:45
8	04:40	05:39	06:48	07:55		09:58 (12)	08:08		14:45 (20)	09:12
	22:43	21:44	20:20	18:53	33	17:18 (23)	16:32	18	15:03 (20)	15:45
9	04:41	05:42	06:51	07:57		10:01 (12)	08:10		14:46 (20)	09:13
	22:42	21:42	20:17	18:50	49	17:20 (23)	16:30	17	15:03 (20)	15:44
10	04:43	05:44	06:53	08:00		10:49 (17)	08:13		13:42 (33)	09:15
	22:40	21:39	20:14	18:47	59	17:21 (23)	16:28	20	15:03 (20)	15:43
11	04:44	05:46	06:55	08:02		10:49 (17)	08:15		13:39 (33)	09:16
	22:39	21:37	20:11	18:44	67	17:23 (23)	16:25	20	14:58 (20)	15:43
12	04:46	05:48	06:57	08:04		10:48 (17)	08:18		13:48 (33)	09:17
	22:38	21:34	20:08	18:42	72	17:23 (23)	16:23	3	13:51 (33)	15:43
13	04:47	05:50	06:59	08:06		10:48 (17)	08:20			09:19
	22:36	21:31	20:05	18:39	73	17:23 (23)	16:21			15:42
14	04:49	05:53	07:02	08:09		10:47 (17)	08:22			09:20
	22:35	21:29	20:02	18:36	77	17:23 (23)	16:19			15:42
15	04:50	05:55	07:04	08:11		10:48 (17)	08:25			09:21
	22:34	21:26	19:59	18:33	86	17:23 (23)	16:17			15:42
16	04:52	05:57	07:06	08:13		10:47 (17)	08:27			09:22
	22:32	21:24	19:56	18:31	93	17:22 (23)	16:15			15:42
17	04:54	05:59	07:08	08:16		10:48 (17)	08:29			09:23
	22:30	21:21	19:53	18:28	85	17:22 (23)	16:13			15:42
18	04:56	06:02	07:10	08:18		12:58 (15)	08:32			09:24
	22:29	21:18	19:51	18:25	66	17:20 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		12:57 (15)	08:34			09:25
	22:27	21:16	19:48	18:22	64	17:17 (23)	16:09			15:42
20	04:59	06:06	07:15	08:23		12:55 (15)	08:36			09:25
	22:25	21:13	19:45	18:20	58	17:12 (23)	16:07			15:42
21	05:01	06:08	07:17	08:25		12:54 (15)	08:39			09:26
	22:23	21:10	19:42	18:17	56	16:51 (28)	16:06			15:43
22	05:03	06:11	07:19	08:27		12:53 (15)	08:41			09:27
	22:22	21:07	19:39	18:14	55	16:49 (28)	16:04			15:43
23	05:05	06:13	07:21	08:30		12:53 (15)	08:43			09:27
	22:20	21:05	19:36	18:12	53	16:48 (28)	16:02			15:44
24	05:07	06:15	07:24	08:32		12:52 (15)	08:45			09:28
	22:18	21:02	19:33	18:09	52	16:46 (28)	16:01			15:44
25	05:09	06:17	07:26	07:34		11:52 (15)	08:47			09:28
	22:16	20:59	19:30	17:06	47	15:44 (28)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:51 (15)	08:49			09:28
	22:14	20:56	19:27	17:04	39	15:39 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:52 (15)	08:52			09:28
	22:12	20:54	19:24	17:01	35	12:27 (15)	15:56			15:47
28	05:15	06:24	07:33	07:42		11:52 (15)	08:54			09:28
	22:10	20:51	19:22	16:59	35	12:27 (15)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:52 (15)	08:56			09:28
	22:07	20:48	19:19	16:56	34	12:26 (15)	15:53			15:49
30	05:20	06:29	07:37	07:46		11:53 (15)	08:58			09:28
	22:05	20:45	19:16	16:54	40	14:58 (20)	15:52			15:50
31	05:22	06:31		07:49		11:53 (15)				09:28
	22:03	20:42		16:51	44	15:00 (20)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1428			365		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		11:38 (17) / 07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		09:44 (12) / 09:00
	15:53		16:56	63	13:43 (15) / 18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	56	15:37 (28) / 15:51
2	09:27		08:43		11:39 (17) / 07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		09:56 (12) / 09:01
	15:54		16:58	59	13:43 (15) / 18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	51	15:37 (28) / 15:50
3	09:27		08:41		11:38 (17) / 07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		09:57 (12) / 09:03
	15:55		17:01	51	13:42 (15) / 18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	55	15:36 (28) / 15:49
4	09:26		08:39		11:39 (17) / 07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:02 (12) / 09:05
	15:57		17:03	51	15:59 (28) / 18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	56	15:35 (28) / 15:48
5	09:26		08:37		11:39 (17) / 07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:04 (12) / 09:07
	15:58		17:06	56	16:02 (28) / 18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	58	15:34 (28) / 15:47
6	09:25		08:34		10:34 (12) / 07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		11:10 (17) / 09:09
	16:00		17:08	57	16:05 (28) / 18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	55	15:33 (28) / 15:46
7	09:24		08:32		10:32 (12) / 07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		11:09 (17) / 09:10
	16:02		17:11	55	16:05 (28) / 18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56		16:34	49	13:12 (15) / 15:45
8	09:24		08:30		10:27 (12) / 07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		11:09 (17) / 09:12
	16:03		17:13	53	16:07 (28) / 18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53		16:32	50	13:13 (15) / 15:45
9	09:23		08:27		10:26 (12) / 07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57		08:10		11:09 (17) / 09:13
	16:05		17:16	49	16:07 (28) / 18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	60	13:14 (15) / 15:44
10	09:22		08:25		10:15 (12) / 07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13		11:10 (17) / 09:15
	16:07		17:18	58	16:07 (28) / 18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	61	13:14 (15) / 15:43
11	09:21		08:22		10:16 (12) / 07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		11:10 (17) / 09:16
	16:09		17:21	55	16:08 (28) / 18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	63	13:14 (15) / 15:43
12	09:20		08:20		10:17 (12) / 07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		11:10 (17) / 09:17
	16:11		17:23	48	16:08 (28) / 18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	66	13:15 (15) / 15:43
13	09:18		08:17		10:18 (12) / 07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		11:11 (17) / 09:19
	16:13		17:26	33	16:07 (28) / 18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	65	13:15 (15) / 15:42
14	09:17	12:02 (9)	08:15		10:21 (12) / 06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:11 (17) / 09:20
	16:15	8 12:10 (9)	17:28	28	16:08 (28) / 18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	66	13:15 (15) / 15:42
15	09:16	12:02 (9)	08:12		15:50 (28) / 06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:13 (17) / 09:21
	16:17	9 12:11 (9)	17:30	17	16:07 (28) / 18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	64	13:15 (15) / 15:42
16	09:14	12:02 (9)	08:10		15:51 (28) / 06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:14 (17) / 09:22
	16:19	11 12:13 (9)	17:33	14	16:05 (28) / 18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	62	13:15 (15) / 15:42
17	09:13	12:02 (9)	08:07		15:52 (28) / 06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		11:15 (17) / 09:23
	16:21	20 13:30 (15)	17:35	12	16:04 (28) / 18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	61	13:14 (15) / 15:42
18	09:12	11:58 (9)	08:05		15:56 (28) / 06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		11:16 (17) / 09:24
	16:23	30 13:34 (15)	17:38	6	16:02 (28) / 18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	60	13:14 (15) / 15:42
19	09:10	11:58 (9)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		11:19 (17) / 09:25
	16:25	33 13:35 (15)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	55	13:14 (15) / 15:42
20	09:08	11:58 (9)	08:00		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		11:21 (17) / 09:25
	16:27	36 13:37 (15)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	47	13:13 (15) / 15:42
21	09:07	11:58 (9)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		11:33 (9) / 09:26
	16:30	39 13:38 (15)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	39	13:13 (15) / 15:43
22	09:05	11:46 (17)	07:54		06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		11:34 (9) / 09:27
	16:32	47 13:38 (15)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	36	13:13 (15) / 15:43
23	09:03	11:44 (17)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		11:34 (9) / 09:27
	16:34	55 13:39 (15)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	33	13:12 (15) / 15:44
24	09:01	11:42 (17)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	16:24 (28)	08:45		11:35 (9) / 09:28
	16:37	60 13:40 (15)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	8 16:32 (28)	16:01	30	13:11 (15) / 15:44
25	09:00	11:42 (17)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	15:22 (28)	08:47		11:41 (9) / 09:28
	16:39	61 13:41 (15)	17:55		19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06	12 15:34 (28)	15:59	20	13:09 (15) / 15:45
26	08:58	11:41 (17)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	15:20 (28)	08:49		11:41 (9) / 09:28
	16:41	62 13:42 (15)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15 15:35 (28)	15:58	11	11:52 (9) / 15:46
27	08:56	11:40 (17)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	15:19 (28)	08:52		11:41 (9) / 09:28
	16:44	64 13:42 (15)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01	17 15:36 (28)	15:56	10	11:51 (9) / 15:47
28	08:54	11:40 (17)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42	09:50 (12)	08:54		11:42 (9) / 09:28
	16:46	65 13:43 (15)	18:02		19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59	28 15:37 (28)	15:55	8	11:50 (9) / 15:48
29	08:52	11:39 (17)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	09:47 (12)	08:56		09:28
	16:49	65 13:43 (15)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	37 15:37 (28)	15:53		15:49
30	08:50	11:39 (17)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	09:46 (12)	08:58		09:28
	16:51	65 13:43 (15)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	49 15:37 (28)	15:52		15:50
31	08:48	11:39 (17)			07:09		04:41		05:22	06:31		07:49	09:46 (12)			09:28
	16:53	63 13:43 (15)			20:14		22:29		22:03	20:42		16:51	55 15:38 (28)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		793		765									221		1347	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46	10:50 (12)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39		07:51	10:27 (12)	09:00
	15:53		16:56 74	14:26 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49 30	13:49 (15)	15:51
2	09:27		08:43	10:51 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:25 (12)	09:01
	15:54		16:58 73	14:27 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 45	13:52 (15)	15:50
3	09:27		08:41	10:50 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:24 (12)	09:03
	15:55		17:01 74	14:27 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44 54	13:54 (15)	15:49
4	09:26		08:39	10:51 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:22 (12)	09:05
	15:57		17:03 71	14:27 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 61	13:55 (15)	15:48
5	09:26		08:37	10:51 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:22 (12)	09:07
	15:58		17:06 68	14:26 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39 65	13:56 (15)	15:47
6	09:25		08:34	10:53 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:22 (12)	09:09
	16:00		17:08 64	14:26 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37 69	13:57 (15)	15:46
7	09:24		08:32	10:53 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:21 (12)	09:10
	16:02		17:11 59	14:25 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34 72	13:57 (15)	15:45
8	09:24		08:30	10:55 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:21 (12)	09:12
	16:03		17:13 52	14:24 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32 73	13:57 (15)	15:45
9	09:23		08:27	10:56 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:21 (12)	09:13
	16:05		17:16 43	14:22 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30 75	13:58 (15)	15:44
10	09:22		08:25	10:58 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:22 (12)	09:15
	16:07		17:18 26	14:18 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28 72	13:58 (15)	15:43
11	09:21		08:22	12:44 (17)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:21 (12)	09:16
	16:09		17:21 5	12:49 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25 75	13:58 (15)	15:43
12	09:20		08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:22 (12)	09:17
	16:11		17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23 72	13:58 (15)	15:42
13	09:18	12:39 (9)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:23 (12)	09:19
	16:13 5	12:44 (9)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21 72	13:58 (15)	15:42
14	09:17	12:39 (9)	08:15		06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	10:23 (12)	09:20
	16:15 7	12:46 (9)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 68	13:57 (15)	15:42
15	09:16	12:39 (9)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	10:24 (12)	09:21
	16:17 15	12:54 (9)	17:30		18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17 63	13:57 (15)	15:42
16	09:14	12:38 (9)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	10:30 (12)	09:22
	16:19 17	12:55 (9)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15 50	13:57 (15)	15:42
17	09:13	12:38 (9)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:05 (17)	09:23
	16:21 18	12:56 (9)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 45	13:55 (15)	15:42
18	09:12	12:37 (9)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:07 (17)	09:24
	16:23 19	12:56 (9)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11 42	13:55 (15)	15:42
19	09:10	12:38 (9)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:08 (17)	09:25
	16:25 20	12:58 (9)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09 39	13:54 (15)	15:42
20	09:08	12:37 (17)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:09 (17)	09:25
	16:27 22	12:59 (9)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07 33	13:51 (15)	15:42
21	09:07	12:35 (17)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:11 (17)	09:26
	16:30 23	12:58 (9)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06 23	12:34 (9)	15:43
22	09:05	12:34 (17)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:13 (17)	09:27
	16:32 33	14:16 (15)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04 22	12:35 (9)	15:43
23	09:03	12:33 (17)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:14 (9)	09:27
	16:34 39	14:19 (15)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02 20	12:34 (9)	15:44
24	09:01	12:33 (17)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:15 (9)	09:28
	16:37 42	14:21 (15)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01 20	12:35 (9)	15:44
25	09:00	12:32 (17)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:16 (9)	09:28
	16:39 45	14:22 (15)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59 18	12:34 (9)	15:45
26	08:58	10:57 (12)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49	12:17 (9)	09:28
	16:41 50	14:24 (15)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58 17	12:34 (9)	15:46
27	08:56	10:51 (12)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52	12:18 (9)	09:28
	16:44 64	14:24 (15)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56 15	12:33 (9)	15:47
28	08:54	10:51 (12)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54	12:19 (9)	09:28
	16:46 69	14:25 (15)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59		15:55 7	12:26 (9)	15:48
29	08:52	10:51 (12)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56	12:20 (9)	09:28
	16:49 70	14:26 (15)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53 5	12:25 (9)	15:49
30	08:50	10:50 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		08:58		09:28
	16:51 72	14:26 (15)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54		15:52		15:50
31	08:48	10:51 (12)			07:09		04:41		05:22	06:31		07:49	12:13 (17)			09:28
	16:53 74	14:27 (15)			20:14		22:29		22:03	20:42		16:51 7	12:20 (17)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case	704		609									7		1322		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October			November			December
1	09:28			08:46		10:45 (12)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39			07:51		10:19 (12)	09:00
	15:53			16:56	73	14:22 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13			16:49	43	13:46 (15)	15:51
2	09:27			08:43		10:46 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41			07:54		10:18 (12)	09:01
	15:54			16:58	74	14:23 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10			16:46	53	13:48 (15)	15:50
3	09:27			08:41		10:45 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44			07:56		10:18 (12)	09:03
	15:55			17:01	74	14:22 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07			16:44	59	13:50 (15)	15:49
4	09:26			08:39		10:46 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46			07:58		10:16 (12)	09:05
	15:57			17:03	73	14:23 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04			16:41	65	13:51 (15)	15:48
5	09:26			08:37		10:46 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48			08:01		10:16 (12)	09:07
	15:58			17:06	71	14:22 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01			16:39	70	13:52 (15)	15:47
6	09:25			08:34		10:47 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50			08:03		10:16 (12)	09:09
	16:00			17:08	68	14:22 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59			16:37	73	13:53 (15)	15:46
7	09:24			08:32		10:47 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53			08:06		10:16 (12)	09:10
	16:02			17:11	65	14:21 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56			16:34	73	13:52 (15)	15:45
8	09:24			08:30		10:48 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55			08:08		10:16 (12)	09:12
	16:03			17:13	58	14:20 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53			16:32	73	13:53 (15)	15:45
9	09:23			08:27		10:49 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57			08:10		10:16 (12)	09:13
	16:05			17:16	50	14:18 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50			16:30	75	13:53 (15)	15:44
10	09:22			08:25		10:50 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00			08:13		10:17 (12)	09:15
	16:07			17:18	40	14:16 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47			16:28	74	13:54 (15)	15:43
11	09:21			08:22		10:53 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02			08:15		10:17 (12)	09:16
	16:09			17:21	22	12:47 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44			16:25	69	13:53 (15)	15:43
12	09:20			08:20		12:38 (17)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04			08:18		10:18 (12)	09:17
	16:11			17:23	4	12:42 (17)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42			16:23	54	13:53 (15)	15:42
13	09:18			08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06			08:20		10:20 (12)	09:19
	16:13			17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39			16:21	53	13:53 (15)	15:42
14	09:17			08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09			08:22		11:57 (17)	09:20
	16:15			17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36			16:19	51	13:52 (15)	15:42
15	09:16			08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11			08:25		11:58 (17)	09:21
	16:17			17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33			16:17	50	13:52 (15)	15:42
16	09:14			08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13			08:27		11:59 (17)	09:22
	16:19			17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31			16:15	49	13:52 (15)	15:42
17	09:13		12:33 (9)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16			08:29		12:00 (17)	09:23
	16:21	5	12:50 (9)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28			16:13	45	13:50 (15)	15:42
18	09:12		12:33 (9)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18			08:32		12:01 (17)	09:24
	16:23	18	12:51 (9)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25			16:11	43	13:50 (15)	15:42
19	09:10		12:34 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20			08:34		12:03 (17)	09:25
	16:25	19	12:53 (9)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22			16:09	38	13:49 (15)	15:42
20	09:08		12:34 (9)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23			08:36		12:04 (17)	09:25
	16:27	20	12:54 (9)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20			16:07	27	13:41 (15)	15:42
21	09:07		12:31 (17)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25			08:39		12:07 (17)	09:26
	16:30	22	12:53 (9)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17			16:06	22	12:29 (9)	15:43
22	09:05		12:29 (17)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27			08:41		12:10 (9)	09:27
	16:32	27	14:06 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14			16:04	20	12:30 (9)	15:43
23	09:03		12:28 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30			08:43		12:10 (9)	09:27
	16:34	38	14:14 (15)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12			16:02	19	12:29 (9)	15:44
24	09:01		12:27 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32			08:45		12:11 (9)	09:28
	16:37	43	14:16 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09			16:01	18	12:29 (9)	15:44
25	09:00		12:27 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34			08:47		12:11 (9)	09:28
	16:39	45	14:17 (15)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06			15:59	5	12:28 (9)	15:45
26	08:58		12:26 (17)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37			08:49			09:28
	16:41	49	14:19 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04			15:58			15:46
27	08:56		12:25 (17)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39			08:52			09:28
	16:44	50	14:19 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01			15:56			15:47
28	08:54		12:25 (17)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42			08:54			09:28
	16:46	51	14:20 (15)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59			15:55			15:48
29	08:52		10:48 (12)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44			08:56			09:28
	16:49	53	14:21 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56			15:53			15:49
30	08:50		10:46 (12)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		12:06 (17)	08:58			09:28
	16:51	55	14:21 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	7	12:13 (17)	15:52			15:50
31	08:48		10:46 (12)				07:09		04:41		05:22	06:31		07:49		10:22 (12)				09:28
	16:53	69	14:22 (15)				20:14		22:29		22:03	20:42		16:51	25	12:17 (17)				15:51
Potential sun hours	221			260			365	432	521	547	546	478	386	319			236			199
Total, worst case		564			672										32			1221		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		12:03 (26)	08:45		14:59 (17)	07:35	07:07	05:44	04:39
	15:52	20	12:23 (26)	16:56	18	15:17 (17)	18:04	20:16	21:26	22:30
2	09:27		12:03 (26)	08:43		14:59 (17)	07:32	07:04	05:41	04:38
	15:54	20	12:23 (26)	16:58	19	15:18 (17)	18:07	20:19	21:28	22:32
3	09:27		12:03 (26)	08:41		14:58 (17)	07:30	07:01	05:38	04:37
	15:55	20	12:23 (26)	17:01	19	15:17 (17)	18:09	20:21	21:30	22:33
4	09:26		12:03 (26)	08:39		14:59 (17)	07:27	06:58	05:36	04:36
	15:57	21	12:24 (26)	17:03	19	15:18 (17)	18:12	20:23	21:33	22:35
5	09:26		12:04 (26)	08:37		14:59 (17)	07:24	06:55	05:33	04:34
	15:58	26	13:33 (12)	17:06	19	15:18 (17)	18:14	20:26	21:35	22:36
6	09:25		12:04 (26)	08:34		15:00 (17)	07:21	06:52	05:31	04:33
	16:00	29	13:35 (12)	17:08	18	15:18 (17)	18:16	20:28	21:37	22:38
7	09:24		12:05 (26)	08:32		15:00 (17)	07:18	06:49	05:29	04:32
	16:01	31	13:37 (12)	17:11	17	15:17 (17)	18:19	20:30	21:39	22:39
8	09:23		12:06 (26)	08:30		15:00 (17)	07:16	06:46	05:26	04:31
	16:03	33	13:39 (12)	17:13	16	15:16 (17)	18:21	20:33	21:42	22:40
9	09:23		12:06 (26)	08:27		15:02 (17)	07:13	06:44	05:24	04:31
	16:05	33	13:39 (12)	17:15	14	15:16 (17)	18:23	20:35	21:44	22:42
10	09:22		12:07 (26)	08:25		15:03 (17)	07:10	06:41	05:21	04:30
	16:07	35	13:41 (12)	17:18	11	15:14 (17)	18:26	20:37	21:46	22:43
11	09:21		12:07 (26)	08:22		15:07 (17)	07:07	06:38	05:19	04:29
	16:09	35	13:41 (12)	17:20	5	15:12 (17)	18:28	20:39	21:49	22:44
12	09:19		12:08 (26)	08:20			07:04	06:35	05:17	04:29
	16:11	35	13:42 (12)	17:23			18:30	20:42	21:51	22:45
13	09:18		12:09 (26)	08:17			07:01	06:32	05:15	04:28
	16:12	35	13:43 (12)	17:25			18:33	20:44	21:53	22:46
14	09:17		12:10 (26)	08:15			06:58	06:29	05:12	04:28
	16:14	35	13:44 (12)	17:28			18:35	20:46	21:55	22:46
15	09:16		12:11 (26)	08:12			06:56	06:27	05:10	04:27
	16:17	34	13:45 (12)	17:30			18:37	20:49	21:57	22:47
16	09:14		12:12 (26)	08:10			06:53	06:24	05:08	04:27
	16:19	32	13:45 (12)	17:33			18:40	20:51	22:00	22:48
17	09:13		12:14 (26)	08:07			06:50	06:21	05:06	04:27
	16:21	29	13:45 (12)	17:35			18:42	20:53	22:02	22:48
18	09:11		12:16 (26)	08:05			06:47	06:18	05:04	04:26
	16:23	26	13:46 (12)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:25 (12)	08:02			06:44	06:16	05:02	04:26
	16:25	21	13:46 (12)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:25 (12)	07:59			06:41	06:13	05:00	04:26
	16:27	22	13:47 (12)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:26 (12)	07:57			06:38	06:10	04:58	04:26
	16:30	21	13:47 (12)	17:45			18:51	21:03	22:10	22:50
22	09:05		13:26 (12)	07:54			06:35	06:07	04:56	04:27
	16:32	21	13:47 (12)	17:48			18:54	21:05	22:12	22:50
23	09:03		13:27 (12)	07:51			06:33	06:05	04:54	04:27
	16:34	20	13:47 (12)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:28 (12)	07:49			06:30	06:02	04:52	04:27
	16:37	19	13:47 (12)	17:52			18:58	21:09	22:16	22:50
25	09:00		13:29 (12)	07:46			06:27	05:59	04:50	04:28
	16:39	18	13:47 (12)	17:55			19:00	21:12	22:18	22:50
26	08:58		13:30 (12)	07:43			06:24	05:57	04:49	04:28
	16:41	17	13:47 (12)	17:57			19:03	21:14	22:20	22:50
27	08:56		13:30 (12)	07:41			06:21	05:54	04:47	04:29
	16:44	20	15:09 (17)	18:00			19:05	21:16	22:22	22:50
28	08:54		13:32 (12)	07:38			06:18	05:51	04:45	04:29
	16:46	23	15:12 (17)	18:02			19:07	21:19	22:23	22:50
29	08:52		13:35 (12)				07:15	05:49	04:44	04:30
	16:48	21	15:14 (17)				20:10	21:21	22:25	22:49
30	08:50		15:00 (17)				07:12	05:46	04:42	04:31
	16:51	15	15:15 (17)				20:12	21:23	22:27	22:49
31	08:48		15:00 (17)				07:09		04:41	
	16:53	16	15:16 (17)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		783			175					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (17)	08:59		11:49 (26)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (17)	15:51	35	13:23 (12)
2	04:33	05:26	06:35	07:41			07:54		14:31 (17)	09:01		11:50 (26)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (17)	15:50	35	13:24 (12)
3	04:34	05:28	06:37	07:44			07:56		14:31 (17)	09:03		11:50 (26)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (17)	15:49	33	13:23 (12)
4	04:35	05:30	06:39	07:46			07:58		14:29 (17)	09:05		11:50 (26)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (17)	15:48	33	13:23 (12)
5	04:36	05:33	06:42	07:48			08:01		14:29 (17)	09:07		11:50 (26)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (17)	15:47	31	13:22 (12)
6	04:37	05:35	06:44	07:50			08:03		14:29 (17)	09:08		11:50 (26)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (17)	15:46	30	13:22 (12)
7	04:38	05:37	06:46	07:53			08:06		14:29 (17)	09:10		11:51 (26)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (17)	15:45	27	13:21 (12)
8	04:40	05:39	06:48	07:55			08:08		14:29 (17)	09:12		11:51 (26)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (17)	15:44	21	12:12 (26)
9	04:41	05:41	06:51	07:57			08:10		14:30 (17)	09:13		11:51 (26)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (17)	15:44	21	12:12 (26)
10	04:42	05:44	06:53	07:59			08:13		14:29 (17)	09:15		11:52 (26)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (17)	15:43	20	12:12 (26)
11	04:44	05:46	06:55	08:02			08:15		14:30 (17)	09:16		11:53 (26)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (17)	15:43	20	12:13 (26)
12	04:45	05:48	06:57	08:04			08:18		14:32 (17)	09:17		11:53 (26)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (17)	15:42	20	12:13 (26)
13	04:47	05:50	06:59	08:06			08:20		13:07 (12)	09:19		11:54 (26)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (17)	15:42	20	12:14 (26)
14	04:49	05:53	07:02	08:09			08:22		13:04 (12)	09:20		11:54 (26)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (17)	15:42	20	12:14 (26)
15	04:50	05:55	07:04	08:11			08:25		13:03 (12)	09:21		11:54 (26)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (17)	15:42	20	12:14 (26)
16	04:52	05:57	07:06	08:13			08:27		13:03 (12)	09:22		11:55 (26)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (12)	15:42	20	12:15 (26)
17	04:54	05:59	07:08	08:16			08:29		13:02 (12)	09:23		11:55 (26)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (12)	15:42	20	12:15 (26)
18	04:56	06:02	07:10	08:18			08:32		13:02 (12)	09:24		11:56 (26)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (12)	15:42	19	12:15 (26)
19	04:57	06:04	07:13	08:20			08:34		13:02 (12)	09:25		11:56 (26)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (12)	15:42	20	12:16 (26)
20	04:59	06:06	07:15	08:23			08:36		13:01 (12)	09:25		11:57 (26)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (12)	15:42	20	12:17 (26)
21	05:01	06:08	07:17	08:25			08:38		13:02 (12)	09:26		11:57 (26)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (12)	15:43	20	12:17 (26)
22	05:03	06:10	07:19	08:27			08:41		13:02 (12)	09:27		11:58 (26)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (12)	15:43	20	12:18 (26)
23	05:05	06:13	07:21	08:30			08:43		13:02 (12)	09:27		11:58 (26)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (12)	15:44	20	12:18 (26)
24	05:07	06:15	07:24	08:32			08:45		11:55 (26)	09:27		11:58 (26)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (12)	15:44	20	12:18 (26)
25	05:09	06:17	07:26	07:34			08:47		11:52 (26)	09:28		11:59 (26)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (12)	15:45	20	12:19 (26)
26	05:11	06:19	07:28	07:37			08:49		11:51 (26)	09:28		12:00 (26)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (12)	15:46	20	12:20 (26)
27	05:13	06:22	07:30	07:39			08:51		11:50 (26)	09:28		12:00 (26)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (12)	15:47	20	12:20 (26)
28	05:15	06:24	07:32	07:42			08:54		11:49 (26)	09:28		12:00 (26)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (12)	15:48	20	12:20 (26)
29	05:17	06:26	07:35	07:44			08:56		11:50 (26)	09:28		12:01 (26)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (12)	15:49	20	12:21 (26)
30	05:20	06:28	07:37	07:46			08:58		11:49 (26)	09:28		12:01 (26)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (12)	15:50	21	12:22 (26)
31	05:22	06:31		07:49		14:35 (17)				09:28		12:01 (26)
	22:03	20:42		16:51	6	14:41 (17)				15:51	21	12:22 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February		March	April	May	June	July	August	September	October	November		December	
1	09:28	12:35 (26)	08:45	14:09 (12)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51		08:59	12:23 (26)
	15:52 20	12:55 (26)	16:56 5	14:14 (12)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51 18	12:41 (26)
2	09:27	12:36 (26)	08:43		07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01	12:23 (26)
	15:54 21	12:57 (26)	16:58		18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50 19	12:42 (26)
3	09:27	12:36 (26)	08:41		07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03	12:23 (26)
	15:55 21	12:57 (26)	17:01		18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49 20	12:43 (26)
4	09:26	12:37 (26)	08:39		07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05	12:23 (26)
	15:57 20	12:57 (26)	17:03		18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48 20	12:43 (26)
5	09:26	12:37 (26)	08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07	12:24 (26)
	15:58 20	12:57 (26)	17:06		18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47 20	12:44 (26)
6	09:25	12:38 (26)	08:34		07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:08	12:24 (26)
	16:00 20	12:58 (26)	17:08		18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46 20	12:44 (26)
7	09:24	12:38 (26)	08:32		07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10	12:24 (26)
	16:01 20	12:58 (26)	17:11		18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34		15:45 21	12:45 (26)
8	09:23	12:39 (26)	08:30		07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12	12:25 (26)
	16:03 20	12:59 (26)	17:13		18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44 20	12:45 (26)
9	09:23	12:39 (26)	08:27		07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10		09:13	12:24 (26)
	16:05 19	12:58 (26)	17:15		18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30		15:44 21	12:45 (26)
10	09:22	12:40 (26)	08:25		07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	13:40 (12)	09:15	12:25 (26)
	16:07 19	12:59 (26)	17:18		18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27 5	13:45 (12)	15:43 21	12:46 (26)
11	09:21	12:40 (26)	08:22		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	13:37 (12)	09:16	12:26 (26)
	16:09 19	12:59 (26)	17:20		18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25 11	13:48 (12)	15:43 21	12:47 (26)
12	09:19	12:42 (26)	08:20		07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	13:36 (12)	09:17	12:26 (26)
	16:10 24	14:10 (12)	17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 14	13:50 (12)	15:42 20	12:46 (26)
13	09:18	12:42 (26)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	13:35 (12)	09:19	12:27 (26)
	16:12 27	14:11 (12)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 17	13:52 (12)	15:42 20	12:47 (26)
14	09:17	12:44 (26)	08:15		06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22	13:34 (12)	09:20	12:27 (26)
	16:14 27	14:13 (12)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 18	13:52 (12)	15:42 21	12:48 (26)
15	09:16	12:45 (26)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	13:34 (12)	09:21	12:27 (26)
	16:17 27	14:14 (12)	17:30		18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17 19	13:53 (12)	15:42 21	12:48 (26)
16	09:14	12:46 (26)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	13:34 (12)	09:22	12:28 (26)
	16:19 27	14:15 (12)	17:33		18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15 20	13:54 (12)	15:42 20	12:48 (26)
17	09:13	12:48 (26)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	13:33 (12)	09:23	12:28 (26)
	16:21 25	14:16 (12)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 20	13:53 (12)	15:42 20	12:48 (26)
18	09:11	13:59 (12)	08:05		06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	13:34 (12)	09:24	12:29 (26)
	16:23 18	14:17 (12)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11 20	13:54 (12)	15:42 20	12:49 (26)
19	09:10	13:59 (12)	08:02		06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34	13:34 (12)	09:25	12:30 (26)
	16:25 19	14:18 (12)	17:40		18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 21	13:55 (12)	15:42 20	12:50 (26)
20	09:08	13:59 (12)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	13:34 (12)	09:25	12:30 (26)
	16:27 19	14:18 (12)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 20	13:54 (12)	15:42 20	12:50 (26)
21	09:07	13:59 (12)	07:57		06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	13:35 (12)	09:26	12:30 (26)
	16:30 20	14:19 (12)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 20	13:55 (12)	15:43 20	12:50 (26)
22	09:05	13:59 (12)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41	13:35 (12)	09:27	12:31 (26)
	16:32 20	14:19 (12)	17:47		18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04 19	13:54 (12)	15:43 20	12:51 (26)
23	09:03	13:59 (12)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	13:36 (12)	09:27	12:31 (26)
	16:34 21	14:20 (12)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02 19	13:55 (12)	15:44 20	12:51 (26)
24	09:01	14:00 (12)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	13:37 (12)	09:27	12:31 (26)
	16:36 20	14:20 (12)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	13:55 (12)	15:44 21	12:52 (26)
25	09:00	14:00 (12)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:26 (26)	09:28	12:33 (26)
	16:39 21	14:21 (12)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 25	13:54 (12)	15:45 20	12:53 (26)
26	08:58	14:01 (12)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:25 (26)	09:28	12:33 (26)
	16:41 20	14:21 (12)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 26	13:54 (12)	15:46 20	12:53 (26)
27	08:56	14:01 (12)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	12:24 (26)	09:28	12:34 (26)
	16:44 19	14:20 (12)	18:00		19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 28	13:54 (12)	15:47 20	12:54 (26)
28	08:54	14:02 (12)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:23 (26)	09:28	12:33 (26)
	16:46 18	14:20 (12)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55 28	13:53 (12)	15:47 21	12:54 (26)
29	08:52	14:04 (12)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:23 (26)	09:28	12:34 (26)
	16:48 16	14:20 (12)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 27	13:52 (12)	15:49 20	12:54 (26)
30	08:50	14:04 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:23 (26)	09:28	12:35 (26)
	16:51 14	14:18 (12)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 24	13:51 (12)	15:50 20	12:55 (26)
31	08:48	14:07 (12)			07:09		04:41		05:22	06:31		07:49			09:28	12:35 (26)
	16:53 10	14:17 (12)			20:14		22:29		22:03	20:42		16:51			15:51 20	12:55 (26)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199	
Total, worst case		631		5										419		625

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		13:54 (26)	08:45		15:12 (12)	07:35	07:06	05:43	04:39
	15:52	9	14:03 (26)	16:56	14	15:26 (12)	18:04	20:16	21:26	22:30
2	09:27		13:54 (26)	08:43		15:12 (12)	07:32	07:04	05:41	04:38
	15:54	11	14:05 (26)	16:58	16	15:28 (12)	18:07	20:19	21:28	22:32
3	09:27		13:54 (26)	08:41		15:11 (12)	07:29	07:01	05:38	04:37
	15:55	12	14:06 (26)	17:01	17	15:28 (12)	18:09	20:21	21:30	22:33
4	09:26		13:54 (26)	08:39		15:11 (12)	07:27	06:58	05:36	04:36
	15:57	13	14:07 (26)	17:03	18	15:29 (12)	18:12	20:23	21:33	22:35
5	09:26		13:53 (26)	08:37		15:11 (12)	07:24	06:55	05:33	04:34
	15:58	15	14:08 (26)	17:06	18	15:29 (12)	18:14	20:26	21:35	22:36
6	09:25		13:53 (26)	08:34		15:11 (12)	07:21	06:52	05:31	04:33
	16:00	16	14:09 (26)	17:08	19	15:30 (12)	18:16	20:28	21:37	22:38
7	09:24		13:54 (26)	08:32		15:11 (12)	07:18	06:49	05:29	04:32
	16:01	16	14:10 (26)	17:10	19	15:30 (12)	18:19	20:30	21:39	22:39
8	09:23		13:54 (26)	08:30		15:11 (12)	07:15	06:46	05:26	04:31
	16:03	17	14:11 (26)	17:13	18	15:29 (12)	18:21	20:32	21:42	22:40
9	09:23		13:53 (26)	08:27		15:12 (12)	07:13	06:44	05:24	04:31
	16:05	18	14:11 (26)	17:15	18	15:30 (12)	18:23	20:35	21:44	22:41
10	09:22		13:53 (26)	08:25		15:12 (12)	07:10	06:41	05:21	04:30
	16:07	19	14:12 (26)	17:18	17	15:29 (12)	18:26	20:37	21:46	22:43
11	09:20		13:53 (26)	08:22		15:13 (12)	07:07	06:38	05:19	04:29
	16:09	19	14:12 (26)	17:20	14	15:27 (12)	18:28	20:39	21:48	22:44
12	09:19		13:54 (26)	08:20		15:16 (12)	07:04	06:35	05:17	04:28
	16:10	19	14:13 (26)	17:23	11	15:27 (12)	18:30	20:42	21:51	22:45
13	09:18		13:53 (26)	08:17		15:18 (12)	07:01	06:32	05:14	04:28
	16:12	21	14:14 (26)	17:25	5	15:23 (12)	18:33	20:44	21:53	22:45
14	09:17		13:54 (26)	08:15			06:58	06:29	05:12	04:27
	16:14	21	14:15 (26)	17:28			18:35	20:46	21:55	22:46
15	09:16		13:54 (26)	08:12			06:56	06:27	05:10	04:27
	16:16	21	14:15 (26)	17:30			18:37	20:49	21:57	22:47
16	09:14		13:54 (26)	08:10			06:53	06:24	05:08	04:27
	16:19	21	14:15 (26)	17:33			18:40	20:51	21:59	22:48
17	09:13		13:54 (26)	08:07			06:50	06:21	05:06	04:27
	16:21	22	14:16 (26)	17:35			18:42	20:53	22:02	22:48
18	09:11		13:55 (26)	08:05			06:47	06:18	05:04	04:26
	16:23	21	14:16 (26)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:55 (26)	08:02			06:44	06:15	05:02	04:26
	16:25	21	14:16 (26)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:56 (26)	07:59			06:41	06:13	05:00	04:26
	16:27	20	14:16 (26)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:56 (26)	07:57			06:38	06:10	04:58	04:26
	16:30	20	14:16 (26)	17:45			18:51	21:02	22:10	22:50
22	09:05		13:57 (26)	07:54			06:35	06:07	04:56	04:27
	16:32	19	14:16 (26)	17:47			18:53	21:05	22:12	22:50
23	09:03		13:58 (26)	07:51			06:32	06:05	04:54	04:27
	16:34	18	14:16 (26)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:59 (26)	07:49			06:30	06:02	04:52	04:27
	16:36	17	14:16 (26)	17:52			18:58	21:09	22:16	22:50
25	08:59		14:01 (26)	07:46			06:27	05:59	04:50	04:28
	16:39	14	14:15 (26)	17:55			19:00	21:12	22:18	22:50
26	08:58		14:02 (26)	07:43			06:24	05:57	04:49	04:28
	16:41	11	14:13 (26)	17:57			19:03	21:14	22:20	22:50
27	08:56		14:05 (26)	07:41			06:21	05:54	04:47	04:29
	16:44	6	14:11 (26)	18:00			19:05	21:16	22:22	22:50
28	08:54			07:38			06:18	05:51	04:45	04:29
	16:46			18:02			19:07	21:19	22:23	22:50
29	08:52						07:15	05:49	04:44	04:30
	16:48						20:10	21:21	22:25	22:49
30	08:50		15:15 (12)				07:12	05:46	04:42	04:31
	16:51	8	15:23 (12)				20:12	21:23	22:27	22:49
31	08:48		15:14 (12)				07:09		04:41	
	16:53	11	15:25 (12)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		476			204					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:42 (12)	08:59		13:35 (26)
	22:48	22:01	20:39	19:13			16:48	16	14:58 (12)	15:51	19	13:54 (26)
2	04:33	05:26	06:35	07:41			07:53		14:41 (12)	09:01		13:37 (26)
	22:48	21:58	20:37	19:10			16:46	18	14:59 (12)	15:50	18	13:55 (26)
3	04:34	05:28	06:37	07:44			07:56		14:40 (12)	09:03		13:37 (26)
	22:47	21:56	20:34	19:07			16:44	19	14:59 (12)	15:49	18	13:55 (26)
4	04:35	05:30	06:39	07:46			07:58		14:40 (12)	09:05		13:38 (26)
	22:46	21:54	20:31	19:04			16:41	20	15:00 (12)	15:48	17	13:55 (26)
5	04:36	05:32	06:42	07:48			08:01		14:41 (12)	09:07		13:39 (26)
	22:45	21:51	20:28	19:01			16:39	19	15:00 (12)	15:47	16	13:55 (26)
6	04:37	05:35	06:44	07:50			08:03		14:41 (12)	09:08		13:40 (26)
	22:45	21:49	20:25	18:58			16:36	19	15:00 (12)	15:46	15	13:55 (26)
7	04:38	05:37	06:46	07:53			08:06		14:41 (12)	09:10		13:41 (26)
	22:44	21:46	20:22	18:56			16:34	18	14:59 (12)	15:45	14	13:55 (26)
8	04:40	05:39	06:48	07:55			08:08		14:42 (12)	09:12		13:42 (26)
	22:43	21:44	20:19	18:53			16:32	17	14:59 (12)	15:44	13	13:55 (26)
9	04:41	05:41	06:50	07:57			08:10		14:43 (12)	09:13		13:42 (26)
	22:41	21:41	20:16	18:50			16:30	16	14:59 (12)	15:44	12	13:54 (26)
10	04:42	05:44	06:53	07:59			08:13		14:43 (12)	09:15		13:43 (26)
	22:40	21:39	20:14	18:47			16:27	14	14:57 (12)	15:43	11	13:54 (26)
11	04:44	05:46	06:55	08:02			08:15		14:45 (12)	09:16		13:45 (26)
	22:39	21:36	20:11	18:44			16:25	11	14:56 (12)	15:43	9	13:54 (26)
12	04:45	05:48	06:57	08:04			08:18		14:47 (12)	09:17		13:46 (26)
	22:38	21:34	20:08	18:41			16:23	7	14:54 (12)	15:42	7	13:53 (26)
13	04:47	05:50	06:59	08:06			08:20			09:19		13:48 (26)
	22:36	21:31	20:05	18:39			16:21			15:42	5	13:53 (26)
14	04:49	05:53	07:01	08:09			08:22			09:20		13:49 (26)
	22:35	21:29	20:02	18:36			16:19			15:42	3	13:52 (26)
15	04:50	05:55	07:04	08:11			08:25		13:37 (26)	09:21		
	22:33	21:26	19:59	18:33			16:17	7	13:44 (26)	15:42		
16	04:52	05:57	07:06	08:13			08:27		13:36 (26)	09:22		
	22:32	21:23	19:56	18:30			16:15	11	13:47 (26)	15:42		
17	04:54	05:59	07:08	08:16			08:29		13:34 (26)	09:23		
	22:30	21:21	19:53	18:28			16:13	14	13:48 (26)	15:42		
18	04:56	06:01	07:10	08:18			08:32		13:33 (26)	09:24		
	22:29	21:18	19:50	18:25			16:11	17	13:50 (26)	15:42		
19	04:57	06:04	07:12	08:20			08:34		13:33 (26)	09:25		
	22:27	21:15	19:47	18:22			16:09	18	13:51 (26)	15:42		
20	04:59	06:06	07:15	08:23			08:36		13:32 (26)	09:25		
	22:25	21:13	19:45	18:19			16:07	19	13:51 (26)	15:42		
21	05:01	06:08	07:17	08:25			08:38		13:32 (26)	09:26		
	22:23	21:10	19:42	18:17			16:06	20	13:52 (26)	15:43		
22	05:03	06:10	07:19	08:27			08:41		13:32 (26)	09:27		
	22:21	21:07	19:39	18:14			16:04	20	13:52 (26)	15:43		
23	05:05	06:13	07:21	08:30			08:43		13:32 (26)	09:27		
	22:20	21:05	19:36	18:11			16:02	21	13:53 (26)	15:44		
24	05:07	06:15	07:23	08:32			08:45		13:33 (26)	09:27		
	22:18	21:02	19:33	18:09			16:00	21	13:54 (26)	15:44		
25	05:09	06:17	07:26	07:34			08:47		13:33 (26)	09:28		
	22:16	20:59	19:30	17:06			15:59	21	13:54 (26)	15:45		
26	05:11	06:19	07:28	07:37			08:49		13:33 (26)	09:28		
	22:14	20:56	19:27	17:04			15:57	21	13:54 (26)	15:46		
27	05:13	06:22	07:30	07:39			08:51		13:33 (26)	09:28		
	22:11	20:53	19:24	17:01			15:56	21	13:54 (26)	15:47		
28	05:15	06:24	07:32	07:41			08:53		13:33 (26)	09:28		
	22:09	20:51	19:21	16:58			15:55	21	13:54 (26)	15:47		
29	05:17	06:26	07:35	07:44		14:47 (12)	08:55		13:35 (26)	09:28		
	22:07	20:48	19:18	16:56	7	14:54 (12)	15:53	20	13:55 (26)	15:48		
30	05:19	06:28	07:37	07:46		14:45 (12)	08:57		13:35 (26)	09:28		13:56 (26)
	22:05	20:45	19:16	16:53	11	14:56 (12)	15:52	20	13:55 (26)	15:50	4	14:00 (26)
31	05:22	06:31		07:49		14:42 (12)				09:28		13:55 (26)
	22:03	20:42		16:51	15	14:57 (12)				15:51	6	14:01 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					33			486			187	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:45		10:57 (37)	07:35		16:28 (17)	07:06		05:44	04:39
	15:52			16:56	40	13:50 (26)	18:04	11	16:39 (17)	20:16		21:26	22:30
2	09:27			08:43		10:59 (37)	07:32		16:27 (17)	07:04		05:41	04:38
	15:54			16:58	37	13:51 (26)	18:07	13	16:40 (17)	20:19		21:28	22:32
3	09:27			08:41		11:02 (37)	07:30		16:27 (17)	07:01		05:38	04:37
	15:55			17:01	28	13:49 (26)	18:09	14	16:41 (17)	20:21		21:30	22:33
4	09:26			08:39		13:29 (26)	07:27		16:27 (17)	06:58		05:36	04:36
	15:57			17:03	20	13:49 (26)	18:12	17	16:44 (17)	20:23		21:33	22:35
5	09:26			08:37		13:30 (26)	07:24		16:27 (17)	06:55		05:33	04:34
	15:58			17:06	17	13:47 (26)	18:14	19	16:46 (17)	20:26		21:35	22:36
6	09:25			08:34		13:33 (26)	07:21		16:28 (17)	06:52		05:31	04:33
	16:00			17:08	12	13:45 (26)	18:16	17	16:45 (17)	20:28		21:37	22:38
7	09:24			08:32			07:18		16:29 (17)	06:49		05:29	04:32
	16:01			17:11			18:19	15	16:44 (17)	20:30		21:39	22:39
8	09:23			08:30			07:15		16:30 (17)	06:46		05:26	04:32
	16:03			17:13			18:21	12	16:42 (17)	20:32		21:42	22:40
9	09:23			08:27			07:13		16:33 (17)	06:44		05:24	04:31
	16:05			17:15			18:23	6	16:39 (17)	20:35		21:44	22:41
10	09:22			08:25			07:10			06:41		05:21	04:30
	16:07			17:18			18:26			20:37		21:46	22:43
11	09:20			08:22			07:07			06:38		05:19	04:29
	16:09			17:20			18:28			20:39		21:48	22:44
12	09:19			08:20		14:57 (7)	07:04			06:35		05:17	04:29
	16:11			17:23	8	15:05 (7)	18:30			20:42		21:51	22:45
13	09:18			08:17		14:59 (7)	07:01			06:32		05:15	04:28
	16:12			17:25	11	15:10 (7)	18:33			20:44		21:53	22:45
14	09:17		11:05 (37)	08:15		15:02 (7)	06:58			06:29		05:12	04:28
	16:14	3	11:08 (37)	17:28	12	15:14 (12)	18:35			20:46		21:55	22:46
15	09:16		10:59 (37)	08:12		15:06 (12)	06:56			06:27		05:10	04:27
	16:17	10	11:09 (37)	17:30	12	15:18 (12)	18:37			20:49		21:57	22:47
16	09:14		10:52 (37)	08:10		15:06 (12)	06:53			06:24		05:08	04:27
	16:19	18	11:10 (37)	17:33	15	15:21 (12)	18:40			20:51		21:59	22:48
17	09:13		10:51 (37)	08:07		15:05 (12)	06:50			06:21		05:06	04:27
	16:21	19	11:10 (37)	17:35	16	15:21 (12)	18:42			20:53		22:02	22:48
18	09:11		10:51 (37)	08:05		15:05 (12)	06:47			06:18		05:04	04:26
	16:23	20	11:11 (37)	17:38	15	15:20 (12)	18:44			20:56		22:04	22:49
19	09:10		10:51 (37)	08:02		15:06 (12)	06:44			06:16		05:02	04:26
	16:25	21	11:12 (37)	17:40	16	15:22 (12)	18:47			20:58		22:06	22:49
20	09:08		10:51 (37)	07:59		15:07 (12)	06:41			06:13		05:00	04:26
	16:27	22	11:13 (37)	17:43	17	15:24 (12)	18:49			21:00		22:08	22:50
21	09:07		10:51 (37)	07:57		15:07 (12)	06:38			06:10		04:58	04:26
	16:30	22	11:13 (37)	17:45	20	15:27 (12)	18:51			21:02		22:10	22:50
22	09:05		10:51 (37)	07:54		15:08 (12)	06:35			06:07		04:56	04:27
	16:32	27	12:49 (32)	17:47	20	15:28 (12)	18:53			21:05		22:12	22:50
23	09:03		10:51 (37)	07:51		15:09 (12)	06:32			06:05		04:54	04:27
	16:34	39	13:02 (32)	17:50	18	15:27 (12)	18:56			21:07		22:14	22:50
24	09:01		10:52 (37)	07:49		15:12 (12)	06:30			06:02		04:52	04:27
	16:37	40	13:04 (32)	17:52	13	15:25 (12)	18:58			21:09		22:16	22:50
25	08:59		10:52 (37)	07:46		15:16 (12)	06:27			05:59		04:50	04:28
	16:39	39	13:04 (32)	17:55	5	15:21 (12)	19:00			21:12		22:18	22:50
26	08:58		10:52 (37)	07:43			06:24			05:57		04:49	04:28
	16:41	39	13:24 (26)	17:57			19:03			21:14		22:20	22:50
27	08:56		10:53 (37)	07:41			06:21			05:54		04:47	04:29
	16:44	39	13:28 (26)	18:00			19:05			21:16		22:22	22:50
28	08:54		10:53 (37)	07:38		16:32 (17)	06:18			05:51		04:45	04:29
	16:46	41	13:35 (26)	18:02	4	16:36 (17)	19:07			21:19		22:23	22:50
29	08:52		10:54 (37)				07:15			05:49		04:44	04:30
	16:48	41	13:44 (26)				20:10			21:21		22:25	22:49
30	08:50		10:55 (37)				07:12			05:46		04:42	04:31
	16:51	42	13:47 (26)				20:12			21:23		22:27	22:49
31	08:48		10:56 (37)				07:09					04:41	
	16:53	42	13:49 (26)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		524			356			124					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51		08:59
	22:48	22:01	20:39	19:13		16:48		15:51
2	04:33	05:26	06:35	07:41		07:54		09:01
	22:48	21:58	20:37	19:10		16:46		15:50
3	04:34	05:28	06:37	07:44		07:56		09:03
	22:47	21:56	20:34	19:07		16:44		15:49
4	04:35	05:30	06:39	07:46		07:58	13:07 (26)	09:05
	22:46	21:54	20:31	19:04		16:41	4 13:11 (26)	15:48
5	04:36	05:33	06:42	07:48	17:09 (17)	08:01	13:02 (26)	09:07
	22:45	21:51	20:28	19:01	9 17:18 (17)	16:39	13 13:15 (26)	15:47
6	04:37	05:35	06:44	07:50	17:06 (17)	08:03	13:01 (26)	09:08
	22:45	21:49	20:25	18:58	14 17:20 (17)	16:36	17 13:18 (26)	15:46
7	04:38	05:37	06:46	07:53	17:04 (17)	08:06	12:58 (26)	09:10
	22:44	21:46	20:22	18:56	16 17:20 (17)	16:34	21 13:19 (26)	15:45
8	04:40	05:39	06:48	07:55	17:03 (17)	08:08	10:32 (37)	09:12
	22:43	21:44	20:19	18:53	18 17:21 (17)	16:32	29 13:20 (26)	15:44
9	04:41	05:41	06:50	07:57	17:02 (17)	08:10	10:30 (37)	09:13
	22:41	21:41	20:16	18:50	18 17:20 (17)	16:30	37 13:22 (26)	15:44
10	04:42	05:44	06:53	07:59	17:01 (17)	08:13	10:28 (37)	09:15
	22:40	21:39	20:14	18:47	16 17:17 (17)	16:27	40 13:21 (26)	15:43
11	04:44	05:46	06:55	08:02	17:01 (17)	08:15	10:27 (37)	09:16
	22:39	21:36	20:11	18:44	14 17:15 (17)	16:25	41 13:19 (26)	15:43
12	04:45	05:48	06:57	08:04	17:01 (17)	08:18	10:27 (37)	09:17
	22:38	21:34	20:08	18:41	12 17:13 (17)	16:23	42 13:19 (26)	15:42
13	04:47	05:50	06:59	08:06	17:02 (17)	08:20	10:25 (37)	09:19
	22:36	21:31	20:05	18:39	10 17:12 (17)	16:21	41 13:15 (26)	15:42
14	04:49	05:53	07:01	08:09	17:06 (17)	08:22	10:25 (37)	09:20
	22:35	21:29	20:02	18:36	2 17:08 (17)	16:19	41 13:07 (26)	15:42
15	04:50	05:55	07:04	08:11		08:25	10:25 (37)	09:21
	22:33	21:26	19:59	18:33		16:17	40 13:01 (26)	15:42
16	04:52	05:57	07:06	08:13		08:27	10:26 (37)	09:22
	22:32	21:23	19:56	18:30		16:15	39 12:58 (26)	15:42
17	04:54	05:59	07:08	08:16	15:45 (12)	08:29	10:25 (37)	09:23
	22:30	21:21	19:53	18:28	9 15:54 (12)	16:13	39 12:37 (32)	15:42
18	04:56	06:02	07:10	08:18	15:42 (12)	08:32	10:26 (37)	09:24
	22:29	21:18	19:50	18:25	15 15:57 (12)	16:11	40 12:38 (32)	15:42
19	04:57	06:04	07:12	08:20	15:40 (12)	08:34	10:26 (37)	09:25
	22:27	21:15	19:47	18:22	18 15:58 (12)	16:09	39 12:37 (32)	15:42
20	04:59	06:06	07:15	08:23	15:39 (12)	08:36	10:26 (37)	09:25
	22:25	21:13	19:45	18:20	21 16:00 (12)	16:07	28 12:25 (32)	15:42
21	05:01	06:08	07:17	08:25	15:37 (12)	08:38	10:27 (37)	09:26
	22:23	21:10	19:42	18:17	18 15:55 (12)	16:06	22 10:49 (37)	15:43
22	05:03	06:10	07:19	08:27	15:37 (12)	08:41	10:27 (37)	09:27
	22:21	21:07	19:39	18:14	16 15:53 (12)	16:04	22 10:49 (37)	15:43
23	05:05	06:13	07:21	08:30	15:36 (12)	08:43	10:28 (37)	09:27
	22:20	21:05	19:36	18:12	16 15:52 (12)	16:02	21 10:49 (37)	15:44
24	05:07	06:15	07:24	08:32	15:35 (12)	08:45	10:29 (37)	09:27
	22:18	21:02	19:33	18:09	16 15:51 (12)	16:01	20 10:49 (37)	15:44
25	05:09	06:17	07:26	07:34	14:36 (12)	08:47	10:29 (37)	09:28
	22:16	20:59	19:30	17:06	15 14:51 (12)	15:59	19 10:48 (37)	15:45
26	05:11	06:19	07:28	07:37	14:35 (12)	08:49	10:31 (37)	09:28
	22:14	20:56	19:27	17:04	14 14:49 (12)	15:57	18 10:49 (37)	15:46
27	05:13	06:22	07:30	07:39	14:35 (12)	08:51	10:38 (37)	09:28
	22:11	20:53	19:24	17:01	12 14:47 (12)	15:56	10 10:48 (37)	15:47
28	05:15	06:24	07:32	07:41	14:30 (7)	08:53	10:44 (37)	09:28
	22:09	20:51	19:21	16:58	12 14:42 (12)	15:55	3 10:47 (37)	15:48
29	05:17	06:26	07:35	07:44	14:27 (7)	08:55		09:28
	22:07	20:48	19:19	16:56	11 14:38 (7)	15:53		15:49
30	05:20	06:28	07:37	07:46	14:26 (7)	08:57		09:28
	22:05	20:45	19:16	16:53	8 14:34 (7)	15:52		15:50
31	05:22	06:31		07:49				09:28
	22:03	20:42		16:51				15:51
Potential sun hours	546	478	386	319		236		199
Total, worst case					330		686	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April			May			June	
1	09:27			08:45		15:29 (8)	07:35		15:43 (13)	07:06			05:43		18:54 (37)	04:39	
	15:52			16:56	22	15:51 (8)	18:04	38	16:21 (13)	20:16			21:25	25	19:19 (37)	22:30	
2	09:27			08:43		15:29 (8)	07:32		15:44 (13)	07:04			05:41		18:56 (37)	04:38	
	15:54			16:58	23	15:52 (8)	18:07	36	16:20 (13)	20:19			21:28	20	19:16 (37)	22:32	
3	09:27			08:41		15:29 (8)	07:29		15:44 (13)	07:01		19:08 (37)	05:38		18:59 (37)	04:37	
	15:55			17:01	23	15:52 (8)	18:09	35	16:19 (13)	20:21	9	19:17 (37)	21:30	15	19:14 (37)	22:33	
4	09:26			08:39		15:29 (8)	07:27		15:45 (13)	06:58		19:03 (37)	05:36		19:04 (37)	04:36	
	15:57			17:03	24	15:53 (8)	18:11	33	16:18 (13)	20:23	18	19:21 (37)	21:32	5	19:09 (37)	22:35	
5	09:25			08:36		15:29 (8)	07:24		15:46 (13)	06:55		18:59 (37)	05:33			04:35	
	15:58			17:06	23	15:52 (8)	18:14	32	16:18 (13)	20:25	24	19:23 (37)	21:35			22:36	
6	09:25			08:34		15:28 (8)	07:21		15:48 (13)	06:52		18:57 (37)	05:31			04:33	
	16:00			17:08	24	15:52 (8)	18:16	28	16:16 (13)	20:28	28	19:25 (37)	21:37			22:37	
7	09:24			08:32		15:29 (8)	07:18		15:49 (13)	06:49		18:55 (37)	05:29			04:32	
	16:01			17:10	24	15:53 (8)	18:19	25	16:14 (13)	20:30	31	19:26 (37)	21:39			22:39	
8	09:23			08:29		15:29 (8)	07:15		15:51 (13)	06:46		18:53 (37)	05:26			04:32	
	16:03			17:13	23	15:52 (8)	18:21	21	16:12 (13)	20:32	35	19:42 (26)	21:42			22:40	
9	09:22			08:27		15:31 (8)	07:13		15:54 (13)	06:43		18:52 (37)	05:24			04:31	
	16:05			17:15	21	15:52 (8)	18:23	15	16:09 (13)	20:35	54	19:59 (26)	21:44			22:41	
10	09:21			08:25		15:31 (8)	07:10			06:41		18:51 (37)	05:21			04:30	
	16:07			17:18	20	15:51 (8)	18:26			20:37	57	19:59 (26)	21:46			22:42	
11	09:20			08:22		15:32 (8)	07:07			06:38		18:49 (37)	05:19			04:29	
	16:09			17:20	18	15:50 (8)	18:28			20:39	60	19:59 (26)	21:48			22:43	
12	09:19			08:20		15:34 (8)	07:04			06:35		18:48 (37)	05:17			04:29	
	16:11			17:23	15	15:49 (8)	18:30			20:42	62	19:58 (26)	21:50			22:44	
13	09:18			08:17		15:36 (8)	07:01			06:32		18:48 (37)	05:15			04:28	
	16:12			17:25	22	16:09 (13)	18:33			20:44	64	19:59 (26)	21:53			22:45	
14	09:17			08:15		15:54 (13)	06:58			06:29		18:47 (37)	05:12			04:28	
	16:14			17:28	18	16:12 (13)	18:35			20:46	63	19:58 (26)	21:55			22:46	
15	09:15			08:12		15:52 (13)	06:55			06:27		18:46 (37)	05:10			04:27	
	16:17			17:30	22	16:14 (13)	18:37			20:48	63	19:57 (26)	21:57			22:47	
16	09:14			08:10		15:51 (13)	06:53		17:30 (32)	06:24		18:47 (37)	05:08			04:27	
	16:19			17:33	26	16:17 (13)	18:40	8	17:38 (32)	20:51	62	19:57 (26)	21:59			22:47	
17	09:13			08:07		15:49 (13)	06:50		17:27 (32)	06:21		18:46 (37)	05:06			04:27	
	16:21			17:35	29	16:18 (13)	18:42	13	17:40 (32)	20:53	60	19:55 (26)	22:01			22:48	
18	09:11			08:04		15:47 (13)	06:47		17:25 (32)	06:18		18:45 (37)	05:04			04:26	
	16:23			17:38	32	16:19 (13)	18:44	17	17:42 (32)	20:55	58	19:53 (26)	22:04			22:49	
19	09:10			08:02		15:46 (13)	06:44		17:23 (32)	06:15		18:46 (37)	05:02			04:26	
	16:25			17:40	33	16:19 (13)	18:46	19	17:42 (32)	20:58	53	19:52 (26)	22:06			22:49	
20	09:08			07:59		15:46 (13)	06:41		17:22 (32)	06:13		18:45 (37)	05:00			04:26	
	16:27			17:43	35	16:21 (13)	18:49	21	17:43 (32)	21:00	44	19:29 (37)	22:08			22:49	
21	09:06			07:57		15:45 (13)	06:38		17:21 (32)	06:10		18:45 (37)	04:58			04:26	
	16:30			17:45	36	16:21 (13)	18:51	22	17:43 (32)	21:02	43	19:28 (37)	22:10			22:50	
22	09:05			07:54		15:44 (13)	06:35		17:21 (32)	06:07		18:46 (37)	04:56			04:27	
	16:32			17:47	37	16:21 (13)	18:53	22	17:43 (32)	21:05	43	19:29 (37)	22:12			22:50	
23	09:03			07:51		15:44 (13)	06:32		17:20 (32)	06:05		18:46 (37)	04:54			04:27	
	16:34			17:50	38	16:22 (13)	18:56	22	17:42 (32)	21:07	41	19:27 (37)	22:14			22:50	
24	09:01			07:49		15:43 (13)	06:29		17:20 (32)	06:02		18:47 (37)	04:52			04:27	
	16:36			17:52	39	16:22 (13)	18:58	22	17:42 (32)	21:09	40	19:27 (37)	22:16			22:50	
25	08:59			07:46		15:44 (13)	06:27		17:20 (32)	05:59		18:47 (37)	04:50			04:28	
	16:39			17:55	38	16:22 (13)	19:00	21	17:41 (32)	21:12	39	19:26 (37)	22:18			22:50	
26	08:57			07:43		15:43 (13)	06:24		17:20 (32)	05:57		18:48 (37)	04:49			04:28	
	16:41			17:57	39	16:22 (13)	19:03	20	17:40 (32)	21:14	37	19:25 (37)	22:20			22:50	
27	08:55		15:34 (8)	07:40		15:43 (13)	06:21		17:22 (32)	05:54		18:48 (37)	04:47			04:29	
	16:44	10	15:44 (8)	18:00	39	16:22 (13)	19:05	17	17:39 (32)	21:16	36	19:24 (37)	22:21			22:50	
28	08:54		15:33 (8)	07:38		15:43 (13)	06:18		17:24 (32)	05:51		18:50 (37)	04:45			04:29	
	16:46	13	15:46 (8)	18:02	38	16:21 (13)	19:07	13	17:37 (32)	21:19	33	19:23 (37)	22:23			22:49	
29	08:51		15:31 (8)				07:15		18:26 (32)	05:49		18:50 (37)	04:44			04:30	
	16:48	16	15:47 (8)				20:09	8	18:34 (32)	21:21	31	19:21 (37)	22:25			22:49	
30	08:49		15:31 (8)				07:12			05:46		18:52 (37)	04:42			04:31	
	16:51	18	15:49 (8)				20:12			21:23	28	19:20 (37)	22:27			22:49	
31	08:47		15:29 (8)				07:09						04:41				
	16:53	20	15:49 (8)				20:14						22:28				
Potential sun hours	221			260			365			432			521			547	
Total, worst case		77			781			508			1216			65			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August			September			October			November			December
1	04:32	05:24			06:33			18:48 (37)	07:39			07:51		15:00 (8)	08:59
	22:48	22:00			20:39	60		19:58 (26)	19:13			16:48	21	15:21 (8)	15:51
2	04:33	05:26			06:35			18:49 (37)	07:41			07:53		15:00 (8)	09:01
	22:47	21:58			20:36	57		19:57 (26)	19:10			16:46	22	15:22 (8)	15:50
3	04:34	05:28			06:37			18:49 (37)	07:43			07:56		14:59 (8)	09:03
	22:47	21:56			20:34	54		19:56 (26)	19:07			16:44	23	15:22 (8)	15:49
4	04:35	05:30			06:39			18:51 (37)	07:46		16:33 (13)	07:58		14:59 (8)	09:05
	22:46	21:53			20:31	35		19:40 (26)	19:04	11	16:44 (13)	16:41	23	15:22 (8)	15:48
5	04:36	05:33			06:42			18:52 (37)	07:48		16:29 (13)	08:01		14:59 (8)	09:07
	22:45	21:51			20:28	31		19:23 (37)	19:01	18	16:47 (13)	16:39	24	15:23 (8)	15:47
6	04:37	05:35			06:44			18:53 (37)	07:50		16:26 (13)	08:03		14:58 (8)	09:08
	22:44	21:49			20:25	28		19:21 (37)	18:58	24	16:50 (13)	16:36	24	15:22 (8)	15:46
7	04:38	05:37			06:46			18:54 (37)	07:52		16:24 (13)	08:05		14:59 (8)	09:10
	22:43	21:46			20:22	25		19:19 (37)	18:55	27	16:51 (13)	16:34	23	15:22 (8)	15:45
8	04:40	05:39			06:48			18:57 (37)	07:55		16:21 (13)	08:08		14:59 (8)	09:11
	22:42	21:44			20:19	18		19:15 (37)	18:53	30	16:51 (13)	16:32	23	15:22 (8)	15:44
9	04:41	05:41		19:10 (37)	06:50			19:00 (37)	07:57		16:21 (13)	08:10		14:59 (8)	09:13
	22:41	21:41	10	19:20 (37)	20:16	11		19:11 (37)	18:50	32	16:53 (13)	16:30	23	15:22 (8)	15:44
10	04:42	05:44		19:07 (37)	06:53				07:59		16:19 (13)	08:13		15:00 (8)	09:14
	22:40	21:39	17	19:24 (37)	20:13				18:47	34	16:53 (13)	16:27	21	15:21 (8)	15:43
11	04:44	05:46		19:04 (37)	06:55				08:02		16:18 (13)	08:15		15:01 (8)	09:16
	22:39	21:36	22	19:26 (37)	20:11				18:44	36	16:54 (13)	16:25	20	15:21 (8)	15:43
12	04:45	05:48		19:02 (37)	06:57				08:04		16:17 (13)	08:17		15:02 (8)	09:17
	22:37	21:34	26	19:28 (37)	20:08				18:41	37	16:54 (13)	16:23	19	15:21 (8)	15:42
13	04:47	05:50		19:00 (37)	06:59				08:06		16:16 (13)	08:20		15:03 (8)	09:18
	22:36	21:31	29	19:29 (37)	20:05				18:39	38	16:54 (13)	16:21	16	15:19 (8)	15:42
14	04:49	05:53		18:58 (37)	07:01			18:17 (32)	08:08		16:16 (13)	08:22		15:05 (8)	09:20
	22:35	21:28	32	19:30 (37)	20:02	7		18:24 (32)	18:36	38	16:54 (13)	16:19	13	15:18 (8)	15:42
15	04:50	05:55		18:57 (37)	07:04			18:13 (32)	08:11		16:15 (13)	08:24		15:07 (8)	09:21
	22:33	21:26	34	19:31 (37)	19:59	13		18:26 (32)	18:33	39	16:54 (13)	16:17	10	15:17 (8)	15:42
16	04:52	05:57		18:56 (37)	07:06			18:11 (32)	08:13		16:15 (13)	08:27			09:22
	22:32	21:23	36	19:32 (37)	19:56	16		18:27 (32)	18:30	39	16:54 (13)	16:15			15:42
17	04:54	05:59		18:54 (37)	07:08			18:09 (32)	08:15		16:15 (13)	08:29			09:23
	22:30	21:21	38	19:32 (37)	19:53	19		18:28 (32)	18:28	38	16:53 (13)	16:13			15:42
18	04:56	06:01		18:53 (37)	07:10			18:08 (32)	08:18		16:15 (13)	08:31			09:24
	22:28	21:18	40	19:33 (37)	19:50	20		18:28 (32)	18:25	39	16:54 (13)	16:11			15:42
19	04:57	06:04		18:52 (37)	07:12			18:08 (32)	08:20		16:15 (13)	08:34			09:24
	22:27	21:15	41	19:33 (37)	19:47	21		18:29 (32)	18:22	38	16:53 (13)	16:09			15:42
20	04:59	06:06		18:51 (37)	07:15			18:07 (32)	08:22		16:16 (13)	08:36			09:25
	22:25	21:13	42	19:33 (37)	19:44	22		18:29 (32)	18:19	36	16:52 (13)	16:07			15:42
21	05:01	06:08		18:50 (37)	07:17			18:06 (32)	08:25		16:16 (13)	08:38			09:26
	22:23	21:10	43	19:33 (37)	19:42	22		18:28 (32)	18:17	35	16:51 (13)	16:06			15:43
22	05:03	06:10		18:50 (37)	07:19			18:06 (32)	08:27		16:17 (13)	08:40			09:26
	22:21	21:07	43	19:33 (37)	19:39	22		18:28 (32)	18:14	34	16:51 (13)	16:04			15:43
23	05:05	06:13		18:49 (37)	07:21			18:06 (32)	08:29		16:17 (13)	08:43			09:27
	22:19	21:04	44	19:33 (37)	19:36	21		18:27 (32)	18:11	32	16:49 (13)	16:02			15:44
24	05:07	06:15		18:49 (37)	07:23			18:07 (32)	08:32		16:18 (13)	08:45			09:27
	22:17	21:02	54	19:55 (26)	19:33	19		18:26 (32)	18:09	31	16:49 (13)	16:01			15:44
25	05:09	06:17		18:49 (37)	07:26			18:07 (32)	07:34		15:18 (13)	08:47			09:28
	22:15	20:59	58	19:57 (26)	19:30	18		18:25 (32)	17:06	29	15:47 (13)	15:59			15:45
26	05:11	06:19		18:49 (37)	07:28			18:08 (32)	07:37		15:20 (13)	08:49			09:28
	22:13	20:56	60	19:58 (26)	19:27	15		18:23 (32)	17:04	25	15:45 (13)	15:57			15:46
27	05:13	06:22		18:48 (37)	07:30			18:09 (32)	07:39		15:22 (13)	08:51			09:28
	22:11	20:53	63	19:59 (26)	19:24	11		18:20 (32)	17:01	22	15:44 (13)	15:56			15:47
28	05:15	06:24		18:48 (37)	07:32				07:41		15:08 (8)	08:53			09:28
	22:09	20:51	63	19:59 (26)	19:21				16:58	22	15:41 (13)	15:55			15:48
29	05:17	06:26		18:48 (37)	07:34				07:44		15:05 (8)	08:55			09:28
	22:07	20:48	63	19:59 (26)	19:18				16:56	21	15:37 (13)	15:53			15:49
30	05:20	06:28		18:48 (37)	07:37				07:46		15:03 (8)	08:57			09:28
	22:05	20:45	63	19:59 (26)	19:16				16:53	16	15:19 (8)	15:52			15:50
31	05:22	06:30		18:48 (37)					07:49		15:01 (8)				09:28
	22:03	20:42	62	19:58 (26)					16:51	18	15:19 (8)				15:51
Potential sun hours	545	478			386			319				236			200
Total, worst case			983			565			839				305		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (23)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (23)
	15:53	39	13:36 (24)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (24)
2	09:28		12:01 (23)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (23)
	15:54	41	13:36 (24)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (24)
3	09:27		12:01 (23)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (23)
	15:55	41	13:36 (24)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (24)
4	09:27		12:01 (23)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (23)
	15:57	41	13:36 (24)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (24)
5	09:26		12:01 (23)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (23)
	15:58	43	13:37 (24)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (24)
6	09:25		12:02 (23)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (23)
	16:00	41	13:37 (24)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (24)
7	09:25		12:02 (23)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (23)
	16:02	41	13:37 (24)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (24)
8	09:24		12:02 (23)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (23)
	16:03	42	13:38 (24)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (24)
9	09:23		12:03 (23)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (23)
	16:05	41	13:38 (24)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (24)
10	09:22		12:03 (23)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (23)
	16:07	40	13:37 (24)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (24)
11	09:21		12:03 (23)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (23)
	16:09	41	13:38 (24)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (24)
12	09:20		12:03 (23)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (23)
	16:11	39	13:37 (24)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (24)
13	09:19		12:04 (23)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (23)
	16:13	37	13:37 (24)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (24)
14	09:17		12:04 (23)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (23)
	16:15	35	13:36 (24)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (24)
15	09:16		12:04 (23)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (23)	09:21		11:54 (23)
	16:17	32	13:35 (24)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (23)	15:42	38	13:27 (24)
16	09:15		12:04 (23)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (23)	09:22		11:55 (23)
	16:19	24	12:28 (23)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (23)	15:42	37	13:28 (24)
17	09:13		12:06 (23)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (23)	09:23		11:55 (23)
	16:21	24	12:30 (23)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (23)	15:42	37	13:28 (24)
18	09:12		12:06 (23)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (23)	09:24		11:56 (23)
	16:23	24	12:30 (23)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (23)	15:42	36	13:29 (24)
19	09:10		12:06 (23)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (23)	09:25		11:57 (23)
	16:25	24	12:30 (23)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (23)	15:42	36	13:29 (24)
20	09:09		12:07 (23)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (23)	09:26		11:58 (23)
	16:28	23	12:30 (23)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (23)	15:43	36	13:30 (24)
21	09:07		12:08 (23)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (23)	09:26		11:59 (23)
	16:30	21	12:29 (23)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (23)	15:43	35	13:31 (24)
22	09:05		12:09 (23)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (23)	09:27		11:58 (23)
	16:32	20	12:29 (23)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (23)	15:43	36	13:31 (24)
23	09:03		12:09 (23)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (23)	09:27		11:59 (23)
	16:34	19	12:28 (23)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (23)	15:44	36	13:31 (24)
24	09:02		12:10 (23)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (23)	09:28		12:00 (23)
	16:37	17	12:27 (23)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (23)	15:44	36	13:32 (24)
25	09:00		12:12 (23)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (23)	09:28		12:00 (23)
	16:39	15	12:27 (23)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (23)	15:45	37	13:33 (24)
26	08:58		12:14 (23)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (23)	09:28		12:00 (23)
	16:41	11	12:25 (23)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (23)	15:46	37	13:33 (24)
27	08:56		12:17 (23)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (23)	09:28		12:00 (23)
	16:44	4	12:21 (23)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (24)	15:47	38	13:33 (24)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (23)	09:29		12:01 (23)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (24)	15:48	37	13:34 (24)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (23)	09:28		12:00 (23)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (24)	15:49	38	13:34 (24)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (23)	09:28		12:01 (23)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (24)	15:50	39	13:35 (24)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (23)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (24)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November		December		
1	09:28		11:14 (23)	08:46		10:11 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (23)
	15:53	31	12:43 (24)	16:56	18	10:29 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (23)
2	09:28		11:14 (23)	08:44		10:11 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (23)
	15:54	30	12:43 (24)	16:58	17	10:28 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (23)
3	09:27		11:13 (23)	08:41		10:13 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (23)
	15:55	31	12:43 (24)	17:01	14	10:27 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (23)
4	09:27		11:13 (23)	08:39		10:14 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (23)
	15:57	30	12:43 (24)	17:03	11	10:25 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (23)
5	09:26		11:14 (23)	08:37		10:17 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (23)
	15:58	28	12:42 (24)	17:06	7	10:24 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (24)
6	09:25		11:14 (23)	08:35			07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		09:47 (28)		09:09		11:00 (23)
	16:00	28	12:42 (24)	17:08			18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	7	09:54 (28)		15:46	28	12:28 (24)
7	09:25		11:14 (23)	08:32			07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		09:45 (28)		09:10		11:01 (23)
	16:02	26	12:41 (24)	17:11			18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	11	09:56 (28)		15:45	29	12:30 (24)
8	09:24		11:14 (23)	08:30			07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		09:43 (28)		09:12		11:02 (23)
	16:03	21	11:35 (23)	17:13			18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	14	09:57 (28)		15:45	30	12:31 (24)
9	09:23		11:15 (23)	08:27			07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		09:42 (28)		09:14		11:03 (23)
	16:05	21	11:36 (23)	17:16			18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	17	09:59 (28)		15:44	30	12:32 (24)
10	09:22		11:15 (23)	08:25			07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		09:42 (28)		09:15		11:03 (23)
	16:07	21	11:36 (23)	17:18			18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	18	10:00 (28)		15:44	30	12:32 (24)
11	09:21		11:15 (23)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		09:41 (28)		09:16		11:04 (23)
	16:09	22	11:37 (23)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	19	10:00 (28)		15:43	30	12:33 (24)
12	09:20		11:15 (23)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		09:41 (28)		09:18		11:04 (23)
	16:11	22	11:37 (23)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	19	10:00 (28)		15:43	31	12:34 (24)
13	09:19		11:16 (23)	08:18			07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20		09:41 (28)		09:19		11:05 (23)
	16:13	22	11:38 (23)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	20	10:01 (28)		15:42	31	12:35 (24)
14	09:17		11:16 (23)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		09:42 (28)		09:20		11:06 (23)
	16:15	22	11:38 (23)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	19	10:01 (28)		15:42	30	12:35 (24)
15	09:16		11:16 (23)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		09:41 (28)		09:21		11:06 (23)
	16:17	22	11:38 (23)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	20	10:01 (28)		15:42	31	12:36 (24)
16	09:15		11:16 (23)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27		09:42 (28)		09:22		11:08 (23)
	16:19	22	11:38 (23)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	19	10:01 (28)		15:42	30	12:37 (24)
17	09:13		11:18 (23)	08:08			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		09:43 (28)		09:23		11:09 (23)
	16:21	21	11:39 (23)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	26	11:08 (23)		15:42	30	12:38 (24)
18	09:12		11:18 (23)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		09:43 (28)		09:24		11:08 (23)
	16:23	21	11:39 (23)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	29	11:10 (23)		15:42	30	12:37 (24)
19	09:10		10:13 (28)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34		09:44 (28)		09:25		11:09 (23)
	16:25	27	11:39 (23)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	31	11:12 (23)		15:42	29	12:38 (24)
20	09:09		10:12 (28)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		09:45 (28)		09:26		11:10 (23)
	16:28	30	11:39 (23)	17:43			18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	32	11:13 (23)		15:43	30	12:39 (24)
21	09:07		10:11 (28)	07:57			06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		09:46 (28)		09:26		11:11 (23)
	16:30	32	11:39 (23)	17:45			18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	32	11:14 (23)		15:43	29	12:40 (24)
22	09:05		10:10 (28)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		09:48 (28)		09:27		11:11 (23)
	16:32	32	11:38 (23)	17:48			18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04	29	11:15 (23)		15:43	29	12:40 (24)
23	09:03		10:09 (28)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		09:49 (28)		09:27		11:11 (23)
	16:34	31	11:37 (23)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	27	11:15 (23)		15:44	30	12:40 (24)
24	09:02		10:09 (28)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		10:55 (23)		09:28		11:12 (23)
	16:37	29	11:36 (23)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	21	11:16 (23)		15:45	30	12:41 (24)
25	09:00		10:09 (28)	07:46			06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		10:55 (23)		09:28		11:12 (23)
	16:39	26	11:34 (23)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	21	11:16 (23)		15:45	29	12:41 (24)
26	08:58		10:09 (28)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		10:55 (23)		09:28		11:13 (23)
	16:41	19	10:28 (28)	17:57			19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58	22	11:17 (23)		15:46	30	12:42 (24)
27	08:56		10:09 (28)	07:41			06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52		10:55 (23)		09:28		11:13 (23)
	16:44	20	10:29 (28)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	22	11:17 (23)		15:47	30	12:42 (24)
28	08:54		10:09 (28)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		10:56 (23)		09:29		11:13 (23)
	16:46	19	10:28 (28)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	22	11:18 (23)		15:48	31	12:43 (24)
29	08:52		10:09 (28)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		10:56 (23)		09:29		11:13 (23)
	16:49	20	10:29 (28)				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22	11:18 (23)		15:49	30	12:42 (24)
30	08:50		10:09 (28)				07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58		10:56 (23)		09:28		11:13 (23)
	16:51	19	10:28 (28)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	22	11:18 (23)		15:50	31	12:43 (24)
31	08:48		10:10 (28)				07:10		04:41		05:22	06:31		07:49					09:28		11:14 (23)
	16:54	19	10:29 (28)				20:14		22:29		22:03	20:43		16:51					15:51	30	12:43 (24)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236				199		
Total, worst case		764			67											541				888	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February	March	April	May	June	July	August	September	October	November	December
1	09:28	12:55 (12)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51	09:00 12:38 (12)
	15:52 16	13:11 (12)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48	15:51 20 12:58 (12)
2	09:27	12:55 (12)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54	09:01 12:39 (12)
	15:54 16	13:11 (12)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46	15:50 20 12:59 (12)
3	09:27	12:55 (12)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56	09:03 12:40 (12)
	15:55 17	13:12 (12)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49 20 13:00 (12)
4	09:26	12:55 (12)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58	09:05 12:40 (12)
	15:57 17	13:12 (12)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41	15:48 20 13:00 (12)
5	09:26	12:55 (12)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01	09:07 12:41 (12)
	15:58 18	13:13 (12)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39	15:47 19 13:00 (12)
6	09:25	12:55 (12)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03	09:09 12:41 (12)
	16:00 19	13:14 (12)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36	15:46 19 13:00 (12)
7	09:24	12:55 (12)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06	09:10 12:42 (12)
	16:01 20	13:15 (12)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34	15:45 18 13:00 (12)
8	09:24	12:56 (12)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08	09:12 12:43 (12)
	16:03 19	13:15 (12)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32	15:44 18 13:01 (12)
9	09:23	12:55 (12)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10	09:13 12:43 (12)
	16:05 20	13:15 (12)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44 17 13:00 (12)
10	09:22	12:56 (12)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	09:15 12:44 (12)
	16:07 20	13:16 (12)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27	15:43 17 13:01 (12)
11	09:21	12:57 (12)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:16 12:45 (12)
	16:09 20	13:17 (12)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25	15:43 16 13:01 (12)
12	09:19	12:57 (12)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	09:17 12:45 (12)
	16:11 20	13:17 (12)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	15:42 16 13:01 (12)
13	09:18	12:57 (12)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	09:19 12:46 (12)
	16:12 20	13:17 (12)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21	15:42 16 13:02 (12)
14	09:17	12:58 (12)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22	09:20 12:47 (12)
	16:14 20	13:18 (12)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19	15:42 14 13:01 (12)
15	09:16	12:58 (12)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	09:21 12:47 (12)
	16:17 20	13:18 (12)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17	15:42 14 13:01 (12)
16	09:14	12:58 (12)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	09:22 12:48 (12)
	16:19 20	13:18 (12)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15	15:42 13 13:01 (12)
17	09:13	12:59 (12)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	09:23 12:48 (12)
	16:21 19	13:18 (12)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13	15:42 14 13:02 (12)
18	09:11	12:59 (12)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	09:24 12:49 (12)
	16:23 19	13:18 (12)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11	15:42 13 13:02 (12)
19	09:10	13:01 (12)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34 12:41 (12)	09:25 12:50 (12)
	16:25 18	13:19 (12)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 9 12:50 (12)	15:42 13 13:03 (12)
20	09:08	13:02 (12)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36 12:39 (12)	09:25 12:51 (12)
	16:27 16	13:18 (12)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 12 12:51 (12)	15:42 12 13:03 (12)
21	09:07	13:02 (12)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38 12:38 (12)	09:26 12:51 (12)
	16:30 15	13:17 (12)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 15 12:53 (12)	15:43 12 13:03 (12)
22	09:05	13:04 (12)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41 12:38 (12)	09:27 12:52 (12)
	16:32 12	13:16 (12)	17:48	18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04 16 12:54 (12)	15:43 12 13:04 (12)
23	09:03	13:06 (12)	07:51	06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43 12:37 (12)	09:27 12:52 (12)
	16:34 9	13:15 (12)	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02 18 12:55 (12)	15:44 12 13:04 (12)
24	09:01		07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45 12:38 (12)	09:28 12:52 (12)
	16:37		17:52	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18 12:56 (12)	15:44 12 13:04 (12)
25	09:00		07:46	06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47 12:37 (12)	09:28 12:53 (12)
	16:39		17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 19 12:56 (12)	15:45 13 13:06 (12)
26	08:58		07:43	06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49 12:37 (12)	09:28 12:53 (12)
	16:41		17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 20 12:57 (12)	15:46 13 13:06 (12)
27	08:56		07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52 12:37 (12)	09:28 12:54 (12)
	16:44		18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 20 12:57 (12)	15:47 13 13:07 (12)
28	08:54		07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54 12:37 (12)	09:28 12:53 (12)
	16:46		18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55 20 12:57 (12)	15:48 14 13:07 (12)
29	08:52			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56 12:38 (12)	09:28 12:53 (12)
	16:48			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 20 12:58 (12)	15:49 15 13:08 (12)
30	08:50			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58 12:38 (12)	09:28 12:54 (12)
	16:51			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 20 12:58 (12)	15:50 15 13:09 (12)
31	08:48			07:09		04:41		05:22	06:31		07:49		09:28 12:54 (12)
	16:53			20:14		22:29		22:03	20:42		16:51		15:51 15 13:09 (12)
Potential sun hours	221		260	365	432	521	547	546	478	386	319	236	199
Total, worst case		410										207	475

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February			March	April	May	June	July	August	September	October			November			December
1	09:28		08:45		13:54 (26)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39			07:51		14:48 (12)	08:59
	15:52		16:56	19	14:13 (26)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13			16:48	19	15:07 (12)	15:51
2	09:27		08:43		13:56 (26)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41			07:53		14:49 (12)	09:01
	15:54		16:58	16	14:12 (26)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10			16:46	17	15:06 (12)	15:50
3	09:27		08:41		13:58 (26)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44			07:56		14:49 (12)	09:03
	15:55		17:01	12	14:10 (26)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07			16:44	15	15:04 (12)	15:49
4	09:26		08:39		14:02 (26)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46			07:58		14:52 (12)	09:05
	15:57		17:03	5	14:07 (26)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04			16:41	10	15:02 (12)	15:48
5	09:26		08:37			07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48			08:01		14:56 (12)	09:07
	15:58		17:06			18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01			16:39	2	14:58 (12)	15:47
6	09:25		08:34		15:25 (12)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50			08:03			09:08
	16:00		17:08	4	15:29 (12)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58			16:36			15:46
7	09:24		08:32		15:22 (12)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53			08:06		13:31 (26)	09:10
	16:01		17:11	11	15:33 (12)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56			16:34	7	13:38 (26)	15:45
8	09:23		08:30		15:20 (12)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55			08:08		13:28 (26)	09:12
	16:03		17:13	15	15:35 (12)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53			16:32	13	13:41 (26)	15:44
9	09:23		08:27		15:19 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57			08:10		13:27 (26)	09:13
	16:05		17:15	18	15:37 (12)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50			16:30	16	13:43 (26)	15:44
10	09:22		08:25		15:18 (12)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59			08:13		13:25 (26)	09:15
	16:07		17:18	19	15:37 (12)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47			16:27	19	13:44 (26)	15:43
11	09:20		08:22		15:17 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02			08:15		13:24 (26)	09:16
	16:09		17:20	21	15:38 (12)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44			16:25	21	13:45 (26)	15:43
12	09:19		08:20		15:17 (12)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04			08:17		13:24 (26)	09:17
	16:10		17:23	22	15:39 (12)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41			16:23	22	13:46 (26)	15:42
13	09:18	13:53 (26)	08:17		15:17 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06			08:20		13:23 (26)	09:19
	16:12	5 13:58 (26)	17:25	22	15:39 (12)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39			16:21	23	13:46 (26)	15:42
14	09:17	13:51 (26)	08:15		15:16 (12)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09			08:22		13:23 (26)	09:20
	16:14	9 14:00 (26)	17:28	23	15:39 (12)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36			16:19	24	13:47 (26)	15:42
15	09:16	13:50 (26)	08:12		15:17 (12)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11			08:25		11:07 (37)	09:21
	16:17	11 14:01 (26)	17:30	22	15:39 (12)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33			16:17	33	13:48 (26)	15:42
16	09:14	13:50 (26)	08:10		15:17 (12)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13			08:27		11:06 (37)	09:22
	16:19	17 14:07 (26)	17:33	22	15:39 (12)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30			16:15	36	13:48 (26)	15:42
17	09:13	13:49 (26)	08:07		15:17 (12)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16			08:29		11:04 (37)	09:23
	16:21	21 14:10 (26)	17:35	21	15:38 (12)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28			16:13	40	13:48 (26)	15:42
18	09:11	11:38 (37)	08:05		15:18 (12)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18			08:32		11:03 (37)	09:24
	16:23	27 14:11 (26)	17:38	19	15:37 (12)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25			16:11	42	13:49 (26)	15:42
19	09:10	11:35 (37)	08:02		15:20 (12)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20			08:34		11:03 (37)	09:25
	16:25	32 14:12 (26)	17:40	17	15:37 (12)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22			16:09	44	13:49 (26)	15:42
20	09:08	11:32 (37)	07:59		15:21 (12)	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23			08:36		11:02 (37)	09:25
	16:27	36 14:12 (26)	17:43	14	15:35 (12)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19			16:07	45	13:49 (26)	15:42
21	09:07	11:29 (37)	07:57		15:24 (12)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25		15:53 (12)	08:38		11:05 (37)	09:26
	16:30	42 14:13 (26)	17:45	8	15:32 (12)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17	10	16:03 (12)	16:06	42	13:49 (26)	15:43
22	09:05	11:27 (37)	07:54			06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27		15:51 (12)	08:41		11:08 (37)	09:27
	16:32	45 14:14 (26)	17:47			18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14	15	16:06 (12)	16:04	36	13:48 (26)	15:43
23	09:03	11:28 (37)	07:51			06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30		15:49 (12)	08:43		11:12 (37)	09:27
	16:34	44 14:14 (26)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	17	16:06 (12)	16:02	32	13:49 (26)	15:44
24	09:01	11:29 (37)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:23	08:32		15:48 (12)	08:45		11:16 (37)	09:27
	16:36	42 14:15 (26)	17:52			18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	19	16:07 (12)	16:01	28	13:49 (26)	15:44
25	08:59	11:31 (37)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		14:48 (12)	08:47		13:27 (26)	09:28
	16:39	40 14:15 (26)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	20	15:08 (12)	15:59	21	13:48 (26)	15:45
26	08:58	11:32 (37)	07:43			06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37		14:46 (12)	08:49		13:29 (26)	09:28
	16:41	37 14:15 (26)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	22	15:08 (12)	15:57	17	13:46 (26)	15:46
27	08:56	11:34 (37)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		14:46 (12)	08:51		13:29 (26)	09:28
	16:44	33 14:15 (26)	18:00			19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01	23	15:09 (12)	15:56	12	13:41 (26)	15:47
28	08:54	13:51 (26)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41		14:46 (12)	08:53		13:30 (26)	09:28
	16:46	24 14:15 (26)	18:02			19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	22	15:08 (12)	15:55	9	13:39 (26)	15:47
29	08:52	13:51 (26)				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44		14:46 (12)	08:55		13:35 (26)	09:28
	16:48	23 14:14 (26)				20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56	22	15:08 (12)	15:53	5	13:40 (26)	15:49
30	08:50	13:52 (26)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		14:47 (12)	08:57			09:28
	16:51	22 14:14 (26)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	21	15:08 (12)	15:52			15:50
31	08:48	13:54 (26)				07:09		04:41		05:22	06:31		07:49		14:47 (12)				09:28
	16:53	20 14:14 (26)				20:14		22:29		22:03	20:42		16:51	20	15:07 (12)				15:51
Potential sun hours	221		260			365	432	521	547	546	478	386	319			236			199
Total, worst case		530		330										211			650		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April		May		June
1	09:28		12:11 (32)	08:45		10:15 (13)	07:35		13:26 (26)	07:07		18:42 (17)	05:44		04:39
	15:52	47	14:26 (14)	16:56	119	15:37 (35)	18:04	35	17:05 (9)	20:16	19	19:01 (17)	21:26		22:30
2	09:27		12:11 (32)	08:43		12:16 (32)	07:32		15:45 (7)	07:04		18:43 (17)	05:41		04:38
	15:54	53	14:28 (14)	16:58	114	15:38 (35)	18:07	27	17:09 (9)	20:19	16	18:59 (17)	21:28		22:32
3	09:27		12:10 (32)	08:41		12:17 (32)	07:30		16:34 (12)	07:01		18:46 (17)	05:38		04:37
	15:55	58	14:29 (14)	17:01	113	15:38 (35)	18:09	33	17:12 (9)	20:21	11	18:57 (17)	21:30		22:33
4	09:26		12:10 (32)	08:39		09:39 (37)	07:27		16:31 (12)	06:58			05:36		04:36
	15:57	61	14:29 (14)	17:03	109	15:39 (35)	18:12	43	17:15 (9)	20:23			21:33		22:35
5	09:26		12:10 (32)	08:36		09:39 (37)	07:24		16:29 (12)	06:55			05:34		04:35
	15:58	64	14:30 (14)	17:06	105	15:39 (35)	18:14	46	17:15 (9)	20:26			21:35		22:36
6	09:25		12:09 (32)	08:34		09:40 (37)	07:21		16:26 (12)	06:52			05:31		04:34
	16:00	70	14:31 (14)	17:08	95	15:39 (35)	18:16	49	17:15 (9)	20:28			21:37		22:38
7	09:24		10:10 (13)	08:32		09:40 (37)	07:18		16:25 (12)	06:49			05:29		04:33
	16:01	78	14:32 (14)	17:11	96	15:39 (35)	18:19	50	17:15 (9)	20:30			21:39		22:39
8	09:23		10:10 (13)	08:30		09:38 (37)	07:15		16:23 (12)	06:46			05:26		04:32
	16:03	84	14:33 (14)	17:13	96	15:38 (35)	18:21	52	17:15 (9)	20:32			21:42		22:40
9	09:22		10:10 (13)	08:27		09:36 (37)	07:13		16:22 (12)	06:44			05:24		04:31
	16:05	86	14:33 (14)	17:16	98	15:38 (35)	18:23	53	17:15 (9)	20:35			21:44		22:41
10	09:21		10:11 (13)	08:25		09:33 (37)	07:10		16:20 (12)	06:41			05:21		04:30
	16:07	91	14:34 (14)	17:18	107	15:57 (7)	18:26	54	17:14 (9)	20:37			21:46		22:42
11	09:20		10:10 (13)	08:22		09:29 (37)	07:07		16:19 (12)	06:38			05:19		04:29
	16:09	97	14:34 (14)	17:20	114	16:00 (7)	18:28	54	17:13 (9)	20:39			21:48		22:44
12	09:19		10:09 (13)	08:20		09:27 (37)	07:04		16:18 (12)	06:35			05:17		04:29
	16:11	102	14:35 (14)	17:23	118	16:03 (7)	18:30	54	17:12 (9)	20:42			21:51		22:44
13	09:18		10:09 (13)	08:17		09:24 (37)	07:01		16:18 (12)	06:32			05:15		04:28
	16:13	105	14:35 (14)	17:25	118	16:04 (7)	18:33	52	17:10 (9)	20:44			21:53		22:45
14	09:17		10:10 (13)	08:15		09:21 (37)	06:58		16:17 (12)	06:29			05:12		04:28
	16:15	107	14:36 (14)	17:28	114	16:05 (7)	18:35	51	17:08 (9)	20:46			21:55		22:46
15	09:16		10:10 (13)	08:12		09:18 (37)	06:56		16:17 (12)	06:27			05:10		04:27
	16:17	112	14:37 (14)	17:30	120	16:07 (7)	18:37	47	17:04 (9)	20:49			21:57		22:47
16	09:14		10:02 (13)	08:10		09:13 (37)	06:53		16:17 (12)	06:24			05:08		04:27
	16:19	119	14:37 (14)	17:33	125	16:08 (7)	18:40	46	17:03 (12)	20:51			21:59		22:48
17	09:13		10:02 (13)	08:07		09:13 (37)	06:50		16:17 (12)	06:21			05:06		04:27
	16:21	126	14:37 (14)	17:35	123	16:08 (7)	18:42	46	17:03 (12)	20:53			22:02		22:48
18	09:11		10:02 (13)	08:05		09:13 (37)	06:47		16:16 (12)	06:18			05:04		04:27
	16:23	127	14:37 (14)	17:38	121	16:08 (7)	18:44	46	17:02 (12)	20:56			22:04		22:49
19	09:10		10:02 (13)	08:02		09:15 (37)	06:44		16:16 (12)	06:16			05:02		04:26
	16:25	129	14:37 (14)	17:40	118	16:09 (7)	18:47	56	18:01 (17)	20:58			22:06		22:49
20	09:08		10:02 (13)	07:59		09:16 (37)	06:41		16:16 (12)	06:13			05:00		04:26
	16:27	130	14:37 (14)	17:43	114	16:09 (7)	18:49	60	18:03 (17)	21:00			22:08		22:50
21	09:07		10:03 (13)	07:57		09:17 (37)	06:38		16:16 (12)	06:10			04:58		04:27
	16:30	131	14:37 (14)	17:45	110	16:09 (7)	18:51	64	18:05 (17)	21:02			22:10		22:50
22	09:05		10:03 (13)	07:54		09:18 (37)	06:35		16:17 (12)	06:07			04:56		04:27
	16:32	129	14:36 (14)	17:48	104	16:08 (7)	18:54	63	18:05 (17)	21:05			22:12		22:50
23	09:03		10:04 (13)	07:51		09:20 (37)	06:32		16:17 (12)	06:05			04:54		04:27
	16:34	131	14:36 (14)	17:50	95	16:08 (7)	18:56	64	18:06 (17)	21:07			22:14		22:50
24	09:01		10:04 (13)	07:49		13:09 (26)	06:30		16:18 (12)	06:02			04:52		04:27
	16:37	128	14:35 (14)	17:52	77	16:08 (7)	18:58	64	18:06 (17)	21:09			22:16		22:50
25	08:59		10:05 (13)	07:46		13:11 (26)	06:27		16:18 (12)	05:59			04:50		04:28
	16:39	125	14:34 (14)	17:55	71	16:07 (7)	19:00	62	18:06 (17)	21:12			22:18		22:50
26	08:58		10:05 (13)	07:43		13:13 (26)	06:24		16:20 (12)	05:57			04:49		04:28
	16:41	124	15:28 (35)	17:57	66	16:06 (7)	19:03	61	18:07 (17)	21:14			22:20		22:50
27	08:56		10:06 (13)	07:41		13:16 (26)	06:21		16:22 (12)	05:54			04:47		04:29
	16:44	127	15:30 (35)	18:00	58	16:05 (7)	19:05	57	18:07 (17)	21:16			22:22		22:50
28	08:54		10:07 (13)	07:38		13:19 (26)	06:18		16:23 (12)	05:51			04:45		04:29
	16:46	130	15:33 (35)	18:02	49	16:04 (7)	19:07	54	18:06 (17)	21:19			22:23		22:50
29	08:52		10:08 (13)				07:15		17:26 (12)	05:49			04:44		04:30
	16:48	131	15:35 (35)				20:10	47	19:05 (17)	21:21			22:25		22:49
30	08:50		10:09 (13)				07:12		17:29 (12)	05:46			04:42		04:31
	16:51	129	15:36 (35)				20:12	38	19:04 (17)	21:23			22:27		22:49
31	08:47		10:12 (13)				07:09		18:41 (17)				04:41		
	16:53	126	15:37 (35)				20:14	22	19:03 (17)				22:29		
Potential sun hours	221			260			365			432			521		547
Total, worst case		3257			2867			1550			46				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October			November			December		
1	04:32	05:24	06:33			07:39		16:57 (12)	07:51		09:03 (37)	08:59		09:52 (13)
	22:48	22:01	20:39			19:13	53	17:50 (9)	16:49	107	15:26 (7)	15:51	96	14:16 (14)
2	04:33	05:26	06:35			07:41		16:58 (12)	07:53		09:06 (37)	09:01		09:53 (13)
	22:48	21:58	20:37			19:10	54	17:52 (9)	16:46	98	15:08 (35)	15:50	91	14:16 (14)
3	04:34	05:28	06:37			07:44		16:58 (12)	07:56		09:08 (37)	09:03		09:54 (13)
	22:47	21:56	20:34			19:07	54	17:52 (9)	16:44	96	15:08 (35)	15:49	88	14:17 (14)
4	04:35	05:30	06:39			07:46		16:58 (12)	07:58		09:10 (37)	09:05		09:54 (13)
	22:46	21:54	20:31			19:04	54	17:52 (9)	16:41	94	15:08 (35)	15:48	83	14:17 (14)
5	04:36	05:33	06:42			07:48		17:00 (12)	08:01		09:10 (37)	09:07		09:55 (13)
	22:45	21:51	20:28			19:01	52	17:52 (9)	16:39	95	15:09 (35)	15:47	77	14:17 (14)
6	04:37	05:35	06:44			07:50		17:00 (12)	08:03		09:10 (37)	09:08		09:57 (13)
	22:45	21:49	20:25			18:58	52	17:52 (9)	16:37	105	15:09 (35)	15:46	71	14:17 (14)
7	04:38	05:37	06:46			07:53		17:01 (12)	08:06		09:08 (37)	09:10		11:57 (32)
	22:44	21:46	20:22			18:56	50	17:51 (9)	16:34	111	15:09 (35)	15:45	64	14:17 (14)
8	04:40	05:39	06:48			07:55		17:03 (12)	08:08		11:48 (32)	09:12		11:57 (32)
	22:43	21:44	20:19			18:53	48	17:51 (9)	16:32	112	15:09 (35)	15:44	62	14:17 (14)
9	04:41	05:41	06:51		18:40 (17)	07:57		17:04 (12)	08:10		11:47 (32)	09:13		11:59 (32)
	22:41	21:41	20:16	10	18:50 (17)	18:50	46	17:50 (9)	16:30	113	15:09 (35)	15:44	57	14:17 (14)
10	04:42	05:44	06:53		18:37 (17)	07:59		17:06 (12)	08:13		09:45 (13)	09:15		12:00 (32)
	22:40	21:39	20:14	15	18:52 (17)	18:47	40	17:48 (9)	16:27	121	15:08 (35)	15:43	53	14:17 (14)
11	04:44	05:46	06:55		18:35 (17)	08:02		16:22 (7)	08:15		09:42 (13)	09:16		12:01 (32)
	22:39	21:36	20:11	19	18:54 (17)	18:44	36	17:45 (9)	16:25	127	15:08 (35)	15:43	47	14:16 (14)
12	04:45	05:48	06:57		18:34 (17)	08:04		16:18 (7)	08:17		09:41 (13)	09:17		12:03 (32)
	22:38	21:34	20:08	21	18:55 (17)	18:42	25	17:41 (9)	16:23	130	15:08 (35)	15:42	44	14:17 (14)
13	04:47	05:50	06:59		17:21 (12)	08:06		13:56 (26)	08:20		09:39 (13)	09:19		12:04 (32)
	22:36	21:31	20:05	37	18:55 (17)	18:39	42	17:38 (9)	16:21	131	15:06 (35)	15:42	39	14:17 (14)
14	04:49	05:53	07:02		17:17 (12)	08:09		13:50 (26)	08:22		09:39 (13)	09:20		12:07 (32)
	22:35	21:29	20:02	45	18:55 (17)	18:36	53	16:37 (7)	16:19	131	15:05 (35)	15:42	34	14:17 (14)
15	04:50	05:55	07:04		17:13 (12)	08:11		13:46 (26)	08:25		09:39 (13)	09:21		13:06 (26)
	22:33	21:26	19:59	52	18:55 (17)	18:33	62	16:37 (7)	16:17	128	15:03 (35)	15:42	26	14:16 (14)
16	04:52	05:57	07:06		17:11 (12)	08:13		13:44 (26)	08:27		09:39 (13)	09:22		13:08 (26)
	22:32	21:23	19:56	56	18:55 (17)	18:30	69	16:39 (7)	16:15	124	15:02 (35)	15:42	22	14:15 (14)
17	04:54	05:59	07:08		17:08 (12)	08:16		13:41 (26)	08:29		09:38 (13)	09:23		13:10 (26)
	22:30	21:21	19:53	59	18:54 (17)	18:28	75	16:39 (7)	16:13	125	14:07 (14)	15:42	18	14:15 (14)
18	04:56	06:02	07:10		17:07 (12)	08:18		09:55 (37)	08:32		09:38 (13)	09:24		13:12 (26)
	22:29	21:18	19:50	63	18:55 (17)	18:25	86	16:39 (7)	16:11	129	14:09 (14)	15:42	16	14:15 (14)
19	04:58	06:04	07:12		17:06 (12)	08:20		09:51 (37)	08:34		09:39 (13)	09:25		13:16 (3)
	22:27	21:15	19:47	63	18:54 (17)	18:22	98	16:39 (7)	16:09	131	14:11 (14)	15:42	11	14:15 (14)
20	04:59	06:06	07:15		17:04 (12)	08:23		09:49 (37)	08:36		09:38 (13)	09:25		13:16 (3)
	22:25	21:13	19:45	65	18:53 (17)	18:20	106	16:40 (7)	16:07	129	14:11 (14)	15:42	9	14:14 (14)
21	05:01	06:08	07:17		17:03 (12)	08:25		09:46 (37)	08:38		09:39 (13)	09:26		13:17 (3)
	22:23	21:10	19:42	64	18:51 (17)	18:17	113	16:39 (7)	16:06	131	14:13 (14)	15:43	9	14:15 (14)
22	05:03	06:11	07:19		17:01 (12)	08:27		09:45 (37)	08:41		09:38 (13)	09:26		13:18 (3)
	22:21	21:07	19:39	64	18:50 (17)	18:14	116	16:39 (7)	16:04	131	14:13 (14)	15:43	9	14:16 (14)
23	05:05	06:13	07:21		17:00 (12)	08:30		09:44 (37)	08:43		09:39 (13)	09:27		13:18 (3)
	22:19	21:05	19:36	62	18:48 (17)	18:12	119	16:38 (7)	16:02	128	14:14 (14)	15:44	9	14:16 (14)
24	05:07	06:15	07:24		17:00 (12)	08:32		09:43 (37)	08:45		09:39 (13)	09:27		13:18 (3)
	22:18	21:02	19:33	58	18:46 (17)	18:09	122	16:38 (7)	16:01	127	14:14 (14)	15:44	11	14:17 (14)
25	05:09	06:17	07:26		16:59 (12)	07:34		08:43 (37)	08:47		09:40 (13)	09:28		13:15 (26)
	22:16	20:59	19:30	46	17:45 (12)	17:06	123	15:38 (7)	15:59	124	14:15 (14)	15:45	14	14:17 (14)
26	05:11	06:19	07:28		16:58 (12)	07:37		08:44 (37)	08:49		09:40 (13)	09:28		13:14 (26)
	22:14	20:56	19:27	47	17:45 (12)	17:04	122	15:37 (7)	15:58	119	14:15 (14)	15:46	17	14:18 (14)
27	05:13	06:22	07:30		16:58 (12)	07:39		08:48 (37)	08:51		09:49 (13)	09:28		13:13 (26)
	22:11	20:53	19:24	46	17:44 (12)	17:01	118	15:36 (7)	15:56	112	14:16 (14)	15:47	20	14:19 (14)
28	05:15	06:24	07:32		16:58 (12)	07:41		08:51 (37)	08:53		09:49 (13)	09:28		13:12 (26)
	22:09	20:51	19:21	46	17:44 (12)	16:59	115	15:35 (7)	15:55	109	14:16 (14)	15:48	24	14:21 (14)
29	05:17	06:26	07:35		16:58 (12)	07:44		08:54 (37)	08:55		09:50 (13)	09:28		12:14 (32)
	22:07	20:48	19:19	50	17:48 (9)	16:56	119	15:34 (7)	15:53	106	14:16 (14)	15:49	31	14:23 (14)
30	05:20	06:28	07:37		16:57 (12)	07:46		08:57 (37)	08:57		09:50 (13)	09:28		12:13 (32)
	22:05	20:45	19:16	52	17:49 (9)	16:53	117	15:32 (7)	15:52	103	14:16 (14)	15:50	37	14:25 (14)
31	05:22	06:31				07:49		08:59 (37)				09:28		12:12 (32)
	22:03	20:42				16:51	115	15:29 (7)				15:51	41	14:25 (14)
Potential sun hours	546	478	386			319			236			199		
Total, worst case				1040			2454			3527			1230	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (1)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	1 20:40 (1)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (1)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	1 20:41 (1)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (1)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	1 20:40 (1)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (1)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	1 20:41 (1)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	2 20:42 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	2 20:42 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	2 20:42 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	2 20:43 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (1)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	2 20:43 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	2 20:43 (1)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	2 20:43 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	2 20:43 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	2 20:44 (1)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	2 20:44 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	2 20:44 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	2 20:44 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	2 20:44 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	1 20:44 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	2 20:45 (1)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	1 20:44 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case							34		1					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44		04:40		20:27 (1)	04:32	20:33 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25		22:30	8	20:35 (1)	22:48	15 20:48 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41		04:38		20:27 (1)	04:33	20:33 (1)	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28		22:31	11	20:38 (1)	22:47	15 20:48 (1)	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39		04:37		20:27 (1)	04:34	20:33 (1)	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30		22:33	12	20:39 (1)	22:47	15 20:48 (1)	21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36		04:36		20:27 (1)	04:35	20:33 (1)	05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32		22:34	12	20:39 (1)	22:46	14 20:47 (1)	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34		04:35		20:27 (1)	04:36	20:33 (1)	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35		22:36	13	20:40 (1)	22:45	14 20:47 (1)	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31		04:34		20:27 (1)	04:37	20:34 (1)	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37		22:37	13	20:40 (1)	22:44	13 20:47 (1)	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29		04:33		20:28 (1)	04:39	20:34 (1)	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39		22:38	14	20:42 (1)	22:43	12 20:46 (1)	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26		04:32		20:28 (1)	04:40	20:34 (1)	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41		22:40	14	20:42 (1)	22:42	12 20:46 (1)	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24		04:31		20:28 (1)	04:41	20:35 (1)	05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44		22:41	14	20:42 (1)	22:41	11 20:46 (1)	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22		04:30		20:29 (1)	04:43	20:35 (1)	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46		22:42	14	20:43 (1)	22:40	11 20:46 (1)	21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19		04:29		20:28 (1)	04:44	20:35 (1)	05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48		22:43	16	20:44 (1)	22:39	9 20:44 (1)	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17		04:29		20:29 (1)	04:46	20:35 (1)	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50		22:44	16	20:45 (1)	22:37	4 20:39 (1)	21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15		04:28		20:29 (1)	04:47	20:35 (1)	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53		22:45	16	20:45 (1)	22:36	3 20:38 (1)	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12		04:28		20:29 (1)	04:49	20:35 (1)	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55		22:46	17	20:46 (1)	22:34	2 20:37 (1)	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10		04:27		20:30 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57		22:47	17	20:47 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08		04:27		20:30 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59		22:47	17	20:47 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06		04:27		20:30 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01		22:48	18	20:48 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04		04:27		20:31 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03		22:48	17	20:48 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02		04:27		20:31 (1)	04:58		06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05		22:49	18	20:49 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00		04:27		20:31 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07		22:49	18	20:49 (1)	22:25		21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58		04:27		20:31 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10		22:49	18	20:49 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56		04:27		20:31 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12		22:50	18	20:49 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54		04:27		20:31 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14		22:50	18	20:49 (1)	22:19		21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52		04:27		20:32 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15		22:50	17	20:49 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51		04:28		20:32 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17		22:50	17	20:49 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49		04:28		20:32 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19		22:50	18	20:50 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47		04:29		20:32 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21		22:49	17	20:49 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46		04:30		20:32 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23		22:49	17	20:49 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44		04:30		20:33 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25		22:49	17	20:50 (1)	22:07		20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42	20:27 (1)	04:31		20:32 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	2 20:29 (1)	22:48	17	20:49 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41	20:27 (1)				05:22		06:31		07:48		09:27
	16:53		20:14		22:28	3 20:30 (1)				22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521		547			545		478	386	319	236	200
Total, worst case						5		469			150					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42	04:39	04:33	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:46	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34	04:35	04:37	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:03	09:08
	16:00	17:09	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:23	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44	22:41	22:41	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:19	08:20	07:04	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55	22:46	22:35	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57	22:47	22:33	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:13	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06	04:27	04:54	06:00	07:08	08:16	08:29	09:23
	16:21	17:36	18:42	20:53	22:02	22:48	22:30	21:21	19:54	18:28	16:13	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56	04:27	05:04	06:11	07:19	08:27	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:03	15:44
24	09:01	07:49	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	08:45	09:27
	16:37	17:53	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	22:50	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48	04:29	05:14	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:23	22:50	22:09	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:14		22:29		22:03	20:43		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April			May			June		
1	09:28	08:46	07:35	07:07			05:44		07:31 (38)	04:40		06:17 (36)
	15:53	16:56	18:05	20:17			21:26	31	08:02 (38)	22:30	23	06:40 (36)
2	09:27	08:43	07:33	07:04			05:42		07:32 (38)	04:39		06:16 (36)
	15:54	16:59	18:07	20:19			21:28	29	08:01 (38)	22:32	24	06:40 (36)
3	09:27	08:41	07:30	07:01			05:39		07:32 (38)	04:37		06:16 (36)
	15:56	17:01	18:10	20:21			21:31	27	07:59 (38)	22:34	25	06:41 (36)
4	09:26	08:39	07:27	06:58			05:36		07:34 (38)	04:36		06:16 (36)
	15:57	17:04	18:12	20:24			21:33	24	07:58 (38)	22:35	26	06:42 (36)
5	09:26	08:37	07:24	06:55			05:34		07:36 (38)	04:35		06:16 (36)
	15:59	17:06	18:14	20:26			21:35	20	07:56 (38)	22:36	27	06:43 (36)
6	09:25	08:34	07:21	06:53			05:32		07:38 (38)	04:34		06:16 (36)
	16:00	17:09	18:17	20:28			21:37	16	07:54 (38)	22:38	27	06:43 (36)
7	09:24	08:32	07:19	06:50			05:29		07:40 (38)	04:33		06:16 (36)
	16:02	17:11	18:19	20:31			21:40	10	07:50 (38)	22:39	27	06:43 (36)
8	09:24	08:30	07:16	06:47			05:27			04:32		06:15 (36)
	16:04	17:14	18:21	20:33			21:42			22:40	29	06:44 (36)
9	09:23	08:27	07:13	06:44			05:24			04:31		06:16 (36)
	16:06	17:16	18:24	20:35			21:44			22:42	29	06:45 (36)
10	09:22	08:25	07:10	06:41		07:48 (38)	05:22			04:31		06:15 (36)
	16:07	17:18	18:26	20:37	10	07:58 (38)	21:46			22:43	30	06:45 (36)
11	09:21	08:23	07:07	06:38		07:45 (38)	05:20			04:30		06:16 (36)
	16:09	17:21	18:28	20:40	17	08:02 (38)	21:49			22:44	29	06:45 (36)
12	09:20	08:20	07:04	06:36		07:41 (38)	05:17			04:29		06:15 (36)
	16:11	17:23	18:31	20:42	22	08:03 (38)	21:51			22:45	30	06:45 (36)
13	09:18	08:18	07:02	06:33		07:37 (38)	05:15			04:29		06:16 (36)
	16:13	17:26	18:33	20:44	27	08:04 (38)	21:53			22:46	30	06:46 (36)
14	09:17	08:15	06:59	06:30		07:35 (38)	05:13			04:28		06:16 (36)
	16:15	17:28	18:35	20:47	30	08:05 (38)	21:55			22:46	30	06:46 (36)
15	09:16	08:13	06:56	06:27		07:34 (38)	05:11			04:28		06:15 (36)
	16:17	17:31	18:38	20:49	33	08:07 (38)	21:57			22:47	31	06:46 (36)
16	09:14	08:10	06:53	06:24		07:33 (38)	05:09			04:28		06:16 (36)
	16:19	17:33	18:40	20:51	34	08:07 (38)	22:00			22:48	30	06:46 (36)
17	09:13	08:07	06:50	06:22		07:32 (38)	05:06			04:27		06:16 (36)
	16:21	17:36	18:42	20:54	35	08:07 (38)	22:02			22:48	31	06:47 (36)
18	09:12	08:05	06:47	06:19		07:31 (38)	05:04			04:27		06:16 (36)
	16:24	17:38	18:45	20:56	37	08:08 (38)	22:04			22:49	31	06:47 (36)
19	09:10	08:02	06:44	06:16		07:30 (38)	05:02			04:27		06:16 (36)
	16:26	17:41	18:47	20:58	38	08:08 (38)	22:06			22:49	31	06:47 (36)
20	09:08	08:00	06:42	06:13		07:30 (38)	05:00			04:27		06:16 (36)
	16:28	17:43	18:49	21:00	39	08:09 (38)	22:08			22:50	31	06:47 (36)
21	09:07	07:57	06:39	06:11		07:30 (38)	04:58			04:27		06:16 (36)
	16:30	17:46	18:52	21:03	38	08:08 (38)	22:10			22:50	31	06:47 (36)
22	09:05	07:54	06:36	06:08		07:29 (38)	04:56			04:27		06:17 (36)
	16:32	17:48	18:54	21:05	39	08:08 (38)	22:12			22:50	31	06:48 (36)
23	09:03	07:52	06:33	06:05		07:29 (38)	04:55			04:28		06:17 (36)
	16:35	17:50	18:56	21:07	39	08:08 (38)	22:14			22:50	31	06:48 (36)
24	09:02	07:49	06:30	06:02		07:29 (38)	04:53			04:28		06:17 (36)
	16:37	17:53	18:58	21:10	38	08:07 (38)	22:16			22:50	31	06:48 (36)
25	09:00	07:46	06:27	06:00		07:29 (38)	04:51			04:28		06:18 (36)
	16:39	17:55	19:01	21:12	38	08:07 (38)	22:18			22:50	31	06:49 (36)
26	08:58	07:44	06:24	05:57		07:29 (38)	04:49		06:24 (36)	04:29		06:18 (36)
	16:42	17:58	19:03	21:14	37	08:06 (38)	22:20	8	06:32 (36)	22:50	31	06:49 (36)
27	08:56	07:41	06:21	05:54		07:29 (38)	04:48		06:21 (36)	04:29		06:19 (36)
	16:44	18:00	19:05	21:17	37	08:06 (38)	22:22	13	06:34 (36)	22:50	30	06:49 (36)
28	08:54	07:38	06:18	05:52		07:29 (38)	04:46		06:20 (36)	04:30		06:18 (36)
	16:47	18:02	19:08	21:19	36	08:05 (38)	22:24	16	06:36 (36)	22:50	31	06:49 (36)
29	08:52		07:16	05:49		07:30 (38)	04:44		06:19 (36)	04:31		06:19 (36)
	16:49		20:10	21:21	34	08:04 (38)	22:25	18	06:37 (36)	22:49	30	06:49 (36)
30	08:50		07:13	05:47		07:30 (38)	04:43		06:19 (36)	04:31		06:19 (36)
	16:51		20:12	21:24	33	08:03 (38)	22:27	20	06:39 (36)	22:49	30	06:49 (36)
31	08:48		07:10				04:41		06:17 (36)			
	16:54		20:14				22:29	22	06:39 (36)			
Potential sun hours	221	260	365	432			521			547		
Total, worst case					691			254			878	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October	November	December
1	04:32		06:20 (36)	05:24		06:33	07:44 (38)	07:39	07:51	09:00
	22:48	30	06:50 (36)	22:01		20:40	17 08:01 (38)	19:13	16:49	15:51
2	04:33		06:20 (36)	05:27		06:35	07:47 (38)	07:42	07:54	09:01
	22:48	30	06:50 (36)	21:58		20:37	10 07:57 (38)	19:10	16:47	15:50
3	04:34		06:20 (36)	05:29		06:38		07:44	07:56	09:03
	22:47	29	06:49 (36)	21:56		20:34		19:07	16:44	15:49
4	04:35		06:20 (36)	05:31		06:40		07:46	07:59	09:05
	22:46	29	06:49 (36)	21:54		20:31		19:05	16:42	15:48
5	04:36		06:21 (36)	05:33		06:42		07:48	08:01	09:07
	22:46	28	06:49 (36)	21:51		20:28		19:02	16:39	15:47
6	04:38		06:21 (36)	05:35	07:49 (38)	06:44		07:51	08:03	09:09
	22:45	28	06:49 (36)	21:49	13 08:02 (38)	20:25		18:59	16:37	15:47
7	04:39		06:23 (36)	05:38	07:46 (38)	06:47		07:53	08:06	09:10
	22:44	27	06:50 (36)	21:47	18 08:04 (38)	20:23		18:56	16:35	15:46
8	04:40		06:23 (36)	05:40	07:44 (38)	06:49		07:55	08:08	09:12
	22:43	26	06:49 (36)	21:44	22 08:06 (38)	20:20		18:53	16:32	15:45
9	04:42		06:23 (36)	05:42	07:43 (38)	06:51		07:57	08:11	09:13
	22:42	26	06:49 (36)	21:42	25 08:08 (38)	20:17		18:50	16:30	15:44
10	04:43		06:24 (36)	05:44	07:41 (38)	06:53		08:00	08:13	09:15
	22:40	24	06:48 (36)	21:39	28 08:09 (38)	20:14		18:48	16:28	15:44
11	04:45		06:25 (36)	05:46	07:40 (38)	06:55		08:02	08:15	09:16
	22:39	23	06:48 (36)	21:37	30 08:10 (38)	20:11		18:45	16:26	15:43
12	04:46		06:25 (36)	05:49	07:39 (38)	06:58		08:04	08:18	09:17
	22:38	23	06:48 (36)	21:34	32 08:11 (38)	20:08		18:42	16:24	15:43
13	04:48		06:26 (36)	05:51	07:38 (38)	07:00		08:07	08:20	09:19
	22:36	21	06:47 (36)	21:32	33 08:11 (38)	20:05		18:39	16:22	15:43
14	04:49		06:28 (36)	05:53	07:37 (38)	07:02		08:09	08:22	09:20
	22:35	18	06:46 (36)	21:29	35 08:12 (38)	20:02		18:36	16:19	15:43
15	04:51		06:28 (36)	05:55	07:36 (38)	07:04		08:11	08:25	09:21
	22:34	17	06:45 (36)	21:26	36 08:12 (38)	19:59		18:34	16:17	15:42
16	04:53		06:30 (36)	05:58	07:36 (38)	07:06		08:14	08:27	09:22
	22:32	14	06:44 (36)	21:24	37 08:13 (38)	19:57		18:31	16:15	15:42
17	04:54		06:31 (36)	06:00	07:35 (38)	07:09		08:16	08:29	09:23
	22:30	11	06:42 (36)	21:21	38 08:13 (38)	19:54		18:28	16:13	15:42
18	04:56		06:35 (36)	06:02	07:36 (38)	07:11		08:18	08:32	09:24
	22:29	5	06:40 (36)	21:18	38 08:14 (38)	19:51		18:25	16:12	15:42
19	04:58			06:04	07:35 (38)	07:13		08:21	08:34	09:25
	22:27			21:16	39 08:14 (38)	19:48		18:23	16:10	15:43
20	05:00			06:07	07:35 (38)	07:15		08:23	08:36	09:25
	22:25			21:13	38 08:13 (38)	19:45		18:20	16:08	15:43
21	05:02			06:09	07:34 (38)	07:17		08:25	08:39	09:26
	22:23			21:10	39 08:13 (38)	19:42		18:17	16:06	15:43
22	05:04			06:11	07:34 (38)	07:20		08:28	08:41	09:27
	22:22			21:08	39 08:13 (38)	19:39		18:15	16:04	15:44
23	05:06			06:13	07:34 (38)	07:22		08:30	08:43	09:27
	22:20			21:05	38 08:12 (38)	19:36		18:12	16:03	15:44
24	05:08			06:15	07:34 (38)	07:24		08:32	08:45	09:28
	22:18			21:02	37 08:11 (38)	19:33		18:09	16:01	15:45
25	05:10			06:18	07:34 (38)	07:26		07:35	08:47	09:28
	22:16			20:59	37 08:11 (38)	19:30		17:07	16:00	15:46
26	05:12			06:20	07:34 (38)	07:28		07:37	08:50	09:28
	22:14			20:57	36 08:10 (38)	19:28		17:04	15:58	15:46
27	05:14			06:22	07:35 (38)	07:31		07:39	08:52	09:28
	22:12			20:54	34 08:09 (38)	19:25		17:02	15:57	15:47
28	05:16			06:24	07:35 (38)	07:33		07:42	08:54	09:28
	22:10			20:51	32 08:07 (38)	19:22		16:59	15:55	15:48
29	05:18			06:27	07:36 (38)	07:35		07:44	08:56	09:28
	22:07			20:48	30 08:06 (38)	19:19		16:56	15:54	15:49
30	05:20			06:29	07:38 (38)	07:37		07:47	08:58	09:28
	22:05			20:45	27 08:05 (38)	19:16		16:54	15:53	15:50
31	05:22			06:31	07:41 (38)			07:49		09:28
	22:03			20:43	22 08:03 (38)			16:51		15:51
Potential sun hours	545			478		386		319	236	200
Total, worst case		409			833		27			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February		March		April		May			June			July			August		September		October		November		December
1	09:28		08:46		07:35		07:07		05:44			04:40		06:01 (38)	04:32		06:06 (38)	05:24		06:33		07:39		07:51		09:00
	15:53		16:56		18:05		20:17		21:26			22:30	34	06:35 (38)	22:48	37	06:43 (38)	22:01		20:40		19:13		16:49		15:52
2	09:27		08:43		07:33		07:04		05:42			04:39		06:01 (38)	04:33		06:07 (38)	05:27		06:35		07:42		07:54		09:01
	15:54		16:59		18:07		20:19		21:28			22:32	35	06:36 (38)	22:48	36	06:43 (38)	21:58		20:37		19:10		16:47		15:50
3	09:27		08:41		07:30		07:01		05:39			04:38		06:01 (38)	04:34		06:06 (38)	05:29		06:38		07:44		07:56		09:03
	15:56		17:01		18:10		20:21		21:30			22:33	35	06:36 (38)	22:47	37	06:43 (38)	21:56		20:34		19:07		16:44		15:49
4	09:26		08:39		07:27		06:58		05:37			04:36		06:00 (38)	04:35		06:06 (38)	05:31		06:40		07:46		07:59		09:05
	15:57		17:04		18:12		20:24		21:33			22:35	36	06:36 (38)	22:46	37	06:43 (38)	21:54		20:31		19:05		16:42		15:48
5	09:26		08:37		07:24		06:55		05:34			04:35		06:01 (38)	04:37		06:06 (38)	05:33		06:42		07:48		08:01		09:07
	15:59		17:06		18:14		20:26		21:35			22:36	36	06:37 (38)	22:46	37	06:43 (38)	21:51		20:28		19:02		16:39		15:47
6	09:25		08:34		07:21		06:53		05:32			04:34		06:01 (38)	04:38		06:08 (38)	05:35		06:44		07:51		08:03		09:09
	16:00		17:09		18:17		20:28		21:37			22:38	36	06:37 (38)	22:45	36	06:44 (38)	21:49		20:25		18:59		16:37		15:47
7	09:24		08:32		07:19		06:50		05:29			04:33		06:01 (38)	04:39		06:08 (38)	05:38		06:47		07:53		08:06		09:10
	16:02		17:11		18:19		20:31		21:40			22:39	36	06:37 (38)	22:44	36	06:44 (38)	21:47		20:23		18:56		16:35		15:46
8	09:24		08:30		07:16		06:47		05:27			04:32		06:01 (38)	04:40		06:08 (38)	05:40		06:49		07:55		08:08		09:12
	16:04		17:14		18:21		20:33		21:42			22:40	36	06:37 (38)	22:43	36	06:44 (38)	21:44		20:20		18:53		16:32		15:45
9	09:23		08:27		07:13		06:44		05:24			04:31		06:02 (38)	04:42		06:08 (38)	05:42		06:51		07:57		08:11		09:13
	16:06		17:16		18:24		20:35		21:44			22:41	36	06:38 (38)	22:42	36	06:44 (38)	21:42		20:17		18:50		16:30		15:44
10	09:22		08:25		07:10		06:41		05:22			04:31		06:01 (38)	04:43		06:08 (38)	05:44		06:53		08:00		08:13		09:15
	16:07		17:19		18:26		20:37		21:46			22:43	37	06:38 (38)	22:40	35	06:43 (38)	21:39		20:14		18:48		16:28		15:44
11	09:21		08:23		07:07		06:38		05:20			04:30		06:02 (38)	04:45		06:09 (38)	05:46		06:55		08:02		08:15		09:16
	16:09		17:21		18:28		20:40		21:49			22:44	37	06:39 (38)	22:39	35	06:44 (38)	21:37		20:11		18:45		16:26		15:43
12	09:20		08:20		07:04		06:36		05:17			04:29		06:02 (38)	04:46		06:09 (38)	05:49		06:58		08:04		08:18		09:17
	16:11		17:23		18:31		20:42		21:51			22:45	36	06:38 (38)	22:38	35	06:44 (38)	21:34		20:08		18:42		16:24		15:43
13	09:18		08:18		07:02		06:33		05:15			04:29		06:02 (38)	04:48		06:09 (38)	05:51		07:00		08:07		08:20		09:19
	16:13		17:26		18:33		20:44		21:53			22:46	37	06:39 (38)	22:36	34	06:43 (38)	21:31		20:05		18:39		16:22		15:43
14	09:17		08:15		06:59		06:30		05:13			04:28		06:03 (38)	04:49		06:10 (38)	05:53		07:02		08:09		08:22		09:20
	16:15		17:28		18:35		20:47		21:55			22:46	36	06:39 (38)	22:35	33	06:43 (38)	21:29		20:02		18:36		16:19		15:43
15	09:16		08:13		06:56		06:27		05:11			04:28		06:02 (38)	04:51		06:10 (38)	05:55		07:04		08:11		08:25		09:21
	16:17		17:31		18:38		20:49		21:57			22:47	37	06:39 (38)	22:34	33	06:43 (38)	21:26		19:59		18:34		16:17		15:42
16	09:14		08:10		06:53		06:24		05:09			04:28		06:02 (38)	04:53		06:11 (38)	05:58		07:06		08:14		08:27		09:22
	16:19		17:33		18:40		20:51		22:00			22:48	37	06:39 (38)	22:32	32	06:43 (38)	21:24		19:57		18:31		16:15		15:42
17	09:13		08:07		06:50		06:22		05:06		06:12 (38)	04:27		06:03 (38)	04:54		06:11 (38)	06:00		07:09		08:16		08:29		09:23
	16:21		17:36		18:42		20:54		22:02	10	06:22 (38)	22:48	37	06:40 (38)	22:30	31	06:42 (38)	21:21		19:54		18:28		16:14		15:42
18	09:12		08:05		06:47		06:19		05:04		06:11 (38)	04:27		06:03 (38)	04:56		06:12 (38)	06:02		07:11		08:18		08:32		09:24
	16:24		17:38		18:45		20:56		22:04	14	06:25 (38)	22:49	37	06:40 (38)	22:29	30	06:42 (38)	21:18		19:51		18:25		16:12		15:42
19	09:10		08:02		06:44		06:16		05:02		06:09 (38)	04:27		06:03 (38)	04:58		06:13 (38)	06:04		07:13		08:20		08:34		09:25
	16:26		17:41		18:47		20:58		22:06	18	06:27 (38)	22:49	37	06:40 (38)	22:27	29	06:42 (38)	21:16		19:48		18:23		16:10		15:43
20	09:08		08:00		06:42		06:13		05:00		06:08 (38)	04:27		06:03 (38)	05:00		06:13 (38)	06:07		07:15		08:23		08:36		09:25
	16:28		17:43		18:49		21:00		22:08	20	06:28 (38)	22:50	37	06:40 (38)	22:25	28	06:41 (38)	21:13		19:45		18:20		16:08		15:43
21	09:07		07:57		06:39		06:11		04:58		06:06 (38)	04:27		06:03 (38)	05:02		06:14 (38)	06:09		07:17		08:25		08:39		09:26
	16:30		17:46		18:52		21:03		22:10	23	06:29 (38)	22:50	37	06:40 (38)	22:23	27	06:41 (38)	21:10		19:42		18:17		16:06		15:43
22	09:05		07:54		06:36		06:08		04:56		06:05 (38)	04:27		06:04 (38)	05:04		06:16 (38)	06:11		07:20		08:28		08:41		09:27
	16:32		17:48		18:54		21:05		22:12	25	06:30 (38)	22:50	37	06:41 (38)	22:22	24	06:40 (38)	21:08		19:39		18:15		16:04		15:44
23	09:03		07:52		06:33		06:05		04:55		06:03 (38)	04:28		06:04 (38)	05:06		06:17 (38)	06:13		07:22		08:30		08:43		09:27
	16:35		17:50		18:56		21:07		22:14	28	06:31 (38)	22:50	37	06:41 (38)	22:20	21	06:38 (38)	21:05		19:36		18:12		16:03		15:44
24	09:02		07:49		06:30		06:02		04:53		06:03 (38)	04:28		06:04 (38)	05:08		06:18 (38)	06:15		07:24		08:32		08:45		09:28
	16:37		17:53		18:58		21:10		22:16	29	06:32 (38)	22:50	37	06:41 (38)	22:18	19	06:37 (38)	21:02		19:33		18:09		16:01		15:45
25	09:00		07:46		06:27		06:00		04:51		06:02 (38)	04:28		06:05 (38)	05:10		06:20 (38)	06:18		07:26		07:35		08:47		09:28
	16:39		17:55		19:01		21:12		22:18	30	06:32 (38)	22:50	37	06:42 (38)	22:16	16	06:36 (38)	20:59		19:30		17:07		16:00		15:46
26	08:58		07:44		06:24		05:57		04:49		06:02 (38)	04:29		06:05 (38)	05:12		06:22 (38)	06:20		07:28		07:37		08:49		09:28
	16:42		17:58		19:03		21:14		22:20	31	06:33 (38)	22:50	36	06:41 (38)	22:14	12	06:34 (38)	20:57		19:28		17:04		15:58		15:46
27	08:56		07:41		06:21		05:54		04:48		06:01 (38)	04:29		06:05 (38)	05:14		06:25 (38)	06:22		07:31		07:39		08:52		09:28
	16:44		18:00		19:05		21:17		22:22	32	06:33 (38)	22:50	37	06:42 (38)	22:12	6	06:31 (38)	20:54		19:25		17:02		15:57		15:47
28	08:54		07:38		06:18		05:52		04:46		06:01 (38)	04:30		06:05 (38)	05:16			06:24		07:33		07:42		08:54		09:28
	16:47		18:02		19:08		21:19		22:24	33	06:34 (38)	22:50	37	06:42 (38)	22:10			20:51		19:22		16:59		15:55		15:48
29	08:52				07:16		05:49		04:44		06:01 (38)	04:31		06:05 (38)	05:18			06:27		07:35		07:44		08:56		09:28
	16:49				20:10		21:21		22:25	34	06:35 (38)	22:49	37	06:42 (38)	22:07			20:48		19:19		16:56		15:54		15:49
30	08:50				07:13		05:47		04:43		06:01 (38)	04:32		06:06 (38)	05:20			06:29		07:37		07:47		08:58		09:28
	16:51				20:12		21:24		22:27	34	06:35 (38)	22:49	37	06:43 (38)	22:05			20:45		19:16		16:54		15:53		15:50
31	08:48				07:10				04:41		06:01 (38)				05:22			06:31				07:49				09:28
	16:54				20:14				22:29	34	06:35 (38)				22:03			20:43				16:51				15:51
Potential sun hours	221		260		365		432		521			547			545			478		386		319		236		200
Total, worst case										395			1094			808										

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44		04:40		06:18 (38)	04:32	06:18 (38)	05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26		22:30	28	06:46 (38)	22:48	33	06:51 (38)	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		04:39		06:18 (38)	04:33		06:19 (38)	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28		22:32	28	06:46 (38)	22:48	33	06:52 (38)	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39		04:38		06:17 (38)	04:34		06:18 (38)	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:31		22:33	29	06:46 (38)	22:47	33	06:51 (38)	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37		04:36		06:16 (38)	04:35		06:18 (38)	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33		22:35	30	06:46 (38)	22:46	33	06:51 (38)	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34		04:35		06:16 (38)	04:37		06:19 (38)	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35		22:36	31	06:47 (38)	22:46	33	06:52 (38)	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32		04:34		06:15 (38)	04:38		06:21 (38)	05:35	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37		22:38	32	06:47 (38)	22:45	32	06:53 (38)	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29		04:33		06:14 (38)	04:39		06:22 (38)	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40		22:39	32	06:46 (38)	22:44	31	06:53 (38)	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27		04:32		06:13 (38)	04:40		06:23 (38)	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42		22:40	33	06:46 (38)	22:43	30	06:53 (38)	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24		04:31		06:14 (38)	04:42		06:24 (38)	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44		22:41	33	06:47 (38)	22:42	29	06:53 (38)	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22		04:31		06:13 (38)	04:43		06:25 (38)	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:37	21:46		22:43	33	06:46 (38)	22:40	28	06:53 (38)	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20		04:30		06:14 (38)	04:45		06:26 (38)	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49		22:44	33	06:47 (38)	22:39	28	06:54 (38)	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17		04:29		06:14 (38)	04:46		06:27 (38)	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51		22:45	32	06:46 (38)	22:38	27	06:54 (38)	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15		04:29		06:14 (38)	04:48		06:28 (38)	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53		22:46	33	06:47 (38)	22:36	26	06:54 (38)	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13		04:28		06:15 (38)	04:49		06:30 (38)	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55		22:46	32	06:47 (38)	22:35	24	06:54 (38)	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11		04:28		06:15 (38)	04:51		06:31 (38)	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57		22:47	32	06:47 (38)	22:34	23	06:54 (38)	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09		06:39 (38)	04:28	06:15 (38)	04:53		06:33 (38)	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	2	06:41 (38)	22:48	32	06:47 (38)	22:32	22	06:55 (38)	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06		06:37 (38)	04:27	06:15 (38)	04:54		06:33 (38)	06:00	07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02	4	06:41 (38)	22:48	32	06:47 (38)	22:30	21	06:54 (38)	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04		06:36 (38)	04:27	06:16 (38)	04:56		06:35 (38)	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	7	06:43 (38)	22:49	31	06:47 (38)	22:29	20	06:55 (38)	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02		06:35 (38)	04:27	06:16 (38)	04:58		06:37 (38)	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	8	06:43 (38)	22:49	31	06:47 (38)	22:27	18	06:55 (38)	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00		06:33 (38)	04:27	06:16 (38)	05:00		06:38 (38)	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	10	06:43 (38)	22:50	31	06:47 (38)	22:25	16	06:54 (38)	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58		06:31 (38)	04:27	06:16 (38)	05:02		06:39 (38)	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	12	06:43 (38)	22:50	31	06:47 (38)	22:23	15	06:54 (38)	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56		06:30 (38)	04:27	06:17 (38)	05:04		06:41 (38)	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	14	06:44 (38)	22:50	31	06:48 (38)	22:22	13	06:54 (38)	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55		06:29 (38)	04:28	06:17 (38)	05:06		06:42 (38)	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	15	06:44 (38)	22:50	31	06:48 (38)	22:20	11	06:53 (38)	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53		06:28 (38)	04:28	06:17 (38)	05:08		06:44 (38)	06:15	07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16	17	06:45 (38)	22:50	31	06:48 (38)	22:18	9	06:53 (38)	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51		06:26 (38)	04:28	06:18 (38)	05:10		06:45 (38)	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	19	06:45 (38)	22:50	31	06:49 (38)	22:16	8	06:53 (38)	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49		06:25 (38)	04:29	06:17 (38)	05:12		06:47 (38)	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	20	06:45 (38)	22:50	32	06:49 (38)	22:14	6	06:53 (38)	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48		06:23 (38)	04:29	06:18 (38)	05:14		06:49 (38)	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	22	06:45 (38)	22:50	32	06:50 (38)	22:12	3	06:52 (38)	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46		06:23 (38)	04:30	06:17 (38)	05:16		06:51 (38)	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24	22	06:45 (38)	22:50	32	06:49 (38)	22:10	1	06:52 (38)	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44		06:22 (38)	04:31	06:18 (38)	05:18			06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	24	06:46 (38)	22:49	32	06:50 (38)	22:07		20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43		06:21 (38)	04:32	06:18 (38)	05:20			06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	25	06:46 (38)	22:49	33	06:51 (38)	22:05		20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		06:19 (38)				05:22		06:31		07:49		09:28
	16:54		20:14		22:29	26	06:45 (38)				22:03		20:43		16:51		15:51
Potential sun hours	221	260	365	432	521			547			545		478	386	319	236	200
Total, worst case						247			944			606					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May		June		July		August		September	October	November	December
1	09:28	08:46	07:35	07:07	05:44		07:08 (38)	04:40	06:45 (38)	04:32	06:56 (38)	05:24	06:57 (38)	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26	1	07:09 (38)	22:30	32	07:17 (38)	22:48	23	07:19 (38)	22:01	33	07:30 (38)	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		07:06 (38)	04:39	06:46 (38)	04:33	06:56 (38)	05:27	06:59 (38)	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28	6	07:12 (38)	22:32	31	07:17 (38)	22:48	24	07:20 (38)	21:58	31	07:30 (38)	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39		07:04 (38)	04:38	06:46 (38)	04:34	06:55 (38)	05:29	07:01 (38)	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:31	9	07:13 (38)	22:33	31	07:17 (38)	22:47	25	07:20 (38)	21:56	28	07:29 (38)	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37		07:02 (38)	04:36	06:47 (38)	04:35	06:55 (38)	05:31	07:03 (38)	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	13	07:15 (38)	22:35	29	07:16 (38)	22:46	25	07:20 (38)	21:54	26	07:29 (38)	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34		07:00 (38)	04:35	06:48 (38)	04:37	06:54 (38)	05:33	07:05 (38)	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	16	07:16 (38)	22:36	29	07:17 (38)	22:46	27	07:21 (38)	21:51	23	07:28 (38)	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32		06:58 (38)	04:34	06:49 (38)	04:38	06:55 (38)	05:35	07:06 (38)	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37	19	07:17 (38)	22:38	27	07:16 (38)	22:45	28	07:23 (38)	21:49	21	07:27 (38)	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29		06:55 (38)	04:33	06:49 (38)	04:39	06:55 (38)	05:38	07:08 (38)	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22	07:17 (38)	22:39	27	07:16 (38)	22:44	28	07:23 (38)	21:47	18	07:26 (38)	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27		06:54 (38)	04:32	06:49 (38)	04:40	06:54 (38)	05:40	07:10 (38)	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42	24	07:18 (38)	22:40	26	07:15 (38)	22:43	30	07:24 (38)	21:44	15	07:25 (38)	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24		06:52 (38)	04:31	06:50 (38)	04:42	06:54 (38)	05:42	07:12 (38)	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44	27	07:19 (38)	22:42	26	07:16 (38)	22:42	30	07:24 (38)	21:42	12	07:24 (38)	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22		06:50 (38)	04:31	06:51 (38)	04:43	06:53 (38)	05:44	07:13 (38)	06:53	08:00	08:13	09:15
	16:07	17:18	18:26	20:37	21:46	29	07:19 (38)	22:43	24	07:15 (38)	22:40	31	07:24 (38)	21:39	9	07:22 (38)	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20		06:48 (38)	04:30	06:52 (38)	04:45	06:54 (38)	05:46	07:15 (38)	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49	32	07:20 (38)	22:44	23	07:15 (38)	22:39	32	07:26 (38)	21:37	5	07:20 (38)	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17		06:46 (38)	04:29	06:52 (38)	04:46	06:53 (38)	05:49		06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51	34	07:20 (38)	22:45	22	07:14 (38)	22:38	33	07:26 (38)	21:34			20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15		06:45 (38)	04:29	06:53 (38)	04:48	06:53 (38)	05:51		07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	35	07:20 (38)	22:46	21	07:14 (38)	22:36	33	07:26 (38)	21:32			20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13		06:43 (38)	04:28	06:53 (38)	04:49	06:53 (38)	05:53		07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55	37	07:20 (38)	22:46	22	07:15 (38)	22:35	34	07:27 (38)	21:29			20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11		06:41 (38)	04:28	06:53 (38)	04:51	06:52 (38)	05:55		07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57	39	07:20 (38)	22:47	21	07:14 (38)	22:34	35	07:27 (38)	21:26			19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09		06:41 (38)	04:28	06:54 (38)	04:53	06:52 (38)	05:58		07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	39	07:20 (38)	22:48	20	07:14 (38)	22:32	36	07:28 (38)	21:24			19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06		06:40 (38)	04:27	06:54 (38)	04:54	06:52 (38)	06:00		07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02	40	07:20 (38)	22:48	20	07:14 (38)	22:30	36	07:28 (38)	21:21			19:54	18:28	16:13	15:42
18	09:12	08:05	06:47	06:19	05:04		06:41 (38)	04:27	06:55 (38)	04:56	06:52 (38)	06:02		07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	40	07:21 (38)	22:49	19	07:14 (38)	22:29	37	07:29 (38)	21:18			19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02		06:41 (38)	04:27	06:55 (38)	04:58	06:52 (38)	06:04		07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	40	07:21 (38)	22:49	19	07:14 (38)	22:27	38	07:30 (38)	21:16			19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00		06:41 (38)	04:27	06:55 (38)	05:00	06:51 (38)	06:07		07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	39	07:20 (38)	22:50	19	07:14 (38)	22:25	38	07:29 (38)	21:13			19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58		06:41 (38)	04:27	06:55 (38)	05:02	06:51 (38)	06:09		07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	39	07:20 (38)	22:50	19	07:14 (38)	22:23	39	07:30 (38)	21:10			19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56		06:41 (38)	04:27	06:56 (38)	05:04	06:52 (38)	06:11		07:19	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	39	07:20 (38)	22:50	19	07:15 (38)	22:22	39	07:31 (38)	21:08			19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55		06:41 (38)	04:28	06:56 (38)	05:06	06:51 (38)	06:13		07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	39	07:20 (38)	22:50	19	07:15 (38)	22:20	39	07:30 (38)	21:05			19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53		06:42 (38)	04:28	06:56 (38)	05:08	06:51 (38)	06:15		07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16	38	07:20 (38)	22:50	19	07:15 (38)	22:18	40	07:31 (38)	21:02			19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51		06:42 (38)	04:28	06:57 (38)	05:10	06:51 (38)	06:18		07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	37	07:19 (38)	22:50	19	07:16 (38)	22:16	40	07:31 (38)	20:59			19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49		06:43 (38)	04:29	06:56 (38)	05:12	06:51 (38)	06:20		07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	37	07:20 (38)	22:50	20	07:16 (38)	22:14	40	07:31 (38)	20:57			19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48		06:43 (38)	04:29	06:56 (38)	05:14	06:52 (38)	06:22		07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	36	07:19 (38)	22:50	21	07:17 (38)	22:12	39	07:31 (38)	20:54			19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46		06:43 (38)	04:30	06:56 (38)	05:16	06:52 (38)	06:24		07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24	36	07:19 (38)	22:50	21	07:17 (38)	22:10	39	07:31 (38)	20:51			19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44		06:44 (38)	04:31	06:56 (38)	05:18	06:52 (38)	06:27		07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	35	07:19 (38)	22:49	21	07:17 (38)	22:07	38	07:30 (38)	20:48			19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43		06:45 (38)	04:32	06:56 (38)	05:20	06:54 (38)	06:29		07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	34	07:19 (38)	22:49	22	07:18 (38)	22:05	36	07:30 (38)	20:45			19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		06:44 (38)				05:22		06:55 (38)	06:31				07:49		09:28
	16:54		20:14		22:29	34	07:18 (38)				22:03	35	07:30 (38)	20:43				16:51		15:51
Potential sun hours	221	260	365	432	521			547		545		478		386	319	236	200
Total, worst case						945			688		1047		221				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March		April	May	June
1	09:28	08:46		07:35		08:22 (22)	07:07	05:44	04:40
	15:53	16:56		18:05	23	08:45 (22)	20:17	21:26	22:31
2	09:28	08:44		07:33		08:21 (22)	07:04	05:41	04:39
	15:54	16:59		18:07	24	08:45 (22)	20:19	21:28	22:32
3	09:27	08:41		07:30		08:21 (22)	07:01	05:39	04:37
	15:56	17:01		18:10	24	08:45 (22)	20:21	21:31	22:34
4	09:27	08:39		07:27		08:20 (22)	06:58	05:36	04:36
	15:57	17:04		18:12	25	08:45 (22)	20:24	21:33	22:35
5	09:26	08:37		07:24		08:20 (22)	06:55	05:34	04:35
	15:59	17:06		18:14	24	08:44 (22)	20:26	21:35	22:37
6	09:25	08:35		07:22		08:20 (22)	06:53	05:31	04:34
	16:00	17:09		18:17	24	08:44 (22)	20:28	21:38	22:38
7	09:25	08:32		07:19		08:20 (22)	06:50	05:29	04:33
	16:02	17:11		18:19	23	08:43 (22)	20:31	21:40	22:39
8	09:24	08:30		07:16		08:21 (22)	06:47	05:27	04:32
	16:04	17:13		18:21	20	08:41 (22)	20:33	21:42	22:41
9	09:23	08:28	09:21 (2)	07:13		08:22 (22)	06:44	05:24	04:31
	16:05	17:16	2 09:23 (2)	18:24	19	08:41 (22)	20:35	21:44	22:42
10	09:22	08:25	09:18 (2)	07:10		08:24 (22)	06:41	05:22	04:30
	16:07	17:18	10 09:28 (2)	18:26	15	08:39 (22)	20:38	21:47	22:43
11	09:21	08:23	09:16 (2)	07:07		08:26 (22)	06:38	05:20	04:30
	16:09	17:21	13 09:29 (2)	18:28	10	08:36 (22)	20:40	21:49	22:44
12	09:20	08:20	09:14 (2)	07:05			06:36	05:17	04:29
	16:11	17:23	16 09:30 (2)	18:31			20:42	21:51	22:45
13	09:19	08:18	09:13 (2)	07:02			06:33	05:15	04:29
	16:13	17:26	17 09:30 (2)	18:33			20:44	21:53	22:46
14	09:17	08:15	09:13 (2)	06:59		07:37 (24)	06:30	05:13	04:28
	16:15	17:28	19 09:32 (2)	18:35	4	07:41 (24)	20:47	21:55	22:47
15	09:16	08:13	09:13 (2)	06:56		07:33 (24)	06:27	05:11	04:28
	16:17	17:31	19 09:32 (2)	18:38	11	07:44 (24)	20:49	21:58	22:47
16	09:15	08:10	09:12 (2)	06:53		07:31 (24)	06:24	05:08	04:27
	16:19	17:33	19 09:31 (2)	18:40	15	07:46 (24)	20:51	22:00	22:48
17	09:13	08:08	09:13 (2)	06:50		07:30 (24)	06:22	05:06	04:27
	16:21	17:36	19 09:32 (2)	18:42	16	07:46 (24)	20:54	22:02	22:49
18	09:12	08:05	09:13 (2)	06:47		07:29 (24)	06:19	05:04	04:27
	16:23	17:38	18 09:31 (2)	18:45	18	07:47 (24)	20:56	22:04	22:49
19	09:10	08:02	09:14 (2)	06:44		07:28 (24)	06:16	05:02	04:27
	16:26	17:41	16 09:30 (2)	18:47	19	07:47 (24)	20:58	22:06	22:50
20	09:09	08:00	09:14 (2)	06:42		07:27 (24)	06:13	05:00	04:27
	16:28	17:43	15 09:29 (2)	18:49	19	07:46 (24)	21:01	22:08	22:50
21	09:07	07:57	09:15 (2)	06:39		07:28 (24)	06:11	04:58	04:27
	16:30	17:46	12 09:27 (2)	18:52	19	07:47 (24)	21:03	22:10	22:50
22	09:05	07:54	09:19 (2)	06:36		07:28 (24)	06:08	04:56	04:27
	16:32	17:48	6 09:25 (2)	18:54	18	07:46 (24)	21:05	22:12	22:50
23	09:04	07:52		06:33		07:28 (24)	06:05	04:54	04:27
	16:35	17:50		18:56	17	07:45 (24)	21:08	22:14	22:51
24	09:02	07:49	08:32 (22)	06:30		07:29 (24)	06:02	04:53	04:28
	16:37	17:53	3 08:35 (22)	18:59	14	07:43 (24)	21:10	22:16	22:51
25	09:00	07:46	08:28 (22)	06:27		07:31 (24)	06:00	04:51	04:28
	16:39	17:55	12 08:40 (22)	19:01	10	07:41 (24)	21:12	22:18	22:51
26	08:58	07:44	08:25 (22)	06:24			05:57	04:49	04:29
	16:42	17:58	16 08:41 (22)	19:03			21:14	22:20	22:50
27	08:56	07:41	08:23 (22)	06:21			05:54	04:47	04:29
	16:44	18:00	19 08:42 (22)	19:05			21:17	22:22	22:50
28	08:54	07:38	08:23 (22)	06:18			05:52	04:46	04:30
	16:46	18:02	21 08:44 (22)	19:08			21:19	22:24	22:50
29	08:52			07:16			05:49	04:44	04:31
	16:49			20:10			21:21	22:26	22:50
30	08:50			07:13			05:47	04:43	04:31
	16:51			20:12			21:24	22:27	22:49
31	08:48			07:10				04:41	
	16:54			20:15				22:29	
Potential sun hours	221	260		365			432	521	547
Total, worst case			272		411				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October			November			December
1	04:32	05:24	06:33			07:40			07:52		08:47 (2)	09:00
	22:49	22:01	20:40			19:13			16:49	9	08:56 (2)	15:51
2	04:33	05:26	06:35			07:42		09:06 (22)	07:54			09:02
	22:48	21:59	20:37			19:10	6	09:12 (22)	16:46			15:50
3	04:34	05:29	06:38			07:44		09:02 (22)	07:56			09:04
	22:47	21:56	20:34			19:07	13	09:15 (22)	16:44			15:49
4	04:35	05:31	06:40			07:46		09:00 (22)	07:59			09:05
	22:47	21:54	20:31			19:05	17	09:17 (22)	16:42			15:48
5	04:36	05:33	06:42			07:48		08:58 (22)	08:01			09:07
	22:46	21:52	20:28			19:02	20	09:18 (22)	16:39			15:47
6	04:38	05:35	06:44			07:51		08:57 (22)	08:04			09:09
	22:45	21:49	20:26			18:59	22	09:19 (22)	16:37			15:46
7	04:39	05:37	06:47			07:53		08:57 (22)	08:06			09:10
	22:44	21:47	20:23			18:56	23	09:20 (22)	16:35			15:46
8	04:40	05:40	06:49			07:55		08:55 (22)	08:08			09:12
	22:43	21:44	20:20			18:53	24	09:19 (22)	16:32			15:45
9	04:41	05:42	06:51			07:58		08:55 (22)	08:11			09:14
	22:42	21:42	20:17			18:50	24	09:19 (22)	16:30			15:44
10	04:43	05:44	06:53			08:00		08:55 (22)	08:13			09:15
	22:41	21:39	20:14			18:48	24	09:19 (22)	16:28			15:44
11	04:44	05:46	06:55			08:02		08:54 (22)	08:16			09:16
	22:39	21:37	20:11			18:45	25	09:19 (22)	16:26			15:43
12	04:46	05:49	06:58			08:04		08:55 (22)	08:18			09:18
	22:38	21:34	20:08			18:42	23	09:18 (22)	16:24			15:43
13	04:48	05:51	07:00			08:07		08:55 (22)	08:20			09:19
	22:37	21:32	20:05			18:39	22	09:17 (22)	16:21			15:43
14	04:49	05:53	07:02			08:09		08:55 (22)	08:23			09:20
	22:35	21:29	20:02			18:36	21	09:16 (22)	16:19			15:42
15	04:51	05:55	07:04			08:11		08:57 (22)	08:25			09:21
	22:34	21:26	20:00			18:34	18	09:15 (22)	16:17			15:42
16	04:53	05:58	07:06			08:14		08:58 (22)	08:27			09:22
	22:32	21:24	19:57			18:31	15	09:13 (22)	16:15			15:42
17	04:54	06:00	07:09			08:16		09:01 (22)	08:30			09:23
	22:31	21:21	19:54			18:28	10	09:11 (22)	16:13			15:42
18	04:56	06:02	07:11		08:19 (24)	08:18			08:32			09:24
	22:29	21:19	19:51	9	08:28 (24)	18:25			16:11			15:42
19	04:58	06:04	07:13		08:16 (24)	08:21			08:34			09:25
	22:27	21:16	19:48	13	08:29 (24)	18:23			16:10			15:43
20	05:00	06:06	07:15		08:14 (24)	08:23		09:48 (2)	08:37			09:26
	22:25	21:13	19:45	16	08:30 (24)	18:20	9	09:57 (2)	16:08			15:43
21	05:02	06:09	07:17		08:14 (24)	08:25		09:46 (2)	08:39			09:26
	22:24	21:10	19:42	17	08:31 (24)	18:17	13	09:59 (2)	16:06			15:43
22	05:04	06:11	07:20		08:13 (24)	08:28		09:44 (2)	08:41			09:27
	22:22	21:08	19:39	18	08:31 (24)	18:15	16	10:00 (2)	16:04			15:44
23	05:06	06:13	07:22		08:12 (24)	08:30		09:44 (2)	08:43			09:27
	22:20	21:05	19:36	19	08:31 (24)	18:12	17	10:01 (2)	16:03			15:44
24	05:08	06:15	07:24		08:12 (24)	08:32		09:42 (2)	08:45			09:28
	22:18	21:02	19:33	19	08:31 (24)	18:09	19	10:01 (2)	16:01			15:45
25	05:10	06:18	07:26		08:11 (24)	07:35		08:42 (2)	08:48			09:28
	22:16	20:59	19:31	19	08:30 (24)	17:07	19	09:01 (2)	15:59			15:45
26	05:12	06:20	07:28		08:12 (24)	07:37		08:43 (2)	08:50			09:28
	22:14	20:57	19:28	17	08:29 (24)	17:04	19	09:02 (2)	15:58			15:46
27	05:14	06:22	07:31		08:13 (24)	07:40		08:42 (2)	08:52			09:28
	22:12	20:54	19:25	15	08:28 (24)	17:02	19	09:01 (2)	15:57			15:47
28	05:16	06:24	07:33		08:14 (24)	07:42		08:43 (2)	08:54			09:29
	22:10	20:51	19:22	12	08:26 (24)	16:59	18	09:01 (2)	15:55			15:48
29	05:18	06:27	07:35		08:15 (24)	07:44		08:44 (2)	08:56			09:29
	22:08	20:48	19:19	8	08:23 (24)	16:56	17	09:01 (2)	15:54			15:49
30	05:20	06:29	07:37			07:47		08:44 (2)	08:58			09:28
	22:05	20:45	19:16			16:54	15	08:59 (2)	15:53			15:50
31	05:22	06:31				07:49		08:45 (2)				09:28
	22:03	20:43				16:51	13	08:58 (2)				15:51
Potential sun hours	545	478	386			319			236			200
Total, worst case				182			501			9		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
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13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
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14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
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15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:06	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February			March			April	May	June	July	August	September			October			November	December
1	09:28	08:46			07:35		08:24 (22)	07:07	05:44	04:40	04:32	05:24	06:33			07:40			07:52	09:00
	15:53	16:56			18:05	23	08:47 (22)	20:17	21:26	22:31	22:49	22:01	20:40			19:13			16:49	15:51
2	09:28	08:44			07:33		08:23 (22)	07:04	05:41	04:39	04:33	05:26	06:35			07:42			07:54	09:02
	15:54	16:59			18:07	24	08:47 (22)	20:19	21:28	22:32	22:48	21:59	20:37			19:10			16:46	15:50
3	09:27	08:41			07:30		08:23 (22)	07:01	05:39	04:37	04:34	05:29	06:38			07:44			07:56	09:04
	15:56	17:01			18:10	24	08:47 (22)	20:21	21:31	22:34	22:47	21:56	20:34			19:07			16:44	15:49
4	09:27	08:39			07:27		08:23 (22)	06:58	05:36	04:36	04:35	05:31	06:40			07:46		09:05 (22)	07:59	09:05
	15:57	17:04			18:12	23	08:46 (22)	20:24	21:33	22:35	22:47	21:54	20:31			19:05	11	09:16 (22)	16:42	15:48
5	09:26	08:37			07:24		08:23 (22)	06:55	05:34	04:35	04:36	05:33	06:42			07:48		09:02 (22)	08:01	09:07
	15:59	17:06			18:14	22	08:45 (22)	20:26	21:35	22:37	22:46	21:52	20:28			19:02	16	09:18 (22)	16:39	15:47
6	09:25	08:35			07:22		08:23 (22)	06:53	05:31	04:34	04:38	05:35	06:44			07:51		09:00 (22)	08:04	09:09
	16:00	17:09			18:17	22	08:45 (22)	20:28	21:38	22:38	22:45	21:49	20:26			18:59	19	09:19 (22)	16:37	15:46
7	09:25	08:32			07:19		08:24 (22)	06:50	05:29	04:33	04:39	05:37	06:47			07:53		09:00 (22)	08:06	09:10
	16:02	17:11			18:19	19	08:43 (22)	20:31	21:40	22:39	22:44	21:47	20:23			18:56	20	09:20 (22)	16:35	15:46
8	09:24	08:30			07:16		08:24 (22)	06:47	05:27	04:32	04:40	05:40	06:49			07:55		08:58 (22)	08:08	09:12
	16:04	17:13			18:21	18	08:42 (22)	20:33	21:42	22:41	22:43	21:44	20:20			18:53	23	09:21 (22)	16:32	15:45
9	09:23	08:28			07:13		08:27 (22)	06:44	05:24	04:31	04:41	05:42	06:51			07:58		08:57 (22)	08:11	09:14
	16:05	17:16			18:24	13	08:40 (22)	20:35	21:44	22:42	22:42	21:42	20:17			18:50	23	09:20 (22)	16:30	15:44
10	09:22	08:25			07:10		08:30 (22)	06:41	05:22	04:30	04:43	05:44	06:53			08:00		08:57 (22)	08:13	09:15
	16:07	17:18			18:26	7	08:37 (22)	20:38	21:47	22:43	22:41	21:39	20:14			18:48	24	09:21 (22)	16:28	15:44
11	09:21	08:23			07:07			06:38	05:20	04:30	04:44	05:46	06:55			08:02		08:57 (22)	08:16	09:16
	16:09	17:21			18:28			20:40	21:49	22:44	22:39	21:37	20:11			18:45	23	09:20 (22)	16:26	15:43
12	09:20	08:20			07:05			06:36	05:17	04:29	04:46	05:49	06:58			08:04		08:57 (22)	08:18	09:18
	16:11	17:23			18:31			20:42	21:51	22:45	22:38	21:34	20:08			18:42	24	09:21 (22)	16:24	15:43
13	09:19	08:18			07:02		07:40 (24)	06:33	05:15	04:29	04:48	05:51	07:00			08:07		08:57 (22)	08:20	09:19
	16:13	17:26			18:33	5	07:45 (24)	20:44	21:53	22:46	22:37	21:32	20:05			18:39	23	09:20 (22)	16:21	15:43
14	09:17	08:15			06:59		07:36 (24)	06:30	05:13	04:28	04:49	05:53	07:02			08:09		08:57 (22)	08:23	09:20
	16:15	17:28			18:35	11	07:47 (24)	20:47	21:55	22:47	22:35	21:29	20:02			18:36	21	09:18 (22)	16:19	15:42
15	09:16	08:13			06:56		07:34 (24)	06:27	05:11	04:28	04:51	05:55	07:04			08:11		08:58 (22)	08:25	09:21
	16:17	17:31			18:38	15	07:49 (24)	20:49	21:58	22:47	22:34	21:26	20:00			18:34	20	09:18 (22)	16:17	15:42
16	09:15	08:10			06:53		07:33 (24)	06:24	05:08	04:27	04:53	05:58	07:06			08:14		08:58 (22)	08:27	09:22
	16:19	17:33			18:40	16	07:49 (24)	20:51	22:00	22:48	22:32	21:24	19:57			18:31	18	09:16 (22)	16:15	15:42
17	09:13	08:08			06:50		07:32 (24)	06:22	05:06	04:27	04:54	06:00	07:09			08:16		09:00 (22)	08:30	09:23
	16:21	17:36			18:42	18	07:50 (24)	20:54	22:02	22:49	22:31	21:21	19:54			18:28	15	09:15 (22)	16:13	15:42
18	09:12	08:05			06:47		07:31 (24)	06:19	05:04	04:27	04:56	06:02	07:11			08:18		09:02 (22)	08:32	09:24
	16:23	17:38			18:45	19	07:50 (24)	20:56	22:04	22:49	22:29	21:19	19:51			18:25	10	09:12 (22)	16:11	15:42
19	09:10	08:02			06:44		07:31 (24)	06:16	05:02	04:27	04:58	06:04	07:13		08:22 (24)	08:21			08:34	09:25
	16:26	17:41			18:47	18	07:49 (24)	20:58	22:06	22:50	22:27	21:16	19:48	7	08:29 (24)	18:23			16:10	15:43
20	09:09	08:00			06:42		07:30 (24)	06:13	05:00	04:27	05:00	06:06	07:15		08:19 (24)	08:23			08:37	09:26
	16:28	17:43			18:49	19	07:49 (24)	21:01	22:08	22:50	22:25	21:13	19:45	12	08:31 (24)	18:20			16:08	15:43
21	09:07	07:57			06:39		07:32 (24)	06:11	04:58	04:27	05:02	06:09	07:17		08:18 (24)	08:25			08:39	09:26
	16:30	17:46			18:52	17	07:49 (24)	21:03	22:10	22:50	22:24	21:10	19:42	15	08:33 (24)	18:17			16:06	15:43
22	09:05	07:54			06:36		07:32 (24)	06:08	04:56	04:27	05:04	06:11	07:20		08:16 (24)	08:28			08:41	09:27
	16:32	17:48			18:54	15	07:47 (24)	21:05	22:12	22:50	22:22	21:08	19:39	17	08:33 (24)	18:15			16:04	15:44
23	09:04	07:52			06:33		07:33 (24)	06:05	04:54	04:27	05:06	06:13	07:22		08:15 (24)	08:30			08:43	09:27
	16:35	17:50			18:56	13	07:46 (24)	21:08	22:14	22:51	22:20	21:05	19:36	18	08:33 (24)	18:12			16:03	15:44
24	09:02	07:49		08:30 (22)	06:30		07:35 (24)	06:02	04:53	04:28	05:08	06:15	07:24		08:14 (24)	08:32			08:45	09:28
	16:37	17:53	12	08:42 (22)	18:59	8	07:43 (24)	21:10	22:16	22:51	22:18	21:02	19:33	19	08:33 (24)	18:09			16:01	15:45
25	09:00	07:46		08:28 (22)	06:27			06:00	04:51	04:28	05:10	06:18	07:26		08:14 (24)	07:35			08:48	09:28
	16:39	17:55	15	08:43 (22)	19:01			21:12	22:18	22:51	22:16	20:59	19:31	18	08:32 (24)	17:07			15:59	15:45
26	08:58	07:44		08:26 (22)	06:24			05:57	04:49	04:29	05:12	06:20	07:28		08:14 (24)	07:37			08:50	09:28
	16:42	17:58	19	08:45 (22)	19:03			21:14	22:20	22:50	22:14	20:57	19:28	19	08:33 (24)	17:04			15:58	15:46
27	08:56	07:41		08:25 (22)	06:21			05:54	04:47	04:29	05:14	06:22	07:31		08:14 (24)	07:40			08:52	09:28
	16:44	18:00	20	08:45 (22)	19:05			21:17	22:22	22:50	22:12	20:54	19:25	18	08:32 (24)	17:02			15:57	15:47
28	08:54	07:38		08:25 (22)	06:18			05:52	04:46	04:30	05:16	06:24	07:33		08:15 (24)	07:42			08:54	09:29
	16:46	18:02	22	08:47 (22)	19:08			21:19	22:24	22:50	22:10	20:51	19:22	15	08:30 (24)	16:59			15:55	15:48
29	08:52				07:16			05:49	04:44	04:31	05:18	06:27	07:35		08:15 (24)	07:44			08:56	09:29
	16:49				20:10			21:21	22:26	22:50	22:08	20:48	19:19	13	08:28 (24)	16:56			15:54	15:49
30	08:50				07:13			05:47	04:43	04:31	05:20	06:29	07:37		08:18 (24)	07:47			08:58	09:28
	16:51				20:12			21:24	22:27	22:49	22:05	20:45	19:16	8	08:26 (24)	16:54			15:53	15:50
31	08:48				07:10				04:41		05:22	06:31				07:49				09:28
	16:54				20:15				22:29		22:03	20:43				16:51				15:51
Potential sun hours	221	260			365			432	521	547	545	478	386			319			236	200
Total, worst case			88			369								179			290			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:52
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
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	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
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	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
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	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
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	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
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25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
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	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
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	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
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8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
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	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
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21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
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	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
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31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
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8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
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	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
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	16:13	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March	April	May	June	July	August	September	October		November	December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54	09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56	09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59	09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:49		08:01	09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39	15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:38	05:35	06:44	07:51		08:04	09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37	15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06	09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35	15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08	09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32	15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11	09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	15:44
10	09:22	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13	09:15
	16:07	17:18		18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28	15:44
11	09:21	08:23	09:07 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16	09:16
	16:09	17:21	7 09:14 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26	15:43
12	09:20	08:20	09:04 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18	09:18
	16:11	17:23	12 09:16 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24	15:43
13	09:19	08:18	09:03 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20	09:19
	16:13	17:26	16 09:19 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21	15:43
14	09:17	08:15	09:02 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23	09:20
	16:15	17:28	17 09:19 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19	15:42
15	09:16	08:13	09:01 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25	09:21
	16:17	17:31	19 09:20 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17	15:42
16	09:15	08:10	09:00 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27	09:22
	16:19	17:33	20 09:20 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15	15:42
17	09:13	08:08	09:01 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30	09:23
	16:21	17:36	20 09:21 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13	15:42
18	09:12	08:05	09:00 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:36 (22)	08:32	09:24
	16:23	17:38	21 09:21 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	10 09:46 (22)	16:11	15:42
19	09:10	08:02	09:00 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:34 (22)	08:34	09:25
	16:26	17:41	20 09:20 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	14 09:48 (22)	16:10	15:42
20	09:09	08:00	09:00 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:32 (22)	08:37	09:26
	16:28	17:43	19 09:19 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	17 09:49 (22)	16:08	15:43
21	09:07	07:57	09:01 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:32 (22)	08:39	09:26
	16:30	17:46	17 09:18 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:50 (22)	16:06	15:43
22	09:05	07:55	09:02 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:30 (22)	08:41	09:27
	16:32	17:48	16 09:18 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	20 09:50 (22)	16:04	15:44
23	09:04	07:52	09:04 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:30 (22)	08:43	09:27
	16:35	17:50	12 09:16 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:50 (22)	16:03	15:44
24	09:02	07:49	09:06 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:31 (22)	08:45	09:28
	16:37	17:53	7 09:13 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	20 09:51 (22)	16:01	15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:30 (22)	08:48	09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	20 08:50 (22)	15:59	15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:31 (22)	08:50	09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	19 08:50 (22)	15:58	15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:30 (22)	08:52	09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	19 08:49 (22)	15:57	15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:31 (22)	08:54	09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	17 08:48 (22)	15:55	15:48
29	08:52			07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:33 (22)	08:56	09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15 08:48 (22)	15:54	15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:34 (22)	08:58	09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	11 08:45 (22)	15:53	15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:37 (22)		09:28
	16:54			20:15		22:29		22:03	20:43		16:51	6 08:43 (22)		15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236	199
Total, worst case			223									226		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February			March			April		May		June		July		August		September		October			November			December
1	09:28		08:46		09:41 (22)	07:35		08:28 (24)	07:07		05:44		04:40		04:32		05:24		06:33		07:39			07:52		09:00 (22)	09:00
	15:53		16:56	3	09:44 (22)	18:05	19	08:47 (24)	20:17		21:26		22:31		22:49		22:01		20:40		19:13			16:49	24	09:24 (22)	15:51
2	09:28		08:44		09:37 (22)	07:33		08:27 (24)	07:04		05:41		04:39		04:33		05:26		06:35		07:42			07:54		09:01 (22)	09:02
	15:54		16:59	10	09:47 (22)	18:07	20	08:47 (24)	20:19		21:28		22:32		22:48		21:59		20:37		19:10			16:46	23	09:24 (22)	15:50
3	09:27		08:41		09:35 (22)	07:30		08:27 (24)	07:01		05:39		04:37		04:34		05:29		06:38		07:44			07:56		09:01 (22)	09:04
	15:56		17:01	15	09:50 (22)	18:10	20	08:47 (24)	20:21		21:31		22:34		22:47		21:56		20:34		19:07			16:44	23	09:24 (22)	15:49
4	09:27		08:39		09:34 (22)	07:27		08:27 (24)	06:58		05:36		04:36		04:35		05:31		06:40		07:46			07:59		09:02 (22)	09:05
	15:57		17:04	17	09:51 (22)	18:12	19	08:46 (24)	20:24		21:33		22:35		22:47		21:54		20:31		19:05			16:42	22	09:24 (22)	15:48
5	09:26		08:37		09:33 (22)	07:24		08:28 (24)	06:55		05:34		04:35		04:36		05:33		06:42		07:48		09:11 (24)	08:01		09:02 (22)	09:07
	15:59		17:06	20	09:53 (22)	18:14	17	08:45 (24)	20:26		21:35		22:37		22:46		21:52		20:28		19:02	3	09:14 (24)	16:39	21	09:23 (22)	15:47
6	09:25		08:35		09:32 (22)	07:22		08:28 (24)	06:53		05:31		04:34		04:37		05:35		06:44		07:51		09:06 (24)	08:04		09:03 (22)	09:09
	16:00		17:08	21	09:53 (22)	18:17	16	08:44 (24)	20:28		21:38		22:38		22:45		21:49		20:26		18:59	11	09:17 (24)	16:37	19	09:22 (22)	15:46
7	09:25		08:32		09:31 (22)	07:19		08:29 (24)	06:50		05:29		04:33		04:39		05:37		06:47		07:53		09:05 (24)	08:06		09:05 (22)	09:10
	16:02		17:11	22	09:53 (22)	18:19	13	08:42 (24)	20:31		21:40		22:39		22:44		21:47		20:23		18:56	15	09:20 (24)	16:35	17	09:22 (22)	15:46
8	09:24		08:30		09:32 (22)	07:16		08:31 (24)	06:47		05:27		04:32		04:40		05:40		06:49		07:55		09:03 (24)	08:08		09:05 (22)	09:12
	16:04		17:13	22	09:54 (22)	18:21	8	08:39 (24)	20:33		21:42		22:41		22:43		21:44		20:20		18:53	17	09:20 (24)	16:32	15	09:20 (22)	15:45
9	09:23		08:28		09:31 (22)	07:13			06:44		05:24		04:31		04:41		05:42		06:51		07:58		09:02 (24)	08:11		09:08 (22)	09:14
	16:05		17:16	23	09:54 (22)	18:24			20:35		21:44		22:42		22:42		21:42		20:17		18:50	18	09:20 (24)	16:30	10	09:18 (22)	15:44
10	09:22		08:25		09:32 (22)	07:10			06:41		05:22		04:30		04:43		05:44		06:53		08:00		09:02 (24)	08:13		09:13 (22)	09:15
	16:07		17:18	23	09:55 (22)	18:26			20:38		21:47		22:43		22:41		21:39		20:14		18:48	19	09:21 (24)	16:28	1	09:14 (22)	15:44
11	09:21		08:23		09:31 (22)	07:07			06:38		05:20		04:30		04:44		05:46		06:55		08:02		09:01 (24)	08:16			09:16
	16:09		17:21	24	09:55 (22)	18:28			20:40		21:49		22:44		22:39		21:37		20:11		18:45	20	09:21 (24)	16:26			15:43
12	09:20		08:20		09:31 (22)	07:05			06:36		05:17		04:29		04:46		05:49		06:58		08:04		09:01 (24)	08:18			09:18
	16:11		17:23	23	09:54 (22)	18:31			20:42		21:51		22:45		22:38		21:34		20:08		18:42	20	09:21 (24)	16:24			15:43
13	09:19		08:18		09:31 (22)	07:02			06:33		05:15		04:28		04:47		05:51		07:00		08:07		09:01 (24)	08:20			09:19
	16:13		17:26	23	09:54 (22)	18:33			20:44		21:53		22:46		22:37		21:32		20:05		18:39	19	09:20 (24)	16:21			15:43
14	09:17		08:15		09:33 (22)	06:59			06:30		05:13		04:28		04:49		05:53		07:02		08:09		09:01 (24)	08:23			09:20
	16:15		17:28	21	09:54 (22)	18:35			20:47		21:55		22:47		22:35		21:29		20:02		18:36	18	09:19 (24)	16:19			15:42
15	09:16		08:13		09:33 (22)	06:56			06:27		05:11		04:28		04:51		05:55		07:04		08:11		09:02 (24)	08:25			09:21
	16:17		17:31	20	09:53 (22)	18:38			20:49		21:58		22:47		22:34		21:26		20:00		18:34	16	09:18 (24)	16:17			15:42
16	09:15		08:10		09:34 (22)	06:53			06:24		05:08		04:27		04:53		05:57		07:06		08:14		09:03 (24)	08:27			09:22
	16:19		17:33	17	09:51 (22)	18:40			20:51		22:00		22:48		22:32		21:24		19:57		18:31	13	09:16 (24)	16:15			15:42
17	09:13		08:08		09:36 (22)	06:50			06:22		05:06		04:27		04:54		06:00		07:09		08:16		09:05 (24)	08:30			09:23
	16:21		17:36	14	09:50 (22)	18:42			20:54		22:02		22:49		22:31		21:21		19:54		18:28	10	09:15 (24)	16:13			15:42
18	09:12		08:05		09:39 (22)	06:47			06:19		05:04		04:27		04:56		06:02		07:11		08:18			08:32			09:24
	16:23		17:38	8	09:47 (22)	18:45			20:56		22:04		22:49		22:29		21:19		19:51		18:25			16:11			15:42
19	09:10		08:02			06:44			06:16		05:02		04:27		04:58		06:04		07:13		08:21			08:34			09:25
	16:26		17:41			18:47			20:58		22:06		22:50		22:27		21:16		19:48		18:23			16:10			15:42
20	09:09		08:00			06:42			06:13		05:00		04:27		05:00		06:06		07:15		08:23			08:37			09:26
	16:28		17:43			18:49			21:01		22:08		22:50		22:25		21:13		19:45		18:20			16:08			15:43
21	09:07		07:57			06:39			06:10		04:58		04:27		05:02		06:09		07:17		08:25			08:39			09:26
	16:30		17:45			18:52			21:03		22:10		22:50		22:24		21:10		19:42		18:17			16:06			15:43
22	09:05		07:54			06:36			06:08		04:56		04:27		05:04		06:11		07:20		08:28			08:41			09:27
	16:32		17:48			18:54			21:05		22:12		22:51		22:22		21:08		19:39		18:15			16:04			15:44
23	09:04		07:52			06:33			06:05		04:54		04:27		05:06		06:13		07:22		08:30			08:43			09:27
	16:35		17:50			18:56			21:08		22:14		22:51		22:20		21:05		19:36		18:12			16:03			15:44
24	09:02		07:49		08:36 (24)	06:30			06:02		04:53		04:28		05:08		06:15		07:24		08:32		10:07 (22)	08:45			09:28
	16:37		17:53	5	08:41 (24)	18:59			21:10		22:16		22:51		22:18		21:02		19:33		18:09	10	10:17 (22)	16:01			15:45
25	09:00		07:46		08:32 (24)	06:27			06:00		04:51		04:28		05:10		06:18		07:26		07:35		09:05 (22)	08:48			09:28
	16:39		17:55	12	08:44 (24)	19:01			21:12		22:18		22:51		22:16		20:59		19:30		17:07	15	09:20 (22)	15:59			15:45
26	08:58		07:44		08:30 (24)	06:24			05:57		04:49		04:29		05:12		06:20		07:28		07:37		09:04 (22)	08:50			09:28
	16:42		17:58	15	08:45 (24)	19:03			21:14		22:20		22:51		22:14		20:57		19:28		17:04	18	09:22 (22)	15:58			15:46
27	08:56		07:41		08:29 (24)	06:21			05:54		04:47		04:29		05:14		06:22		07:31		07:40		09:02 (22)	08:52			09:28
	16:44		18:00	17	08:46 (24)	19:05			21:17		22:22		22:50		22:12		20:54		19:25		17:02	20	09:22 (22)	15:56			15:47
28	08:54		07:38		08:29 (24)	06:18			05:52		04:46		04:30		05:16		06:24		07:33		07:42		09:02 (22)	08:54			09:29
	16:46		18:02	18	08:47 (24)	19:08			21:19		22:24		22:50		22:10		20:51		19:22		16:59	21	09:23 (22)	15:55			15:48
29	08:52					07:16			05:49		04:44		04:30		05:18		06:27		07:35		07:44		09:02 (22)	08:56			09:29
	16:49					20:10			21:21		22:26		22:50		22:08		20:48		19:19		16:56	22	09:24 (22)	15:54			15:49
30	08:50					07:13			05:47		04:43		04:31		05:20		06:29		07:37		07:47		09:01 (22)	08:58			09:28
	16:51					20:12			21:24		22:27		22:49		22:05		20:45		19:16		16:54	23	09:24 (22)	15:53			15:50
31	08:48					07:10					04:41				05:22		06:31				07:49		09:01 (22)				09:28
	16:54					20:15					22:29				22:03		20:43				16:51	23	09:24 (22)				15:51
Potential sun hours	221		260			365			432		521		547		546		478		386		319			236			199
Total, worst case				393			132															351			175		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April	May	June
1	09:28			08:46		09:41 (22)	07:35		08:31 (24)	07:07	05:44	04:40
	15:53			16:56	14	09:55 (22)	18:05	20	08:51 (24)	20:17	21:26	22:31
2	09:28			08:44		09:40 (22)	07:33		08:31 (24)	07:04	05:41	04:39
	15:54			16:59	16	09:56 (22)	18:07	20	08:51 (24)	20:19	21:28	22:32
3	09:27			08:41		09:39 (22)	07:30		08:31 (24)	07:01	05:39	04:37
	15:56			17:01	19	09:58 (22)	18:10	19	08:50 (24)	20:21	21:31	22:34
4	09:27			08:39		09:38 (22)	07:27		08:31 (24)	06:58	05:36	04:36
	15:57			17:04	20	09:58 (22)	18:12	19	08:50 (24)	20:24	21:33	22:35
5	09:26			08:37		09:38 (22)	07:24		08:32 (24)	06:55	05:34	04:35
	15:59			17:06	22	10:00 (22)	18:14	16	08:48 (24)	20:26	21:35	22:37
6	09:25			08:35		09:37 (22)	07:22		08:33 (24)	06:53	05:31	04:34
	16:00			17:08	23	10:00 (22)	18:17	14	08:47 (24)	20:28	21:38	22:38
7	09:25			08:32		09:36 (22)	07:19		08:35 (24)	06:50	05:29	04:33
	16:02			17:11	24	10:00 (22)	18:19	9	08:44 (24)	20:31	21:40	22:39
8	09:24			08:30		09:37 (22)	07:16			06:47	05:27	04:32
	16:04			17:13	24	10:01 (22)	18:21			20:33	21:42	22:41
9	09:23			08:28		09:36 (22)	07:13			06:44	05:24	04:31
	16:05			17:16	24	10:00 (22)	18:24			20:35	21:44	22:42
10	09:22			08:25		09:37 (22)	07:10			06:41	05:22	04:30
	16:07			17:18	24	10:01 (22)	18:26			20:38	21:47	22:43
11	09:21			08:23		09:37 (22)	07:07			06:38	05:20	04:30
	16:09			17:21	23	10:00 (22)	18:28			20:40	21:49	22:44
12	09:20			08:20		09:37 (22)	07:05			06:36	05:17	04:29
	16:11			17:23	23	10:00 (22)	18:31			20:42	21:51	22:45
13	09:19			08:18		09:38 (22)	07:02			06:33	05:15	04:28
	16:13			17:26	21	09:59 (22)	18:33			20:44	21:53	22:46
14	09:17			08:15		09:39 (22)	06:59			06:30	05:13	04:28
	16:15			17:28	20	09:59 (22)	18:35			20:47	21:55	22:47
15	09:16			08:13		09:40 (22)	06:56			06:27	05:11	04:28
	16:17			17:31	17	09:57 (22)	18:38			20:49	21:58	22:47
16	09:15			08:10		09:42 (22)	06:53			06:24	05:08	04:27
	16:19			17:33	13	09:55 (22)	18:40			20:51	22:00	22:48
17	09:13			08:08		09:45 (22)	06:50			06:21	05:06	04:27
	16:21			17:36	8	09:53 (22)	18:42			20:54	22:02	22:49
18	09:12			08:05			06:47			06:19	05:04	04:27
	16:23			17:38			18:45			20:56	22:04	22:49
19	09:10			08:02			06:44			06:16	05:02	04:27
	16:26			17:41			18:47			20:58	22:06	22:50
20	09:09			08:00			06:42			06:13	05:00	04:27
	16:28			17:43			18:49			21:01	22:08	22:50
21	09:07			07:57			06:39			06:10	04:58	04:27
	16:30			17:45			18:52			21:03	22:10	22:50
22	09:05			07:54			06:36			06:08	04:56	04:27
	16:32			17:48			18:54			21:05	22:12	22:51
23	09:04			07:52		08:40 (24)	06:33			06:05	04:54	04:27
	16:35			17:50	5	08:45 (24)	18:56			21:08	22:14	22:51
24	09:02			07:49		08:36 (24)	06:30			06:02	04:53	04:28
	16:37			17:53	12	08:48 (24)	18:59			21:10	22:16	22:51
25	09:00			07:46		08:34 (24)	06:27			06:00	04:51	04:28
	16:39			17:55	15	08:49 (24)	19:01			21:12	22:18	22:51
26	08:58			07:44		08:33 (24)	06:24			05:57	04:49	04:29
	16:42			17:58	17	08:50 (24)	19:03			21:14	22:20	22:51
27	08:56			07:41		08:32 (24)	06:21			05:54	04:47	04:29
	16:44			18:00	18	08:50 (24)	19:05			21:17	22:22	22:50
28	08:54			07:38		08:32 (24)	06:18			05:52	04:46	04:30
	16:46			18:02	19	08:51 (24)	19:08			21:19	22:24	22:50
29	08:52						07:16			05:49	04:44	04:30
	16:49						20:10			21:21	22:26	22:50
30	08:50						07:13			05:47	04:43	04:31
	16:51						20:12			21:24	22:27	22:49
31	08:48		09:43 (22)				07:10				04:41	
	16:54	9	09:52 (22)				20:15				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		9			421			117				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51	09:06 (22)	09:00
	22:49	22:01	20:40	19:13		16:49	24 09:30 (22)	15:51
2	04:33	05:26	06:35	07:42		07:54	09:06 (22)	09:02
	22:48	21:59	20:37	19:10		16:46	24 09:30 (22)	15:50
3	04:34	05:29	06:38	07:44		07:56	09:06 (22)	09:04
	22:47	21:56	20:34	19:07		16:44	24 09:30 (22)	15:49
4	04:35	05:31	06:40	07:46		07:59	09:07 (22)	09:05
	22:47	21:54	20:31	19:05		16:42	23 09:30 (22)	15:48
5	04:36	05:33	06:42	07:48		08:01	09:07 (22)	09:07
	22:46	21:52	20:28	19:02		16:39	22 09:29 (22)	15:47
6	04:37	05:35	06:44	07:51	09:12 (24)	08:04	09:08 (22)	09:09
	22:45	21:49	20:26	18:59	7 09:19 (24)	16:37	21 09:29 (22)	15:46
7	04:39	05:37	06:47	07:53	09:10 (24)	08:06	09:09 (22)	09:10
	22:44	21:47	20:23	18:56	12 09:22 (24)	16:35	20 09:29 (22)	15:46
8	04:40	05:40	06:49	07:55	09:08 (24)	08:08	09:09 (22)	09:12
	22:43	21:44	20:20	18:53	15 09:23 (24)	16:32	18 09:27 (22)	15:45
9	04:41	05:42	06:51	07:58	09:06 (24)	08:11	09:10 (22)	09:14
	22:42	21:42	20:17	18:50	18 09:24 (24)	16:30	17 09:27 (22)	15:44
10	04:43	05:44	06:53	08:00	09:06 (24)	08:13	09:12 (22)	09:15
	22:41	21:39	20:14	18:48	19 09:25 (24)	16:28	13 09:25 (22)	15:44
11	04:44	05:46	06:55	08:02	09:05 (24)	08:16	09:14 (22)	09:16
	22:39	21:37	20:11	18:45	19 09:24 (24)	16:26	9 09:23 (22)	15:43
12	04:46	05:49	06:58	08:04	09:05 (24)	08:18		09:18
	22:38	21:34	20:08	18:42	20 09:25 (24)	16:24		15:43
13	04:47	05:51	07:00	08:07	09:04 (24)	08:20		09:19
	22:37	21:32	20:05	18:39	20 09:24 (24)	16:21		15:43
14	04:49	05:53	07:02	08:09	09:04 (24)	08:23		09:20
	22:35	21:29	20:02	18:36	19 09:23 (24)	16:19		15:42
15	04:51	05:55	07:04	08:11	09:05 (24)	08:25		09:21
	22:34	21:26	20:00	18:34	18 09:23 (24)	16:17		15:42
16	04:53	05:57	07:06	08:14	09:05 (24)	08:27		09:22
	22:32	21:24	19:57	18:31	16 09:21 (24)	16:15		15:42
17	04:54	06:00	07:09	08:16	09:07 (24)	08:30		09:23
	22:31	21:21	19:54	18:28	14 09:21 (24)	16:13		15:42
18	04:56	06:02	07:11	08:18	09:08 (24)	08:32		09:24
	22:29	21:19	19:51	18:25	10 09:18 (24)	16:11		15:42
19	04:58	06:04	07:13	08:21		08:34		09:25
	22:27	21:16	19:48	18:23		16:10		15:42
20	05:00	06:06	07:15	08:23		08:37		09:26
	22:25	21:13	19:45	18:20		16:08		15:43
21	05:02	06:09	07:17	08:25		08:39		09:26
	22:24	21:10	19:42	18:17		16:06		15:43
22	05:04	06:11	07:20	08:28		08:41		09:27
	22:22	21:08	19:39	18:15		16:04		15:44
23	05:06	06:13	07:22	08:30		08:43		09:27
	22:20	21:05	19:36	18:12		16:03		15:44
24	05:08	06:15	07:24	08:32		08:45		09:28
	22:18	21:02	19:33	18:09		16:01		15:45
25	05:10	06:18	07:26	07:35	09:13 (22)	08:48		09:28
	22:16	20:59	19:30	17:07	10 09:23 (22)	15:59		15:45
26	05:12	06:20	07:28	07:37	09:11 (22)	08:50		09:28
	22:14	20:57	19:28	17:04	15 09:26 (22)	15:58		15:46
27	05:14	06:22	07:31	07:40	09:09 (22)	08:52		09:28
	22:12	20:54	19:25	17:01	18 09:27 (22)	15:56		15:47
28	05:16	06:24	07:33	07:42	09:08 (22)	08:54		09:29
	22:10	20:51	19:22	16:59	20 09:28 (22)	15:55		15:48
29	05:18	06:27	07:35	07:44	09:08 (22)	08:56		09:29
	22:08	20:48	19:19	16:56	21 09:29 (22)	15:54		15:49
30	05:20	06:29	07:37	07:47	09:07 (22)	08:58		09:28
	22:05	20:45	19:16	16:54	22 09:29 (22)	15:53		15:50
31	05:22	06:31		07:49	09:07 (22)			09:28
	22:03	20:43		16:51	23 09:30 (22)			15:51
Potential sun hours	546	478	386	319		236		199
Total, worst case				336		215		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February			March		April		May		June		July		August		September		October			November			December
1	09:28		08:46			07:35		07:07		05:44		04:40		04:32		05:24		06:33		07:40			07:52		08:41 (22)		09:00
	15:53		16:56			18:05		20:17		21:26		22:31		22:49		22:01		20:40		19:13			16:49	7	08:48 (22)		15:51
2	09:28		08:44			07:33		07:04		05:41		04:39		04:33		05:26		06:35		07:42			07:54				09:02
	15:54		16:59			18:07		20:19		21:28		22:32		22:48		21:59		20:37		19:10			16:46				15:50
3	09:27		08:41			07:30		07:01		05:39		04:37		04:34		05:29		06:38		07:44			07:56				09:04
	15:56		17:01			18:10		20:21		21:31		22:34		22:47		21:56		20:34		19:07			16:44				15:49
4	09:27		08:39			07:27		06:58		05:36		04:36		04:35		05:31		06:40		07:46			07:59				09:05
	15:57		17:04			18:12		20:24		21:33		22:35		22:47		21:54		20:31		19:05			16:42				15:48
5	09:26		08:37			07:24		06:55		05:34		04:35		04:36		05:33		06:42		07:48			08:01				09:07
	15:59		17:06			18:14		20:26		21:35		22:37		22:46		21:52		20:28		19:02			16:39				15:47
6	09:25		08:35			07:22		06:53		05:31		04:34		04:37		05:35		06:44		07:51			08:04				09:09
	16:00		17:09			18:17		20:28		21:38		22:38		22:45		21:49		20:26		18:59			16:37				15:46
7	09:25		08:32			07:19		06:50		05:29		04:33		04:39		05:37		06:47		07:53			08:06				09:10
	16:02		17:11			18:19		20:31		21:40		22:39		22:44		21:47		20:23		18:56			16:35				15:46
8	09:24		08:30			07:16		06:47		05:27		04:32		04:40		05:40		06:49		07:55			08:08				09:12
	16:04		17:13			18:21		20:33		21:42		22:41		22:43		21:44		20:20		18:53			16:32				15:45
9	09:23		08:28			07:13		06:44		05:24		04:31		04:41		05:42		06:51		07:58			08:11				09:14
	16:05		17:16			18:24		20:35		21:44		22:42		22:42		21:42		20:17		18:50			16:30				15:44
10	09:22		08:25		09:11 (22)	07:10		06:41		05:22		04:30		04:43		05:44		06:53		08:00			08:13				09:15
	16:07		17:18	8	09:19 (22)	18:26		20:38		21:47		22:43		22:41		21:39		20:14		18:48			16:28				15:44
11	09:21		08:23		09:09 (22)	07:07		06:38		05:20		04:30		04:44		05:46		06:55		08:02			08:16				09:16
	16:09		17:21	12	09:21 (22)	18:28		20:40		21:49		22:44		22:39		21:37		20:11		18:45			16:26				15:43
12	09:20		08:20		09:07 (22)	07:05		06:36		05:17		04:29		04:46		05:49		06:58		08:04			08:18				09:18
	16:11		17:23	15	09:22 (22)	18:31		20:42		21:51		22:45		22:38		21:34		20:08		18:42			16:24				15:43
13	09:19		08:18		09:06 (22)	07:02		06:33		05:15		04:28		04:48		05:51		07:00		08:07			08:20				09:19
	16:13		17:26	18	09:24 (22)	18:33		20:44		21:53		22:46		22:37		21:32		20:05		18:39			16:21				15:43
14	09:17		08:15		09:05 (22)	06:59		06:30		05:13		04:28		04:49		05:53		07:02		08:09			08:23				09:20
	16:15		17:28	20	09:25 (22)	18:35		20:47		21:56		22:47		22:35		21:29		20:02		18:36			16:19				15:42
15	09:16		08:13		09:05 (22)	06:56		06:27		05:11		04:28		04:51		05:55		07:04		08:11			08:25				09:21
	16:17		17:31	20	09:25 (22)	18:38		20:49		21:58		22:47		22:34		21:26		20:00		18:34			16:17				15:42
16	09:15		08:10		09:04 (22)	06:53		06:24		05:08		04:27		04:53		05:58		07:06		08:14			08:27				09:22
	16:19		17:33	21	09:25 (22)	18:40		20:51		22:00		22:48		22:32		21:24		19:57		18:31			16:15				15:42
17	09:13		08:08		09:05 (22)	06:50		06:22		05:06		04:27		04:54		06:00		07:09		08:16			08:30				09:23
	16:21		17:36	21	09:26 (22)	18:42		20:54		22:02		22:49		22:31		21:21		19:54		18:28			16:13				15:42
18	09:12		08:05		09:05 (22)	06:47		06:19		05:04		04:27		04:56		06:02		07:11		08:18		09:42 (22)	08:32				09:24
	16:23		17:38	20	09:25 (22)	18:45		20:56		22:04		22:49		22:29		21:19		19:51		18:25	7	09:49 (22)	16:11				15:42
19	09:10		08:02		09:05 (22)	06:44		06:16		05:02		04:27		04:58		06:04		07:13		08:21		09:39 (22)	08:34				09:25
	16:26		17:41	20	09:25 (22)	18:47		20:58		22:06		22:50		22:27		21:16		19:48		18:23	13	09:52 (22)	16:10				15:42
20	09:09		08:00		09:05 (22)	06:42		06:13		05:00		04:27		05:00		06:06		07:15		08:23		09:37 (22)	08:37				09:26
	16:28		17:43	19	09:24 (22)	18:49		21:01		22:08		22:50		22:26		21:13		19:45		18:20	16	09:53 (22)	16:08				15:43
21	09:07		07:57		09:05 (22)	06:39		06:11		04:58		04:27		05:02		06:09		07:17		08:25		09:36 (22)	08:39				09:26
	16:30		17:46	18	09:23 (22)	18:52		21:03		22:10		22:50		22:24		21:10		19:42		18:17	18	09:54 (22)	16:06				15:43
22	09:05		07:54		09:07 (22)	06:36		06:08		04:56		04:27		05:04		06:11		07:20		08:28		09:35 (22)	08:41				09:27
	16:32		17:48	15	09:22 (22)	18:54		21:05		22:12		22:51		22:22		21:08		19:39		18:15	19	09:54 (22)	16:04				15:44
23	09:04		07:52		09:09 (22)	06:33		06:05		04:54		04:27		05:06		06:13		07:22		08:30		09:35 (22)	08:43				09:27
	16:35		17:50	11	09:20 (22)	18:56		21:08		22:14		22:51		22:20		21:05		19:36		18:12	20	09:55 (22)	16:03				15:44
24	09:02		07:49		09:13 (22)	06:30		06:02		04:53		04:28		05:08		06:15		07:24		08:32		09:34 (22)	08:45				09:28
	16:37		17:53	3	09:16 (22)	18:59		21:10		22:16		22:51		22:18		21:02		19:33		18:09	21	09:55 (22)	16:01				15:45
25	09:00		07:46			06:27		06:00		04:51		04:28		05:10		06:18		07:26		07:35		08:34 (22)	08:48				09:28
	16:39		17:55			19:01		21:12		22:18		22:51		22:16		20:59		19:31		17:07	21	08:55 (22)	15:59				15:45
26	08:58		07:44			06:24		05:57		04:49		04:29		05:12		06:20		07:28		07:37		08:34 (22)	08:50				09:28
	16:42		17:58			19:03		21:15		22:20		22:51		22:14		20:57		19:28		17:04	21	08:55 (22)	15:58				15:46
27	08:56		07:41			06:21		05:54		04:47		04:29		05:14		06:22		07:31		07:40		08:34 (22)	08:52				09:29
	16:44		18:00			19:05		21:17		22:22		22:50		22:12		20:54		19:25		17:02	20	08:54 (22)	15:57				15:47
28	08:54		07:38			06:18		05:52		04:46		04:30		05:16		06:24		07:33		07:42		08:35 (22)	08:54				09:29
	16:46		18:02			19:08		21:19		22:24		22:50		22:10		20:51		19:22		16:59	19	08:54 (22)	15:55				15:48
29	08:52					07:16		05:49		04:44		04:30		05:18		06:27		07:35		07:44		08:36 (22)	08:56				09:29
	16:49					20:10		21:21		22:26		22:50		22:08		20:48		19:19		16:56	17	08:53 (22)	15:54				15:49
30	08:50					07:13		05:47		04:43		04:31		05:20		06:29		07:37		07:47		08:36 (22)	08:58				09:28
	16:51					20:12		21:24		22:27		22:49		22:05		20:45		19:16		16:54	16	08:52 (22)	15:53				15:50
31	08:48					07:10				04:41				05:22		06:31				07:49		08:38 (22)					09:28
	16:54					20:15				22:29				22:03		20:43				16:51	12	08:50 (22)					15:51
Potential sun hours	221		260			365		432		521		547		546		478		386		319			236				199
Total, worst case				241																	240			7			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
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27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
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	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
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31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November		December		
1	09:28		12:21 (24)	08:46		10:00 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:36 (28)	09:00	10:51 (23)
	15:53	20	12:41 (24)	16:56	20	10:20 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6	09:42 (28)	15:51	28 12:23 (24)
2	09:28		12:22 (24)	08:44		09:59 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:34 (28)	09:02	10:51 (23)
	15:54	19	12:41 (24)	16:58	21	10:20 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11	09:45 (28)	15:50	30 12:24 (24)
3	09:27		12:22 (24)	08:41		10:00 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:33 (28)	09:04	10:52 (23)
	15:55	19	12:41 (24)	17:01	20	10:20 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14	09:47 (28)	15:49	29 12:25 (24)
4	09:27		11:12 (23)	08:39		10:00 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:31 (28)	09:05	10:53 (23)
	15:57	22	12:41 (24)	17:03	20	10:20 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17	09:48 (28)	15:48	30 12:26 (24)
5	09:26		11:11 (23)	08:37		10:01 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:31 (28)	09:07	10:54 (23)
	15:58	26	12:42 (24)	17:06	19	10:20 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18	09:49 (28)	15:47	29 12:27 (24)
6	09:25		11:10 (23)	08:35		10:01 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		09:30 (28)	09:09	10:56 (23)
	16:00	28	12:42 (24)	17:08	18	10:19 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20	09:50 (28)	15:46	28 12:28 (24)
7	09:25		11:09 (23)	08:32		10:01 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		09:30 (28)	09:10	10:58 (23)
	16:02	29	12:42 (24)	17:11	17	10:18 (28)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20	09:50 (28)	15:45	26 12:29 (24)
8	09:24		11:09 (23)	08:30		10:03 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		09:30 (28)	09:12	11:00 (23)
	16:03	30	12:42 (24)	17:13	15	10:18 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20	09:50 (28)	15:45	23 12:30 (24)
9	09:23		11:09 (23)	08:27		10:04 (28)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		09:30 (28)	09:13	12:11 (24)
	16:05	30	12:42 (24)	17:16	12	10:16 (28)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20	09:50 (28)	15:44	19 12:30 (24)
10	09:22		11:08 (23)	08:25		10:07 (28)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		09:31 (28)	09:15	12:11 (24)
	16:07	30	12:41 (24)	17:18	5	10:12 (28)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20	09:51 (28)	15:44	19 12:30 (24)
11	09:21		11:09 (23)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		09:30 (28)	09:16	12:11 (24)
	16:09	28	12:41 (24)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20	09:50 (28)	15:43	20 12:31 (24)
12	09:20		11:08 (23)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		09:31 (28)	09:18	12:11 (24)
	16:11	27	12:40 (24)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27	10:58 (23)	15:43	20 12:31 (24)
13	09:19		11:08 (23)	08:18			07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20		09:32 (28)	09:19	12:12 (24)
	16:13	25	12:39 (24)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31	11:01 (23)	15:42	21 12:33 (24)
14	09:17		11:08 (23)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		09:33 (28)	09:20	12:12 (24)
	16:15	20	11:28 (23)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32	11:03 (23)	15:42	21 12:33 (24)
15	09:16		11:08 (23)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		09:34 (28)	09:21	12:12 (24)
	16:17	21	11:29 (23)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31	11:03 (23)	15:42	21 12:33 (24)
16	09:15		11:08 (23)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27		09:36 (28)	09:22	12:13 (24)
	16:19	21	11:29 (23)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31	11:05 (23)	15:42	20 12:33 (24)
17	09:13		11:09 (23)	08:08			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		09:38 (28)	09:23	12:14 (24)
	16:21	22	11:31 (23)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28	11:06 (23)	15:42	21 12:35 (24)
18	09:12		11:09 (23)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		10:44 (23)	09:24	12:14 (24)
	16:23	22	11:31 (23)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22	11:06 (23)	15:42	21 12:35 (24)
19	09:10		11:09 (23)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34		10:45 (23)	09:25	12:14 (24)
	16:25	22	11:31 (23)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22	11:07 (23)	15:42	21 12:35 (24)
20	09:09		11:09 (23)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		10:45 (23)	09:26	12:15 (24)
	16:28	23	11:32 (23)	17:43			18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22	11:07 (23)	15:43	21 12:36 (24)
21	09:07		11:09 (23)	07:57			06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39		10:45 (23)	09:26	12:16 (24)
	16:30	23	11:32 (23)	17:45			18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	11:07 (23)	15:43	21 12:37 (24)
22	09:05		11:10 (23)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		10:45 (23)	09:27	12:16 (24)
	16:32	22	11:32 (23)	17:48			18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	11:08 (23)	15:43	21 12:37 (24)
23	09:03		11:10 (23)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		10:45 (23)	09:27	12:16 (24)
	16:34	22	11:32 (23)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	11:08 (23)	15:44	21 12:37 (24)
24	09:02		11:10 (23)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		10:46 (23)	09:28	12:17 (24)
	16:37	22	11:32 (23)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22	11:08 (23)	15:45	21 12:38 (24)
25	09:00		10:04 (28)	07:46			06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		10:46 (23)	09:28	12:17 (24)
	16:39	28	11:32 (23)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22	11:08 (23)	15:45	21 12:38 (24)
26	08:58		10:03 (28)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		10:47 (23)	09:28	12:18 (24)
	16:42	31	11:32 (23)	17:57			19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21	11:08 (23)	15:46	21 12:39 (24)
27	08:56		10:02 (28)	07:41			06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52		10:47 (23)	09:28	12:18 (24)
	16:44	31	11:31 (23)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21	11:08 (23)	15:47	21 12:39 (24)
28	08:54		10:00 (28)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		10:48 (23)	09:29	12:19 (24)
	16:46	32	11:30 (23)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21	11:09 (23)	15:48	21 12:40 (24)
29	08:52		10:00 (28)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		10:49 (23)	09:29	12:19 (24)
	16:49	31	11:29 (23)				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22	12:18 (24)	15:49	21 12:40 (24)
30	08:50		09:59 (28)				07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58		10:49 (23)	09:28	12:20 (24)
	16:51	27	11:26 (23)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28	12:21 (24)	15:50	20 12:40 (24)
31	08:48		09:59 (28)				07:10		04:41		05:22	06:31		07:49				09:28	12:21 (24)
	16:54	20	10:19 (28)				20:14		22:29		22:03	20:43		16:51				15:51	20 12:41 (24)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236			199	
Total, worst case		773			167											657			697

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	22:47	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	04:34	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:39	07:46	07:58	09:05
	15:57	17:03	18:12	20:23	21:32	22:34	22:46	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	22:45	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	22:44	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	04:39	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:39	22:43	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	04:40	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	22:42	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	04:43	05:44	06:53	07:59	08:12	09:14
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	16:09	17:21	18:28	20:39	21:48	22:43	22:39	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:17	09:17
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	16:13	17:25	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:13	04:28	04:49	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	22:34	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	22:33	21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	22:31	21:23	19:56	18:30	16:15	15:42
17	09:13	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	22:30	21:21	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	22:28	21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:47	20:58	22:05	22:49	22:26	21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:22	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:49	22:25	21:12	19:44	18:20	16:08	15:43
21	09:06	07:57	06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:38	09:26
	16:30	17:45	18:51	21:02	22:10	22:49	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:40	09:26
	16:32	17:48	18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:29	08:43	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	22:19	21:04	19:36	18:12	16:02	15:44
24	09:01	07:49	06:30	06:02	04:52	04:28	05:07	06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:16	22:50	22:17	21:02	19:33	18:09	16:01	15:45
25	08:59	07:46	06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:12	22:17	22:50	22:15	20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:49	09:28
	16:41	17:57	19:03	21:14	22:19	22:50	22:13	20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	22:11	20:53	19:24	17:01	15:56	15:47
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	16:46	18:02	19:07	21:18	22:23	22:49	22:09	20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:55	09:28
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Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
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	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
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10	09:21	08:24	07:10	06:41	05:22	04:30	04:43	05:44	06:53	07:59	08:12	09:14
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	16:23	17:38	18:44	20:55	22:03	22:48	22:28	21:18	19:50	18:25	16:11	15:42
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	16:25	17:40	18:47	20:58	22:05	22:49	22:26	21:15	19:47	18:22	16:09	15:42
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	16:39	17:55	19:00	21:12	22:17	22:50	22:15	20:59	19:30	17:06	15:59	15:45
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Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

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Vedlegg 5.2

Grafisk Moifjellet vindkraftverk

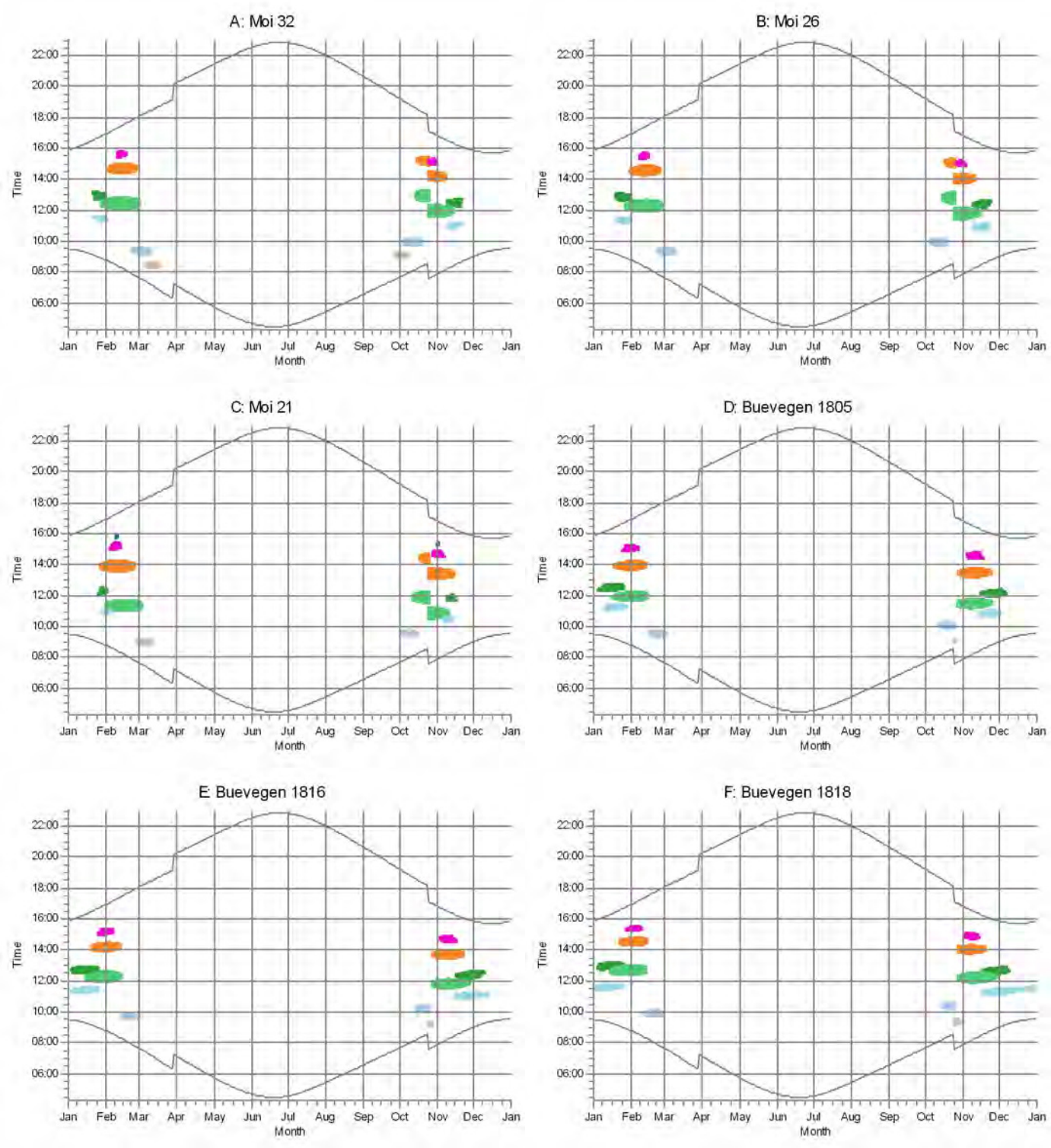
Worst case

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere



WTGs

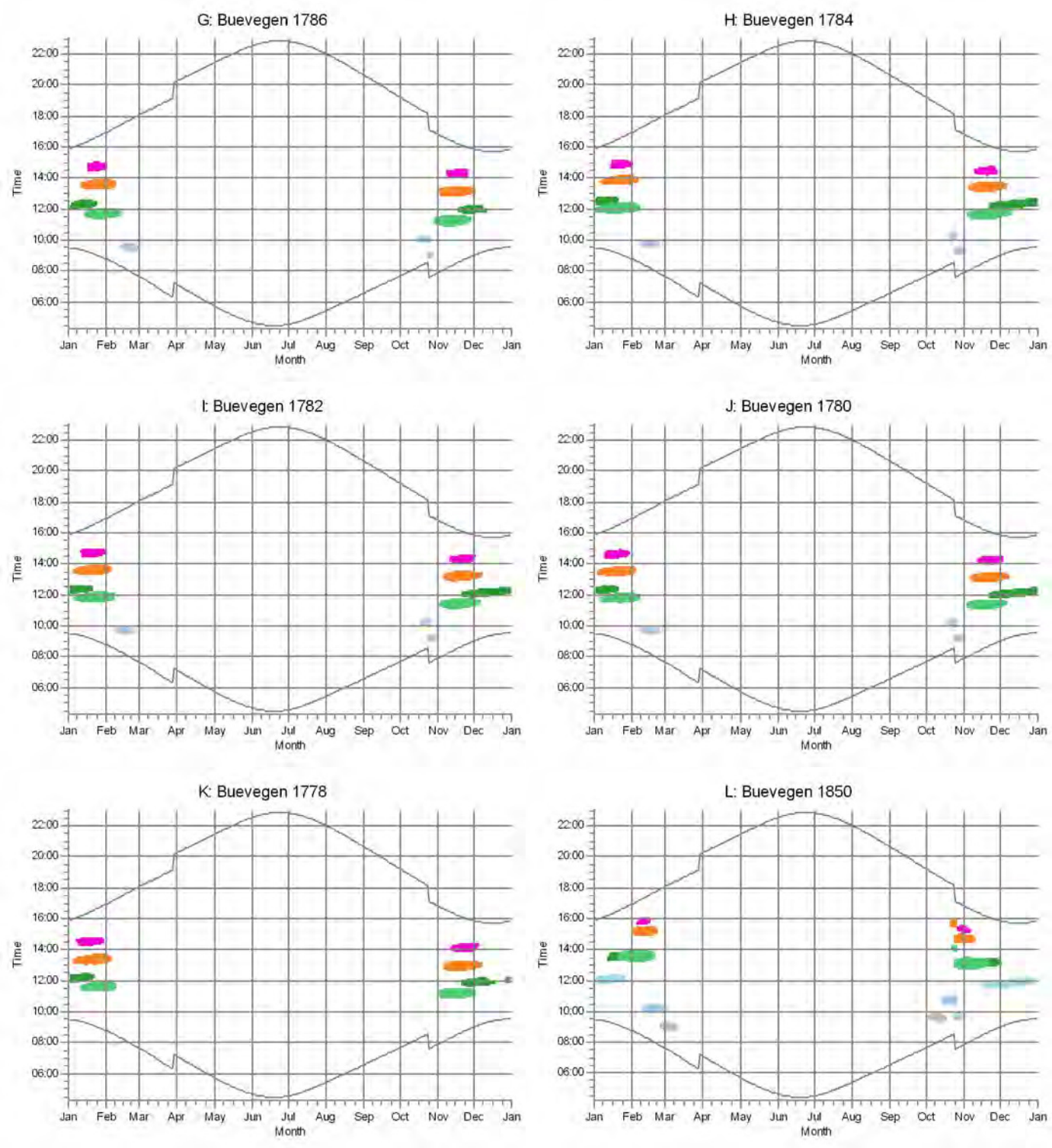
15: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2558
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
20: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2563
22: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2565
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
24: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
33: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2576

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere



WTGs

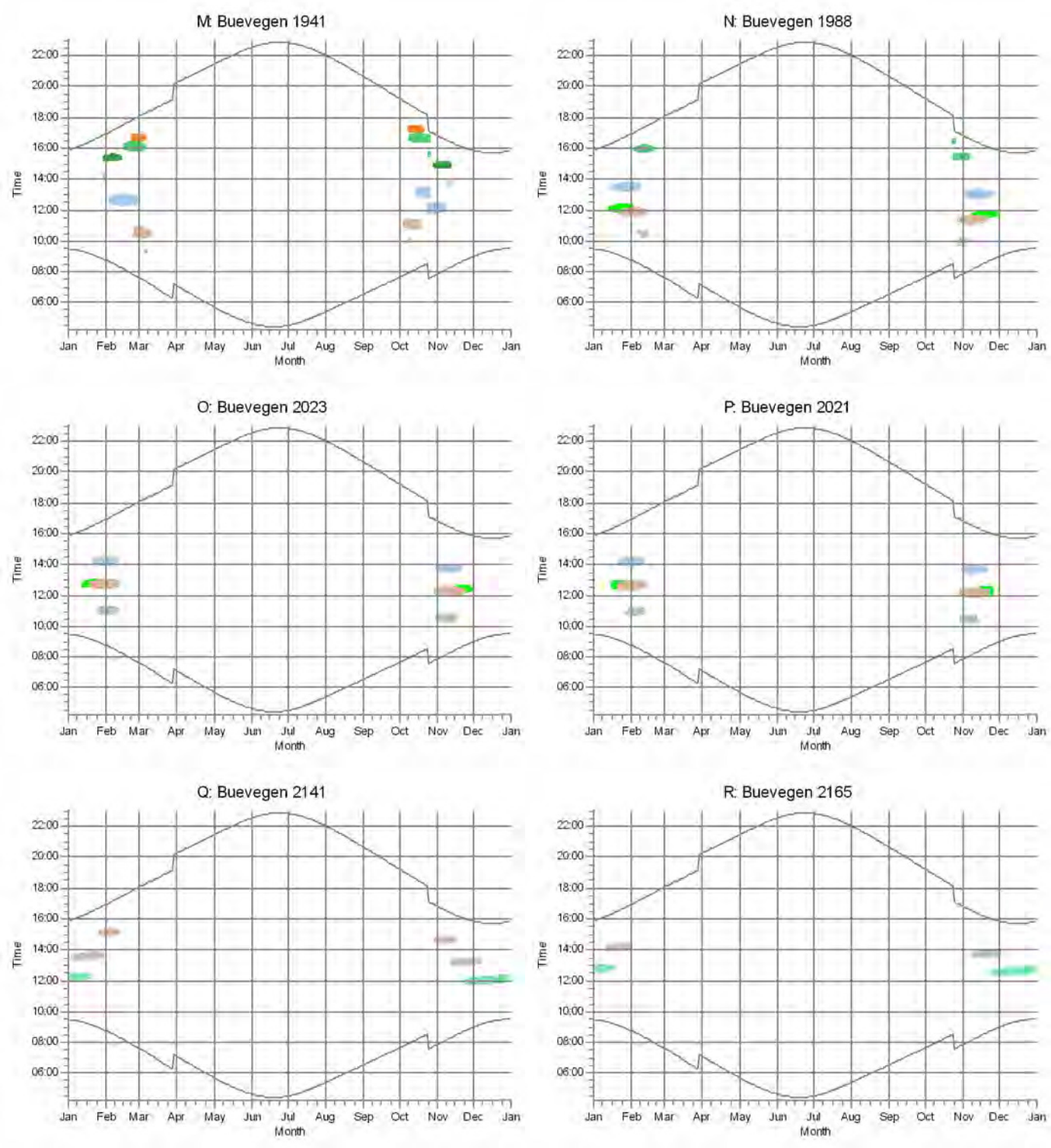
15: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2558
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
20: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2563
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
24: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
33: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2576

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere



WTGs

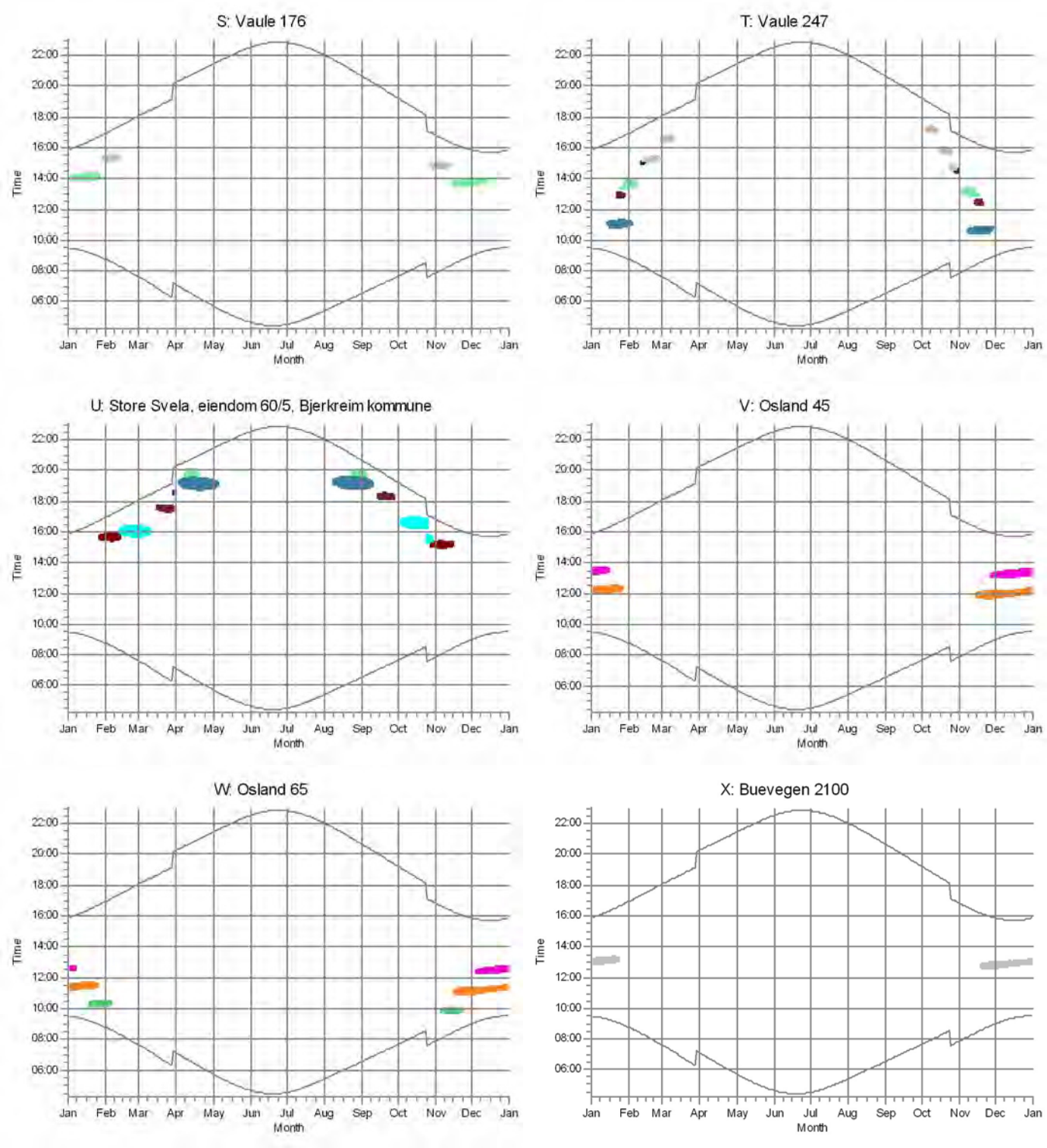
9: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2552
12: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555
15: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2558
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
20: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2563
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
26: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
33: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2576

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19.11.2025 15:03/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere



WTGs

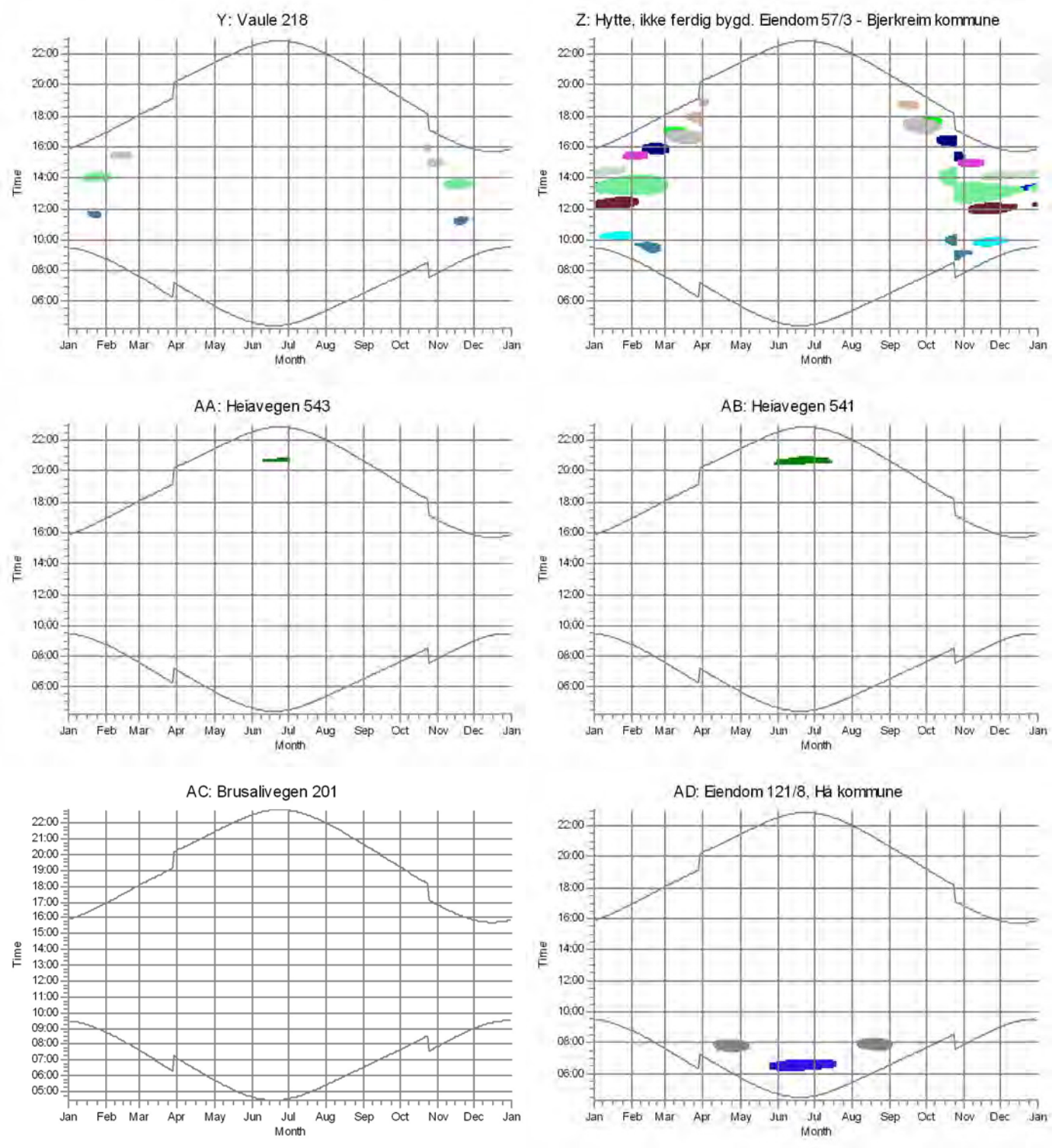
7: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2550
8: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2551
12: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555
13: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2556
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
24: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
26: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
32: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575
37: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2580

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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere



WTGs

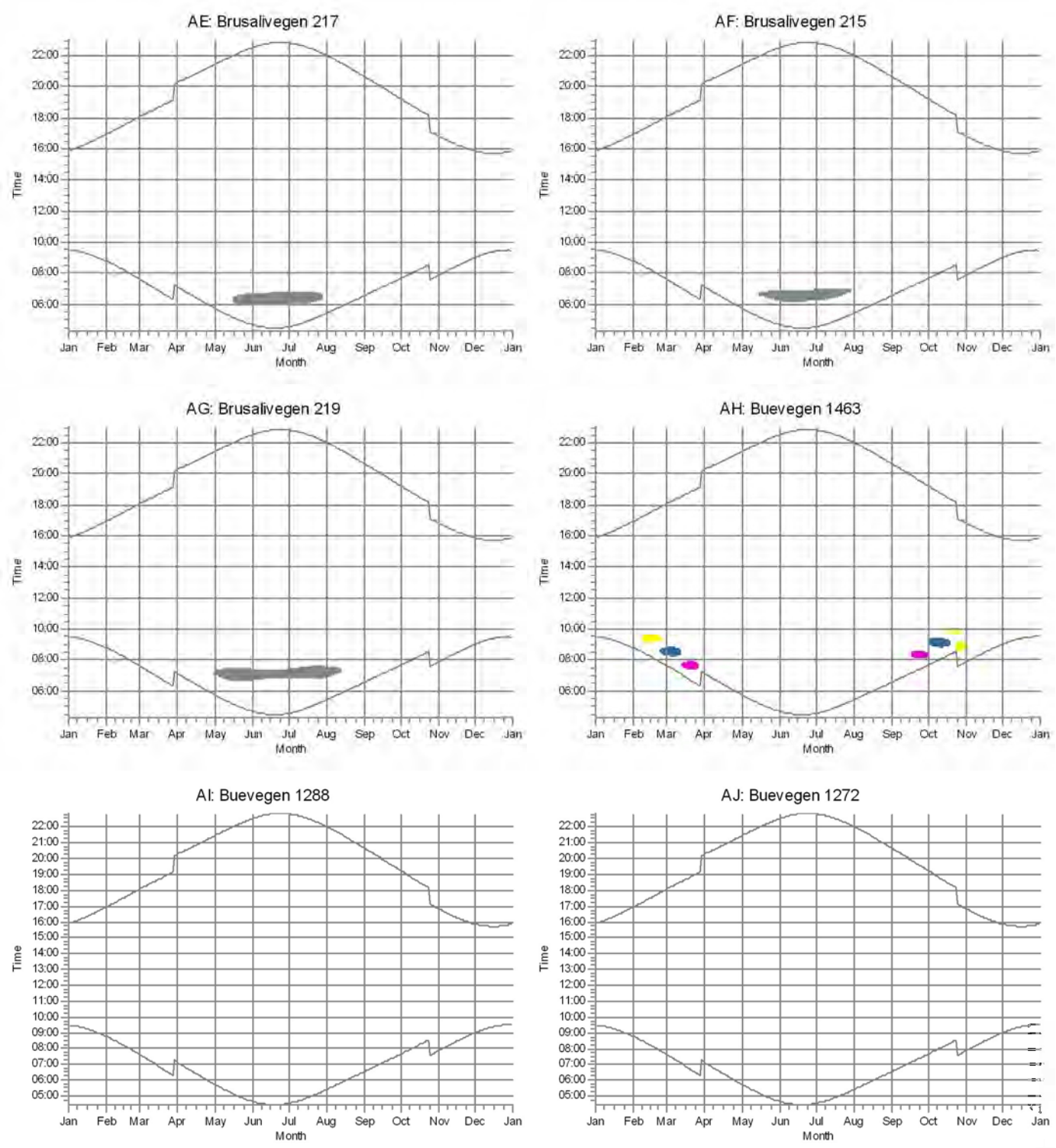
1: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2544	13: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2556	35: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2578
3: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2546	14: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2557	36: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2579
7: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2550	17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560	37: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2580
9: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2552	26: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569	38: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2543
12: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555	32: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575	

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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere

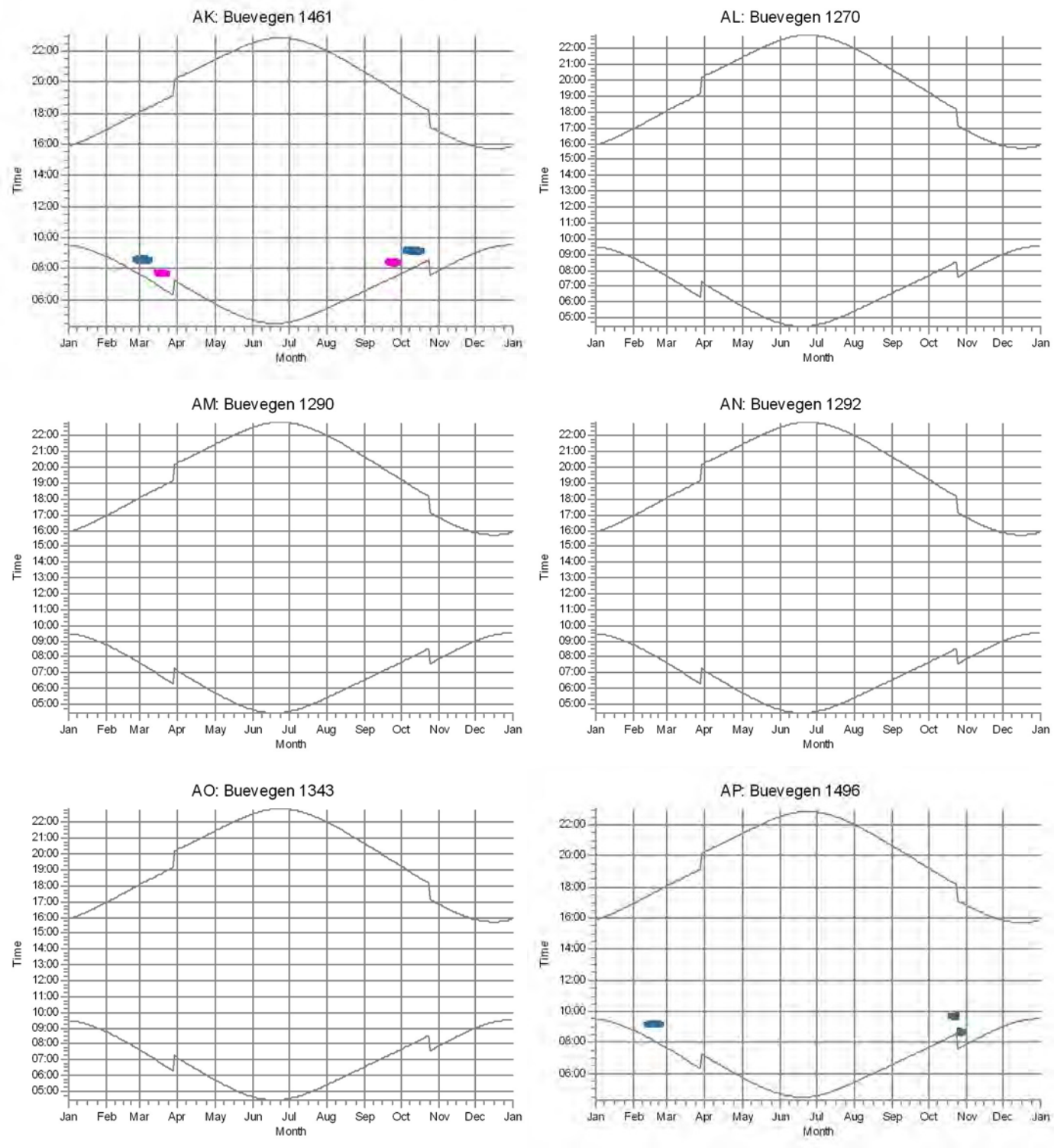


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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere

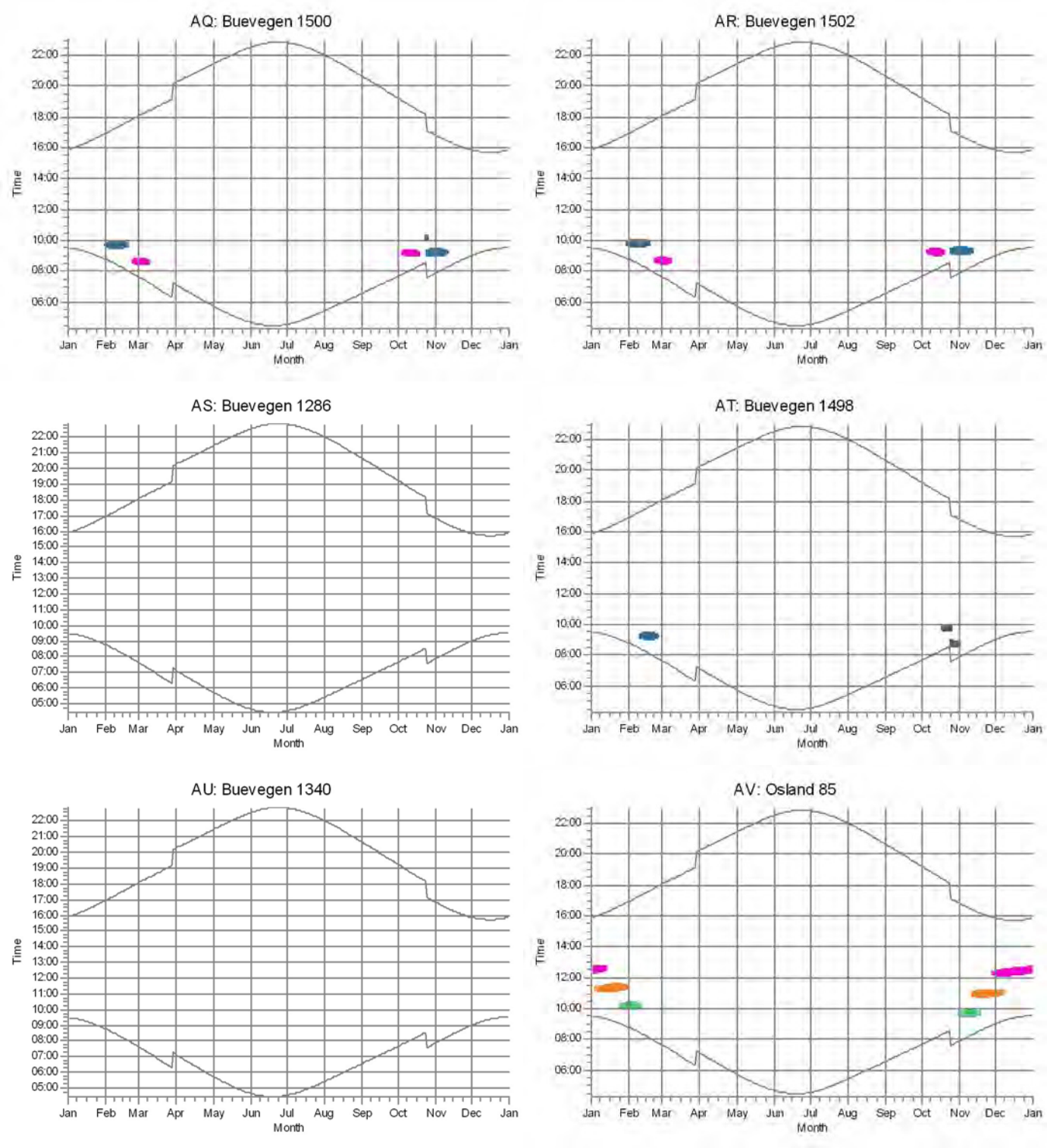


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Calculated:
19.11.2025 15:03/4.2.271

SHADOW - Calendar, graphical

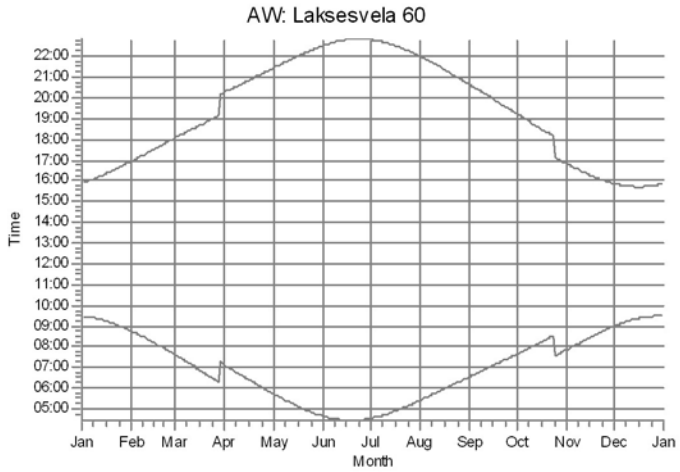
Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere

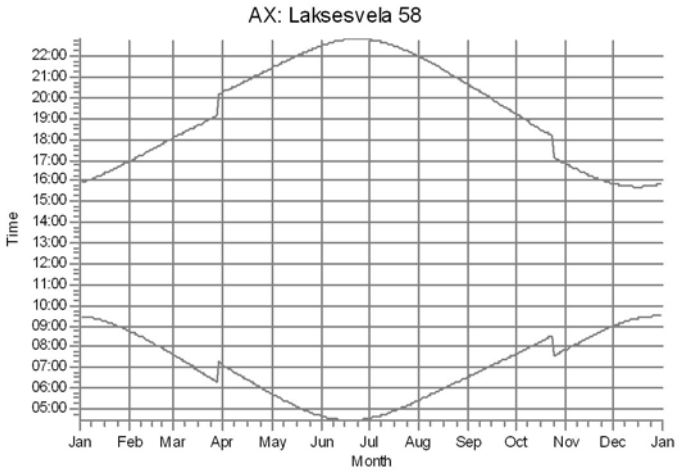


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SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - worst case - mottakere





WTGs

Vedlegg 6.1

Tabell Moifjellet vindkraftverk

Realistic case

Project:

Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:19 (33)	07:35		09:10 (15)	07:07	05:44	04:40
	15:53			16:56	51	13:02 (20)	18:05	24	09:34 (15)	20:17	21:26	22:30
2	09:27			08:43		11:24 (33)	07:33		09:10 (15)	07:04	05:41	04:38
	15:54			16:58	34	12:41 (28)	18:07	25	09:35 (15)	20:19	21:28	22:32
3	09:27			08:41		12:08 (28)	07:30		09:10 (15)	07:01	05:39	04:37
	15:55			17:01	43	14:41 (23)	18:09	24	09:34 (15)	20:21	21:30	22:34
4	09:26			08:39		12:07 (28)	07:27		09:10 (15)	06:58	05:36	04:36
	15:57			17:03	56	14:50 (23)	18:12	24	09:34 (15)	20:24	21:33	22:35
5	09:26			08:37		12:06 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	61	14:52 (23)	18:14	23	09:33 (15)	20:26	21:35	22:37
6	09:25			08:34		12:06 (28)	07:21		08:24 (17)	06:52	05:31	04:34
	16:00			17:08	66	14:54 (23)	18:17	28	09:32 (15)	20:28	21:37	22:38
7	09:24			08:32		12:05 (28)	07:19		08:21 (17)	06:50	05:29	04:33
	16:02			17:11	69	14:54 (23)	18:19	32	09:30 (15)	20:30	21:40	22:39
8	09:24			08:30		12:05 (28)	07:16		08:19 (17)	06:47	05:26	04:32
	16:03			17:13	72	14:56 (23)	18:21	32	09:28 (15)	20:33	21:42	22:40
9	09:23			08:27		12:04 (28)	07:13		08:18 (17)	06:44	05:24	04:31
	16:05			17:16	75	14:57 (23)	18:24	29	09:26 (15)	20:35	21:44	22:42
10	09:22			08:25		12:04 (28)	07:10		08:17 (17)	06:41	05:22	04:30
	16:07			17:18	80	15:35 (24)	18:26	18	08:35 (17)	20:37	21:46	22:43
11	09:21			08:23		12:04 (28)	07:07		08:17 (17)	06:38	05:19	04:29
	16:09			17:21	91	15:40 (24)	18:28	18	08:35 (17)	20:40	21:49	22:44
12	09:20			08:20		12:04 (28)	07:04		08:17 (17)	06:35	05:17	04:29
	16:11			17:23	99	15:47 (24)	18:31	19	08:36 (17)	20:42	21:51	22:45
13	09:18			08:18		12:03 (28)	07:01		08:17 (17)	06:32	05:15	04:28
	16:13			17:26	101	15:48 (24)	18:33	18	08:35 (17)	20:44	21:53	22:46
14	09:17			08:15		12:04 (28)	06:59		08:17 (17)	06:30	05:13	04:28
	16:15			17:28	99	15:48 (24)	18:35	17	08:34 (17)	20:47	21:55	22:47
15	09:16			08:13		12:04 (28)	06:56		08:18 (17)	06:27	05:10	04:27
	16:17			17:31	96	15:46 (24)	18:38	15	08:33 (17)	20:49	21:58	22:47
16	09:15			08:10		12:03 (28)	06:53		08:19 (17)	06:24	05:08	04:27
	16:19			17:33	92	15:44 (24)	18:40	12	08:31 (17)	20:51	22:00	22:48
17	09:13			08:07		12:03 (28)	06:50		08:22 (17)	06:21	05:06	04:27
	16:21			17:36	86	15:41 (24)	18:42	5	08:27 (17)	20:53	22:02	22:49
18	09:12			08:05		12:04 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	78	14:58 (23)	18:45			20:56	22:04	22:49
19	09:10			08:02		12:05 (28)	06:44			06:16	05:02	04:27
	16:25			17:40	76	14:58 (23)	18:47			20:58	22:06	22:50
20	09:08			08:00		12:05 (28)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:57 (23)	18:49			21:00	22:08	22:50
21	09:07		11:29 (33)	07:57		12:05 (28)	06:38			06:10	04:58	04:27
	16:30	8	13:08 (20)	17:45	71	14:56 (23)	18:51			21:03	22:10	22:50
22	09:05		11:28 (33)	07:54		12:06 (28)	06:36			06:08	04:56	04:27
	16:32	22	13:07 (20)	17:48	66	14:55 (23)	18:54			21:05	22:12	22:50
23	09:03		11:29 (33)	07:52		09:20 (15)	06:33			06:05	04:54	04:27
	16:34	21	13:08 (20)	17:50	69	14:54 (23)	18:56			21:07	22:14	22:50
24	09:02		11:28 (33)	07:49		09:16 (15)	06:30			06:02	04:52	04:27
	16:37	33	13:08 (20)	17:53	69	14:52 (23)	18:58			21:10	22:16	22:51
25	09:00		11:27 (33)	07:46		09:14 (15)	06:27			05:59	04:51	04:28
	16:39	33	13:08 (20)	17:55	64	14:49 (23)	19:01			21:12	22:18	22:50
26	08:58		11:22 (33)	07:44		09:13 (15)	06:24			05:57	04:49	04:28
	16:41	37	13:08 (20)	17:57	54	14:45 (23)	19:03			21:14	22:20	22:50
27	08:56		11:14 (33)	07:41		09:12 (15)	06:21			05:54	04:47	04:29
	16:44	43	13:07 (20)	18:00	41	12:35 (28)	19:05			21:17	22:22	22:50
28	08:54		11:14 (33)	07:38		09:11 (15)	06:18			05:52	04:46	04:30
	16:46	52	13:07 (20)	18:02	33	12:29 (28)	19:07			21:19	22:24	22:50
29	08:52		11:15 (33)				07:15			05:49	04:44	04:30
	16:49	56	13:07 (20)				20:10			21:21	22:25	22:50
30	08:50		11:15 (33)				07:12			05:46	04:43	04:31
	16:51	59	13:06 (20)				20:12			21:24	22:27	22:49
31	08:48		11:17 (33)				07:10				04:41	
	16:54	57	13:05 (20)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		421			1966			363				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,64			0,61			0,73				
Total reduction		0,26			0,24			0,29				
Total, real		108			479			106				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September			October		November			December	
1	04:32		05:24		06:33			07:39		08:56 (17)	07:51		11:33 (28)	09:00
	22:49		22:01		20:40			19:13	19	09:15 (17)	16:49	78	14:57 (24)	15:51
2	04:33		05:26		06:35			07:42		08:56 (17)	07:54		11:34 (28)	09:02
	22:48		21:58		20:37			19:10	18	09:14 (17)	16:46	74	14:26 (23)	15:50
3	04:34		05:28		06:37			07:44		08:55 (17)	07:56		11:35 (28)	09:03
	22:47		21:56		20:34			19:07	19	09:14 (17)	16:44	71	14:25 (23)	15:49
4	04:35		05:31		06:40			07:46		08:55 (17)	07:59		11:35 (28)	09:05
	22:47		21:54		20:31			19:04	26	10:01 (15)	16:41	69	14:24 (23)	15:48
5	04:36		05:33		06:42			07:48		08:56 (17)	08:01		11:36 (28)	09:07
	22:46		21:51		20:28			19:02	31	10:05 (15)	16:39	64	14:23 (23)	15:47
6	04:37		05:35		06:44			07:51		08:57 (17)	08:03		11:37 (28)	09:09
	22:45		21:49		20:25			18:59	32	10:06 (15)	16:37	61	14:22 (23)	15:46
7	04:39		05:37		06:46			07:53		08:58 (17)	08:06		11:37 (28)	09:10
	22:44		21:47		20:22			18:56	31	10:07 (15)	16:34	53	14:17 (23)	15:45
8	04:40		05:39		06:49			07:55		09:03 (17)	08:08		11:39 (28)	09:12
	22:43		21:44		20:20			18:53	23	10:08 (15)	16:32	42	14:11 (23)	15:45
9	04:41		05:42		06:51			07:57		09:45 (15)	08:11		10:53 (33)	09:13
	22:42		21:42		20:17			18:50	23	10:08 (15)	16:30	37	12:12 (28)	15:44
10	04:43		05:44		06:53			08:00		09:45 (15)	08:13		10:50 (33)	09:15
	22:40		21:39		20:14			18:47	24	10:09 (15)	16:28	52	12:34 (20)	15:44
11	04:44		05:46		06:55			08:02		09:44 (15)	08:15		10:48 (33)	09:16
	22:39		21:37		20:11			18:45	24	10:08 (15)	16:25	57	12:36 (20)	15:43
12	04:46		05:48		06:57			08:04		09:43 (15)	08:18		10:47 (33)	09:18
	22:38		21:34		20:08			18:42	24	10:07 (15)	16:23	58	12:37 (20)	15:43
13	04:47		05:51		07:00			08:07		09:44 (15)	08:20		10:47 (33)	09:19
	22:37		21:31		20:05			18:39	23	10:07 (15)	16:21	57	12:39 (20)	15:42
14	04:49		05:53		07:02			08:09		09:44 (15)	08:22		10:46 (33)	09:20
	22:35		21:29		20:02			18:36	37	13:05 (28)	16:19	52	12:39 (20)	15:42
15	04:51		05:55		07:04			08:11		09:45 (15)	08:25		10:47 (33)	09:21
	22:34		21:26		19:59			18:33	44	13:09 (28)	16:17	43	12:40 (20)	15:42
16	04:52		05:57		07:06			08:13		09:45 (15)	08:27		10:55 (33)	09:22
	22:32		21:24		19:56			18:31	59	15:19 (23)	16:15	37	12:41 (20)	15:42
17	04:54		06:00		07:08			08:16		09:47 (15)	08:29		11:00 (33)	09:23
	22:30		21:21		19:54			18:28	66	15:22 (23)	16:13	33	12:41 (20)	15:42
18	04:56		06:02		07:11			08:18		09:48 (15)	08:32		11:02 (33)	09:24
	22:29		21:18		19:51			18:25	71	15:24 (23)	16:11	33	12:42 (20)	15:42
19	04:58		06:04		07:13			08:20		09:52 (15)	08:34		11:04 (33)	09:25
	22:27		21:16		19:48			18:22	70	15:26 (23)	16:09	21	12:43 (20)	15:42
20	05:00		06:06		07:15			08:23		12:37 (28)	08:36		11:03 (33)	09:26
	22:25		21:13		19:45			18:20	68	15:26 (23)	16:08	22	12:42 (20)	15:43
21	05:01		06:08		07:17			08:25		12:36 (28)	08:39		11:04 (33)	09:26
	22:24		21:10		19:42			18:17	71	15:27 (23)	16:06	8	12:43 (20)	15:43
22	05:03		06:11		07:19			08:27		12:35 (28)	08:41			09:27
	22:22		21:08		19:39			18:14	74	15:27 (23)	16:04			15:43
23	05:05		06:13		07:22			08:30		12:35 (28)	08:43			09:27
	22:20		21:05		19:36			18:12	76	15:28 (23)	16:02			15:44
24	05:07		06:15		07:24			08:32		12:34 (28)	08:45			09:28
	22:18		21:02		19:33			18:09	78	15:28 (23)	16:01			15:44
25	05:09		06:17		07:26			07:35		11:34 (28)	08:47			09:28
	22:16		20:59		19:30			17:06	86	15:12 (24)	15:59			15:45
26	05:11		06:20		07:28			07:37		11:33 (28)	08:50			09:28
	22:14		20:56		19:27			17:04	94	15:14 (24)	15:58			15:46
27	05:13		06:22		07:30		09:02 (17)	07:39		11:33 (28)	08:52			09:28
	22:12		20:54		19:25	10	09:12 (17)	17:01	97	15:16 (24)	15:56			15:47
28	05:16		06:24		07:33		09:00 (17)	07:42		11:33 (28)	08:54			09:28
	22:10		20:51		19:22	13	09:13 (17)	16:59	101	15:18 (24)	15:55			15:48
29	05:18		06:26		07:35		08:58 (17)	07:44		11:33 (28)	08:56			09:28
	22:07		20:48		19:19	16	09:14 (17)	16:56	102	15:18 (24)	15:54			15:49
30	05:20		06:29		07:37		08:56 (17)	07:47		11:33 (28)	08:58			09:28
	22:05		20:45		19:16	18	09:14 (17)	16:54	99	15:15 (24)	15:52			15:50
31	05:22		06:31					07:49		11:34 (28)				09:28
	22:03		20:42					16:51	90	15:09 (24)				15:51
Potential sun hours	546		478		386			319			236			199
Total, worst case						57			1700			1022		
Sun reduction						0,50			0,50			0,50		
Oper. time red.						0,80			0,80			0,80		
Wind dir. red.						0,72			0,63			0,62		
Total reduction						0,29			0,25			0,25		
Total, real						16			428			255		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:16 (33)	07:35		09:09 (15)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (23)	18:05	23	09:32 (15)	20:17	21:26	22:30
2	09:27			08:43		12:00 (28)	07:33		09:09 (15)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (23)	18:07	24	09:33 (15)	20:19	21:28	22:32
3	09:27			08:41		11:58 (28)	07:30		09:09 (15)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (23)	18:09	24	09:33 (15)	20:21	21:30	22:34
4	09:26			08:39		11:58 (28)	07:27		09:09 (15)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (23)	18:12	23	09:32 (15)	20:24	21:33	22:35
5	09:26			08:37		11:57 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (23)	18:14	21	09:31 (15)	20:26	21:35	22:37
6	09:25			08:34		11:57 (28)	07:21		09:10 (15)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (23)	18:17	20	09:30 (15)	20:28	21:37	22:38
7	09:24			08:32		11:56 (28)	07:19		09:11 (15)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (23)	18:19	17	09:28 (15)	20:30	21:40	22:39
8	09:24			08:30		11:56 (28)	07:16		09:13 (15)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (24)	18:21	12	09:25 (15)	20:33	21:42	22:40
9	09:23			08:27		11:56 (28)	07:13		09:16 (15)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (24)	18:24	5	09:21 (15)	20:35	21:44	22:42
10	09:22			08:25		11:55 (28)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (24)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (28)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (24)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (28)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (24)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (24)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (23)	18:45			20:56	22:04	22:49
19	09:10		12:54 (20)	08:02		11:57 (28)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (20)	17:40	70	14:48 (23)	18:47			20:58	22:06	22:50
20	09:08		11:12 (33)	08:00		11:57 (28)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (20)	17:43	68	14:47 (23)	18:49			21:00	22:08	22:50
21	09:07		11:11 (33)	07:57		11:58 (28)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (20)	17:45	64	14:46 (23)	18:51			21:03	22:10	22:50
22	09:05		11:11 (33)	07:54		11:59 (28)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (20)	17:48	58	14:44 (23)	18:54			21:05	22:12	22:50
23	09:03		11:11 (33)	07:52		09:17 (15)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (20)	17:50	62	14:43 (23)	18:56			21:07	22:14	22:50
24	09:02		11:10 (33)	07:49		09:14 (15)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (20)	17:53	57	14:39 (23)	18:58			21:10	22:16	22:51
25	09:00		11:08 (33)	07:46		09:13 (15)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (20)	17:55	42	12:28 (28)	19:01			21:12	22:18	22:50
26	08:58		11:09 (33)	07:44		09:11 (15)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (20)	17:57	38	12:24 (28)	19:03			21:14	22:20	22:50
27	08:56		11:09 (33)	07:41		09:10 (15)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (20)	18:00	22	09:32 (15)	19:05			21:17	22:22	22:50
28	08:54		11:10 (33)	07:38		09:09 (15)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (20)	18:02	23	09:32 (15)	19:07			21:19	22:24	22:50
29	08:52		11:12 (33)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (20)				20:10			21:21	22:25	22:50
30	08:50		11:12 (33)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (20)				20:12			21:24	22:27	22:49
31	08:48		11:14 (33)				07:10				04:41	
	16:54	56	14:29 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,65			0,61			0,74				
Total reduction		0,26			0,24			0,29				
Total, real		151			468			50				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:25 (28)	09:00
	22:49	22:01	20:40	19:13			16:49	96	15:09 (24)	15:51
2	04:33	05:26	06:35	07:42			07:54		11:25 (28)	09:02
	22:48	21:58	20:37	19:10			16:46	90	15:04 (24)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:26 (28)	09:03
	22:47	21:56	20:34	19:07			16:44	82	14:58 (24)	15:49
4	04:35	05:31	06:40	07:46			07:59		11:26 (28)	09:05
	22:47	21:54	20:31	19:04			16:41	72	14:17 (23)	15:48
5	04:36	05:33	06:42	07:48		09:51 (15)	08:01		11:27 (28)	09:07
	22:46	21:51	20:28	19:02	10	10:01 (15)	16:39	70	14:17 (23)	15:47
6	04:37	05:35	06:44	07:51		09:48 (15)	08:03		11:28 (28)	09:09
	22:45	21:49	20:25	18:59	15	10:03 (15)	16:37	65	14:16 (23)	15:46
7	04:39	05:37	06:46	07:53		09:46 (15)	08:06		11:28 (28)	09:10
	22:44	21:47	20:22	18:56	18	10:04 (15)	16:34	62	14:14 (23)	15:45
8	04:40	05:39	06:49	07:55		09:45 (15)	08:08		11:29 (28)	09:12
	22:43	21:44	20:20	18:53	21	10:06 (15)	16:32	57	14:13 (23)	15:45
9	04:41	05:42	06:51	07:57		09:44 (15)	08:11		11:30 (28)	09:13
	22:42	21:42	20:17	18:50	22	10:06 (15)	16:30	53	14:12 (23)	15:44
10	04:43	05:44	06:53	08:00		09:44 (15)	08:13		10:47 (33)	09:15
	22:40	21:39	20:14	18:47	23	10:07 (15)	16:28	58	14:10 (23)	15:44
11	04:44	05:46	06:55	08:02		09:43 (15)	08:15		10:45 (33)	09:16
	22:39	21:37	20:11	18:45	23	10:06 (15)	16:25	55	13:59 (23)	15:43
12	04:46	05:48	06:57	08:04		09:42 (15)	08:18		10:44 (33)	09:18
	22:38	21:34	20:08	18:42	24	10:06 (15)	16:23	57	12:31 (20)	15:43
13	04:47	05:51	07:00	08:07		09:43 (15)	08:20		10:43 (33)	09:19
	22:37	21:31	20:05	18:39	23	10:06 (15)	16:21	59	12:32 (20)	15:42
14	04:49	05:53	07:02	08:09		09:42 (15)	08:22		10:42 (33)	09:20
	22:35	21:29	20:02	18:36	23	10:05 (15)	16:19	58	12:33 (20)	15:42
15	04:51	05:55	07:04	08:11		09:43 (15)	08:25		10:42 (33)	09:21
	22:34	21:26	19:59	18:33	33	12:54 (28)	16:17	53	12:34 (20)	15:42
16	04:52	05:57	07:06	08:13		09:44 (15)	08:27		10:42 (33)	09:22
	22:32	21:24	19:56	18:31	39	12:58 (28)	16:15	45	12:35 (20)	15:42
17	04:54	06:00	07:08	08:16		09:45 (15)	08:29		10:41 (33)	09:23
	22:30	21:21	19:54	18:28	46	15:07 (23)	16:13	47	12:35 (20)	15:42
18	04:56	06:02	07:11	08:18		09:46 (15)	08:32		10:44 (33)	09:24
	22:29	21:18	19:51	18:25	59	15:12 (23)	16:11	46	12:36 (20)	15:42
19	04:58	06:04	07:13	08:20		09:49 (15)	08:34		10:46 (33)	09:25
	22:27	21:16	19:48	18:22	62	15:15 (23)	16:09	45	12:37 (20)	15:42
20	05:00	06:06	07:15	08:23		12:30 (28)	08:36		10:46 (33)	09:26
	22:25	21:13	19:45	18:20	60	15:16 (23)	16:08	45	12:37 (20)	15:43
21	05:01	06:08	07:17	08:25		12:29 (28)	08:39		10:46 (33)	09:26
	22:24	21:10	19:42	18:17	65	15:17 (23)	16:06	36	12:37 (20)	15:43
22	05:03	06:11	07:19	08:27		12:27 (28)	08:41		10:48 (33)	09:27
	22:22	21:08	19:39	18:14	70	15:18 (23)	16:04	30	12:38 (20)	15:43
23	05:05	06:13	07:22	08:30		12:27 (28)	08:43		12:30 (20)	09:27
	22:20	21:05	19:36	18:12	72	15:19 (23)	16:02	5	12:35 (20)	15:44
24	05:07	06:15	07:24	08:32		12:26 (28)	08:45			09:28
	22:18	21:02	19:33	18:09	75	15:19 (23)	16:01			15:44
25	05:09	06:17	07:26	07:35		11:26 (28)	08:47			09:28
	22:16	20:59	19:30	17:06	76	14:20 (23)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:25 (28)	08:50			09:28
	22:14	20:56	19:27	17:04	81	15:04 (24)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:25 (28)	08:52			09:28
	22:12	20:54	19:25	17:01	91	15:08 (24)	15:56			15:47
28	05:16	06:24	07:33	07:42		11:25 (28)	08:54			09:28
	22:10	20:51	19:22	16:59	95	15:10 (24)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:24 (28)	08:56			09:28
	22:07	20:48	19:19	16:56	99	15:11 (24)	15:54			15:49
30	05:20	06:29	07:37	07:47		11:25 (28)	08:58			09:28
	22:05	20:45	19:16	16:54	99	15:12 (24)	15:52			15:50
31	05:22	06:31		07:49		11:25 (28)				09:28
	22:03	20:42		16:51	101	15:13 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1425			1286		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,63			0,62		
Total reduction					0,25			0,25		
Total, real					357			321		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		10:42 (33)	07:35		08:50 (15)	07:07	05:44	04:40
	15:53			16:56	72	14:06 (23)	18:05	39	11:29 (28)	20:17	21:26	22:30
2	09:27			08:43		10:44 (33)	07:33		08:50 (15)	07:04	05:41	04:38
	15:54			16:58	72	14:08 (23)	18:07	31	11:25 (28)	20:19	21:28	22:32
3	09:27			08:41		10:46 (33)	07:30		08:49 (15)	07:01	05:39	04:37
	15:55			17:01	71	14:10 (23)	18:09	21	09:10 (15)	20:21	21:31	22:34
4	09:26			08:39		10:47 (33)	07:27		08:48 (15)	06:58	05:36	04:36
	15:57			17:03	77	15:02 (24)	18:12	22	09:10 (15)	20:24	21:33	22:35
5	09:26			08:37		10:50 (33)	07:24		08:48 (15)	06:55	05:34	04:35
	15:58			17:06	77	15:05 (24)	18:14	21	09:09 (15)	20:26	21:35	22:37
6	09:25			08:34		11:05 (28)	07:21		08:48 (15)	06:52	05:31	04:34
	16:00			17:08	82	15:12 (24)	18:17	21	09:09 (15)	20:28	21:37	22:38
7	09:24			08:32		11:03 (28)	07:19		08:48 (15)	06:50	05:29	04:33
	16:02			17:11	92	15:18 (24)	18:19	20	09:08 (15)	20:30	21:40	22:39
8	09:24			08:30		11:03 (28)	07:16		08:48 (15)	06:47	05:26	04:32
	16:03			17:13	101	15:25 (24)	18:21	19	09:07 (15)	20:33	21:42	22:40
9	09:23			08:27		11:02 (28)	07:13		08:48 (15)	06:44	05:24	04:31
	16:05			17:16	112	15:55 (22)	18:24	18	09:06 (15)	20:35	21:44	22:42
10	09:22			08:25		11:01 (28)	07:10		08:49 (15)	06:41	05:22	04:30
	16:07			17:18	104	15:51 (22)	18:26	15	09:04 (15)	20:37	21:46	22:43
11	09:21			08:23		11:01 (28)	07:07		08:51 (15)	06:38	05:19	04:29
	16:09			17:21	101	15:23 (24)	18:28	10	09:01 (15)	20:40	21:49	22:44
12	09:20			08:20		11:00 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	98	15:21 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		10:59 (28)	07:02			06:33	05:15	04:28
	16:13			17:26	94	15:18 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:00 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	83	14:14 (23)	18:35			20:47	21:55	22:47
15	09:16			08:13		10:59 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	83	14:13 (23)	18:38			20:49	21:58	22:47
16	09:15			08:10		10:59 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	81	14:12 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		10:59 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	81	14:12 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		10:59 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	80	14:12 (23)	18:45			20:56	22:04	22:49
19	09:10			08:02		10:59 (28)	06:44			06:16	05:02	04:27
	16:25			17:40	78	14:11 (23)	18:47			20:58	22:06	22:50
20	09:08			08:00		10:59 (28)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:09 (23)	18:49			21:00	22:08	22:50
21	09:07			07:57		10:59 (28)	06:39			06:10	04:58	04:27
	16:30			17:45	71	14:08 (23)	18:51			21:03	22:10	22:50
22	09:05			07:54		11:00 (28)	06:36			06:08	04:56	04:27
	16:32			17:48	66	14:06 (23)	18:54			21:05	22:12	22:50
23	09:03			07:52		11:01 (28)	06:33			06:05	04:54	04:27
	16:34			17:50	60	14:04 (23)	18:56			21:07	22:14	22:50
24	09:02			07:49		11:01 (28)	06:30			06:02	04:52	04:27
	16:37			17:53	50	14:00 (23)	18:58			21:10	22:16	22:51
25	09:00			07:46		11:02 (28)	06:27			06:00	04:51	04:28
	16:39			17:55	36	11:38 (28)	19:01			21:12	22:18	22:50
26	08:58		12:05 (20)	07:44		08:58 (15)	06:24			05:57	04:49	04:28
	16:41	5	12:10 (20)	17:57	36	11:36 (28)	19:03			21:14	22:20	22:50
27	08:56		12:05 (20)	07:41		08:54 (15)	06:21			05:54	04:47	04:29
	16:44	19	13:53 (23)	18:00	41	11:34 (28)	19:05			21:17	22:22	22:50
28	08:54		11:00 (33)	07:38		08:52 (15)	06:18			05:52	04:46	04:30
	16:46	40	13:59 (23)	18:02	41	11:32 (28)	19:08			21:19	22:24	22:50
29	08:52		10:56 (33)				07:15			05:49	04:44	04:30
	16:49	47	14:02 (23)				20:10			21:21	22:25	22:50
30	08:50		10:50 (33)				07:13			05:46	04:43	04:31
	16:51	55	14:03 (23)				20:12			21:24	22:27	22:49
31	08:48		10:44 (33)				07:10				04:41	
	16:54	62	14:05 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		228			2114			237				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,62			0,63			0,73				
Total reduction		0,25			0,25			0,29				
Total, real		56			530			69				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		10:30 (28)	09:00
	22:49	22:01	20:40	19:13			16:49	107	15:21 (22)	15:51
2	04:33	05:26	06:35	07:42		09:32 (15)	07:54		10:32 (28)	09:02
	22:48	21:58	20:37	19:10	7	09:39 (15)	16:46	110	15:25 (22)	15:50
3	04:34	05:28	06:37	07:44		09:28 (15)	07:56		10:33 (28)	09:03
	22:47	21:56	20:34	19:07	13	09:41 (15)	16:44	97	14:53 (24)	15:49
4	04:35	05:31	06:40	07:46		09:26 (15)	07:59		10:33 (28)	09:05
	22:47	21:54	20:31	19:04	16	09:42 (15)	16:41	89	14:46 (24)	15:48
5	04:36	05:33	06:42	07:48		09:25 (15)	08:01		10:35 (28)	09:07
	22:46	21:51	20:28	19:02	19	09:44 (15)	16:39	81	14:41 (24)	15:47
6	04:37	05:35	06:44	07:51		09:24 (15)	08:03		10:20 (33)	09:09
	22:45	21:49	20:25	18:59	20	09:44 (15)	16:37	77	14:35 (24)	15:46
7	04:39	05:37	06:46	07:53		09:23 (15)	08:06		10:16 (33)	09:10
	22:44	21:47	20:22	18:56	21	09:44 (15)	16:34	77	14:32 (24)	15:45
8	04:40	05:39	06:49	07:55		09:23 (15)	08:08		10:15 (33)	09:12
	22:43	21:44	20:20	18:53	22	09:45 (15)	16:32	71	13:39 (23)	15:45
9	04:41	05:42	06:51	07:57		09:22 (15)	08:11		10:15 (33)	09:13
	22:42	21:42	20:17	18:50	22	09:44 (15)	16:30	72	13:39 (23)	15:44
10	04:43	05:44	06:53	08:00		09:23 (15)	08:13		10:14 (33)	09:15
	22:40	21:39	20:14	18:47	21	09:44 (15)	16:28	71	13:38 (23)	15:44
11	04:44	05:46	06:55	08:02		09:23 (15)	08:15		10:15 (33)	09:16
	22:39	21:37	20:11	18:45	20	09:43 (15)	16:25	61	13:36 (23)	15:43
12	04:46	05:48	06:57	08:04		09:23 (15)	08:18		10:24 (33)	09:18
	22:38	21:34	20:08	18:42	36	12:00 (28)	16:23	52	13:35 (23)	15:43
13	04:47	05:51	07:00	08:07		09:24 (15)	08:20		10:28 (33)	09:19
	22:37	21:31	20:05	18:39	40	12:04 (28)	16:21	47	13:33 (23)	15:42
14	04:49	05:53	07:02	08:09		09:25 (15)	08:22		10:32 (33)	09:20
	22:35	21:29	20:02	18:36	42	12:06 (28)	16:19	39	13:30 (23)	15:42
15	04:51	05:55	07:04	08:11		09:28 (15)	08:25		11:38 (20)	09:21
	22:34	21:26	19:59	18:33	40	12:08 (28)	16:17	19	13:26 (23)	15:42
16	04:52	05:57	07:06	08:13		11:35 (28)	08:27		11:38 (20)	09:22
	22:32	21:24	19:56	18:31	34	12:09 (28)	16:15	4	11:42 (20)	15:42
17	04:54	06:00	07:08	08:16		11:34 (28)	08:29			09:23
	22:30	21:21	19:54	18:28	36	12:10 (28)	16:13			15:42
18	04:56	06:02	07:11	08:18		11:32 (28)	08:32			09:24
	22:29	21:18	19:51	18:25	55	14:33 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		11:32 (28)	08:34			09:25
	22:27	21:16	19:48	18:22	62	14:36 (23)	16:09			15:42
20	05:00	06:06	07:15	08:23		11:31 (28)	08:36			09:26
	22:25	21:13	19:45	18:20	67	14:37 (23)	16:08			15:43
21	05:01	06:09	07:17	08:25		11:30 (28)	08:39			09:26
	22:24	21:10	19:42	18:17	72	14:39 (23)	16:06			15:43
22	05:03	06:11	07:19	08:27		11:29 (28)	08:41			09:27
	22:22	21:08	19:39	18:14	75	14:40 (23)	16:04			15:43
23	05:05	06:13	07:22	08:30		11:29 (28)	08:43			09:27
	22:20	21:05	19:36	18:12	78	14:41 (23)	16:02			15:44
24	05:07	06:15	07:24	08:32		11:29 (28)	08:45			09:28
	22:18	21:02	19:33	18:09	79	14:41 (23)	16:01			15:45
25	05:09	06:17	07:26	07:35		10:29 (28)	08:47			09:28
	22:16	20:59	19:30	17:07	81	13:42 (23)	15:59			15:45
26	05:11	06:20	07:28	07:37		10:29 (28)	08:50			09:28
	22:14	20:57	19:27	17:04	82	13:43 (23)	15:58			15:46
27	05:13	06:22	07:30	07:39		10:29 (28)	08:52			09:28
	22:12	20:54	19:25	17:01	81	13:42 (23)	15:56			15:47
28	05:16	06:24	07:33	07:42		10:29 (28)	08:54			09:28
	22:10	20:51	19:22	16:59	87	14:45 (24)	15:55			15:48
29	05:18	06:26	07:35	07:44		10:29 (28)	08:56			09:28
	22:07	20:48	19:19	16:56	95	14:48 (24)	15:54			15:49
30	05:20	06:29	07:37	07:47		10:30 (28)	08:58			09:28
	22:05	20:45	19:16	16:54	99	14:51 (24)	15:52			15:50
31	05:22	06:31		07:49		10:31 (28)				09:28
	22:03	20:42		16:51	99	14:52 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1521			1074		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,65			0,62		
Total reduction					0,26			0,25		
Total, real					396			264		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:46		11:39 (28)	07:35	09:25 (15)	07:07	05:44	04:40
	15:53		16:56	88	15:12 (24)	18:05	9 09:34 (15)	20:17	21:26	22:31
2	09:27		08:43		11:39 (28)	07:33		07:04	05:41	04:38
	15:54		16:58	88	15:13 (24)	18:07		20:19	21:28	22:32
3	09:27		08:41		11:40 (28)	07:30		07:01	05:39	04:37
	15:55		17:01	85	15:12 (24)	18:09		20:21	21:31	22:34
4	09:27		08:39		11:39 (28)	07:27		06:58	05:36	04:36
	15:57		17:03	83	15:11 (24)	18:12		20:24	21:33	22:35
5	09:26	12:20 (20)	08:37		11:39 (28)	07:24		06:55	05:34	04:35
	15:58	1 12:21 (20)	17:06	80	15:09 (24)	18:14		20:26	21:35	22:37
6	09:25	12:19 (20)	08:34		11:40 (28)	07:21		06:52	05:31	04:34
	16:00	5 12:24 (20)	17:08	74	15:08 (24)	18:17		20:28	21:37	22:38
7	09:24	12:17 (20)	08:32		11:40 (28)	07:19		06:50	05:29	04:33
	16:02	11 12:28 (20)	17:11	62	14:11 (23)	18:19		20:30	21:40	22:39
8	09:24	12:17 (20)	08:30		11:41 (28)	07:16		06:47	05:26	04:32
	16:03	13 12:30 (20)	17:13	61	14:11 (23)	18:21		20:33	21:42	22:40
9	09:23	12:18 (20)	08:27		11:42 (28)	07:13		06:44	05:24	04:31
	16:05	16 12:34 (20)	17:16	57	14:10 (23)	18:24		20:35	21:44	22:42
10	09:22	11:06 (33)	08:25		11:42 (28)	07:10		06:41	05:22	04:30
	16:07	25 12:39 (20)	17:18	54	14:09 (23)	18:26		20:37	21:46	22:43
11	09:21	11:02 (33)	08:23		11:44 (28)	07:07		06:38	05:19	04:29
	16:09	31 12:41 (20)	17:21	48	14:08 (23)	18:28		20:40	21:49	22:44
12	09:20	11:01 (33)	08:20		11:45 (28)	07:04		06:35	05:17	04:29
	16:11	40 12:41 (20)	17:23	42	14:06 (23)	18:31		20:42	21:51	22:45
13	09:18	11:02 (33)	08:18		11:46 (28)	07:02		06:32	05:15	04:28
	16:13	42 12:42 (20)	17:26	32	14:02 (23)	18:33		20:44	21:53	22:46
14	09:17	11:02 (33)	08:15		11:49 (28)	06:59		06:30	05:13	04:28
	16:15	42 12:42 (20)	17:28	18	12:07 (28)	18:35		20:47	21:55	22:47
15	09:16	11:02 (33)	08:13		11:52 (28)	06:56		06:27	05:10	04:27
	16:17	43 12:42 (20)	17:31	12	12:04 (28)	18:38		20:49	21:58	22:47
16	09:15	11:02 (33)	08:10		09:29 (15)	06:53		06:24	05:08	04:27
	16:19	43 12:42 (20)	17:33	5	09:34 (15)	18:40		20:51	22:00	22:48
17	09:13	11:02 (33)	08:07		09:25 (15)	06:50		06:21	05:06	04:27
	16:21	45 12:42 (20)	17:36	12	09:37 (15)	18:42		20:53	22:02	22:49
18	09:12	11:03 (33)	08:05		09:24 (15)	06:47		06:19	05:04	04:27
	16:23	57 13:55 (23)	17:38	16	09:40 (15)	18:45		20:56	22:04	22:49
19	09:10	11:03 (33)	08:02		09:23 (15)	06:44		06:16	05:02	04:27
	16:25	70 13:59 (23)	17:40	17	09:40 (15)	18:47		20:58	22:06	22:50
20	09:08	11:04 (33)	08:00		09:22 (15)	06:41		06:13	05:00	04:27
	16:28	75 14:01 (23)	17:43	19	09:41 (15)	18:49		21:00	22:08	22:50
21	09:07	11:04 (33)	07:57		09:21 (15)	06:39		06:10	04:58	04:27
	16:30	80 14:03 (23)	17:45	20	09:41 (15)	18:51		21:03	22:10	22:50
22	09:05	11:05 (33)	07:54		09:20 (15)	06:36		06:08	04:56	04:27
	16:32	82 14:05 (23)	17:48	21	09:41 (15)	18:54		21:05	22:12	22:50
23	09:03	11:05 (33)	07:52		09:21 (15)	06:33		06:05	04:54	04:27
	16:34	83 14:05 (23)	17:50	21	09:42 (15)	18:56		21:07	22:14	22:51
24	09:02	11:06 (33)	07:49		09:21 (15)	06:30		06:02	04:52	04:27
	16:37	84 14:07 (23)	17:53	20	09:41 (15)	18:58		21:10	22:16	22:51
25	09:00	11:07 (33)	07:46		09:21 (15)	06:27		05:59	04:51	04:28
	16:39	84 14:52 (24)	17:55	20	09:41 (15)	19:01		21:12	22:18	22:51
26	08:58	11:09 (33)	07:44		09:21 (15)	06:24		05:57	04:49	04:28
	16:41	79 14:57 (24)	17:57	19	09:40 (15)	19:03		21:14	22:20	22:50
27	08:56	11:10 (33)	07:41		09:22 (15)	06:21		05:54	04:47	04:29
	16:44	86 15:12 (24)	18:00	16	09:38 (15)	19:05		21:17	22:22	22:50
28	08:54	11:13 (33)	07:38		09:23 (15)	06:18		05:52	04:46	04:30
	16:46	90 15:13 (24)	18:02	14	09:37 (15)	19:08		21:19	22:24	22:50
29	08:52	11:40 (28)				07:15		05:49	04:44	04:30
	16:49	88 15:14 (24)				20:10		21:21	22:25	22:50
30	08:50	11:39 (28)				07:12		05:46	04:42	04:31
	16:51	88 15:13 (24)				20:12		21:24	22:27	22:49
31	08:48	11:39 (28)				07:10			04:41	
	16:54	88 15:13 (24)				20:14			22:29	
Potential sun hours	221		260			365		432	521	547
Total, worst case		1491		1104		9				
Sun reduction		0,50		0,50		0,50				
Oper. time red.		0,80		0,80		0,80				
Wind dir. red.		0,62		0,63		0,73				
Total reduction		0,25		0,25		0,29				
Total, real		371		276		3				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:12 (28)	09:00		10:44 (33)
	22:49		22:01		20:40		19:13			16:49	53	13:38 (23)	15:51	31	12:23 (20)
2	04:33		05:26		06:35		07:42			07:54		11:11 (28)	09:02		10:48 (33)
	22:48		21:58		20:37		19:10			16:46	58	13:40 (23)	15:50	27	12:23 (20)
3	04:34		05:28		06:37		07:44			07:56		11:11 (28)	09:03		12:01 (20)
	22:47		21:56		20:34		19:07			16:44	60	13:41 (23)	15:49	17	12:18 (20)
4	04:35		05:31		06:40		07:46			07:59		11:10 (28)	09:05		12:01 (20)
	22:47		21:54		20:31		19:04			16:41	63	13:41 (23)	15:48	13	12:14 (20)
5	04:36		05:33		06:42		07:48			08:01		11:10 (28)	09:07		12:02 (20)
	22:46		21:51		20:28		19:02			16:39	75	14:38 (24)	15:47	11	12:13 (20)
6	04:37		05:35		06:44		07:51			08:03		11:10 (28)	09:09		12:05 (20)
	22:45		21:49		20:25		18:59			16:37	79	14:40 (24)	15:46	5	12:10 (20)
7	04:39		05:37		06:46		07:53			08:06		11:09 (28)	09:10		12:07 (20)
	22:44		21:47		20:22		18:56			16:34	84	14:41 (24)	15:45	2	12:09 (20)
8	04:40		05:39		06:49		07:55			08:08		11:09 (28)	09:12		
	22:43		21:44		20:20		18:53			16:32	87	14:42 (24)	15:45		
9	04:41		05:42		06:51		07:57			08:11		11:10 (28)	09:13		
	22:42		21:42		20:17		18:50			16:30	87	14:43 (24)	15:44		
10	04:43		05:44		06:53		08:00			08:13		11:10 (28)	09:15		
	22:41		21:39		20:14		18:47			16:28	88	14:44 (24)	15:43		
11	04:44		05:46		06:55		08:02			08:15		11:10 (28)	09:16		
	22:39		21:37		20:11		18:45			16:25	88	14:44 (24)	15:43		
12	04:46		05:48		06:57		08:04		10:02 (15)	08:18		11:11 (28)	09:18		
	22:38		21:34		20:08		18:42	2	10:04 (15)	16:23	88	14:45 (24)	15:43		
13	04:47		05:51		07:00		08:07		09:58 (15)	08:20		11:12 (28)	09:19		
	22:37		21:32		20:05		18:39	11	10:09 (15)	16:21	86	14:45 (24)	15:42		
14	04:49		05:53		07:02		08:09		09:55 (15)	08:22		10:45 (33)	09:20		
	22:35		21:29		20:02		18:36	15	10:10 (15)	16:19	89	14:45 (24)	15:42		
15	04:51		05:55		07:04		08:11		09:54 (15)	08:25		10:42 (33)	09:21		
	22:34		21:26		19:59		18:33	18	10:12 (15)	16:17	87	14:45 (24)	15:42		
16	04:52		05:57		07:06		08:13		09:53 (15)	08:27		10:41 (33)	09:22		
	22:32		21:24		19:56		18:31	19	10:12 (15)	16:15	81	14:30 (24)	15:42		
17	04:54		06:00		07:08		08:16		09:53 (15)	08:30		10:41 (33)	09:23		
	22:30		21:21		19:54		18:28	20	10:13 (15)	16:13	83	14:25 (24)	15:42		
18	04:56		06:02		07:11		08:18		09:52 (15)	08:32		10:40 (33)	09:24		
	22:29		21:18		19:51		18:25	21	10:13 (15)	16:11	84	13:41 (23)	15:42		
19	04:58		06:04		07:13		08:20		09:52 (15)	08:34		10:40 (33)	09:25		
	22:27		21:16		19:48		18:22	21	10:13 (15)	16:09	83	13:40 (23)	15:42		
20	05:00		06:06		07:15		08:23		09:52 (15)	08:36		10:39 (33)	09:26		
	22:25		21:13		19:45		18:20	20	10:12 (15)	16:08	82	13:39 (23)	15:43		
21	05:01		06:08		07:17		08:25		09:52 (15)	08:39		10:39 (33)	09:26		
	22:24		21:10		19:42		18:17	20	10:12 (15)	16:06	80	13:38 (23)	15:43		
22	05:03		06:11		07:19		08:27		09:52 (15)	08:41		10:40 (33)	09:27		
	22:22		21:08		19:39		18:14	19	10:11 (15)	16:04	75	13:37 (23)	15:43		
23	05:05		06:13		07:22		08:30		09:53 (15)	08:43		10:39 (33)	09:27		
	22:20		21:05		19:36		18:12	17	10:10 (15)	16:02	69	13:35 (23)	15:44		
24	05:07		06:15		07:24		08:32		09:54 (15)	08:45		10:40 (33)	09:28		
	22:18		21:02		19:33		18:09	14	10:08 (15)	16:01	58	13:32 (23)	15:44		
25	05:09		06:17		07:26		07:35		08:56 (15)	08:47		10:40 (33)	09:28		
	22:16		20:59		19:30		17:06	11	09:07 (15)	15:59	45	12:20 (20)	15:45		
26	05:11		06:20		07:28		07:37		09:01 (15)	08:50		10:41 (33)	09:28		
	22:14		20:57		19:27		17:04	2	09:03 (15)	15:58	43	12:21 (20)	15:46		
27	05:13		06:22		07:30		07:39		11:20 (28)	08:52		10:41 (33)	09:28		
	22:12		20:54		19:25		17:01	14	11:34 (28)	15:56	43	12:21 (20)	15:47		
28	05:16		06:24		07:33		07:42		11:18 (28)	08:54		10:42 (33)	09:28		
	22:10		20:51		19:22		16:59	19	11:37 (28)	15:55	42	12:22 (20)	15:48		
29	05:18		06:26		07:35		07:44		11:15 (28)	08:56		10:42 (33)	09:28		
	22:07		20:48		19:19		16:56	34	13:32 (23)	15:54	42	12:22 (20)	15:49		
30	05:20		06:29		07:37		07:47		11:14 (28)	08:58		10:42 (33)	09:28		
	22:05		20:45		19:16		16:54	42	13:35 (23)	15:52	40	12:22 (20)	15:50		
31	05:22		06:31				07:49		11:13 (28)				09:28		
	22:03		20:42				16:51	50	13:38 (23)				15:51		
Potential sun hours	546		478		386		319			236			199		
Total, worst case								389			2122			106	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,69			0,61			0,64	
Total reduction								0,27			0,25			0,25	
Total, real								107			520			27	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:12 (33)	08:46	11:58 (28)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (33)	16:56	88	15:21 (24)	18:05	20:17	21:26	22:30
2	09:27		11:11 (33)	08:43	11:59 (28)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (33)	16:58	85	15:21 (24)	18:07	20:19	21:28	22:32
3	09:27		11:11 (33)	08:41	12:00 (28)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (20)	17:01	84	15:21 (24)	18:09	20:21	21:31	22:34
4	09:27		11:11 (33)	08:39	11:59 (28)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (20)	17:03	82	15:20 (24)	18:12	20:24	21:33	22:35
5	09:26		11:11 (33)	08:37	11:59 (28)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (20)	17:06	81	15:19 (24)	18:14	20:26	21:35	22:37
6	09:25		11:11 (33)	08:34	12:00 (28)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (20)	17:08	75	15:18 (24)	18:17	20:28	21:37	22:38
7	09:24		11:11 (33)	08:32	12:01 (28)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (20)	17:11	64	15:14 (24)	18:19	20:30	21:40	22:39
8	09:24		11:11 (33)	08:30	12:02 (28)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (20)	17:13	57	14:25 (23)	18:21	20:33	21:42	22:40
9	09:23		11:12 (33)	08:27	12:03 (28)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (20)	17:16	53	14:24 (23)	18:24	20:35	21:44	22:42
10	09:22		11:11 (33)	08:25	12:04 (28)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (20)	17:18	48	14:23 (23)	18:26	20:37	21:46	22:43
11	09:21		11:12 (33)	08:23	12:06 (28)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (20)	17:21	43	14:22 (23)	18:28	20:40	21:49	22:44
12	09:20		11:12 (33)	08:20	12:07 (28)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (20)	17:23	35	14:20 (23)	18:31	20:42	21:51	22:45
13	09:18		11:12 (33)	08:18	12:10 (28)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (20)	17:26	22	14:16 (23)	18:33	20:44	21:53	22:46
14	09:17		11:12 (33)	08:15	09:38 (15)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (20)	17:28	10	12:19 (28)	18:35	20:47	21:55	22:47
15	09:16		11:12 (33)	08:13	09:35 (15)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (20)	17:31	12	09:47 (15)	18:38	20:49	21:58	22:47
16	09:15		11:12 (33)	08:10	09:33 (15)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (20)	17:33	16	09:49 (15)	18:40	20:51	22:00	22:48
17	09:13		11:13 (33)	08:07	09:32 (15)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (20)	17:36	18	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:14 (33)	08:05	09:31 (15)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (20)	17:38	20	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:15 (33)	08:02	09:31 (15)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (20)	17:40	20	09:51 (15)	18:47	20:58	22:06	22:50
20	09:08		11:15 (33)	08:00	09:30 (15)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (23)	17:43	21	09:51 (15)	18:49	21:00	22:08	22:50
21	09:07		11:16 (33)	07:57	09:30 (15)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (23)	17:45	21	09:51 (15)	18:51	21:03	22:10	22:50
22	09:05		11:16 (33)	07:54	09:29 (15)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (23)	17:48	22	09:51 (15)	18:54	21:05	22:12	22:50
23	09:03		11:17 (33)	07:52	09:30 (15)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (23)	17:50	21	09:51 (15)	18:56	21:07	22:14	22:51
24	09:02		11:19 (33)	07:49	09:31 (15)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (23)	17:53	19	09:50 (15)	18:58	21:10	22:16	22:51
25	09:00		11:20 (33)	07:46	09:31 (15)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (23)	17:55	18	09:49 (15)	19:01	21:12	22:18	22:51
26	08:58		11:23 (33)	07:44	09:32 (15)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (24)	17:57	15	09:47 (15)	19:03	21:14	22:20	22:50
27	08:56		11:58 (28)	07:41	09:34 (15)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (24)	18:00	11	09:45 (15)	19:05	21:17	22:22	22:50
28	08:54		11:58 (28)	07:38	09:38 (15)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (24)	18:02	2	09:40 (15)	19:07	21:19	22:24	22:50
29	08:52		11:59 (28)			07:15	05:49	04:44	04:30
	16:49	83	15:18 (24)			20:10	21:21	22:25	22:50
30	08:50		11:58 (28)			07:12	05:46	04:42	04:31
	16:51	86	15:21 (24)			20:12	21:24	22:27	22:49
31	08:48		11:58 (28)			07:10		04:41	
	16:54	88	15:22 (24)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1646		1063					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,63		0,63					
Total reduction		0,25		0,25					
Total, real		411		265					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:33 (28)	09:00		10:54 (33)
	22:49		22:01		20:40		19:13			16:49	50	13:53 (23)	15:51	43	12:35 (20)
2	04:33		05:26		06:35		07:42			07:54		11:32 (28)	09:02		10:54 (33)
	22:48		21:58		20:37		19:10			16:46	54	13:54 (23)	15:50	42	12:35 (20)
3	04:34		05:28		06:37		07:44			07:56		11:32 (28)	09:03		10:55 (33)
	22:47		21:56		20:34		19:07			16:44	57	13:55 (23)	15:49	40	12:35 (20)
4	04:35		05:31		06:40		07:46			07:59		11:30 (28)	09:05		10:56 (33)
	22:47		21:54		20:31		19:04			16:41	68	14:45 (24)	15:48	39	12:35 (20)
5	04:36		05:33		06:42		07:48			08:01		11:30 (28)	09:07		10:56 (33)
	22:46		21:51		20:28		19:02			16:39	76	14:48 (24)	15:47	39	12:36 (20)
6	04:37		05:35		06:44		07:51			08:03		11:30 (28)	09:09		10:57 (33)
	22:45		21:49		20:25		18:59			16:37	78	14:49 (24)	15:46	30	12:36 (20)
7	04:39		05:37		06:46		07:53			08:06		11:29 (28)	09:10		10:58 (33)
	22:44		21:47		20:22		18:56			16:34	83	14:50 (24)	15:45	29	12:36 (20)
8	04:40		05:39		06:49		07:55			08:08		11:29 (28)	09:12		10:59 (33)
	22:43		21:44		20:20		18:53			16:32	86	14:51 (24)	15:45	15	12:33 (20)
9	04:41		05:42		06:51		07:57			08:11		11:29 (28)	09:13		11:00 (33)
	22:42		21:42		20:17		18:50			16:30	87	14:52 (24)	15:44	12	12:34 (20)
10	04:43		05:44		06:53		08:00			08:13		11:30 (28)	09:15		11:00 (33)
	22:41		21:39		20:14		18:47			16:28	88	14:53 (24)	15:43	4	12:31 (20)
11	04:44		05:46		06:55		08:02			08:15		11:29 (28)	09:16		11:02 (33)
	22:39		21:37		20:11		18:45			16:25	87	14:52 (24)	15:43	2	11:04 (33)
12	04:46		05:48		06:57		08:04			08:18		11:30 (28)	09:18		11:02 (33)
	22:38		21:34		20:08		18:42			16:23	87	14:53 (24)	15:43	2	11:04 (33)
13	04:47		05:51		07:00		08:07			08:20		11:30 (28)	09:19		
	22:37		21:31		20:05		18:39			16:21	83	14:50 (24)	15:42		
14	04:49		05:53		07:02		08:09		10:08 (15)	08:22		11:30 (28)	09:20		
	22:35		21:29		20:02		18:36	8	10:16 (15)	16:19	74	14:42 (24)	15:42		
15	04:51		05:55		07:04		08:11		10:06 (15)	08:25		11:31 (28)	09:21		
	22:34		21:26		19:59		18:33	13	10:19 (15)	16:17	68	14:38 (24)	15:42		
16	04:52		05:57		07:06		08:13		10:04 (15)	08:27		10:56 (33)	09:22		
	22:32		21:24		19:56		18:31	16	10:20 (15)	16:15	69	14:36 (24)	15:42		
17	04:54		06:00		07:08		08:16		10:03 (15)	08:30		10:54 (33)	09:23		
	22:30		21:21		19:54		18:28	18	10:21 (15)	16:13	73	13:55 (23)	15:42		
18	04:56		06:02		07:11		08:18		10:02 (15)	08:32		10:52 (33)	09:24		
	22:29		21:18		19:51		18:25	20	10:22 (15)	16:11	78	13:54 (23)	15:42		
19	04:58		06:04		07:13		08:20		10:01 (15)	08:34		10:52 (33)	09:25		
	22:27		21:16		19:48		18:22	21	10:22 (15)	16:09	81	13:54 (23)	15:42		
20	05:00		06:06		07:15		08:23		10:01 (15)	08:36		10:51 (33)	09:26		
	22:25		21:13		19:45		18:20	21	10:22 (15)	16:08	80	13:52 (23)	15:43		
21	05:01		06:08		07:17		08:25		10:01 (15)	08:39		10:51 (33)	09:26		
	22:24		21:10		19:42		18:17	21	10:22 (15)	16:06	78	13:51 (23)	15:43		
22	05:03		06:11		07:19		08:27		10:00 (15)	08:41		10:51 (33)	09:27		
	22:22		21:08		19:39		18:14	21	10:21 (15)	16:04	75	13:50 (23)	15:43		
23	05:05		06:13		07:22		08:30		10:01 (15)	08:43		10:51 (33)	09:27		
	22:20		21:05		19:36		18:12	20	10:21 (15)	16:02	64	12:31 (20)	15:44		
24	05:07		06:15		07:24		08:32		10:01 (15)	08:45		10:51 (33)	09:28		
	22:18		21:02		19:33		18:09	19	10:20 (15)	16:01	63	12:32 (20)	15:44		
25	05:09		06:17		07:26		07:35		09:02 (15)	08:47		10:51 (33)	09:28		
	22:16		20:59		19:30		17:06	18	09:20 (15)	15:59	60	12:32 (20)	15:45		
26	05:11		06:20		07:28		07:37		09:03 (15)	08:50		10:52 (33)	09:28		
	22:14		20:57		19:27		17:04	15	09:18 (15)	15:58	56	12:33 (20)	15:46		
27	05:13		06:22		07:30		07:39		09:05 (15)	08:52		10:51 (33)	09:28		
	22:12		20:54		19:25		17:01	11	09:16 (15)	15:56	53	12:33 (20)	15:47		
28	05:16		06:24		07:33		07:42		09:08 (15)	08:54		10:52 (33)	09:28		
	22:10		20:51		19:22		16:59	13	11:51 (28)	15:55	44	12:34 (20)	15:48		
29	05:18		06:26		07:35		07:44		11:38 (28)	08:56		10:53 (33)	09:28		
	22:07		20:48		19:19		16:56	26	13:46 (23)	15:54	43	12:34 (20)	15:49		
30	05:20		06:29		07:37		07:47		11:36 (28)	08:58		10:53 (33)	09:28		
	22:05		20:45		19:16		16:54	37	13:50 (23)	15:52	43	12:34 (20)	15:50		
31	05:22		06:31				07:49		11:35 (28)				09:28		11:11 (33)
	22:03		20:42				16:51	44	13:52 (23)				15:51	1	11:12 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								362			2086			298	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,69			0,61			0,65	
Total reduction								0,28			0,24			0,26	
Total, real								100			508			77	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:23 (33)	08:46	12:23 (28)	07:35	07:07	05:44	04:40
	15:53	17	11:40 (33)	16:56	82	15:30 (24)	18:05	20:17	21:26	22:30
2	09:27		11:23 (33)	08:43	12:24 (28)	07:33	07:04	05:41	04:38
	15:54	17	11:40 (33)	16:58	86	15:34 (24)	18:07	20:19	21:28	22:32
3	09:27		11:23 (33)	08:41	12:25 (28)	07:30	07:01	05:39	04:37
	15:55	18	11:41 (33)	17:01	84	15:34 (24)	18:09	20:21	21:31	22:34
4	09:26		11:23 (33)	08:39	12:25 (28)	07:27	06:58	05:36	04:36
	15:57	23	12:52 (20)	17:03	85	15:34 (24)	18:12	20:24	21:33	22:35
5	09:26		11:23 (33)	08:37	12:25 (28)	07:24	06:55	05:34	04:35
	15:58	25	12:53 (20)	17:06	82	15:33 (24)	18:14	20:26	21:35	22:37
6	09:25		11:24 (33)	08:34	12:26 (28)	07:21	06:52	05:31	04:34
	16:00	31	13:06 (20)	17:08	79	15:33 (24)	18:17	20:28	21:37	22:38
7	09:24		11:24 (33)	08:32	12:26 (28)	07:19	06:50	05:29	04:33
	16:02	34	13:07 (20)	17:11	74	15:31 (24)	18:19	20:30	21:40	22:39
8	09:24		11:24 (33)	08:30	12:28 (28)	07:16	06:47	05:26	04:32
	16:03	41	13:07 (20)	17:13	68	15:30 (24)	18:21	20:33	21:42	22:40
9	09:23		11:24 (33)	08:27	12:28 (28)	07:13	06:44	05:24	04:31
	16:05	42	13:07 (20)	17:16	60	15:26 (24)	18:24	20:35	21:44	22:42
10	09:22		11:25 (33)	08:25	12:29 (28)	07:10	06:41	05:22	04:30
	16:07	42	13:08 (20)	17:18	51	14:44 (23)	18:26	20:37	21:46	22:43
11	09:21		11:25 (33)	08:23	12:32 (28)	07:07	06:38	05:19	04:29
	16:09	43	13:09 (20)	17:21	45	14:43 (23)	18:28	20:40	21:49	22:44
12	09:20		11:25 (33)	08:20	09:49 (15)	07:04	06:35	05:17	04:29
	16:11	44	13:09 (20)	17:23	45	14:42 (23)	18:31	20:42	21:51	22:45
13	09:18		11:26 (33)	08:18	09:45 (15)	07:01	06:32	05:15	04:28
	16:13	44	13:10 (20)	17:26	43	14:40 (23)	18:33	20:44	21:53	22:46
14	09:17		11:26 (33)	08:15	09:44 (15)	06:59	06:30	05:13	04:28
	16:15	54	13:10 (20)	17:28	27	14:38 (23)	18:35	20:47	21:55	22:47
15	09:16		11:26 (33)	08:13	09:43 (15)	06:56	06:27	05:10	04:27
	16:17	57	13:10 (20)	17:31	18	10:01 (15)	18:38	20:49	21:58	22:47
16	09:15		11:27 (33)	08:10	09:42 (15)	06:53	06:24	05:08	04:27
	16:19	60	13:10 (20)	17:33	20	10:02 (15)	18:40	20:51	22:00	22:48
17	09:13		11:27 (33)	08:07	09:41 (15)	06:50	06:21	05:06	04:27
	16:21	63	13:10 (20)	17:35	21	10:02 (15)	18:42	20:53	22:02	22:49
18	09:12		11:28 (33)	08:05	09:41 (15)	06:47	06:19	05:04	04:27
	16:23	64	13:11 (20)	17:38	22	10:03 (15)	18:45	20:56	22:04	22:49
19	09:10		11:29 (33)	08:02	09:40 (15)	06:44	06:16	05:02	04:27
	16:25	63	13:11 (20)	17:40	23	10:03 (15)	18:47	20:58	22:06	22:50
20	09:08		11:30 (33)	08:00	09:40 (15)	06:41	06:13	05:00	04:27
	16:28	63	13:11 (20)	17:43	23	10:03 (15)	18:49	21:00	22:08	22:50
21	09:07		11:31 (33)	07:57	09:40 (15)	06:38	06:10	04:58	04:27
	16:30	62	13:11 (20)	17:45	22	10:02 (15)	18:51	21:03	22:10	22:50
22	09:05		11:31 (33)	07:54	09:40 (15)	06:36	06:08	04:56	04:27
	16:32	60	13:09 (20)	17:48	22	10:02 (15)	18:54	21:05	22:12	22:50
23	09:03		11:33 (33)	07:52	09:42 (15)	06:33	06:05	04:54	04:27
	16:34	66	14:33 (23)	17:50	20	10:02 (15)	18:56	21:07	22:14	22:50
24	09:02		11:35 (33)	07:49	09:42 (15)	06:30	06:02	04:52	04:27
	16:37	67	14:36 (23)	17:53	18	10:00 (15)	18:58	21:10	22:16	22:51
25	09:00		11:39 (33)	07:46	09:43 (15)	06:27	05:59	04:51	04:28
	16:39	58	14:38 (23)	17:55	16	09:59 (15)	19:01	21:12	22:18	22:50
26	08:58		12:24 (28)	07:44	09:45 (15)	06:24	05:57	04:49	04:28
	16:41	55	14:40 (23)	17:57	11	09:56 (15)	19:03	21:14	22:20	22:50
27	08:56		12:23 (28)	07:41	09:49 (15)	06:21	05:54	04:47	04:29
	16:44	57	14:40 (23)	18:00	2	09:51 (15)	19:05	21:17	22:22	22:50
28	08:54		12:23 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	61	15:15 (24)	18:02		19:07	21:19	22:24	22:50
29	08:52		12:24 (28)			07:15	05:49	04:44	04:30
	16:49	67	15:19 (24)			20:10	21:21	22:25	22:50
30	08:50		12:23 (28)			07:12	05:46	04:42	04:31
	16:51	74	15:23 (24)			20:12	21:24	22:27	22:49
31	08:48		12:24 (28)			07:10		04:41	
	16:53	77	15:26 (24)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1549		1149					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,62		0,62					
Total reduction		0,25		0,25					
Total, real		386		284					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:59 (28)	09:00		11:07 (33)
	22:49		22:01		20:40		19:13			16:49	51	14:13 (23)	15:51	43	12:51 (20)
2	04:33		05:26		06:35		07:42			07:54		11:58 (28)	09:02		11:08 (33)
	22:48		21:58		20:37		19:10			16:46	61	14:57 (24)	15:50	42	12:51 (20)
3	04:34		05:28		06:37		07:44			07:56		11:57 (28)	09:03		11:08 (33)
	22:47		21:56		20:34		19:07			16:44	71	15:00 (24)	15:49	42	12:51 (20)
4	04:35		05:31		06:40		07:46			07:59		11:56 (28)	09:05		11:09 (33)
	22:47		21:54		20:31		19:04			16:41	76	15:01 (24)	15:48	41	12:52 (20)
5	04:36		05:33		06:42		07:48			08:01		11:55 (28)	09:07		11:09 (33)
	22:46		21:51		20:28		19:02			16:39	80	15:02 (24)	15:47	35	12:52 (20)
6	04:37		05:35		06:44		07:51			08:03		11:55 (28)	09:09		11:10 (33)
	22:45		21:49		20:25		18:59			16:37	82	15:03 (24)	15:46	31	12:52 (20)
7	04:38		05:37		06:46		07:53			08:06		11:54 (28)	09:10		11:11 (33)
	22:44		21:47		20:22		18:56			16:34	84	15:03 (24)	15:45	24	12:40 (20)
8	04:40		05:39		06:49		07:55			08:08		11:54 (28)	09:12		11:11 (33)
	22:43		21:44		20:20		18:53			16:32	87	15:04 (24)	15:45	24	12:41 (20)
9	04:41		05:42		06:51		07:57			08:11		11:55 (28)	09:13		11:12 (33)
	22:42		21:42		20:17		18:50			16:30	87	15:05 (24)	15:44	20	12:37 (20)
10	04:43		05:44		06:53		08:00			08:13		11:55 (28)	09:15		11:12 (33)
	22:40		21:39		20:14		18:47			16:28	81	15:01 (24)	15:43	17	11:29 (33)
11	04:44		05:46		06:55		08:02			08:15		11:54 (28)	09:16		11:14 (33)
	22:39		21:37		20:11		18:45			16:25	78	14:57 (24)	15:43	16	11:30 (33)
12	04:46		05:48		06:57		08:04			08:18		11:55 (28)	09:18		11:14 (33)
	22:38		21:34		20:08		18:42			16:23	74	14:55 (24)	15:43	15	11:29 (33)
13	04:47		05:51		07:00		08:07			08:20		11:56 (28)	09:19		11:15 (33)
	22:37		21:31		20:05		18:39			16:21	67	14:51 (24)	15:42	15	11:30 (33)
14	04:49		05:53		07:02		08:09			08:22		11:55 (28)	09:20		11:16 (33)
	22:35		21:29		20:02		18:36			16:19	62	14:47 (24)	15:42	14	11:30 (33)
15	04:51		05:55		07:04		08:11		10:19 (15)	08:25		11:56 (28)	09:21		11:16 (33)
	22:34		21:26		19:59		18:33	8	10:27 (15)	16:17	57	14:13 (23)	15:42	14	11:30 (33)
16	04:52		05:57		07:06		08:13		10:16 (15)	08:27		11:57 (28)	09:22		11:17 (33)
	22:32		21:24		19:56		18:31	13	10:29 (15)	16:15	54	14:12 (23)	15:42	12	11:29 (33)
17	04:54		06:00		07:08		08:16		10:15 (15)	08:29		11:12 (33)	09:23		11:17 (33)
	22:30		21:21		19:54		18:28	16	10:31 (15)	16:13	58	14:11 (23)	15:42	12	11:29 (33)
18	04:56		06:02		07:11		08:18		10:13 (15)	08:32		11:09 (33)	09:24		11:18 (33)
	22:29		21:18		19:51		18:25	19	10:32 (15)	16:11	67	14:10 (23)	15:42	11	11:29 (33)
19	04:58		06:04		07:13		08:20		10:12 (15)	08:34		11:08 (33)	09:25		11:19 (33)
	22:27		21:16		19:48		18:22	21	10:33 (15)	16:09	66	14:08 (23)	15:42	11	11:30 (33)
20	05:00		06:06		07:15		08:23		10:11 (15)	08:36		11:06 (33)	09:26		11:20 (33)
	22:25		21:13		19:45		18:20	22	10:33 (15)	16:08	60	12:44 (20)	15:43	10	11:30 (33)
21	05:01		06:08		07:17		08:25		10:11 (15)	08:39		11:06 (33)	09:26		11:20 (33)
	22:24		21:10		19:42		18:17	23	10:34 (15)	16:06	62	12:46 (20)	15:43	10	11:30 (33)
22	05:03		06:11		07:19		08:27		10:10 (15)	08:41		11:06 (33)	09:27		11:21 (33)
	22:22		21:08		19:39		18:14	23	10:33 (15)	16:04	63	12:47 (20)	15:43	10	11:31 (33)
23	05:05		06:13		07:22		08:30		10:11 (15)	08:43		11:05 (33)	09:27		11:21 (33)
	22:20		21:05		19:36		18:12	22	10:33 (15)	16:02	63	12:47 (20)	15:44	10	11:31 (33)
24	05:07		06:15		07:24		08:32		10:10 (15)	08:45		11:05 (33)	09:28		11:22 (33)
	22:18		21:02		19:33		18:09	22	10:32 (15)	16:01	64	12:48 (20)	15:44	10	11:32 (33)
25	05:09		06:17		07:26		07:35		09:11 (15)	08:47		11:05 (33)	09:28		11:22 (33)
	22:16		20:59		19:30		17:06	21	09:32 (15)	15:59	63	12:48 (20)	15:45	11	11:33 (33)
26	05:11		06:20		07:28		07:37		09:11 (15)	08:50		11:06 (33)	09:28		11:22 (33)
	22:14		20:56		19:27		17:04	20	09:31 (15)	15:58	59	12:49 (20)	15:46	12	11:34 (33)
27	05:13		06:22		07:30		07:39		09:12 (15)	08:52		11:05 (33)	09:28		11:23 (33)
	22:12		20:54		19:25		17:01	18	09:30 (15)	15:56	57	12:49 (20)	15:47	11	11:34 (33)
28	05:16		06:24		07:33		07:42		09:14 (15)	08:54		11:06 (33)	09:28		11:23 (33)
	22:10		20:51		19:22		16:59	28	14:08 (23)	15:55	53	12:50 (20)	15:48	13	11:36 (33)
29	05:18		06:26		07:35		07:44		09:15 (15)	08:56		11:06 (33)	09:28		11:22 (33)
	22:07		20:48		19:19		16:56	44	14:10 (23)	15:54	44	12:50 (20)	15:49	14	11:36 (33)
30	05:20		06:29		07:37		07:47		09:19 (15)	08:58		11:06 (33)	09:28		11:23 (33)
	22:05		20:45		19:16		16:54	44	14:11 (23)	15:52	43	12:50 (20)	15:50	15	11:38 (33)
31	05:22		06:31				07:49		12:01 (28)				09:28		11:23 (33)
	22:03		20:42				16:51	46	14:13 (23)				15:51	15	11:38 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								410			1974			580	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,68			0,61			0,65	
Total reduction								0,27			0,24			0,26	
Total, real								112			477			151	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28			08:46		11:27 (28)	07:35	07:07	05:44	04:40
	15:53			16:56	70	14:51 (24)	18:05	20:17	21:26	22:31
2	09:27		12:04 (20)	08:43		11:27 (28)	07:33	07:04	05:41	04:38
	15:54	1	12:05 (20)	16:58	60	13:50 (23)	18:07	20:19	21:28	22:32
3	09:27		12:04 (20)	08:41		11:28 (28)	07:30	07:01	05:39	04:37
	15:55	4	12:08 (20)	17:01	58	13:50 (23)	18:09	20:21	21:31	22:34
4	09:27		12:04 (20)	08:39		11:28 (28)	07:27	06:58	05:36	04:36
	15:57	7	12:11 (20)	17:03	54	13:48 (23)	18:12	20:24	21:33	22:35
5	09:26		12:04 (20)	08:37		11:28 (28)	07:24	06:55	05:34	04:35
	15:58	17	12:21 (20)	17:06	52	13:47 (23)	18:14	20:26	21:35	22:37
6	09:25		12:05 (20)	08:34		11:29 (28)	07:21	06:52	05:31	04:34
	16:00	16	12:21 (20)	17:08	49	13:47 (23)	18:17	20:28	21:37	22:38
7	09:24		12:05 (20)	08:32		11:29 (28)	07:19	06:50	05:29	04:33
	16:02	19	12:26 (20)	17:11	43	13:44 (23)	18:19	20:30	21:40	22:39
8	09:24		12:05 (20)	08:30		11:31 (28)	07:16	06:47	05:26	04:32
	16:03	22	12:27 (20)	17:13	35	13:42 (23)	18:21	20:33	21:42	22:40
9	09:23		12:06 (20)	08:27		11:32 (28)	07:13	06:44	05:24	04:31
	16:05	22	12:28 (20)	17:16	22	11:54 (28)	18:24	20:35	21:44	22:42
10	09:22		12:06 (20)	08:25		11:34 (28)	07:10	06:41	05:22	04:30
	16:07	22	12:28 (20)	17:18	18	11:52 (28)	18:26	20:37	21:46	22:43
11	09:21		12:07 (20)	08:23		11:37 (28)	07:07	06:38	05:19	04:29
	16:09	22	12:29 (20)	17:21	14	11:51 (28)	18:28	20:40	21:49	22:44
12	09:20		12:07 (20)	08:20		11:41 (28)	07:04	06:35	05:17	04:29
	16:11	28	13:33 (23)	17:23	4	11:45 (28)	18:31	20:42	21:51	22:45
13	09:18		12:08 (20)	08:18			07:02	06:32	05:15	04:28
	16:13	33	13:37 (23)	17:26			18:33	20:44	21:53	22:46
14	09:17		12:08 (20)	08:15		09:30 (15)	06:59	06:30	05:13	04:28
	16:15	36	13:38 (23)	17:28	5	09:35 (15)	18:35	20:47	21:55	22:47
15	09:16		11:34 (28)	08:13		09:27 (15)	06:56	06:27	05:10	04:27
	16:17	47	13:40 (23)	17:31	11	09:38 (15)	18:38	20:49	21:58	22:47
16	09:15		11:32 (28)	08:10		09:25 (15)	06:53	06:24	05:08	04:27
	16:19	54	13:41 (23)	17:33	14	09:39 (15)	18:40	20:51	22:00	22:48
17	09:13		11:31 (28)	08:07		09:23 (15)	06:50	06:21	05:06	04:27
	16:21	57	13:43 (23)	17:36	17	09:40 (15)	18:42	20:53	22:02	22:49
18	09:12		11:30 (28)	08:05		09:23 (15)	06:47	06:19	05:04	04:27
	16:23	72	14:53 (24)	17:38	18	09:41 (15)	18:45	20:56	22:04	22:49
19	09:10		11:29 (28)	08:02		09:22 (15)	06:44	06:16	05:02	04:27
	16:25	85	14:53 (24)	17:40	19	09:41 (15)	18:47	20:58	22:06	22:50
20	09:09		11:28 (28)	08:00		09:22 (15)	06:41	06:13	05:00	04:27
	16:28	88	14:54 (24)	17:43	19	09:41 (15)	18:49	21:00	22:08	22:50
21	09:07		11:28 (28)	07:57		09:22 (15)	06:39	06:10	04:58	04:27
	16:30	88	14:54 (24)	17:45	19	09:41 (15)	18:51	21:03	22:10	22:50
22	09:05		11:28 (28)	07:54		09:22 (15)	06:36	06:08	04:56	04:27
	16:32	89	14:55 (24)	17:48	19	09:41 (15)	18:54	21:05	22:12	22:50
23	09:03		11:26 (28)	07:52		09:23 (15)	06:33	06:05	04:54	04:27
	16:34	87	14:54 (24)	17:50	18	09:41 (15)	18:56	21:07	22:14	22:51
24	09:02		11:26 (28)	07:49		09:23 (15)	06:30	06:02	04:52	04:27
	16:37	81	14:55 (24)	17:53	17	09:40 (15)	18:58	21:10	22:16	22:51
25	09:00		11:26 (28)	07:46		09:24 (15)	06:27	05:59	04:51	04:28
	16:39	82	14:55 (24)	17:55	14	09:38 (15)	19:01	21:12	22:18	22:51
26	08:58		11:26 (28)	07:44		09:25 (15)	06:24	05:57	04:49	04:28
	16:41	83	14:55 (24)	17:57	11	09:36 (15)	19:03	21:14	22:20	22:50
27	08:56		11:25 (28)	07:41		09:30 (15)	06:21	05:54	04:47	04:29
	16:44	83	14:54 (24)	18:00	1	09:31 (15)	19:05	21:17	22:22	22:50
28	08:54		11:26 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	82	14:54 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:26 (28)				07:15	05:49	04:44	04:30
	16:49	80	14:54 (24)				20:10	21:21	22:25	22:50
30	08:50		11:26 (28)				07:13	05:46	04:42	04:31
	16:51	79	14:53 (24)				20:12	21:24	22:27	22:49
31	08:48		11:26 (28)				07:10		04:41	
	16:54	76	14:52 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1562			681					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,61			0,66					
Total reduction		0,24			0,26					
Total, real		382			180					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:03 (28)	09:00		11:49 (20)
	22:49		22:01		20:40		19:13			16:49	19	11:22 (28)	15:51	22	12:11 (20)
2	04:33		05:26		06:35		07:42			07:54		11:01 (28)	09:02		11:49 (20)
	22:48		21:59		20:37		19:10			16:46	23	11:24 (28)	15:50	22	12:11 (20)
3	04:34		05:28		06:37		07:44			07:56		11:01 (28)	09:03		11:49 (20)
	22:47		21:56		20:34		19:07			16:44	36	13:12 (23)	15:49	22	12:11 (20)
4	04:35		05:31		06:40		07:46			07:59		10:59 (28)	09:05		11:50 (20)
	22:47		21:54		20:31		19:04			16:41	43	13:14 (23)	15:48	21	12:11 (20)
5	04:36		05:33		06:42		07:48			08:01		10:59 (28)	09:07		11:50 (20)
	22:46		21:51		20:28		19:02			16:39	48	13:16 (23)	15:47	21	12:11 (20)
6	04:37		05:35		06:44		07:51			08:03		10:58 (28)	09:09		11:51 (20)
	22:45		21:49		20:25		18:59			16:37	53	13:18 (23)	15:46	16	12:07 (20)
7	04:39		05:37		06:46		07:53			08:06		10:57 (28)	09:10		11:51 (20)
	22:44		21:47		20:23		18:56			16:34	55	13:18 (23)	15:45	17	12:08 (20)
8	04:40		05:39		06:49		07:55			08:08		10:57 (28)	09:12		11:52 (20)
	22:43		21:44		20:20		18:53			16:32	58	13:19 (23)	15:45	8	12:00 (20)
9	04:41		05:42		06:51		07:57			08:11		10:57 (28)	09:13		11:53 (20)
	22:42		21:42		20:17		18:50			16:30	63	14:18 (24)	15:44	4	11:57 (20)
10	04:43		05:44		06:53		08:00			08:13		10:58 (28)	09:15		11:53 (20)
	22:41		21:39		20:14		18:47			16:28	71	14:22 (24)	15:43	1	11:54 (20)
11	04:44		05:46		06:55		08:02			08:15		10:57 (28)	09:16		
	22:39		21:37		20:11		18:45			16:25	76	14:23 (24)	15:43		
12	04:46		05:48		06:57		08:04			08:18		10:57 (28)	09:18		
	22:38		21:34		20:08		18:42			16:23	80	14:25 (24)	15:43		
13	04:47		05:51		07:00		08:07			08:20		10:58 (28)	09:19		
	22:37		21:32		20:05		18:39			16:21	81	14:26 (24)	15:42		
14	04:49		05:53		07:02		08:09			08:22		10:58 (28)	09:20		
	22:35		21:29		20:02		18:36			16:19	82	14:26 (24)	15:42		
15	04:51		05:55		07:04		08:11		10:00 (15)	08:25		10:58 (28)	09:21		
	22:34		21:26		19:59		18:33	7	10:07 (15)	16:17	83	14:27 (24)	15:42		
16	04:52		05:57		07:06		08:13		09:57 (15)	08:27		10:59 (28)	09:22		
	22:32		21:24		19:56		18:31	12	10:09 (15)	16:15	83	14:28 (24)	15:42		
17	04:54		06:00		07:08		08:16		09:56 (15)	08:30		11:00 (28)	09:23		
	22:31		21:21		19:54		18:28	15	10:11 (15)	16:13	83	14:29 (24)	15:42		
18	04:56		06:02		07:11		08:18		09:54 (15)	08:32		11:00 (28)	09:24		
	22:29		21:18		19:51		18:25	17	10:11 (15)	16:11	81	14:29 (24)	15:42		
19	04:58		06:04		07:13		08:20		09:54 (15)	08:34		11:01 (28)	09:25		
	22:27		21:16		19:48		18:22	18	10:12 (15)	16:09	87	14:29 (24)	15:42		
20	05:00		06:06		07:15		08:23		09:53 (15)	08:36		11:02 (28)	09:26		
	22:25		21:13		19:45		18:20	19	10:12 (15)	16:08	88	14:29 (24)	15:43		
21	05:01		06:08		07:17		08:25		09:53 (15)	08:39		11:03 (28)	09:26		
	22:24		21:10		19:42		18:17	19	10:12 (15)	16:06	88	14:29 (24)	15:43		
22	05:03		06:11		07:19		08:27		09:52 (15)	08:41		11:04 (28)	09:27		
	22:22		21:08		19:39		18:14	20	10:12 (15)	16:04	88	14:30 (24)	15:43		
23	05:05		06:13		07:22		08:30		09:53 (15)	08:43		11:05 (28)	09:27		
	22:20		21:05		19:36		18:12	19	10:12 (15)	16:02	84	14:29 (24)	15:44		
24	05:07		06:15		07:24		08:32		09:53 (15)	08:45		11:07 (28)	09:28		
	22:18		21:02		19:33		18:09	17	10:10 (15)	16:01	72	14:30 (24)	15:44		
25	05:09		06:17		07:26		07:35		08:54 (15)	08:47		11:08 (28)	09:28		
	22:16		20:59		19:30		17:06	16	09:10 (15)	15:59	58	13:20 (23)	15:45		
26	05:11		06:20		07:28		07:37		08:55 (15)	08:50		11:11 (28)	09:28		
	22:14		20:57		19:27		17:04	14	09:09 (15)	15:58	53	13:20 (23)	15:46		
27	05:13		06:22		07:30		07:39		08:56 (15)	08:52		11:13 (28)	09:28		
	22:12		20:54		19:25		17:01	10	09:06 (15)	15:56	47	13:19 (23)	15:47		
28	05:16		06:24		07:33		07:42			08:54		11:48 (20)	09:28		
	22:10		20:51		19:22		16:59			15:55	35	13:18 (23)	15:48		
29	05:18		06:26		07:35		07:44			08:56		11:48 (20)	09:28		
	22:07		20:48		19:19		16:56			15:54	33	13:17 (23)	15:49		
30	05:20		06:29		07:37		07:47		11:09 (28)	08:58		11:48 (20)	09:28		
	22:05		20:45		19:16		16:54	7	11:16 (28)	15:52	30	13:15 (23)	15:50		
31	05:22		06:31				07:49		11:06 (28)				09:28		
	22:03		20:42				16:51	15	11:21 (28)				15:51		
Potential sun hours	546		478		386		319			236			199		
Total, worst case								225			1881			154	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,61			0,64	
Total reduction								0,29			0,25			0,25	
Total, real								65			461			39	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:18 (20)	08:46	11:53 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (20)	16:56	49	14:04 (23)	18:05	20:17	21:26	22:31
2	09:27		12:18 (20)	08:43	11:54 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (20)	16:58	44	14:02 (23)	18:07	20:19	21:28	22:32
3	09:27		11:54 (28)	08:41	11:56 (28)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (20)	17:01	39	14:01 (23)	18:09	20:21	21:31	22:34
4	09:27		11:52 (28)	08:39	11:57 (28)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (20)	17:03	32	13:59 (23)	18:12	20:24	21:33	22:35
5	09:26		11:51 (28)	08:37	11:59 (28)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (20)	17:06	19	13:55 (23)	18:14	20:26	21:35	22:37
6	09:25		11:50 (28)	08:34	12:04 (28)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (20)	17:08	5	12:09 (28)	18:17	20:28	21:37	22:38
7	09:24		11:50 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	42	13:46 (23)	17:11		18:19	20:30	21:40	22:39
8	09:24		11:50 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	48	13:49 (23)	17:13		18:21	20:33	21:42	22:40
9	09:23		11:50 (28)	08:27	09:42 (15)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (23)	17:16	7	09:49 (15)	18:24	20:35	21:44	22:42
10	09:22		11:49 (28)	08:25	09:40 (15)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (23)	17:18	12	09:52 (15)	18:26	20:37	21:46	22:43
11	09:21		11:49 (28)	08:23	09:39 (15)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (23)	17:21	15	09:54 (15)	18:28	20:40	21:49	22:44
12	09:20		11:48 (28)	08:20	09:37 (15)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (23)	17:23	17	09:54 (15)	18:31	20:42	21:51	22:45
13	09:18		11:49 (28)	08:18	09:36 (15)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (23)	17:26	19	09:55 (15)	18:33	20:44	21:53	22:46
14	09:17		11:48 (28)	08:15	09:37 (15)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (23)	17:28	19	09:56 (15)	18:35	20:47	21:55	22:47
15	09:16		11:48 (28)	08:13	09:36 (15)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (24)	17:31	20	09:56 (15)	18:38	20:49	21:58	22:47
16	09:15		11:47 (28)	08:10	09:36 (15)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (24)	17:33	20	09:56 (15)	18:40	20:51	22:00	22:48
17	09:13		11:48 (28)	08:07	09:36 (15)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (24)	17:36	19	09:55 (15)	18:42	20:53	22:02	22:49
18	09:12		11:48 (28)	08:05	09:37 (15)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (24)	17:38	19	09:56 (15)	18:45	20:56	22:04	22:49
19	09:10		11:48 (28)	08:02	09:37 (15)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (24)	17:40	18	09:55 (15)	18:47	20:58	22:06	22:50
20	09:08		11:48 (28)	08:00	09:38 (15)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (24)	17:43	15	09:53 (15)	18:49	21:00	22:08	22:50
21	09:07		11:48 (28)	07:57	09:39 (15)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (24)	17:45	13	09:52 (15)	18:51	21:03	22:10	22:50
22	09:05		11:48 (28)	07:54	09:41 (15)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (24)	17:48	8	09:49 (15)	18:54	21:05	22:12	22:50
23	09:03		11:48 (28)	07:52		06:33	06:05	04:54	04:27
	16:34	80	15:02 (24)	17:50		18:56	21:07	22:14	22:51
24	09:02		11:48 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	80	15:02 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00		11:49 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	80	15:02 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58		11:49 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	79	15:02 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56		11:49 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	75	15:01 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54		11:50 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	73	15:01 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52		11:51 (28)			07:15	05:49	04:44	04:30
	16:49	69	15:00 (24)			20:10	21:21	22:25	22:50
30	08:50		11:51 (28)			07:12	05:46	04:42	04:31
	16:51	64	14:58 (24)			20:12	21:24	22:27	22:49
31	08:48		11:52 (28)			07:10		04:41	
	16:54	55	14:55 (24)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1930		409					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,60		0,67					
Total reduction		0,24		0,27					
Total, real		465		110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (15)	09:00		11:31 (28)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (15)	15:51	60	13:37 (23)
2	04:33	05:26	06:35	07:42			07:54		09:12 (15)	09:02		11:32 (28)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (15)	15:50	56	13:36 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (23)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (28)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (23)
5	04:36	05:33	06:42	07:48			08:01		11:32 (28)	09:07		11:35 (28)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (28)	15:47	43	13:32 (23)
6	04:37	05:35	06:44	07:51			08:03		11:29 (28)	09:09		11:37 (28)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (23)	15:46	36	12:27 (20)
7	04:38	05:37	06:46	07:53			08:06		11:27 (28)	09:10		11:38 (28)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (23)	15:45	34	12:27 (20)
8	04:40	05:39	06:49	07:55			08:08		11:25 (28)	09:12		11:40 (28)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (23)	15:45	32	12:28 (20)
9	04:41	05:42	06:51	07:57			08:11		11:25 (28)	09:13		11:42 (28)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (23)	15:44	28	12:28 (20)
10	04:43	05:44	06:53	08:00			08:13		11:24 (28)	09:15		12:07 (20)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (23)	15:43	21	12:28 (20)
11	04:44	05:46	06:55	08:02			08:15		11:23 (28)	09:16		12:08 (20)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (24)	15:43	21	12:29 (20)
12	04:46	05:48	06:57	08:04			08:18		11:23 (28)	09:18		12:08 (20)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (24)	15:43	21	12:29 (20)
13	04:47	05:51	07:00	08:07			08:20		11:23 (28)	09:19		12:09 (20)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (24)	15:42	21	12:30 (20)
14	04:49	05:53	07:02	08:09			08:22		11:22 (28)	09:20		12:09 (20)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (24)	15:42	21	12:30 (20)
15	04:51	05:55	07:04	08:11			08:25		11:22 (28)	09:21		12:09 (20)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (24)	15:42	21	12:30 (20)
16	04:52	05:57	07:06	08:13			08:27		11:22 (28)	09:22		12:10 (20)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (24)	15:42	20	12:30 (20)
17	04:54	06:00	07:08	08:16			08:30		11:23 (28)	09:23		12:10 (20)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (24)	15:42	21	12:31 (20)
18	04:56	06:02	07:11	08:18			08:32		11:22 (28)	09:24		12:11 (20)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (24)	15:42	20	12:31 (20)
19	04:58	06:04	07:13	08:20			08:34		11:23 (28)	09:25		12:12 (20)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (24)	15:42	20	12:32 (20)
20	05:00	06:06	07:15	08:23		10:11 (15)	08:36		11:22 (28)	09:26		12:12 (20)
	22:25	21:13	19:45	18:20	10	10:21 (15)	16:08	82	14:37 (24)	15:43	20	12:32 (20)
21	05:01	06:08	07:17	08:25		10:10 (15)	08:39		11:23 (28)	09:26		12:12 (20)
	22:24	21:10	19:42	18:17	13	10:23 (15)	16:06	80	14:37 (24)	15:43	20	12:32 (20)
22	05:03	06:11	07:19	08:27		10:08 (15)	08:41		11:24 (28)	09:27		12:13 (20)
	22:22	21:08	19:39	18:14	16	10:24 (15)	16:04	79	14:38 (24)	15:43	20	12:33 (20)
23	05:05	06:13	07:22	08:30		10:07 (15)	08:43		11:24 (28)	09:27		12:13 (20)
	22:20	21:05	19:36	18:12	18	10:25 (15)	16:02	84	14:38 (24)	15:44	20	12:33 (20)
24	05:07	06:15	07:24	08:32		10:06 (15)	08:45		11:25 (28)	09:28		12:14 (20)
	22:18	21:02	19:33	18:09	19	10:25 (15)	16:01	88	14:38 (24)	15:44	21	12:35 (20)
25	05:09	06:17	07:26	07:35		09:06 (15)	08:47		11:25 (28)	09:28		12:15 (20)
	22:16	20:59	19:30	17:06	20	09:26 (15)	15:59	88	14:38 (24)	15:45	20	12:35 (20)
26	05:11	06:20	07:28	07:37		09:06 (15)	08:50		11:26 (28)	09:28		12:15 (20)
	22:14	20:57	19:27	17:04	20	09:26 (15)	15:58	81	14:37 (24)	15:46	20	12:35 (20)
27	05:13	06:22	07:30	07:39		09:06 (15)	08:52		11:27 (28)	09:28		12:16 (20)
	22:12	20:54	19:25	17:01	19	09:25 (15)	15:56	73	14:26 (24)	15:47	20	12:36 (20)
28	05:16	06:24	07:33	07:42		09:06 (15)	08:54		11:28 (28)	09:28		12:16 (20)
	22:10	20:51	19:22	16:59	19	09:25 (15)	15:55	65	13:38 (23)	15:48	21	12:37 (20)
29	05:18	06:26	07:35	07:44		09:06 (15)	08:56		11:29 (28)	09:28		12:16 (20)
	22:07	20:48	19:19	16:56	18	09:24 (15)	15:54	64	13:37 (23)	15:49	20	12:36 (20)
30	05:20	06:29	07:37	07:47		09:07 (15)	08:58		11:29 (28)	09:28		12:17 (20)
	22:05	20:45	19:16	16:54	17	09:24 (15)	15:52	62	13:37 (23)	15:50	20	12:37 (20)
31	05:22	06:31		07:49		09:08 (15)				09:28		12:16 (20)
	22:03	20:42		16:51	15	09:23 (15)				15:51	21	12:37 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,60			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			410			210	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:08 (20)	08:46	11:39 (28)	07:35	07:07	05:44	04:40
	15:53	21 12:29 (20)	16:56	49 13:50 (23)	18:05	20:17	21:26	22:31
2	09:27	12:08 (20)	08:43	11:40 (28)	07:33	07:04	05:41	04:38
	15:54	21 12:29 (20)	16:58	44 13:48 (23)	18:07	20:19	21:28	22:32
3	09:27	12:09 (20)	08:41	11:41 (28)	07:30	07:01	05:39	04:37
	15:55	20 12:29 (20)	17:01	39 13:47 (23)	18:09	20:21	21:31	22:34
4	09:27	12:09 (20)	08:39	11:42 (28)	07:27	06:58	05:36	04:36
	15:57	21 12:30 (20)	17:03	32 13:45 (23)	18:12	20:24	21:33	22:35
5	09:26	12:09 (20)	08:37	11:43 (28)	07:24	06:55	05:34	04:35
	15:58	21 12:30 (20)	17:06	19 12:02 (28)	18:14	20:26	21:35	22:37
6	09:25	12:10 (20)	08:34	11:46 (28)	07:21	06:52	05:31	04:34
	16:00	25 13:32 (23)	17:08	14 12:00 (28)	18:17	20:28	21:37	22:38
7	09:24	11:43 (28)	08:32	11:50 (28)	07:19	06:50	05:29	04:33
	16:02	33 13:35 (23)	17:11	6 11:56 (28)	18:19	20:30	21:40	22:39
8	09:24	11:41 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	41 13:37 (23)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:40 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	47 13:39 (23)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:38 (28)	08:25	09:39 (15)	07:10	06:41	05:22	04:30
	16:07	51 13:40 (23)	17:18	3 09:42 (15)	18:26	20:37	21:46	22:43
11	09:21	11:38 (28)	08:23	09:36 (15)	07:07	06:38	05:19	04:29
	16:09	55 13:42 (23)	17:21	10 09:46 (15)	18:28	20:40	21:49	22:44
12	09:20	11:37 (28)	08:20	09:34 (15)	07:04	06:35	05:17	04:29
	16:11	60 14:46 (24)	17:23	14 09:48 (15)	18:31	20:42	21:51	22:45
13	09:18	11:37 (28)	08:18	09:33 (15)	07:02	06:32	05:15	04:28
	16:13	72 14:49 (24)	17:26	16 09:49 (15)	18:33	20:44	21:53	22:46
14	09:17	11:36 (28)	08:15	09:33 (15)	06:59	06:30	05:13	04:28
	16:15	83 14:49 (24)	17:28	17 09:50 (15)	18:35	20:47	21:55	22:47
15	09:16	11:36 (28)	08:13	09:32 (15)	06:56	06:27	05:10	04:27
	16:17	87 14:50 (24)	17:31	18 09:50 (15)	18:38	20:49	21:58	22:47
16	09:15	11:35 (28)	08:10	09:31 (15)	06:53	06:24	05:08	04:27
	16:19	86 14:50 (24)	17:33	19 09:50 (15)	18:40	20:51	22:00	22:48
17	09:13	11:36 (28)	08:07	09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87 14:51 (24)	17:36	19 09:50 (15)	18:42	20:53	22:02	22:49
18	09:12	11:36 (28)	08:05	09:32 (15)	06:47	06:19	05:04	04:27
	16:23	89 14:52 (24)	17:38	19 09:51 (15)	18:45	20:56	22:04	22:49
19	09:10	11:36 (28)	08:02	09:32 (15)	06:44	06:16	05:02	04:27
	16:25	87 14:52 (24)	17:40	18 09:50 (15)	18:47	20:58	22:06	22:50
20	09:09	11:35 (28)	08:00	09:32 (15)	06:41	06:13	05:00	04:27
	16:28	85 14:53 (24)	17:43	17 09:49 (15)	18:49	21:00	22:08	22:50
21	09:07	11:35 (28)	07:57	09:33 (15)	06:39	06:10	04:58	04:27
	16:30	79 14:53 (24)	17:45	15 09:48 (15)	18:51	21:03	22:10	22:50
22	09:05	11:36 (28)	07:54	09:34 (15)	06:36	06:08	04:56	04:27
	16:32	79 14:53 (24)	17:48	12 09:46 (15)	18:54	21:05	22:12	22:50
23	09:03	11:35 (28)	07:52	09:38 (15)	06:33	06:05	04:54	04:27
	16:34	79 14:52 (24)	17:50	6 09:44 (15)	18:56	21:07	22:14	22:51
24	09:02	11:35 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	79 14:52 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:35 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	78 14:52 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:36 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	77 14:52 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:36 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	74 14:51 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:36 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	71 14:50 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:37 (28)			07:15	05:49	04:44	04:30
	16:49	66 14:49 (24)			20:10	21:21	22:25	22:50
30	08:50	11:37 (28)			07:13	05:46	04:42	04:31
	16:51	56 14:45 (24)			20:12	21:24	22:27	22:49
31	08:48	11:38 (28)			07:10		04:41	
	16:54	51 13:50 (23)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1881		406				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,61		0,68				
Total reduction		0,24		0,27				
Total, real		457		110				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (28)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (23)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (28)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (23)
4	04:35	05:31	06:40	07:46			07:59		11:18 (28)	09:05		11:25 (28)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (28)	15:48	42	13:22 (23)
5	04:36	05:33	06:42	07:48			08:01		11:15 (28)	09:07		11:28 (28)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (28)	15:47	34	13:21 (23)
6	04:37	05:35	06:44	07:51			08:03		11:14 (28)	09:09		11:56 (20)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (28)	15:46	26	13:19 (23)
7	04:38	05:37	06:46	07:53			08:06		11:12 (28)	09:10		11:56 (20)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (23)	15:45	21	12:17 (20)
8	04:40	05:39	06:49	07:55			08:08		11:11 (28)	09:12		11:57 (20)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (23)	15:45	21	12:18 (20)
9	04:41	05:42	06:51	07:57			08:11		11:10 (28)	09:13		11:58 (20)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (23)	15:44	20	12:18 (20)
10	04:43	05:44	06:53	08:00			08:13		11:10 (28)	09:15		11:58 (20)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (23)	15:43	20	12:18 (20)
11	04:44	05:46	06:55	08:02			08:15		11:09 (28)	09:16		11:58 (20)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (23)	15:43	21	12:19 (20)
12	04:46	05:48	06:57	08:04			08:18		11:09 (28)	09:18		11:58 (20)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (24)	15:43	21	12:19 (20)
13	04:47	05:51	07:00	08:07			08:20		11:09 (28)	09:19		12:00 (20)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (24)	15:42	20	12:20 (20)
14	04:49	05:53	07:02	08:09			08:23		11:08 (28)	09:20		12:00 (20)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (24)	15:42	20	12:20 (20)
15	04:51	05:55	07:04	08:11			08:25		11:08 (28)	09:21		12:00 (20)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (24)	15:42	20	12:20 (20)
16	04:52	05:57	07:06	08:13			08:27		11:09 (28)	09:22		12:01 (20)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (24)	15:42	19	12:20 (20)
17	04:54	06:00	07:08	08:16			08:30		11:09 (28)	09:23		12:01 (20)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (24)	15:42	20	12:21 (20)
18	04:56	06:02	07:11	08:18			08:32		11:09 (28)	09:24		12:02 (20)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (24)	15:42	19	12:21 (20)
19	04:58	06:04	07:13	08:20		10:07 (15)	08:34		11:10 (28)	09:25		12:02 (20)
	22:27	21:16	19:48	18:22	9	10:16 (15)	16:09	79	14:27 (24)	15:42	20	12:22 (20)
20	05:00	06:06	07:15	08:23		10:05 (15)	08:36		11:10 (28)	09:26		12:03 (20)
	22:25	21:13	19:45	18:20	13	10:18 (15)	16:08	79	14:27 (24)	15:43	19	12:22 (20)
21	05:01	06:08	07:17	08:25		10:04 (15)	08:39		11:10 (28)	09:26		12:03 (20)
	22:24	21:10	19:42	18:17	15	10:19 (15)	16:06	79	14:28 (24)	15:43	19	12:22 (20)
22	05:03	06:11	07:19	08:27		10:02 (15)	08:41		11:11 (28)	09:27		12:04 (20)
	22:22	21:08	19:39	18:14	17	10:19 (15)	16:04	84	14:29 (24)	15:43	19	12:23 (20)
23	05:05	06:13	07:22	08:30		10:02 (15)	08:43		11:12 (28)	09:27		12:04 (20)
	22:20	21:05	19:36	18:12	18	10:20 (15)	16:02	86	14:28 (24)	15:44	19	12:23 (20)
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		11:13 (28)	09:28		12:05 (20)
	22:18	21:02	19:33	18:09	19	10:20 (15)	16:01	88	14:29 (24)	15:44	19	12:24 (20)
25	05:09	06:17	07:26	07:35		09:01 (15)	08:47		11:13 (28)	09:28		12:06 (20)
	22:16	20:59	19:30	17:06	19	09:20 (15)	15:59	88	14:29 (24)	15:45	19	12:25 (20)
26	05:11	06:20	07:28	07:37		09:02 (15)	08:50		11:14 (28)	09:28		12:06 (20)
	22:14	20:57	19:27	17:04	19	09:21 (15)	15:58	87	14:29 (24)	15:46	19	12:25 (20)
27	05:13	06:22	07:30	07:39		09:01 (15)	08:52		11:15 (28)	09:28		12:06 (20)
	22:12	20:54	19:25	17:01	19	09:20 (15)	15:56	86	14:29 (24)	15:47	20	12:26 (20)
28	05:16	06:24	07:33	07:42		09:02 (15)	08:54		11:16 (28)	09:28		12:07 (20)
	22:10	20:51	19:22	16:59	17	09:19 (15)	15:55	82	14:29 (24)	15:48	20	12:27 (20)
29	05:18	06:26	07:35	07:44		09:02 (15)	08:56		11:17 (28)	09:28		12:07 (20)
	22:07	20:48	19:19	16:56	16	09:18 (15)	15:54	72	14:29 (24)	15:49	19	12:26 (20)
30	05:20	06:29	07:37	07:47		09:04 (15)	08:58		11:18 (28)	09:28		12:07 (20)
	22:05	20:45	19:16	16:54	13	09:17 (15)	15:52	60	14:28 (24)	15:50	20	12:27 (20)
31	05:22	06:31		07:49		09:06 (15)				09:28		12:07 (20)
	22:03	20:42		16:51	9	09:15 (15)				15:51	20	12:27 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			420			190	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:05 (20)	08:46	11:36 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:26 (20)	16:56	45	13:44 (23)	18:05	20:17	21:26	22:31
2	09:27		12:06 (20)	08:43	11:37 (28)	07:33	07:04	05:41	04:38
	15:54	20	12:26 (20)	16:58	40	13:42 (23)	18:07	20:19	21:28	22:32
3	09:27		12:06 (20)	08:41	11:38 (28)	07:30	07:01	05:39	04:37
	15:55	20	12:26 (20)	17:01	34	13:40 (23)	18:09	20:21	21:31	22:34
4	09:27		12:06 (20)	08:39	11:39 (28)	07:27	06:58	05:36	04:36
	15:57	21	12:27 (20)	17:03	20	11:59 (28)	18:12	20:24	21:33	22:35
5	09:26		12:06 (20)	08:37	11:41 (28)	07:24	06:55	05:34	04:35
	15:58	28	13:28 (23)	17:06	16	11:57 (28)	18:14	20:26	21:35	22:37
6	09:25		12:07 (20)	08:34	11:44 (28)	07:21	06:52	05:31	04:34
	16:00	32	13:31 (23)	17:08	11	11:55 (28)	18:17	20:28	21:37	22:38
7	09:24		11:39 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	38	13:32 (23)	17:11			18:19	20:30	21:40	22:39
8	09:24		11:37 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	46	13:34 (23)	17:13			18:21	20:33	21:42	22:41
9	09:23		11:36 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	50	13:36 (23)	17:16			18:24	20:35	21:44	22:42
10	09:22		11:35 (28)	08:25		09:37 (15)	07:10	06:41	05:22	04:30
	16:07	58	14:41 (24)	17:18	6	09:43 (15)	18:26	20:37	21:46	22:43
11	09:21		11:34 (28)	08:23		09:35 (15)	07:07	06:38	05:19	04:29
	16:09	71	14:43 (24)	17:21	11	09:46 (15)	18:28	20:40	21:49	22:44
12	09:20		11:33 (28)	08:20		09:33 (15)	07:04	06:35	05:17	04:29
	16:11	79	14:44 (24)	17:23	15	09:48 (15)	18:31	20:42	21:51	22:45
13	09:18		11:34 (28)	08:18		09:32 (15)	07:02	06:32	05:15	04:28
	16:13	81	14:45 (24)	17:26	16	09:48 (15)	18:33	20:44	21:53	22:46
14	09:17		11:33 (28)	08:15		09:32 (15)	06:59	06:30	05:13	04:28
	16:15	84	14:45 (24)	17:28	18	09:50 (15)	18:35	20:47	21:55	22:47
15	09:16		11:32 (28)	08:13		09:31 (15)	06:56	06:27	05:10	04:27
	16:17	86	14:46 (24)	17:31	19	09:50 (15)	18:38	20:49	21:58	22:47
16	09:15		11:32 (28)	08:10		09:31 (15)	06:53	06:24	05:08	04:27
	16:19	87	14:46 (24)	17:33	19	09:50 (15)	18:40	20:51	22:00	22:48
17	09:13		11:32 (28)	08:07		09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87	14:47 (24)	17:36	19	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:32 (28)	08:05		09:32 (15)	06:47	06:19	05:04	04:27
	16:23	88	14:48 (24)	17:38	18	09:50 (15)	18:45	20:56	22:04	22:49
19	09:10		11:32 (28)	08:02		09:32 (15)	06:44	06:16	05:02	04:27
	16:25	86	14:48 (24)	17:40	17	09:49 (15)	18:47	20:58	22:06	22:50
20	09:09		11:32 (28)	08:00		09:32 (15)	06:41	06:13	05:00	04:27
	16:28	79	14:48 (24)	17:43	16	09:48 (15)	18:49	21:00	22:08	22:50
21	09:07		11:32 (28)	07:57		09:33 (15)	06:39	06:10	04:58	04:27
	16:30	77	14:48 (24)	17:45	14	09:47 (15)	18:51	21:03	22:10	22:50
22	09:05		11:32 (28)	07:54		09:35 (15)	06:36	06:08	04:56	04:27
	16:32	79	14:49 (24)	17:48	10	09:45 (15)	18:54	21:05	22:12	22:50
23	09:03		11:31 (28)	07:52			06:33	06:05	04:54	04:27
	16:34	78	14:48 (24)	17:50			18:56	21:07	22:14	22:51
24	09:02		11:32 (28)	07:49			06:30	06:02	04:52	04:27
	16:37	77	14:48 (24)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:32 (28)	07:46			06:27	05:59	04:51	04:28
	16:39	75	14:47 (24)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:33 (28)	07:44			06:24	05:57	04:49	04:28
	16:41	73	14:47 (24)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:32 (28)	07:41			06:21	05:54	04:47	04:29
	16:44	70	14:45 (24)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:33 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	66	14:44 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:34 (28)				07:15	05:49	04:44	04:30
	16:49	57	14:41 (24)				20:10	21:21	22:25	22:50
30	08:50		11:34 (28)				07:13	05:46	04:42	04:31
	16:51	52	13:45 (23)				20:12	21:24	22:27	22:49
31	08:48		11:35 (28)				07:10		04:41	
	16:54	48	13:44 (23)				20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1914			364				
Sun reduction		0,50			0,50				
Oper. time red.		0,80			0,80				
Wind dir. red.		0,61			0,69				
Total reduction		0,24			0,27				
Total, real		467			100				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:08 (15)	09:00		11:16 (28)
	22:49	22:01	20:40	19:13			16:49	4	09:12 (15)	15:51	74	14:26 (24)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:18 (28)
	22:48	21:59	20:37	19:10			16:46			15:50	58	14:24 (24)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:19 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	51	13:19 (23)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:21 (28)
	22:47	21:54	20:31	19:04			16:41			15:48	46	13:18 (23)
5	04:36	05:33	06:42	07:48			08:01		11:13 (28)	09:07		11:23 (28)
	22:46	21:51	20:28	19:02			16:39	12	11:25 (28)	15:47	39	13:18 (23)
6	04:37	05:35	06:44	07:51			08:03		11:11 (28)	09:09		11:53 (20)
	22:45	21:49	20:25	18:59			16:37	17	11:28 (28)	15:46	32	13:17 (23)
7	04:38	05:37	06:46	07:53			08:06		11:10 (28)	09:10		11:54 (20)
	22:44	21:47	20:23	18:56			16:34	22	13:06 (23)	15:45	28	13:16 (23)
8	04:40	05:39	06:49	07:55			08:08		11:08 (28)	09:12		11:54 (20)
	22:43	21:44	20:20	18:53			16:32	34	13:10 (23)	15:45	22	13:13 (23)
9	04:41	05:42	06:51	07:57			08:11		11:07 (28)	09:13		11:55 (20)
	22:42	21:42	20:17	18:50			16:30	41	13:13 (23)	15:44	20	12:15 (20)
10	04:43	05:44	06:53	08:00			08:13		11:07 (28)	09:15		11:55 (20)
	22:41	21:39	20:14	18:47			16:28	46	13:15 (23)	15:43	20	12:15 (20)
11	04:44	05:46	06:55	08:02			08:15		11:06 (28)	09:16		11:56 (20)
	22:39	21:37	20:11	18:45			16:25	48	13:15 (23)	15:43	20	12:16 (20)
12	04:46	05:48	06:57	08:04			08:18		11:06 (28)	09:18		11:56 (20)
	22:38	21:34	20:08	18:42			16:23	52	13:17 (23)	15:43	20	12:16 (20)
13	04:47	05:51	07:00	08:07			08:20		11:06 (28)	09:19		11:57 (20)
	22:37	21:32	20:05	18:39			16:21	58	14:14 (24)	15:42	20	12:17 (20)
14	04:49	05:53	07:02	08:09			08:23		11:05 (28)	09:20		11:57 (20)
	22:35	21:29	20:02	18:36			16:19	66	14:16 (24)	15:42	20	12:17 (20)
15	04:51	05:55	07:04	08:11			08:25		11:05 (28)	09:21		11:57 (20)
	22:34	21:26	19:59	18:33			16:17	70	14:18 (24)	15:42	20	12:17 (20)
16	04:52	05:57	07:06	08:13			08:27		11:06 (28)	09:22		11:58 (20)
	22:32	21:24	19:56	18:31			16:15	73	14:20 (24)	15:42	19	12:17 (20)
17	04:54	06:00	07:08	08:16			08:30		11:06 (28)	09:23		11:58 (20)
	22:31	21:21	19:54	18:28			16:13	75	14:21 (24)	15:42	19	12:17 (20)
18	04:56	06:02	07:11	08:18			08:32		11:06 (28)	09:24		11:59 (20)
	22:29	21:18	19:51	18:25			16:11	77	14:22 (24)	15:42	19	12:18 (20)
19	04:58	06:04	07:13	08:20		10:09 (15)	08:34		11:06 (28)	09:25		11:59 (20)
	22:27	21:16	19:48	18:22	5	10:14 (15)	16:09	78	14:23 (24)	15:42	20	12:19 (20)
20	05:00	06:06	07:15	08:23		10:05 (15)	08:36		11:06 (28)	09:26		12:00 (20)
	22:25	21:13	19:45	18:20	11	10:16 (15)	16:08	79	14:23 (24)	15:43	19	12:19 (20)
21	05:01	06:08	07:17	08:25		10:04 (15)	08:39		11:07 (28)	09:26		12:00 (20)
	22:24	21:10	19:42	18:17	14	10:18 (15)	16:06	77	14:23 (24)	15:43	19	12:19 (20)
22	05:03	06:11	07:19	08:27		10:02 (15)	08:41		11:08 (28)	09:27		12:01 (20)
	22:22	21:08	19:39	18:14	17	10:19 (15)	16:04	77	14:24 (24)	15:43	19	12:20 (20)
23	05:05	06:13	07:22	08:30		10:02 (15)	08:43		11:08 (28)	09:27		12:01 (20)
	22:20	21:05	19:36	18:12	18	10:20 (15)	16:02	86	14:24 (24)	15:44	19	12:20 (20)
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		11:09 (28)	09:28		12:02 (20)
	22:18	21:02	19:33	18:09	18	10:19 (15)	16:01	87	14:25 (24)	15:44	19	12:21 (20)
25	05:09	06:17	07:26	07:35		09:01 (15)	08:47		11:10 (28)	09:28		12:03 (20)
	22:16	20:59	19:30	17:06	19	09:20 (15)	15:59	87	14:25 (24)	15:45	19	12:22 (20)
26	05:11	06:20	07:28	07:37		09:01 (15)	08:50		11:11 (28)	09:28		12:03 (20)
	22:14	20:57	19:27	17:04	19	09:20 (15)	15:58	87	14:25 (24)	15:46	19	12:22 (20)
27	05:13	06:22	07:30	07:39		09:01 (15)	08:52		11:11 (28)	09:28		12:03 (20)
	22:12	20:54	19:25	17:01	18	09:19 (15)	15:56	86	14:25 (24)	15:47	20	12:23 (20)
28	05:16	06:24	07:33	07:42		09:02 (15)	08:54		11:13 (28)	09:28		12:04 (20)
	22:10	20:51	19:22	16:59	17	09:19 (15)	15:55	85	14:26 (24)	15:48	20	12:24 (20)
29	05:18	06:26	07:35	07:44		09:02 (15)	08:56		11:14 (28)	09:28		12:04 (20)
	22:07	20:48	19:19	16:56	16	09:18 (15)	15:54	82	14:25 (24)	15:49	19	12:23 (20)
30	05:20	06:29	07:37	07:47		09:03 (15)	08:58		11:14 (28)	09:28		12:04 (20)
	22:05	20:45	19:16	16:54	14	09:17 (15)	15:52	80	14:25 (24)	15:50	20	12:24 (20)
31	05:22	06:31		07:49		09:05 (15)				09:28		12:04 (20)
	22:03	20:42		16:51	11	09:16 (15)				15:51	20	12:24 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					197			1686			799	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					57			411			201	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28		11:58 (20)	08:46	11:24 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:44 (20)
	15:53	16	12:14 (20)	16:56	49 13:35 (23)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	57	14:20 (24)
2	09:28		11:58 (20)	08:43	11:24 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:44 (20)
	15:54	18	12:16 (20)	16:58	47 13:34 (23)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	50	14:19 (24)
3	09:27		11:58 (20)	08:41	11:25 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56		11:02 (28)	09:03		11:44 (20)
	15:55	20	12:18 (20)	17:01	42 13:33 (23)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	12	11:14 (28)	15:49	40	14:19 (24)
4	09:27		11:58 (20)	08:39	11:26 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		10:59 (28)	09:05		11:44 (20)
	15:57	21	12:19 (20)	17:03	35 13:30 (23)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17	11:16 (28)	15:48	34	14:19 (24)
5	09:26		11:59 (20)	08:37	11:26 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		10:58 (28)	09:07		11:45 (20)
	15:58	20	12:19 (20)	17:06	23 11:49 (28)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39	20	11:18 (28)	15:47	31	13:06 (23)
6	09:25		11:59 (20)	08:34	11:28 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		10:57 (28)	09:09		11:45 (20)
	16:00	26	13:18 (23)	17:08	20 11:48 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	23	11:20 (28)	15:46	27	13:05 (23)
7	09:25		12:00 (20)	08:32	11:30 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		10:56 (28)	09:10		11:46 (20)
	16:02	30	13:21 (23)	17:11	16 11:46 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34	37	13:01 (23)	15:45	20	12:06 (20)
8	09:24		12:00 (20)	08:30	11:33 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		10:55 (28)	09:12		11:47 (20)
	16:03	34	14:35 (24)	17:13	11 11:44 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	43	13:03 (23)	15:45	20	12:07 (20)
9	09:23		12:01 (20)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		10:54 (28)	09:13		11:47 (20)
	16:05	41	14:36 (24)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	48	13:05 (23)	15:44	20	12:07 (20)
10	09:22		12:01 (20)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		10:54 (28)	09:15		11:47 (20)
	16:07	50	14:36 (24)	17:18		18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28	51	13:06 (23)	15:43	19	12:07 (20)
11	09:21		12:02 (20)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		10:54 (28)	09:16		11:48 (20)
	16:09	57	14:37 (24)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25	52	13:06 (23)	15:43	16	12:04 (20)
12	09:20		11:28 (28)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		10:54 (28)	09:18		11:48 (20)
	16:11	68	14:38 (24)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	55	13:08 (23)	15:43	11	11:59 (20)
13	09:18		11:26 (28)	08:18		07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20		10:54 (28)	09:19		11:49 (20)
	16:13	75	14:39 (24)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	62	14:08 (24)	15:42	11	12:00 (20)
14	09:17		11:25 (28)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		10:53 (28)	09:20		11:50 (20)
	16:15	78	14:39 (24)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	69	14:10 (24)	15:42	7	12:00 (20)
15	09:16		11:24 (28)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		10:54 (28)	09:21		11:50 (20)
	16:17	82	14:40 (24)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	71	14:12 (24)	15:42	3	11:53 (20)
16	09:15		11:23 (28)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		10:54 (28)	09:22		11:50 (20)
	16:19	85	14:40 (24)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	75	14:14 (24)	15:42	3	11:53 (20)
17	09:13		11:23 (28)	08:07		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		10:55 (28)	09:23		11:51 (20)
	16:21	86	14:41 (24)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	77	14:15 (24)	15:42	1	11:52 (20)
18	09:12		11:23 (28)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		10:55 (28)	09:24		
	16:23	87	14:42 (24)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	76	14:15 (24)	15:42		
19	09:10		11:22 (28)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		10:56 (28)	09:25		
	16:25	88	14:42 (24)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	77	14:16 (24)	15:42		
20	09:09		11:22 (28)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		10:56 (28)	09:26		
	16:28	86	14:42 (24)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	77	14:16 (24)	15:43		
21	09:07		11:22 (28)	07:57		06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39		10:57 (28)	09:26		
	16:30	83	14:42 (24)	17:45		18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	83	14:17 (24)	15:43		
22	09:05		11:22 (28)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41		10:58 (28)	09:27		
	16:32	77	14:42 (24)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	86	14:18 (24)	15:43		
23	09:03		11:21 (28)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		10:58 (28)	09:27		
	16:34	77	14:41 (24)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	88	14:18 (24)	15:44		
24	09:02		11:21 (28)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:00 (28)	09:28		
	16:37	76	14:41 (24)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	87	14:19 (24)	15:44		
25	09:00		11:21 (28)	07:46		06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47		11:00 (28)	09:28		
	16:39	77	14:41 (24)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59	86	14:18 (24)	15:45		
26	08:58		11:22 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:02 (28)	09:28		
	16:41	74	14:41 (24)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	85	14:19 (24)	15:46		
27	08:56		11:21 (28)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:03 (28)	09:28		11:56 (20)
	16:44	71	14:39 (24)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	83	14:19 (24)	15:47	3	11:59 (20)
28	08:54		11:21 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:05 (28)	09:28		11:57 (20)
	16:46	69	14:38 (24)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	79	14:19 (24)	15:48	3	12:00 (20)
29	08:52		11:22 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:07 (28)	09:28		11:56 (20)
	16:49	61	14:36 (24)			20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54	73	14:19 (24)	15:49	5	12:07 (20)
30	08:50		11:22 (28)			07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:08 (28)	09:28		11:57 (20)
	16:51	55	13:36 (23)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	69	14:19 (24)	15:50	11	12:08 (20)
31	08:48		11:23 (28)			07:10		04:41		05:22	06:31		07:49				09:28		11:57 (20)
	16:54	53	13:36 (23)			20:14		22:29		22:03	20:42		16:51				15:51	11	12:08 (20)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236				199		
Total, worst case		1841		243										1761				403	
Sun reduction		0,50		0,50										0,50				0,50	
Oper. time red.		0,80		0,80										0,80				0,80	
Wind dir. red.		0,62		0,65										0,62				0,62	
Total reduction		0,25		0,26										0,25				0,25	
Total, real		452		63										435				100	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28		11:52 (33)	08:46		13:17 (28)	07:35		08:53 (17)	07:07	05:44	04:40
	15:53	17	12:09 (33)	16:56	36	13:53 (28)	18:05	19	09:12 (17)	20:17	21:26	22:30
2	09:27		11:51 (33)	08:43		13:18 (28)	07:32		08:53 (17)	07:04	05:41	04:38
	15:54	19	12:10 (33)	16:58	43	15:13 (23)	18:07	20	09:13 (17)	20:19	21:28	22:32
3	09:27		11:51 (33)	08:41		13:17 (28)	07:30		08:52 (17)	07:01	05:39	04:37
	15:55	19	12:10 (33)	17:01	52	15:18 (23)	18:09	21	09:13 (17)	20:21	21:30	22:34
4	09:26		11:51 (33)	08:39		13:18 (28)	07:27		08:52 (17)	06:58	05:36	04:36
	15:57	20	12:11 (33)	17:03	54	15:20 (23)	18:12	20	09:12 (17)	20:24	21:33	22:35
5	09:26		11:52 (33)	08:37		13:17 (28)	07:24		08:52 (17)	06:55	05:34	04:35
	15:58	20	12:12 (33)	17:06	58	15:21 (23)	18:14	20	09:12 (17)	20:26	21:35	22:37
6	09:25		11:52 (33)	08:34		13:18 (28)	07:21		08:52 (17)	06:52	05:31	04:34
	16:00	20	12:12 (33)	17:08	62	15:43 (24)	18:16	19	09:11 (17)	20:28	21:37	22:38
7	09:24		11:52 (33)	08:32		13:17 (28)	07:19		08:53 (17)	06:49	05:29	04:33
	16:02	21	12:13 (33)	17:11	68	15:46 (24)	18:19	17	09:10 (17)	20:30	21:40	22:39
8	09:24		11:53 (33)	08:30		13:18 (28)	07:16		08:54 (17)	06:47	05:26	04:32
	16:03	21	12:14 (33)	17:13	72	15:51 (24)	18:21	14	09:08 (17)	20:33	21:42	22:40
9	09:23		11:52 (33)	08:27		13:18 (28)	07:13		08:55 (17)	06:44	05:24	04:31
	16:05	22	12:14 (33)	17:16	78	15:59 (24)	18:24	10	09:05 (17)	20:35	21:44	22:42
10	09:22		11:53 (33)	08:25		13:18 (28)	07:10			06:41	05:22	04:30
	16:07	22	12:15 (33)	17:18	82	16:00 (24)	18:26			20:37	21:46	22:43
11	09:21		11:54 (33)	08:23		10:11 (15)	07:07			06:38	05:19	04:29
	16:09	22	12:16 (33)	17:21	84	16:00 (24)	18:28			20:40	21:49	22:44
12	09:20		11:53 (33)	08:20		10:06 (15)	07:04			06:35	05:17	04:29
	16:11	23	12:16 (33)	17:23	89	15:59 (24)	18:31			20:42	21:51	22:45
13	09:18		11:53 (33)	08:18		10:04 (15)	07:01			06:32	05:15	04:28
	16:13	29	13:27 (20)	17:26	90	15:58 (24)	18:33			20:44	21:53	22:46
14	09:17		11:54 (33)	08:15		10:03 (15)	06:59			06:30	05:13	04:28
	16:15	38	13:37 (20)	17:28	87	15:57 (24)	18:35			20:47	21:55	22:46
15	09:16		11:55 (33)	08:13		10:02 (15)	06:56			06:27	05:10	04:27
	16:17	44	13:43 (20)	17:31	81	15:54 (24)	18:38			20:49	21:57	22:47
16	09:15		11:55 (33)	08:10		10:01 (15)	06:53			06:24	05:08	04:27
	16:19	45	13:44 (20)	17:33	72	15:24 (23)	18:40			20:51	22:00	22:48
17	09:13		11:55 (33)	08:07		10:00 (15)	06:50			06:21	05:06	04:27
	16:21	45	13:44 (20)	17:35	67	15:23 (23)	18:42			20:53	22:02	22:49
18	09:12		11:57 (33)	08:05		10:00 (15)	06:47			06:19	05:04	04:27
	16:23	44	13:46 (20)	17:38	61	15:23 (23)	18:45			20:56	22:04	22:49
19	09:10		11:57 (33)	08:02		10:00 (15)	06:44			06:16	05:02	04:27
	16:25	44	13:46 (20)	17:40	43	15:21 (23)	18:47			20:58	22:06	22:50
20	09:08		11:58 (33)	08:00		09:59 (15)	06:41			06:13	05:00	04:27
	16:28	43	13:46 (20)	17:43	41	15:19 (23)	18:49			21:00	22:08	22:50
21	09:07		11:59 (33)	07:57		09:59 (15)	06:38			06:10	04:58	04:27
	16:30	40	13:46 (20)	17:45	32	15:15 (23)	18:51			21:03	22:10	22:50
22	09:05		11:59 (33)	07:54		09:59 (15)	06:36			06:08	04:56	04:27
	16:32	40	13:46 (20)	17:48	25	10:24 (15)	18:54			21:05	22:12	22:50
23	09:03		12:01 (33)	07:52		10:00 (15)	06:33			06:05	04:54	04:27
	16:34	36	13:46 (20)	17:50	24	10:24 (15)	18:56			21:07	22:14	22:50
24	09:02		12:03 (33)	07:49		10:01 (15)	06:30			06:02	04:52	04:27
	16:37	34	13:46 (20)	17:53	22	10:23 (15)	18:58			21:10	22:16	22:51
25	09:00		12:05 (33)	07:46		09:00 (17)	06:27			05:59	04:51	04:28
	16:39	32	13:46 (28)	17:55	27	10:22 (15)	19:01			21:12	22:18	22:50
26	08:58		13:21 (28)	07:43		08:57 (17)	06:24			05:57	04:49	04:28
	16:41	27	13:48 (28)	17:57	30	10:20 (15)	19:03			21:14	22:20	22:50
27	08:56		13:20 (28)	07:41		08:55 (17)	06:21			05:54	04:47	04:29
	16:44	28	13:48 (28)	18:00	28	10:17 (15)	19:05			21:17	22:22	22:50
28	08:54		13:19 (28)	07:38		08:54 (17)	06:18			05:52	04:46	04:30
	16:46	31	13:50 (28)	18:02	22	10:13 (15)	19:07			21:19	22:24	22:50
29	08:52		13:19 (28)				07:15			05:49	04:44	04:30
	16:49	32	13:51 (28)				20:10			21:21	22:25	22:50
30	08:50		13:18 (28)				07:12			05:46	04:42	04:31
	16:51	33	13:51 (28)				20:12			21:24	22:27	22:49
31	08:48		13:18 (28)				07:10				04:41	
	16:53	34	13:52 (28)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		945			1530			160				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,61			0,61			0,74				
Total reduction		0,24			0,24			0,29				
Total, real		230			370			47				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		12:48 (28)	09:00		11:36 (33)
	22:49	22:01	20:40	19:13			16:49	83	15:30 (24)	15:51	22	11:58 (33)
2	04:33	05:26	06:35	07:42			07:54		12:48 (28)	09:02		11:36 (33)
	22:48	21:58	20:37	19:10			16:46	76	15:28 (24)	15:50	22	11:58 (33)
3	04:34	05:28	06:37	07:44			07:56		12:48 (28)	09:03		11:36 (33)
	22:47	21:56	20:34	19:07			16:44	71	15:20 (24)	15:49	22	11:58 (33)
4	04:35	05:31	06:40	07:46		09:34 (17)	07:59		12:47 (28)	09:05		11:37 (33)
	22:47	21:54	20:31	19:04	7	09:41 (17)	16:41	66	15:15 (24)	15:48	21	11:58 (33)
5	04:36	05:33	06:42	07:48		09:32 (17)	08:01		12:47 (28)	09:07		11:37 (33)
	22:46	21:51	20:28	19:01	12	09:44 (17)	16:39	62	15:13 (24)	15:47	21	11:58 (33)
6	04:37	05:35	06:44	07:51		09:30 (17)	08:03		12:48 (28)	09:09		11:38 (33)
	22:45	21:49	20:25	18:59	15	09:45 (17)	16:37	57	14:51 (23)	15:46	21	11:59 (33)
7	04:38	05:37	06:46	07:53		09:28 (17)	08:06		12:47 (28)	09:10		11:39 (33)
	22:44	21:47	20:22	18:56	18	09:46 (17)	16:34	55	14:50 (23)	15:45	20	11:59 (33)
8	04:40	05:39	06:48	07:55		09:28 (17)	08:08		12:48 (28)	09:12		11:40 (33)
	22:43	21:44	20:20	18:53	19	09:47 (17)	16:32	50	14:48 (23)	15:45	19	11:59 (33)
9	04:41	05:42	06:51	07:57		09:27 (17)	08:11		12:48 (28)	09:13		11:41 (33)
	22:42	21:42	20:17	18:50	20	09:47 (17)	16:30	42	14:43 (23)	15:44	19	12:00 (33)
10	04:43	05:44	06:53	08:00		09:27 (17)	08:13		12:49 (28)	09:15		11:41 (33)
	22:40	21:39	20:14	18:47	20	09:47 (17)	16:28	35	13:24 (28)	15:43	18	11:59 (33)
11	04:44	05:46	06:55	08:02		09:26 (17)	08:15		12:49 (28)	09:16		11:42 (33)
	22:39	21:37	20:11	18:45	20	09:46 (17)	16:25	34	13:23 (28)	15:43	18	12:00 (33)
12	04:46	05:48	06:57	08:04		09:26 (17)	08:18		12:50 (28)	09:18		11:42 (33)
	22:38	21:34	20:08	18:42	19	09:45 (17)	16:23	33	13:23 (28)	15:43	17	11:59 (33)
13	04:47	05:51	07:00	08:06		09:27 (17)	08:20		12:51 (28)	09:19		11:43 (33)
	22:37	21:31	20:05	18:39	18	09:45 (17)	16:21	32	13:23 (28)	15:42	17	12:00 (33)
14	04:49	05:53	07:02	08:09		09:27 (17)	08:22		12:51 (28)	09:20		11:44 (33)
	22:35	21:29	20:02	18:36	26	10:48 (15)	16:19	31	13:22 (28)	15:42	16	12:00 (33)
15	04:51	05:55	07:04	08:11		09:29 (17)	08:25		12:53 (28)	09:21		11:44 (33)
	22:34	21:26	19:59	18:33	29	10:51 (15)	16:17	28	13:21 (28)	15:42	16	12:00 (33)
16	04:52	05:57	07:06	08:13		09:30 (17)	08:27		12:54 (28)	09:22		11:45 (33)
	22:32	21:24	19:56	18:31	28	10:52 (15)	16:15	27	13:21 (28)	15:42	15	12:00 (33)
17	04:54	05:59	07:08	08:16		10:33 (15)	08:29		11:38 (33)	09:23		11:45 (33)
	22:30	21:21	19:54	18:28	21	10:54 (15)	16:13	32	13:19 (28)	15:42	15	12:00 (33)
18	04:56	06:02	07:10	08:18		10:31 (15)	08:32		11:36 (33)	09:24		11:46 (33)
	22:29	21:18	19:51	18:25	23	10:54 (15)	16:11	35	13:20 (20)	15:42	15	12:01 (33)
19	04:58	06:04	07:13	08:20		10:31 (15)	08:34		11:36 (33)	09:25		11:47 (33)
	22:27	21:16	19:48	18:22	24	10:55 (15)	16:09	36	13:21 (20)	15:42	14	12:01 (33)
20	05:00	06:06	07:15	08:23		10:30 (15)	08:36		11:34 (33)	09:26		11:48 (33)
	22:25	21:13	19:45	18:20	25	10:55 (15)	16:08	40	13:21 (20)	15:42	14	12:02 (33)
21	05:01	06:08	07:17	08:25		10:30 (15)	08:39		11:34 (33)	09:26		11:48 (33)
	22:24	21:10	19:42	18:17	37	15:48 (23)	16:06	40	13:21 (20)	15:43	14	12:02 (33)
22	05:03	06:11	07:19	08:27		10:29 (15)	08:41		11:34 (33)	09:27		11:49 (33)
	22:22	21:08	19:39	18:14	42	15:50 (23)	16:04	43	13:22 (20)	15:43	14	12:03 (33)
23	05:05	06:13	07:22	08:30		10:30 (15)	08:43		11:33 (33)	09:27		11:49 (33)
	22:20	21:05	19:36	18:12	50	15:52 (23)	16:02	44	13:22 (20)	15:44	14	12:03 (33)
24	05:07	06:15	07:24	08:32		10:29 (15)	08:45		11:34 (33)	09:28		11:50 (33)
	22:18	21:02	19:33	18:09	63	15:52 (23)	16:01	44	13:23 (20)	15:44	14	12:04 (33)
25	05:09	06:17	07:26	07:35		09:30 (15)	08:47		11:33 (33)	09:28		11:50 (33)
	22:16	20:59	19:30	17:06	69	14:54 (23)	15:59	44	13:22 (20)	15:45	14	12:04 (33)
26	05:11	06:20	07:28	07:37		09:30 (15)	08:50		11:34 (33)	09:28		11:50 (33)
	22:14	20:56	19:27	17:04	74	14:54 (23)	15:58	44	13:23 (20)	15:46	15	12:05 (33)
27	05:13	06:22	07:30	07:39		09:31 (15)	08:52		11:34 (33)	09:28		11:50 (33)
	22:12	20:54	19:24	17:01	82	15:24 (24)	15:56	44	13:23 (20)	15:47	16	12:06 (33)
28	05:16	06:24	07:33	07:42		09:33 (15)	08:54		11:35 (33)	09:28		11:50 (33)
	22:10	20:51	19:22	16:59	89	15:27 (24)	15:55	37	13:17 (20)	15:48	16	12:06 (33)
29	05:18	06:26	07:35	07:44		09:34 (15)	08:56		11:35 (33)	09:28		11:50 (33)
	22:07	20:48	19:19	16:56	90	15:28 (24)	15:54	29	13:09 (20)	15:49	16	12:06 (33)
30	05:20	06:29	07:37	07:47		09:36 (15)	08:58		11:35 (33)	09:28		11:51 (33)
	22:05	20:45	19:16	16:54	90	15:29 (24)	15:52	23	13:03 (20)	15:50	17	12:08 (33)
31	05:22	06:31		07:49		12:49 (28)				09:28		11:51 (33)
	22:03	20:42		16:51	81	15:30 (24)				15:51	17	12:08 (33)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					1111			1317			529	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,64			0,59			0,64	
Total reduction					0,26			0,23			0,26	
Total, real					286			308			135	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		14:11 (33)	07:35		10:14 (17)	07:07	05:44	04:40
	15:53			16:56	18	15:31 (20)	18:05	73	16:49 (23)	20:17	21:26	22:30
2	09:27			08:43		15:15 (20)	07:32		10:15 (17)	07:04	05:41	04:38
	15:54			16:58	17	15:32 (20)	18:07	70	16:50 (23)	20:19	21:28	22:32
3	09:27			08:41		15:14 (20)	07:30		10:16 (17)	07:01	05:39	04:37
	15:55			17:01	19	15:33 (20)	18:09	63	16:48 (23)	20:21	21:30	22:34
4	09:26			08:39		12:33 (15)	07:27		10:16 (17)	06:58	05:36	04:36
	15:57			17:03	32	15:33 (20)	18:12	54	16:47 (23)	20:23	21:33	22:35
5	09:26			08:37		12:30 (15)	07:24		09:25 (12)	06:55	05:34	04:35
	15:58			17:06	37	15:33 (20)	18:14	37	16:44 (23)	20:26	21:35	22:36
6	09:25			08:34		12:29 (15)	07:21		09:21 (12)	06:52	05:31	04:34
	16:00			17:08	40	15:34 (20)	18:16	27	10:42 (17)	20:28	21:37	22:38
7	09:24			08:32		12:27 (15)	07:18		10:19 (17)	06:49	05:29	04:33
	16:02			17:11	43	15:33 (20)	18:19	20	10:39 (17)	20:30	21:40	22:39
8	09:24			08:30		12:26 (15)	07:16		10:21 (17)	06:47	05:26	04:32
	16:03			17:13	46	15:34 (20)	18:21	15	10:36 (17)	20:33	21:42	22:40
9	09:23			08:27		12:25 (15)	07:13		10:24 (17)	06:44	05:24	04:31
	16:05			17:16	46	15:33 (20)	18:24	8	10:32 (17)	20:35	21:44	22:42
10	09:22			08:25		12:24 (15)	07:10			06:41	05:22	04:30
	16:07			17:18	45	15:31 (20)	18:26			20:37	21:46	22:43
11	09:21			08:22		12:24 (15)	07:07			06:38	05:19	04:29
	16:09			17:21	43	15:30 (20)	18:28			20:40	21:49	22:44
12	09:20			08:20		12:23 (15)	07:04			06:35	05:17	04:29
	16:11			17:23	38	15:27 (20)	18:31			20:42	21:51	22:45
13	09:18			08:18		12:22 (15)	07:01			06:32	05:15	04:28
	16:13			17:26	35	12:57 (15)	18:33			20:44	21:53	22:46
14	09:17			08:15		12:23 (15)	06:59			06:30	05:12	04:28
	16:15			17:28	35	12:58 (15)	18:35			20:46	21:55	22:46
15	09:16			08:12		12:22 (15)	06:56			06:27	05:10	04:27
	16:17			17:30	35	12:57 (15)	18:38			20:49	21:57	22:47
16	09:14			08:10		12:22 (15)	06:53			06:24	05:08	04:27
	16:19			17:33	43	16:12 (28)	18:40			20:51	22:00	22:48
17	09:13			08:07		12:22 (15)	06:50			06:21	05:06	04:27
	16:21			17:35	49	16:15 (28)	18:42			20:53	22:02	22:48
18	09:12			08:05		12:23 (15)	06:47			06:18	05:04	04:27
	16:23			17:38	51	16:17 (28)	18:44			20:56	22:04	22:49
19	09:10			08:02		12:23 (15)	06:44			06:16	05:02	04:27
	16:25			17:40	54	16:18 (28)	18:47			20:58	22:06	22:49
20	09:08			08:00		12:23 (15)	06:41			06:13	05:00	04:27
	16:28			17:43	55	16:19 (28)	18:49			21:00	22:08	22:50
21	09:07			07:57		12:23 (15)	06:38			06:10	04:58	04:27
	16:30			17:45	56	16:20 (28)	18:51			21:03	22:10	22:50
22	09:05			07:54		12:24 (15)	06:36			06:07	04:56	04:27
	16:32			17:48	61	16:42 (23)	18:54			21:05	22:12	22:50
23	09:03			07:52		12:26 (15)	06:33			06:05	04:54	04:27
	16:34			17:50	66	16:48 (23)	18:56			21:07	22:14	22:50
24	09:01			07:49		10:20 (17)	06:30			06:02	04:52	04:27
	16:37			17:52	68	16:49 (23)	18:58			21:10	22:16	22:50
25	09:00			07:46		10:16 (17)	06:27			05:59	04:51	04:28
	16:39			17:55	89	16:50 (23)	19:01			21:12	22:18	22:50
26	08:58			07:43		10:15 (17)	06:24			05:57	04:49	04:28
	16:41			17:57	92	16:50 (23)	19:03			21:14	22:20	22:50
27	08:56			07:41		10:15 (17)	06:21			05:54	04:47	04:29
	16:44			18:00	77	16:50 (23)	19:05			21:17	22:22	22:50
28	08:54			07:38		10:15 (17)	06:18			05:51	04:45	04:29
	16:46			18:02	75	16:50 (23)	19:07			21:19	22:24	22:50
29	08:52						07:15			05:49	04:44	04:30
	16:49						20:10			21:21	22:25	22:49
30	08:50		14:16 (33)				07:12			05:46	04:42	04:31
	16:51	3	14:19 (33)				20:12			21:23	22:27	22:49
31	08:48		14:08 (33)				07:10				04:41	
	16:53	21	15:27 (20)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		24			1365			367				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,55			0,60			0,65				
Total reduction		0,22			0,24			0,26				
Total, real		5			328			96				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
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NO-0276 Oslo
+47 21 58 60 15
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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:53 (15)	09:00
	22:48	22:01	20:40	19:13			16:49	46	15:01 (20)	15:51
2	04:33	05:26	06:35	07:41			07:54		11:55 (15)	09:01
	22:48	21:58	20:37	19:10			16:46	45	15:02 (20)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:56 (15)	09:03
	22:47	21:56	20:34	19:07			16:44	45	15:03 (20)	15:49
4	04:35	05:31	06:40	07:46			07:58		11:57 (15)	09:05
	22:46	21:54	20:31	19:04			16:41	43	15:03 (20)	15:48
5	04:36	05:33	06:42	07:48		10:59 (17)	08:01		11:58 (15)	09:07
	22:46	21:51	20:28	19:01	13	11:12 (17)	16:39	41	15:03 (20)	15:47
6	04:37	05:35	06:44	07:50		10:56 (17)	08:03		12:01 (15)	09:09
	22:45	21:49	20:25	18:59	19	11:15 (17)	16:37	36	15:04 (20)	15:46
7	04:38	05:37	06:46	07:53		09:54 (12)	08:06		12:03 (15)	09:10
	22:44	21:47	20:22	18:56	24	11:16 (17)	16:34	31	15:03 (20)	15:45
8	04:40	05:39	06:48	07:55		09:58 (12)	08:08		14:45 (20)	09:12
	22:43	21:44	20:20	18:53	33	17:18 (23)	16:32	18	15:03 (20)	15:45
9	04:41	05:42	06:51	07:57		10:01 (12)	08:10		14:46 (20)	09:13
	22:42	21:42	20:17	18:50	49	17:20 (23)	16:30	17	15:03 (20)	15:44
10	04:43	05:44	06:53	08:00		10:49 (17)	08:13		13:42 (33)	09:15
	22:40	21:39	20:14	18:47	59	17:21 (23)	16:28	20	15:03 (20)	15:43
11	04:44	05:46	06:55	08:02		10:49 (17)	08:15		13:39 (33)	09:16
	22:39	21:37	20:11	18:44	67	17:23 (23)	16:25	20	14:58 (20)	15:43
12	04:46	05:48	06:57	08:04		10:48 (17)	08:18		13:48 (33)	09:17
	22:38	21:34	20:08	18:42	72	17:23 (23)	16:23	3	13:51 (33)	15:43
13	04:47	05:50	06:59	08:06		10:48 (17)	08:20			09:19
	22:36	21:31	20:05	18:39	73	17:23 (23)	16:21			15:42
14	04:49	05:53	07:02	08:09		10:47 (17)	08:22			09:20
	22:35	21:29	20:02	18:36	77	17:23 (23)	16:19			15:42
15	04:50	05:55	07:04	08:11		10:48 (17)	08:25			09:21
	22:34	21:26	19:59	18:33	86	17:23 (23)	16:17			15:42
16	04:52	05:57	07:06	08:13		10:47 (17)	08:27			09:22
	22:32	21:24	19:56	18:31	93	17:22 (23)	16:15			15:42
17	04:54	05:59	07:08	08:16		10:48 (17)	08:29			09:23
	22:30	21:21	19:53	18:28	85	17:22 (23)	16:13			15:42
18	04:56	06:02	07:10	08:18		12:58 (15)	08:32			09:24
	22:29	21:18	19:51	18:25	66	17:20 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		12:57 (15)	08:34			09:25
	22:27	21:16	19:48	18:22	64	17:17 (23)	16:09			15:42
20	04:59	06:06	07:15	08:23		12:55 (15)	08:36			09:25
	22:25	21:13	19:45	18:20	58	17:12 (23)	16:07			15:42
21	05:01	06:08	07:17	08:25		12:54 (15)	08:39			09:26
	22:23	21:10	19:42	18:17	56	16:51 (28)	16:06			15:43
22	05:03	06:11	07:19	08:27		12:53 (15)	08:41			09:27
	22:22	21:07	19:39	18:14	55	16:49 (28)	16:04			15:43
23	05:05	06:13	07:21	08:30		12:53 (15)	08:43			09:27
	22:20	21:05	19:36	18:12	53	16:48 (28)	16:02			15:44
24	05:07	06:15	07:24	08:32		12:52 (15)	08:45			09:28
	22:18	21:02	19:33	18:09	52	16:46 (28)	16:01			15:44
25	05:09	06:17	07:26	07:34		11:52 (15)	08:47			09:28
	22:16	20:59	19:30	17:06	47	15:44 (28)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:51 (15)	08:49			09:28
	22:14	20:56	19:27	17:04	39	15:39 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:52 (15)	08:52			09:28
	22:12	20:54	19:24	17:01	35	12:27 (15)	15:56			15:47
28	05:15	06:24	07:33	07:42		11:52 (15)	08:54			09:28
	22:10	20:51	19:22	16:59	35	12:27 (15)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:52 (15)	08:56			09:28
	22:07	20:48	19:19	16:56	34	12:26 (15)	15:53			15:49
30	05:20	06:29	07:37	07:46		11:53 (15)	08:58			09:28
	22:05	20:45	19:16	16:54	40	14:58 (20)	15:52			15:50
31	05:22	06:31		07:49		11:53 (15)				09:28
	22:03	20:42		16:51	44	15:00 (20)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1428			365		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,62			0,58		
Total reduction					0,25			0,23		
Total, real					353			85		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

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NO-0276 Oslo
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Calculated:

19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		11:38 (17)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		09:44 (12)	09:00
	15:53		16:56	63	13:43 (15)	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	56	15:37 (28)	15:51
2	09:27		08:43		11:39 (17)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		09:56 (12)	09:01
	15:54		16:58	59	13:43 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	51	15:37 (28)	15:50
3	09:27		08:41		11:38 (17)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		09:57 (12)	09:03
	15:55		17:01	51	13:42 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	55	15:36 (28)	15:49
4	09:26		08:39		11:39 (17)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:02 (12)	09:05
	15:57		17:03	51	15:59 (28)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	56	15:35 (28)	15:48
5	09:26		08:37		11:39 (17)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:04 (12)	09:07
	15:58		17:06	56	16:02 (28)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	58	15:34 (28)	15:47
6	09:25		08:34		10:34 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		11:10 (17)	09:09
	16:00		17:08	57	16:05 (28)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	55	15:33 (28)	15:46
7	09:24		08:32		10:32 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		11:09 (17)	09:10
	16:02		17:11	55	16:05 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56		16:34	49	13:12 (15)	15:45
8	09:24		08:30		10:27 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		11:09 (17)	09:12
	16:03		17:13	53	16:07 (28)	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53		16:32	50	13:13 (15)	15:45
9	09:23		08:27		10:26 (12)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57		08:10		11:09 (17)	09:13
	16:05		17:16	49	16:07 (28)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	60	13:14 (15)	15:44
10	09:22		08:25		10:15 (12)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13		11:10 (17)	09:15
	16:07		17:18	58	16:07 (28)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	61	13:14 (15)	15:43
11	09:21		08:22		10:16 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		11:10 (17)	09:16
	16:09		17:21	55	16:08 (28)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	63	13:14 (15)	15:43
12	09:20		08:20		10:17 (12)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		11:10 (17)	09:17
	16:11		17:23	48	16:08 (28)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	66	13:15 (15)	15:43
13	09:18		08:17		10:18 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		11:11 (17)	09:19
	16:13		17:26	33	16:07 (28)	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	65	13:15 (15)	15:42
14	09:17	12:02 (9)	08:15		10:21 (12)	06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:11 (17)	09:20
	16:15	8 12:10 (9)	17:28	28	16:08 (28)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	66	13:15 (15)	15:42
15	09:16	12:02 (9)	08:12		15:50 (28)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:13 (17)	09:21
	16:17	9 12:11 (9)	17:30	17	16:07 (28)	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	64	13:15 (15)	15:42
16	09:14	12:02 (9)	08:10		15:51 (28)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:14 (17)	09:22
	16:19	11 12:13 (9)	17:33	14	16:05 (28)	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	62	13:15 (15)	15:42
17	09:13	12:02 (9)	08:07		15:52 (28)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		11:15 (17)	09:23
	16:21	20 13:30 (15)	17:35	12	16:04 (28)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	61	13:14 (15)	15:42
18	09:12	11:58 (9)	08:05		15:56 (28)	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		11:16 (17)	09:24
	16:23	30 13:34 (15)	17:38	6	16:02 (28)	18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	60	13:14 (15)	15:42
19	09:10	11:58 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		11:19 (17)	09:25
	16:25	33 13:35 (15)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	55	13:14 (15)	15:42
20	09:08	11:58 (9)	08:00			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		11:21 (17)	09:25
	16:27	36 13:37 (15)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	47	13:13 (15)	15:42
21	09:07	11:58 (9)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		11:33 (9)	09:26
	16:30	39 13:38 (15)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	39	13:13 (15)	15:43
22	09:05	11:46 (17)	07:54			06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		11:34 (9)	09:27
	16:32	47 13:38 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	36	13:13 (15)	15:43
23	09:03	11:44 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		11:34 (9)	09:27
	16:34	55 13:39 (15)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	33	13:12 (15)	15:44
24	09:01	11:42 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	16:24 (28)	08:45		11:35 (9)	09:28
	16:37	60 13:40 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	8 16:32 (28)	16:01	30	13:11 (15)	15:44
25	09:00	11:42 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	15:22 (28)	08:47		11:41 (9)	09:28
	16:39	61 13:41 (15)	17:55			19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06	12 15:34 (28)	15:59	20	13:09 (15)	15:45
26	08:58	11:41 (17)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	15:20 (28)	08:49		11:41 (9)	09:28
	16:41	62 13:42 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15 15:35 (28)	15:58	11	11:52 (9)	15:46
27	08:56	11:40 (17)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	15:19 (28)	08:52		11:41 (9)	09:28
	16:44	64 13:42 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01	17 15:36 (28)	15:56	10	11:51 (9)	15:47
28	08:54	11:40 (17)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42	09:50 (12)	08:54		11:42 (9)	09:28
	16:46	65 13:43 (15)	18:02			19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59	28 15:37 (28)	15:55	8	11:50 (9)	15:48
29	08:52	11:39 (17)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	09:47 (12)	08:56			09:28
	16:49	65 13:43 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	37 15:37 (28)	15:53			15:49
30	08:50	11:39 (17)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	09:46 (12)	08:58			09:28
	16:51	65 13:43 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	49 15:37 (28)	15:52			15:50
31	08:48	11:39 (17)				07:09		04:41		05:22	06:31		07:49	09:46 (12)				09:28
	16:53	63 13:43 (15)				20:14		22:29		22:03	20:42		16:51	55 15:38 (28)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236				199
Total, worst case		793		765									221		1347			
Sun reduction		0,50		0,50									0,50		0,50			
Oper. time red.		0,80		0,80									0,80		0,80			
Wind dir. red.		0,62		0,61									0,60		0,62			
Total reduction		0,25		0,24									0,24		0,25			
Total, real		197		187									53		334			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:50 (12)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39		07:51	10:27 (12)	09:00
	15:53		16:56	74	14:26 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	30 13:49 (15)	15:51
2	09:27		08:43		10:51 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:25 (12)	09:01
	15:54		16:58	73	14:27 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	45 13:52 (15)	15:50
3	09:27		08:41		10:50 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:24 (12)	09:03
	15:55		17:01	74	14:27 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	54 13:54 (15)	15:49
4	09:26		08:39		10:51 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:22 (12)	09:05
	15:57		17:03	71	14:27 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	61 13:55 (15)	15:48
5	09:26		08:37		10:51 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:22 (12)	09:07
	15:58		17:06	68	14:26 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	65 13:56 (15)	15:47
6	09:25		08:34		10:53 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:22 (12)	09:09
	16:00		17:08	64	14:26 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	69 13:57 (15)	15:46
7	09:24		08:32		10:53 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:21 (12)	09:10
	16:02		17:11	59	14:25 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	72 13:57 (15)	15:45
8	09:24		08:30		10:55 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:21 (12)	09:12
	16:03		17:13	52	14:24 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73 13:57 (15)	15:45
9	09:23		08:27		10:56 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:21 (12)	09:13
	16:05		17:16	43	14:22 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75 13:58 (15)	15:44
10	09:22		08:25		10:58 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:22 (12)	09:15
	16:07		17:18	26	14:18 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	72 13:58 (15)	15:43
11	09:21		08:22		12:44 (17)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:21 (12)	09:16
	16:09		17:21	5	12:49 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	75 13:58 (15)	15:43
12	09:20		08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:22 (12)	09:17
	16:11		17:23			18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	72 13:58 (15)	15:42
13	09:18	12:39 (9)	08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:23 (12)	09:19
	16:13	5 12:44 (9)	17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	72 13:58 (15)	15:42
14	09:17	12:39 (9)	08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	10:23 (12)	09:20
	16:15	7 12:46 (9)	17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	68 13:57 (15)	15:42
15	09:16	12:39 (9)	08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	10:24 (12)	09:21
	16:17	15 12:54 (9)	17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	63 13:57 (15)	15:42
16	09:14	12:38 (9)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	10:30 (12)	09:22
	16:19	17 12:55 (9)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	50 13:57 (15)	15:42
17	09:13	12:38 (9)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:05 (17)	09:23
	16:21	18 12:56 (9)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45 13:55 (15)	15:42
18	09:12	12:37 (9)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:07 (17)	09:24
	16:23	19 12:56 (9)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	42 13:55 (15)	15:42
19	09:10	12:38 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:08 (17)	09:25
	16:25	20 12:58 (9)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	39 13:54 (15)	15:42
20	09:08	12:37 (17)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:09 (17)	09:25
	16:27	22 12:59 (9)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	33 13:51 (15)	15:42
21	09:07	12:35 (17)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:11 (17)	09:26
	16:30	23 12:58 (9)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	23 12:34 (9)	15:43
22	09:05	12:34 (17)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:13 (17)	09:27
	16:32	33 14:16 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	22 12:35 (9)	15:43
23	09:03	12:33 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:14 (9)	09:27
	16:34	39 14:19 (15)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	20 12:34 (9)	15:44
24	09:01	12:33 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:15 (9)	09:28
	16:37	42 14:21 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	20 12:35 (9)	15:44
25	09:00	12:32 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:16 (9)	09:28
	16:39	45 14:22 (15)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	18 12:34 (9)	15:45
26	08:58	10:57 (12)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49	12:17 (9)	09:28
	16:41	50 14:24 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58	17 12:34 (9)	15:46
27	08:56	10:51 (12)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52	12:18 (9)	09:28
	16:44	64 14:24 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56	15 12:33 (9)	15:47
28	08:54	10:51 (12)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54	12:19 (9)	09:28
	16:46	69 14:25 (15)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59		15:55	7 12:26 (9)	15:48
29	08:52	10:51 (12)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56	12:20 (9)	09:28
	16:49	70 14:26 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53	5 12:25 (9)	15:49
30	08:50	10:50 (12)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		08:58		09:28
	16:51	72 14:26 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54		15:52		15:50
31	08:48	10:51 (12)				07:09		04:41		05:22	06:31		07:49	12:13 (17)			09:28
	16:53	74 14:27 (15)				20:14		22:29		22:03	20:42		16:51	7 12:20 (17)			15:51
Potential sun hours	221		260			365	432	521	547	546	478	386	319		236		199
Total, worst case		704		609										7		1322	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,62		0,63										0,63		0,62	
Total reduction		0,25		0,25										0,25		0,25	
Total, real		174		153										2		328	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:45 (12)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		10:19 (12)	09:00
	15:53		16:56	73	14:22 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	43	13:46 (15)	15:51
2	09:27		08:43		10:46 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		10:18 (12)	09:01
	15:54		16:58	74	14:23 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	53	13:48 (15)	15:50
3	09:27		08:41		10:45 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		10:18 (12)	09:03
	15:55		17:01	74	14:22 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	59	13:50 (15)	15:49
4	09:26		08:39		10:46 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:16 (12)	09:05
	15:57		17:03	73	14:23 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	65	13:51 (15)	15:48
5	09:26		08:37		10:46 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:16 (12)	09:07
	15:58		17:06	71	14:22 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	70	13:52 (15)	15:47
6	09:25		08:34		10:47 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		10:16 (12)	09:09
	16:00		17:08	68	14:22 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	73	13:53 (15)	15:46
7	09:24		08:32		10:47 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		10:16 (12)	09:10
	16:02		17:11	65	14:21 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	73	13:52 (15)	15:45
8	09:24		08:30		10:48 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		10:16 (12)	09:12
	16:03		17:13	58	14:20 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73	13:53 (15)	15:45
9	09:23		08:27		10:49 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10		10:16 (12)	09:13
	16:05		17:16	50	14:18 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75	13:53 (15)	15:44
10	09:22		08:25		10:50 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13		10:17 (12)	09:15
	16:07		17:18	40	14:16 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	74	13:54 (15)	15:43
11	09:21		08:22		10:53 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		10:17 (12)	09:16
	16:09		17:21	22	12:47 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	69	13:53 (15)	15:43
12	09:20		08:20		12:38 (17)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		10:18 (12)	09:17
	16:11		17:23	4	12:42 (17)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	54	13:53 (15)	15:42
13	09:18		08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		10:20 (12)	09:19
	16:13		17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	53	13:53 (15)	15:42
14	09:17		08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:57 (17)	09:20
	16:15		17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	51	13:52 (15)	15:42
15	09:16		08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:58 (17)	09:21
	16:17		17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	50	13:52 (15)	15:42
16	09:14		08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:59 (17)	09:22
	16:19		17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	49	13:52 (15)	15:42
17	09:13		08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		12:00 (17)	09:23
	16:21	5	12:50 (9)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45	13:50 (15)	15:42
18	09:12		12:33 (9)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		12:01 (17)	09:24
	16:23	18	12:51 (9)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	43	13:50 (15)	15:42
19	09:10		12:34 (9)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		12:03 (17)	09:25
	16:25	19	12:53 (9)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	38	13:49 (15)	15:42
20	09:08		12:34 (9)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		12:04 (17)	09:25
	16:27	20	12:54 (9)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	27	13:41 (15)	15:42
21	09:07		12:31 (17)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		12:07 (17)	09:26
	16:30	22	12:53 (9)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	22	12:29 (9)	15:43
22	09:05		12:29 (17)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		12:10 (9)	09:27
	16:32	27	14:06 (15)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	20	12:30 (9)	15:43
23	09:03		12:28 (17)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		12:10 (9)	09:27
	16:34	38	14:14 (15)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	19	12:29 (9)	15:44
24	09:01		12:27 (17)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45		12:11 (9)	09:28
	16:37	43	14:16 (15)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	18	12:29 (9)	15:44
25	09:00		12:27 (17)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47		12:11 (9)	09:28
	16:39	45	14:17 (15)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	5	12:28 (9)	15:45
26	08:58		12:26 (17)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49			09:28
	16:41	49	14:19 (15)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58			15:46
27	08:56		12:25 (17)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52			09:28
	16:44	50	14:19 (15)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56			15:47
28	08:54		12:25 (17)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54			09:28
	16:46	51	14:20 (15)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59		15:55			15:48
29	08:52		10:48 (12)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56			09:28
	16:49	53	14:21 (15)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53			15:49
30	08:50		10:46 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	12:06 (17)	08:58			09:28
	16:51	55	14:21 (15)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	7 12:13 (17)	15:52			15:50
31	08:48		10:46 (12)			07:09		04:41		05:22	06:31		07:49	10:22 (12)				09:28
	16:53	69	14:22 (15)			20:14		22:29		22:03	20:42		16:51	25 12:17 (17)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236				199
Total, worst case		564		672									32		1221			
Sun reduction		0,50		0,50									0,50		0,50			
Oper. time red.		0,80		0,80									0,80		0,80			
Wind dir. red.		0,61		0,63									0,66		0,62			
Total reduction		0,24		0,25									0,26		0,25			
Total, real		138		169									8		303			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:03 (26)	08:45	14:59 (17)	07:35	07:07	05:44	04:39
	15:52 20	12:23 (26)	16:56 18	15:17 (17)	18:04	20:16	21:26	22:30
2	09:27	12:03 (26)	08:43	14:59 (17)	07:32	07:04	05:41	04:38
	15:54 20	12:23 (26)	16:58 19	15:18 (17)	18:07	20:19	21:28	22:32
3	09:27	12:03 (26)	08:41	14:58 (17)	07:30	07:01	05:38	04:37
	15:55 20	12:23 (26)	17:01 19	15:17 (17)	18:09	20:21	21:30	22:33
4	09:26	12:03 (26)	08:39	14:59 (17)	07:27	06:58	05:36	04:36
	15:57 21	12:24 (26)	17:03 19	15:18 (17)	18:12	20:23	21:33	22:35
5	09:26	12:04 (26)	08:37	14:59 (17)	07:24	06:55	05:33	04:34
	15:58 26	13:33 (12)	17:06 19	15:18 (17)	18:14	20:26	21:35	22:36
6	09:25	12:04 (26)	08:34	15:00 (17)	07:21	06:52	05:31	04:33
	16:00 29	13:35 (12)	17:08 18	15:18 (17)	18:16	20:28	21:37	22:38
7	09:24	12:05 (26)	08:32	15:00 (17)	07:18	06:49	05:29	04:32
	16:01 31	13:37 (12)	17:11 17	15:17 (17)	18:19	20:30	21:39	22:39
8	09:23	12:06 (26)	08:30	15:00 (17)	07:16	06:46	05:26	04:31
	16:03 33	13:39 (12)	17:13 16	15:16 (17)	18:21	20:33	21:42	22:40
9	09:23	12:06 (26)	08:27	15:02 (17)	07:13	06:44	05:24	04:31
	16:05 33	13:39 (12)	17:15 14	15:16 (17)	18:23	20:35	21:44	22:42
10	09:22	12:07 (26)	08:25	15:03 (17)	07:10	06:41	05:21	04:30
	16:07 35	13:41 (12)	17:18 11	15:14 (17)	18:26	20:37	21:46	22:43
11	09:21	12:07 (26)	08:22	15:07 (17)	07:07	06:38	05:19	04:29
	16:09 35	13:41 (12)	17:20 5	15:12 (17)	18:28	20:39	21:49	22:44
12	09:19	12:08 (26)	08:20		07:04	06:35	05:17	04:29
	16:11 35	13:42 (12)	17:23		18:30	20:42	21:51	22:45
13	09:18	12:09 (26)	08:17		07:01	06:32	05:15	04:28
	16:12 35	13:43 (12)	17:25		18:33	20:44	21:53	22:46
14	09:17	12:10 (26)	08:15		06:58	06:29	05:12	04:28
	16:14 35	13:44 (12)	17:28		18:35	20:46	21:55	22:46
15	09:16	12:11 (26)	08:12		06:56	06:27	05:10	04:27
	16:17 34	13:45 (12)	17:30		18:37	20:49	21:57	22:47
16	09:14	12:12 (26)	08:10		06:53	06:24	05:08	04:27
	16:19 32	13:45 (12)	17:33		18:40	20:51	22:00	22:48
17	09:13	12:14 (26)	08:07		06:50	06:21	05:06	04:27
	16:21 29	13:45 (12)	17:35		18:42	20:53	22:02	22:48
18	09:11	12:16 (26)	08:05		06:47	06:18	05:04	04:26
	16:23 26	13:46 (12)	17:38		18:44	20:56	22:04	22:49
19	09:10	13:25 (12)	08:02		06:44	06:16	05:02	04:26
	16:25 21	13:46 (12)	17:40		18:47	20:58	22:06	22:49
20	09:08	13:25 (12)	07:59		06:41	06:13	05:00	04:26
	16:27 22	13:47 (12)	17:43		18:49	21:00	22:08	22:50
21	09:07	13:26 (12)	07:57		06:38	06:10	04:58	04:26
	16:30 21	13:47 (12)	17:45		18:51	21:03	22:10	22:50
22	09:05	13:26 (12)	07:54		06:35	06:07	04:56	04:27
	16:32 21	13:47 (12)	17:48		18:54	21:05	22:12	22:50
23	09:03	13:27 (12)	07:51		06:33	06:05	04:54	04:27
	16:34 20	13:47 (12)	17:50		18:56	21:07	22:14	22:50
24	09:01	13:28 (12)	07:49		06:30	06:02	04:52	04:27
	16:37 19	13:47 (12)	17:52		18:58	21:09	22:16	22:50
25	09:00	13:29 (12)	07:46		06:27	05:59	04:50	04:28
	16:39 18	13:47 (12)	17:55		19:00	21:12	22:18	22:50
26	08:58	13:30 (12)	07:43		06:24	05:57	04:49	04:28
	16:41 17	13:47 (12)	17:57		19:03	21:14	22:20	22:50
27	08:56	13:30 (12)	07:41		06:21	05:54	04:47	04:29
	16:44 20	15:09 (17)	18:00		19:05	21:16	22:22	22:50
28	08:54	13:32 (12)	07:38		06:18	05:51	04:45	04:29
	16:46 23	15:12 (17)	18:02		19:07	21:19	22:23	22:50
29	08:52	13:35 (12)			07:15	05:49	04:44	04:30
	16:48 21	15:14 (17)			20:10	21:21	22:25	22:49
30	08:50	15:00 (17)			07:12	05:46	04:42	04:31
	16:51 15	15:15 (17)			20:12	21:23	22:27	22:49
31	08:48	15:00 (17)			07:09		04:41	
	16:53 16	15:16 (17)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		783		175				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,60		0,55				
Total reduction		0,24		0,22				
Total, real		187		39				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (17)	08:59		11:49 (26)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (17)	15:51	35	13:23 (12)
2	04:33	05:26	06:35	07:41			07:54		14:31 (17)	09:01		11:50 (26)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (17)	15:50	35	13:24 (12)
3	04:34	05:28	06:37	07:44			07:56		14:31 (17)	09:03		11:50 (26)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (17)	15:49	33	13:23 (12)
4	04:35	05:30	06:39	07:46			07:58		14:29 (17)	09:05		11:50 (26)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (17)	15:48	33	13:23 (12)
5	04:36	05:33	06:42	07:48			08:01		14:29 (17)	09:07		11:50 (26)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (17)	15:47	31	13:22 (12)
6	04:37	05:35	06:44	07:50			08:03		14:29 (17)	09:08		11:50 (26)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (17)	15:46	30	13:22 (12)
7	04:38	05:37	06:46	07:53			08:06		14:29 (17)	09:10		11:51 (26)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (17)	15:45	27	13:21 (12)
8	04:40	05:39	06:48	07:55			08:08		14:29 (17)	09:12		11:51 (26)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (17)	15:44	21	12:12 (26)
9	04:41	05:41	06:51	07:57			08:10		14:30 (17)	09:13		11:51 (26)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (17)	15:44	21	12:12 (26)
10	04:42	05:44	06:53	07:59			08:13		14:29 (17)	09:15		11:52 (26)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (17)	15:43	20	12:12 (26)
11	04:44	05:46	06:55	08:02			08:15		14:30 (17)	09:16		11:53 (26)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (17)	15:43	20	12:13 (26)
12	04:45	05:48	06:57	08:04			08:18		14:32 (17)	09:17		11:53 (26)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (17)	15:42	20	12:13 (26)
13	04:47	05:50	06:59	08:06			08:20		13:07 (12)	09:19		11:54 (26)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (17)	15:42	20	12:14 (26)
14	04:49	05:53	07:02	08:09			08:22		13:04 (12)	09:20		11:54 (26)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (17)	15:42	20	12:14 (26)
15	04:50	05:55	07:04	08:11			08:25		13:03 (12)	09:21		11:54 (26)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (17)	15:42	20	12:14 (26)
16	04:52	05:57	07:06	08:13			08:27		13:03 (12)	09:22		11:55 (26)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (12)	15:42	20	12:15 (26)
17	04:54	05:59	07:08	08:16			08:29		13:02 (12)	09:23		11:55 (26)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (12)	15:42	20	12:15 (26)
18	04:56	06:02	07:10	08:18			08:32		13:02 (12)	09:24		11:56 (26)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (12)	15:42	19	12:15 (26)
19	04:57	06:04	07:13	08:20			08:34		13:02 (12)	09:25		11:56 (26)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (12)	15:42	20	12:16 (26)
20	04:59	06:06	07:15	08:23			08:36		13:01 (12)	09:25		11:57 (26)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (12)	15:42	20	12:17 (26)
21	05:01	06:08	07:17	08:25			08:38		13:02 (12)	09:26		11:57 (26)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (12)	15:43	20	12:17 (26)
22	05:03	06:10	07:19	08:27			08:41		13:02 (12)	09:27		11:58 (26)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (12)	15:43	20	12:18 (26)
23	05:05	06:13	07:21	08:30			08:43		13:02 (12)	09:27		11:58 (26)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (12)	15:44	20	12:18 (26)
24	05:07	06:15	07:24	08:32			08:45		11:55 (26)	09:27		11:58 (26)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (12)	15:44	20	12:18 (26)
25	05:09	06:17	07:26	07:34			08:47		11:52 (26)	09:28		11:59 (26)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (12)	15:45	20	12:19 (26)
26	05:11	06:19	07:28	07:37			08:49		11:51 (26)	09:28		12:00 (26)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (12)	15:46	20	12:20 (26)
27	05:13	06:22	07:30	07:39			08:51		11:50 (26)	09:28		12:00 (26)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (12)	15:47	20	12:20 (26)
28	05:15	06:24	07:32	07:42			08:54		11:49 (26)	09:28		12:00 (26)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (12)	15:48	20	12:20 (26)
29	05:17	06:26	07:35	07:44			08:56		11:50 (26)	09:28		12:01 (26)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (12)	15:49	20	12:21 (26)
30	05:20	06:28	07:37	07:46			08:58		11:49 (26)	09:28		12:01 (26)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (12)	15:50	21	12:22 (26)
31	05:22	06:31		07:49		14:35 (17)				09:28		12:01 (26)
	22:03	20:42		16:51	6	14:41 (17)				15:51	21	12:22 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,58			0,63	
Total reduction					0,22			0,23			0,25	
Total, real					1			151			178	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:35 (26)	08:45	14:09 (12)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51		08:59		12:23 (26)
	15:52 20	12:55 (26)	16:56 5	14:14 (12)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51	18	12:41 (26)
2	09:27	12:36 (26)	08:43		07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01		12:23 (26)
	15:54 21	12:57 (26)	16:58		18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50	19	12:42 (26)
3	09:27	12:36 (26)	08:41		07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03		12:23 (26)
	15:55 21	12:57 (26)	17:01		18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49	20	12:43 (26)
4	09:26	12:37 (26)	08:39		07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05		12:23 (26)
	15:57 20	12:57 (26)	17:03		18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48	20	12:43 (26)
5	09:26	12:37 (26)	08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07		12:24 (26)
	15:58 20	12:57 (26)	17:06		18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47	20	12:44 (26)
6	09:25	12:38 (26)	08:34		07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:08		12:24 (26)
	16:00 20	12:58 (26)	17:08		18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46	20	12:44 (26)
7	09:24	12:38 (26)	08:32		07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10		12:24 (26)
	16:01 20	12:58 (26)	17:11		18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34		15:45	21	12:45 (26)
8	09:23	12:39 (26)	08:30		07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12		12:25 (26)
	16:03 20	12:59 (26)	17:13		18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44	20	12:45 (26)
9	09:23	12:39 (26)	08:27		07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10		09:13		12:24 (26)
	16:05 19	12:58 (26)	17:15		18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30		15:44	21	12:45 (26)
10	09:22	12:40 (26)	08:25		07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	13:40 (12)	09:15		12:25 (26)
	16:07 19	12:59 (26)	17:18		18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27 5	13:45 (12)	15:43	21	12:46 (26)
11	09:21	12:40 (26)	08:22		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	13:37 (12)	09:16		12:26 (26)
	16:09 19	12:59 (26)	17:20		18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25 11	13:48 (12)	15:43	21	12:47 (26)
12	09:19	12:42 (26)	08:20		07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	13:36 (12)	09:17		12:26 (26)
	16:10 24	14:10 (12)	17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 14	13:50 (12)	15:42	20	12:46 (26)
13	09:18	12:42 (26)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	13:35 (12)	09:19		12:27 (26)
	16:12 27	14:11 (12)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 17	13:52 (12)	15:42	20	12:47 (26)
14	09:17	12:44 (26)	08:15		06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22	13:34 (12)	09:20		12:27 (26)
	16:14 27	14:13 (12)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 18	13:52 (12)	15:42	21	12:48 (26)
15	09:16	12:45 (26)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	13:34 (12)	09:21		12:27 (26)
	16:17 27	14:14 (12)	17:30		18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17 19	13:53 (12)	15:42	21	12:48 (26)
16	09:14	12:46 (26)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	13:34 (12)	09:22		12:28 (26)
	16:19 27	14:15 (12)	17:33		18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15 20	13:54 (12)	15:42	20	12:48 (26)
17	09:13	12:48 (26)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	13:33 (12)	09:23		12:28 (26)
	16:21 25	14:16 (12)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 20	13:53 (12)	15:42	20	12:48 (26)
18	09:11	13:59 (12)	08:05		06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	13:34 (12)	09:24		12:29 (26)
	16:23 18	14:17 (12)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11 20	13:54 (12)	15:42	20	12:49 (26)
19	09:10	13:59 (12)	08:02		06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34	13:34 (12)	09:25		12:30 (26)
	16:25 19	14:18 (12)	17:40		18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 21	13:55 (12)	15:42	20	12:50 (26)
20	09:08	13:59 (12)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	13:34 (12)	09:25		12:30 (26)
	16:27 19	14:18 (12)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 20	13:54 (12)	15:42	20	12:50 (26)
21	09:07	13:59 (12)	07:57		06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	13:35 (12)	09:26		12:30 (26)
	16:30 20	14:19 (12)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 20	13:55 (12)	15:43	20	12:50 (26)
22	09:05	13:59 (12)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41	13:35 (12)	09:27		12:31 (26)
	16:32 20	14:19 (12)	17:47		18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04 19	13:54 (12)	15:43	20	12:51 (26)
23	09:03	13:59 (12)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	13:36 (12)	09:27		12:31 (26)
	16:34 21	14:20 (12)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02 19	13:55 (12)	15:44	20	12:51 (26)
24	09:01	14:00 (12)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	13:37 (12)	09:27		12:31 (26)
	16:36 20	14:20 (12)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	13:55 (12)	15:44	21	12:52 (26)
25	09:00	14:00 (12)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:26 (26)	09:28		12:33 (26)
	16:39 21	14:21 (12)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 25	13:54 (12)	15:45	20	12:53 (26)
26	08:58	14:01 (12)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:25 (26)	09:28		12:33 (26)
	16:41 20	14:21 (12)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 26	13:54 (12)	15:46	20	12:53 (26)
27	08:56	14:01 (12)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	12:24 (26)	09:28		12:34 (26)
	16:44 19	14:20 (12)	18:00		19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 28	13:54 (12)	15:47	20	12:54 (26)
28	08:54	14:02 (12)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:23 (26)	09:28		12:33 (26)
	16:46 18	14:20 (12)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55 28	13:53 (12)	15:47	21	12:54 (26)
29	08:52	14:04 (12)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:23 (26)	09:28		12:34 (26)
	16:48 16	14:20 (12)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 27	13:52 (12)	15:49	20	12:54 (26)
30	08:50	14:04 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:23 (26)	09:28		12:35 (26)
	16:51 14	14:18 (12)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 24	13:51 (12)	15:50	20	12:55 (26)
31	08:48	14:07 (12)			07:09		04:41		05:22	06:31		07:49			09:28		12:35 (26)
	16:53 10	14:17 (12)			20:14		22:29		22:03	20:42		16:51			15:51	20	12:55 (26)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	631		5										419		625		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,58		0,55										0,56		0,62		
Total reduction	0,23		0,22										0,23		0,25		
Total, real	147		1										94		154		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28		13:54 (26)	08:45		15:12 (12)	07:35	07:06	05:43	04:39
	15:52	9	14:03 (26)	16:56	14	15:26 (12)	18:04	20:16	21:26	22:30
2	09:27		13:54 (26)	08:43		15:12 (12)	07:32	07:04	05:41	04:38
	15:54	11	14:05 (26)	16:58	16	15:28 (12)	18:07	20:19	21:28	22:32
3	09:27		13:54 (26)	08:41		15:11 (12)	07:29	07:01	05:38	04:37
	15:55	12	14:06 (26)	17:01	17	15:28 (12)	18:09	20:21	21:30	22:33
4	09:26		13:54 (26)	08:39		15:11 (12)	07:27	06:58	05:36	04:36
	15:57	13	14:07 (26)	17:03	18	15:29 (12)	18:12	20:23	21:33	22:35
5	09:26		13:53 (26)	08:37		15:11 (12)	07:24	06:55	05:33	04:34
	15:58	15	14:08 (26)	17:06	18	15:29 (12)	18:14	20:26	21:35	22:36
6	09:25		13:53 (26)	08:34		15:11 (12)	07:21	06:52	05:31	04:33
	16:00	16	14:09 (26)	17:08	19	15:30 (12)	18:16	20:28	21:37	22:38
7	09:24		13:54 (26)	08:32		15:11 (12)	07:18	06:49	05:29	04:32
	16:01	16	14:10 (26)	17:10	19	15:30 (12)	18:19	20:30	21:39	22:39
8	09:23		13:54 (26)	08:30		15:11 (12)	07:15	06:46	05:26	04:31
	16:03	17	14:11 (26)	17:13	18	15:29 (12)	18:21	20:32	21:42	22:40
9	09:23		13:53 (26)	08:27		15:12 (12)	07:13	06:44	05:24	04:31
	16:05	18	14:11 (26)	17:15	18	15:30 (12)	18:23	20:35	21:44	22:41
10	09:22		13:53 (26)	08:25		15:12 (12)	07:10	06:41	05:21	04:30
	16:07	19	14:12 (26)	17:18	17	15:29 (12)	18:26	20:37	21:46	22:43
11	09:20		13:53 (26)	08:22		15:13 (12)	07:07	06:38	05:19	04:29
	16:09	19	14:12 (26)	17:20	14	15:27 (12)	18:28	20:39	21:48	22:44
12	09:19		13:54 (26)	08:20		15:16 (12)	07:04	06:35	05:17	04:28
	16:10	19	14:13 (26)	17:23	11	15:27 (12)	18:30	20:42	21:51	22:45
13	09:18		13:53 (26)	08:17		15:18 (12)	07:01	06:32	05:14	04:28
	16:12	21	14:14 (26)	17:25	5	15:23 (12)	18:33	20:44	21:53	22:45
14	09:17		13:54 (26)	08:15			06:58	06:29	05:12	04:27
	16:14	21	14:15 (26)	17:28			18:35	20:46	21:55	22:46
15	09:16		13:54 (26)	08:12			06:56	06:27	05:10	04:27
	16:16	21	14:15 (26)	17:30			18:37	20:49	21:57	22:47
16	09:14		13:54 (26)	08:10			06:53	06:24	05:08	04:27
	16:19	21	14:15 (26)	17:33			18:40	20:51	21:59	22:48
17	09:13		13:54 (26)	08:07			06:50	06:21	05:06	04:27
	16:21	22	14:16 (26)	17:35			18:42	20:53	22:02	22:48
18	09:11		13:55 (26)	08:05			06:47	06:18	05:04	04:26
	16:23	21	14:16 (26)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:55 (26)	08:02			06:44	06:15	05:02	04:26
	16:25	21	14:16 (26)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:56 (26)	07:59			06:41	06:13	05:00	04:26
	16:27	20	14:16 (26)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:56 (26)	07:57			06:38	06:10	04:58	04:26
	16:30	20	14:16 (26)	17:45			18:51	21:02	22:10	22:50
22	09:05		13:57 (26)	07:54			06:35	06:07	04:56	04:27
	16:32	19	14:16 (26)	17:47			18:53	21:05	22:12	22:50
23	09:03		13:58 (26)	07:51			06:32	06:05	04:54	04:27
	16:34	18	14:16 (26)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:59 (26)	07:49			06:30	06:02	04:52	04:27
	16:36	17	14:16 (26)	17:52			18:58	21:09	22:16	22:50
25	08:59		14:01 (26)	07:46			06:27	05:59	04:50	04:28
	16:39	14	14:15 (26)	17:55			19:00	21:12	22:18	22:50
26	08:58		14:02 (26)	07:43			06:24	05:57	04:49	04:28
	16:41	11	14:13 (26)	17:57			19:03	21:14	22:20	22:50
27	08:56		14:05 (26)	07:41			06:21	05:54	04:47	04:29
	16:44	6	14:11 (26)	18:00			19:05	21:16	22:22	22:50
28	08:54			07:38			06:18	05:51	04:45	04:29
	16:46			18:02			19:07	21:19	22:23	22:50
29	08:52						07:15	05:49	04:44	04:30
	16:48						20:10	21:21	22:25	22:49
30	08:50		15:15 (12)				07:12	05:46	04:42	04:31
	16:51	8	15:23 (12)				20:12	21:23	22:27	22:49
31	08:48		15:14 (12)				07:09		04:41	
	16:53	11	15:25 (12)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		476			204					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,55			0,55					
Total reduction		0,22			0,22					
Total, real		104			45					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:42 (12)	08:59		13:35 (26)
	22:48	22:01	20:39	19:13			16:48	16	14:58 (12)	15:51	19	13:54 (26)
2	04:33	05:26	06:35	07:41			07:53		14:41 (12)	09:01		13:37 (26)
	22:48	21:58	20:37	19:10			16:46	18	14:59 (12)	15:50	18	13:55 (26)
3	04:34	05:28	06:37	07:44			07:56		14:40 (12)	09:03		13:37 (26)
	22:47	21:56	20:34	19:07			16:44	19	14:59 (12)	15:49	18	13:55 (26)
4	04:35	05:30	06:39	07:46			07:58		14:40 (12)	09:05		13:38 (26)
	22:46	21:54	20:31	19:04			16:41	20	15:00 (12)	15:48	17	13:55 (26)
5	04:36	05:32	06:42	07:48			08:01		14:41 (12)	09:07		13:39 (26)
	22:45	21:51	20:28	19:01			16:39	19	15:00 (12)	15:47	16	13:55 (26)
6	04:37	05:35	06:44	07:50			08:03		14:41 (12)	09:08		13:40 (26)
	22:45	21:49	20:25	18:58			16:36	19	15:00 (12)	15:46	15	13:55 (26)
7	04:38	05:37	06:46	07:53			08:06		14:41 (12)	09:10		13:41 (26)
	22:44	21:46	20:22	18:56			16:34	18	14:59 (12)	15:45	14	13:55 (26)
8	04:40	05:39	06:48	07:55			08:08		14:42 (12)	09:12		13:42 (26)
	22:43	21:44	20:19	18:53			16:32	17	14:59 (12)	15:44	13	13:55 (26)
9	04:41	05:41	06:50	07:57			08:10		14:43 (12)	09:13		13:42 (26)
	22:41	21:41	20:16	18:50			16:30	16	14:59 (12)	15:44	12	13:54 (26)
10	04:42	05:44	06:53	07:59			08:13		14:43 (12)	09:15		13:43 (26)
	22:40	21:39	20:14	18:47			16:27	14	14:57 (12)	15:43	11	13:54 (26)
11	04:44	05:46	06:55	08:02			08:15		14:45 (12)	09:16		13:45 (26)
	22:39	21:36	20:11	18:44			16:25	11	14:56 (12)	15:43	9	13:54 (26)
12	04:45	05:48	06:57	08:04			08:18		14:47 (12)	09:17		13:46 (26)
	22:38	21:34	20:08	18:41			16:23	7	14:54 (12)	15:42	7	13:53 (26)
13	04:47	05:50	06:59	08:06			08:20			09:19		13:48 (26)
	22:36	21:31	20:05	18:39			16:21			15:42	5	13:53 (26)
14	04:49	05:53	07:01	08:09			08:22			09:20		13:49 (26)
	22:35	21:29	20:02	18:36			16:19			15:42	3	13:52 (26)
15	04:50	05:55	07:04	08:11			08:25		13:37 (26)	09:21		
	22:33	21:26	19:59	18:33			16:17	7	13:44 (26)	15:42		
16	04:52	05:57	07:06	08:13			08:27		13:36 (26)	09:22		
	22:32	21:23	19:56	18:30			16:15	11	13:47 (26)	15:42		
17	04:54	05:59	07:08	08:16			08:29		13:34 (26)	09:23		
	22:30	21:21	19:53	18:28			16:13	14	13:48 (26)	15:42		
18	04:56	06:01	07:10	08:18			08:32		13:33 (26)	09:24		
	22:29	21:18	19:50	18:25			16:11	17	13:50 (26)	15:42		
19	04:57	06:04	07:12	08:20			08:34		13:33 (26)	09:25		
	22:27	21:15	19:47	18:22			16:09	18	13:51 (26)	15:42		
20	04:59	06:06	07:15	08:23			08:36		13:32 (26)	09:25		
	22:25	21:13	19:45	18:19			16:07	19	13:51 (26)	15:42		
21	05:01	06:08	07:17	08:25			08:38		13:32 (26)	09:26		
	22:23	21:10	19:42	18:17			16:06	20	13:52 (26)	15:43		
22	05:03	06:10	07:19	08:27			08:41		13:32 (26)	09:27		
	22:21	21:07	19:39	18:14			16:04	20	13:52 (26)	15:43		
23	05:05	06:13	07:21	08:30			08:43		13:32 (26)	09:27		
	22:20	21:05	19:36	18:11			16:02	21	13:53 (26)	15:44		
24	05:07	06:15	07:23	08:32			08:45		13:33 (26)	09:27		
	22:18	21:02	19:33	18:09			16:00	21	13:54 (26)	15:44		
25	05:09	06:17	07:26	07:34			08:47		13:33 (26)	09:28		
	22:16	20:59	19:30	17:06			15:59	21	13:54 (26)	15:45		
26	05:11	06:19	07:28	07:37			08:49		13:33 (26)	09:28		
	22:14	20:56	19:27	17:04			15:57	21	13:54 (26)	15:46		
27	05:13	06:22	07:30	07:39			08:51		13:33 (26)	09:28		
	22:11	20:53	19:24	17:01			15:56	21	13:54 (26)	15:47		
28	05:15	06:24	07:32	07:41			08:53		13:33 (26)	09:28		
	22:09	20:51	19:21	16:58			15:55	21	13:54 (26)	15:47		
29	05:17	06:26	07:35	07:44		14:47 (12)	08:55		13:35 (26)	09:28		
	22:07	20:48	19:18	16:56	7	14:54 (12)	15:53	20	13:55 (26)	15:48		
30	05:19	06:28	07:37	07:46		14:45 (12)	08:57		13:35 (26)	09:28		13:56 (26)
	22:05	20:45	19:16	16:53	11	14:56 (12)	15:52	20	13:55 (26)	15:50	4	14:00 (26)
31	05:22	06:31		07:49		14:42 (12)				09:28		13:55 (26)
	22:03	20:42		16:51	15	14:57 (12)				15:51	6	14:01 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					33			486			187	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,55			0,55	
Total reduction					0,22			0,22			0,22	
Total, real					7			107			41	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:45	10:57 (37)	07:35	16:28 (17)	07:06	05:44	04:39
	15:52		16:56 40	13:50 (26)	18:04 11	16:39 (17)	20:16	21:26	22:30
2	09:27		08:43	10:59 (37)	07:32	16:27 (17)	07:04	05:41	04:38
	15:54		16:58 37	13:51 (26)	18:07 13	16:40 (17)	20:19	21:28	22:32
3	09:27		08:41	11:02 (37)	07:30	16:27 (17)	07:01	05:38	04:37
	15:55		17:01 28	13:49 (26)	18:09 14	16:41 (17)	20:21	21:30	22:33
4	09:26		08:39	13:29 (26)	07:27	16:27 (17)	06:58	05:36	04:36
	15:57		17:03 20	13:49 (26)	18:12 17	16:44 (17)	20:23	21:33	22:35
5	09:26		08:37	13:30 (26)	07:24	16:27 (17)	06:55	05:33	04:34
	15:58		17:06 17	13:47 (26)	18:14 19	16:46 (17)	20:26	21:35	22:36
6	09:25		08:34	13:33 (26)	07:21	16:28 (17)	06:52	05:31	04:33
	16:00		17:08 12	13:45 (26)	18:16 17	16:45 (17)	20:28	21:37	22:38
7	09:24		08:32		07:18	16:29 (17)	06:49	05:29	04:32
	16:01		17:11		18:19 15	16:44 (17)	20:30	21:39	22:39
8	09:23		08:30		07:15	16:30 (17)	06:46	05:26	04:32
	16:03		17:13		18:21 12	16:42 (17)	20:32	21:42	22:40
9	09:23		08:27		07:13	16:33 (17)	06:44	05:24	04:31
	16:05		17:15		18:23 6	16:39 (17)	20:35	21:44	22:41
10	09:22		08:25		07:10		06:41	05:21	04:30
	16:07		17:18		18:26		20:37	21:46	22:43
11	09:20		08:22		07:07		06:38	05:19	04:29
	16:09		17:20		18:28		20:39	21:48	22:44
12	09:19		08:20	14:57 (7)	07:04		06:35	05:17	04:29
	16:11		17:23 8	15:05 (7)	18:30		20:42	21:51	22:45
13	09:18		08:17	14:59 (7)	07:01		06:32	05:15	04:28
	16:12		17:25 11	15:10 (7)	18:33		20:44	21:53	22:45
14	09:17	11:05 (37)	08:15	15:02 (7)	06:58		06:29	05:12	04:28
	16:14 3	11:08 (37)	17:28 12	15:14 (12)	18:35		20:46	21:55	22:46
15	09:16	10:59 (37)	08:12	15:06 (12)	06:56		06:27	05:10	04:27
	16:17 10	11:09 (37)	17:30 12	15:18 (12)	18:37		20:49	21:57	22:47
16	09:14	10:52 (37)	08:10	15:06 (12)	06:53		06:24	05:08	04:27
	16:19 18	11:10 (37)	17:33 15	15:21 (12)	18:40		20:51	21:59	22:48
17	09:13	10:51 (37)	08:07	15:05 (12)	06:50		06:21	05:06	04:27
	16:21 19	11:10 (37)	17:35 16	15:21 (12)	18:42		20:53	22:02	22:48
18	09:11	10:51 (37)	08:05	15:05 (12)	06:47		06:18	05:04	04:26
	16:23 20	11:11 (37)	17:38 15	15:20 (12)	18:44		20:56	22:04	22:49
19	09:10	10:51 (37)	08:02	15:06 (12)	06:44		06:16	05:02	04:26
	16:25 21	11:12 (37)	17:40 16	15:22 (12)	18:47		20:58	22:06	22:49
20	09:08	10:51 (37)	07:59	15:07 (12)	06:41		06:13	05:00	04:26
	16:27 22	11:13 (37)	17:43 17	15:24 (12)	18:49		21:00	22:08	22:50
21	09:07	10:51 (37)	07:57	15:07 (12)	06:38		06:10	04:58	04:26
	16:30 22	11:13 (37)	17:45 20	15:27 (12)	18:51		21:02	22:10	22:50
22	09:05	10:51 (37)	07:54	15:08 (12)	06:35		06:07	04:56	04:27
	16:32 27	12:49 (32)	17:47 20	15:28 (12)	18:53		21:05	22:12	22:50
23	09:03	10:51 (37)	07:51	15:09 (12)	06:32		06:05	04:54	04:27
	16:34 39	13:02 (32)	17:50 18	15:27 (12)	18:56		21:07	22:14	22:50
24	09:01	10:52 (37)	07:49	15:12 (12)	06:30		06:02	04:52	04:27
	16:37 40	13:04 (32)	17:52 13	15:25 (12)	18:58		21:09	22:16	22:50
25	08:59	10:52 (37)	07:46	15:16 (12)	06:27		05:59	04:50	04:28
	16:39 39	13:04 (32)	17:55 5	15:21 (12)	19:00		21:12	22:18	22:50
26	08:58	10:52 (37)	07:43		06:24		05:57	04:49	04:28
	16:41 39	13:24 (26)	17:57		19:03		21:14	22:20	22:50
27	08:56	10:53 (37)	07:41		06:21		05:54	04:47	04:29
	16:44 39	13:28 (26)	18:00		19:05		21:16	22:22	22:50
28	08:54	10:53 (37)	07:38	16:32 (17)	06:18		05:51	04:45	04:29
	16:46 41	13:35 (26)	18:02 4	16:36 (17)	19:07		21:19	22:23	22:50
29	08:52	10:54 (37)			07:15		05:49	04:44	04:30
	16:48 41	13:44 (26)			20:10		21:21	22:25	22:49
30	08:50	10:55 (37)			07:12		05:46	04:42	04:31
	16:51 42	13:47 (26)			20:12		21:23	22:27	22:49
31	08:48	10:56 (37)			07:09			04:41	
	16:53 42	13:49 (26)			20:14			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case	524		356		124				
Sun reduction	0,50		0,50		0,50				
Oper. time red.	0,80		0,80		0,80				
Wind dir. red.	0,67		0,57		0,57				
Total reduction	0,27		0,23		0,23				
Total, real	139		81		28				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51			08:59
	22:48	22:01	20:39	19:13			16:48			15:51
2	04:33	05:26	06:35	07:41			07:54			09:01
	22:48	21:58	20:37	19:10			16:46			15:50
3	04:34	05:28	06:37	07:44			07:56			09:03
	22:47	21:56	20:34	19:07			16:44			15:49
4	04:35	05:30	06:39	07:46			07:58		13:07 (26)	09:05
	22:46	21:54	20:31	19:04			16:41	4	13:11 (26)	15:48
5	04:36	05:33	06:42	07:48		17:09 (17)	08:01		13:02 (26)	09:07
	22:45	21:51	20:28	19:01	9	17:18 (17)	16:39	13	13:15 (26)	15:47
6	04:37	05:35	06:44	07:50		17:06 (17)	08:03		13:01 (26)	09:08
	22:45	21:49	20:25	18:58	14	17:20 (17)	16:36	17	13:18 (26)	15:46
7	04:38	05:37	06:46	07:53		17:04 (17)	08:06		12:58 (26)	09:10
	22:44	21:46	20:22	18:56	16	17:20 (17)	16:34	21	13:19 (26)	15:45
8	04:40	05:39	06:48	07:55		17:03 (17)	08:08		10:32 (37)	09:12
	22:43	21:44	20:19	18:53	18	17:21 (17)	16:32	29	13:20 (26)	15:44
9	04:41	05:41	06:50	07:57		17:02 (17)	08:10		10:30 (37)	09:13
	22:41	21:41	20:16	18:50	18	17:20 (17)	16:30	37	13:22 (26)	15:44
10	04:42	05:44	06:53	07:59		17:01 (17)	08:13		10:28 (37)	09:15
	22:40	21:39	20:14	18:47	16	17:17 (17)	16:27	40	13:21 (26)	15:43
11	04:44	05:46	06:55	08:02		17:01 (17)	08:15		10:27 (37)	09:16
	22:39	21:36	20:11	18:44	14	17:15 (17)	16:25	41	13:19 (26)	15:43
12	04:45	05:48	06:57	08:04		17:01 (17)	08:18		10:27 (37)	09:17
	22:38	21:34	20:08	18:41	12	17:13 (17)	16:23	42	13:19 (26)	15:42
13	04:47	05:50	06:59	08:06		17:02 (17)	08:20		10:25 (37)	09:19
	22:36	21:31	20:05	18:39	10	17:12 (17)	16:21	41	13:15 (26)	15:42
14	04:49	05:53	07:01	08:09		17:06 (17)	08:22		10:25 (37)	09:20
	22:35	21:29	20:02	18:36	2	17:08 (17)	16:19	41	13:07 (26)	15:42
15	04:50	05:55	07:04	08:11			08:25		10:25 (37)	09:21
	22:33	21:26	19:59	18:33			16:17	40	13:01 (26)	15:42
16	04:52	05:57	07:06	08:13			08:27		10:26 (37)	09:22
	22:32	21:23	19:56	18:30			16:15	39	12:58 (26)	15:42
17	04:54	05:59	07:08	08:16		15:45 (12)	08:29		10:25 (37)	09:23
	22:30	21:21	19:53	18:28	9	15:54 (12)	16:13	39	12:37 (32)	15:42
18	04:56	06:02	07:10	08:18		15:42 (12)	08:32		10:26 (37)	09:24
	22:29	21:18	19:50	18:25	15	15:57 (12)	16:11	40	12:38 (32)	15:42
19	04:57	06:04	07:12	08:20		15:40 (12)	08:34		10:26 (37)	09:25
	22:27	21:15	19:47	18:22	18	15:58 (12)	16:09	39	12:37 (32)	15:42
20	04:59	06:06	07:15	08:23		15:39 (12)	08:36		10:26 (37)	09:25
	22:25	21:13	19:45	18:20	21	16:00 (12)	16:07	28	12:25 (32)	15:42
21	05:01	06:08	07:17	08:25		15:37 (12)	08:38		10:27 (37)	09:26
	22:23	21:10	19:42	18:17	18	15:55 (12)	16:06	22	10:49 (37)	15:43
22	05:03	06:10	07:19	08:27		15:37 (12)	08:41		10:27 (37)	09:27
	22:21	21:07	19:39	18:14	16	15:53 (12)	16:04	22	10:49 (37)	15:43
23	05:05	06:13	07:21	08:30		15:36 (12)	08:43		10:28 (37)	09:27
	22:20	21:05	19:36	18:12	16	15:52 (12)	16:02	21	10:49 (37)	15:44
24	05:07	06:15	07:24	08:32		15:35 (12)	08:45		10:29 (37)	09:27
	22:18	21:02	19:33	18:09	16	15:51 (12)	16:01	20	10:49 (37)	15:44
25	05:09	06:17	07:26	07:34		14:36 (12)	08:47		10:29 (37)	09:28
	22:16	20:59	19:30	17:06	15	14:51 (12)	15:59	19	10:48 (37)	15:45
26	05:11	06:19	07:28	07:37		14:35 (12)	08:49		10:31 (37)	09:28
	22:14	20:56	19:27	17:04	14	14:49 (12)	15:57	18	10:49 (37)	15:46
27	05:13	06:22	07:30	07:39		14:35 (12)	08:51		10:38 (37)	09:28
	22:11	20:53	19:24	17:01	12	14:47 (12)	15:56	10	10:48 (37)	15:47
28	05:15	06:24	07:32	07:41		14:30 (7)	08:53		10:44 (37)	09:28
	22:09	20:51	19:21	16:58	12	14:42 (12)	15:55	3	10:47 (37)	15:48
29	05:17	06:26	07:35	07:44		14:27 (7)	08:55			09:28
	22:07	20:48	19:19	16:56	11	14:38 (7)	15:53			15:49
30	05:20	06:28	07:37	07:46		14:26 (7)	08:57			09:28
	22:05	20:45	19:16	16:53	8	14:34 (7)	15:52			15:50
31	05:22	06:31		07:49						09:28
	22:03	20:42		16:51						15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					330			686		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,56			0,65		
Total reduction					0,22			0,26		
Total, real					73			178		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

Shadow receptor: U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April			May			June		
1	09:27			08:45		15:29 (8)	07:35		15:43 (13)	07:06			05:43		18:54 (37)	04:39		
	15:52			16:56	22	15:51 (8)	18:04	38	16:21 (13)	20:16			21:25	25	19:19 (37)	22:30		
2	09:27			08:43		15:29 (8)	07:32		15:44 (13)	07:04			05:41		18:56 (37)	04:38		
	15:54			16:58	23	15:52 (8)	18:07	36	16:20 (13)	20:19			21:28	20	19:16 (37)	22:32		
3	09:27			08:41		15:29 (8)	07:29		15:44 (13)	07:01		19:08 (37)	05:38		18:59 (37)	04:37		
	15:55			17:01	23	15:52 (8)	18:09	35	16:19 (13)	20:21	9	19:17 (37)	21:30	15	19:14 (37)	22:33		
4	09:26			08:39		15:29 (8)	07:27		15:45 (13)	06:58		19:03 (37)	05:36		19:04 (37)	04:36		
	15:57			17:03	24	15:53 (8)	18:11	33	16:18 (13)	20:23	18	19:21 (37)	21:32	5	19:09 (37)	22:35		
5	09:25			08:36		15:29 (8)	07:24		15:46 (13)	06:55		18:59 (37)	05:33			04:35		
	15:58			17:06	23	15:52 (8)	18:14	32	16:18 (13)	20:25	24	19:23 (37)	21:35			22:36		
6	09:25			08:34		15:28 (8)	07:21		15:48 (13)	06:52		18:57 (37)	05:31			04:33		
	16:00			17:08	24	15:52 (8)	18:16	28	16:16 (13)	20:28	28	19:25 (37)	21:37			22:37		
7	09:24			08:32		15:29 (8)	07:18		15:49 (13)	06:49		18:55 (37)	05:29			04:32		
	16:01			17:10	24	15:53 (8)	18:19	25	16:14 (13)	20:30	31	19:26 (37)	21:39			22:39		
8	09:23			08:29		15:29 (8)	07:15		15:51 (13)	06:46		18:53 (37)	05:26			04:32		
	16:03			17:13	23	15:52 (8)	18:21	21	16:12 (13)	20:32	35	19:42 (26)	21:42			22:40		
9	09:22			08:27		15:31 (8)	07:13		15:54 (13)	06:43		18:52 (37)	05:24			04:31		
	16:05			17:15	21	15:52 (8)	18:23	15	16:09 (13)	20:35	54	19:59 (26)	21:44			22:41		
10	09:21			08:25		15:31 (8)	07:10			06:41		18:51 (37)	05:21			04:30		
	16:07			17:18	20	15:51 (8)	18:26			20:37	57	19:59 (26)	21:46			22:42		
11	09:20			08:22		15:32 (8)	07:07			06:38		18:49 (37)	05:19			04:29		
	16:09			17:20	18	15:50 (8)	18:28			20:39	60	19:59 (26)	21:48			22:43		
12	09:19			08:20		15:34 (8)	07:04			06:35		18:48 (37)	05:17			04:29		
	16:11			17:23	15	15:49 (8)	18:30			20:42	62	19:58 (26)	21:50			22:44		
13	09:18			08:17		15:36 (8)	07:01			06:32		18:48 (37)	05:15			04:28		
	16:12			17:25	22	16:09 (13)	18:33			20:44	64	19:59 (26)	21:53			22:45		
14	09:17			08:15		15:54 (13)	06:58			06:29		18:47 (37)	05:12			04:28		
	16:14			17:28	18	16:12 (13)	18:35			20:46	63	19:58 (26)	21:55			22:46		
15	09:15			08:12		15:52 (13)	06:55			06:27		18:46 (37)	05:10			04:27		
	16:17			17:30	22	16:14 (13)	18:37			20:48	63	19:57 (26)	21:57			22:47		
16	09:14			08:10		15:51 (13)	06:53		17:30 (32)	06:24		18:47 (37)	05:08			04:27		
	16:19			17:33	26	16:17 (13)	18:40	8	17:38 (32)	20:51	62	19:57 (26)	21:59			22:47		
17	09:13			08:07		15:49 (13)	06:50		17:27 (32)	06:21		18:46 (37)	05:06			04:27		
	16:21			17:35	29	16:18 (13)	18:42	13	17:40 (32)	20:53	60	19:55 (26)	22:01			22:48		
18	09:11			08:04		15:47 (13)	06:47		17:25 (32)	06:18		18:45 (37)	05:04			04:26		
	16:23			17:38	32	16:19 (13)	18:44	17	17:42 (32)	20:55	58	19:53 (26)	22:04			22:49		
19	09:10			08:02		15:46 (13)	06:44		17:23 (32)	06:15		18:46 (37)	05:02			04:26		
	16:25			17:40	33	16:19 (13)	18:46	19	17:42 (32)	20:58	53	19:52 (26)	22:06			22:49		
20	09:08			07:59		15:46 (13)	06:41		17:22 (32)	06:13		18:45 (37)	05:00			04:26		
	16:27			17:43	35	16:21 (13)	18:49	21	17:43 (32)	21:00	44	19:29 (37)	22:08			22:49		
21	09:06			07:57		15:45 (13)	06:38		17:21 (32)	06:10		18:45 (37)	04:58			04:26		
	16:30			17:45	36	16:21 (13)	18:51	22	17:43 (32)	21:02	43	19:28 (37)	22:10			22:50		
22	09:05			07:54		15:44 (13)	06:35		17:21 (32)	06:07		18:46 (37)	04:56			04:27		
	16:32			17:47	37	16:21 (13)	18:53	22	17:43 (32)	21:05	43	19:29 (37)	22:12			22:50		
23	09:03			07:51		15:44 (13)	06:32		17:20 (32)	06:05		18:46 (37)	04:54			04:27		
	16:34			17:50	38	16:22 (13)	18:56	22	17:42 (32)	21:07	41	19:27 (37)	22:14			22:50		
24	09:01			07:49		15:43 (13)	06:29		17:20 (32)	06:02		18:47 (37)	04:52			04:27		
	16:36			17:52	39	16:22 (13)	18:58	22	17:42 (32)	21:09	40	19:27 (37)	22:16			22:50		
25	08:59			07:46		15:44 (13)	06:27		17:20 (32)	05:59		18:47 (37)	04:50			04:28		
	16:39			17:55	38	16:22 (13)	19:00	21	17:41 (32)	21:12	39	19:26 (37)	22:18			22:50		
26	08:57			07:43		15:43 (13)	06:24		17:20 (32)	05:57		18:48 (37)	04:49			04:28		
	16:41			17:57	39	16:22 (13)	19:03	20	17:40 (32)	21:14	37	19:25 (37)	22:20			22:50		
27	08:55		15:34 (8)	07:40		15:43 (13)	06:21		17:22 (32)	05:54		18:48 (37)	04:47			04:29		
	16:44	10	15:44 (8)	18:00	39	16:22 (13)	19:05	17	17:39 (32)	21:16	36	19:24 (37)	22:21			22:50		
28	08:54		15:33 (8)	07:38		15:43 (13)	06:18		17:24 (32)	05:51		18:50 (37)	04:45			04:29		
	16:46	13	15:46 (8)	18:02	38	16:21 (13)	19:07	13	17:37 (32)	21:19	33	19:23 (37)	22:23			22:49		
29	08:51		15:31 (8)				07:15		18:26 (32)	05:49		18:50 (37)	04:44			04:30		
	16:48	16	15:47 (8)				20:09	8	18:34 (32)	21:21	31	19:21 (37)	22:25			22:49		
30	08:49		15:31 (8)				07:12			05:46		18:52 (37)	04:42			04:31		
	16:51	18	15:49 (8)				20:12			21:23	28	19:20 (37)	22:27			22:49		
31	08:47		15:29 (8)				07:09						04:41					
	16:53	20	15:49 (8)				20:14						22:28					
Potential sun hours	221			260			365			432			521			547		
Total, worst case		77			781			508			1216			65				
Sun reduction		0,50			0,50			0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80			0,80			0,80				
Wind dir. red.		0,53			0,54			0,58			0,68			0,68				
Total reduction		0,21			0,22			0,23			0,27			0,27				
Total, real		16			169			118			331			18				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

Shadow receptor: U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August			September			October			November			December
1	04:32	05:24		19:10 (37)	06:33		18:48 (37)	07:39		16:33 (13)	07:51		15:00 (8)	08:59
	22:48	22:00		19:20 (37)	20:39	60	19:58 (26)	19:13		16:44 (13)	16:48	21	15:21 (8)	15:51
2	04:33	05:26		19:07 (37)	06:35		18:49 (37)	07:41		16:29 (13)	07:53		15:00 (8)	09:01
	22:47	21:58		19:24 (37)	20:36	57	19:57 (26)	19:10		16:47 (13)	16:46	22	15:22 (8)	15:50
3	04:34	05:28		19:04 (37)	06:37		18:49 (37)	07:43		16:26 (13)	07:56		14:59 (8)	09:03
	22:47	21:56		19:26 (37)	20:34	54	19:56 (26)	19:07		16:50 (13)	16:44	23	15:22 (8)	15:49
4	04:35	05:30		19:02 (37)	06:39		18:51 (37)	07:46		16:24 (13)	07:58		14:59 (8)	09:05
	22:46	21:53		19:28 (37)	20:31	35	19:40 (26)	19:04	11	16:44 (13)	16:41	23	15:22 (8)	15:48
5	04:36	05:33		19:00 (37)	06:42		18:52 (37)	07:48		16:29 (13)	08:01		14:59 (8)	09:07
	22:45	21:51		19:30 (37)	20:28	31	19:23 (37)	19:01	18	16:47 (13)	16:39	24	15:23 (8)	15:47
6	04:37	05:35		19:00 (37)	06:44		18:53 (37)	07:50		16:26 (13)	08:03		14:58 (8)	09:08
	22:44	21:49		19:32 (37)	20:25	28	19:21 (37)	18:58	24	16:50 (13)	16:36	24	15:22 (8)	15:46
7	04:38	05:37		19:02 (37)	06:46		18:54 (37)	07:52		16:24 (13)	08:05		14:59 (8)	09:10
	22:43	21:46		19:34 (37)	20:22	25	19:19 (37)	18:55	27	16:51 (13)	16:34	23	15:22 (8)	15:45
8	04:40	05:39		19:04 (37)	06:48		18:57 (37)	07:55		16:21 (13)	08:08		14:59 (8)	09:11
	22:42	21:44		19:36 (37)	20:19	18	19:15 (37)	18:53	30	16:51 (13)	16:32	23	15:22 (8)	15:44
9	04:41	05:41		19:07 (37)	06:50		19:00 (37)	07:57		16:21 (13)	08:10		14:59 (8)	09:13
	22:41	21:41	10	19:20 (37)	20:16	11	19:11 (37)	18:50	32	16:53 (13)	16:30	23	15:22 (8)	15:44
10	04:42	05:44		19:07 (37)	06:53			07:59		16:19 (13)	08:13		15:00 (8)	09:14
	22:40	21:39	17	19:24 (37)	20:13			18:47	34	16:53 (13)	16:27	21	15:21 (8)	15:43
11	04:44	05:46		19:04 (37)	06:55			08:02		16:18 (13)	08:15		15:01 (8)	09:16
	22:39	21:36	22	19:26 (37)	20:11			18:44	36	16:54 (13)	16:25	20	15:21 (8)	15:43
12	04:45	05:48		19:02 (37)	06:57			08:04		16:17 (13)	08:17		15:02 (8)	09:17
	22:37	21:34	26	19:28 (37)	20:08			18:41	37	16:54 (13)	16:23	19	15:21 (8)	15:42
13	04:47	05:50		19:00 (37)	06:59			08:06		16:16 (13)	08:20		15:03 (8)	09:18
	22:36	21:31	29	19:29 (37)	20:05			18:39	38	16:54 (13)	16:21	16	15:19 (8)	15:42
14	04:49	05:53		18:58 (37)	07:01		18:17 (32)	08:08		16:16 (13)	08:22		15:05 (8)	09:20
	22:35	21:28	32	19:30 (37)	20:02	7	18:24 (32)	18:36	38	16:54 (13)	16:19	13	15:18 (8)	15:42
15	04:50	05:55		18:57 (37)	07:04		18:13 (32)	08:11		16:15 (13)	08:24		15:07 (8)	09:21
	22:33	21:26	34	19:31 (37)	19:59	13	18:26 (32)	18:33	39	16:54 (13)	16:17	10	15:17 (8)	15:42
16	04:52	05:57		18:56 (37)	07:06		18:11 (32)	08:13		16:15 (13)	08:27			09:22
	22:32	21:23	36	19:32 (37)	19:56	16	18:27 (32)	18:30	39	16:54 (13)	16:15			15:42
17	04:54	05:59		18:54 (37)	07:08		18:09 (32)	08:15		16:15 (13)	08:29			09:23
	22:30	21:21	38	19:32 (37)	19:53	19	18:28 (32)	18:28	38	16:53 (13)	16:13			15:42
18	04:56	06:01		18:53 (37)	07:10		18:08 (32)	08:18		16:15 (13)	08:31			09:24
	22:28	21:18	40	19:33 (37)	19:50	20	18:28 (32)	18:25	39	16:54 (13)	16:11			15:42
19	04:57	06:04		18:52 (37)	07:12		18:08 (32)	08:20		16:15 (13)	08:34			09:24
	22:27	21:15	41	19:33 (37)	19:47	21	18:29 (32)	18:22	38	16:53 (13)	16:09			15:42
20	04:59	06:06		18:51 (37)	07:15		18:07 (32)	08:22		16:16 (13)	08:36			09:25
	22:25	21:13	42	19:33 (37)	19:44	22	18:29 (32)	18:19	36	16:52 (13)	16:07			15:42
21	05:01	06:08		18:50 (37)	07:17		18:06 (32)	08:25		16:16 (13)	08:38			09:26
	22:23	21:10	43	19:33 (37)	19:42	22	18:28 (32)	18:17	35	16:51 (13)	16:06			15:43
22	05:03	06:10		18:50 (37)	07:19		18:06 (32)	08:27		16:17 (13)	08:40			09:26
	22:21	21:07	43	19:33 (37)	19:39	22	18:28 (32)	18:14	34	16:51 (13)	16:04			15:43
23	05:05	06:13		18:49 (37)	07:21		18:06 (32)	08:29		16:17 (13)	08:43			09:27
	22:19	21:04	44	19:33 (37)	19:36	21	18:27 (32)	18:11	32	16:49 (13)	16:02			15:44
24	05:07	06:15		18:49 (37)	07:23		18:07 (32)	08:32		16:18 (13)	08:45			09:27
	22:17	21:02	54	19:55 (26)	19:33	19	18:26 (32)	18:09	31	16:49 (13)	16:01			15:44
25	05:09	06:17		18:49 (37)	07:26		18:07 (32)	07:34		15:18 (13)	08:47			09:28
	22:15	20:59	58	19:57 (26)	19:30	18	18:25 (32)	17:06	29	15:47 (13)	15:59			15:45
26	05:11	06:19		18:49 (37)	07:28		18:08 (32)	07:37		15:20 (13)	08:49			09:28
	22:13	20:56	60	19:58 (26)	19:27	15	18:23 (32)	17:04	25	15:45 (13)	15:57			15:46
27	05:13	06:22		18:48 (37)	07:30		18:09 (32)	07:39		15:22 (13)	08:51			09:28
	22:11	20:53	63	19:59 (26)	19:24	11	18:20 (32)	17:01	22	15:44 (13)	15:56			15:47
28	05:15	06:24		18:48 (37)	07:32			07:41		15:08 (8)	08:53			09:28
	22:09	20:51	63	19:59 (26)	19:21			16:58	22	15:41 (13)	15:55			15:48
29	05:17	06:26		18:48 (37)	07:34			07:44		15:05 (8)	08:55			09:28
	22:07	20:48	63	19:59 (26)	19:18			16:56	21	15:37 (13)	15:53			15:49
30	05:20	06:28		18:48 (37)	07:37			07:46		15:03 (8)	08:57			09:28
	22:05	20:45	63	19:59 (26)	19:16			16:53	16	15:19 (8)	15:52			15:50
31	05:22	06:30		18:48 (37)				07:49		15:01 (8)				09:28
	22:03	20:42	62	19:58 (26)				16:51	18	15:19 (8)				15:51
Potential sun hours	545	478			386			319			236			200
Total, worst case			983			565			839			305		
Sun reduction			0,50			0,50			0,50			0,50		
Oper. time red.			0,80			0,80			0,80			0,80		
Wind dir. red.			0,68			0,65			0,55			0,53		
Total reduction			0,27			0,26			0,22			0,21		
Total, real			268			147			184			64		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (23)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (23)
	15:53	39	13:36 (24)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (24)
2	09:28		12:01 (23)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (23)
	15:54	41	13:36 (24)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (24)
3	09:27		12:01 (23)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (23)
	15:55	41	13:36 (24)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (24)
4	09:27		12:01 (23)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (23)
	15:57	41	13:36 (24)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (24)
5	09:26		12:01 (23)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (23)
	15:58	43	13:37 (24)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (24)
6	09:25		12:02 (23)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (23)
	16:00	41	13:37 (24)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (24)
7	09:25		12:02 (23)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (23)
	16:02	41	13:37 (24)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (24)
8	09:24		12:02 (23)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (23)
	16:03	42	13:38 (24)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (24)
9	09:23		12:03 (23)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (23)
	16:05	41	13:38 (24)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (24)
10	09:22		12:03 (23)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (23)
	16:07	40	13:37 (24)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (24)
11	09:21		12:03 (23)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (23)
	16:09	41	13:38 (24)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (24)
12	09:20		12:03 (23)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (23)
	16:11	39	13:37 (24)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (24)
13	09:19		12:04 (23)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (23)
	16:13	37	13:37 (24)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (24)
14	09:17		12:04 (23)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (23)
	16:15	35	13:36 (24)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (24)
15	09:16		12:04 (23)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (23)	09:21		11:54 (23)
	16:17	32	13:35 (24)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (23)	15:42	38	13:27 (24)
16	09:15		12:04 (23)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (23)	09:22		11:55 (23)
	16:19	24	12:28 (23)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (23)	15:42	37	13:28 (24)
17	09:13		12:06 (23)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (23)	09:23		11:55 (23)
	16:21	24	12:30 (23)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (23)	15:42	37	13:28 (24)
18	09:12		12:06 (23)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (23)	09:24		11:56 (23)
	16:23	24	12:30 (23)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (23)	15:42	36	13:29 (24)
19	09:10		12:06 (23)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (23)	09:25		11:57 (23)
	16:25	24	12:30 (23)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (23)	15:42	36	13:29 (24)
20	09:09		12:07 (23)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (23)	09:26		11:58 (23)
	16:28	23	12:30 (23)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (23)	15:43	36	13:30 (24)
21	09:07		12:08 (23)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (23)	09:26		11:59 (23)
	16:30	21	12:29 (23)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (23)	15:43	35	13:31 (24)
22	09:05		12:09 (23)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (23)	09:27		11:58 (23)
	16:32	20	12:29 (23)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (23)	15:43	36	13:31 (24)
23	09:03		12:09 (23)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (23)	09:27		11:59 (23)
	16:34	19	12:28 (23)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (23)	15:44	36	13:31 (24)
24	09:02		12:10 (23)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (23)	09:28		12:00 (23)
	16:37	17	12:27 (23)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (23)	15:44	36	13:32 (24)
25	09:00		12:12 (23)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (23)	09:28		12:00 (23)
	16:39	15	12:27 (23)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (23)	15:45	37	13:33 (24)
26	08:58		12:14 (23)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (23)	09:28		12:00 (23)
	16:41	11	12:25 (23)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (23)	15:46	37	13:33 (24)
27	08:56		12:17 (23)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (23)	09:28		12:00 (23)
	16:44	4	12:21 (23)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (24)	15:47	38	13:33 (24)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (23)	09:29		12:01 (23)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (24)	15:48	37	13:34 (24)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (23)	09:28		12:00 (23)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (24)	15:49	38	13:34 (24)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (23)	09:28		12:01 (23)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (24)	15:50	39	13:35 (24)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (23)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (24)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,62												0,63			0,61	
Total reduction		0,25												0,25			0,24	
Total, real		203												93			290	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	11:14 (23)	08:46	10:11 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (23)
	15:53 31	12:43 (24)	16:56 18	10:29 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (23)
2	09:28	11:14 (23)	08:44	10:11 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (23)
	15:54 30	12:43 (24)	16:58 17	10:28 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (23)
3	09:27	11:13 (23)	08:41	10:13 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (23)
	15:55 31	12:43 (24)	17:01 14	10:27 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (23)
4	09:27	11:13 (23)	08:39	10:14 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (23)
	15:57 30	12:43 (24)	17:03 11	10:25 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (23)
5	09:26	11:14 (23)	08:37	10:17 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (23)
	15:58 28	12:42 (24)	17:06 7	10:24 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (24)
6	09:25	11:14 (23)	08:35		07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:47 (28)	09:09		11:00 (23)
	16:00 28	12:42 (24)	17:08		18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 7	09:54 (28)	15:46	28	12:28 (24)
7	09:25	11:14 (23)	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:45 (28)	09:10		11:01 (23)
	16:02 26	12:41 (24)	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34 11	09:56 (28)	15:45	29	12:30 (24)
8	09:24	11:14 (23)	08:30		07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:43 (28)	09:12		11:02 (23)
	16:03 21	11:35 (23)	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 14	09:57 (28)	15:45	30	12:31 (24)
9	09:23	11:15 (23)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:42 (28)	09:14		11:03 (23)
	16:05 21	11:36 (23)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 17	09:59 (28)	15:44	30	12:32 (24)
10	09:22	11:15 (23)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:42 (28)	09:15		11:03 (23)
	16:07 21	11:36 (23)	17:18		18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28 18	10:00 (28)	15:44	30	12:32 (24)
11	09:21	11:15 (23)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:41 (28)	09:16		11:04 (23)
	16:09 22	11:37 (23)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26 19	10:00 (28)	15:43	30	12:33 (24)
12	09:20	11:15 (23)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:41 (28)	09:18		11:04 (23)
	16:11 22	11:37 (23)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 19	10:00 (28)	15:43	31	12:34 (24)
13	09:19	11:16 (23)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:41 (28)	09:19		11:05 (23)
	16:13 22	11:38 (23)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 20	10:01 (28)	15:42	31	12:35 (24)
14	09:17	11:16 (23)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:42 (28)	09:20		11:06 (23)
	16:15 22	11:38 (23)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 19	10:01 (28)	15:42	30	12:35 (24)
15	09:16	11:16 (23)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:41 (28)	09:21		11:06 (23)
	16:17 22	11:38 (23)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 20	10:01 (28)	15:42	31	12:36 (24)
16	09:15	11:16 (23)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:42 (28)	09:22		11:08 (23)
	16:19 22	11:38 (23)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15 19	10:01 (28)	15:42	30	12:37 (24)
17	09:13	11:18 (23)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:43 (28)	09:23		11:09 (23)
	16:21 21	11:39 (23)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 26	11:08 (23)	15:42	30	12:38 (24)
18	09:12	11:18 (23)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:43 (28)	09:24		11:08 (23)
	16:23 21	11:39 (23)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 29	11:10 (23)	15:42	30	12:37 (24)
19	09:10	10:13 (28)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:44 (28)	09:25		11:09 (23)
	16:25 27	11:39 (23)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09 31	11:12 (23)	15:42	29	12:38 (24)
20	09:09	10:12 (28)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	09:45 (28)	09:26		11:10 (23)
	16:28 30	11:39 (23)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08 32	11:13 (23)	15:43	30	12:39 (24)
21	09:07	10:11 (28)	07:57		06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39	09:46 (28)	09:26		11:11 (23)
	16:30 32	11:39 (23)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 32	11:14 (23)	15:43	29	12:40 (24)
22	09:05	10:10 (28)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	09:48 (28)	09:27		11:11 (23)
	16:32 32	11:38 (23)	17:48		18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04 29	11:15 (23)	15:43	29	12:40 (24)
23	09:03	10:09 (28)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	09:49 (28)	09:27		11:11 (23)
	16:34 31	11:37 (23)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 27	11:15 (23)	15:44	30	12:40 (24)
24	09:02	10:09 (28)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:55 (23)	09:28		11:12 (23)
	16:37 29	11:36 (23)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 21	11:16 (23)	15:45	30	12:41 (24)
25	09:00	10:09 (28)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:55 (23)	09:28		11:12 (23)
	16:39 26	11:34 (23)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59 21	11:16 (23)	15:45	29	12:41 (24)
26	08:58	10:09 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:55 (23)	09:28		11:13 (23)
	16:41 19	10:28 (28)	17:57		19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58 22	11:17 (23)	15:46	30	12:42 (24)
27	08:56	10:09 (28)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:55 (23)	09:28		11:13 (23)
	16:44 20	10:29 (28)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 22	11:17 (23)	15:47	30	12:42 (24)
28	08:54	10:09 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:56 (23)	09:29		11:13 (23)
	16:46 19	10:28 (28)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 22	11:18 (23)	15:48	31	12:43 (24)
29	08:52	10:09 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:56 (23)	09:29		11:13 (23)
	16:49 20	10:29 (28)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54 22	11:18 (23)	15:49	30	12:42 (24)
30	08:50	10:09 (28)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:56 (23)	09:28		11:13 (23)
	16:51 19	10:28 (28)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 22	11:18 (23)	15:50	31	12:43 (24)
31	08:48	10:10 (28)			07:10		04:41		05:22	06:31		07:49			09:28		11:14 (23)
	16:54 19	10:29 (28)			20:14		22:29		22:03	20:43		16:51			15:51	30	12:43 (24)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	764		67										541		888		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,68		0,72										0,70		0,65		
Total reduction	0,27		0,29										0,28		0,26		
Total, real	208		19										151		231		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:55 (12)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51			09:00		12:38 (12)
	15:52	16	13:11 (12)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48			15:51	20	12:58 (12)
2	09:27		12:55 (12)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54			09:01		12:39 (12)
	15:54	16	13:11 (12)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46			15:50	20	12:59 (12)
3	09:27		12:55 (12)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56			09:03		12:40 (12)
	15:55	17	13:12 (12)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44			15:49	20	13:00 (12)
4	09:26		12:55 (12)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58			09:05		12:40 (12)
	15:57	17	13:12 (12)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41			15:48	20	13:00 (12)
5	09:26		12:55 (12)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01			09:07		12:41 (12)
	15:58	18	13:13 (12)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39			15:47	19	13:00 (12)
6	09:25		12:55 (12)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03			09:09		12:41 (12)
	16:00	19	13:14 (12)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36			15:46	19	13:00 (12)
7	09:24		12:55 (12)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06			09:10		12:42 (12)
	16:01	20	13:15 (12)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34			15:45	18	13:00 (12)
8	09:24		12:56 (12)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08			09:12		12:43 (12)
	16:03	19	13:15 (12)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32			15:44	18	13:01 (12)
9	09:23		12:55 (12)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10			09:13		12:43 (12)
	16:05	20	13:15 (12)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	17	13:00 (12)
10	09:22		12:56 (12)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13			09:15		12:44 (12)
	16:07	20	13:16 (12)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27			15:43	17	13:01 (12)
11	09:21		12:57 (12)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		12:45 (12)
	16:09	20	13:17 (12)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25			15:43	16	13:01 (12)
12	09:19		12:57 (12)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18			09:17		12:45 (12)
	16:11	20	13:17 (12)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:42	16	13:01 (12)
13	09:18		12:57 (12)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20			09:19		12:46 (12)
	16:12	20	13:17 (12)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21			15:42	16	13:02 (12)
14	09:17		12:58 (12)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22			09:20		12:47 (12)
	16:14	20	13:18 (12)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19			15:42	14	13:01 (12)
15	09:16		12:58 (12)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25			09:21		12:47 (12)
	16:17	20	13:18 (12)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17			15:42	14	13:01 (12)
16	09:14		12:58 (12)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27			09:22		12:48 (12)
	16:19	20	13:18 (12)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15			15:42	13	13:01 (12)
17	09:13		12:59 (12)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29			09:23		12:48 (12)
	16:21	19	13:18 (12)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13			15:42	14	13:02 (12)
18	09:11		12:59 (12)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32			09:24		12:49 (12)
	16:23	19	13:18 (12)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11			15:42	13	13:02 (12)
19	09:10		13:01 (12)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34		12:41 (12)	09:25		12:50 (12)
	16:25	18	13:19 (12)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09	9	12:50 (12)	15:42	13	13:03 (12)
20	09:08		13:02 (12)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36		12:39 (12)	09:25		12:51 (12)
	16:27	16	13:18 (12)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07	12	12:51 (12)	15:42	12	13:03 (12)
21	09:07		13:02 (12)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38		12:38 (12)	09:26		12:51 (12)
	16:30	15	13:17 (12)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15	12:53 (12)	15:43	12	13:03 (12)
22	09:05		13:04 (12)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41		12:38 (12)	09:27		12:52 (12)
	16:32	12	13:16 (12)	17:48	18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04	16	12:54 (12)	15:43	12	13:04 (12)
23	09:03		13:06 (12)	07:51	06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43		12:37 (12)	09:27		12:52 (12)
	16:34	9	13:15 (12)	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02	18	12:55 (12)	15:44	12	13:04 (12)
24	09:01			07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		12:38 (12)	09:28		12:52 (12)
	16:37			17:52	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	18	12:56 (12)	15:44	12	13:04 (12)
25	09:00			07:46	06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47		12:37 (12)	09:28		12:53 (12)
	16:39			17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59	19	12:56 (12)	15:45	13	13:06 (12)
26	08:58			07:43	06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49		12:37 (12)	09:28		12:53 (12)
	16:41			17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57	20	12:57 (12)	15:46	13	13:06 (12)
27	08:56			07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		12:37 (12)	09:28		12:54 (12)
	16:44			18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56	20	12:57 (12)	15:47	13	13:07 (12)
28	08:54			07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54		12:37 (12)	09:28		12:53 (12)
	16:46			18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55	20	12:57 (12)	15:48	14	13:07 (12)
29	08:52				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56		12:38 (12)	09:28		12:53 (12)
	16:48				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53	20	12:58 (12)	15:49	15	13:08 (12)
30	08:50				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58		12:38 (12)	09:28		12:54 (12)
	16:51				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52	20	12:58 (12)	15:50	15	13:09 (12)
31	08:48				07:09		04:41		05:22	06:31		07:49				09:28		12:54 (12)
	16:53				20:14		22:29		22:03	20:42		16:51				15:51	15	13:09 (12)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		410												207			475	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,61												0,61			0,61	
Total reduction		0,24												0,24			0,24	
Total, real		99												50			115	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:45	13:54 (26)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39		07:51	14:48 (12)	08:59
	15:52		16:56 19	14:13 (26)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13		16:48 19	15:07 (12)	15:51
2	09:27		08:43	13:56 (26)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:53	14:49 (12)	09:01
	15:54		16:58 16	14:12 (26)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 17	15:06 (12)	15:50
3	09:27		08:41	13:58 (26)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44		07:56	14:49 (12)	09:03
	15:55		17:01 12	14:10 (26)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07		16:44 15	15:04 (12)	15:49
4	09:26		08:39	14:02 (26)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46		07:58	14:52 (12)	09:05
	15:57		17:03 5	14:07 (26)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 10	15:02 (12)	15:48
5	09:26		08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48		08:01	14:56 (12)	09:07
	15:58		17:06		18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01		16:39 2	14:58 (12)	15:47
6	09:25		08:34	15:25 (12)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50		08:03		09:08
	16:00		17:08 4	15:29 (12)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58		16:36		15:46
7	09:24		08:32	15:22 (12)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53		08:06	13:31 (26)	09:10
	16:01		17:11 11	15:33 (12)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56		16:34 7	13:38 (26)	15:45
8	09:23		08:30	15:20 (12)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55		08:08	13:28 (26)	09:12
	16:03		17:13 15	15:35 (12)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53		16:32 13	13:41 (26)	15:44
9	09:23		08:27	15:19 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57		08:10	13:27 (26)	09:13
	16:05		17:15 18	15:37 (12)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50		16:30 16	13:43 (26)	15:44
10	09:22		08:25	15:18 (12)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59		08:13	13:25 (26)	09:15
	16:07		17:18 19	15:37 (12)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:27 19	13:44 (26)	15:43
11	09:20		08:22	15:17 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	13:24 (26)	09:16
	16:09		17:20 21	15:38 (12)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44		16:25 21	13:45 (26)	15:43
12	09:19		08:20	15:17 (12)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04		08:17	13:24 (26)	09:17
	16:10		17:23 22	15:39 (12)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41		16:23 22	13:46 (26)	15:42
13	09:18	13:53 (26)	08:17	15:17 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	13:23 (26)	09:19
	16:12 5	13:58 (26)	17:25 22	15:39 (12)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39		16:21 23	13:46 (26)	15:42
14	09:17	13:51 (26)	08:15	15:16 (12)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09		08:22	13:23 (26)	09:20
	16:14 9	14:00 (26)	17:28 23	15:39 (12)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 24	13:47 (26)	15:42
15	09:16	13:50 (26)	08:12	15:17 (12)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:07 (37)	09:21
	16:17 11	14:01 (26)	17:30 22	15:39 (12)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33		16:17 33	13:48 (26)	15:42
16	09:14	13:50 (26)	08:10	15:17 (12)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:06 (37)	09:22
	16:19 17	14:07 (26)	17:33 22	15:39 (12)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30		16:15 36	13:48 (26)	15:42
17	09:13	13:49 (26)	08:07	15:17 (12)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	11:04 (37)	09:23
	16:21 21	14:10 (26)	17:35 21	15:38 (12)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 40	13:48 (26)	15:42
18	09:11	11:38 (37)	08:05	15:18 (12)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18		08:32	11:03 (37)	09:24
	16:23 27	14:11 (26)	17:38 19	15:37 (12)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25		16:11 42	13:49 (26)	15:42
19	09:10	11:35 (37)	08:02	15:20 (12)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20		08:34	11:03 (37)	09:25
	16:25 32	14:12 (26)	17:40 17	15:37 (12)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22		16:09 44	13:49 (26)	15:42
20	09:08	11:32 (37)	07:59	15:21 (12)	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	11:02 (37)	09:25
	16:27 36	14:12 (26)	17:43 14	15:35 (12)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19		16:07 45	13:49 (26)	15:42
21	09:07	11:29 (37)	07:57	15:24 (12)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	15:53 (12)	08:38	11:05 (37)	09:26
	16:30 42	14:13 (26)	17:45 8	15:32 (12)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17 10	16:03 (12)	16:06 42	13:49 (26)	15:43
22	09:05	11:27 (37)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	15:51 (12)	08:41	11:08 (37)	09:27
	16:32 45	14:14 (26)	17:47		18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14 15	16:06 (12)	16:04 36	13:48 (26)	15:43
23	09:03	11:28 (37)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	15:49 (12)	08:43	11:12 (37)	09:27
	16:34 44	14:14 (26)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11 17	16:06 (12)	16:02 32	13:49 (26)	15:44
24	09:01	11:29 (37)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:23	08:32	15:48 (12)	08:45	11:16 (37)	09:27
	16:36 42	14:15 (26)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09 19	16:07 (12)	16:01 28	13:49 (26)	15:44
25	08:59	11:31 (37)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	14:48 (12)	08:47	13:27 (26)	09:28
	16:39 40	14:15 (26)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06 20	15:08 (12)	15:59 21	13:48 (26)	15:45
26	08:58	11:32 (37)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	14:46 (12)	08:49	13:29 (26)	09:28
	16:41 37	14:15 (26)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 22	15:08 (12)	15:57 17	13:46 (26)	15:46
27	08:56	11:34 (37)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	14:46 (12)	08:51	13:29 (26)	09:28
	16:44 33	14:15 (26)	18:00		19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01 23	15:09 (12)	15:56 12	13:41 (26)	15:47
28	08:54	13:51 (26)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41	14:46 (12)	08:53	13:30 (26)	09:28
	16:46 24	14:15 (26)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58 22	15:08 (12)	15:55 9	13:39 (26)	15:47
29	08:52	13:51 (26)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	14:46 (12)	08:55	13:35 (26)	09:28
	16:48 23	14:14 (26)			20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56 22	15:08 (12)	15:53 5	13:40 (26)	15:49
30	08:50	13:52 (26)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	14:47 (12)	08:57		09:28
	16:51 22	14:14 (26)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53 21	15:08 (12)	15:52		15:50
31	08:48	13:54 (26)			07:09		04:41		05:22	06:31		07:49	14:47 (12)			09:28
	16:53 20	14:14 (26)			20:14		22:29		22:03	20:42		16:51 20	15:07 (12)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		530		330									211		650	
Sun reduction		0,50		0,50									0,50		0,50	
Oper. time red.		0,80		0,80									0,80		0,80	
Wind dir. red.		0,58		0,55									0,54		0,57	
Total reduction		0,23		0,22									0,22		0,23	
Total, real		122		72									46		148	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April		May	June
1	09:28		12:11 (32) | 08:45		10:15 (13) | 07:35		13:26 (26) | 07:07		18:42 (17) | 05:44	| 04:39
	15:52	47	14:26 (14) | 16:56	119	15:37 (35) | 18:04	35	17:05 (9) | 20:16	19	19:01 (17) | 21:26	| 22:30
2	09:27		12:11 (32) | 08:43		12:16 (32) | 07:32		15:45 (7) | 07:04		18:43 (17) | 05:41	| 04:38
	15:54	53	14:28 (14) | 16:58	114	15:38 (35) | 18:07	27	17:09 (9) | 20:19	16	18:59 (17) | 21:28	| 22:32
3	09:27		12:10 (32) | 08:41		12:17 (32) | 07:30		16:34 (12) | 07:01		18:46 (17) | 05:38	| 04:37
	15:55	58	14:29 (14) | 17:01	113	15:38 (35) | 18:09	33	17:12 (9) | 20:21	11	18:57 (17) | 21:30	| 22:33
4	09:26		12:10 (32) | 08:39		09:39 (37) | 07:27		16:31 (12) | 06:58			| 05:36	| 04:36
	15:57	61	14:29 (14) | 17:03	109	15:39 (35) | 18:12	43	17:15 (9) | 20:23			| 21:33	| 22:35
5	09:26		12:10 (32) | 08:36		09:39 (37) | 07:24		16:29 (12) | 06:55			| 05:34	| 04:35
	15:58	64	14:30 (14) | 17:06	105	15:39 (35) | 18:14	46	17:15 (9) | 20:26			| 21:35	| 22:36
6	09:25		12:09 (32) | 08:34		09:40 (37) | 07:21		16:26 (12) | 06:52			| 05:31	| 04:34
	16:00	70	14:31 (14) | 17:08	95	15:39 (35) | 18:16	49	17:15 (9) | 20:28			| 21:37	| 22:38
7	09:24		10:10 (13) | 08:32		09:40 (37) | 07:18		16:25 (12) | 06:49			| 05:29	| 04:33
	16:01	78	14:32 (14) | 17:11	96	15:39 (35) | 18:19	50	17:15 (9) | 20:30			| 21:39	| 22:39
8	09:23		10:10 (13) | 08:30		09:38 (37) | 07:15		16:23 (12) | 06:46			| 05:26	| 04:32
	16:03	84	14:33 (14) | 17:13	96	15:38 (35) | 18:21	52	17:15 (9) | 20:32			| 21:42	| 22:40
9	09:22		10:10 (13) | 08:27		09:36 (37) | 07:13		16:22 (12) | 06:44			| 05:24	| 04:31
	16:05	86	14:33 (14) | 17:16	98	15:38 (35) | 18:23	53	17:15 (9) | 20:35			| 21:44	| 22:41
10	09:21		10:11 (13) | 08:25		09:33 (37) | 07:10		16:20 (12) | 06:41			| 05:21	| 04:30
	16:07	91	14:34 (14) | 17:18	107	15:57 (7) | 18:26	54	17:14 (9) | 20:37			| 21:46	| 22:42
11	09:20		10:10 (13) | 08:22		09:29 (37) | 07:07		16:19 (12) | 06:38			| 05:19	| 04:29
	16:09	97	14:34 (14) | 17:20	114	16:00 (7) | 18:28	54	17:13 (9) | 20:39			| 21:48	| 22:44
12	09:19		10:09 (13) | 08:20		09:27 (37) | 07:04		16:18 (12) | 06:35			| 05:17	| 04:29
	16:11	102	14:35 (14) | 17:23	118	16:03 (7) | 18:30	54	17:12 (9) | 20:42			| 21:51	| 22:44
13	09:18		10:09 (13) | 08:17		09:24 (37) | 07:01		16:18 (12) | 06:32			| 05:15	| 04:28
	16:13	105	14:35 (14) | 17:25	118	16:04 (7) | 18:33	52	17:10 (9) | 20:44			| 21:53	| 22:45
14	09:17		10:10 (13) | 08:15		09:21 (37) | 06:58		16:17 (12) | 06:29			| 05:12	| 04:28
	16:15	107	14:36 (14) | 17:28	114	16:05 (7) | 18:35	51	17:08 (9) | 20:46			| 21:55	| 22:46
15	09:16		10:10 (13) | 08:12		09:18 (37) | 06:56		16:17 (12) | 06:27			| 05:10	| 04:27
	16:17	112	14:37 (14) | 17:30	120	16:07 (7) | 18:37	47	17:04 (9) | 20:49			| 21:57	| 22:47
16	09:14		10:02 (13) | 08:10		09:13 (37) | 06:53		16:17 (12) | 06:24			| 05:08	| 04:27
	16:19	119	14:37 (14) | 17:33	125	16:08 (7) | 18:40	46	17:03 (12) | 20:51			| 21:59	| 22:48
17	09:13		10:02 (13) | 08:07		09:13 (37) | 06:50		16:17 (12) | 06:21			| 05:06	| 04:27
	16:21	126	14:37 (14) | 17:35	123	16:08 (7) | 18:42	46	17:03 (12) | 20:53			| 22:02	| 22:48
18	09:11		10:02 (13) | 08:05		09:13 (37) | 06:47		16:16 (12) | 06:18			| 05:04	| 04:27
	16:23	127	14:37 (14) | 17:38	121	16:08 (7) | 18:44	46	17:02 (12) | 20:56			| 22:04	| 22:49
19	09:10		10:02 (13) | 08:02		09:15 (37) | 06:44		16:16 (12) | 06:16			| 05:02	| 04:26
	16:25	129	14:37 (14) | 17:40	118	16:09 (7) | 18:47	56	18:01 (17) | 20:58			| 22:06	| 22:49
20	09:08		10:02 (13) | 07:59		09:16 (37) | 06:41		16:16 (12) | 06:13			| 05:00	| 04:26
	16:27	130	14:37 (14) | 17:43	114	16:09 (7) | 18:49	60	18:03 (17) | 21:00			| 22:08	| 22:50
21	09:07		10:03 (13) | 07:57		09:17 (37) | 06:38		16:16 (12) | 06:10			| 04:58	| 04:27
	16:30	131	14:37 (14) | 17:45	110	16:09 (7) | 18:51	64	18:05 (17) | 21:02			| 22:10	| 22:50
22	09:05		10:03 (13) | 07:54		09:18 (37) | 06:35		16:17 (12) | 06:07			| 04:56	| 04:27
	16:32	129	14:36 (14) | 17:48	104	16:08 (7) | 18:54	63	18:05 (17) | 21:05			| 22:12	| 22:50
23	09:03		10:04 (13) | 07:51		09:20 (37) | 06:32		16:17 (12) | 06:05			| 04:54	| 04:27
	16:34	131	14:36 (14) | 17:50	95	16:08 (7) | 18:56	64	18:06 (17) | 21:07			| 22:14	| 22:50
24	09:01		10:04 (13) | 07:49		13:09 (26) | 06:30		16:18 (12) | 06:02			| 04:52	| 04:27
	16:37	128	14:35 (14) | 17:52	77	16:08 (7) | 18:58	64	18:06 (17) | 21:09			| 22:16	| 22:50
25	08:59		10:05 (13) | 07:46		13:11 (26) | 06:27		16:18 (12) | 05:59			| 04:50	| 04:28
	16:39	125	14:34 (14) | 17:55	71	16:07 (7) | 19:00	62	18:06 (17) | 21:12			| 22:18	| 22:50
26	08:58		10:05 (13) | 07:43		13:13 (26) | 06:24		16:20 (12) | 05:57			| 04:49	| 04:28
	16:41	124	15:28 (35) | 17:57	66	16:06 (7) | 19:03	61	18:07 (17) | 21:14			| 22:20	| 22:50
27	08:56		10:06 (13) | 07:41		13:16 (26) | 06:21		16:22 (12) | 05:54			| 04:47	| 04:29
	16:44	127	15:30 (35) | 18:00	58	16:05 (7) | 19:05	57	18:07 (17) | 21:16			| 22:22	| 22:50
28	08:54		10:07 (13) | 07:38		13:19 (26) | 06:18		16:23 (12) | 05:51			| 04:45	| 04:29
	16:46	130	15:33 (35) | 18:02	49	16:04 (7) | 19:07	54	18:06 (17) | 21:19			| 22:23	| 22:50
29	08:52		10:08 (13) |		| 07:15		17:26 (12) | 05:49			| 04:44	| 04:30
	16:48	131	15:35 (35) |		| 20:10	47	19:05 (17) | 21:21			| 22:25	| 22:49
30	08:50		10:09 (13) |		| 07:12		17:29 (12) | 05:46			| 04:42	| 04:31
	16:51	129	15:36 (35) |		| 20:12	38	19:04 (17) | 21:23			| 22:27	| 22:49
31	08:47		10:12 (13) |		| 07:09		18:41 (17) |			| 04:41	|
	16:53	126	15:37 (35) |		| 20:14	22	19:03 (17) |			| 22:29	|
Potential sun hours	221		| 260		| 365		| 432		| 521	| 547
Total, worst case	| 3257		| 2867		| 1550		| 46		|	|
Sun reduction	| 0,50		| 0,50		| 0,50		| 0,50		|	|
Oper. time red.	| 0,80		| 0,80		| 0,80		| 0,80		|	|
Wind dir. red.	| 0,60		| 0,59		| 0,58		| 0,62		|	|
Total reduction	| 0,24		| 0,24		| 0,23		| 0,25		|	|
Total, real	| 786		| 675		| 361		| 11		|	|

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

Shadow receptor: Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December	
1	04:32	05:24	06:33		07:39		16:57 (12)	07:51	09:03 (37)	08:59	09:52 (13)
	22:48	22:01	20:39		19:13	53	17:50 (9)	16:49 107	15:26 (7)	15:51 96	14:16 (14)
2	04:33	05:26	06:35		07:41		16:58 (12)	07:53	09:06 (37)	09:01	09:53 (13)
	22:48	21:58	20:37		19:10	54	17:52 (9)	16:46 98	15:08 (35)	15:50 91	14:16 (14)
3	04:34	05:28	06:37		07:44		16:58 (12)	07:56	09:08 (37)	09:03	09:54 (13)
	22:47	21:56	20:34		19:07	54	17:52 (9)	16:44 96	15:08 (35)	15:49 88	14:17 (14)
4	04:35	05:30	06:39		07:46		16:58 (12)	07:58	09:10 (37)	09:05	09:54 (13)
	22:46	21:54	20:31		19:04	54	17:52 (9)	16:41 94	15:08 (35)	15:48 83	14:17 (14)
5	04:36	05:33	06:42		07:48		17:00 (12)	08:01	09:10 (37)	09:07	09:55 (13)
	22:45	21:51	20:28		19:01	52	17:52 (9)	16:39 95	15:09 (35)	15:47 77	14:17 (14)
6	04:37	05:35	06:44		07:50		17:00 (12)	08:03	09:10 (37)	09:08	09:57 (13)
	22:45	21:49	20:25		18:58	52	17:52 (9)	16:37 105	15:09 (35)	15:46 71	14:17 (14)
7	04:38	05:37	06:46		07:53		17:01 (12)	08:06	09:08 (37)	09:10	11:57 (32)
	22:44	21:46	20:22		18:56	50	17:51 (9)	16:34 111	15:09 (35)	15:45 64	14:17 (14)
8	04:40	05:39	06:48		07:55		17:03 (12)	08:08	11:48 (32)	09:12	11:57 (32)
	22:43	21:44	20:19		18:53	48	17:51 (9)	16:32 112	15:09 (35)	15:44 62	14:17 (14)
9	04:41	05:41	06:51	18:40 (17)	07:57		17:04 (12)	08:10	11:47 (32)	09:13	11:59 (32)
	22:41	21:41	20:16	10 18:50 (17)	18:50	46	17:50 (9)	16:30 113	15:09 (35)	15:44 57	14:17 (14)
10	04:42	05:44	06:53	18:37 (17)	07:59		17:06 (12)	08:13	09:45 (13)	09:15	12:00 (32)
	22:40	21:39	20:14	15 18:52 (17)	18:47	40	17:48 (9)	16:27 121	15:08 (35)	15:43 53	14:17 (14)
11	04:44	05:46	06:55	18:35 (17)	08:02		16:22 (7)	08:15	09:42 (13)	09:16	12:01 (32)
	22:39	21:36	20:11	19 18:54 (17)	18:44	36	17:45 (9)	16:25 127	15:08 (35)	15:43 47	14:16 (14)
12	04:45	05:48	06:57	18:34 (17)	08:04		16:18 (7)	08:17	09:41 (13)	09:17	12:03 (32)
	22:38	21:34	20:08	21 18:55 (17)	18:42	25	17:41 (9)	16:23 130	15:08 (35)	15:42 44	14:17 (14)
13	04:47	05:50	06:59	17:21 (12)	08:06		13:56 (26)	08:20	09:39 (13)	09:19	12:04 (32)
	22:36	21:31	20:05	37 18:55 (17)	18:39	42	17:38 (9)	16:21 131	15:06 (35)	15:42 39	14:17 (14)
14	04:49	05:53	07:02	17:17 (12)	08:09		13:50 (26)	08:22	09:39 (13)	09:20	12:07 (32)
	22:35	21:29	20:02	45 18:55 (17)	18:36	53	16:37 (7)	16:19 131	15:05 (35)	15:42 34	14:17 (14)
15	04:50	05:55	07:04	17:13 (12)	08:11		13:46 (26)	08:25	09:39 (13)	09:21	13:06 (26)
	22:33	21:26	19:59	52 18:55 (17)	18:33	62	16:37 (7)	16:17 128	15:03 (35)	15:42 26	14:16 (14)
16	04:52	05:57	07:06	17:11 (12)	08:13		13:44 (26)	08:27	09:39 (13)	09:22	13:08 (26)
	22:32	21:23	19:56	56 18:55 (17)	18:30	69	16:39 (7)	16:15 124	15:02 (35)	15:42 22	14:15 (14)
17	04:54	05:59	07:08	17:08 (12)	08:16		13:41 (26)	08:29	09:38 (13)	09:23	13:10 (26)
	22:30	21:21	19:53	59 18:54 (17)	18:28	75	16:39 (7)	16:13 125	14:07 (14)	15:42 18	14:15 (14)
18	04:56	06:02	07:10	17:07 (12)	08:18		09:55 (37)	08:32	09:38 (13)	09:24	13:12 (26)
	22:29	21:18	19:50	63 18:55 (17)	18:25	86	16:39 (7)	16:11 129	14:09 (14)	15:42 16	14:15 (14)
19	04:58	06:04	07:12	17:06 (12)	08:20		09:51 (37)	08:34	09:39 (13)	09:25	13:16 (3)
	22:27	21:15	19:47	63 18:54 (17)	18:22	98	16:39 (7)	16:09 131	14:11 (14)	15:42 11	14:15 (14)
20	04:59	06:06	07:15	17:04 (12)	08:23		09:49 (37)	08:36	09:38 (13)	09:25	13:16 (3)
	22:25	21:13	19:45	65 18:53 (17)	18:20	106	16:40 (7)	16:07 129	14:11 (14)	15:42 9	14:14 (14)
21	05:01	06:08	07:17	17:03 (12)	08:25		09:46 (37)	08:38	09:39 (13)	09:26	13:17 (3)
	22:23	21:10	19:42	64 18:51 (17)	18:17	113	16:39 (7)	16:06 131	14:13 (14)	15:43 9	14:15 (14)
22	05:03	06:11	07:19	17:01 (12)	08:27		09:45 (37)	08:41	09:38 (13)	09:26	13:18 (3)
	22:21	21:07	19:39	64 18:50 (17)	18:14	116	16:39 (7)	16:04 131	14:13 (14)	15:43 9	14:16 (14)
23	05:05	06:13	07:21	17:00 (12)	08:30		09:44 (37)	08:43	09:39 (13)	09:27	13:18 (3)
	22:19	21:05	19:36	62 18:48 (17)	18:12	119	16:38 (7)	16:02 128	14:14 (14)	15:44 9	14:16 (14)
24	05:07	06:15	07:24	17:00 (12)	08:32		09:43 (37)	08:45	09:39 (13)	09:27	13:18 (3)
	22:18	21:02	19:33	58 18:46 (17)	18:09	122	16:38 (7)	16:01 127	14:14 (14)	15:44 11	14:17 (14)
25	05:09	06:17	07:26	16:59 (12)	07:34		08:43 (37)	08:47	09:40 (13)	09:28	13:15 (26)
	22:16	20:59	19:30	46 17:45 (12)	17:06	123	15:38 (7)	15:59 124	14:15 (14)	15:45 14	14:17 (14)
26	05:11	06:19	07:28	16:58 (12)	07:37		08:44 (37)	08:49	09:40 (13)	09:28	13:14 (26)
	22:14	20:56	19:27	47 17:45 (12)	17:04	122	15:37 (7)	15:58 119	14:15 (14)	15:46 17	14:18 (14)
27	05:13	06:22	07:30	16:58 (12)	07:39		08:48 (37)	08:51	09:49 (13)	09:28	13:13 (26)
	22:11	20:53	19:24	46 17:44 (12)	17:01	118	15:36 (7)	15:56 112	14:16 (14)	15:47 20	14:19 (14)
28	05:15	06:24	07:32	16:58 (12)	07:41		08:51 (37)	08:53	09:49 (13)	09:28	13:12 (26)
	22:09	20:51	19:21	46 17:44 (12)	16:59	115	15:35 (7)	15:55 109	14:16 (14)	15:48 24	14:21 (14)
29	05:17	06:26	07:35	16:58 (12)	07:44		08:54 (37)	08:55	09:50 (13)	09:28	12:14 (32)
	22:07	20:48	19:19	50 17:48 (9)	16:56	119	15:34 (7)	15:53 106	14:16 (14)	15:49 31	14:23 (14)
30	05:20	06:28	07:37	16:57 (12)	07:46		08:57 (37)	08:57	09:50 (13)	09:28	12:13 (32)
	22:05	20:45	19:16	52 17:49 (9)	16:53	117	15:32 (7)	15:52 103	14:16 (14)	15:50 37	14:25 (14)
31	05:22	06:31			07:49		08:59 (37)			09:28	12:12 (32)
	22:03	20:42			16:51	115	15:29 (7)			15:51 41	14:25 (14)
Potential sun hours	546	478	386		319			236		199	
Total, worst case				1040		2454		3527		1230	
Sun reduction				0,50		0,50		0,50		0,50	
Oper. time red.				0,80		0,80		0,80		0,80	
Wind dir. red.				0,59		0,59		0,60		0,59	
Total reduction				0,24		0,24		0,24		0,24	
Total, real				245		577		846		289	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (1)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	1 20:40 (1)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (1)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	1 20:41 (1)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (1)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	1 20:40 (1)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (1)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	1 20:41 (1)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	2 20:42 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	2 20:42 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	2 20:42 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	2 20:43 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (1)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	2 20:43 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	2 20:43 (1)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	2 20:43 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	2 20:43 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	2 20:44 (1)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	2 20:44 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	2 20:44 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	2 20:44 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	2 20:44 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	1 20:44 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	2 20:45 (1)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	1 20:44 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case						34		1						
Sun reduction						0,50		0,50						
Oper. time red.						0,80		0,80						
Wind dir. red.						0,74		0,74						
Total reduction						0,29		0,29						
Total, real						10		0						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	20:27 (1)	04:32	20:33 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	8 20:35 (1)	22:48	15 20:48 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	20:27 (1)	04:33	20:33 (1)	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	11 20:38 (1)	22:47	15 20:48 (1)	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	20:27 (1)	04:34	20:33 (1)	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	12 20:39 (1)	22:47	15 20:48 (1)	21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36	20:27 (1)	04:35	20:33 (1)	05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34	12 20:39 (1)	22:46	14 20:47 (1)	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	20:27 (1)	04:36	20:33 (1)	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	13 20:40 (1)	22:45	14 20:47 (1)	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	20:27 (1)	04:37	20:34 (1)	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	13 20:40 (1)	22:44	13 20:47 (1)	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	20:28 (1)	04:39	20:34 (1)	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38	14 20:42 (1)	22:43	12 20:46 (1)	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	20:28 (1)	04:40	20:34 (1)	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	14 20:42 (1)	22:42	12 20:46 (1)	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31	20:28 (1)	04:41	20:35 (1)	05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	14 20:42 (1)	22:41	11 20:46 (1)	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	20:29 (1)	04:43	20:35 (1)	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	14 20:43 (1)	22:40	11 20:46 (1)	21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:28 (1)	04:44	20:35 (1)	05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	16 20:44 (1)	22:39	9 20:44 (1)	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:29 (1)	04:46	20:35 (1)	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	16 20:45 (1)	22:37	4 20:39 (1)	21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:29 (1)	04:47	20:35 (1)	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	16 20:45 (1)	22:36	3 20:38 (1)	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:29 (1)	04:49	20:35 (1)	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	17 20:46 (1)	22:34	2 20:37 (1)	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:30 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	17 20:47 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:30 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	17 20:47 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:30 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	18 20:48 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:31 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	17 20:48 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:31 (1)	04:58		06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	18 20:49 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:31 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	18 20:49 (1)	22:25		21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58	04:27	20:31 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	18 20:49 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:31 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	18 20:49 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:31 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	18 20:49 (1)	22:19		21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:32 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	17 20:49 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:32 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	17 20:49 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:32 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	18 20:50 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:32 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	17 20:49 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:32 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	17 20:49 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:33 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	17 20:50 (1)	22:07		20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42	20:27 (1)	04:31	20:32 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	2 20:29 (1)	22:48	17 20:49 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41	20:27 (1)			05:22		06:31		07:48		09:27
	16:53		20:14		22:28	3 20:30 (1)			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521		547		545		478	386	319	236	200
Total, worst case						5		469		150					
Sun reduction						0,50		0,50		0,50					
Oper. time red.						0,80		0,80		0,80					
Wind dir. red.						0,73		0,73		0,73					
Total reduction						0,29		0,29		0,29					
Total, real						1		138		44					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42	04:39	04:33	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:46	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34	04:35	04:37	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:03	09:08
	16:00	17:09	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:23	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44	22:41	22:41	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:19	08:20	07:04	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55	22:46	22:35	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57	22:47	22:33	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:13	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06	04:27	04:54	06:00	07:08	08:16	08:29	09:23
	16:21	17:36	18:42	20:53	22:02	22:48	22:30	21:21	19:54	18:28	16:13	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56	04:27	05:04	06:11	07:19	08:27	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:03	15:44
24	09:01	07:49	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	08:45	09:27
	16:37	17:53	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	22:50	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48	04:29	05:14	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:23	22:50	22:09	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:14		22:29		22:03	20:43		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April			May			June		
1	09:28	08:46	07:35	07:07			05:44		07:31 (38)	04:40		06:17 (36)
	15:53	16:56	18:05	20:17			21:26	31	08:02 (38)	22:30	23	06:40 (36)
2	09:27	08:43	07:33	07:04			05:42		07:32 (38)	04:39		06:16 (36)
	15:54	16:59	18:07	20:19			21:28	29	08:01 (38)	22:32	24	06:40 (36)
3	09:27	08:41	07:30	07:01			05:39		07:32 (38)	04:37		06:16 (36)
	15:56	17:01	18:10	20:21			21:31	27	07:59 (38)	22:34	25	06:41 (36)
4	09:26	08:39	07:27	06:58			05:36		07:34 (38)	04:36		06:16 (36)
	15:57	17:04	18:12	20:24			21:33	24	07:58 (38)	22:35	26	06:42 (36)
5	09:26	08:37	07:24	06:55			05:34		07:36 (38)	04:35		06:16 (36)
	15:59	17:06	18:14	20:26			21:35	20	07:56 (38)	22:36	27	06:43 (36)
6	09:25	08:34	07:21	06:53			05:32		07:38 (38)	04:34		06:16 (36)
	16:00	17:09	18:17	20:28			21:37	16	07:54 (38)	22:38	27	06:43 (36)
7	09:24	08:32	07:19	06:50			05:29		07:40 (38)	04:33		06:16 (36)
	16:02	17:11	18:19	20:31			21:40	10	07:50 (38)	22:39	27	06:43 (36)
8	09:24	08:30	07:16	06:47			05:27			04:32		06:15 (36)
	16:04	17:14	18:21	20:33			21:42			22:40	29	06:44 (36)
9	09:23	08:27	07:13	06:44			05:24			04:31		06:16 (36)
	16:06	17:16	18:24	20:35			21:44			22:42	29	06:45 (36)
10	09:22	08:25	07:10	06:41		07:48 (38)	05:22			04:31		06:15 (36)
	16:07	17:18	18:26	20:37	10	07:58 (38)	21:46			22:43	30	06:45 (36)
11	09:21	08:23	07:07	06:38		07:45 (38)	05:20			04:30		06:16 (36)
	16:09	17:21	18:28	20:40	17	08:02 (38)	21:49			22:44	29	06:45 (36)
12	09:20	08:20	07:04	06:36		07:41 (38)	05:17			04:29		06:15 (36)
	16:11	17:23	18:31	20:42	22	08:03 (38)	21:51			22:45	30	06:45 (36)
13	09:18	08:18	07:02	06:33		07:37 (38)	05:15			04:29		06:16 (36)
	16:13	17:26	18:33	20:44	27	08:04 (38)	21:53			22:46	30	06:46 (36)
14	09:17	08:15	06:59	06:30		07:35 (38)	05:13			04:28		06:16 (36)
	16:15	17:28	18:35	20:47	30	08:05 (38)	21:55			22:46	30	06:46 (36)
15	09:16	08:13	06:56	06:27		07:34 (38)	05:11			04:28		06:15 (36)
	16:17	17:31	18:38	20:49	33	08:07 (38)	21:57			22:47	31	06:46 (36)
16	09:14	08:10	06:53	06:24		07:33 (38)	05:09			04:28		06:16 (36)
	16:19	17:33	18:40	20:51	34	08:07 (38)	22:00			22:48	30	06:46 (36)
17	09:13	08:07	06:50	06:22		07:32 (38)	05:06			04:27		06:16 (36)
	16:21	17:36	18:42	20:54	35	08:07 (38)	22:02			22:48	31	06:47 (36)
18	09:12	08:05	06:47	06:19		07:31 (38)	05:04			04:27		06:16 (36)
	16:24	17:38	18:45	20:56	37	08:08 (38)	22:04			22:49	31	06:47 (36)
19	09:10	08:02	06:44	06:16		07:30 (38)	05:02			04:27		06:16 (36)
	16:26	17:41	18:47	20:58	38	08:08 (38)	22:06			22:49	31	06:47 (36)
20	09:08	08:00	06:42	06:13		07:30 (38)	05:00			04:27		06:16 (36)
	16:28	17:43	18:49	21:00	39	08:09 (38)	22:08			22:50	31	06:47 (36)
21	09:07	07:57	06:39	06:11		07:30 (38)	04:58			04:27		06:16 (36)
	16:30	17:46	18:52	21:03	38	08:08 (38)	22:10			22:50	31	06:47 (36)
22	09:05	07:54	06:36	06:08		07:29 (38)	04:56			04:27		06:17 (36)
	16:32	17:48	18:54	21:05	39	08:08 (38)	22:12			22:50	31	06:48 (36)
23	09:03	07:52	06:33	06:05		07:29 (38)	04:55			04:28		06:17 (36)
	16:35	17:50	18:56	21:07	39	08:08 (38)	22:14			22:50	31	06:48 (36)
24	09:02	07:49	06:30	06:02		07:29 (38)	04:53			04:28		06:17 (36)
	16:37	17:53	18:58	21:10	38	08:07 (38)	22:16			22:50	31	06:48 (36)
25	09:00	07:46	06:27	06:00		07:29 (38)	04:51			04:28		06:18 (36)
	16:39	17:55	19:01	21:12	38	08:07 (38)	22:18			22:50	31	06:49 (36)
26	08:58	07:44	06:24	05:57		07:29 (38)	04:49		06:24 (36)	04:29		06:18 (36)
	16:42	17:58	19:03	21:14	37	08:06 (38)	22:20	8	06:32 (36)	22:50	31	06:49 (36)
27	08:56	07:41	06:21	05:54		07:29 (38)	04:48		06:21 (36)	04:29		06:19 (36)
	16:44	18:00	19:05	21:17	37	08:06 (38)	22:22	13	06:34 (36)	22:50	30	06:49 (36)
28	08:54	07:38	06:18	05:52		07:29 (38)	04:46		06:20 (36)	04:30		06:18 (36)
	16:47	18:02	19:08	21:19	36	08:05 (38)	22:24	16	06:36 (36)	22:50	31	06:49 (36)
29	08:52		07:16	05:49		07:30 (38)	04:44		06:19 (36)	04:31		06:19 (36)
	16:49		20:10	21:21	34	08:04 (38)	22:25	18	06:37 (36)	22:49	30	06:49 (36)
30	08:50		07:13	05:47		07:30 (38)	04:43		06:19 (36)	04:31		06:19 (36)
	16:51		20:12	21:24	33	08:03 (38)	22:27	20	06:39 (36)	22:49	30	06:49 (36)
31	08:48		07:10				04:41		06:17 (36)			
	16:54		20:14				22:29	22	06:39 (36)			
Potential sun hours	221	260	365	432			521			547		
Total, worst case					691			254			878	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,65			0,62			0,58	
Total reduction					0,26			0,25			0,23	
Total, real					178			63			204	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July			August			September			October	November	December
1	04:32		06:20 (36)	05:24			06:33		07:44 (38)	07:39	07:51	09:00
	22:48	30	06:50 (36)	22:01			20:40	17	08:01 (38)	19:13	16:49	15:51
2	04:33		06:20 (36)	05:27			06:35		07:47 (38)	07:42	07:54	09:01
	22:48	30	06:50 (36)	21:58			20:37	10	07:57 (38)	19:10	16:47	15:50
3	04:34		06:20 (36)	05:29			06:38			07:44	07:56	09:03
	22:47	29	06:49 (36)	21:56			20:34			19:07	16:44	15:49
4	04:35		06:20 (36)	05:31			06:40			07:46	07:59	09:05
	22:46	29	06:49 (36)	21:54			20:31			19:05	16:42	15:48
5	04:36		06:21 (36)	05:33			06:42			07:48	08:01	09:07
	22:46	28	06:49 (36)	21:51			20:28			19:02	16:39	15:47
6	04:38		06:21 (36)	05:35		07:49 (38)	06:44			07:51	08:03	09:09
	22:45	28	06:49 (36)	21:49	13	08:02 (38)	20:25			18:59	16:37	15:47
7	04:39		06:23 (36)	05:38		07:46 (38)	06:47			07:53	08:06	09:10
	22:44	27	06:50 (36)	21:47	18	08:04 (38)	20:23			18:56	16:35	15:46
8	04:40		06:23 (36)	05:40		07:44 (38)	06:49			07:55	08:08	09:12
	22:43	26	06:49 (36)	21:44	22	08:06 (38)	20:20			18:53	16:32	15:45
9	04:42		06:23 (36)	05:42		07:43 (38)	06:51			07:57	08:11	09:13
	22:42	26	06:49 (36)	21:42	25	08:08 (38)	20:17			18:50	16:30	15:44
10	04:43		06:24 (36)	05:44		07:41 (38)	06:53			08:00	08:13	09:15
	22:40	24	06:48 (36)	21:39	28	08:09 (38)	20:14			18:48	16:28	15:44
11	04:45		06:25 (36)	05:46		07:40 (38)	06:55			08:02	08:15	09:16
	22:39	23	06:48 (36)	21:37	30	08:10 (38)	20:11			18:45	16:26	15:43
12	04:46		06:25 (36)	05:49		07:39 (38)	06:58			08:04	08:18	09:17
	22:38	23	06:48 (36)	21:34	32	08:11 (38)	20:08			18:42	16:24	15:43
13	04:48		06:26 (36)	05:51		07:38 (38)	07:00			08:07	08:20	09:19
	22:36	21	06:47 (36)	21:32	33	08:11 (38)	20:05			18:39	16:22	15:43
14	04:49		06:28 (36)	05:53		07:37 (38)	07:02			08:09	08:22	09:20
	22:35	18	06:46 (36)	21:29	35	08:12 (38)	20:02			18:36	16:19	15:43
15	04:51		06:28 (36)	05:55		07:36 (38)	07:04			08:11	08:25	09:21
	22:34	17	06:45 (36)	21:26	36	08:12 (38)	19:59			18:34	16:17	15:42
16	04:53		06:30 (36)	05:58		07:36 (38)	07:06			08:14	08:27	09:22
	22:32	14	06:44 (36)	21:24	37	08:13 (38)	19:57			18:31	16:15	15:42
17	04:54		06:31 (36)	06:00		07:35 (38)	07:09			08:16	08:29	09:23
	22:30	11	06:42 (36)	21:21	38	08:13 (38)	19:54			18:28	16:13	15:42
18	04:56		06:35 (36)	06:02		07:36 (38)	07:11			08:18	08:32	09:24
	22:29	5	06:40 (36)	21:18	38	08:14 (38)	19:51			18:25	16:12	15:42
19	04:58			06:04		07:35 (38)	07:13			08:21	08:34	09:25
	22:27			21:16	39	08:14 (38)	19:48			18:23	16:10	15:43
20	05:00			06:07		07:35 (38)	07:15			08:23	08:36	09:25
	22:25			21:13	38	08:13 (38)	19:45			18:20	16:08	15:43
21	05:02			06:09		07:34 (38)	07:17			08:25	08:39	09:26
	22:23			21:10	39	08:13 (38)	19:42			18:17	16:06	15:43
22	05:04			06:11		07:34 (38)	07:20			08:28	08:41	09:27
	22:22			21:08	39	08:13 (38)	19:39			18:15	16:04	15:44
23	05:06			06:13		07:34 (38)	07:22			08:30	08:43	09:27
	22:20			21:05	38	08:12 (38)	19:36			18:12	16:03	15:44
24	05:08			06:15		07:34 (38)	07:24			08:32	08:45	09:28
	22:18			21:02	37	08:11 (38)	19:33			18:09	16:01	15:45
25	05:10			06:18		07:34 (38)	07:26			07:35	08:47	09:28
	22:16			20:59	37	08:11 (38)	19:30			17:07	16:00	15:46
26	05:12			06:20		07:34 (38)	07:28			07:37	08:50	09:28
	22:14			20:57	36	08:10 (38)	19:28			17:04	15:58	15:46
27	05:14			06:22		07:35 (38)	07:31			07:39	08:52	09:28
	22:12			20:54	34	08:09 (38)	19:25			17:02	15:57	15:47
28	05:16			06:24		07:35 (38)	07:33			07:42	08:54	09:28
	22:10			20:51	32	08:07 (38)	19:22			16:59	15:55	15:48
29	05:18			06:27		07:36 (38)	07:35			07:44	08:56	09:28
	22:07			20:48	30	08:06 (38)	19:19			16:56	15:54	15:49
30	05:20			06:29		07:38 (38)	07:37			07:47	08:58	09:28
	22:05			20:45	27	08:05 (38)	19:16			16:54	15:53	15:50
31	05:22			06:31		07:41 (38)				07:49		09:28
	22:03			20:43	22	08:03 (38)				16:51		15:51
Potential sun hours	545			478			386			319	236	200
Total, worst case		409			833			27				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,58			0,65			0,65				
Total reduction		0,23			0,26			0,26				
Total, real		95			215			7				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44		04:40		06:01 (38)	04:32	06:06 (38)	05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26		22:30	34	06:35 (38)	22:48	37 06:43 (38)	22:01	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		04:39		06:01 (38)	04:33	06:07 (38)	05:27	06:35	07:42	07:54	09:01
	15:54	16:59	18:07	20:19	21:28		22:32	35	06:36 (38)	22:48	36 06:43 (38)	21:58	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39		04:38		06:01 (38)	04:34	06:06 (38)	05:29	06:38	07:44	07:56	09:03
	15:56	17:01	18:10	20:21	21:30		22:33	35	06:36 (38)	22:47	37 06:43 (38)	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:37		04:36		06:00 (38)	04:35	06:06 (38)	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33		22:35	36	06:36 (38)	22:46	37 06:43 (38)	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:55	05:34		04:35		06:01 (38)	04:37	06:06 (38)	05:33	06:42	07:48	08:01	09:07
	15:59	17:06	18:14	20:26	21:35		22:36	36	06:37 (38)	22:46	37 06:43 (38)	21:51	20:28	19:02	16:39	15:47
6	09:25	08:34	07:21	06:53	05:32		04:34		06:01 (38)	04:38	06:08 (38)	05:35	06:44	07:51	08:03	09:09
	16:00	17:09	18:17	20:28	21:37		22:38	36	06:37 (38)	22:45	36 06:44 (38)	21:49	20:25	18:59	16:37	15:47
7	09:24	08:32	07:19	06:50	05:29		04:33		06:01 (38)	04:39	06:08 (38)	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40		22:39	36	06:37 (38)	22:44	36 06:44 (38)	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27		04:32		06:01 (38)	04:40	06:08 (38)	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:21	20:33	21:42		22:40	36	06:37 (38)	22:43	36 06:44 (38)	21:44	20:20	18:53	16:32	15:45
9	09:23	08:27	07:13	06:44	05:24		04:31		06:02 (38)	04:42	06:08 (38)	05:42	06:51	07:57	08:11	09:13
	16:06	17:16	18:24	20:35	21:44		22:41	36	06:38 (38)	22:42	36 06:44 (38)	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22		04:31		06:01 (38)	04:43	06:08 (38)	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:37	21:46		22:43	37	06:38 (38)	22:40	35 06:43 (38)	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20		04:30		06:02 (38)	04:45	06:09 (38)	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:40	21:49		22:44	37	06:39 (38)	22:39	35 06:44 (38)	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:04	06:36	05:17		04:29		06:02 (38)	04:46	06:09 (38)	05:49	06:58	08:04	08:18	09:17
	16:11	17:23	18:31	20:42	21:51		22:45	36	06:38 (38)	22:38	35 06:44 (38)	21:34	20:08	18:42	16:24	15:43
13	09:18	08:18	07:02	06:33	05:15		04:29		06:02 (38)	04:48	06:09 (38)	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53		22:46	37	06:39 (38)	22:36	34 06:43 (38)	21:31	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13		04:28		06:03 (38)	04:49	06:10 (38)	05:53	07:02	08:09	08:22	09:20
	16:15	17:28	18:35	20:47	21:55		22:46	36	06:39 (38)	22:35	33 06:43 (38)	21:29	20:02	18:36	16:19	15:43
15	09:16	08:13	06:56	06:27	05:11		04:28		06:02 (38)	04:51	06:10 (38)	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:57		22:47	37	06:39 (38)	22:34	33 06:43 (38)	21:26	19:59	18:34	16:17	15:42
16	09:14	08:10	06:53	06:24	05:09		04:28		06:02 (38)	04:53	06:11 (38)	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00		22:48	37	06:39 (38)	22:32	32 06:43 (38)	21:24	19:57	18:31	16:15	15:42
17	09:13	08:07	06:50	06:22	05:06	06:12 (38)	04:27		06:03 (38)	04:54	06:11 (38)	06:00	07:09	08:16	08:29	09:23
	16:21	17:36	18:42	20:54	22:02	10 06:22 (38)	22:48	37	06:40 (38)	22:30	31 06:42 (38)	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	06:11 (38)	04:27		06:03 (38)	04:56	06:12 (38)	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	14 06:25 (38)	22:49	37	06:40 (38)	22:29	30 06:42 (38)	21:18	19:51	18:25	16:12	15:42
19	09:10	08:02	06:44	06:16	05:02	06:09 (38)	04:27		06:03 (38)	04:58	06:13 (38)	06:04	07:13	08:20	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	18 06:27 (38)	22:49	37	06:40 (38)	22:27	29 06:42 (38)	21:16	19:48	18:23	16:10	15:43
20	09:08	08:00	06:42	06:13	05:00	06:08 (38)	04:27		06:03 (38)	05:00	06:13 (38)	06:07	07:15	08:23	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	20 06:28 (38)	22:50	37	06:40 (38)	22:25	28 06:41 (38)	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	06:06 (38)	04:27		06:03 (38)	05:02	06:14 (38)	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	23 06:29 (38)	22:50	37	06:40 (38)	22:23	27 06:41 (38)	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:36	06:08	04:56	06:05 (38)	04:27		06:04 (38)	05:04	06:16 (38)	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	25 06:30 (38)	22:50	37	06:41 (38)	22:22	24 06:40 (38)	21:08	19:39	18:15	16:04	15:44
23	09:03	07:52	06:33	06:05	04:55	06:03 (38)	04:28		06:04 (38)	05:06	06:17 (38)	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:07	22:14	28 06:31 (38)	22:50	37	06:41 (38)	22:20	21 06:38 (38)	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	06:03 (38)	04:28		06:04 (38)	05:08	06:18 (38)	06:15	07:24	08:32	08:45	09:28
	16:37	17:53	18:58	21:10	22:16	29 06:32 (38)	22:50	37	06:41 (38)	22:18	19 06:37 (38)	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	06:02 (38)	04:28		06:05 (38)	05:10	06:20 (38)	06:18	07:26	07:35	08:47	09:28
	16:39	17:55	19:01	21:12	22:18	30 06:32 (38)	22:50	37	06:42 (38)	22:16	16 06:36 (38)	20:59	19:30	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	06:02 (38)	04:29		06:05 (38)	05:12	06:22 (38)	06:20	07:28	07:37	08:49	09:28
	16:42	17:58	19:03	21:14	22:20	31 06:33 (38)	22:50	36	06:41 (38)	22:14	12 06:34 (38)	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:54	04:48	06:01 (38)	04:29		06:05 (38)	05:14	06:25 (38)	06:22	07:31	07:39	08:52	09:28
	16:44	18:00	19:05	21:17	22:22	32 06:33 (38)	22:50	37	06:42 (38)	22:12	6 06:31 (38)	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:18	05:52	04:46	06:01 (38)	04:30		06:05 (38)	05:16		06:24	07:33	07:42	08:54	09:28
	16:47	18:02	19:08	21:19	22:24	33 06:34 (38)	22:50	37	06:42 (38)	22:10		20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	06:01 (38)	04:31		06:05 (38)	05:18		06:27	07:35	07:44	08:56	09:28
	16:49		20:10	21:21	22:25	34 06:35 (38)	22:49	37	06:42 (38)	22:07		20:48	19:19	16:56	15:54	15:49
30	08:50		07:13	05:47	04:43	06:01 (38)	04:32		06:06 (38)	05:20		06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	34 06:35 (38)	22:49	37	06:43 (38)	22:05		20:45	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41	06:01 (38)				05:22		06:31		07:49		09:28
	16:54		20:14		22:29	34 06:35 (38)				22:03		20:43		16:51		15:51
Potential sun hours	221	260	365	432	521		547			545		478	386	319	236	200
Total, worst case						395		1094		808						
Sun reduction						0,50		0,50		0,50						
Oper. time red.						0,80		0,80		0,80						
Wind dir. red.						0,58		0,58		0,58						
Total reduction						0,23		0,23		0,23						
Total, real						91		252		186						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:28	08:46	07:35	07:07	05:44		04:40		04:32		05:24	06:33	07:39	07:51	09:00
	15:53	16:56	18:05	20:17	21:26		22:30	28	06:18 (38)	33	06:51 (38)	20:40	19:13	16:49	15:52
2	09:27	08:43	07:33	07:04	05:42		04:39		06:18 (38)		06:19 (38)	22:01	20:40	19:13	16:49
	15:54	16:59	18:07	20:19	21:28		22:32	28	04:33	33	06:52 (38)	05:27	06:35	07:42	07:54
3	09:27	08:41	07:30	07:01	05:39		04:38		06:46 (38)		06:18 (38)	21:58	20:37	19:10	16:47
	15:56	17:01	18:10	20:21	21:31		22:33	29	06:17 (38)	33	06:51 (38)	05:29	06:38	07:44	07:56
4	09:26	08:39	07:27	06:58	05:37		04:36		06:46 (38)		06:18 (38)	21:56	20:34	19:07	16:44
	15:57	17:04	18:12	20:24	21:33		22:35	30	06:16 (38)	33	06:51 (38)	05:31	06:40	07:46	07:59
5	09:26	08:37	07:24	06:55	05:34		04:35		06:46 (38)		06:51 (38)	21:54	20:31	19:05	16:42
	15:59	17:06	18:14	20:26	21:35		22:36	31	06:16 (38)	33	06:19 (38)	05:33	06:42	07:48	08:01
6	09:25	08:34	07:21	06:53	05:32		04:34		06:47 (38)		06:52 (38)	21:51	20:28	19:02	16:39
	16:00	17:09	18:17	20:28	21:37		22:38	32	06:15 (38)	32	06:21 (38)	05:35	06:44	07:51	08:03
7	09:24	08:32	07:19	06:50	05:29		04:33		06:47 (38)		06:53 (38)	21:49	20:25	18:59	16:37
	16:02	17:11	18:19	20:31	21:40		22:39	32	06:14 (38)	32	06:22 (38)	05:38	06:47	07:53	08:06
8	09:24	08:30	07:16	06:47	05:27		04:32		06:46 (38)		06:53 (38)	21:47	20:23	18:56	16:35
	16:04	17:14	18:21	20:33	21:42		22:40	33	04:40	31	06:23 (38)	05:40	06:49	07:55	08:08
9	09:23	08:27	07:13	06:44	05:24		04:31		06:46 (38)		06:53 (38)	21:44	20:20	18:53	16:32
	16:06	17:16	18:24	20:35	21:44		22:41	33	04:43	30	06:24 (38)	05:42	06:51	07:57	08:11
10	09:22	08:25	07:10	06:41	05:22		04:31		06:47 (38)		06:53 (38)	21:42	20:17	18:50	16:30
	16:07	17:19	18:26	20:37	21:46		22:43	33	06:13 (38)	29	06:25 (38)	05:44	06:53	08:00	08:13
11	09:21	08:23	07:07	06:38	05:20		04:30		04:40		06:53 (38)	21:39	20:14	18:48	16:28
	16:09	17:21	18:28	20:40	21:49		22:44	33	06:46 (38)	28	06:26 (38)	05:46	06:55	08:02	08:15
12	09:20	08:20	07:04	06:36	05:17		04:29		06:14 (38)		06:54 (38)	21:37	20:11	18:45	16:26
	16:11	17:23	18:31	20:42	21:51		22:45	32	04:46	28	06:27 (38)	05:49	06:58	08:04	08:18
13	09:18	08:18	07:02	06:33	05:15		04:29		06:46 (38)		06:54 (38)	21:34	20:08	18:42	16:24
	16:13	17:26	18:33	20:44	21:53		22:46	33	04:48	27	06:28 (38)	05:51	07:00	08:07	08:20
14	09:17	08:15	06:59	06:30	05:13		04:28		06:47 (38)		06:54 (38)	21:32	20:05	18:39	16:22
	16:15	17:28	18:35	20:47	21:55		22:46	32	04:49	26	06:30 (38)	05:53	07:02	08:09	08:22
15	09:16	08:13	06:56	06:27	05:11		04:28		06:47 (38)		06:54 (38)	21:29	20:02	18:36	16:19
	16:17	17:31	18:38	20:49	21:57		22:47	32	04:51	24	06:31 (38)	05:55	07:04	08:11	08:25
16	09:14	08:10	06:53	06:24	05:09		04:28		06:47 (38)		06:54 (38)	21:26	19:59	18:34	16:17
	16:19	17:33	18:40	20:51	22:00	2	06:39 (38)	32	06:15 (38)	23	06:33 (38)	05:58	07:06	08:14	08:27
17	09:13	08:07	06:50	06:22	05:06		04:28		04:53		06:55 (38)	21:24	19:57	18:31	16:15
	16:21	17:36	18:42	20:54	22:02	4	06:41 (38)	32	06:47 (38)	22	06:33 (38)	06:00	07:09	08:16	08:29
18	09:12	08:05	06:47	06:19	05:04		04:27		06:15 (38)		06:54 (38)	21:21	19:54	18:28	16:14
	16:24	17:38	18:45	20:56	22:04	7	06:36 (38)	32	06:47 (38)	21	06:35 (38)	06:02	07:11	08:18	08:32
19	09:10	08:02	06:44	06:16	05:02		04:27		04:54		06:55 (38)	21:18	19:51	18:25	16:12
	16:26	17:41	18:47	20:58	22:06	8	06:43 (38)	31	06:16 (38)	20	06:37 (38)	06:04	07:13	08:21	08:34
20	09:08	08:00	06:42	06:13	05:00		04:27		04:58		06:55 (38)	21:16	19:48	18:23	16:10
	16:28	17:43	18:49	21:00	22:08	10	06:33 (38)	31	06:47 (38)	18	06:38 (38)	06:07	07:15	08:23	08:36
21	09:07	07:57	06:39	06:11	04:58		04:27		06:16 (38)		06:54 (38)	21:13	19:45	18:20	16:08
	16:30	17:46	18:52	21:03	22:10	12	06:31 (38)	31	06:47 (38)	16	06:39 (38)	06:09	07:17	08:25	08:39
22	09:05	07:54	06:36	06:08	04:56		04:27		05:02		06:54 (38)	21:10	19:42	18:17	16:06
	16:32	17:48	18:54	21:05	22:12	14	06:43 (38)	31	06:47 (38)	15	06:41 (38)	06:11	07:20	08:28	08:41
23	09:03	07:52	06:33	06:05	04:55		04:27		06:16 (38)		06:54 (38)	21:08	19:39	18:15	16:04
	16:35	17:50	18:56	21:07	22:14	15	06:44 (38)	31	06:47 (38)	13	06:42 (38)	06:13	07:22	08:30	08:43
24	09:02	07:49	06:30	06:02	04:53		04:28		06:17 (38)		06:53 (38)	21:05	19:36	18:12	16:03
	16:37	17:53	18:58	21:10	22:16	17	06:45 (38)	31	06:48 (38)	11	06:44 (38)	06:15	07:24	08:32	08:45
25	09:00	07:46	06:27	06:00	04:51		04:28		06:17 (38)		06:53 (38)	21:02	19:33	18:09	16:01
	16:39	17:55	19:01	21:12	22:18	19	06:26 (38)	31	06:48 (38)	9	06:45 (38)	06:18	07:26	07:35	08:47
26	08:58	07:44	06:24	05:57	04:49		04:28		06:18 (38)		06:53 (38)	20:59	19:30	17:07	16:00
	16:42	17:58	19:03	21:14	22:20	20	06:45 (38)	31	06:49 (38)	8	06:47 (38)	06:20	07:28	07:37	08:49
27	08:56	07:41	06:21	05:54	04:48		04:29		05:10		06:53 (38)	20:57	19:28	17:04	15:58
	16:44	18:00	19:05	21:17	22:22	22	06:23 (38)	32	06:49 (38)	6	06:49 (38)	06:22	07:31	07:39	08:52
28	08:54	07:38	06:18	05:52	04:46		04:29		06:18 (38)		06:52 (38)	20:54	19:25	17:02	15:57
	16:47	18:02	19:08	21:19	22:24	22	06:45 (38)	32	06:50 (38)	3	06:51 (38)	06:24	07:33	07:42	08:54
29	08:52		07:16	05:49	04:44		06:22 (38)	32	06:17 (38)	32	06:52 (38)	20:51	19:22	16:59	15:55
	16:49		20:10	21:21	22:25	24	04:31		06:49 (38)	1		06:27	07:35	07:44	08:56
30	08:50		07:13	05:47	04:43		06:46 (38)	32	06:18 (38)			20:48	19:19	16:56	15:54
	16:51		20:12	21:24	22:27	25	06:21 (38)	32	05:14			06:29	07:37	07:47	08:58
31	08:48		07:10		04:41		04:32		06:18 (38)			20:45	19:16	16:54	15:53
	16:54		20:14		22:29	26	06:19 (38)	33	05:20			06:31		07:49	
Potential sun hours	221	260	365	432	521		06:45 (38)		05:22			20:43		16:51	
Total, worst case						247		547		545			478	386	319	236	200
Sun reduction								944		606							
Oper. time red.						0,50		0,50		0,50							
Wind dir. red.						0,80		0,80		0,80							
Total reduction						0,58		0,58		0,58							
Total, real						0,23		0,23		0,23							
						58		220		141							

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28 15:53	08:46 16:56	07:35 18:05	07:07 20:17	05:44 21:26 1	07:08 (38) | 04:40 07:09 (38) | 22:30 32	06:45 (38) | 04:32 07:17 (38) | 22:48 23	06:56 (38) | 05:24 07:19 (38) | 22:01 33	06:57 (38) | 06:33 07:30 (38) | 20:40	07:39 19:13	07:51 16:49	09:00 15:52
2	09:27 15:54	08:43 16:59	07:33 18:07	07:04 20:19	05:42 21:28 6	07:06 (38) | 04:39 07:12 (38) | 22:32 31	06:46 (38) | 04:33 07:17 (38) | 22:48 24	06:56 (38) | 05:27 07:20 (38) | 21:58 31	06:59 (38) | 06:35 07:30 (38) | 20:37	07:42 19:10	07:54 16:47	09:01 15:50
3	09:27 15:56	08:41 17:01	07:30 18:10	07:01 20:21	05:39 21:31 9	07:04 (38) | 04:38 07:13 (38) | 22:33 31	06:46 (38) | 04:34 07:17 (38) | 22:47 25	06:55 (38) | 05:29 07:20 (38) | 21:56 28	07:01 (38) | 06:38 07:29 (38) | 20:34	07:44 19:07	07:56 16:44	09:03 15:49
4	09:26 15:57	08:39 17:04	07:27 18:12	06:58 20:24	05:37 21:33 13	07:02 (38) | 04:36 07:15 (38) | 22:35 29	06:47 (38) | 04:35 07:16 (38) | 22:46 25	06:55 (38) | 05:31 07:20 (38) | 21:54 26	07:03 (38) | 06:40 07:29 (38) | 20:31	07:46 19:05	07:59 16:42	09:05 15:48
5	09:26 15:59	08:37 17:06	07:24 18:14	06:55 20:26	05:34 21:35 16	07:00 (38) | 04:35 07:16 (38) | 22:36 29	06:48 (38) | 04:37 07:17 (38) | 22:46 27	06:54 (38) | 05:33 07:21 (38) | 21:51 23	07:05 (38) | 06:42 07:28 (38) | 20:28	07:48 19:02	08:01 16:39	09:07 15:47
6	09:25 16:00	08:34 17:09	07:21 18:17	06:53 20:28	05:32 21:37 19	06:58 (38) | 04:34 07:17 (38) | 22:38 27	06:49 (38) | 04:38 07:16 (38) | 22:45 28	06:55 (38) | 05:35 07:23 (38) | 21:49 21	07:06 (38) | 06:44 07:27 (38) | 20:25	07:51 18:59	08:03 16:37	09:09 15:47
7	09:24 16:02	08:32 17:11	07:19 18:19	06:50 20:31	05:29 21:40 22	06:55 (38) | 04:33 07:17 (38) | 22:39 27	06:49 (38) | 04:39 07:16 (38) | 22:44 28	06:55 (38) | 05:38 07:23 (38) | 21:47 18	07:08 (38) | 06:47 07:26 (38) | 20:23	07:53 18:56	08:06 16:35	09:10 15:46
8	09:24 16:04	08:30 17:14	07:16 18:21	06:47 20:33	05:27 21:42 24	06:54 (38) | 04:32 07:18 (38) | 22:40 26	06:49 (38) | 04:40 07:15 (38) | 22:43 30	06:54 (38) | 05:40 07:24 (38) | 21:44 15	07:10 (38) | 06:49 07:25 (38) | 20:20	07:55 18:53	08:08 16:32	09:12 15:45
9	09:23 16:06	08:27 17:16	07:13 18:24	06:44 20:35	05:24 21:44 27	06:52 (38) | 04:31 07:19 (38) | 22:42 26	06:50 (38) | 04:42 07:16 (38) | 22:42 30	06:54 (38) | 05:42 07:24 (38) | 21:42 12	07:12 (38) | 06:51 07:24 (38) | 20:17	07:57 18:50	08:11 16:30	09:13 15:44
10	09:22 16:07	08:25 17:18	07:10 18:26	06:41 20:37	05:22 21:46 29	06:50 (38) | 04:31 07:19 (38) | 22:43 24	06:51 (38) | 04:43 07:15 (38) | 22:40 31	06:53 (38) | 05:44 07:24 (38) | 21:39 9	07:13 (38) | 06:53 07:22 (38) | 20:14	08:00 18:48	08:13 16:28	09:15 15:44
11	09:21 16:09	08:23 17:21	07:07 18:28	06:38 20:40	05:20 21:49 32	06:48 (38) | 04:30 07:20 (38) | 22:44 23	06:52 (38) | 04:45 07:15 (38) | 22:39 32	06:54 (38) | 05:46 07:26 (38) | 21:37 5	07:15 (38) | 06:55 07:20 (38) | 20:11	08:02 18:45	08:15 16:26	09:16 15:43
12	09:20 16:11	08:20 17:23	07:04 18:31	06:36 20:42	05:17 21:51 34	06:46 (38) | 04:29 07:20 (38) | 22:45 22	06:52 (38) | 04:46 07:14 (38) | 22:38 33	06:53 (38) | 05:49 07:26 (38) | 21:34	06:58 20:08	08:04 18:42	08:18 16:24	09:17 15:43
13	09:18 16:13	08:18 17:26	07:02 18:33	06:33 20:44	05:15 21:53 35	06:45 (38) | 04:29 07:20 (38) | 22:46 21	06:53 (38) | 04:48 07:14 (38) | 22:36 33	06:53 (38) | 05:51 07:26 (38) | 21:32	07:00 20:05	08:07 18:39	08:20 16:22	09:19 15:43
14	09:17 16:15	08:15 17:28	06:59 18:35	06:30 20:47	05:13 21:55 37	06:43 (38) | 04:28 07:20 (38) | 22:46 22	06:53 (38) | 04:49 07:15 (38) | 22:35 34	06:53 (38) | 05:53 07:27 (38) | 21:29	07:02 20:02	08:09 18:36	08:22 16:19	09:20 15:43
15	09:16 16:17	08:13 17:31	06:56 18:38	06:27 20:49	05:11 21:57 39	06:41 (38) | 04:28 07:20 (38) | 22:47 21	06:53 (38) | 04:51 07:14 (38) | 22:34 35	06:52 (38) | 05:55 07:27 (38) | 21:26	07:04 19:59	08:11 18:34	08:25 16:17	09:21 15:42
16	09:14 16:19	08:10 17:33	06:53 18:40	06:24 20:51	05:09 22:00 39	06:41 (38) | 04:28 07:20 (38) | 22:48 20	06:54 (38) | 04:53 07:14 (38) | 22:32 36	06:52 (38) | 05:58 07:28 (38) | 21:24	07:06 19:57	08:14 18:31	08:27 16:15	09:22 15:42
17	09:13 16:21	08:07 17:36	06:50 18:42	06:22 20:54	05:06 22:02 40	06:40 (38) | 04:27 07:20 (38) | 22:48 20	06:54 (38) | 04:54 07:14 (38) | 22:30 36	06:52 (38) | 06:00 07:28 (38) | 21:21	07:09 19:54	08:16 18:28	08:29 16:13	09:23 15:42
18	09:12 16:24	08:05 17:38	06:47 18:45	06:19 20:56	05:04 22:04 40	06:41 (38) | 04:27 07:21 (38) | 22:49 19	06:55 (38) | 04:56 07:14 (38) | 22:29 37	06:52 (38) | 06:02 07:29 (38) | 21:18	07:11 19:51	08:18 18:25	08:32 16:12	09:24 15:42
19	09:10 16:26	08:02 17:41	06:44 18:47	06:16 20:58	05:02 22:06 40	06:41 (38) | 04:27 07:21 (38) | 22:49 19	06:55 (38) | 04:58 07:14 (38) | 22:27 38	06:52 (38) | 06:04 07:30 (38) | 21:16	07:13 19:48	08:21 18:23	08:34 16:10	09:25 15:43
20	09:08 16:28	08:00 17:43	06:42 18:49	06:13 21:00	05:00 22:08 39	06:41 (38) | 04:27 07:20 (38) | 22:50 19	06:55 (38) | 05:00 07:14 (38) | 22:25 38	06:51 (38) | 06:07 07:29 (38) | 21:13	07:15 19:45	08:23 18:20	08:36 16:08	09:25 15:43
21	09:07 16:30	07:57 17:46	06:39 18:52	06:11 21:03	04:58 22:10 39	06:41 (38) | 04:27 07:20 (38) | 22:50 19	06:55 (38) | 05:02 07:14 (38) | 22:23 39	06:51 (38) | 06:09 07:30 (38) | 21:10	07:17 19:42	08:25 18:17	08:39 16:06	09:26 15:43
22	09:05 16:32	07:54 17:48	06:36 18:54	06:08 21:05	04:56 22:12 39	06:41 (38) | 04:27 07:20 (38) | 22:50 19	06:56 (38) | 05:04 07:15 (38) | 22:22 39	06:52 (38) | 06:11 07:31 (38) | 21:08	07:19 19:39	08:28 18:15	08:41 16:04	09:27 15:44
23	09:03 16:35	07:52 17:50	06:33 18:56	06:05 21:07	04:55 22:14 39	06:41 (38) | 04:28 07:20 (38) | 22:50 19	06:56 (38) | 05:06 07:15 (38) | 22:20 39	06:51 (38) | 06:13 07:30 (38) | 21:05	07:22 19:36	08:30 18:12	08:43 16:03	09:27 15:44
24	09:02 16:37	07:49 17:53	06:30 18:58	06:02 21:10	04:53 22:16 38	06:42 (38) | 04:28 07:20 (38) | 22:50 19	06:56 (38) | 05:08 07:15 (38) | 22:18 40	06:51 (38) | 06:15 07:31 (38) | 21:02	07:24 19:33	08:32 18:09	08:45 16:01	09:28 15:45
25	09:00 16:39	07:46 17:55	06:27 19:01	06:00 21:12	04:51 22:18 37	06:42 (38) | 04:28 07:19 (38) | 22:50 19	06:57 (38) | 05:10 07:16 (38) | 22:16 40	06:51 (38) | 06:18 07:31 (38) | 20:59	07:26 19:30	08:35 17:07	08:47 16:00	09:28 15:46
26	08:58 16:42	07:44 17:58	06:24 19:03	05:57 21:14	04:49 22:20 37	06:43 (38) | 04:29 07:20 (38) | 22:50 20	06:56 (38) | 05:12 07:16 (38) | 22:14 40	06:51 (38) | 06:20 07:31 (38) | 20:57	07:28 19:28	08:37 17:04	08:49 15:58	09:28 15:46
27	08:56 16:44	07:41 18:00	06:21 19:05	05:54 21:17	04:48 22:22 36	06:43 (38) | 04:29 07:19 (38) | 22:50 21	06:56 (38) | 05:14 07:17 (38) | 22:12 39	06:52 (38) | 06:22 07:31 (38) | 20:54	07:31 19:25	07:39 17:02	08:52 15:57	09:28 15:47
28	08:54 16:47	07:38 18:02	06:18 19:08	05:52 21:19	04:46 22:24 36	06:43 (38) | 04:30 07:19 (38) | 22:50 21	06:56 (38) | 05:16 07:17 (38) | 22:10 39	06:52 (38) | 06:24 07:31 (38) | 20:51	07:33 19:22	07:42 16:59	08:54 15:55	09:28 15:48
29	08:52 16:49		07:16 20:10	05:49 21:21	04:44 22:25 35	06:44 (38) | 04:31 07:19 (38) | 22:49 21	06:56 (38) | 05:18 07:17 (38) | 22:07 38	06:52 (38) | 06:27 07:30 (38) | 20:48	07:35 19:19	07:44 16:56	08:56 15:54	09:28 15:49
30	08:50 16:51		07:13 20:12	05:47 21:24	04:43 22:27 34	06:45 (38) | 04:32 07:19 (38) | 22:49 22	06:56 (38) | 05:20 07:18 (38) | 22:05 36	06:54 (38) | 06:29 07:30 (38) | 20:45	07:37 19:16	07:47 16:54	08:58 15:53	09:28 15:50
31	08:48 16:54		07:10 20:14		04:41 22:29 34	06:44 (38) | 07:18 (38) |	05:22 22:03 35	06:55 (38) | 06:31 07:30 (38) | 20:43		07:49 16:51		09:28 15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case					945	688	1047	221				
Sun reduction					0,50	0,50	0,50	0,50				
Oper. time red.					0,80	0,80	0,80	0,80				
Wind dir. red.					0,59	0,59	0,59	0,59				
Total reduction					0,24	0,24	0,24	0,24				
Total, real					224	163	248	52				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June
1	09:28	08:46		07:35		08:22 (22)	07:07	05:44	04:40
	15:53	16:56		18:05	23	08:45 (22)	20:17	21:26	22:31
2	09:28	08:44		07:33		08:21 (22)	07:04	05:41	04:39
	15:54	16:59		18:07	24	08:45 (22)	20:19	21:28	22:32
3	09:27	08:41		07:30		08:21 (22)	07:01	05:39	04:37
	15:56	17:01		18:10	24	08:45 (22)	20:21	21:31	22:34
4	09:27	08:39		07:27		08:20 (22)	06:58	05:36	04:36
	15:57	17:04		18:12	25	08:45 (22)	20:24	21:33	22:35
5	09:26	08:37		07:24		08:20 (22)	06:55	05:34	04:35
	15:59	17:06		18:14	24	08:44 (22)	20:26	21:35	22:37
6	09:25	08:35		07:22		08:20 (22)	06:53	05:31	04:34
	16:00	17:09		18:17	24	08:44 (22)	20:28	21:38	22:38
7	09:25	08:32		07:19		08:20 (22)	06:50	05:29	04:33
	16:02	17:11		18:19	23	08:43 (22)	20:31	21:40	22:39
8	09:24	08:30		07:16		08:21 (22)	06:47	05:27	04:32
	16:04	17:13		18:21	20	08:41 (22)	20:33	21:42	22:41
9	09:23	08:28	09:21 (2)	07:13		08:22 (22)	06:44	05:24	04:31
	16:05	17:16	2 09:23 (2)	18:24	19	08:41 (22)	20:35	21:44	22:42
10	09:22	08:25	09:18 (2)	07:10		08:24 (22)	06:41	05:22	04:30
	16:07	17:18	10 09:28 (2)	18:26	15	08:39 (22)	20:38	21:47	22:43
11	09:21	08:23	09:16 (2)	07:07		08:26 (22)	06:38	05:20	04:30
	16:09	17:21	13 09:29 (2)	18:28	10	08:36 (22)	20:40	21:49	22:44
12	09:20	08:20	09:14 (2)	07:05			06:36	05:17	04:29
	16:11	17:23	16 09:30 (2)	18:31			20:42	21:51	22:45
13	09:19	08:18	09:13 (2)	07:02			06:33	05:15	04:29
	16:13	17:26	17 09:30 (2)	18:33			20:44	21:53	22:46
14	09:17	08:15	09:13 (2)	06:59		07:37 (24)	06:30	05:13	04:28
	16:15	17:28	19 09:32 (2)	18:35	4	07:41 (24)	20:47	21:55	22:47
15	09:16	08:13	09:13 (2)	06:56		07:33 (24)	06:27	05:11	04:28
	16:17	17:31	19 09:32 (2)	18:38	11	07:44 (24)	20:49	21:58	22:47
16	09:15	08:10	09:12 (2)	06:53		07:31 (24)	06:24	05:08	04:27
	16:19	17:33	19 09:31 (2)	18:40	15	07:46 (24)	20:51	22:00	22:48
17	09:13	08:08	09:13 (2)	06:50		07:30 (24)	06:22	05:06	04:27
	16:21	17:36	19 09:32 (2)	18:42	16	07:46 (24)	20:54	22:02	22:49
18	09:12	08:05	09:13 (2)	06:47		07:29 (24)	06:19	05:04	04:27
	16:23	17:38	18 09:31 (2)	18:45	18	07:47 (24)	20:56	22:04	22:49
19	09:10	08:02	09:14 (2)	06:44		07:28 (24)	06:16	05:02	04:27
	16:26	17:41	16 09:30 (2)	18:47	19	07:47 (24)	20:58	22:06	22:50
20	09:09	08:00	09:14 (2)	06:42		07:27 (24)	06:13	05:00	04:27
	16:28	17:43	15 09:29 (2)	18:49	19	07:46 (24)	21:01	22:08	22:50
21	09:07	07:57	09:15 (2)	06:39		07:28 (24)	06:11	04:58	04:27
	16:30	17:46	12 09:27 (2)	18:52	19	07:47 (24)	21:03	22:10	22:50
22	09:05	07:54	09:19 (2)	06:36		07:28 (24)	06:08	04:56	04:27
	16:32	17:48	6 09:25 (2)	18:54	18	07:46 (24)	21:05	22:12	22:50
23	09:04	07:52		06:33		07:28 (24)	06:05	04:54	04:27
	16:35	17:50		18:56	17	07:45 (24)	21:08	22:14	22:51
24	09:02	07:49	08:32 (22)	06:30		07:29 (24)	06:02	04:53	04:28
	16:37	17:53	3 08:35 (22)	18:59	14	07:43 (24)	21:10	22:16	22:51
25	09:00	07:46	08:28 (22)	06:27		07:31 (24)	06:00	04:51	04:28
	16:39	17:55	12 08:40 (22)	19:01	10	07:41 (24)	21:12	22:18	22:51
26	08:58	07:44	08:25 (22)	06:24			05:57	04:49	04:29
	16:42	17:58	16 08:41 (22)	19:03			21:14	22:20	22:50
27	08:56	07:41	08:23 (22)	06:21			05:54	04:47	04:29
	16:44	18:00	19 08:42 (22)	19:05			21:17	22:22	22:50
28	08:54	07:38	08:23 (22)	06:18			05:52	04:46	04:30
	16:46	18:02	21 08:44 (22)	19:08			21:19	22:24	22:50
29	08:52			07:16			05:49	04:44	04:31
	16:49			20:10			21:21	22:26	22:50
30	08:50			07:13			05:47	04:43	04:31
	16:51			20:12			21:24	22:27	22:49
31	08:48			07:10				04:41	
	16:54			20:15				22:29	
Potential sun hours	221	260		365			432	521	547
Total, worst case			272		411				
Sun reduction			0,50		0,50				
Oper. time red.			0,80		0,80				
Wind dir. red.			0,73		0,71				
Total reduction			0,29		0,28				
Total, real			80		117				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December
1	04:32	05:24	06:33		07:40		07:52	08:47 (2)	09:00
	22:49	22:01	20:40		19:13		16:49	9 08:56 (2)	15:51
2	04:33	05:26	06:35		07:42	09:06 (22)	07:54		09:02
	22:48	21:59	20:37		19:10	6 09:12 (22)	16:46		15:50
3	04:34	05:29	06:38		07:44	09:02 (22)	07:56		09:04
	22:47	21:56	20:34		19:07	13 09:15 (22)	16:44		15:49
4	04:35	05:31	06:40		07:46	09:00 (22)	07:59		09:05
	22:47	21:54	20:31		19:05	17 09:17 (22)	16:42		15:48
5	04:36	05:33	06:42		07:48	08:58 (22)	08:01		09:07
	22:46	21:52	20:28		19:02	20 09:18 (22)	16:39		15:47
6	04:38	05:35	06:44		07:51	08:57 (22)	08:04		09:09
	22:45	21:49	20:26		18:59	22 09:19 (22)	16:37		15:46
7	04:39	05:37	06:47		07:53	08:57 (22)	08:06		09:10
	22:44	21:47	20:23		18:56	23 09:20 (22)	16:35		15:46
8	04:40	05:40	06:49		07:55	08:55 (22)	08:08		09:12
	22:43	21:44	20:20		18:53	24 09:19 (22)	16:32		15:45
9	04:41	05:42	06:51		07:58	08:55 (22)	08:11		09:14
	22:42	21:42	20:17		18:50	24 09:19 (22)	16:30		15:44
10	04:43	05:44	06:53		08:00	08:55 (22)	08:13		09:15
	22:41	21:39	20:14		18:48	24 09:19 (22)	16:28		15:44
11	04:44	05:46	06:55		08:02	08:54 (22)	08:16		09:16
	22:39	21:37	20:11		18:45	25 09:19 (22)	16:26		15:43
12	04:46	05:49	06:58		08:04	08:55 (22)	08:18		09:18
	22:38	21:34	20:08		18:42	23 09:18 (22)	16:24		15:43
13	04:48	05:51	07:00		08:07	08:55 (22)	08:20		09:19
	22:37	21:32	20:05		18:39	22 09:17 (22)	16:21		15:43
14	04:49	05:53	07:02		08:09	08:55 (22)	08:23		09:20
	22:35	21:29	20:02		18:36	21 09:16 (22)	16:19		15:42
15	04:51	05:55	07:04		08:11	08:57 (22)	08:25		09:21
	22:34	21:26	20:00		18:34	18 09:15 (22)	16:17		15:42
16	04:53	05:58	07:06		08:14	08:58 (22)	08:27		09:22
	22:32	21:24	19:57		18:31	15 09:13 (22)	16:15		15:42
17	04:54	06:00	07:09		08:16	09:01 (22)	08:30		09:23
	22:31	21:21	19:54		18:28	10 09:11 (22)	16:13		15:42
18	04:56	06:02	07:11	08:19 (24)	08:18		08:32		09:24
	22:29	21:19	19:51	9 08:28 (24)	18:25		16:11		15:42
19	04:58	06:04	07:13	08:16 (24)	08:21		08:34		09:25
	22:27	21:16	19:48	13 08:29 (24)	18:23		16:10		15:43
20	05:00	06:06	07:15	08:14 (24)	08:23	09:48 (2)	08:37		09:26
	22:25	21:13	19:45	16 08:30 (24)	18:20	9 09:57 (2)	16:08		15:43
21	05:02	06:09	07:17	08:14 (24)	08:25	09:46 (2)	08:39		09:26
	22:24	21:10	19:42	17 08:31 (24)	18:17	13 09:59 (2)	16:06		15:43
22	05:04	06:11	07:20	08:13 (24)	08:28	09:44 (2)	08:41		09:27
	22:22	21:08	19:39	18 08:31 (24)	18:15	16 10:00 (2)	16:04		15:44
23	05:06	06:13	07:22	08:12 (24)	08:30	09:44 (2)	08:43		09:27
	22:20	21:05	19:36	19 08:31 (24)	18:12	17 10:01 (2)	16:03		15:44
24	05:08	06:15	07:24	08:12 (24)	08:32	09:42 (2)	08:45		09:28
	22:18	21:02	19:33	19 08:31 (24)	18:09	19 10:01 (2)	16:01		15:45
25	05:10	06:18	07:26	08:11 (24)	07:35	08:42 (2)	08:48		09:28
	22:16	20:59	19:31	19 08:30 (24)	17:07	19 09:01 (2)	15:59		15:45
26	05:12	06:20	07:28	08:12 (24)	07:37	08:43 (2)	08:50		09:28
	22:14	20:57	19:28	17 08:29 (24)	17:04	19 09:02 (2)	15:58		15:46
27	05:14	06:22	07:31	08:13 (24)	07:40	08:42 (2)	08:52		09:28
	22:12	20:54	19:25	15 08:28 (24)	17:02	19 09:01 (2)	15:57		15:47
28	05:16	06:24	07:33	08:14 (24)	07:42	08:43 (2)	08:54		09:29
	22:10	20:51	19:22	12 08:26 (24)	16:59	18 09:01 (2)	15:55		15:48
29	05:18	06:27	07:35	08:15 (24)	07:44	08:44 (2)	08:56		09:29
	22:08	20:48	19:19	8 08:23 (24)	16:56	17 09:01 (2)	15:54		15:49
30	05:20	06:29	07:37		07:47	08:44 (2)	08:58		09:28
	22:05	20:45	19:16		16:54	15 08:59 (2)	15:53		15:50
31	05:22	06:31			07:49	08:45 (2)			09:28
	22:03	20:43			16:51	13 08:58 (2)			15:51
Potential sun hours	545	478	386		319		236		200
Total, worst case			182		501		9		
Sun reduction			0,50		0,50		0,50		
Oper. time red.			0,80		0,80		0,80		
Wind dir. red.			0,70		0,73		0,74		
Total reduction			0,28		0,29		0,29		
Total, real			51		146		3		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
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13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
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	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
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14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:06	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:35	08:24 (22)	07:07	05:44	04:40	04:32	05:24	06:33		07:40		07:52	09:00
	15:53	16:56		18:05 23	08:47 (22)	20:17	21:26	22:31	22:49	22:01	20:40		19:13		16:49	15:51
2	09:28	08:44		07:33	08:23 (22)	07:04	05:41	04:39	04:33	05:26	06:35		07:42		07:54	09:02
	15:54	16:59		18:07 24	08:47 (22)	20:19	21:28	22:32	22:48	21:59	20:37		19:10		16:46	15:50
3	09:27	08:41		07:30	08:23 (22)	07:01	05:39	04:37	04:34	05:29	06:38		07:44		07:56	09:04
	15:56	17:01		18:10 24	08:47 (22)	20:21	21:31	22:34	22:47	21:56	20:34		19:07		16:44	15:49
4	09:27	08:39		07:27	08:23 (22)	06:58	05:36	04:36	04:35	05:31	06:40		07:46	09:05 (22)	07:59	09:05
	15:57	17:04		18:12 23	08:46 (22)	20:24	21:33	22:35	22:47	21:54	20:31		19:05 11	09:16 (22)	16:42	15:48
5	09:26	08:37		07:24	08:23 (22)	06:55	05:34	04:35	04:36	05:33	06:42		07:48	09:02 (22)	08:01	09:07
	15:59	17:06		18:14 22	08:45 (22)	20:26	21:35	22:37	22:46	21:52	20:28		19:02 16	09:18 (22)	16:39	15:47
6	09:25	08:35		07:22	08:23 (22)	06:53	05:31	04:34	04:38	05:35	06:44		07:51	09:00 (22)	08:04	09:09
	16:00	17:09		18:17 22	08:45 (22)	20:28	21:38	22:38	22:45	21:49	20:26		18:59 19	09:19 (22)	16:37	15:46
7	09:25	08:32		07:19	08:24 (22)	06:50	05:29	04:33	04:39	05:37	06:47		07:53	09:00 (22)	08:06	09:10
	16:02	17:11		18:19 19	08:43 (22)	20:31	21:40	22:39	22:44	21:47	20:23		18:56 20	09:20 (22)	16:35	15:46
8	09:24	08:30		07:16	08:24 (22)	06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:58 (22)	08:08	09:12
	16:04	17:13		18:21 18	08:42 (22)	20:33	21:42	22:41	22:43	21:44	20:20		18:53 23	09:21 (22)	16:32	15:45
9	09:23	08:28		07:13	08:27 (22)	06:44	05:24	04:31	04:41	05:42	06:51		07:58	08:57 (22)	08:11	09:14
	16:05	17:16		18:24 13	08:40 (22)	20:35	21:44	22:42	22:42	21:42	20:17		18:50 23	09:20 (22)	16:30	15:44
10	09:22	08:25		07:10	08:30 (22)	06:41	05:22	04:30	04:43	05:44	06:53		08:00	08:57 (22)	08:13	09:15
	16:07	17:18		18:26 7	08:37 (22)	20:38	21:47	22:43	22:41	21:39	20:14		18:48 24	09:21 (22)	16:28	15:44
11	09:21	08:23		07:07		06:38	05:20	04:30	04:44	05:46	06:55		08:02	08:57 (22)	08:16	09:16
	16:09	17:21		18:28		20:40	21:49	22:44	22:39	21:37	20:11		18:45 23	09:20 (22)	16:26	15:43
12	09:20	08:20		07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:04	08:57 (22)	08:18	09:18
	16:11	17:23		18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42 24	09:21 (22)	16:24	15:43
13	09:19	08:18		07:02	07:40 (24)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:57 (22)	08:20	09:19
	16:13	17:26		18:33 5	07:45 (24)	20:44	21:53	22:46	22:37	21:32	20:05		18:39 23	09:20 (22)	16:21	15:43
14	09:17	08:15		06:59	07:36 (24)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:57 (22)	08:23	09:20
	16:15	17:28		18:35 11	07:47 (24)	20:47	21:55	22:47	22:35	21:29	20:02		18:36 21	09:18 (22)	16:19	15:42
15	09:16	08:13		06:56	07:34 (24)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:58 (22)	08:25	09:21
	16:17	17:31		18:38 15	07:49 (24)	20:49	21:58	22:47	22:34	21:26	20:00		18:34 20	09:18 (22)	16:17	15:42
16	09:15	08:10		06:53	07:33 (24)	06:24	05:08	04:27	04:53	05:58	07:06		08:14	08:58 (22)	08:27	09:22
	16:19	17:33		18:40 16	07:49 (24)	20:51	22:00	22:48	22:32	21:24	19:57		18:31 18	09:16 (22)	16:15	15:42
17	09:13	08:08		06:50	07:32 (24)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	09:00 (22)	08:30	09:23
	16:21	17:36		18:42 18	07:50 (24)	20:54	22:02	22:49	22:31	21:21	19:54		18:28 15	09:15 (22)	16:13	15:42
18	09:12	08:05		06:47	07:31 (24)	06:19	05:04	04:27	04:56	06:02	07:11		08:18	09:02 (22)	08:32	09:24
	16:23	17:38		18:45 19	07:50 (24)	20:56	22:04	22:49	22:29	21:19	19:51		18:25 10	09:12 (22)	16:11	15:42
19	09:10	08:02		06:44	07:31 (24)	06:16	05:02	04:27	04:58	06:04	07:13	08:22 (24)	08:21		08:34	09:25
	16:26	17:41		18:47 18	07:49 (24)	20:58	22:06	22:50	22:27	21:16	19:48 7	08:29 (24)	18:23		16:10	15:43
20	09:09	08:00		06:42	07:30 (24)	06:13	05:00	04:27	05:00	06:06	07:15	08:19 (24)	08:23		08:37	09:26
	16:28	17:43		18:49 19	07:49 (24)	21:01	22:08	22:50	22:25	21:13	19:45 12	08:31 (24)	18:20		16:08	15:43
21	09:07	07:57		06:39	07:32 (24)	06:11	04:58	04:27	05:02	06:09	07:17	08:18 (24)	08:25		08:39	09:26
	16:30	17:46		18:52 17	07:49 (24)	21:03	22:10	22:50	22:24	21:10	19:42 15	08:33 (24)	18:17		16:06	15:43
22	09:05	07:54		06:36	07:32 (24)	06:08	04:56	04:27	05:04	06:11	07:20	08:16 (24)	08:28		08:41	09:27
	16:32	17:48		18:54 15	07:47 (24)	21:05	22:12	22:50	22:22	21:08	19:39 17	08:33 (24)	18:15		16:04	15:44
23	09:04	07:52		06:33	07:33 (24)	06:05	04:54	04:27	05:06	06:13	07:22	08:15 (24)	08:30		08:43	09:27
	16:35	17:50		18:56 13	07:46 (24)	21:08	22:14	22:51	22:20	21:05	19:36 18	08:33 (24)	18:12		16:03	15:44
24	09:02	07:49	08:30 (22)	06:30	07:35 (24)	06:02	04:53	04:28	05:08	06:15	07:24	08:14 (24)	08:32		08:45	09:28
	16:37	17:53 12	08:42 (22)	18:59 8	07:43 (24)	21:10	22:16	22:51	22:18	21:02	19:33 19	08:33 (24)	18:09		16:01	15:45
25	09:00	07:46	08:28 (22)	06:27		06:00	04:51	04:28	05:10	06:18	07:26	08:14 (24)	07:35		08:48	09:28
	16:39	17:55 15	08:43 (22)	19:01		21:12	22:18	22:51	22:16	20:59	19:31 18	08:32 (24)	17:07		15:59	15:45
26	08:58	07:44	08:26 (22)	06:24		05:57	04:49	04:29	05:12	06:20	07:28	08:14 (24)	07:37		08:50	09:28
	16:42	17:58 19	08:45 (22)	19:03		21:14	22:20	22:50	22:14	20:57	19:28 19	08:33 (24)	17:04		15:58	15:46
27	08:56	07:41	08:25 (22)	06:21		05:54	04:47	04:29	05:14	06:22	07:31	08:14 (24)	07:40		08:52	09:28
	16:44	18:00 20	08:45 (22)	19:05		21:17	22:22	22:50	22:12	20:54	19:25 18	08:32 (24)	17:02		15:57	15:47
28	08:54	07:38	08:25 (22)	06:18		05:52	04:46	04:30	05:16	06:24	07:33	08:15 (24)	07:42		08:54	09:29
	16:46	18:02 22	08:47 (22)	19:08		21:19	22:24	22:50	22:10	20:51	19:22 15	08:30 (24)	16:59		15:55	15:48
29	08:52			07:16		05:49	04:44	04:31	05:18	06:27	07:35	08:15 (24)	07:44		08:56	09:29
	16:49			20:10		21:21	22:26	22:50	22:08	20:48	19:19 13	08:28 (24)	16:56		15:54	15:49
30	08:50			07:13		05:47	04:43	04:31	05:20	06:29	07:37	08:18 (24)	07:47		08:58	09:28
	16:51			20:12		21:24	22:27	22:49	22:05	20:45	19:16 8	08:26 (24)	16:54		15:53	15:50
31	08:48			07:10			04:41		05:22	06:31			07:49			09:28
	16:54			20:15			22:29		22:03	20:43			16:51			15:51
Potential sun hours	221	260		365		432	521	547	545	478	386		319		236	200
Total, worst case			88		369							179		290		
Sun reduction			0,50		0,50							0,50		0,50		
Oper. time red.			0,80		0,80							0,80		0,80		
Wind dir. red.			0,73		0,71							0,70		0,73		
Total reduction			0,29		0,29							0,28		0,29		
Total, real			26		105							50		84		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
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	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
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	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
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	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
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24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
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31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:52
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
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	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
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11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
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	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
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	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
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19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
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	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
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9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
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16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
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	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:

19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April	May	June	July	August	September	October		November	December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54	09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56	09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59	09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:49		08:01	09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39	15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:38	05:35	06:44	07:51		08:04	09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37	15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06	09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35	15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08	09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32	15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11	09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	15:44
10	09:22	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13	09:15
	16:07	17:18		18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28	15:44
11	09:21	08:23	09:07 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16	09:16
	16:09	17:21	7 09:14 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26	15:43
12	09:20	08:20	09:04 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18	09:18
	16:11	17:23	12 09:16 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24	15:43
13	09:19	08:18	09:03 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20	09:19
	16:13	17:26	16 09:19 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21	15:43
14	09:17	08:15	09:02 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23	09:20
	16:15	17:28	17 09:19 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19	15:42
15	09:16	08:13	09:01 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25	09:21
	16:17	17:31	19 09:20 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17	15:42
16	09:15	08:10	09:00 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27	09:22
	16:19	17:33	20 09:20 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15	15:42
17	09:13	08:08	09:01 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30	09:23
	16:21	17:36	20 09:21 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13	15:42
18	09:12	08:05	09:00 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:36 (22)	08:32	09:24
	16:23	17:38	21 09:21 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	10 09:46 (22)	16:11	15:42
19	09:10	08:02	09:00 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:34 (22)	08:34	09:25
	16:26	17:41	20 09:20 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	14 09:48 (22)	16:10	15:42
20	09:09	08:00	09:00 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:32 (22)	08:37	09:26
	16:28	17:43	19 09:19 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	17 09:49 (22)	16:08	15:43
21	09:07	07:57	09:01 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:32 (22)	08:39	09:26
	16:30	17:46	17 09:18 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:50 (22)	16:06	15:43
22	09:05	07:55	09:02 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:30 (22)	08:41	09:27
	16:32	17:48	16 09:18 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	20 09:50 (22)	16:04	15:44
23	09:04	07:52	09:04 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:30 (22)	08:43	09:27
	16:35	17:50	12 09:16 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:50 (22)	16:03	15:44
24	09:02	07:49	09:06 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:31 (22)	08:45	09:28
	16:37	17:53	7 09:13 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	20 09:51 (22)	16:01	15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:30 (22)	08:48	09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	20 08:50 (22)	15:59	15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:31 (22)	08:50	09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	19 08:50 (22)	15:58	15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:30 (22)	08:52	09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	19 08:49 (22)	15:57	15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:31 (22)	08:54	09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	17 08:48 (22)	15:55	15:48
29	08:52			07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:33 (22)	08:56	09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15 08:48 (22)	15:54	15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:34 (22)	08:58	09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	11 08:45 (22)	15:53	15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:37 (22)		09:28
	16:54			20:15		22:29		22:03	20:43		16:51	6 08:43 (22)		15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236	199
Total, worst case			223									226		
Sun reduction			0,50									0,50		
Oper. time red.			0,80									0,80		
Wind dir. red.			0,74									0,74		
Total reduction			0,29									0,29		
Total, real			66									67		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June	July	August	September	October		November		December
1	09:28	08:46		09:41 (22)		08:28 (24)	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:52		09:00 (22)	09:00
	15:53	16:56	3	09:44 (22)	19	08:47 (24)	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	24	09:24 (22)	15:51
2	09:28	08:44		09:37 (22)		08:27 (24)	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54		09:01 (22)	09:02
	15:54	16:59	10	09:47 (22)	20	08:47 (24)	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	23	09:24 (22)	15:50
3	09:27	08:41		09:35 (22)		08:27 (24)	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56		09:01 (22)	09:04
	15:56	17:01	15	09:50 (22)	20	08:47 (24)	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	23	09:24 (22)	15:49
4	09:27	08:39		09:34 (22)		08:27 (24)	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59		09:02 (22)	09:05
	15:57	17:04	17	09:51 (22)	19	08:46 (24)	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	22	09:24 (22)	15:48
5	09:26	08:37		09:33 (22)		08:28 (24)	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		09:02 (22)	09:07
	15:59	17:06	20	09:53 (22)	17	08:45 (24)	20:26	21:35	22:37	22:46	21:52	20:28	19:02	3	09:14 (24)	21	09:23 (22)	15:47
6	09:25	08:35		09:32 (22)		08:28 (24)	06:53	05:31	04:34	04:37	05:35	06:44	07:51		09:06 (24)		09:03 (22)	09:09
	16:00	17:08	21	09:53 (22)	16	08:44 (24)	20:28	21:38	22:38	22:45	21:49	20:26	18:59	11	09:17 (24)	19	09:22 (22)	15:46
7	09:25	08:32		09:31 (22)		08:29 (24)	06:50	05:29	04:33	04:39	05:37	06:47	07:53		09:05 (24)		09:05 (22)	09:10
	16:02	17:11	22	09:53 (22)	13	08:42 (24)	20:31	21:40	22:39	22:44	21:47	20:23	18:56	15	09:20 (24)	17	09:22 (22)	15:46
8	09:24	08:30		09:32 (22)		08:31 (24)	06:47	05:27	04:32	04:40	05:40	06:49	07:55		09:03 (24)		09:05 (22)	09:12
	16:04	17:13	22	09:54 (22)	8	08:39 (24)	20:33	21:42	22:41	22:43	21:44	20:20	18:53	17	09:20 (24)	15	09:20 (22)	15:45
9	09:23	08:28		09:31 (22)			06:44	05:24	04:31	04:41	05:42	06:51	07:58		09:02 (24)		09:08 (22)	09:14
	16:05	17:16	23	09:54 (22)			20:35	21:44	22:42	22:42	21:42	20:17	18:50	18	09:20 (24)	10	09:18 (22)	15:44
10	09:22	08:25		09:32 (22)			06:41	05:22	04:30	04:43	05:44	06:53	08:00		09:02 (24)		09:13 (22)	09:15
	16:07	17:18	23	09:55 (22)			20:38	21:47	22:43	22:41	21:39	20:14	18:48	19	09:21 (24)	1	09:14 (22)	15:44
11	09:21	08:23		09:31 (22)			06:38	05:20	04:30	04:44	05:46	06:55	08:02		09:01 (24)			09:16
	16:09	17:21	24	09:55 (22)			20:40	21:49	22:44	22:39	21:37	20:11	18:45	20	09:21 (24)			15:43
12	09:20	08:20		09:31 (22)			06:36	05:17	04:29	04:46	05:49	06:58	08:04		09:01 (24)			09:18
	16:11	17:23	23	09:54 (22)			20:42	21:51	22:45	22:38	21:34	20:08	18:42	20	09:21 (24)			15:43
13	09:19	08:18		09:31 (22)			06:33	05:15	04:28	04:47	05:51	07:00	08:07		09:01 (24)			09:19
	16:13	17:26	23	09:54 (22)			20:44	21:53	22:46	22:37	21:32	20:05	18:39	19	09:20 (24)			15:43
14	09:17	08:15		09:33 (22)			06:30	05:13	04:28	04:49	05:53	07:02	08:09		09:01 (24)			09:20
	16:15	17:28	21	09:54 (22)			20:47	21:55	22:47	22:35	21:29	20:02	18:36	18	09:19 (24)			15:42
15	09:16	08:13		09:33 (22)			06:27	05:11	04:28	04:51	05:55	07:04	08:11		09:02 (24)			09:21
	16:17	17:31	20	09:53 (22)			20:49	21:58	22:47	22:34	21:26	20:00	18:34	16	09:18 (24)			15:42
16	09:15	08:10		09:34 (22)			06:24	05:08	04:27	04:53	05:57	07:06	08:14		09:03 (24)			09:22
	16:19	17:33	17	09:51 (22)			20:51	22:00	22:48	22:32	21:24	19:57	18:31	13	09:16 (24)			15:42
17	09:13	08:08		09:36 (22)			06:22	05:06	04:27	04:54	06:00	07:09	08:16		09:05 (24)			09:23
	16:21	17:36	14	09:50 (22)			20:54	22:02	22:49	22:31	21:21	19:54	18:28	10	09:15 (24)			15:42
18	09:12	08:05		09:39 (22)			06:19	05:04	04:27	04:56	06:02	07:11	08:18					09:24
	16:23	17:38	8	09:47 (22)			20:56	22:04	22:49	22:29	21:19	19:51	18:25					15:42
19	09:10	08:02			06:44		06:16	05:02	04:27	04:58	06:04	07:13	08:21					09:25
	16:26	17:41			18:47		20:58	22:06	22:50	22:27	21:16	19:48	18:23					15:42
20	09:09	08:00			06:42		06:13	05:00	04:27	05:00	06:06	07:15	08:23					09:26
	16:28	17:43			18:49		21:01	22:08	22:50	22:25	21:13	19:45	18:20					15:43
21	09:07	07:57			06:39		06:10	04:58	04:27	05:02	06:09	07:17	08:25					09:26
	16:30	17:45			18:52		21:03	22:10	22:50	22:24	21:10	19:42	18:17					15:43
22	09:05	07:54			06:36		06:08	04:56	04:27	05:04	06:11	07:20	08:28					09:27
	16:32	17:48			18:54		21:05	22:12	22:51	22:22	21:08	19:39	18:15					15:44
23	09:04	07:52			06:33		06:05	04:54	04:27	05:06	06:13	07:22	08:30					09:27
	16:35	17:50			18:56		21:08	22:14	22:51	22:20	21:05	19:36	18:12					15:44
24	09:02	07:49		08:36 (24)	06:30		06:02	04:53	04:28	05:08	06:15	07:24	08:32		10:07 (22)		08:45	09:28
	16:37	17:53	5	08:41 (24)	18:59		21:10	22:16	22:51	22:18	21:02	19:33	18:09	10	10:17 (22)		16:01	15:45
25	09:00	07:46		08:32 (24)	06:27		06:00	04:51	04:28	05:10	06:18	07:26	07:35		09:05 (22)		08:48	09:28
	16:39	17:55	12	08:44 (24)	19:01		21:12	22:18	22:51	22:16	20:59	19:30	17:07	15	09:20 (22)		15:59	15:45
26	08:58	07:44		08:30 (24)	06:24		05:57	04:49	04:29	05:12	06:20	07:28	07:37		09:04 (22)		08:50	09:28
	16:42	17:58	15	08:45 (24)	19:03		21:14	22:20	22:51	22:14	20:57	19:28	17:04	18	09:22 (22)		15:58	15:46
27	08:56	07:41		08:29 (24)	06:21		05:54	04:47	04:29	05:14	06:22	07:31	07:40		09:02 (22)		08:52	09:28
	16:44	18:00	17	08:46 (24)	19:05		21:17	22:22	22:50	22:12	20:54	19:25	17:02	20	09:22 (22)		15:56	15:47
28	08:54	07:38		08:29 (24)	06:18		05:52	04:46	04:30	05:16	06:24	07:33	07:42		09:02 (22)		08:54	09:29
	16:46	18:02	18	08:47 (24)	19:08		21:19	22:24	22:50	22:10	20:51	19:22	16:59	21	09:23 (22)		15:55	15:48
29	08:52				07:16		05:49	04:44	04:30	05:18	06:27	07:35	07:44		09:02 (22)		08:56	09:29
	16:49				20:10		21:21	22:26	22:50	22:08	20:48	19:19	16:56	22	09:24 (22)		15:54	15:49
30	08:50				07:13		05:47	04:43	04:31	05:20	06:29	07:37	07:47		09:01 (22)		08:58	09:28
	16:51				20:12		21:24	22:27	22:49	22:05	20:45	19:16	16:54	23	09:24 (22)		15:53	15:50
31	08:48				07:10			04:41		05:22	06:31		07:49		09:01 (22)			09:28
	16:54				20:15			22:29		22:03	20:43		16:51	23	09:24 (22)			15:51
Potential sun hours	221	260			365		432	521	547	546	478	386	319			236		199
Total, worst case			393		132									351		175		
Sun reduction			0,50		0,50									0,50		0,50		
Oper. time red.			0,80		0,80									0,80		0,80		
Wind dir. red.			0,73		0,73									0,73		0,73		
Total reduction			0,29		0,29									0,29		0,29		
Total, real			114		38									102		51		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		09:41 (22)	07:35		08:31 (24)	07:07	05:44	04:40
	15:53			16:56	14	09:55 (22)	18:05	20	08:51 (24)	20:17	21:26	22:31
2	09:28			08:44		09:40 (22)	07:33		08:31 (24)	07:04	05:41	04:39
	15:54			16:59	16	09:56 (22)	18:07	20	08:51 (24)	20:19	21:28	22:32
3	09:27			08:41		09:39 (22)	07:30		08:31 (24)	07:01	05:39	04:37
	15:56			17:01	19	09:58 (22)	18:10	19	08:50 (24)	20:21	21:31	22:34
4	09:27			08:39		09:38 (22)	07:27		08:31 (24)	06:58	05:36	04:36
	15:57			17:04	20	09:58 (22)	18:12	19	08:50 (24)	20:24	21:33	22:35
5	09:26			08:37		09:38 (22)	07:24		08:32 (24)	06:55	05:34	04:35
	15:59			17:06	22	10:00 (22)	18:14	16	08:48 (24)	20:26	21:35	22:37
6	09:25			08:35		09:37 (22)	07:22		08:33 (24)	06:53	05:31	04:34
	16:00			17:08	23	10:00 (22)	18:17	14	08:47 (24)	20:28	21:38	22:38
7	09:25			08:32		09:36 (22)	07:19		08:35 (24)	06:50	05:29	04:33
	16:02			17:11	24	10:00 (22)	18:19	9	08:44 (24)	20:31	21:40	22:39
8	09:24			08:30		09:37 (22)	07:16			06:47	05:27	04:32
	16:04			17:13	24	10:01 (22)	18:21			20:33	21:42	22:41
9	09:23			08:28		09:36 (22)	07:13			06:44	05:24	04:31
	16:05			17:16	24	10:00 (22)	18:24			20:35	21:44	22:42
10	09:22			08:25		09:37 (22)	07:10			06:41	05:22	04:30
	16:07			17:18	24	10:01 (22)	18:26			20:38	21:47	22:43
11	09:21			08:23		09:37 (22)	07:07			06:38	05:20	04:30
	16:09			17:21	23	10:00 (22)	18:28			20:40	21:49	22:44
12	09:20			08:20		09:37 (22)	07:05			06:36	05:17	04:29
	16:11			17:23	23	10:00 (22)	18:31			20:42	21:51	22:45
13	09:19			08:18		09:38 (22)	07:02			06:33	05:15	04:28
	16:13			17:26	21	09:59 (22)	18:33			20:44	21:53	22:46
14	09:17			08:15		09:39 (22)	06:59			06:30	05:13	04:28
	16:15			17:28	20	09:59 (22)	18:35			20:47	21:55	22:47
15	09:16			08:13		09:40 (22)	06:56			06:27	05:11	04:28
	16:17			17:31	17	09:57 (22)	18:38			20:49	21:58	22:47
16	09:15			08:10		09:42 (22)	06:53			06:24	05:08	04:27
	16:19			17:33	13	09:55 (22)	18:40			20:51	22:00	22:48
17	09:13			08:08		09:45 (22)	06:50			06:21	05:06	04:27
	16:21			17:36	8	09:53 (22)	18:42			20:54	22:02	22:49
18	09:12			08:05			06:47			06:19	05:04	04:27
	16:23			17:38			18:45			20:56	22:04	22:49
19	09:10			08:02			06:44			06:16	05:02	04:27
	16:26			17:41			18:47			20:58	22:06	22:50
20	09:09			08:00			06:42			06:13	05:00	04:27
	16:28			17:43			18:49			21:01	22:08	22:50
21	09:07			07:57			06:39			06:10	04:58	04:27
	16:30			17:45			18:52			21:03	22:10	22:50
22	09:05			07:54			06:36			06:08	04:56	04:27
	16:32			17:48			18:54			21:05	22:12	22:51
23	09:04			07:52		08:40 (24)	06:33			06:05	04:54	04:27
	16:35			17:50	5	08:45 (24)	18:56			21:08	22:14	22:51
24	09:02			07:49		08:36 (24)	06:30			06:02	04:53	04:28
	16:37			17:53	12	08:48 (24)	18:59			21:10	22:16	22:51
25	09:00			07:46		08:34 (24)	06:27			06:00	04:51	04:28
	16:39			17:55	15	08:49 (24)	19:01			21:12	22:18	22:51
26	08:58			07:44		08:33 (24)	06:24			05:57	04:49	04:29
	16:42			17:58	17	08:50 (24)	19:03			21:14	22:20	22:51
27	08:56			07:41		08:32 (24)	06:21			05:54	04:47	04:29
	16:44			18:00	18	08:50 (24)	19:05			21:17	22:22	22:50
28	08:54			07:38		08:32 (24)	06:18			05:52	04:46	04:30
	16:46			18:02	19	08:51 (24)	19:08			21:19	22:24	22:50
29	08:52						07:16			05:49	04:44	04:30
	16:49						20:10			21:21	22:26	22:50
30	08:50						07:13			05:47	04:43	04:31
	16:51						20:12			21:24	22:27	22:49
31	08:48		09:43 (22)				07:10				04:41	
	16:54	9	09:52 (22)				20:15				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		9			421			117				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,72			0,73			0,73				
Total reduction		0,29			0,29			0,29				
Total, real		3			122			34				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		09:06 (22)	09:00
	22:49	22:01	20:40	19:13			16:49	24	09:30 (22)	15:51
2	04:33	05:26	06:35	07:42			07:54		09:06 (22)	09:02
	22:48	21:59	20:37	19:10			16:46	24	09:30 (22)	15:50
3	04:34	05:29	06:38	07:44			07:56		09:06 (22)	09:04
	22:47	21:56	20:34	19:07			16:44	24	09:30 (22)	15:49
4	04:35	05:31	06:40	07:46			07:59		09:07 (22)	09:05
	22:47	21:54	20:31	19:05			16:42	23	09:30 (22)	15:48
5	04:36	05:33	06:42	07:48			08:01		09:07 (22)	09:07
	22:46	21:52	20:28	19:02			16:39	22	09:29 (22)	15:47
6	04:37	05:35	06:44	07:51		09:12 (24)	08:04		09:08 (22)	09:09
	22:45	21:49	20:26	18:59	7	09:19 (24)	16:37	21	09:29 (22)	15:46
7	04:39	05:37	06:47	07:53		09:10 (24)	08:06		09:09 (22)	09:10
	22:44	21:47	20:23	18:56	12	09:22 (24)	16:35	20	09:29 (22)	15:46
8	04:40	05:40	06:49	07:55		09:08 (24)	08:08		09:09 (22)	09:12
	22:43	21:44	20:20	18:53	15	09:23 (24)	16:32	18	09:27 (22)	15:45
9	04:41	05:42	06:51	07:58		09:06 (24)	08:11		09:10 (22)	09:14
	22:42	21:42	20:17	18:50	18	09:24 (24)	16:30	17	09:27 (22)	15:44
10	04:43	05:44	06:53	08:00		09:06 (24)	08:13		09:12 (22)	09:15
	22:41	21:39	20:14	18:48	19	09:25 (24)	16:28	13	09:25 (22)	15:44
11	04:44	05:46	06:55	08:02		09:05 (24)	08:16		09:14 (22)	09:16
	22:39	21:37	20:11	18:45	19	09:24 (24)	16:26	9	09:23 (22)	15:43
12	04:46	05:49	06:58	08:04		09:05 (24)	08:18			09:18
	22:38	21:34	20:08	18:42	20	09:25 (24)	16:24			15:43
13	04:47	05:51	07:00	08:07		09:04 (24)	08:20			09:19
	22:37	21:32	20:05	18:39	20	09:24 (24)	16:21			15:43
14	04:49	05:53	07:02	08:09		09:04 (24)	08:23			09:20
	22:35	21:29	20:02	18:36	19	09:23 (24)	16:19			15:42
15	04:51	05:55	07:04	08:11		09:05 (24)	08:25			09:21
	22:34	21:26	20:00	18:34	18	09:23 (24)	16:17			15:42
16	04:53	05:57	07:06	08:14		09:05 (24)	08:27			09:22
	22:32	21:24	19:57	18:31	16	09:21 (24)	16:15			15:42
17	04:54	06:00	07:09	08:16		09:07 (24)	08:30			09:23
	22:31	21:21	19:54	18:28	14	09:21 (24)	16:13			15:42
18	04:56	06:02	07:11	08:18		09:08 (24)	08:32			09:24
	22:29	21:19	19:51	18:25	10	09:18 (24)	16:11			15:42
19	04:58	06:04	07:13	08:21			08:34			09:25
	22:27	21:16	19:48	18:23			16:10			15:42
20	05:00	06:06	07:15	08:23			08:37			09:26
	22:25	21:13	19:45	18:20			16:08			15:43
21	05:02	06:09	07:17	08:25			08:39			09:26
	22:24	21:10	19:42	18:17			16:06			15:43
22	05:04	06:11	07:20	08:28			08:41			09:27
	22:22	21:08	19:39	18:15			16:04			15:44
23	05:06	06:13	07:22	08:30			08:43			09:27
	22:20	21:05	19:36	18:12			16:03			15:44
24	05:08	06:15	07:24	08:32			08:45			09:28
	22:18	21:02	19:33	18:09			16:01			15:45
25	05:10	06:18	07:26	07:35		09:13 (22)	08:48			09:28
	22:16	20:59	19:30	17:07	10	09:23 (22)	15:59			15:45
26	05:12	06:20	07:28	07:37		09:11 (22)	08:50			09:28
	22:14	20:57	19:28	17:04	15	09:26 (22)	15:58			15:46
27	05:14	06:22	07:31	07:40		09:09 (22)	08:52			09:28
	22:12	20:54	19:25	17:01	18	09:27 (22)	15:56			15:47
28	05:16	06:24	07:33	07:42		09:08 (22)	08:54			09:29
	22:10	20:51	19:22	16:59	20	09:28 (22)	15:55			15:48
29	05:18	06:27	07:35	07:44		09:08 (22)	08:56			09:29
	22:08	20:48	19:19	16:56	21	09:29 (22)	15:54			15:49
30	05:20	06:29	07:37	07:47		09:07 (22)	08:58			09:28
	22:05	20:45	19:16	16:54	22	09:29 (22)	15:53			15:50
31	05:22	06:31		07:49		09:07 (22)				09:28
	22:03	20:43		16:51	23	09:30 (22)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					336			215		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,73			0,72		
Total reduction					0,29			0,29		
Total, real					98			62		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
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13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April	May	June	July	August	September	October		November		December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	08:41 (22)	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	7 08:48 (22)	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54		09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46		15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56		09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44		15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59		09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42		15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39		15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:37	05:35	06:44	07:51		08:04		09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37		15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06		09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35		15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08		09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32		15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11		09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30		15:44
10	09:22	08:25	09:11 (22)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13		09:15
	16:07	17:18	8 09:19 (22)	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28		15:44
11	09:21	08:23	09:09 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16		09:16
	16:09	17:21	12 09:21 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26		15:43
12	09:20	08:20	09:07 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18		09:18
	16:11	17:23	15 09:22 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24		15:43
13	09:19	08:18	09:06 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20		09:19
	16:13	17:26	18 09:24 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21		15:43
14	09:17	08:15	09:05 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23		09:20
	16:15	17:28	20 09:25 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19		15:42
15	09:16	08:13	09:05 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25		09:21
	16:17	17:31	20 09:25 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17		15:42
16	09:15	08:10	09:04 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27		09:22
	16:19	17:33	21 09:25 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15		15:42
17	09:13	08:08	09:05 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30		09:23
	16:21	17:36	21 09:26 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13		15:42
18	09:12	08:05	09:05 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:42 (22)	08:32		09:24
	16:23	17:38	20 09:25 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	7 09:49 (22)	16:11		15:42
19	09:10	08:02	09:05 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:39 (22)	08:34		09:25
	16:26	17:41	20 09:25 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	13 09:52 (22)	16:10		15:42
20	09:09	08:00	09:05 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:37 (22)	08:37		09:26
	16:28	17:43	19 09:24 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16 09:53 (22)	16:08		15:43
21	09:07	07:57	09:05 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:36 (22)	08:39		09:26
	16:30	17:46	18 09:23 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:54 (22)	16:06		15:43
22	09:05	07:54	09:07 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:35 (22)	08:41		09:27
	16:32	17:48	15 09:22 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	19 09:54 (22)	16:04		15:44
23	09:04	07:52	09:09 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:35 (22)	08:43		09:27
	16:35	17:50	11 09:20 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:55 (22)	16:03		15:44
24	09:02	07:49	09:13 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:34 (22)	08:45		09:28
	16:37	17:53	3 09:16 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	21 09:55 (22)	16:01		15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:34 (22)	08:48		09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	21 08:55 (22)	15:59		15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:34 (22)	08:50		09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	21 08:55 (22)	15:58		15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:34 (22)	08:52		09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	20 08:54 (22)	15:57		15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:35 (22)	08:54		09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	19 08:54 (22)	15:55		15:48
29	08:52			07:16	05:49	04:44	04:30	05:18	06:27	07:35	07:44	08:36 (22)	08:56		09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	17 08:53 (22)	15:54		15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:36 (22)	08:58		09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	16 08:52 (22)	15:53		15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:38 (22)			09:28
	16:54			20:15		22:29		22:03	20:43		16:51	12 08:50 (22)			15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236		199
Total, worst case			241									240		7	
Sun reduction			0,50									0,50		0,50	
Oper. time red.			0,80									0,80		0,80	
Wind dir. red.			0,74									0,74		0,74	
Total reduction			0,29									0,29		0,29	
Total, real			71									71		2	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:21 (24)	08:46	10:00 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:36 (28)	09:00	10:51 (23)	
	15:53	20 12:41 (24)	16:56	20 10:20 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6 09:42 (28)	15:51	28 12:23 (24)	
2	09:28	12:22 (24)	08:44	09:59 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54	09:34 (28)	09:02	10:51 (23)	
	15:54	19 12:41 (24)	16:58	21 10:20 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11 09:45 (28)	15:50	30 12:24 (24)	
3	09:27	12:22 (24)	08:41	10:00 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56	09:33 (28)	09:04	10:52 (23)	
	15:55	19 12:41 (24)	17:01	20 10:20 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14 09:47 (28)	15:49	29 12:25 (24)	
4	09:27	11:12 (23)	08:39	10:00 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:31 (28)	09:05	10:53 (23)	
	15:57	22 12:41 (24)	17:03	20 10:20 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17 09:48 (28)	15:48	30 12:26 (24)	
5	09:26	11:11 (23)	08:37	10:01 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	09:31 (28)	09:07	10:54 (23)	
	15:58	26 12:42 (24)	17:06	19 10:20 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18 09:49 (28)	15:47	29 12:27 (24)	
6	09:25	11:10 (23)	08:35	10:01 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:30 (28)	09:09	10:56 (23)	
	16:00	28 12:42 (24)	17:08	18 10:19 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20 09:50 (28)	15:46	28 12:28 (24)	
7	09:25	11:09 (23)	08:32	10:01 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:30 (28)	09:10	10:58 (23)	
	16:02	29 12:42 (24)	17:11	17 10:18 (28)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20 09:50 (28)	15:45	26 12:29 (24)	
8	09:24	11:09 (23)	08:30	10:03 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:30 (28)	09:12	11:00 (23)	
	16:03	30 12:42 (24)	17:13	15 10:18 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20 09:50 (28)	15:45	23 12:30 (24)	
9	09:23	11:09 (23)	08:27	10:04 (28)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:30 (28)	09:13	12:11 (24)	
	16:05	30 12:42 (24)	17:16	12 10:16 (28)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20 09:50 (28)	15:44	19 12:30 (24)	
10	09:22	11:08 (23)	08:25	10:07 (28)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:31 (28)	09:15	12:11 (24)	
	16:07	30 12:41 (24)	17:18	5 10:12 (28)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20 09:51 (28)	15:44	19 12:30 (24)	
11	09:21	11:09 (23)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:30 (28)	09:16	12:11 (24)	
	16:09	28 12:41 (24)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20 09:50 (28)	15:43	20 12:31 (24)	
12	09:20	11:08 (23)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:31 (28)	09:18	12:11 (24)	
	16:11	27 12:40 (24)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27 10:58 (23)	15:43	20 12:31 (24)	
13	09:19	11:08 (23)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:32 (28)	09:19	12:12 (24)	
	16:13	25 12:39 (24)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31 11:01 (23)	15:42	21 12:33 (24)	
14	09:17	11:08 (23)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:33 (28)	09:20	12:12 (24)	
	16:15	20 11:28 (23)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32 11:03 (23)	15:42	21 12:33 (24)	
15	09:16	11:08 (23)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:34 (28)	09:21	12:12 (24)	
	16:17	21 11:29 (23)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31 11:03 (23)	15:42	21 12:33 (24)	
16	09:15	11:08 (23)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:36 (28)	09:22	12:13 (24)	
	16:19	21 11:29 (23)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31 11:05 (23)	15:42	20 12:33 (24)	
17	09:13	11:09 (23)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:38 (28)	09:23	12:14 (24)	
	16:21	22 11:31 (23)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28 11:06 (23)	15:42	21 12:35 (24)	
18	09:12	11:09 (23)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:44 (23)	09:24	12:14 (24)	
	16:23	22 11:31 (23)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22 11:06 (23)	15:42	21 12:35 (24)	
19	09:10	11:09 (23)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	10:45 (23)	09:25	12:14 (24)	
	16:25	22 11:31 (23)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22 11:07 (23)	15:42	21 12:35 (24)	
20	09:09	11:09 (23)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:45 (23)	09:26	12:15 (24)	
	16:28	23 11:32 (23)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22 11:07 (23)	15:43	21 12:36 (24)	
21	09:07	11:09 (23)	07:57		06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39	10:45 (23)	09:26	12:16 (24)	
	16:30	23 11:32 (23)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22 11:07 (23)	15:43	21 12:37 (24)	
22	09:05	11:10 (23)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	10:45 (23)	09:27	12:16 (24)	
	16:32	22 11:32 (23)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23 11:08 (23)	15:43	21 12:37 (24)	
23	09:03	11:10 (23)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:45 (23)	09:27	12:16 (24)	
	16:34	22 11:32 (23)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23 11:08 (23)	15:44	21 12:37 (24)	
24	09:02	11:10 (23)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:46 (23)	09:28	12:17 (24)	
	16:37	22 11:32 (23)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22 11:08 (23)	15:45	21 12:38 (24)	
25	09:00	10:04 (28)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:46 (23)	09:28	12:17 (24)	
	16:39	28 11:32 (23)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22 11:08 (23)	15:45	21 12:38 (24)	
26	08:58	10:03 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:47 (23)	09:28	12:18 (24)	
	16:42	31 11:32 (23)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21 11:08 (23)	15:46	21 12:39 (24)	
27	08:56	10:02 (28)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:47 (23)	09:28	12:18 (24)	
	16:44	31 11:31 (23)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21 11:08 (23)	15:47	21 12:39 (24)	
28	08:54	10:00 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:48 (23)	09:29	12:19 (24)	
	16:46	32 11:30 (23)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21 11:09 (23)	15:48	21 12:40 (24)	
29	08:52	10:00 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:49 (23)	09:29	12:19 (24)	
	16:49	31 11:29 (23)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22 12:18 (24)	15:49	21 12:40 (24)	
30	08:50	09:59 (28)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:49 (23)	09:28	12:20 (24)	
	16:51	27 11:26 (23)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28 12:21 (24)	15:50	20 12:40 (24)	
31	08:48	09:59 (28)			07:10		04:41		05:22	06:31		07:49			09:28	12:21 (24)	
	16:54	20 10:19 (28)			20:14		22:29		22:03	20:43		16:51			15:51	20 12:41 (24)	
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case		773		167										657		697	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,67		0,72										0,70		0,64	
Total reduction		0,27		0,29										0,28		0,25	
Total, real		208		48										183		177	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	22:47	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	04:34	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:39	07:46	07:58	09:05
	15:57	17:03	18:12	20:23	21:32	22:34	22:46	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	22:45	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	22:44	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	04:39	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:39	22:43	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	04:40	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	22:42	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	04:43	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	22:40	21:39	20:13	18:47	16:28	15:44
11	09:20	08:22	07:07	06:38	05:19	04:30	04:44	05:46	06:55	08:02	08:15	09:16
	16:09	17:21	18:28	20:39	21:48	22:43	22:39	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:42	21:50	22:44	22:37	21:34	20:08	18:42	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:13	04:28	04:49	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	22:34	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	22:33	21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	22:31	21:23	19:56	18:30	16:15	15:42
17	09:13	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	22:30	21:21	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	22:28	21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:47	20:58	22:05	22:49	22:26	21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:22	08:36	09:25
	16:28	17:43	18:49	21:00	22:08	22:49	22:25	21:12	19:44	18:20	16:08	15:43
21	09:06	07:57	06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:38	09:26
	16:30	17:45	18:51	21:02	22:10	22:49	22:23	21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:40	09:26
	16:32	17:48	18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:29	08:43	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	22:19	21:04	19:36	18:12	16:02	15:44
24	09:01	07:49	06:30	06:02	04:52	04:28	05:07	06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:16	22:50	22:17	21:02	19:33	18:09	16:01	15:45
25	08:59	07:46	06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:12	22:17	22:50	22:15	20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:49	09:28
	16:41	17:57	19:03	21:14	22:19	22:50	22:13	20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	22:11	20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	05:16	06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	22:09	20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	22:07	20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:43	04:31	05:20	06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	22:05	20:45	19:16	16:54	15:52	15:50
31	08:47		07:09		04:41		05:22	06:31		07:48		09:27
	16:53		20:14		22:28		22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:27/4.2.271

SHADOW - Calendar

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	04:32	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	22:48	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	22:47	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	04:34	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44	15:49
4	09:26	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:39	07:46	07:58	09:05
	15:57	17:03	18:12	20:23	21:32	22:34	22:46	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	22:45	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	22:44	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	04:39	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:39	22:43	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	04:40	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	22:42	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	04:43	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	22:40	21:39	20:13	18:47	16:28	15:44
11	09:20	08:22	07:07	06:38	05:19	04:30	04:44	05:46	06:55	08:02	08:15	09:16
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12	09:19	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:42	21:50	22:44	22:37	21:34	20:08	18:42	16:23	15:43
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31	08:47		07:09		04:41		05:22	06:31		07:48		09:27
	16:53		20:14		22:28		22:02	20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Vedlegg 6.2

Grafisk Moifjellet vindkraftverk

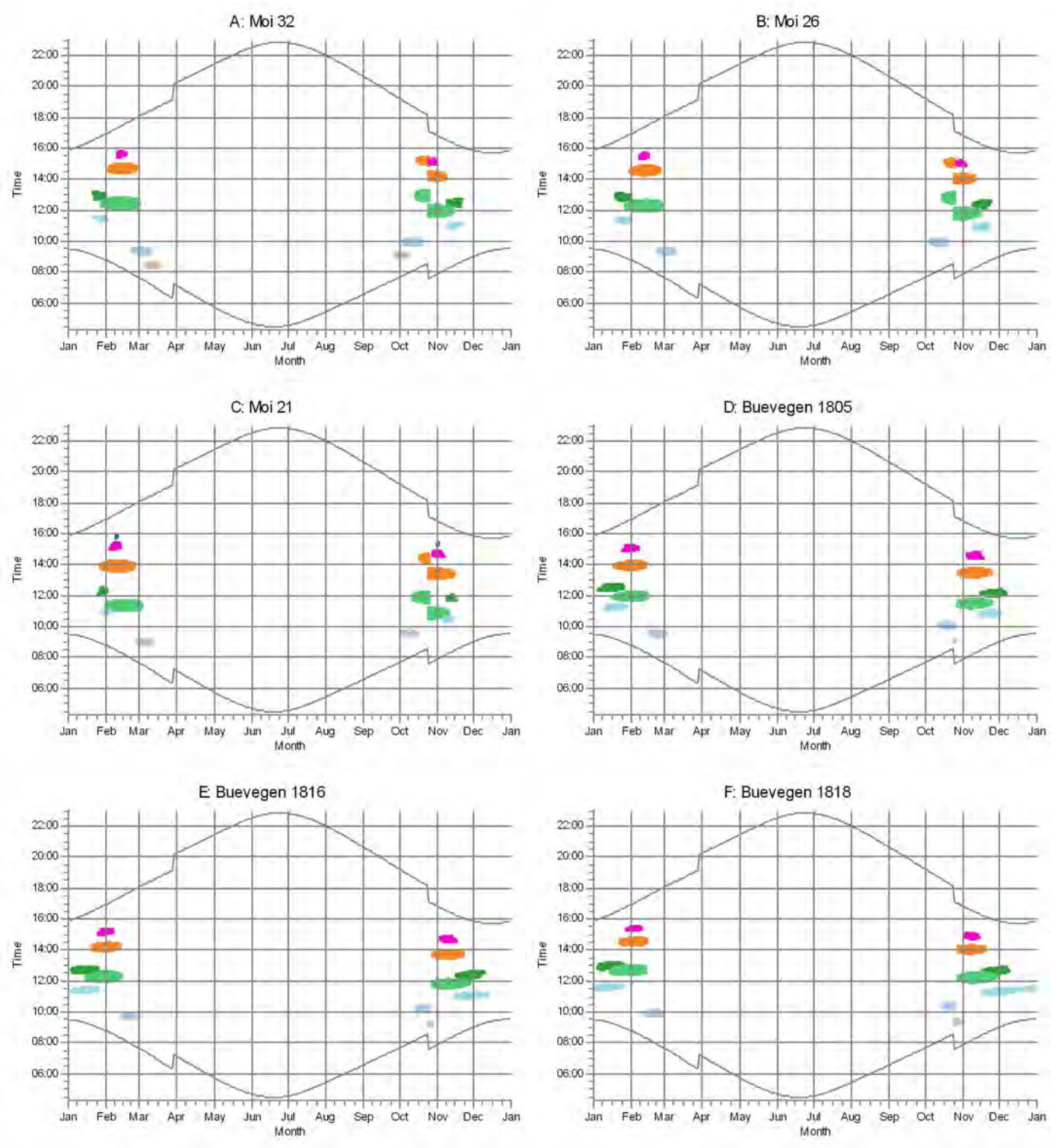
Realistic case

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19.11.2025 15:27/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere



WTGs

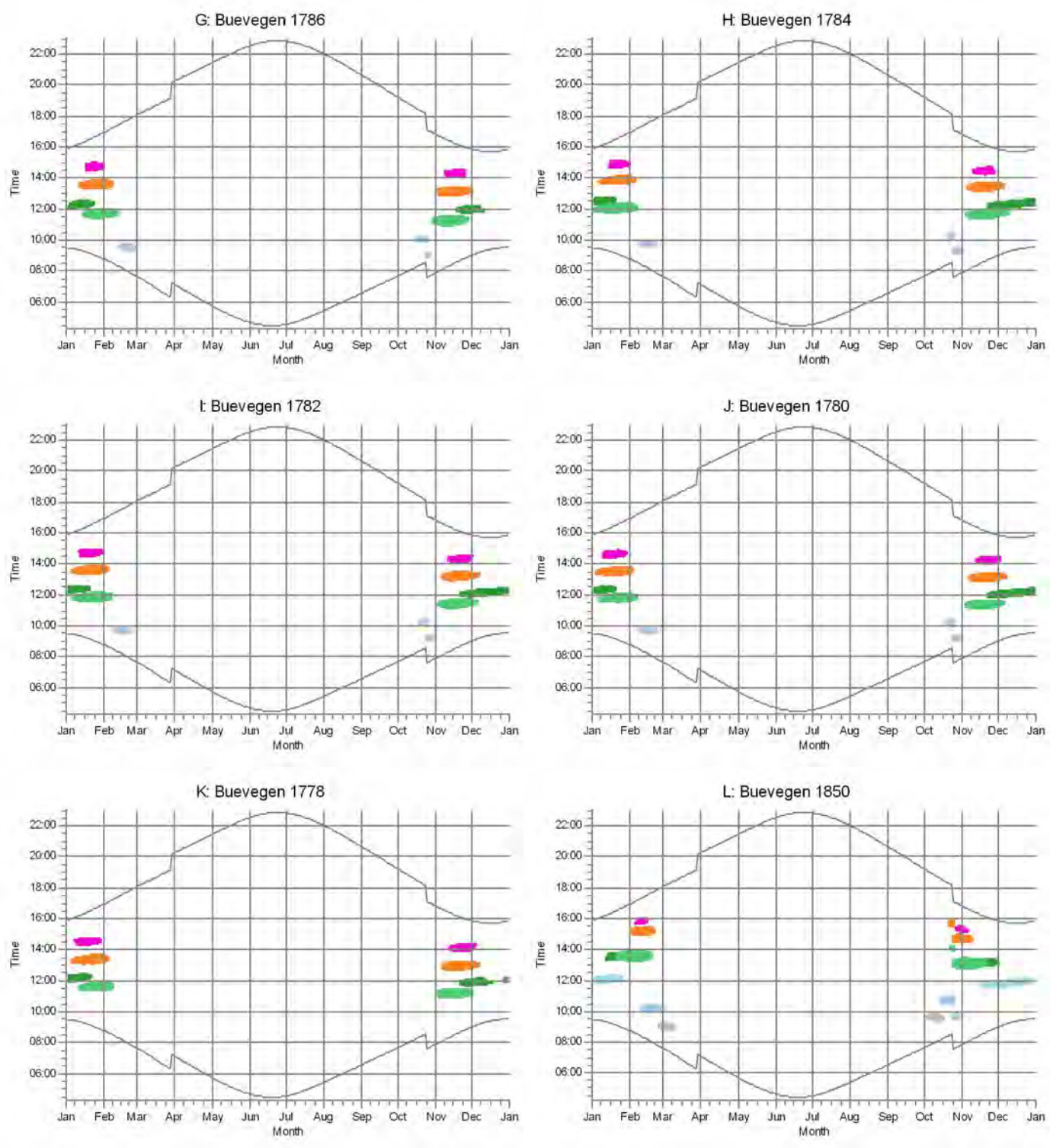
15: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2558
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
20: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2563
22: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2565
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
24: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
33: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2576

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SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere



WTGs

15: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2558
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
20: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2563
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
24: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
33: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2576

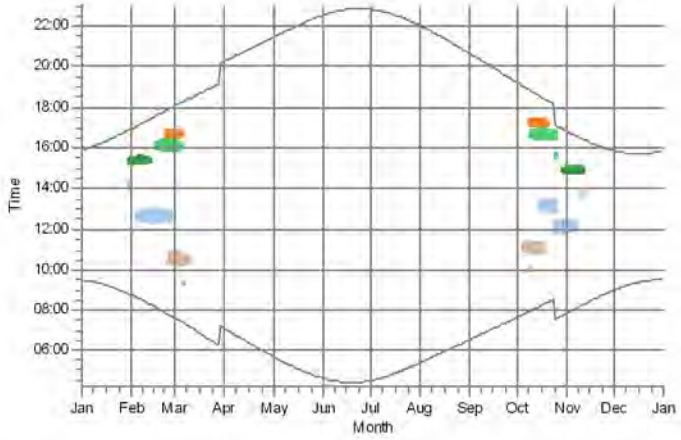
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Calculated:
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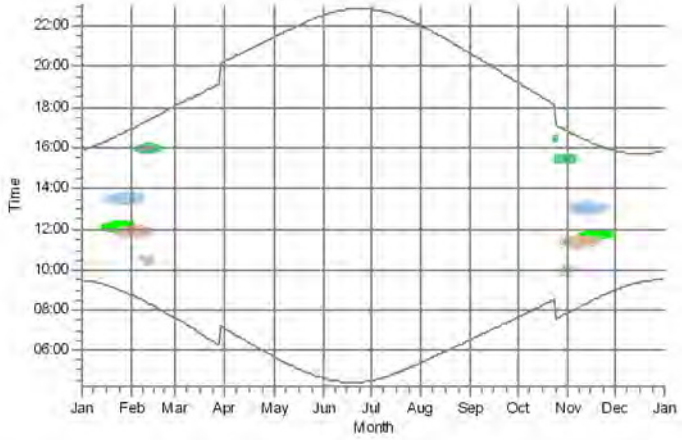
SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

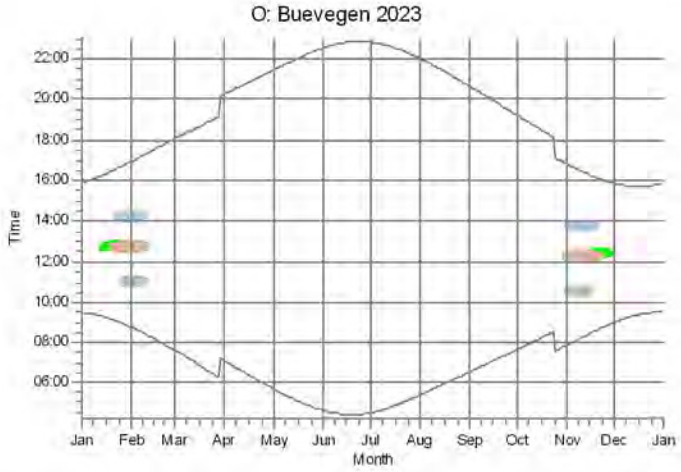
M: Buevegen 1941



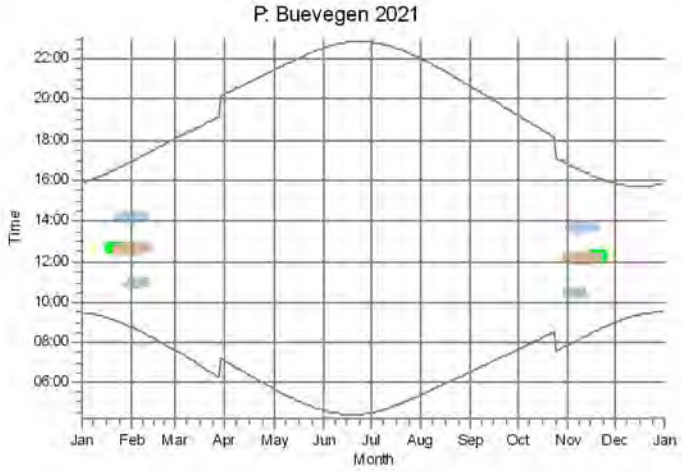
N: Buevegen 1988



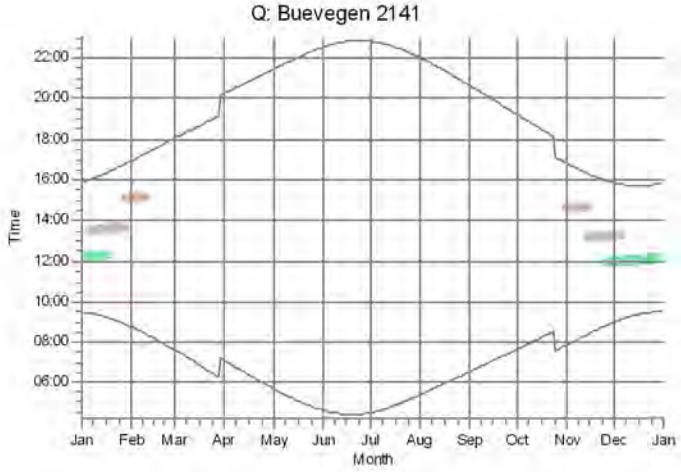
O: Buevegen 2023



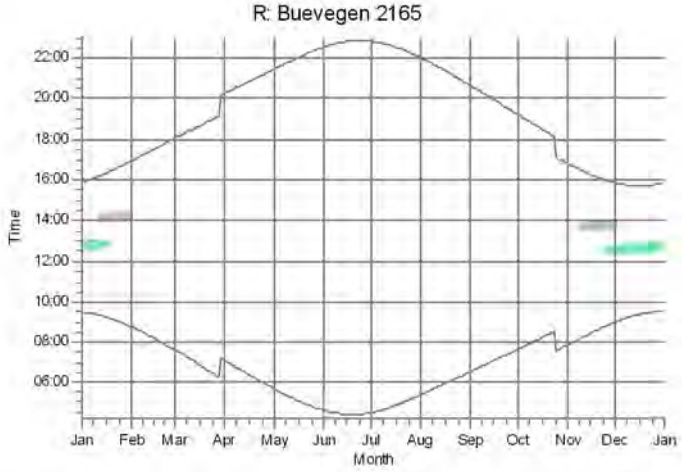
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Q: Buevegen 2141



R: Buevegen 2165



WTGs

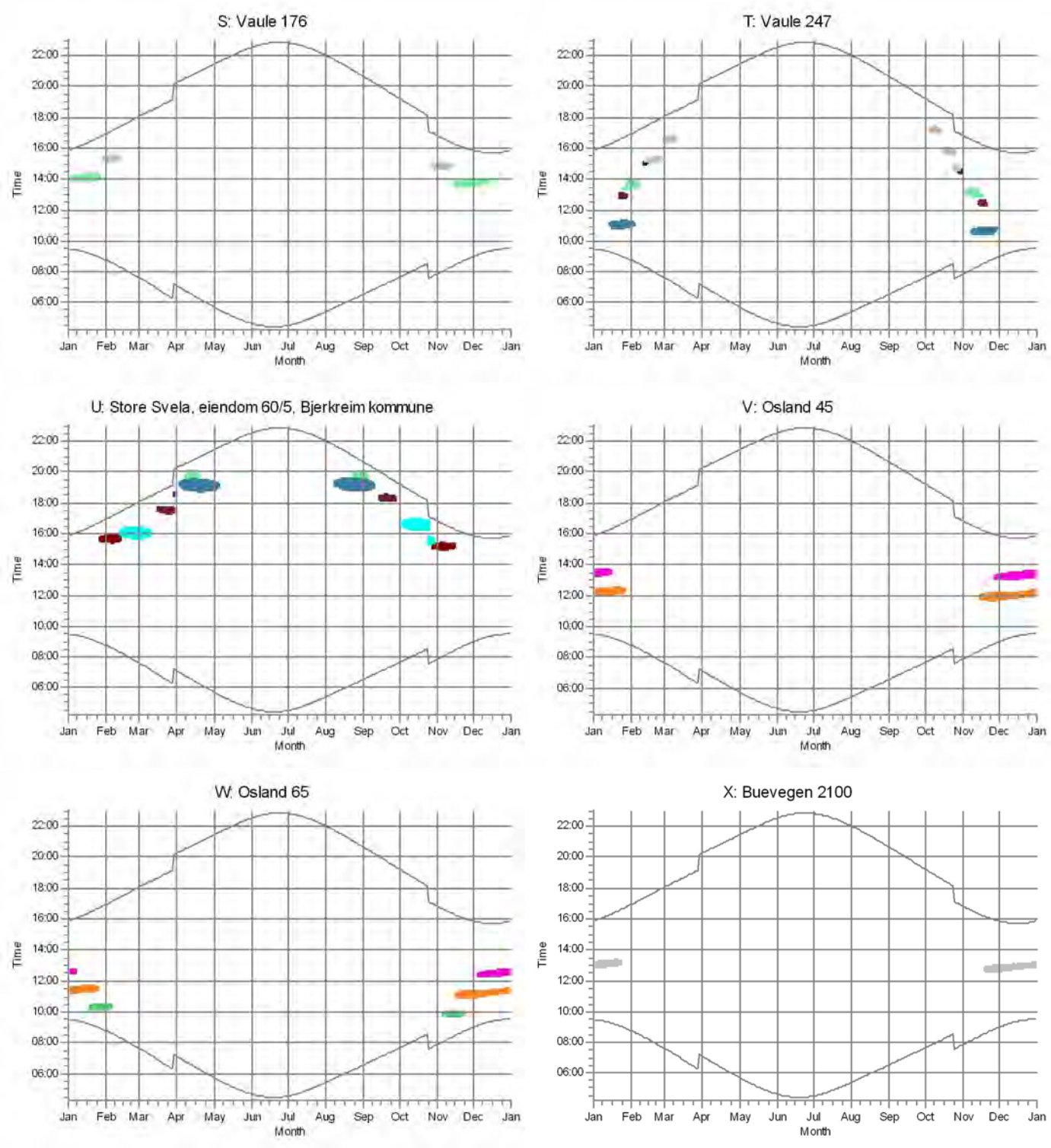
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12: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555
15: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2558
17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
20: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2563
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
26: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
33: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2576

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SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere



WTGs

7: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2550
8: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2551
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17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
23: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2566
24: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2567
26: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569
28: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2571
32: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575
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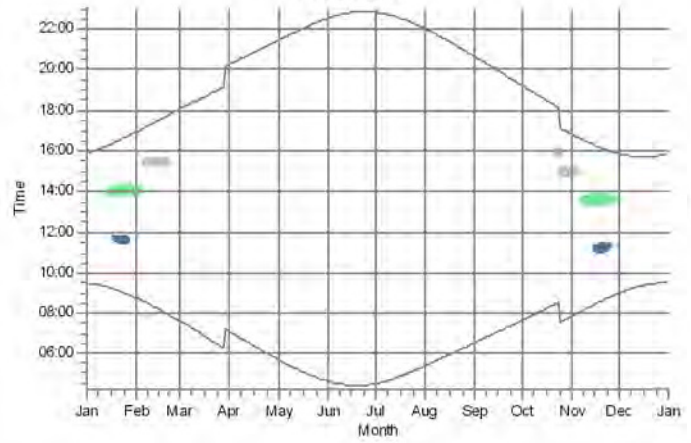
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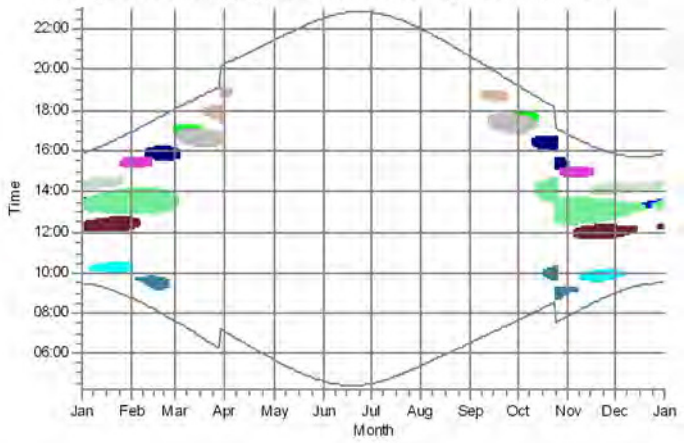
SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

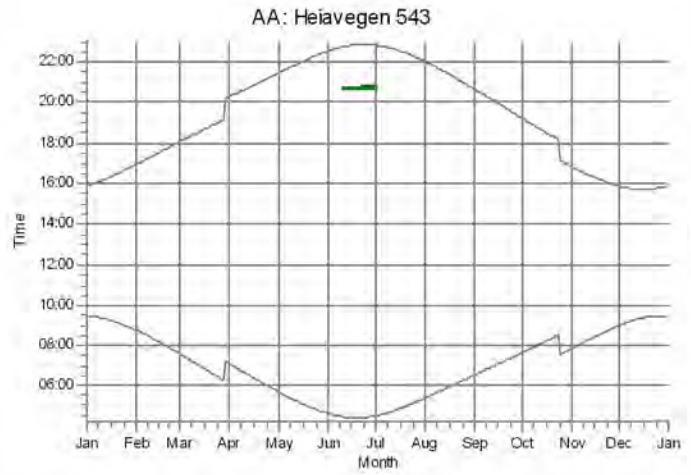
Y: Vaule 218



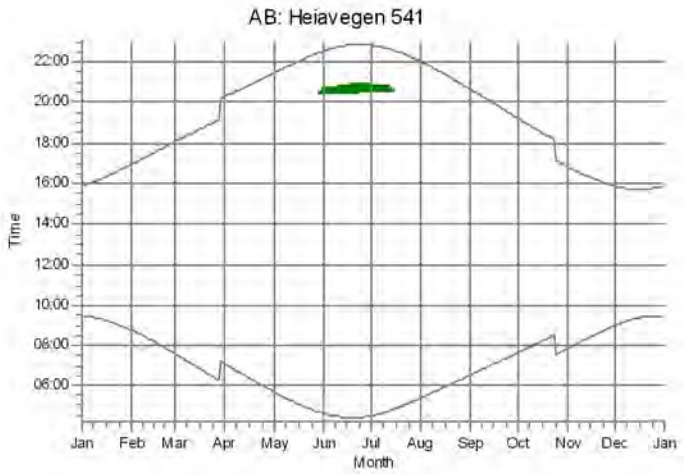
Z: Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune



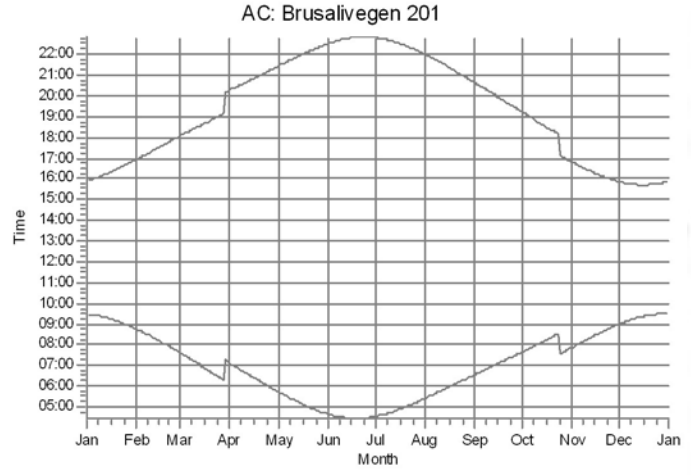
AA: Heiavegen 543



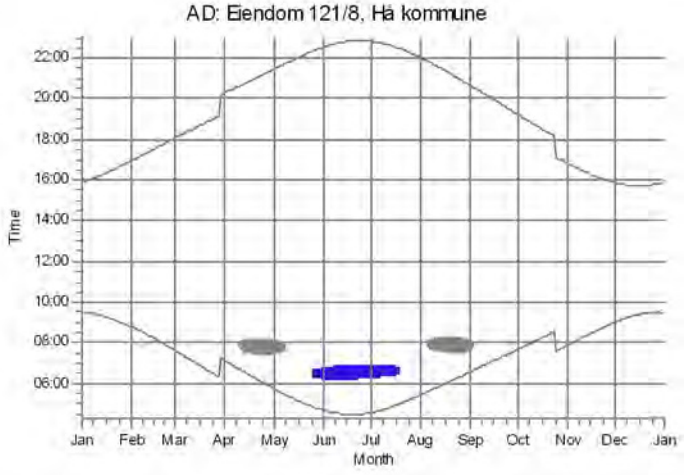
AB: Heiavegen 541



AC: Brusalivegen 201



AD: Eiendom 121/8, Hå kommune



WTGs

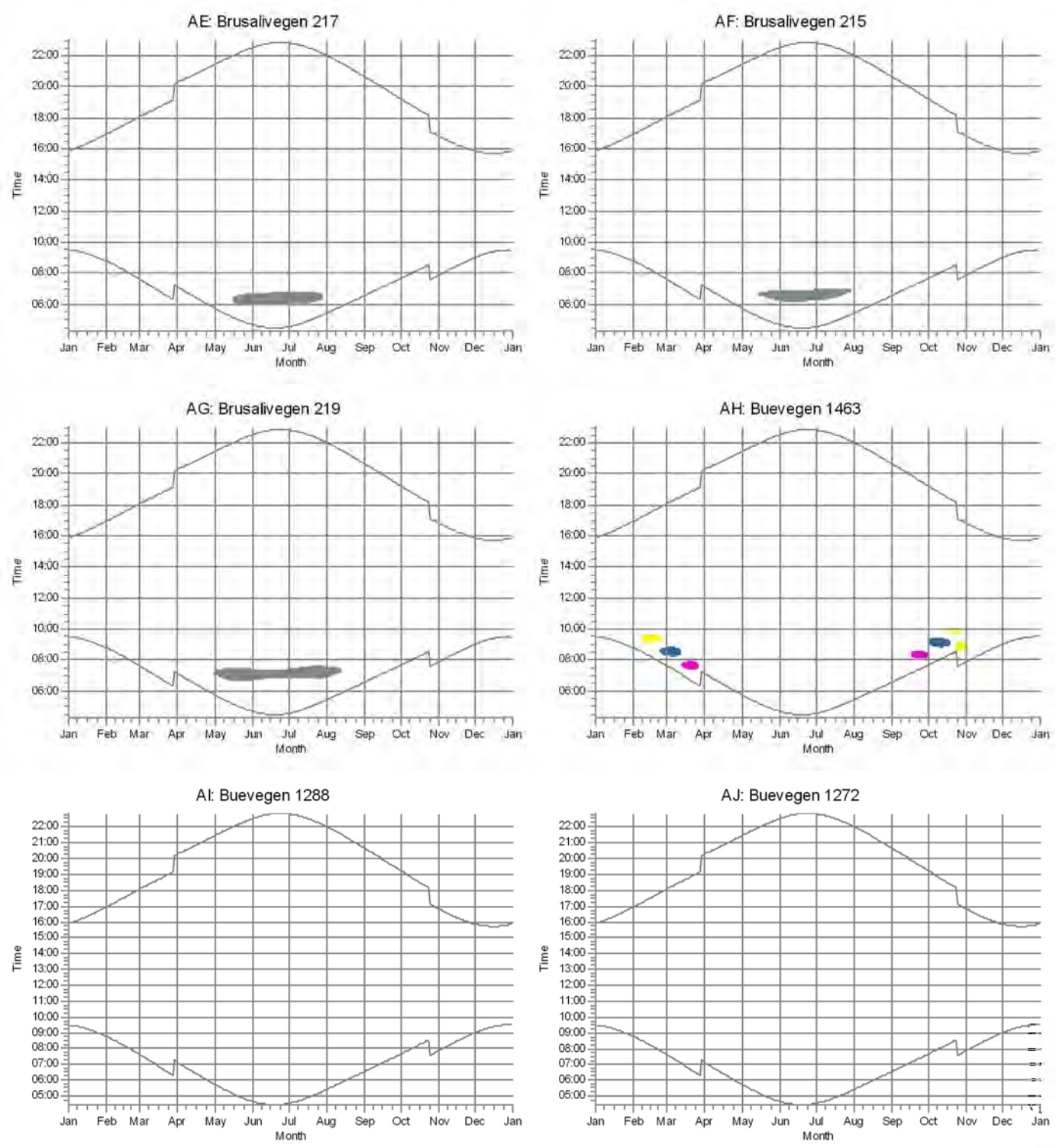
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- 3: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2546
- 7: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2550
- 9: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2552
- 12: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2555
- 13: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2556
- 14: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2557
- 17: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2560
- 26: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2569
- 32: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2575
- 35: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2578
- 36: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2579
- 37: VESTAS V162-7.2 7200 162.0 !O! hub: 119.0 m (TOT: 200.0 m) (2580
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SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

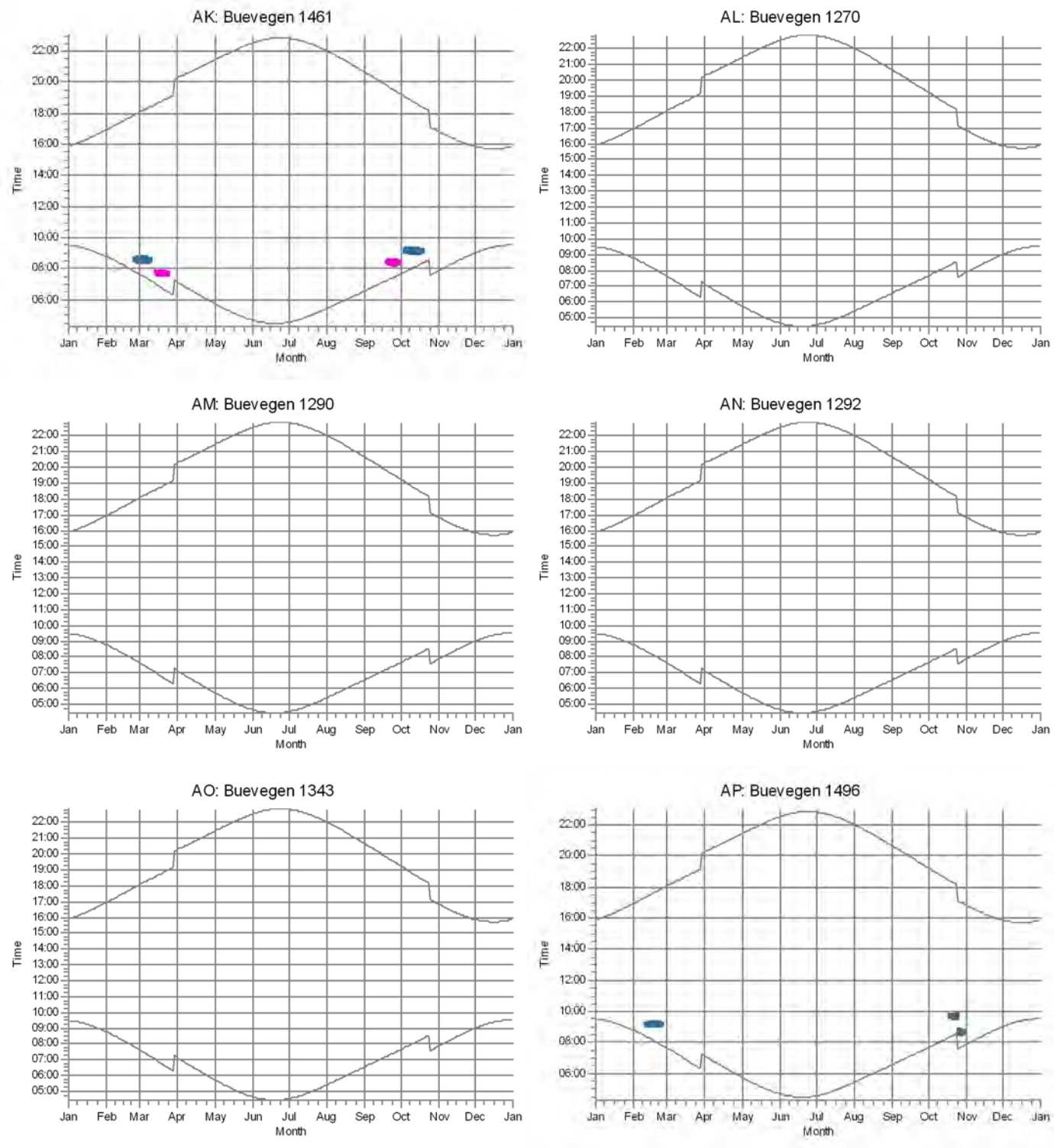


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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

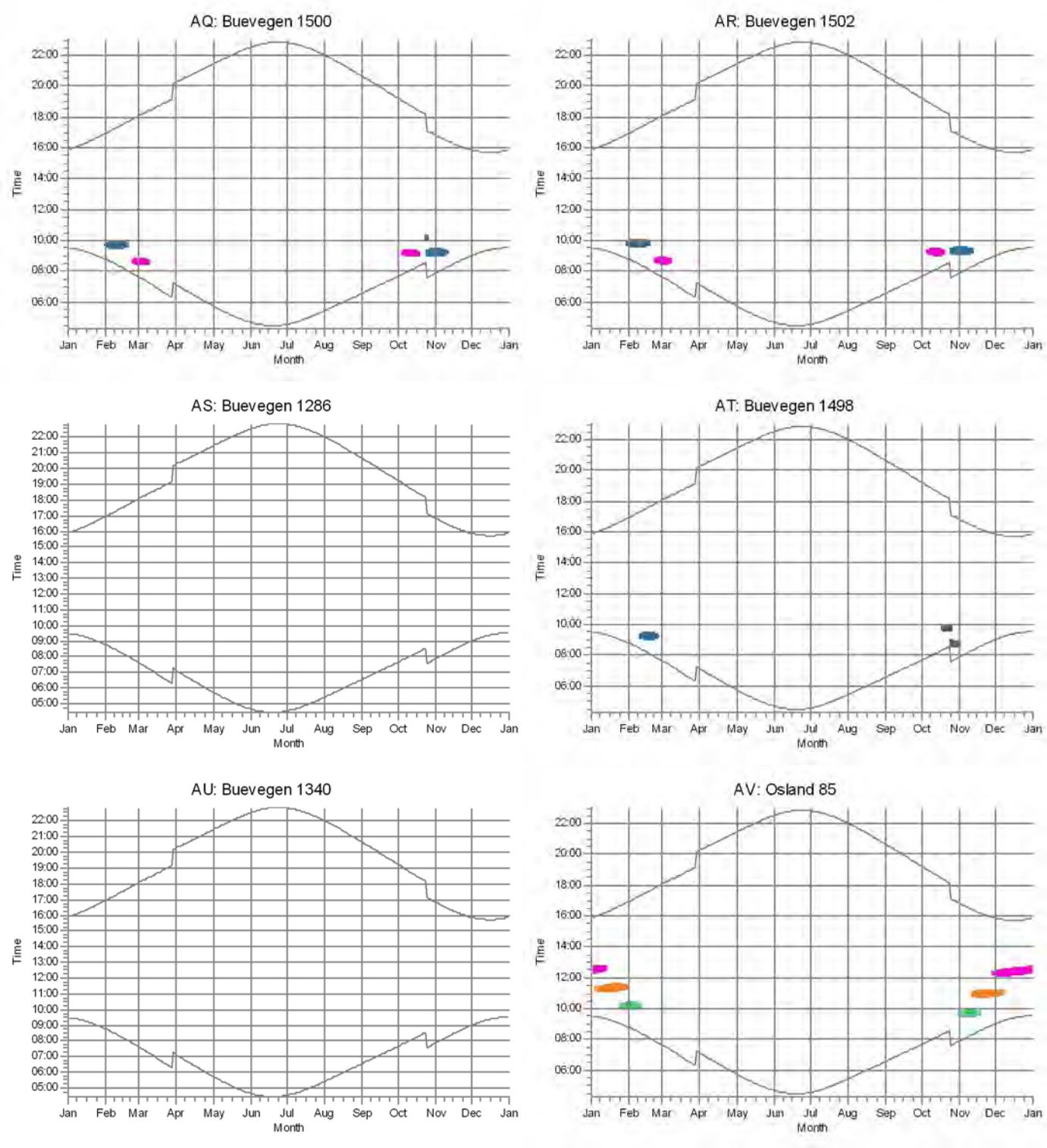


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Calculated:
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SHADOW - Calendar, graphical

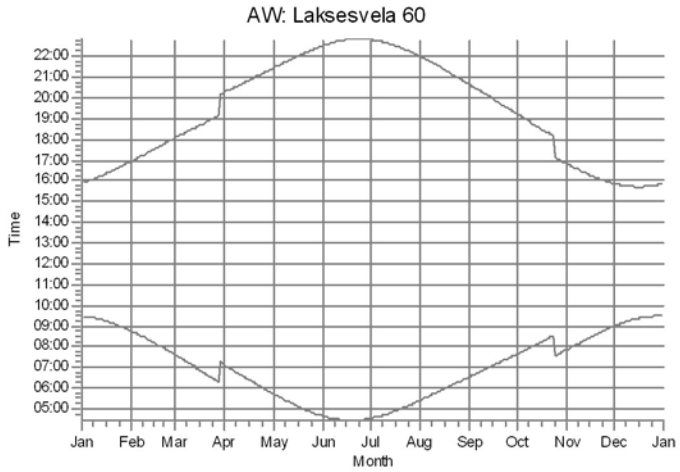
Calculation: Moifjellet uten eksisterende vkv - real case - mottakere

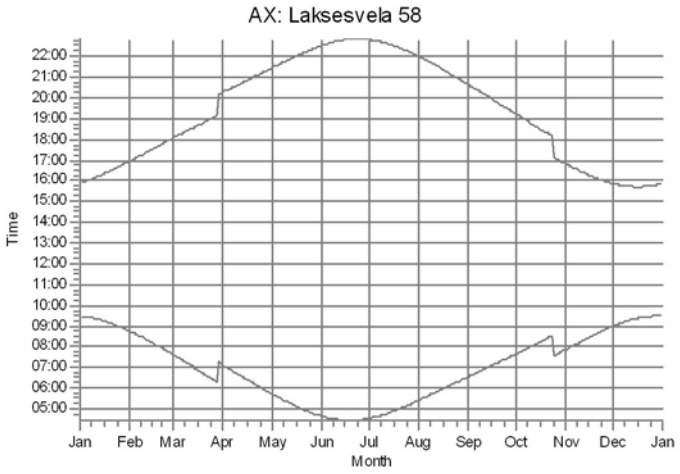


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SHADOW - Calendar, graphical

Calculation: Moifjellet uten eksisterende vkv - real case - mottakere





WTGs

Vedlegg 7.1

Tabell Moifjellet vindkraftverk

Med nærliggende - worst case

Project:

Moifjellet og Mellomstrand vrk

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SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		11:19 (33)	07:35		09:10 (15)	07:07		05:44	04:40
	15:53			16:56	51	13:02 (20)	18:05	24	09:34 (15)	20:17		21:26	22:30
2	09:27			08:43		11:24 (33)	07:33		09:10 (15)	07:04		05:41	04:38
	15:54			16:58	34	12:41 (28)	18:07	25	09:35 (15)	20:19		21:28	22:32
3	09:27			08:41		12:08 (28)	07:30		09:10 (15)	07:01		05:39	04:37
	15:55			17:01	43	14:41 (23)	18:09	24	09:34 (15)	20:21		21:30	22:34
4	09:26			08:39		12:07 (28)	07:27		09:10 (15)	06:58		05:36	04:36
	15:57			17:03	56	14:50 (23)	18:12	24	09:34 (15)	20:24		21:33	22:35
5	09:26			08:37		12:06 (28)	07:24		09:10 (15)	06:55		05:34	04:35
	15:58			17:06	61	14:52 (23)	18:14	23	09:33 (15)	20:26		21:35	22:37
6	09:25			08:34		12:06 (28)	07:21		08:24 (17)	06:52		05:31	04:34
	16:00			17:08	66	14:54 (23)	18:17	28	09:32 (15)	20:28		21:37	22:38
7	09:24			08:32		12:05 (28)	07:19		08:21 (17)	06:50		05:29	04:33
	16:02			17:11	69	14:54 (23)	18:19	32	09:30 (15)	20:30		21:40	22:39
8	09:24			08:30		12:05 (28)	07:16		08:19 (17)	06:47		05:26	04:32
	16:03			17:13	72	14:56 (23)	18:21	32	09:28 (15)	20:33		21:42	22:40
9	09:23			08:27		12:04 (28)	07:13		08:18 (17)	06:44		05:24	04:31
	16:05			17:16	75	14:57 (23)	18:24	29	09:26 (15)	20:35		21:44	22:42
10	09:22			08:25		12:04 (28)	07:10		08:17 (17)	06:41		05:22	04:30
	16:07			17:18	80	15:35 (24)	18:26	18	08:35 (17)	20:37		21:46	22:43
11	09:21			08:23		12:04 (28)	07:07		08:17 (17)	06:38		05:19	04:29
	16:09			17:21	91	15:40 (24)	18:28	18	08:35 (17)	20:40		21:49	22:44
12	09:20			08:20		12:04 (28)	07:04		08:17 (17)	06:35		05:17	04:29
	16:11			17:23	99	15:47 (24)	18:31	19	08:36 (17)	20:42		21:51	22:45
13	09:18			08:18		12:03 (28)	07:01		08:17 (17)	06:32		05:15	04:28
	16:13			17:26	101	15:48 (24)	18:33	18	08:35 (17)	20:44		21:53	22:46
14	09:17			08:15		12:04 (28)	06:59		08:17 (17)	06:30		05:13	04:28
	16:15			17:28	99	15:48 (24)	18:35	17	08:34 (17)	20:47		21:55	22:47
15	09:16			08:13		12:04 (28)	06:56		08:18 (17)	06:27		05:10	04:27
	16:17			17:31	96	15:46 (24)	18:38	15	08:33 (17)	20:49		21:58	22:47
16	09:15			08:10		12:03 (28)	06:53		08:19 (17)	06:24		05:08	04:27
	16:19			17:33	92	15:44 (24)	18:40	12	08:31 (17)	20:51		22:00	22:48
17	09:13			08:07		12:03 (28)	06:50		08:22 (17)	06:21		05:06	04:27
	16:21			17:36	86	15:41 (24)	18:42	5	08:27 (17)	20:53		22:02	22:49
18	09:12			08:05		12:04 (28)	06:47			06:19		05:04	04:27
	16:23			17:38	78	14:58 (23)	18:45			20:56		22:04	22:49
19	09:10			08:02		12:05 (28)	06:44			06:16		05:02	04:27
	16:25			17:40	76	14:58 (23)	18:47			20:58		22:06	22:50
20	09:08			08:00		12:05 (28)	06:41			06:13		05:00	04:27
	16:28			17:43	74	14:57 (23)	18:49			21:00		22:08	22:50
21	09:07		11:29 (33)	07:57		12:05 (28)	06:38			06:10		04:58	04:27
	16:30	8	13:08 (20)	17:45	71	14:56 (23)	18:51			21:03		22:10	22:50
22	09:05		11:28 (33)	07:54		12:06 (28)	06:36			06:08		04:56	04:27
	16:32	22	13:07 (20)	17:48	66	14:55 (23)	18:54			21:05		22:12	22:50
23	09:03		11:29 (33)	07:52		09:20 (15)	06:33			06:05		04:54	04:27
	16:34	21	13:08 (20)	17:50	69	14:54 (23)	18:56			21:07		22:14	22:50
24	09:02		11:28 (33)	07:49		09:16 (15)	06:30			06:02		04:52	04:27
	16:37	33	13:08 (20)	17:53	69	14:52 (23)	18:58			21:10		22:16	22:51
25	09:00		11:27 (33)	07:46		09:14 (15)	06:27			05:59		04:51	04:28
	16:39	33	13:08 (20)	17:55	64	14:49 (23)	19:01			21:12		22:18	22:50
26	08:58		11:22 (33)	07:44		09:13 (15)	06:24			05:57		04:49	04:28
	16:41	37	13:08 (20)	17:57	54	14:45 (23)	19:03			21:14		22:20	22:50
27	08:56		11:14 (33)	07:41		09:12 (15)	06:21			05:54		04:47	04:29
	16:44	43	13:07 (20)	18:00	41	12:35 (28)	19:05			21:17		22:22	22:50
28	08:54		11:14 (33)	07:38		09:11 (15)	06:18			05:52		04:46	04:30
	16:46	52	13:07 (20)	18:02	33	12:29 (28)	19:07			21:19		22:24	22:50
29	08:52		11:15 (33)				07:15			05:49		04:44	04:30
	16:49	56	13:07 (20)				20:10			21:21		22:25	22:50
30	08:50		11:15 (33)				07:12			05:46		04:43	04:31
	16:51	59	13:06 (20)				20:12			21:24		22:27	22:49
31	08:48		11:17 (33)				07:10					04:41	
	16:54	57	13:05 (20)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		421			1966			363					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October		November			December
1	04:32	05:24	06:33			07:39		08:56 (17)	07:51		11:33 (28)	09:00
	22:49	22:01	20:40			19:13	19	09:15 (17)	16:49	78	14:57 (24)	15:51
2	04:33	05:26	06:35			07:42		08:56 (17)	07:54		11:34 (28)	09:02
	22:48	21:58	20:37			19:10	18	09:14 (17)	16:46	74	14:26 (23)	15:50
3	04:34	05:28	06:37			07:44		08:55 (17)	07:56		11:35 (28)	09:03
	22:47	21:56	20:34			19:07	19	09:14 (17)	16:44	71	14:25 (23)	15:49
4	04:35	05:31	06:40			07:46		08:55 (17)	07:59		11:35 (28)	09:05
	22:47	21:54	20:31			19:04	26	10:01 (15)	16:41	69	14:24 (23)	15:48
5	04:36	05:33	06:42			07:48		08:56 (17)	08:01		11:36 (28)	09:07
	22:46	21:51	20:28			19:02	31	10:05 (15)	16:39	64	14:23 (23)	15:47
6	04:37	05:35	06:44			07:51		08:57 (17)	08:03		11:37 (28)	09:09
	22:45	21:49	20:25			18:59	32	10:06 (15)	16:37	61	14:22 (23)	15:46
7	04:39	05:37	06:46			07:53		08:58 (17)	08:06		11:37 (28)	09:10
	22:44	21:47	20:22			18:56	31	10:07 (15)	16:34	53	14:17 (23)	15:45
8	04:40	05:39	06:49			07:55		09:03 (17)	08:08		11:39 (28)	09:12
	22:43	21:44	20:20			18:53	23	10:08 (15)	16:32	42	14:11 (23)	15:45
9	04:41	05:42	06:51			07:57		09:45 (15)	08:11		10:53 (33)	09:13
	22:42	21:42	20:17			18:50	23	10:08 (15)	16:30	37	12:12 (28)	15:44
10	04:43	05:44	06:53			08:00		09:45 (15)	08:13		10:50 (33)	09:15
	22:40	21:39	20:14			18:47	24	10:09 (15)	16:28	52	12:34 (20)	15:44
11	04:44	05:46	06:55			08:02		09:44 (15)	08:15		10:48 (33)	09:16
	22:39	21:37	20:11			18:45	24	10:08 (15)	16:25	57	12:36 (20)	15:43
12	04:46	05:48	06:57			08:04		09:43 (15)	08:18		10:47 (33)	09:18
	22:38	21:34	20:08			18:42	24	10:07 (15)	16:23	58	12:37 (20)	15:43
13	04:47	05:51	07:00			08:07		09:44 (15)	08:20		10:47 (33)	09:19
	22:37	21:31	20:05			18:39	23	10:07 (15)	16:21	57	12:39 (20)	15:42
14	04:49	05:53	07:02			08:09		09:44 (15)	08:22		10:46 (33)	09:20
	22:35	21:29	20:02			18:36	37	13:05 (28)	16:19	52	12:39 (20)	15:42
15	04:51	05:55	07:04			08:11		09:45 (15)	08:25		10:47 (33)	09:21
	22:34	21:26	19:59			18:33	44	13:09 (28)	16:17	43	12:40 (20)	15:42
16	04:52	05:57	07:06			08:13		09:45 (15)	08:27		10:55 (33)	09:22
	22:32	21:24	19:56			18:31	59	15:19 (23)	16:15	37	12:41 (20)	15:42
17	04:54	06:00	07:08			08:16		09:47 (15)	08:29		11:00 (33)	09:23
	22:30	21:21	19:54			18:28	66	15:22 (23)	16:13	33	12:41 (20)	15:42
18	04:56	06:02	07:11			08:18		09:48 (15)	08:32		11:02 (33)	09:24
	22:29	21:18	19:51			18:25	71	15:24 (23)	16:11	33	12:42 (20)	15:42
19	04:58	06:04	07:13			08:20		09:52 (15)	08:34		11:04 (33)	09:25
	22:27	21:16	19:48			18:22	70	15:26 (23)	16:09	21	12:43 (20)	15:42
20	05:00	06:06	07:15			08:23		12:37 (28)	08:36		11:03 (33)	09:26
	22:25	21:13	19:45			18:20	68	15:26 (23)	16:08	22	12:42 (20)	15:43
21	05:01	06:08	07:17			08:25		12:36 (28)	08:39		11:04 (33)	09:26
	22:24	21:10	19:42			18:17	71	15:27 (23)	16:06	8	12:43 (20)	15:43
22	05:03	06:11	07:19			08:27		12:35 (28)	08:41			09:27
	22:22	21:08	19:39			18:14	74	15:27 (23)	16:04			15:43
23	05:05	06:13	07:22			08:30		12:35 (28)	08:43			09:27
	22:20	21:05	19:36			18:12	76	15:28 (23)	16:02			15:44
24	05:07	06:15	07:24			08:32		12:34 (28)	08:45			09:28
	22:18	21:02	19:33			18:09	78	15:28 (23)	16:01			15:44
25	05:09	06:17	07:26			07:35		11:34 (28)	08:47			09:28
	22:16	20:59	19:30			17:06	86	15:12 (24)	15:59			15:45
26	05:11	06:20	07:28			07:37		11:33 (28)	08:50			09:28
	22:14	20:56	19:27			17:04	94	15:14 (24)	15:58			15:46
27	05:13	06:22	07:30		09:02 (17)	07:39		11:33 (28)	08:52			09:28
	22:12	20:54	19:25	10	09:12 (17)	17:01	97	15:16 (24)	15:56			15:47
28	05:16	06:24	07:33		09:00 (17)	07:42		11:33 (28)	08:54			09:28
	22:10	20:51	19:22	13	09:13 (17)	16:59	101	15:18 (24)	15:55			15:48
29	05:18	06:26	07:35		08:58 (17)	07:44		11:33 (28)	08:56			09:28
	22:07	20:48	19:19	16	09:14 (17)	16:56	102	15:18 (24)	15:54			15:49
30	05:20	06:29	07:37		08:56 (17)	07:47		11:33 (28)	08:58			09:28
	22:05	20:45	19:16	18	09:14 (17)	16:54	99	15:15 (24)	15:52			15:50
31	05:22	06:31				07:49		11:34 (28)				09:28
	22:03	20:42				16:51	90	15:09 (24)				15:51
Potential sun hours	546	478	386			319			236			199
Total, worst case				57			1700			1022		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April	May	June
1	09:28			08:46		11:16 (33)	07:35		09:09 (15)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (23)	18:05	23	09:32 (15)	20:17	21:26	22:30
2	09:27			08:43		12:00 (28)	07:33		09:09 (15)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (23)	18:07	24	09:33 (15)	20:19	21:28	22:32
3	09:27			08:41		11:58 (28)	07:30		09:09 (15)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (23)	18:09	24	09:33 (15)	20:21	21:30	22:34
4	09:26			08:39		11:58 (28)	07:27		09:09 (15)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (23)	18:12	23	09:32 (15)	20:24	21:33	22:35
5	09:26			08:37		11:57 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (23)	18:14	21	09:31 (15)	20:26	21:35	22:37
6	09:25			08:34		11:57 (28)	07:21		09:10 (15)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (23)	18:17	20	09:30 (15)	20:28	21:37	22:38
7	09:24			08:32		11:56 (28)	07:19		09:11 (15)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (23)	18:19	17	09:28 (15)	20:30	21:40	22:39
8	09:24			08:30		11:56 (28)	07:16		09:13 (15)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (24)	18:21	12	09:25 (15)	20:33	21:42	22:40
9	09:23			08:27		11:56 (28)	07:13		09:16 (15)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (24)	18:24	5	09:21 (15)	20:35	21:44	22:42
10	09:22			08:25		11:55 (28)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (24)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (28)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (24)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (28)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (24)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (24)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (23)	18:45			20:56	22:04	22:49
19	09:10		12:54 (20)	08:02		11:57 (28)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (20)	17:40	70	14:48 (23)	18:47			20:58	22:06	22:50
20	09:08		11:12 (33)	08:00		11:57 (28)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (20)	17:43	68	14:47 (23)	18:49			21:00	22:08	22:50
21	09:07		11:11 (33)	07:57		11:58 (28)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (20)	17:45	64	14:46 (23)	18:51			21:03	22:10	22:50
22	09:05		11:11 (33)	07:54		11:59 (28)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (20)	17:48	58	14:44 (23)	18:54			21:05	22:12	22:50
23	09:03		11:11 (33)	07:52		09:17 (15)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (20)	17:50	62	14:43 (23)	18:56			21:07	22:14	22:50
24	09:02		11:10 (33)	07:49		09:14 (15)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (20)	17:53	57	14:39 (23)	18:58			21:10	22:16	22:51
25	09:00		11:08 (33)	07:46		09:13 (15)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (20)	17:55	42	12:28 (28)	19:01			21:12	22:18	22:50
26	08:58		11:09 (33)	07:44		09:11 (15)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (20)	17:57	38	12:24 (28)	19:03			21:14	22:20	22:50
27	08:56		11:09 (33)	07:41		09:10 (15)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (20)	18:00	22	09:32 (15)	19:05			21:17	22:22	22:50
28	08:54		11:10 (33)	07:38		09:09 (15)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (20)	18:02	23	09:32 (15)	19:07			21:19	22:24	22:50
29	08:52		11:12 (33)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (20)				20:10			21:21	22:25	22:50
30	08:50		11:12 (33)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (20)				20:12			21:24	22:27	22:49
31	08:48		11:14 (33)				07:10				04:41	
	16:54	56	14:29 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:25 (28)	09:00
	22:49	22:01	20:40	19:13			16:49	96	15:09 (24)	15:51
2	04:33	05:26	06:35	07:42			07:54		11:25 (28)	09:02
	22:48	21:58	20:37	19:10			16:46	90	15:04 (24)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:26 (28)	09:03
	22:47	21:56	20:34	19:07			16:44	82	14:58 (24)	15:49
4	04:35	05:31	06:40	07:46			07:59		11:26 (28)	09:05
	22:47	21:54	20:31	19:04			16:41	72	14:17 (23)	15:48
5	04:36	05:33	06:42	07:48		09:51 (15)	08:01		11:27 (28)	09:07
	22:46	21:51	20:28	19:02	10	10:01 (15)	16:39	70	14:17 (23)	15:47
6	04:37	05:35	06:44	07:51		09:48 (15)	08:03		11:28 (28)	09:09
	22:45	21:49	20:25	18:59	15	10:03 (15)	16:37	65	14:16 (23)	15:46
7	04:39	05:37	06:46	07:53		09:46 (15)	08:06		11:28 (28)	09:10
	22:44	21:47	20:22	18:56	18	10:04 (15)	16:34	62	14:14 (23)	15:45
8	04:40	05:39	06:49	07:55		09:45 (15)	08:08		11:29 (28)	09:12
	22:43	21:44	20:20	18:53	21	10:06 (15)	16:32	57	14:13 (23)	15:45
9	04:41	05:42	06:51	07:57		09:44 (15)	08:11		11:30 (28)	09:13
	22:42	21:42	20:17	18:50	22	10:06 (15)	16:30	53	14:12 (23)	15:44
10	04:43	05:44	06:53	08:00		09:44 (15)	08:13		10:47 (33)	09:15
	22:40	21:39	20:14	18:47	23	10:07 (15)	16:28	58	14:10 (23)	15:44
11	04:44	05:46	06:55	08:02		09:43 (15)	08:15		10:45 (33)	09:16
	22:39	21:37	20:11	18:45	23	10:06 (15)	16:25	55	13:59 (23)	15:43
12	04:46	05:48	06:57	08:04		09:42 (15)	08:18		10:44 (33)	09:18
	22:38	21:34	20:08	18:42	24	10:06 (15)	16:23	57	12:31 (20)	15:43
13	04:47	05:51	07:00	08:07		09:43 (15)	08:20		10:43 (33)	09:19
	22:37	21:31	20:05	18:39	23	10:06 (15)	16:21	59	12:32 (20)	15:42
14	04:49	05:53	07:02	08:09		09:42 (15)	08:22		10:42 (33)	09:20
	22:35	21:29	20:02	18:36	23	10:05 (15)	16:19	58	12:33 (20)	15:42
15	04:51	05:55	07:04	08:11		09:43 (15)	08:25		10:42 (33)	09:21
	22:34	21:26	19:59	18:33	33	12:54 (28)	16:17	53	12:34 (20)	15:42
16	04:52	05:57	07:06	08:13		09:44 (15)	08:27		10:42 (33)	09:22
	22:32	21:24	19:56	18:31	39	12:58 (28)	16:15	45	12:35 (20)	15:42
17	04:54	06:00	07:08	08:16		09:45 (15)	08:29		10:41 (33)	09:23
	22:30	21:21	19:54	18:28	46	15:07 (23)	16:13	47	12:35 (20)	15:42
18	04:56	06:02	07:11	08:18		09:46 (15)	08:32		10:44 (33)	09:24
	22:29	21:18	19:51	18:25	59	15:12 (23)	16:11	46	12:36 (20)	15:42
19	04:58	06:04	07:13	08:20		09:49 (15)	08:34		10:46 (33)	09:25
	22:27	21:16	19:48	18:22	62	15:15 (23)	16:09	45	12:37 (20)	15:42
20	05:00	06:06	07:15	08:23		12:30 (28)	08:36		10:46 (33)	09:26
	22:25	21:13	19:45	18:20	60	15:16 (23)	16:08	45	12:37 (20)	15:43
21	05:01	06:08	07:17	08:25		12:29 (28)	08:39		10:46 (33)	09:26
	22:24	21:10	19:42	18:17	65	15:17 (23)	16:06	36	12:37 (20)	15:43
22	05:03	06:11	07:19	08:27		12:27 (28)	08:41		10:48 (33)	09:27
	22:22	21:08	19:39	18:14	70	15:18 (23)	16:04	30	12:38 (20)	15:43
23	05:05	06:13	07:22	08:30		12:27 (28)	08:43		12:30 (20)	09:27
	22:20	21:05	19:36	18:12	72	15:19 (23)	16:02	5	12:35 (20)	15:44
24	05:07	06:15	07:24	08:32		12:26 (28)	08:45			09:28
	22:18	21:02	19:33	18:09	75	15:19 (23)	16:01			15:44
25	05:09	06:17	07:26	07:35		11:26 (28)	08:47			09:28
	22:16	20:59	19:30	17:06	76	14:20 (23)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:25 (28)	08:50			09:28
	22:14	20:56	19:27	17:04	81	15:04 (24)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:25 (28)	08:52			09:28
	22:12	20:54	19:25	17:01	91	15:08 (24)	15:56			15:47
28	05:16	06:24	07:33	07:42		11:25 (28)	08:54			09:28
	22:10	20:51	19:22	16:59	95	15:10 (24)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:24 (28)	08:56			09:28
	22:07	20:48	19:19	16:56	99	15:11 (24)	15:54			15:49
30	05:20	06:29	07:37	07:47		11:25 (28)	08:58			09:28
	22:05	20:45	19:16	16:54	99	15:12 (24)	15:52			15:50
31	05:22	06:31		07:49		11:25 (28)				09:28
	22:03	20:42		16:51	101	15:13 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1425			1286		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		10:42 (33)	07:35		08:50 (15)	07:07		05:44	04:40
	15:53			16:56	72	14:06 (23)	18:05	39	11:29 (28)	20:17		21:26	22:30
2	09:27			08:43		10:44 (33)	07:33		08:50 (15)	07:04		05:41	04:38
	15:54			16:58	72	14:08 (23)	18:07	31	11:25 (28)	20:19		21:28	22:32
3	09:27			08:41		10:46 (33)	07:30		08:49 (15)	07:01		05:39	04:37
	15:55			17:01	71	14:10 (23)	18:09	21	09:10 (15)	20:21		21:31	22:34
4	09:26			08:39		10:47 (33)	07:27		08:48 (15)	06:58		05:36	04:36
	15:57			17:03	77	15:02 (24)	18:12	22	09:10 (15)	20:24		21:33	22:35
5	09:26			08:37		10:50 (33)	07:24		08:48 (15)	06:55		05:34	04:35
	15:58			17:06	77	15:05 (24)	18:14	21	09:09 (15)	20:26		21:35	22:37
6	09:25			08:34		11:05 (28)	07:21		08:48 (15)	06:52		05:31	04:34
	16:00			17:08	82	15:12 (24)	18:17	21	09:09 (15)	20:28		21:37	22:38
7	09:24			08:32		11:03 (28)	07:19		08:48 (15)	06:50		05:29	04:33
	16:02			17:11	92	15:18 (24)	18:19	20	09:08 (15)	20:30		21:40	22:39
8	09:24			08:30		11:03 (28)	07:16		08:48 (15)	06:47		05:26	04:32
	16:03			17:13	101	15:25 (24)	18:21	19	09:07 (15)	20:33		21:42	22:40
9	09:23			08:27		11:02 (28)	07:13		08:48 (15)	06:44		05:24	04:31
	16:05			17:16	112	15:55 (22)	18:24	18	09:06 (15)	20:35		21:44	22:42
10	09:22			08:25		11:01 (28)	07:10		08:49 (15)	06:41		05:22	04:30
	16:07			17:18	104	15:51 (22)	18:26	15	09:04 (15)	20:37		21:46	22:43
11	09:21			08:23		11:01 (28)	07:07		08:51 (15)	06:38		05:19	04:29
	16:09			17:21	101	15:23 (24)	18:28	10	09:01 (15)	20:40		21:49	22:44
12	09:20			08:20		11:00 (28)	07:04			06:35		05:17	04:29
	16:11			17:23	98	15:21 (24)	18:31			20:42		21:51	22:45
13	09:18			08:18		10:59 (28)	07:02			06:33		05:15	04:28
	16:13			17:26	94	15:18 (24)	18:33			20:44		21:53	22:46
14	09:17			08:15		11:00 (28)	06:59			06:30		05:13	04:28
	16:15			17:28	83	14:14 (23)	18:35			20:47		21:55	22:47
15	09:16			08:13		10:59 (28)	06:56			06:27		05:10	04:27
	16:17			17:31	83	14:13 (23)	18:38			20:49		21:58	22:47
16	09:15			08:10		10:59 (28)	06:53			06:24		05:08	04:27
	16:19			17:33	81	14:12 (23)	18:40			20:51		22:00	22:48
17	09:13			08:07		10:59 (28)	06:50			06:21		05:06	04:27
	16:21			17:36	81	14:12 (23)	18:42			20:53		22:02	22:49
18	09:12			08:05		10:59 (28)	06:47			06:19		05:04	04:27
	16:23			17:38	80	14:12 (23)	18:45			20:56		22:04	22:49
19	09:10			08:02		10:59 (28)	06:44			06:16		05:02	04:27
	16:25			17:40	78	14:11 (23)	18:47			20:58		22:06	22:50
20	09:08			08:00		10:59 (28)	06:41			06:13		05:00	04:27
	16:28			17:43	74	14:09 (23)	18:49			21:00		22:08	22:50
21	09:07			07:57		10:59 (28)	06:39			06:10		04:58	04:27
	16:30			17:45	71	14:08 (23)	18:51			21:03		22:10	22:50
22	09:05			07:54		11:00 (28)	06:36			06:08		04:56	04:27
	16:32			17:48	66	14:06 (23)	18:54			21:05		22:12	22:50
23	09:03			07:52		11:01 (28)	06:33			06:05		04:54	04:27
	16:34			17:50	60	14:04 (23)	18:56			21:07		22:14	22:50
24	09:02			07:49		11:01 (28)	06:30			06:02		04:52	04:27
	16:37			17:53	50	14:00 (23)	18:58			21:10		22:16	22:51
25	09:00			07:46		11:02 (28)	06:27			06:00		04:51	04:28
	16:39			17:55	36	11:38 (28)	19:01			21:12		22:18	22:50
26	08:58		12:05 (20)	07:44		08:58 (15)	06:24			05:57		04:49	04:28
	16:41	5	12:10 (20)	17:57	36	11:36 (28)	19:03			21:14		22:20	22:50
27	08:56		12:05 (20)	07:41		08:54 (15)	06:21			05:54		04:47	04:29
	16:44	19	13:53 (23)	18:00	41	11:34 (28)	19:05			21:17		22:22	22:50
28	08:54		11:00 (33)	07:38		08:52 (15)	06:18			05:52		04:46	04:30
	16:46	40	13:59 (23)	18:02	41	11:32 (28)	19:08			21:19		22:24	22:50
29	08:52		10:56 (33)				07:15			05:49		04:44	04:30
	16:49	47	14:02 (23)				20:10			21:21		22:25	22:50
30	08:50		10:50 (33)				07:13			05:46		04:43	04:31
	16:51	55	14:03 (23)				20:12			21:24		22:27	22:49
31	08:48		10:44 (33)				07:10					04:41	
	16:54	62	14:05 (23)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		228			2114			237					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51		10:30 (28)	09:00
	22:49	22:01	20:40	19:13		16:49	107	15:21 (22)	15:51
2	04:33	05:26	06:35	07:42		09:32 (15)	07:54		10:32 (28)	09:02
	22:48	21:58	20:37	19:10	7	09:39 (15)	16:46	110	15:25 (22)	15:50
3	04:34	05:28	06:37	07:44		09:28 (15)	07:56		10:33 (28)	09:03
	22:47	21:56	20:34	19:07	13	09:41 (15)	16:44	97	14:53 (24)	15:49
4	04:35	05:31	06:40	07:46		09:26 (15)	07:59		10:33 (28)	09:05
	22:47	21:54	20:31	19:04	16	09:42 (15)	16:41	89	14:46 (24)	15:48
5	04:36	05:33	06:42	07:48		09:25 (15)	08:01		10:35 (28)	09:07
	22:46	21:51	20:28	19:02	19	09:44 (15)	16:39	81	14:41 (24)	15:47
6	04:37	05:35	06:44	07:51		09:24 (15)	08:03		10:20 (33)	09:09
	22:45	21:49	20:25	18:59	20	09:44 (15)	16:37	77	14:35 (24)	15:46
7	04:39	05:37	06:46	07:53		09:23 (15)	08:06		10:16 (33)	09:10
	22:44	21:47	20:22	18:56	21	09:44 (15)	16:34	77	14:32 (24)	15:45
8	04:40	05:39	06:49	07:55		09:23 (15)	08:08		10:15 (33)	09:12
	22:43	21:44	20:20	18:53	22	09:45 (15)	16:32	71	13:39 (23)	15:45
9	04:41	05:42	06:51	07:57		09:22 (15)	08:11		10:15 (33)	09:13
	22:42	21:42	20:17	18:50	22	09:44 (15)	16:30	72	13:39 (23)	15:44
10	04:43	05:44	06:53	08:00		09:23 (15)	08:13		10:14 (33)	09:15
	22:40	21:39	20:14	18:47	21	09:44 (15)	16:28	71	13:38 (23)	15:44
11	04:44	05:46	06:55	08:02		09:23 (15)	08:15		10:15 (33)	09:16
	22:39	21:37	20:11	18:45	20	09:43 (15)	16:25	61	13:36 (23)	15:43
12	04:46	05:48	06:57	08:04		09:23 (15)	08:18		10:24 (33)	09:18
	22:38	21:34	20:08	18:42	36	12:00 (28)	16:23	52	13:35 (23)	15:43
13	04:47	05:51	07:00	08:07		09:24 (15)	08:20		10:28 (33)	09:19
	22:37	21:31	20:05	18:39	40	12:04 (28)	16:21	47	13:33 (23)	15:42
14	04:49	05:53	07:02	08:09		09:25 (15)	08:22		10:32 (33)	09:20
	22:35	21:29	20:02	18:36	42	12:06 (28)	16:19	39	13:30 (23)	15:42
15	04:51	05:55	07:04	08:11		09:28 (15)	08:25		11:38 (20)	09:21
	22:34	21:26	19:59	18:33	40	12:08 (28)	16:17	19	13:26 (23)	15:42
16	04:52	05:57	07:06	08:13		11:35 (28)	08:27		11:38 (20)	09:22
	22:32	21:24	19:56	18:31	34	12:09 (28)	16:15	4	11:42 (20)	15:42
17	04:54	06:00	07:08	08:16		11:34 (28)	08:29			09:23
	22:30	21:21	19:54	18:28	36	12:10 (28)	16:13			15:42
18	04:56	06:02	07:11	08:18		11:32 (28)	08:32			09:24
	22:29	21:18	19:51	18:25	55	14:33 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		11:32 (28)	08:34			09:25
	22:27	21:16	19:48	18:22	62	14:36 (23)	16:09			15:42
20	05:00	06:06	07:15	08:23		11:31 (28)	08:36			09:26
	22:25	21:13	19:45	18:20	67	14:37 (23)	16:08			15:43
21	05:01	06:09	07:17	08:25		11:30 (28)	08:39			09:26
	22:24	21:10	19:42	18:17	72	14:39 (23)	16:06			15:43
22	05:03	06:11	07:19	08:27		11:29 (28)	08:41			09:27
	22:22	21:08	19:39	18:14	75	14:40 (23)	16:04			15:43
23	05:05	06:13	07:22	08:30		11:29 (28)	08:43			09:27
	22:20	21:05	19:36	18:12	78	14:41 (23)	16:02			15:44
24	05:07	06:15	07:24	08:32		11:29 (28)	08:45			09:28
	22:18	21:02	19:33	18:09	79	14:41 (23)	16:01			15:45
25	05:09	06:17	07:26	07:35		10:29 (28)	08:47			09:28
	22:16	20:59	19:30	17:07	81	13:42 (23)	15:59			15:45
26	05:11	06:20	07:28	07:37		10:29 (28)	08:50			09:28
	22:14	20:57	19:27	17:04	82	13:43 (23)	15:58			15:46
27	05:13	06:22	07:30	07:39		10:29 (28)	08:52			09:28
	22:12	20:54	19:25	17:01	81	13:42 (23)	15:56			15:47
28	05:16	06:24	07:33	07:42		10:29 (28)	08:54			09:28
	22:10	20:51	19:22	16:59	87	14:45 (24)	15:55			15:48
29	05:18	06:26	07:35	07:44		10:29 (28)	08:56			09:28
	22:07	20:48	19:19	16:56	95	14:48 (24)	15:54			15:49
30	05:20	06:29	07:37	07:47		10:30 (28)	08:58			09:28
	22:05	20:45	19:16	16:54	99	14:51 (24)	15:52			15:50
31	05:22	06:31		07:49		10:31 (28)				09:28
	22:03	20:42		16:51	99	14:52 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1521			1074		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		08:46		11:39 (28)	07:35	09:25 (15)	07:07	05:44	04:40
	15:53		16:56	88	15:12 (24)	18:05	9 09:34 (15)	20:17	21:26	22:31
2	09:27		08:43		11:39 (28)	07:33		07:04	05:41	04:38
	15:54		16:58	88	15:13 (24)	18:07		20:19	21:28	22:32
3	09:27		08:41		11:40 (28)	07:30		07:01	05:39	04:37
	15:55		17:01	85	15:12 (24)	18:09		20:21	21:31	22:34
4	09:27		08:39		11:39 (28)	07:27		06:58	05:36	04:36
	15:57		17:03	83	15:11 (24)	18:12		20:24	21:33	22:35
5	09:26	12:20 (20)	08:37		11:39 (28)	07:24		06:55	05:34	04:35
	15:58	1 12:21 (20)	17:06	80	15:09 (24)	18:14		20:26	21:35	22:37
6	09:25	12:19 (20)	08:34		11:40 (28)	07:21		06:52	05:31	04:34
	16:00	5 12:24 (20)	17:08	74	15:08 (24)	18:17		20:28	21:37	22:38
7	09:24	12:17 (20)	08:32		11:40 (28)	07:19		06:50	05:29	04:33
	16:02	11 12:28 (20)	17:11	62	14:11 (23)	18:19		20:30	21:40	22:39
8	09:24	12:17 (20)	08:30		11:41 (28)	07:16		06:47	05:26	04:32
	16:03	13 12:30 (20)	17:13	61	14:11 (23)	18:21		20:33	21:42	22:40
9	09:23	12:18 (20)	08:27		11:42 (28)	07:13		06:44	05:24	04:31
	16:05	16 12:34 (20)	17:16	57	14:10 (23)	18:24		20:35	21:44	22:42
10	09:22	11:06 (33)	08:25		11:42 (28)	07:10		06:41	05:22	04:30
	16:07	25 12:39 (20)	17:18	54	14:09 (23)	18:26		20:37	21:46	22:43
11	09:21	11:02 (33)	08:23		11:44 (28)	07:07		06:38	05:19	04:29
	16:09	31 12:41 (20)	17:21	48	14:08 (23)	18:28		20:40	21:49	22:44
12	09:20	11:01 (33)	08:20		11:45 (28)	07:04		06:35	05:17	04:29
	16:11	40 12:41 (20)	17:23	42	14:06 (23)	18:31		20:42	21:51	22:45
13	09:18	11:02 (33)	08:18		11:46 (28)	07:02		06:32	05:15	04:28
	16:13	42 12:42 (20)	17:26	32	14:02 (23)	18:33		20:44	21:53	22:46
14	09:17	11:02 (33)	08:15		11:49 (28)	06:59		06:30	05:13	04:28
	16:15	42 12:42 (20)	17:28	18	12:07 (28)	18:35		20:47	21:55	22:47
15	09:16	11:02 (33)	08:13		11:52 (28)	06:56		06:27	05:10	04:27
	16:17	43 12:42 (20)	17:31	12	12:04 (28)	18:38		20:49	21:58	22:47
16	09:15	11:02 (33)	08:10		09:29 (15)	06:53		06:24	05:08	04:27
	16:19	43 12:42 (20)	17:33	5	09:34 (15)	18:40		20:51	22:00	22:48
17	09:13	11:02 (33)	08:07		09:25 (15)	06:50		06:21	05:06	04:27
	16:21	45 12:42 (20)	17:36	12	09:37 (15)	18:42		20:53	22:02	22:49
18	09:12	11:03 (33)	08:05		09:24 (15)	06:47		06:19	05:04	04:27
	16:23	57 13:55 (23)	17:38	16	09:40 (15)	18:45		20:56	22:04	22:49
19	09:10	11:03 (33)	08:02		09:23 (15)	06:44		06:16	05:02	04:27
	16:25	70 13:59 (23)	17:40	17	09:40 (15)	18:47		20:58	22:06	22:50
20	09:08	11:04 (33)	08:00		09:22 (15)	06:41		06:13	05:00	04:27
	16:28	75 14:01 (23)	17:43	19	09:41 (15)	18:49		21:00	22:08	22:50
21	09:07	11:04 (33)	07:57		09:21 (15)	06:39		06:10	04:58	04:27
	16:30	80 14:03 (23)	17:45	20	09:41 (15)	18:51		21:03	22:10	22:50
22	09:05	11:05 (33)	07:54		09:20 (15)	06:36		06:08	04:56	04:27
	16:32	82 14:05 (23)	17:48	21	09:41 (15)	18:54		21:05	22:12	22:50
23	09:03	11:05 (33)	07:52		09:21 (15)	06:33		06:05	04:54	04:27
	16:34	83 14:05 (23)	17:50	21	09:42 (15)	18:56		21:07	22:14	22:51
24	09:02	11:06 (33)	07:49		09:21 (15)	06:30		06:02	04:52	04:27
	16:37	84 14:07 (23)	17:53	20	09:41 (15)	18:58		21:10	22:16	22:51
25	09:00	11:07 (33)	07:46		09:21 (15)	06:27		05:59	04:51	04:28
	16:39	84 14:52 (24)	17:55	20	09:41 (15)	19:01		21:12	22:18	22:51
26	08:58	11:09 (33)	07:44		09:21 (15)	06:24		05:57	04:49	04:28
	16:41	79 14:57 (24)	17:57	19	09:40 (15)	19:03		21:14	22:20	22:50
27	08:56	11:10 (33)	07:41		09:22 (15)	06:21		05:54	04:47	04:29
	16:44	86 15:12 (24)	18:00	16	09:38 (15)	19:05		21:17	22:22	22:50
28	08:54	11:13 (33)	07:38		09:23 (15)	06:18		05:52	04:46	04:30
	16:46	90 15:13 (24)	18:02	14	09:37 (15)	19:08		21:19	22:24	22:50
29	08:52	11:40 (28)				07:15		05:49	04:44	04:30
	16:49	88 15:14 (24)				20:10		21:21	22:25	22:50
30	08:50	11:39 (28)				07:12		05:46	04:42	04:31
	16:51	88 15:13 (24)				20:12		21:24	22:27	22:49
31	08:48	11:39 (28)				07:10			04:41	
	16:54	88 15:13 (24)				20:14			22:29	
Potential sun hours	221		260			365		432	521	547
Total, worst case		1491		1104		9				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:12 (28)	09:00		10:44 (33)
	22:49		22:01		20:40		19:13			16:49	53	13:38 (23)	15:51	31	12:23 (20)
2	04:33		05:26		06:35		07:42			07:54		11:11 (28)	09:02		10:48 (33)
	22:48		21:58		20:37		19:10			16:46	58	13:40 (23)	15:50	27	12:23 (20)
3	04:34		05:28		06:37		07:44			07:56		11:11 (28)	09:03		12:01 (20)
	22:47		21:56		20:34		19:07			16:44	60	13:41 (23)	15:49	17	12:18 (20)
4	04:35		05:31		06:40		07:46			07:59		11:10 (28)	09:05		12:01 (20)
	22:47		21:54		20:31		19:04			16:41	63	13:41 (23)	15:48	13	12:14 (20)
5	04:36		05:33		06:42		07:48			08:01		11:10 (28)	09:07		12:02 (20)
	22:46		21:51		20:28		19:02			16:39	75	14:38 (24)	15:47	11	12:13 (20)
6	04:37		05:35		06:44		07:51			08:03		11:10 (28)	09:09		12:05 (20)
	22:45		21:49		20:25		18:59			16:37	79	14:40 (24)	15:46	5	12:10 (20)
7	04:39		05:37		06:46		07:53			08:06		11:09 (28)	09:10		12:07 (20)
	22:44		21:47		20:22		18:56			16:34	84	14:41 (24)	15:45	2	12:09 (20)
8	04:40		05:39		06:49		07:55			08:08		11:09 (28)	09:12		
	22:43		21:44		20:20		18:53			16:32	87	14:42 (24)	15:45		
9	04:41		05:42		06:51		07:57			08:11		11:10 (28)	09:13		
	22:42		21:42		20:17		18:50			16:30	87	14:43 (24)	15:44		
10	04:43		05:44		06:53		08:00			08:13		11:10 (28)	09:15		
	22:41		21:39		20:14		18:47			16:28	88	14:44 (24)	15:43		
11	04:44		05:46		06:55		08:02			08:15		11:10 (28)	09:16		
	22:39		21:37		20:11		18:45			16:25	88	14:44 (24)	15:43		
12	04:46		05:48		06:57		08:04		10:02 (15)	08:18		11:11 (28)	09:18		
	22:38		21:34		20:08		18:42	2	10:04 (15)	16:23	88	14:45 (24)	15:43		
13	04:47		05:51		07:00		08:07		09:58 (15)	08:20		11:12 (28)	09:19		
	22:37		21:32		20:05		18:39	11	10:09 (15)	16:21	86	14:45 (24)	15:42		
14	04:49		05:53		07:02		08:09		09:55 (15)	08:22		10:45 (33)	09:20		
	22:35		21:29		20:02		18:36	15	10:10 (15)	16:19	89	14:45 (24)	15:42		
15	04:51		05:55		07:04		08:11		09:54 (15)	08:25		10:42 (33)	09:21		
	22:34		21:26		19:59		18:33	18	10:12 (15)	16:17	87	14:45 (24)	15:42		
16	04:52		05:57		07:06		08:13		09:53 (15)	08:27		10:41 (33)	09:22		
	22:32		21:24		19:56		18:31	19	10:12 (15)	16:15	81	14:30 (24)	15:42		
17	04:54		06:00		07:08		08:16		09:53 (15)	08:30		10:41 (33)	09:23		
	22:30		21:21		19:54		18:28	20	10:13 (15)	16:13	83	14:25 (24)	15:42		
18	04:56		06:02		07:11		08:18		09:52 (15)	08:32		10:40 (33)	09:24		
	22:29		21:18		19:51		18:25	21	10:13 (15)	16:11	84	13:41 (23)	15:42		
19	04:58		06:04		07:13		08:20		09:52 (15)	08:34		10:40 (33)	09:25		
	22:27		21:16		19:48		18:22	21	10:13 (15)	16:09	83	13:40 (23)	15:42		
20	05:00		06:06		07:15		08:23		09:52 (15)	08:36		10:39 (33)	09:26		
	22:25		21:13		19:45		18:20	20	10:12 (15)	16:08	82	13:39 (23)	15:43		
21	05:01		06:08		07:17		08:25		09:52 (15)	08:39		10:39 (33)	09:26		
	22:24		21:10		19:42		18:17	20	10:12 (15)	16:06	80	13:38 (23)	15:43		
22	05:03		06:11		07:19		08:27		09:52 (15)	08:41		10:40 (33)	09:27		
	22:22		21:08		19:39		18:14	19	10:11 (15)	16:04	75	13:37 (23)	15:43		
23	05:05		06:13		07:22		08:30		09:53 (15)	08:43		10:39 (33)	09:27		
	22:20		21:05		19:36		18:12	17	10:10 (15)	16:02	69	13:35 (23)	15:44		
24	05:07		06:15		07:24		08:32		09:54 (15)	08:45		10:40 (33)	09:28		
	22:18		21:02		19:33		18:09	14	10:08 (15)	16:01	58	13:32 (23)	15:44		
25	05:09		06:17		07:26		07:35		08:56 (15)	08:47		10:40 (33)	09:28		
	22:16		20:59		19:30		17:06	11	09:07 (15)	15:59	45	12:20 (20)	15:45		
26	05:11		06:20		07:28		07:37		09:01 (15)	08:50		10:41 (33)	09:28		
	22:14		20:57		19:27		17:04	2	09:03 (15)	15:58	43	12:21 (20)	15:46		
27	05:13		06:22		07:30		07:39		11:20 (28)	08:52		10:41 (33)	09:28		
	22:12		20:54		19:25		17:01	14	11:34 (28)	15:56	43	12:21 (20)	15:47		
28	05:16		06:24		07:33		07:42		11:18 (28)	08:54		10:42 (33)	09:28		
	22:10		20:51		19:22		16:59	19	11:37 (28)	15:55	42	12:22 (20)	15:48		
29	05:18		06:26		07:35		07:44		11:15 (28)	08:56		10:42 (33)	09:28		
	22:07		20:48		19:19		16:56	34	13:32 (23)	15:54	42	12:22 (20)	15:49		
30	05:20		06:29		07:37		07:47		11:14 (28)	08:58		10:42 (33)	09:28		
	22:05		20:45		19:16		16:54	42	13:35 (23)	15:52	40	12:22 (20)	15:50		
31	05:22		06:31				07:49		11:13 (28)				09:28		
	22:03		20:42				16:51	50	13:38 (23)				15:51		
Potential sun hours	546		478		386		319			236			199		
Total, worst case								389			2122			106	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:12 (33)	08:46	11:58 (28)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (33)	16:56	88	15:21 (24)	18:05	20:17	21:26	22:30
2	09:27		11:11 (33)	08:43	11:59 (28)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (33)	16:58	85	15:21 (24)	18:07	20:19	21:28	22:32
3	09:27		11:11 (33)	08:41	12:00 (28)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (20)	17:01	84	15:21 (24)	18:09	20:21	21:31	22:34
4	09:27		11:11 (33)	08:39	11:59 (28)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (20)	17:03	82	15:20 (24)	18:12	20:24	21:33	22:35
5	09:26		11:11 (33)	08:37	11:59 (28)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (20)	17:06	81	15:19 (24)	18:14	20:26	21:35	22:37
6	09:25		11:11 (33)	08:34	12:00 (28)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (20)	17:08	75	15:18 (24)	18:17	20:28	21:37	22:38
7	09:24		11:11 (33)	08:32	12:01 (28)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (20)	17:11	64	15:14 (24)	18:19	20:30	21:40	22:39
8	09:24		11:11 (33)	08:30	12:02 (28)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (20)	17:13	57	14:25 (23)	18:21	20:33	21:42	22:40
9	09:23		11:12 (33)	08:27	12:03 (28)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (20)	17:16	53	14:24 (23)	18:24	20:35	21:44	22:42
10	09:22		11:11 (33)	08:25	12:04 (28)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (20)	17:18	48	14:23 (23)	18:26	20:37	21:46	22:43
11	09:21		11:12 (33)	08:23	12:06 (28)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (20)	17:21	43	14:22 (23)	18:28	20:40	21:49	22:44
12	09:20		11:12 (33)	08:20	12:07 (28)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (20)	17:23	35	14:20 (23)	18:31	20:42	21:51	22:45
13	09:18		11:12 (33)	08:18	12:10 (28)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (20)	17:26	22	14:16 (23)	18:33	20:44	21:53	22:46
14	09:17		11:12 (33)	08:15	09:38 (15)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (20)	17:28	10	12:19 (28)	18:35	20:47	21:55	22:47
15	09:16		11:12 (33)	08:13	09:35 (15)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (20)	17:31	12	09:47 (15)	18:38	20:49	21:58	22:47
16	09:15		11:12 (33)	08:10	09:33 (15)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (20)	17:33	16	09:49 (15)	18:40	20:51	22:00	22:48
17	09:13		11:13 (33)	08:07	09:32 (15)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (20)	17:36	18	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:14 (33)	08:05	09:31 (15)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (20)	17:38	20	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:15 (33)	08:02	09:31 (15)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (20)	17:40	20	09:51 (15)	18:47	20:58	22:06	22:50
20	09:08		11:15 (33)	08:00	09:30 (15)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (23)	17:43	21	09:51 (15)	18:49	21:00	22:08	22:50
21	09:07		11:16 (33)	07:57	09:30 (15)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (23)	17:45	21	09:51 (15)	18:51	21:03	22:10	22:50
22	09:05		11:16 (33)	07:54	09:29 (15)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (23)	17:48	22	09:51 (15)	18:54	21:05	22:12	22:50
23	09:03		11:17 (33)	07:52	09:30 (15)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (23)	17:50	21	09:51 (15)	18:56	21:07	22:14	22:51
24	09:02		11:19 (33)	07:49	09:31 (15)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (23)	17:53	19	09:50 (15)	18:58	21:10	22:16	22:51
25	09:00		11:20 (33)	07:46	09:31 (15)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (23)	17:55	18	09:49 (15)	19:01	21:12	22:18	22:51
26	08:58		11:23 (33)	07:44	09:32 (15)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (24)	17:57	15	09:47 (15)	19:03	21:14	22:20	22:50
27	08:56		11:58 (28)	07:41	09:34 (15)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (24)	18:00	11	09:45 (15)	19:05	21:17	22:22	22:50
28	08:54		11:58 (28)	07:38	09:38 (15)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (24)	18:02	2	09:40 (15)	19:07	21:19	22:24	22:50
29	08:52		11:59 (28)			07:15	05:49	04:44	04:30
	16:49	83	15:18 (24)			20:10	21:21	22:25	22:50
30	08:50		11:58 (28)			07:12	05:46	04:42	04:31
	16:51	86	15:21 (24)			20:12	21:24	22:27	22:49
31	08:48		11:58 (28)			07:10		04:41	
	16:54	88	15:22 (24)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1646			1063				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:33 (28)	09:00		10:54 (33)
	22:49	22:01	20:40	19:13			16:49	50	13:53 (23)	15:51	43	12:35 (20)
2	04:33	05:26	06:35	07:42			07:54		11:32 (28)	09:02		10:54 (33)
	22:48	21:58	20:37	19:10			16:46	54	13:54 (23)	15:50	42	12:35 (20)
3	04:34	05:28	06:37	07:44			07:56		11:32 (28)	09:03		10:55 (33)
	22:47	21:56	20:34	19:07			16:44	57	13:55 (23)	15:49	40	12:35 (20)
4	04:35	05:31	06:40	07:46			07:59		11:30 (28)	09:05		10:56 (33)
	22:47	21:54	20:31	19:04			16:41	68	14:45 (24)	15:48	39	12:35 (20)
5	04:36	05:33	06:42	07:48			08:01		11:30 (28)	09:07		10:56 (33)
	22:46	21:51	20:28	19:02			16:39	76	14:48 (24)	15:47	39	12:36 (20)
6	04:37	05:35	06:44	07:51			08:03		11:30 (28)	09:09		10:57 (33)
	22:45	21:49	20:25	18:59			16:37	78	14:49 (24)	15:46	30	12:36 (20)
7	04:39	05:37	06:46	07:53			08:06		11:29 (28)	09:10		10:58 (33)
	22:44	21:47	20:22	18:56			16:34	83	14:50 (24)	15:45	29	12:36 (20)
8	04:40	05:39	06:49	07:55			08:08		11:29 (28)	09:12		10:59 (33)
	22:43	21:44	20:20	18:53			16:32	86	14:51 (24)	15:45	15	12:33 (20)
9	04:41	05:42	06:51	07:57			08:11		11:29 (28)	09:13		11:00 (33)
	22:42	21:42	20:17	18:50			16:30	87	14:52 (24)	15:44	12	12:34 (20)
10	04:43	05:44	06:53	08:00			08:13		11:30 (28)	09:15		11:00 (33)
	22:41	21:39	20:14	18:47			16:28	88	14:53 (24)	15:43	4	12:31 (20)
11	04:44	05:46	06:55	08:02			08:15		11:29 (28)	09:16		11:02 (33)
	22:39	21:37	20:11	18:45			16:25	87	14:52 (24)	15:43	2	11:04 (33)
12	04:46	05:48	06:57	08:04			08:18		11:30 (28)	09:18		11:02 (33)
	22:38	21:34	20:08	18:42			16:23	87	14:53 (24)	15:43	2	11:04 (33)
13	04:47	05:51	07:00	08:07			08:20		11:30 (28)	09:19		
	22:37	21:31	20:05	18:39			16:21	83	14:50 (24)	15:42		
14	04:49	05:53	07:02	08:09		10:08 (15)	08:22		11:30 (28)	09:20		
	22:35	21:29	20:02	18:36	8	10:16 (15)	16:19	74	14:42 (24)	15:42		
15	04:51	05:55	07:04	08:11		10:06 (15)	08:25		11:31 (28)	09:21		
	22:34	21:26	19:59	18:33	13	10:19 (15)	16:17	68	14:38 (24)	15:42		
16	04:52	05:57	07:06	08:13		10:04 (15)	08:27		10:56 (33)	09:22		
	22:32	21:24	19:56	18:31	16	10:20 (15)	16:15	69	14:36 (24)	15:42		
17	04:54	06:00	07:08	08:16		10:03 (15)	08:30		10:54 (33)	09:23		
	22:30	21:21	19:54	18:28	18	10:21 (15)	16:13	73	13:55 (23)	15:42		
18	04:56	06:02	07:11	08:18		10:02 (15)	08:32		10:52 (33)	09:24		
	22:29	21:18	19:51	18:25	20	10:22 (15)	16:11	78	13:54 (23)	15:42		
19	04:58	06:04	07:13	08:20		10:01 (15)	08:34		10:52 (33)	09:25		
	22:27	21:16	19:48	18:22	21	10:22 (15)	16:09	81	13:54 (23)	15:42		
20	05:00	06:06	07:15	08:23		10:01 (15)	08:36		10:51 (33)	09:26		
	22:25	21:13	19:45	18:20	21	10:22 (15)	16:08	80	13:52 (23)	15:43		
21	05:01	06:08	07:17	08:25		10:01 (15)	08:39		10:51 (33)	09:26		
	22:24	21:10	19:42	18:17	21	10:22 (15)	16:06	78	13:51 (23)	15:43		
22	05:03	06:11	07:19	08:27		10:00 (15)	08:41		10:51 (33)	09:27		
	22:22	21:08	19:39	18:14	21	10:21 (15)	16:04	75	13:50 (23)	15:43		
23	05:05	06:13	07:22	08:30		10:01 (15)	08:43		10:51 (33)	09:27		
	22:20	21:05	19:36	18:12	20	10:21 (15)	16:02	64	12:31 (20)	15:44		
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		10:51 (33)	09:28		
	22:18	21:02	19:33	18:09	19	10:20 (15)	16:01	63	12:32 (20)	15:44		
25	05:09	06:17	07:26	07:35		09:02 (15)	08:47		10:51 (33)	09:28		
	22:16	20:59	19:30	17:06	18	09:20 (15)	15:59	60	12:32 (20)	15:45		
26	05:11	06:20	07:28	07:37		09:03 (15)	08:50		10:52 (33)	09:28		
	22:14	20:57	19:27	17:04	15	09:18 (15)	15:58	56	12:33 (20)	15:46		
27	05:13	06:22	07:30	07:39		09:05 (15)	08:52		10:51 (33)	09:28		
	22:12	20:54	19:25	17:01	11	09:16 (15)	15:56	53	12:33 (20)	15:47		
28	05:16	06:24	07:33	07:42		09:08 (15)	08:54		10:52 (33)	09:28		
	22:10	20:51	19:22	16:59	13	11:51 (28)	15:55	44	12:34 (20)	15:48		
29	05:18	06:26	07:35	07:44		11:38 (28)	08:56		10:53 (33)	09:28		
	22:07	20:48	19:19	16:56	26	13:46 (23)	15:54	43	12:34 (20)	15:49		
30	05:20	06:29	07:37	07:47		11:36 (28)	08:58		10:53 (33)	09:28		
	22:05	20:45	19:16	16:54	37	13:50 (23)	15:52	43	12:34 (20)	15:50		
31	05:22	06:31		07:49		11:35 (28)				09:28		11:11 (33)
	22:03	20:42		16:51	44	13:52 (23)				15:51	1	11:12 (33)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					362			2086			298	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		11:23 (33)	08:46	12:23 (28)	07:35	07:07	05:44	04:40
	15:53	17	11:40 (33)	16:56	82	15:30 (24)	18:05	20:17	21:26	22:30
2	09:27		11:23 (33)	08:43	12:24 (28)	07:33	07:04	05:41	04:38
	15:54	17	11:40 (33)	16:58	86	15:34 (24)	18:07	20:19	21:28	22:32
3	09:27		11:23 (33)	08:41	12:25 (28)	07:30	07:01	05:39	04:37
	15:55	18	11:41 (33)	17:01	84	15:34 (24)	18:09	20:21	21:31	22:34
4	09:26		11:23 (33)	08:39	12:25 (28)	07:27	06:58	05:36	04:36
	15:57	23	12:52 (20)	17:03	85	15:34 (24)	18:12	20:24	21:33	22:35
5	09:26		11:23 (33)	08:37	12:25 (28)	07:24	06:55	05:34	04:35
	15:58	25	12:53 (20)	17:06	82	15:33 (24)	18:14	20:26	21:35	22:37
6	09:25		11:24 (33)	08:34	12:26 (28)	07:21	06:52	05:31	04:34
	16:00	31	13:06 (20)	17:08	79	15:33 (24)	18:17	20:28	21:37	22:38
7	09:24		11:24 (33)	08:32	12:26 (28)	07:19	06:50	05:29	04:33
	16:02	34	13:07 (20)	17:11	74	15:31 (24)	18:19	20:30	21:40	22:39
8	09:24		11:24 (33)	08:30	12:28 (28)	07:16	06:47	05:26	04:32
	16:03	41	13:07 (20)	17:13	68	15:30 (24)	18:21	20:33	21:42	22:40
9	09:23		11:24 (33)	08:27	12:28 (28)	07:13	06:44	05:24	04:31
	16:05	42	13:07 (20)	17:16	60	15:26 (24)	18:24	20:35	21:44	22:42
10	09:22		11:25 (33)	08:25	12:29 (28)	07:10	06:41	05:22	04:30
	16:07	42	13:08 (20)	17:18	51	14:44 (23)	18:26	20:37	21:46	22:43
11	09:21		11:25 (33)	08:23	12:32 (28)	07:07	06:38	05:19	04:29
	16:09	43	13:09 (20)	17:21	45	14:43 (23)	18:28	20:40	21:49	22:44
12	09:20		11:25 (33)	08:20	09:49 (15)	07:04	06:35	05:17	04:29
	16:11	44	13:09 (20)	17:23	45	14:42 (23)	18:31	20:42	21:51	22:45
13	09:18		11:26 (33)	08:18	09:45 (15)	07:01	06:32	05:15	04:28
	16:13	44	13:10 (20)	17:26	43	14:40 (23)	18:33	20:44	21:53	22:46
14	09:17		11:26 (33)	08:15	09:44 (15)	06:59	06:30	05:13	04:28
	16:15	54	13:10 (20)	17:28	27	14:38 (23)	18:35	20:47	21:55	22:47
15	09:16		11:26 (33)	08:13	09:43 (15)	06:56	06:27	05:10	04:27
	16:17	57	13:10 (20)	17:31	18	10:01 (15)	18:38	20:49	21:58	22:47
16	09:15		11:27 (33)	08:10	09:42 (15)	06:53	06:24	05:08	04:27
	16:19	60	13:10 (20)	17:33	20	10:02 (15)	18:40	20:51	22:00	22:48
17	09:13		11:27 (33)	08:07	09:41 (15)	06:50	06:21	05:06	04:27
	16:21	63	13:10 (20)	17:35	21	10:02 (15)	18:42	20:53	22:02	22:49
18	09:12		11:28 (33)	08:05	09:41 (15)	06:47	06:19	05:04	04:27
	16:23	64	13:11 (20)	17:38	22	10:03 (15)	18:45	20:56	22:04	22:49
19	09:10		11:29 (33)	08:02	09:40 (15)	06:44	06:16	05:02	04:27
	16:25	63	13:11 (20)	17:40	23	10:03 (15)	18:47	20:58	22:06	22:50
20	09:08		11:30 (33)	08:00	09:40 (15)	06:41	06:13	05:00	04:27
	16:28	63	13:11 (20)	17:43	23	10:03 (15)	18:49	21:00	22:08	22:50
21	09:07		11:31 (33)	07:57	09:40 (15)	06:38	06:10	04:58	04:27
	16:30	62	13:11 (20)	17:45	22	10:02 (15)	18:51	21:03	22:10	22:50
22	09:05		11:31 (33)	07:54	09:40 (15)	06:36	06:08	04:56	04:27
	16:32	60	13:09 (20)	17:48	22	10:02 (15)	18:54	21:05	22:12	22:50
23	09:03		11:33 (33)	07:52	09:42 (15)	06:33	06:05	04:54	04:27
	16:34	66	14:33 (23)	17:50	20	10:02 (15)	18:56	21:07	22:14	22:50
24	09:02		11:35 (33)	07:49	09:42 (15)	06:30	06:02	04:52	04:27
	16:37	67	14:36 (23)	17:53	18	10:00 (15)	18:58	21:10	22:16	22:51
25	09:00		11:39 (33)	07:46	09:43 (15)	06:27	05:59	04:51	04:28
	16:39	58	14:38 (23)	17:55	16	09:59 (15)	19:01	21:12	22:18	22:50
26	08:58		12:24 (28)	07:44	09:45 (15)	06:24	05:57	04:49	04:28
	16:41	55	14:40 (23)	17:57	11	09:56 (15)	19:03	21:14	22:20	22:50
27	08:56		12:23 (28)	07:41	09:49 (15)	06:21	05:54	04:47	04:29
	16:44	57	14:40 (23)	18:00	2	09:51 (15)	19:05	21:17	22:22	22:50
28	08:54		12:23 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	61	15:15 (24)	18:02			19:07	21:19	22:24	22:50
29	08:52		12:24 (28)				07:15	05:49	04:44	04:30
	16:49	67	15:19 (24)				20:10	21:21	22:25	22:50
30	08:50		12:23 (28)				07:12	05:46	04:42	04:31
	16:51	74	15:23 (24)				20:12	21:24	22:27	22:49
31	08:48		12:24 (28)				07:10		04:41	
	16:53	77	15:26 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1549			1149					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:59 (28)	09:00		11:07 (33)
	22:49	22:01	20:40	19:13			16:49	51	14:13 (23)	15:51	43	12:51 (20)
2	04:33	05:26	06:35	07:42			07:54		11:58 (28)	09:02		11:08 (33)
	22:48	21:58	20:37	19:10			16:46	61	14:57 (24)	15:50	42	12:51 (20)
3	04:34	05:28	06:37	07:44			07:56		11:57 (28)	09:03		11:08 (33)
	22:47	21:56	20:34	19:07			16:44	71	15:00 (24)	15:49	42	12:51 (20)
4	04:35	05:31	06:40	07:46			07:59		11:56 (28)	09:05		11:09 (33)
	22:47	21:54	20:31	19:04			16:41	76	15:01 (24)	15:48	41	12:52 (20)
5	04:36	05:33	06:42	07:48			08:01		11:55 (28)	09:07		11:09 (33)
	22:46	21:51	20:28	19:02			16:39	80	15:02 (24)	15:47	35	12:52 (20)
6	04:37	05:35	06:44	07:51			08:03		11:55 (28)	09:09		11:10 (33)
	22:45	21:49	20:25	18:59			16:37	82	15:03 (24)	15:46	31	12:52 (20)
7	04:38	05:37	06:46	07:53			08:06		11:54 (28)	09:10		11:11 (33)
	22:44	21:47	20:22	18:56			16:34	84	15:03 (24)	15:45	24	12:40 (20)
8	04:40	05:39	06:49	07:55			08:08		11:54 (28)	09:12		11:11 (33)
	22:43	21:44	20:20	18:53			16:32	87	15:04 (24)	15:45	24	12:41 (20)
9	04:41	05:42	06:51	07:57			08:11		11:55 (28)	09:13		11:12 (33)
	22:42	21:42	20:17	18:50			16:30	87	15:05 (24)	15:44	20	12:37 (20)
10	04:43	05:44	06:53	08:00			08:13		11:55 (28)	09:15		11:12 (33)
	22:40	21:39	20:14	18:47			16:28	81	15:01 (24)	15:43	17	11:29 (33)
11	04:44	05:46	06:55	08:02			08:15		11:54 (28)	09:16		11:14 (33)
	22:39	21:37	20:11	18:45			16:25	78	14:57 (24)	15:43	16	11:30 (33)
12	04:46	05:48	06:57	08:04			08:18		11:55 (28)	09:18		11:14 (33)
	22:38	21:34	20:08	18:42			16:23	74	14:55 (24)	15:43	15	11:29 (33)
13	04:47	05:51	07:00	08:07			08:20		11:56 (28)	09:19		11:15 (33)
	22:37	21:31	20:05	18:39			16:21	67	14:51 (24)	15:42	15	11:30 (33)
14	04:49	05:53	07:02	08:09			08:22		11:55 (28)	09:20		11:16 (33)
	22:35	21:29	20:02	18:36			16:19	62	14:47 (24)	15:42	14	11:30 (33)
15	04:51	05:55	07:04	08:11		10:19 (15)	08:25		11:56 (28)	09:21		11:16 (33)
	22:34	21:26	19:59	18:33	8	10:27 (15)	16:17	57	14:13 (23)	15:42	14	11:30 (33)
16	04:52	05:57	07:06	08:13		10:16 (15)	08:27		11:57 (28)	09:22		11:17 (33)
	22:32	21:24	19:56	18:31	13	10:29 (15)	16:15	54	14:12 (23)	15:42	12	11:29 (33)
17	04:54	06:00	07:08	08:16		10:15 (15)	08:29		11:12 (33)	09:23		11:17 (33)
	22:30	21:21	19:54	18:28	16	10:31 (15)	16:13	58	14:11 (23)	15:42	12	11:29 (33)
18	04:56	06:02	07:11	08:18		10:13 (15)	08:32		11:09 (33)	09:24		11:18 (33)
	22:29	21:18	19:51	18:25	19	10:32 (15)	16:11	67	14:10 (23)	15:42	11	11:29 (33)
19	04:58	06:04	07:13	08:20		10:12 (15)	08:34		11:08 (33)	09:25		11:19 (33)
	22:27	21:16	19:48	18:22	21	10:33 (15)	16:09	66	14:08 (23)	15:42	11	11:30 (33)
20	05:00	06:06	07:15	08:23		10:11 (15)	08:36		11:06 (33)	09:26		11:20 (33)
	22:25	21:13	19:45	18:20	22	10:33 (15)	16:08	60	12:44 (20)	15:43	10	11:30 (33)
21	05:01	06:08	07:17	08:25		10:11 (15)	08:39		11:06 (33)	09:26		11:20 (33)
	22:24	21:10	19:42	18:17	23	10:34 (15)	16:06	62	12:46 (20)	15:43	10	11:30 (33)
22	05:03	06:11	07:19	08:27		10:10 (15)	08:41		11:06 (33)	09:27		11:21 (33)
	22:22	21:08	19:39	18:14	23	10:33 (15)	16:04	63	12:47 (20)	15:43	10	11:31 (33)
23	05:05	06:13	07:22	08:30		10:11 (15)	08:43		11:05 (33)	09:27		11:21 (33)
	22:20	21:05	19:36	18:12	22	10:33 (15)	16:02	63	12:47 (20)	15:44	10	11:31 (33)
24	05:07	06:15	07:24	08:32		10:10 (15)	08:45		11:05 (33)	09:28		11:22 (33)
	22:18	21:02	19:33	18:09	22	10:32 (15)	16:01	64	12:48 (20)	15:44	10	11:32 (33)
25	05:09	06:17	07:26	07:35		09:11 (15)	08:47		11:05 (33)	09:28		11:22 (33)
	22:16	20:59	19:30	17:06	21	09:32 (15)	15:59	63	12:48 (20)	15:45	11	11:33 (33)
26	05:11	06:20	07:28	07:37		09:11 (15)	08:50		11:06 (33)	09:28		11:22 (33)
	22:14	20:56	19:27	17:04	20	09:31 (15)	15:58	59	12:49 (20)	15:46	12	11:34 (33)
27	05:13	06:22	07:30	07:39		09:12 (15)	08:52		11:05 (33)	09:28		11:23 (33)
	22:12	20:54	19:25	17:01	18	09:30 (15)	15:56	57	12:49 (20)	15:47	11	11:34 (33)
28	05:16	06:24	07:33	07:42		09:14 (15)	08:54		11:06 (33)	09:28		11:23 (33)
	22:10	20:51	19:22	16:59	28	14:08 (23)	15:55	53	12:50 (20)	15:48	13	11:36 (33)
29	05:18	06:26	07:35	07:44		09:15 (15)	08:56		11:06 (33)	09:28		11:22 (33)
	22:07	20:48	19:19	16:56	44	14:10 (23)	15:54	44	12:50 (20)	15:49	14	11:36 (33)
30	05:20	06:29	07:37	07:47		09:19 (15)	08:58		11:06 (33)	09:28		11:23 (33)
	22:05	20:45	19:16	16:54	44	14:11 (23)	15:52	43	12:50 (20)	15:50	15	11:38 (33)
31	05:22	06:31		07:49		12:01 (28)				09:28		11:23 (33)
	22:03	20:42		16:51	46	14:13 (23)				15:51	15	11:38 (33)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					410			1974			580	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28		08:46		11:27 (28)	07:35	07:07	05:44	04:40
	15:53		16:56	70	14:51 (24)	18:05	20:17	21:26	22:31
2	09:27	12:04 (20)	08:43		11:27 (28)	07:33	07:04	05:41	04:38
	15:54	1 12:05 (20)	16:58	60	13:50 (23)	18:07	20:19	21:28	22:32
3	09:27	12:04 (20)	08:41		11:28 (28)	07:30	07:01	05:39	04:37
	15:55	4 12:08 (20)	17:01	58	13:50 (23)	18:09	20:21	21:31	22:34
4	09:27	12:04 (20)	08:39		11:28 (28)	07:27	06:58	05:36	04:36
	15:57	7 12:11 (20)	17:03	54	13:48 (23)	18:12	20:24	21:33	22:35
5	09:26	12:04 (20)	08:37		11:28 (28)	07:24	06:55	05:34	04:35
	15:58	17 12:21 (20)	17:06	52	13:47 (23)	18:14	20:26	21:35	22:37
6	09:25	12:05 (20)	08:34		11:29 (28)	07:21	06:52	05:31	04:34
	16:00	16 12:21 (20)	17:08	49	13:47 (23)	18:17	20:28	21:37	22:38
7	09:24	12:05 (20)	08:32		11:29 (28)	07:19	06:50	05:29	04:33
	16:02	19 12:26 (20)	17:11	43	13:44 (23)	18:19	20:30	21:40	22:39
8	09:24	12:05 (20)	08:30		11:31 (28)	07:16	06:47	05:26	04:32
	16:03	22 12:27 (20)	17:13	35	13:42 (23)	18:21	20:33	21:42	22:40
9	09:23	12:06 (20)	08:27		11:32 (28)	07:13	06:44	05:24	04:31
	16:05	22 12:28 (20)	17:16	22	11:54 (28)	18:24	20:35	21:44	22:42
10	09:22	12:06 (20)	08:25		11:34 (28)	07:10	06:41	05:22	04:30
	16:07	22 12:28 (20)	17:18	18	11:52 (28)	18:26	20:37	21:46	22:43
11	09:21	12:07 (20)	08:23		11:37 (28)	07:07	06:38	05:19	04:29
	16:09	22 12:29 (20)	17:21	14	11:51 (28)	18:28	20:40	21:49	22:44
12	09:20	12:07 (20)	08:20		11:41 (28)	07:04	06:35	05:17	04:29
	16:11	28 13:33 (23)	17:23	4	11:45 (28)	18:31	20:42	21:51	22:45
13	09:18	12:08 (20)	08:18			07:02	06:32	05:15	04:28
	16:13	33 13:37 (23)	17:26			18:33	20:44	21:53	22:46
14	09:17	12:08 (20)	08:15		09:30 (15)	06:59	06:30	05:13	04:28
	16:15	36 13:38 (23)	17:28	5	09:35 (15)	18:35	20:47	21:55	22:47
15	09:16	11:34 (28)	08:13		09:27 (15)	06:56	06:27	05:10	04:27
	16:17	47 13:40 (23)	17:31	11	09:38 (15)	18:38	20:49	21:58	22:47
16	09:15	11:32 (28)	08:10		09:25 (15)	06:53	06:24	05:08	04:27
	16:19	54 13:41 (23)	17:33	14	09:39 (15)	18:40	20:51	22:00	22:48
17	09:13	11:31 (28)	08:07		09:23 (15)	06:50	06:21	05:06	04:27
	16:21	57 13:43 (23)	17:36	17	09:40 (15)	18:42	20:53	22:02	22:49
18	09:12	11:30 (28)	08:05		09:23 (15)	06:47	06:19	05:04	04:27
	16:23	72 14:53 (24)	17:38	18	09:41 (15)	18:45	20:56	22:04	22:49
19	09:10	11:29 (28)	08:02		09:22 (15)	06:44	06:16	05:02	04:27
	16:25	85 14:53 (24)	17:40	19	09:41 (15)	18:47	20:58	22:06	22:50
20	09:09	11:28 (28)	08:00		09:22 (15)	06:41	06:13	05:00	04:27
	16:28	88 14:54 (24)	17:43	19	09:41 (15)	18:49	21:00	22:08	22:50
21	09:07	11:28 (28)	07:57		09:22 (15)	06:39	06:10	04:58	04:27
	16:30	88 14:54 (24)	17:45	19	09:41 (15)	18:51	21:03	22:10	22:50
22	09:05	11:28 (28)	07:54		09:22 (15)	06:36	06:08	04:56	04:27
	16:32	89 14:55 (24)	17:48	19	09:41 (15)	18:54	21:05	22:12	22:50
23	09:03	11:26 (28)	07:52		09:23 (15)	06:33	06:05	04:54	04:27
	16:34	87 14:54 (24)	17:50	18	09:41 (15)	18:56	21:07	22:14	22:51
24	09:02	11:26 (28)	07:49		09:23 (15)	06:30	06:02	04:52	04:27
	16:37	81 14:55 (24)	17:53	17	09:40 (15)	18:58	21:10	22:16	22:51
25	09:00	11:26 (28)	07:46		09:24 (15)	06:27	05:59	04:51	04:28
	16:39	82 14:55 (24)	17:55	14	09:38 (15)	19:01	21:12	22:18	22:51
26	08:58	11:26 (28)	07:44		09:25 (15)	06:24	05:57	04:49	04:28
	16:41	83 14:55 (24)	17:57	11	09:36 (15)	19:03	21:14	22:20	22:50
27	08:56	11:25 (28)	07:41		09:30 (15)	06:21	05:54	04:47	04:29
	16:44	83 14:54 (24)	18:00	1	09:31 (15)	19:05	21:17	22:22	22:50
28	08:54	11:26 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	82 14:54 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52	11:26 (28)				07:15	05:49	04:44	04:30
	16:49	80 14:54 (24)				20:10	21:21	22:25	22:50
30	08:50	11:26 (28)				07:13	05:46	04:42	04:31
	16:51	79 14:53 (24)				20:12	21:24	22:27	22:49
31	08:48	11:26 (28)				07:10		04:41	
	16:54	76 14:52 (24)				20:14		22:29	
Potential sun hours	221		260			365	432	521	547
Total, worst case		1562		681					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:03 (28)	09:00		11:49 (20)
	22:49	22:01	20:40	19:13			16:49	19	11:22 (28)	15:51	22	12:11 (20)
2	04:33	05:26	06:35	07:42			07:54		11:01 (28)	09:02		11:49 (20)
	22:48	21:59	20:37	19:10			16:46	23	11:24 (28)	15:50	22	12:11 (20)
3	04:34	05:28	06:37	07:44			07:56		11:01 (28)	09:03		11:49 (20)
	22:47	21:56	20:34	19:07			16:44	36	13:12 (23)	15:49	22	12:11 (20)
4	04:35	05:31	06:40	07:46			07:59		10:59 (28)	09:05		11:50 (20)
	22:47	21:54	20:31	19:04			16:41	43	13:14 (23)	15:48	21	12:11 (20)
5	04:36	05:33	06:42	07:48			08:01		10:59 (28)	09:07		11:50 (20)
	22:46	21:51	20:28	19:02			16:39	48	13:16 (23)	15:47	21	12:11 (20)
6	04:37	05:35	06:44	07:51			08:03		10:58 (28)	09:09		11:51 (20)
	22:45	21:49	20:25	18:59			16:37	53	13:18 (23)	15:46	16	12:07 (20)
7	04:39	05:37	06:46	07:53			08:06		10:57 (28)	09:10		11:51 (20)
	22:44	21:47	20:23	18:56			16:34	55	13:18 (23)	15:45	17	12:08 (20)
8	04:40	05:39	06:49	07:55			08:08		10:57 (28)	09:12		11:52 (20)
	22:43	21:44	20:20	18:53			16:32	58	13:19 (23)	15:45	8	12:00 (20)
9	04:41	05:42	06:51	07:57			08:11		10:57 (28)	09:13		11:53 (20)
	22:42	21:42	20:17	18:50			16:30	63	14:18 (24)	15:44	4	11:57 (20)
10	04:43	05:44	06:53	08:00			08:13		10:58 (28)	09:15		11:53 (20)
	22:41	21:39	20:14	18:47			16:28	71	14:22 (24)	15:43	1	11:54 (20)
11	04:44	05:46	06:55	08:02			08:15		10:57 (28)	09:16		
	22:39	21:37	20:11	18:45			16:25	76	14:23 (24)	15:43		
12	04:46	05:48	06:57	08:04			08:18		10:57 (28)	09:18		
	22:38	21:34	20:08	18:42			16:23	80	14:25 (24)	15:43		
13	04:47	05:51	07:00	08:07			08:20		10:58 (28)	09:19		
	22:37	21:32	20:05	18:39			16:21	81	14:26 (24)	15:42		
14	04:49	05:53	07:02	08:09			08:22		10:58 (28)	09:20		
	22:35	21:29	20:02	18:36			16:19	82	14:26 (24)	15:42		
15	04:51	05:55	07:04	08:11		10:00 (15)	08:25		10:58 (28)	09:21		
	22:34	21:26	19:59	18:33	7	10:07 (15)	16:17	83	14:27 (24)	15:42		
16	04:52	05:57	07:06	08:13		09:57 (15)	08:27		10:59 (28)	09:22		
	22:32	21:24	19:56	18:31	12	10:09 (15)	16:15	83	14:28 (24)	15:42		
17	04:54	06:00	07:08	08:16		09:56 (15)	08:30		11:00 (28)	09:23		
	22:31	21:21	19:54	18:28	15	10:11 (15)	16:13	83	14:29 (24)	15:42		
18	04:56	06:02	07:11	08:18		09:54 (15)	08:32		11:00 (28)	09:24		
	22:29	21:18	19:51	18:25	17	10:11 (15)	16:11	81	14:29 (24)	15:42		
19	04:58	06:04	07:13	08:20		09:54 (15)	08:34		11:01 (28)	09:25		
	22:27	21:16	19:48	18:22	18	10:12 (15)	16:09	87	14:29 (24)	15:42		
20	05:00	06:06	07:15	08:23		09:53 (15)	08:36		11:02 (28)	09:26		
	22:25	21:13	19:45	18:20	19	10:12 (15)	16:08	88	14:29 (24)	15:43		
21	05:01	06:08	07:17	08:25		09:53 (15)	08:39		11:03 (28)	09:26		
	22:24	21:10	19:42	18:17	19	10:12 (15)	16:06	88	14:29 (24)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (15)	08:41		11:04 (28)	09:27		
	22:22	21:08	19:39	18:14	20	10:12 (15)	16:04	88	14:30 (24)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (15)	08:43		11:05 (28)	09:27		
	22:20	21:05	19:36	18:12	19	10:12 (15)	16:02	84	14:29 (24)	15:44		
24	05:07	06:15	07:24	08:32		09:53 (15)	08:45		11:07 (28)	09:28		
	22:18	21:02	19:33	18:09	17	10:10 (15)	16:01	72	14:30 (24)	15:44		
25	05:09	06:17	07:26	07:35		08:54 (15)	08:47		11:08 (28)	09:28		
	22:16	20:59	19:30	17:06	16	09:10 (15)	15:59	58	13:20 (23)	15:45		
26	05:11	06:20	07:28	07:37		08:55 (15)	08:50		11:11 (28)	09:28		
	22:14	20:57	19:27	17:04	14	09:09 (15)	15:58	53	13:20 (23)	15:46		
27	05:13	06:22	07:30	07:39		08:56 (15)	08:52		11:13 (28)	09:28		
	22:12	20:54	19:25	17:01	10	09:06 (15)	15:56	47	13:19 (23)	15:47		
28	05:16	06:24	07:33	07:42			08:54		11:48 (20)	09:28		
	22:10	20:51	19:22	16:59			15:55	35	13:18 (23)	15:48		
29	05:18	06:26	07:35	07:44			08:56		11:48 (20)	09:28		
	22:07	20:48	19:19	16:56			15:54	33	13:17 (23)	15:49		
30	05:20	06:29	07:37	07:47		11:09 (28)	08:58		11:48 (20)	09:28		
	22:05	20:45	19:16	16:54	7	11:16 (28)	15:52	30	13:15 (23)	15:50		
31	05:22	06:31		07:49		11:06 (28)				09:28		
	22:03	20:42		16:51	15	11:21 (28)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					225			1881			154	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		12:18 (20)	08:46		11:53 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (20)	16:56	49	14:04 (23)	18:05	20:17	21:26	22:31
2	09:27		12:18 (20)	08:43		11:54 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (20)	16:58	44	14:02 (23)	18:07	20:19	21:28	22:32
3	09:27		11:54 (28)	08:41		11:56 (28)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (20)	17:01	39	14:01 (23)	18:09	20:21	21:31	22:34
4	09:27		11:52 (28)	08:39		11:57 (28)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (20)	17:03	32	13:59 (23)	18:12	20:24	21:33	22:35
5	09:26		11:51 (28)	08:37		11:59 (28)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (20)	17:06	19	13:55 (23)	18:14	20:26	21:35	22:37
6	09:25		11:50 (28)	08:34		12:04 (28)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (20)	17:08	5	12:09 (28)	18:17	20:28	21:37	22:38
7	09:24		11:50 (28)	08:32			07:19	06:50	05:29	04:33
	16:02	42	13:46 (23)	17:11			18:19	20:30	21:40	22:39
8	09:24		11:50 (28)	08:30			07:16	06:47	05:26	04:32
	16:03	48	13:49 (23)	17:13			18:21	20:33	21:42	22:40
9	09:23		11:50 (28)	08:27		09:42 (15)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (23)	17:16	7	09:49 (15)	18:24	20:35	21:44	22:42
10	09:22		11:49 (28)	08:25		09:40 (15)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (23)	17:18	12	09:52 (15)	18:26	20:37	21:46	22:43
11	09:21		11:49 (28)	08:23		09:39 (15)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (23)	17:21	15	09:54 (15)	18:28	20:40	21:49	22:44
12	09:20		11:48 (28)	08:20		09:37 (15)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (23)	17:23	17	09:54 (15)	18:31	20:42	21:51	22:45
13	09:18		11:49 (28)	08:18		09:36 (15)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (23)	17:26	19	09:55 (15)	18:33	20:44	21:53	22:46
14	09:17		11:48 (28)	08:15		09:37 (15)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (23)	17:28	19	09:56 (15)	18:35	20:47	21:55	22:47
15	09:16		11:48 (28)	08:13		09:36 (15)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (24)	17:31	20	09:56 (15)	18:38	20:49	21:58	22:47
16	09:15		11:47 (28)	08:10		09:36 (15)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (24)	17:33	20	09:56 (15)	18:40	20:51	22:00	22:48
17	09:13		11:48 (28)	08:07		09:36 (15)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (24)	17:36	19	09:55 (15)	18:42	20:53	22:02	22:49
18	09:12		11:48 (28)	08:05		09:37 (15)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (24)	17:38	19	09:56 (15)	18:45	20:56	22:04	22:49
19	09:10		11:48 (28)	08:02		09:37 (15)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (24)	17:40	18	09:55 (15)	18:47	20:58	22:06	22:50
20	09:08		11:48 (28)	08:00		09:38 (15)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (24)	17:43	15	09:53 (15)	18:49	21:00	22:08	22:50
21	09:07		11:48 (28)	07:57		09:39 (15)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (24)	17:45	13	09:52 (15)	18:51	21:03	22:10	22:50
22	09:05		11:48 (28)	07:54		09:41 (15)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (24)	17:48	8	09:49 (15)	18:54	21:05	22:12	22:50
23	09:03		11:48 (28)	07:52			06:33	06:05	04:54	04:27
	16:34	80	15:02 (24)	17:50			18:56	21:07	22:14	22:51
24	09:02		11:48 (28)	07:49			06:30	06:02	04:52	04:27
	16:37	80	15:02 (24)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:49 (28)	07:46			06:27	05:59	04:51	04:28
	16:39	80	15:02 (24)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:49 (28)	07:44			06:24	05:57	04:49	04:28
	16:41	79	15:02 (24)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:49 (28)	07:41			06:21	05:54	04:47	04:29
	16:44	75	15:01 (24)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:50 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	73	15:01 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:51 (28)				07:15	05:49	04:44	04:30
	16:49	69	15:00 (24)				20:10	21:21	22:25	22:50
30	08:50		11:51 (28)				07:12	05:46	04:42	04:31
	16:51	64	14:58 (24)				20:12	21:24	22:27	22:49
31	08:48		11:52 (28)				07:10		04:41	
	16:54	55	14:55 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1930			409					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (15)	09:00		11:31 (28)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (15)	15:51	60	13:37 (23)
2	04:33	05:26	06:35	07:42			07:54		09:12 (15)	09:02		11:32 (28)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (15)	15:50	56	13:36 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (23)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (28)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (23)
5	04:36	05:33	06:42	07:48			08:01		11:32 (28)	09:07		11:35 (28)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (28)	15:47	43	13:32 (23)
6	04:37	05:35	06:44	07:51			08:03		11:29 (28)	09:09		11:37 (28)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (23)	15:46	36	12:27 (20)
7	04:38	05:37	06:46	07:53			08:06		11:27 (28)	09:10		11:38 (28)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (23)	15:45	34	12:27 (20)
8	04:40	05:39	06:49	07:55			08:08		11:25 (28)	09:12		11:40 (28)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (23)	15:45	32	12:28 (20)
9	04:41	05:42	06:51	07:57			08:11		11:25 (28)	09:13		11:42 (28)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (23)	15:44	28	12:28 (20)
10	04:43	05:44	06:53	08:00			08:13		11:24 (28)	09:15		12:07 (20)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (23)	15:43	21	12:28 (20)
11	04:44	05:46	06:55	08:02			08:15		11:23 (28)	09:16		12:08 (20)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (24)	15:43	21	12:29 (20)
12	04:46	05:48	06:57	08:04			08:18		11:23 (28)	09:18		12:08 (20)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (24)	15:43	21	12:29 (20)
13	04:47	05:51	07:00	08:07			08:20		11:23 (28)	09:19		12:09 (20)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (24)	15:42	21	12:30 (20)
14	04:49	05:53	07:02	08:09			08:22		11:22 (28)	09:20		12:09 (20)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (24)	15:42	21	12:30 (20)
15	04:51	05:55	07:04	08:11			08:25		11:22 (28)	09:21		12:09 (20)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (24)	15:42	21	12:30 (20)
16	04:52	05:57	07:06	08:13			08:27		11:22 (28)	09:22		12:10 (20)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (24)	15:42	20	12:30 (20)
17	04:54	06:00	07:08	08:16			08:30		11:23 (28)	09:23		12:10 (20)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (24)	15:42	21	12:31 (20)
18	04:56	06:02	07:11	08:18			08:32		11:22 (28)	09:24		12:11 (20)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (24)	15:42	20	12:31 (20)
19	04:58	06:04	07:13	08:20			08:34		11:23 (28)	09:25		12:12 (20)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (24)	15:42	20	12:32 (20)
20	05:00	06:06	07:15	08:23		10:11 (15)	08:36		11:22 (28)	09:26		12:12 (20)
	22:25	21:13	19:45	18:20	10	10:21 (15)	16:08	82	14:37 (24)	15:43	20	12:32 (20)
21	05:01	06:08	07:17	08:25		10:10 (15)	08:39		11:23 (28)	09:26		12:12 (20)
	22:24	21:10	19:42	18:17	13	10:23 (15)	16:06	80	14:37 (24)	15:43	20	12:32 (20)
22	05:03	06:11	07:19	08:27		10:08 (15)	08:41		11:24 (28)	09:27		12:13 (20)
	22:22	21:08	19:39	18:14	16	10:24 (15)	16:04	79	14:38 (24)	15:43	20	12:33 (20)
23	05:05	06:13	07:22	08:30		10:07 (15)	08:43		11:24 (28)	09:27		12:13 (20)
	22:20	21:05	19:36	18:12	18	10:25 (15)	16:02	84	14:38 (24)	15:44	20	12:33 (20)
24	05:07	06:15	07:24	08:32		10:06 (15)	08:45		11:25 (28)	09:28		12:14 (20)
	22:18	21:02	19:33	18:09	19	10:25 (15)	16:01	88	14:38 (24)	15:44	21	12:35 (20)
25	05:09	06:17	07:26	07:35		09:06 (15)	08:47		11:25 (28)	09:28		12:15 (20)
	22:16	20:59	19:30	17:06	20	09:26 (15)	15:59	88	14:38 (24)	15:45	20	12:35 (20)
26	05:11	06:20	07:28	07:37		09:06 (15)	08:50		11:26 (28)	09:28		12:15 (20)
	22:14	20:57	19:27	17:04	20	09:26 (15)	15:58	81	14:37 (24)	15:46	20	12:35 (20)
27	05:13	06:22	07:30	07:39		09:06 (15)	08:52		11:27 (28)	09:28		12:16 (20)
	22:12	20:54	19:25	17:01	19	09:25 (15)	15:56	73	14:26 (24)	15:47	20	12:36 (20)
28	05:16	06:24	07:33	07:42		09:06 (15)	08:54		11:28 (28)	09:28		12:16 (20)
	22:10	20:51	19:22	16:59	19	09:25 (15)	15:55	65	13:38 (23)	15:48	21	12:37 (20)
29	05:18	06:26	07:35	07:44		09:06 (15)	08:56		11:29 (28)	09:28		12:16 (20)
	22:07	20:48	19:19	16:56	18	09:24 (15)	15:54	64	13:37 (23)	15:49	20	12:36 (20)
30	05:20	06:29	07:37	07:47		09:07 (15)	08:58		11:29 (28)	09:28		12:17 (20)
	22:05	20:45	19:16	16:54	17	09:24 (15)	15:52	62	13:37 (23)	15:50	20	12:37 (20)
31	05:22	06:31		07:49		09:08 (15)				09:28		12:16 (20)
	22:03	20:42		16:51	15	09:23 (15)				15:51	21	12:37 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		12:08 (20)	08:46		11:39 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:29 (20)	16:56	49	13:50 (23)	18:05	20:17	21:26	22:31
2	09:27		12:08 (20)	08:43		11:40 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:29 (20)	16:58	44	13:48 (23)	18:07	20:19	21:28	22:32
3	09:27		12:09 (20)	08:41		11:41 (28)	07:30	07:01	05:39	04:37
	15:55	20	12:29 (20)	17:01	39	13:47 (23)	18:09	20:21	21:31	22:34
4	09:27		12:09 (20)	08:39		11:42 (28)	07:27	06:58	05:36	04:36
	15:57	21	12:30 (20)	17:03	32	13:45 (23)	18:12	20:24	21:33	22:35
5	09:26		12:09 (20)	08:37		11:43 (28)	07:24	06:55	05:34	04:35
	15:58	21	12:30 (20)	17:06	19	12:02 (28)	18:14	20:26	21:35	22:37
6	09:25		12:10 (20)	08:34		11:46 (28)	07:21	06:52	05:31	04:34
	16:00	25	13:32 (23)	17:08	14	12:00 (28)	18:17	20:28	21:37	22:38
7	09:24		11:43 (28)	08:32		11:50 (28)	07:19	06:50	05:29	04:33
	16:02	33	13:35 (23)	17:11	6	11:56 (28)	18:19	20:30	21:40	22:39
8	09:24		11:41 (28)	08:30			07:16	06:47	05:26	04:32
	16:03	41	13:37 (23)	17:13			18:21	20:33	21:42	22:41
9	09:23		11:40 (28)	08:27			07:13	06:44	05:24	04:31
	16:05	47	13:39 (23)	17:16			18:24	20:35	21:44	22:42
10	09:22		11:38 (28)	08:25		09:39 (15)	07:10	06:41	05:22	04:30
	16:07	51	13:40 (23)	17:18	3	09:42 (15)	18:26	20:37	21:46	22:43
11	09:21		11:38 (28)	08:23		09:36 (15)	07:07	06:38	05:19	04:29
	16:09	55	13:42 (23)	17:21	10	09:46 (15)	18:28	20:40	21:49	22:44
12	09:20		11:37 (28)	08:20		09:34 (15)	07:04	06:35	05:17	04:29
	16:11	60	14:46 (24)	17:23	14	09:48 (15)	18:31	20:42	21:51	22:45
13	09:18		11:37 (28)	08:18		09:33 (15)	07:02	06:32	05:15	04:28
	16:13	72	14:49 (24)	17:26	16	09:49 (15)	18:33	20:44	21:53	22:46
14	09:17		11:36 (28)	08:15		09:33 (15)	06:59	06:30	05:13	04:28
	16:15	83	14:49 (24)	17:28	17	09:50 (15)	18:35	20:47	21:55	22:47
15	09:16		11:36 (28)	08:13		09:32 (15)	06:56	06:27	05:10	04:27
	16:17	87	14:50 (24)	17:31	18	09:50 (15)	18:38	20:49	21:58	22:47
16	09:15		11:35 (28)	08:10		09:31 (15)	06:53	06:24	05:08	04:27
	16:19	86	14:50 (24)	17:33	19	09:50 (15)	18:40	20:51	22:00	22:48
17	09:13		11:36 (28)	08:07		09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87	14:51 (24)	17:36	19	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:36 (28)	08:05		09:32 (15)	06:47	06:19	05:04	04:27
	16:23	89	14:52 (24)	17:38	19	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:36 (28)	08:02		09:32 (15)	06:44	06:16	05:02	04:27
	16:25	87	14:52 (24)	17:40	18	09:50 (15)	18:47	20:58	22:06	22:50
20	09:09		11:35 (28)	08:00		09:32 (15)	06:41	06:13	05:00	04:27
	16:28	85	14:53 (24)	17:43	17	09:49 (15)	18:49	21:00	22:08	22:50
21	09:07		11:35 (28)	07:57		09:33 (15)	06:39	06:10	04:58	04:27
	16:30	79	14:53 (24)	17:45	15	09:48 (15)	18:51	21:03	22:10	22:50
22	09:05		11:36 (28)	07:54		09:34 (15)	06:36	06:08	04:56	04:27
	16:32	79	14:53 (24)	17:48	12	09:46 (15)	18:54	21:05	22:12	22:50
23	09:03		11:35 (28)	07:52		09:38 (15)	06:33	06:05	04:54	04:27
	16:34	79	14:52 (24)	17:50	6	09:44 (15)	18:56	21:07	22:14	22:51
24	09:02		11:35 (28)	07:49			06:30	06:02	04:52	04:27
	16:37	79	14:52 (24)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:35 (28)	07:46			06:27	05:59	04:51	04:28
	16:39	78	14:52 (24)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:36 (28)	07:44			06:24	05:57	04:49	04:28
	16:41	77	14:52 (24)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:36 (28)	07:41			06:21	05:54	04:47	04:29
	16:44	74	14:51 (24)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:36 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	71	14:50 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:37 (28)				07:15	05:49	04:44	04:30
	16:49	66	14:49 (24)				20:10	21:21	22:25	22:50
30	08:50		11:37 (28)				07:13	05:46	04:42	04:31
	16:51	56	14:45 (24)				20:12	21:24	22:27	22:49
31	08:48		11:38 (28)				07:10		04:41	
	16:54	51	13:50 (23)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1881			406					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (28)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (23)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (28)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (23)
4	04:35	05:31	06:40	07:46			07:59		11:18 (28)	09:05		11:25 (28)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (28)	15:48	42	13:22 (23)
5	04:36	05:33	06:42	07:48			08:01		11:15 (28)	09:07		11:28 (28)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (28)	15:47	34	13:21 (23)
6	04:37	05:35	06:44	07:51			08:03		11:14 (28)	09:09		11:56 (20)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (28)	15:46	26	13:19 (23)
7	04:38	05:37	06:46	07:53			08:06		11:12 (28)	09:10		11:56 (20)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (23)	15:45	21	12:17 (20)
8	04:40	05:39	06:49	07:55			08:08		11:11 (28)	09:12		11:57 (20)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (23)	15:45	21	12:18 (20)
9	04:41	05:42	06:51	07:57			08:11		11:10 (28)	09:13		11:58 (20)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (23)	15:44	20	12:18 (20)
10	04:43	05:44	06:53	08:00			08:13		11:10 (28)	09:15		11:58 (20)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (23)	15:43	20	12:18 (20)
11	04:44	05:46	06:55	08:02			08:15		11:09 (28)	09:16		11:58 (20)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (23)	15:43	21	12:19 (20)
12	04:46	05:48	06:57	08:04			08:18		11:09 (28)	09:18		11:58 (20)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (24)	15:43	21	12:19 (20)
13	04:47	05:51	07:00	08:07			08:20		11:09 (28)	09:19		12:00 (20)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (24)	15:42	20	12:20 (20)
14	04:49	05:53	07:02	08:09			08:23		11:08 (28)	09:20		12:00 (20)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (24)	15:42	20	12:20 (20)
15	04:51	05:55	07:04	08:11			08:25		11:08 (28)	09:21		12:00 (20)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (24)	15:42	20	12:20 (20)
16	04:52	05:57	07:06	08:13			08:27		11:09 (28)	09:22		12:01 (20)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (24)	15:42	19	12:20 (20)
17	04:54	06:00	07:08	08:16			08:30		11:09 (28)	09:23		12:01 (20)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (24)	15:42	20	12:21 (20)
18	04:56	06:02	07:11	08:18			08:32		11:09 (28)	09:24		12:02 (20)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (24)	15:42	19	12:21 (20)
19	04:58	06:04	07:13	08:20		10:07 (15)	08:34		11:10 (28)	09:25		12:02 (20)
	22:27	21:16	19:48	18:22	9	10:16 (15)	16:09	79	14:27 (24)	15:42	20	12:22 (20)
20	05:00	06:06	07:15	08:23		10:05 (15)	08:36		11:10 (28)	09:26		12:03 (20)
	22:25	21:13	19:45	18:20	13	10:18 (15)	16:08	79	14:27 (24)	15:43	19	12:22 (20)
21	05:01	06:08	07:17	08:25		10:04 (15)	08:39		11:10 (28)	09:26		12:03 (20)
	22:24	21:10	19:42	18:17	15	10:19 (15)	16:06	79	14:28 (24)	15:43	19	12:22 (20)
22	05:03	06:11	07:19	08:27		10:02 (15)	08:41		11:11 (28)	09:27		12:04 (20)
	22:22	21:08	19:39	18:14	17	10:19 (15)	16:04	84	14:29 (24)	15:43	19	12:23 (20)
23	05:05	06:13	07:22	08:30		10:02 (15)	08:43		11:12 (28)	09:27		12:04 (20)
	22:20	21:05	19:36	18:12	18	10:20 (15)	16:02	86	14:28 (24)	15:44	19	12:23 (20)
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		11:13 (28)	09:28		12:05 (20)
	22:18	21:02	19:33	18:09	19	10:20 (15)	16:01	88	14:29 (24)	15:44	19	12:24 (20)
25	05:09	06:17	07:26	07:35		09:01 (15)	08:47		11:13 (28)	09:28		12:06 (20)
	22:16	20:59	19:30	17:06	19	09:20 (15)	15:59	88	14:29 (24)	15:45	19	12:25 (20)
26	05:11	06:20	07:28	07:37		09:02 (15)	08:50		11:14 (28)	09:28		12:06 (20)
	22:14	20:57	19:27	17:04	19	09:21 (15)	15:58	87	14:29 (24)	15:46	19	12:25 (20)
27	05:13	06:22	07:30	07:39		09:01 (15)	08:52		11:15 (28)	09:28		12:06 (20)
	22:12	20:54	19:25	17:01	19	09:20 (15)	15:56	86	14:29 (24)	15:47	20	12:26 (20)
28	05:16	06:24	07:33	07:42		09:02 (15)	08:54		11:16 (28)	09:28		12:07 (20)
	22:10	20:51	19:22	16:59	17	09:19 (15)	15:55	82	14:29 (24)	15:48	20	12:27 (20)
29	05:18	06:26	07:35	07:44		09:02 (15)	08:56		11:17 (28)	09:28		12:07 (20)
	22:07	20:48	19:19	16:56	16	09:18 (15)	15:54	72	14:29 (24)	15:49	19	12:26 (20)
30	05:20	06:29	07:37	07:47		09:04 (15)	08:58		11:18 (28)	09:28		12:07 (20)
	22:05	20:45	19:16	16:54	13	09:17 (15)	15:52	60	14:28 (24)	15:50	20	12:27 (20)
31	05:22	06:31		07:49		09:06 (15)				09:28		12:07 (20)
	22:03	20:42		16:51	9	09:15 (15)				15:51	20	12:27 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June
1	09:28	12:05 (20)	08:46	11:36 (28)	07:35	07:07	05:44	04:40
	15:53	21 12:26 (20)	16:56	45 13:44 (23)	18:05	20:17	21:26	22:31
2	09:27	12:06 (20)	08:43	11:37 (28)	07:33	07:04	05:41	04:38
	15:54	20 12:26 (20)	16:58	40 13:42 (23)	18:07	20:19	21:28	22:32
3	09:27	12:06 (20)	08:41	11:38 (28)	07:30	07:01	05:39	04:37
	15:55	20 12:26 (20)	17:01	34 13:40 (23)	18:09	20:21	21:31	22:34
4	09:27	12:06 (20)	08:39	11:39 (28)	07:27	06:58	05:36	04:36
	15:57	21 12:27 (20)	17:03	20 11:59 (28)	18:12	20:24	21:33	22:35
5	09:26	12:06 (20)	08:37	11:41 (28)	07:24	06:55	05:34	04:35
	15:58	28 13:28 (23)	17:06	16 11:57 (28)	18:14	20:26	21:35	22:37
6	09:25	12:07 (20)	08:34	11:44 (28)	07:21	06:52	05:31	04:34
	16:00	32 13:31 (23)	17:08	11 11:55 (28)	18:17	20:28	21:37	22:38
7	09:24	11:39 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	38 13:32 (23)	17:11		18:19	20:30	21:40	22:39
8	09:24	11:37 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	46 13:34 (23)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:36 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	50 13:36 (23)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:35 (28)	08:25	09:37 (15)	07:10	06:41	05:22	04:30
	16:07	58 14:41 (24)	17:18	6 09:43 (15)	18:26	20:37	21:46	22:43
11	09:21	11:34 (28)	08:23	09:35 (15)	07:07	06:38	05:19	04:29
	16:09	71 14:43 (24)	17:21	11 09:46 (15)	18:28	20:40	21:49	22:44
12	09:20	11:33 (28)	08:20	09:33 (15)	07:04	06:35	05:17	04:29
	16:11	79 14:44 (24)	17:23	15 09:48 (15)	18:31	20:42	21:51	22:45
13	09:18	11:34 (28)	08:18	09:32 (15)	07:02	06:32	05:15	04:28
	16:13	81 14:45 (24)	17:26	16 09:48 (15)	18:33	20:44	21:53	22:46
14	09:17	11:33 (28)	08:15	09:32 (15)	06:59	06:30	05:13	04:28
	16:15	84 14:45 (24)	17:28	18 09:50 (15)	18:35	20:47	21:55	22:47
15	09:16	11:32 (28)	08:13	09:31 (15)	06:56	06:27	05:10	04:27
	16:17	86 14:46 (24)	17:31	19 09:50 (15)	18:38	20:49	21:58	22:47
16	09:15	11:32 (28)	08:10	09:31 (15)	06:53	06:24	05:08	04:27
	16:19	87 14:46 (24)	17:33	19 09:50 (15)	18:40	20:51	22:00	22:48
17	09:13	11:32 (28)	08:07	09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87 14:47 (24)	17:36	19 09:50 (15)	18:42	20:53	22:02	22:49
18	09:12	11:32 (28)	08:05	09:32 (15)	06:47	06:19	05:04	04:27
	16:23	88 14:48 (24)	17:38	18 09:50 (15)	18:45	20:56	22:04	22:49
19	09:10	11:32 (28)	08:02	09:32 (15)	06:44	06:16	05:02	04:27
	16:25	86 14:48 (24)	17:40	17 09:49 (15)	18:47	20:58	22:06	22:50
20	09:09	11:32 (28)	08:00	09:32 (15)	06:41	06:13	05:00	04:27
	16:28	79 14:48 (24)	17:43	16 09:48 (15)	18:49	21:00	22:08	22:50
21	09:07	11:32 (28)	07:57	09:33 (15)	06:39	06:10	04:58	04:27
	16:30	77 14:48 (24)	17:45	14 09:47 (15)	18:51	21:03	22:10	22:50
22	09:05	11:32 (28)	07:54	09:35 (15)	06:36	06:08	04:56	04:27
	16:32	79 14:49 (24)	17:48	10 09:45 (15)	18:54	21:05	22:12	22:50
23	09:03	11:31 (28)	07:52		06:33	06:05	04:54	04:27
	16:34	78 14:48 (24)	17:50		18:56	21:07	22:14	22:51
24	09:02	11:32 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	77 14:48 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:32 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	75 14:47 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:33 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	73 14:47 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:32 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	70 14:45 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:33 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	66 14:44 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:34 (28)			07:15	05:49	04:44	04:30
	16:49	57 14:41 (24)			20:10	21:21	22:25	22:50
30	08:50	11:34 (28)			07:13	05:46	04:42	04:31
	16:51	52 13:45 (23)			20:12	21:24	22:27	22:49
31	08:48	11:35 (28)			07:10		04:41	
	16:54	48 13:44 (23)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1914		364				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		09:08 (15)	09:00		11:16 (28)
	22:49		22:01		20:40		19:13			16:49	4	09:12 (15)	15:51	74	14:26 (24)
2	04:33		05:26		06:35		07:42			07:54			09:02		11:18 (28)
	22:48		21:59		20:37		19:10			16:46			15:50	58	14:24 (24)
3	04:34		05:28		06:37		07:44			07:56			09:03		11:19 (28)
	22:47		21:56		20:34		19:07			16:44			15:49	51	13:19 (23)
4	04:35		05:31		06:40		07:46			07:59			09:05		11:21 (28)
	22:47		21:54		20:31		19:04			16:41			15:48	46	13:18 (23)
5	04:36		05:33		06:42		07:48			08:01		11:13 (28)	09:07		11:23 (28)
	22:46		21:51		20:28		19:02			16:39	12	11:25 (28)	15:47	39	13:18 (23)
6	04:37		05:35		06:44		07:51			08:03		11:11 (28)	09:09		11:53 (20)
	22:45		21:49		20:25		18:59			16:37	17	11:28 (28)	15:46	32	13:17 (23)
7	04:38		05:37		06:46		07:53			08:06		11:10 (28)	09:10		11:54 (20)
	22:44		21:47		20:23		18:56			16:34	22	13:06 (23)	15:45	28	13:16 (23)
8	04:40		05:39		06:49		07:55			08:08		11:08 (28)	09:12		11:54 (20)
	22:43		21:44		20:20		18:53			16:32	34	13:10 (23)	15:45	22	13:13 (23)
9	04:41		05:42		06:51		07:57			08:11		11:07 (28)	09:13		11:55 (20)
	22:42		21:42		20:17		18:50			16:30	41	13:13 (23)	15:44	20	12:15 (20)
10	04:43		05:44		06:53		08:00			08:13		11:07 (28)	09:15		11:55 (20)
	22:41		21:39		20:14		18:47			16:28	46	13:15 (23)	15:43	20	12:15 (20)
11	04:44		05:46		06:55		08:02			08:15		11:06 (28)	09:16		11:56 (20)
	22:39		21:37		20:11		18:45			16:25	48	13:15 (23)	15:43	20	12:16 (20)
12	04:46		05:48		06:57		08:04			08:18		11:06 (28)	09:18		11:56 (20)
	22:38		21:34		20:08		18:42			16:23	52	13:17 (23)	15:43	20	12:16 (20)
13	04:47		05:51		07:00		08:07			08:20		11:06 (28)	09:19		11:57 (20)
	22:37		21:32		20:05		18:39			16:21	58	14:14 (24)	15:42	20	12:17 (20)
14	04:49		05:53		07:02		08:09			08:23		11:05 (28)	09:20		11:57 (20)
	22:35		21:29		20:02		18:36			16:19	66	14:16 (24)	15:42	20	12:17 (20)
15	04:51		05:55		07:04		08:11			08:25		11:05 (28)	09:21		11:57 (20)
	22:34		21:26		19:59		18:33			16:17	70	14:18 (24)	15:42	20	12:17 (20)
16	04:52		05:57		07:06		08:13			08:27		11:06 (28)	09:22		11:58 (20)
	22:32		21:24		19:56		18:31			16:15	73	14:20 (24)	15:42	19	12:17 (20)
17	04:54		06:00		07:08		08:16			08:30		11:06 (28)	09:23		11:58 (20)
	22:31		21:21		19:54		18:28			16:13	75	14:21 (24)	15:42	19	12:17 (20)
18	04:56		06:02		07:11		08:18			08:32		11:06 (28)	09:24		11:59 (20)
	22:29		21:18		19:51		18:25			16:11	77	14:22 (24)	15:42	19	12:18 (20)
19	04:58		06:04		07:13		08:20		10:09 (15)	08:34		11:06 (28)	09:25		11:59 (20)
	22:27		21:16		19:48		18:22	5	10:14 (15)	16:09	78	14:23 (24)	15:42	20	12:19 (20)
20	05:00		06:06		07:15		08:23		10:05 (15)	08:36		11:06 (28)	09:26		12:00 (20)
	22:25		21:13		19:45		18:20	11	10:16 (15)	16:08	79	14:23 (24)	15:43	19	12:19 (20)
21	05:01		06:08		07:17		08:25		10:04 (15)	08:39		11:07 (28)	09:26		12:00 (20)
	22:24		21:10		19:42		18:17	14	10:18 (15)	16:06	77	14:23 (24)	15:43	19	12:19 (20)
22	05:03		06:11		07:19		08:27		10:02 (15)	08:41		11:08 (28)	09:27		12:01 (20)
	22:22		21:08		19:39		18:14	17	10:19 (15)	16:04	77	14:24 (24)	15:43	19	12:20 (20)
23	05:05		06:13		07:22		08:30		10:02 (15)	08:43		11:08 (28)	09:27		12:01 (20)
	22:20		21:05		19:36		18:12	18	10:20 (15)	16:02	86	14:24 (24)	15:44	19	12:20 (20)
24	05:07		06:15		07:24		08:32		10:01 (15)	08:45		11:09 (28)	09:28		12:02 (20)
	22:18		21:02		19:33		18:09	18	10:19 (15)	16:01	87	14:25 (24)	15:44	19	12:21 (20)
25	05:09		06:17		07:26		07:35		09:01 (15)	08:47		11:10 (28)	09:28		12:03 (20)
	22:16		20:59		19:30		17:06	19	09:20 (15)	15:59	87	14:25 (24)	15:45	19	12:22 (20)
26	05:11		06:20		07:28		07:37		09:01 (15)	08:50		11:11 (28)	09:28		12:03 (20)
	22:14		20:57		19:27		17:04	19	09:20 (15)	15:58	87	14:25 (24)	15:46	19	12:22 (20)
27	05:13		06:22		07:30		07:39		09:01 (15)	08:52		11:11 (28)	09:28		12:03 (20)
	22:12		20:54		19:25		17:01	18	09:19 (15)	15:56	86	14:25 (24)	15:47	20	12:23 (20)
28	05:16		06:24		07:33		07:42		09:02 (15)	08:54		11:13 (28)	09:28		12:04 (20)
	22:10		20:51		19:22		16:59	17	09:19 (15)	15:55	85	14:26 (24)	15:48	20	12:24 (20)
29	05:18		06:26		07:35		07:44		09:02 (15)	08:56		11:14 (28)	09:28		12:04 (20)
	22:07		20:48		19:19		16:56	16	09:18 (15)	15:54	82	14:25 (24)	15:49	19	12:23 (20)
30	05:20		06:29		07:37		07:47		09:03 (15)	08:58		11:14 (28)	09:28		12:04 (20)
	22:05		20:45		19:16		16:54	14	09:17 (15)	15:52	80	14:25 (24)	15:50	20	12:24 (20)
31	05:22		06:31				07:49		09:05 (15)				09:28		12:04 (20)
	22:03		20:42				16:51	11	09:16 (15)				15:51	20	12:24 (20)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								197			1686			799	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November			December		
1	09:28		11:58 (20)	08:46		11:24 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:44 (20)
	15:53	16	12:14 (20)	16:56	49	13:35 (23)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	57	14:20 (24)
2	09:28		11:58 (20)	08:43		11:24 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:44 (20)
	15:54	18	12:16 (20)	16:58	47	13:34 (23)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	50	14:19 (24)
3	09:27		11:58 (20)	08:41		11:25 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56		11:02 (28)	09:03		11:44 (20)
	15:55	20	12:18 (20)	17:01	42	13:33 (23)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	12	11:14 (28)	15:49	40	14:19 (24)
4	09:27		11:58 (20)	08:39		11:26 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		10:59 (28)	09:05		11:44 (20)
	15:57	21	12:19 (20)	17:03	35	13:30 (23)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17	11:16 (28)	15:48	34	14:19 (24)
5	09:26		11:59 (20)	08:37		11:26 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		10:58 (28)	09:07		11:45 (20)
	15:58	20	12:19 (20)	17:06	23	11:49 (28)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39	20	11:18 (28)	15:47	31	13:06 (23)
6	09:25		11:59 (20)	08:34		11:28 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		10:57 (28)	09:09		11:45 (20)
	16:00	26	13:18 (23)	17:08	20	11:48 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	23	11:20 (28)	15:46	27	13:05 (23)
7	09:25		12:00 (20)	08:32		11:30 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		10:56 (28)	09:10		11:46 (20)
	16:02	30	13:21 (23)	17:11	16	11:46 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34	37	13:01 (23)	15:45	20	12:06 (20)
8	09:24		12:00 (20)	08:30		11:33 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		10:55 (28)	09:12		11:47 (20)
	16:03	34	14:35 (24)	17:13	11	11:44 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	43	13:03 (23)	15:45	20	12:07 (20)
9	09:23		12:01 (20)	08:27			07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		10:54 (28)	09:13		11:47 (20)
	16:05	41	14:36 (24)	17:16			18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	48	13:05 (23)	15:44	20	12:07 (20)
10	09:22		12:01 (20)	08:25			07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		10:54 (28)	09:15		11:47 (20)
	16:07	50	14:36 (24)	17:18			18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28	51	13:06 (23)	15:43	19	12:07 (20)
11	09:21		12:02 (20)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		10:54 (28)	09:16		11:48 (20)
	16:09	57	14:37 (24)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25	52	13:06 (23)	15:43	16	12:04 (20)
12	09:20		11:28 (28)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		10:54 (28)	09:18		11:48 (20)
	16:11	68	14:38 (24)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	55	13:08 (23)	15:43	11	11:59 (20)
13	09:18		11:26 (28)	08:18			07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20		10:54 (28)	09:19		11:49 (20)
	16:13	75	14:39 (24)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	62	14:08 (24)	15:42	11	12:00 (20)
14	09:17		11:25 (28)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		10:53 (28)	09:20		11:50 (20)
	16:15	78	14:39 (24)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	69	14:10 (24)	15:42	7	12:00 (20)
15	09:16		11:24 (28)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		10:54 (28)	09:21		11:50 (20)
	16:17	82	14:40 (24)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	71	14:12 (24)	15:42	3	11:53 (20)
16	09:15		11:23 (28)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		10:54 (28)	09:22		11:50 (20)
	16:19	85	14:40 (24)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	75	14:14 (24)	15:42	3	11:53 (20)
17	09:13		11:23 (28)	08:07			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		10:55 (28)	09:23		11:51 (20)
	16:21	86	14:41 (24)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	77	14:15 (24)	15:42	1	11:52 (20)
18	09:12		11:23 (28)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		10:55 (28)	09:24		
	16:23	87	14:42 (24)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	76	14:15 (24)	15:42		
19	09:10		11:22 (28)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		10:56 (28)	09:25		
	16:25	88	14:42 (24)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	77	14:16 (24)	15:42		
20	09:09		11:22 (28)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		10:56 (28)	09:26		
	16:28	86	14:42 (24)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	77	14:16 (24)	15:43		
21	09:07		11:22 (28)	07:57			06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39		10:57 (28)	09:26		
	16:30	83	14:42 (24)	17:45			18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	83	14:17 (24)	15:43		
22	09:05		11:22 (28)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41		10:58 (28)	09:27		
	16:32	77	14:42 (24)	17:48			18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	86	14:18 (24)	15:43		
23	09:03		11:21 (28)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		10:58 (28)	09:27		
	16:34	77	14:41 (24)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	88	14:18 (24)	15:44		
24	09:02		11:21 (28)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:00 (28)	09:28		
	16:37	76	14:41 (24)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	87	14:19 (24)	15:44		
25	09:00		11:21 (28)	07:46			06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47		11:00 (28)	09:28		
	16:39	77	14:41 (24)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59	86	14:18 (24)	15:45		
26	08:58		11:22 (28)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:02 (28)	09:28		
	16:41	74	14:41 (24)	17:57			19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	85	14:19 (24)	15:46		
27	08:56		11:21 (28)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:03 (28)	09:28		11:56 (20)
	16:44	71	14:39 (24)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	83	14:19 (24)	15:47	3	11:59 (20)
28	08:54		11:21 (28)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:05 (28)	09:28		11:57 (20)
	16:46	69	14:38 (24)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	79	14:19 (24)	15:48	3	12:00 (20)
29	08:52		11:22 (28)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:07 (28)	09:28		11:56 (20)
	16:49	61	14:36 (24)				20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54	73	14:19 (24)	15:49	5	12:07 (20)
30	08:50		11:22 (28)				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:08 (28)	09:28		11:57 (20)
	16:51	55	13:36 (23)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	69	14:19 (24)	15:50	11	12:08 (20)
31	08:48		11:23 (28)				07:10		04:41		05:22	06:31		07:49				09:28		11:57 (20)
	16:54	53	13:36 (23)				20:14		22:29		22:03	20:42		16:51				15:51	11	12:08 (20)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236			199		
Total, worst case		1841			243											1761			403	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April	May	June
1	09:28		11:52 (33)	08:46		13:17 (28)	07:35	08:53 (17)	07:07	05:44	04:40
	15:53	17	12:09 (33)	16:56	36	13:53 (28)	18:05	19	09:12 (17)	20:17	21:26	22:30
2	09:27		11:51 (33)	08:43		13:18 (28)	07:32		08:53 (17)	07:04	05:41	04:38
	15:54	19	12:10 (33)	16:58	43	15:13 (23)	18:07	20	09:13 (17)	20:19	21:28	22:32
3	09:27		11:51 (33)	08:41		13:17 (28)	07:30		08:52 (17)	07:01	05:39	04:37
	15:55	19	12:10 (33)	17:01	52	15:18 (23)	18:09	21	09:13 (17)	20:21	21:30	22:34
4	09:26		11:51 (33)	08:39		13:18 (28)	07:27		08:52 (17)	06:58	05:36	04:36
	15:57	20	12:11 (33)	17:03	54	15:20 (23)	18:12	20	09:12 (17)	20:24	21:33	22:35
5	09:26		11:52 (33)	08:37		13:17 (28)	07:24		08:52 (17)	06:55	05:34	04:35
	15:58	20	12:12 (33)	17:06	58	15:21 (23)	18:14	20	09:12 (17)	20:26	21:35	22:37
6	09:25		11:52 (33)	08:34		13:18 (28)	07:21		08:52 (17)	06:52	05:31	04:34
	16:00	20	12:12 (33)	17:08	62	15:43 (24)	18:16	19	09:11 (17)	20:28	21:37	22:38
7	09:24		11:52 (33)	08:32		13:17 (28)	07:19		08:53 (17)	06:49	05:29	04:33
	16:02	21	12:13 (33)	17:11	68	15:46 (24)	18:19	17	09:10 (17)	20:30	21:40	22:39
8	09:24		11:53 (33)	08:30		13:18 (28)	07:16		08:54 (17)	06:47	05:26	04:32
	16:03	21	12:14 (33)	17:13	72	15:51 (24)	18:21	14	09:08 (17)	20:33	21:42	22:40
9	09:23		11:52 (33)	08:27		13:18 (28)	07:13		08:55 (17)	06:44	05:24	04:31
	16:05	22	12:14 (33)	17:16	78	15:59 (24)	18:24	10	09:05 (17)	20:35	21:44	22:42
10	09:22		11:53 (33)	08:25		13:18 (28)	07:10			06:41	05:22	04:30
	16:07	22	12:15 (33)	17:18	82	16:00 (24)	18:26			20:37	21:46	22:43
11	09:21		11:54 (33)	08:23		10:11 (15)	07:07			06:38	05:19	04:29
	16:09	22	12:16 (33)	17:21	84	16:00 (24)	18:28			20:40	21:49	22:44
12	09:20		11:53 (33)	08:20		10:06 (15)	07:04			06:35	05:17	04:29
	16:11	23	12:16 (33)	17:23	89	15:59 (24)	18:31			20:42	21:51	22:45
13	09:18		11:53 (33)	08:18		10:04 (15)	07:01			06:32	05:15	04:28
	16:13	29	13:27 (20)	17:26	90	15:58 (24)	18:33			20:44	21:53	22:46
14	09:17		11:54 (33)	08:15		10:03 (15)	06:59			06:30	05:13	04:28
	16:15	38	13:37 (20)	17:28	87	15:57 (24)	18:35			20:47	21:55	22:46
15	09:16		11:55 (33)	08:13		10:02 (15)	06:56			06:27	05:10	04:27
	16:17	44	13:43 (20)	17:31	81	15:54 (24)	18:38			20:49	21:57	22:47
16	09:15		11:55 (33)	08:10		10:01 (15)	06:53			06:24	05:08	04:27
	16:19	45	13:44 (20)	17:33	72	15:24 (23)	18:40			20:51	22:00	22:48
17	09:13		11:55 (33)	08:07		10:00 (15)	06:50			06:21	05:06	04:27
	16:21	45	13:44 (20)	17:35	67	15:23 (23)	18:42			20:53	22:02	22:49
18	09:12		11:57 (33)	08:05		10:00 (15)	06:47			06:19	05:04	04:27
	16:23	44	13:46 (20)	17:38	61	15:23 (23)	18:45			20:56	22:04	22:49
19	09:10		11:57 (33)	08:02		10:00 (15)	06:44			06:16	05:02	04:27
	16:25	44	13:46 (20)	17:40	43	15:21 (23)	18:47			20:58	22:06	22:50
20	09:08		11:58 (33)	08:00		09:59 (15)	06:41			06:13	05:00	04:27
	16:28	43	13:46 (20)	17:43	41	15:19 (23)	18:49			21:00	22:08	22:50
21	09:07		11:59 (33)	07:57		09:59 (15)	06:38			06:10	04:58	04:27
	16:30	40	13:46 (20)	17:45	32	15:15 (23)	18:51			21:03	22:10	22:50
22	09:05		11:59 (33)	07:54		09:59 (15)	06:36			06:08	04:56	04:27
	16:32	40	13:46 (20)	17:48	25	10:24 (15)	18:54			21:05	22:12	22:50
23	09:03		12:01 (33)	07:52		10:00 (15)	06:33			06:05	04:54	04:27
	16:34	36	13:46 (20)	17:50	24	10:24 (15)	18:56			21:07	22:14	22:50
24	09:02		12:03 (33)	07:49		10:01 (15)	06:30			06:02	04:52	04:27
	16:37	34	13:46 (20)	17:53	22	10:23 (15)	18:58			21:10	22:16	22:51
25	09:00		12:05 (33)	07:46		09:00 (17)	06:27			05:59	04:51	04:28
	16:39	32	13:46 (28)	17:55	27	10:22 (15)	19:01			21:12	22:18	22:50
26	08:58		13:21 (28)	07:43		08:57 (17)	06:24			05:57	04:49	04:28
	16:41	27	13:48 (28)	17:57	30	10:20 (15)	19:03			21:14	22:20	22:50
27	08:56		13:20 (28)	07:41		08:55 (17)	06:21			05:54	04:47	04:29
	16:44	28	13:48 (28)	18:00	28	10:17 (15)	19:05			21:17	22:22	22:50
28	08:54		13:19 (28)	07:38		08:54 (17)	06:18			05:52	04:46	04:30
	16:46	31	13:50 (28)	18:02	22	10:13 (15)	19:07			21:19	22:24	22:50
29	08:52		13:19 (28)				07:15			05:49	04:44	04:30
	16:49	32	13:51 (28)				20:10			21:21	22:25	22:50
30	08:50		13:18 (28)				07:12			05:46	04:42	04:31
	16:51	33	13:51 (28)				20:12			21:24	22:27	22:49
31	08:48		13:18 (28)				07:10				04:41	
	16:53	34	13:52 (28)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		945			1530			160				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December	
1	04:32	05:24	06:33	07:39		07:51		12:48 (28)	09:00		11:36 (33)
	22:49	22:01	20:40	19:13		16:49	83	15:30 (24)	15:51	22	11:58 (33)
2	04:33	05:26	06:35	07:42		07:54		12:48 (28)	09:02		11:36 (33)
	22:48	21:58	20:37	19:10		16:46	76	15:28 (24)	15:50	22	11:58 (33)
3	04:34	05:28	06:37	07:44		07:56		12:48 (28)	09:03		11:36 (33)
	22:47	21:56	20:34	19:07		16:44	71	15:20 (24)	15:49	22	11:58 (33)
4	04:35	05:31	06:40	07:46	09:34 (17)	07:59		12:47 (28)	09:05		11:37 (33)
	22:47	21:54	20:31	19:04	7 09:41 (17)	16:41	66	15:15 (24)	15:48	21	11:58 (33)
5	04:36	05:33	06:42	07:48	09:32 (17)	08:01		12:47 (28)	09:07		11:37 (33)
	22:46	21:51	20:28	19:01	12 09:44 (17)	16:39	62	15:13 (24)	15:47	21	11:58 (33)
6	04:37	05:35	06:44	07:51	09:30 (17)	08:03		12:48 (28)	09:09		11:38 (33)
	22:45	21:49	20:25	18:59	15 09:45 (17)	16:37	57	14:51 (23)	15:46	21	11:59 (33)
7	04:38	05:37	06:46	07:53	09:28 (17)	08:06		12:47 (28)	09:10		11:39 (33)
	22:44	21:47	20:22	18:56	18 09:46 (17)	16:34	55	14:50 (23)	15:45	20	11:59 (33)
8	04:40	05:39	06:48	07:55	09:28 (17)	08:08		12:48 (28)	09:12		11:40 (33)
	22:43	21:44	20:20	18:53	19 09:47 (17)	16:32	50	14:48 (23)	15:45	19	11:59 (33)
9	04:41	05:42	06:51	07:57	09:27 (17)	08:11		12:48 (28)	09:13		11:41 (33)
	22:42	21:42	20:17	18:50	20 09:47 (17)	16:30	42	14:43 (23)	15:44	19	12:00 (33)
10	04:43	05:44	06:53	08:00	09:27 (17)	08:13		12:49 (28)	09:15		11:41 (33)
	22:40	21:39	20:14	18:47	20 09:47 (17)	16:28	35	13:24 (28)	15:43	18	11:59 (33)
11	04:44	05:46	06:55	08:02	09:26 (17)	08:15		12:49 (28)	09:16		11:42 (33)
	22:39	21:37	20:11	18:45	20 09:46 (17)	16:25	34	13:23 (28)	15:43	18	12:00 (33)
12	04:46	05:48	06:57	08:04	09:26 (17)	08:18		12:50 (28)	09:18		11:42 (33)
	22:38	21:34	20:08	18:42	19 09:45 (17)	16:23	33	13:23 (28)	15:43	17	11:59 (33)
13	04:47	05:51	07:00	08:06	09:27 (17)	08:20		12:51 (28)	09:19		11:43 (33)
	22:37	21:31	20:05	18:39	18 09:45 (17)	16:21	32	13:23 (28)	15:42	17	12:00 (33)
14	04:49	05:53	07:02	08:09	09:27 (17)	08:22		12:51 (28)	09:20		11:44 (33)
	22:35	21:29	20:02	18:36	26 10:48 (15)	16:19	31	13:22 (28)	15:42	16	12:00 (33)
15	04:51	05:55	07:04	08:11	09:29 (17)	08:25		12:53 (28)	09:21		11:44 (33)
	22:34	21:26	19:59	18:33	29 10:51 (15)	16:17	28	13:21 (28)	15:42	16	12:00 (33)
16	04:52	05:57	07:06	08:13	09:30 (17)	08:27		12:54 (28)	09:22		11:45 (33)
	22:32	21:24	19:56	18:31	28 10:52 (15)	16:15	27	13:21 (28)	15:42	15	12:00 (33)
17	04:54	05:59	07:08	08:16	10:33 (15)	08:29		11:38 (33)	09:23		11:45 (33)
	22:30	21:21	19:54	18:28	21 10:54 (15)	16:13	32	13:19 (28)	15:42	15	12:00 (33)
18	04:56	06:02	07:10	08:18	10:31 (15)	08:32		11:36 (33)	09:24		11:46 (33)
	22:29	21:18	19:51	18:25	23 10:54 (15)	16:11	35	13:20 (20)	15:42	15	12:01 (33)
19	04:58	06:04	07:13	08:20	10:31 (15)	08:34		11:36 (33)	09:25		11:47 (33)
	22:27	21:16	19:48	18:22	24 10:55 (15)	16:09	36	13:21 (20)	15:42	14	12:01 (33)
20	05:00	06:06	07:15	08:23	10:30 (15)	08:36		11:34 (33)	09:26		11:48 (33)
	22:25	21:13	19:45	18:20	25 10:55 (15)	16:08	40	13:21 (20)	15:42	14	12:02 (33)
21	05:01	06:08	07:17	08:25	10:30 (15)	08:39		11:34 (33)	09:26		11:48 (33)
	22:24	21:10	19:42	18:17	37 15:48 (23)	16:06	40	13:21 (20)	15:43	14	12:02 (33)
22	05:03	06:11	07:19	08:27	10:29 (15)	08:41		11:34 (33)	09:27		11:49 (33)
	22:22	21:08	19:39	18:14	42 15:50 (23)	16:04	43	13:22 (20)	15:43	14	12:03 (33)
23	05:05	06:13	07:22	08:30	10:30 (15)	08:43		11:33 (33)	09:27		11:49 (33)
	22:20	21:05	19:36	18:12	50 15:52 (23)	16:02	44	13:22 (20)	15:44	14	12:03 (33)
24	05:07	06:15	07:24	08:32	10:29 (15)	08:45		11:34 (33)	09:28		11:50 (33)
	22:18	21:02	19:33	18:09	63 15:52 (23)	16:01	44	13:23 (20)	15:44	14	12:04 (33)
25	05:09	06:17	07:26	07:35	09:30 (15)	08:47		11:33 (33)	09:28		11:50 (33)
	22:16	20:59	19:30	17:06	69 14:54 (23)	15:59	44	13:22 (20)	15:45	14	12:04 (33)
26	05:11	06:20	07:28	07:37	09:30 (15)	08:50		11:34 (33)	09:28		11:50 (33)
	22:14	20:56	19:27	17:04	74 14:54 (23)	15:58	44	13:23 (20)	15:46	15	12:05 (33)
27	05:13	06:22	07:30	07:39	09:31 (15)	08:52		11:34 (33)	09:28		11:50 (33)
	22:12	20:54	19:24	17:01	82 15:24 (24)	15:56	44	13:23 (20)	15:47	16	12:06 (33)
28	05:16	06:24	07:33	07:42	09:33 (15)	08:54		11:35 (33)	09:28		11:50 (33)
	22:10	20:51	19:22	16:59	89 15:27 (24)	15:55	37	13:17 (20)	15:48	16	12:06 (33)
29	05:18	06:26	07:35	07:44	09:34 (15)	08:56		11:35 (33)	09:28		11:50 (33)
	22:07	20:48	19:19	16:56	90 15:28 (24)	15:54	29	13:09 (20)	15:49	16	12:06 (33)
30	05:20	06:29	07:37	07:47	09:36 (15)	08:58		11:35 (33)	09:28		11:51 (33)
	22:05	20:45	19:16	16:54	90 15:29 (24)	15:52	23	13:03 (20)	15:50	17	12:08 (33)
31	05:22	06:31		07:49	12:49 (28)				09:28		11:51 (33)
	22:03	20:42		16:51	81 15:30 (24)				15:51	17	12:08 (33)
Potential sun hours	546	478	386	319		236			199		
Total, worst case					1111		1317			529	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:46		14:11 (33)	07:35		10:14 (17)	07:07		05:44	04:40
	15:53			16:56	18	15:31 (20)	18:05	73	16:49 (23)	20:17		21:26	22:30
2	09:27			08:43		15:15 (20)	07:32		10:15 (17)	07:04		05:41	04:38
	15:54			16:58	17	15:32 (20)	18:07	70	16:50 (23)	20:19		21:28	22:32
3	09:27			08:41		15:14 (20)	07:30		10:16 (17)	07:01		05:39	04:37
	15:55			17:01	19	15:33 (20)	18:09	63	16:48 (23)	20:21		21:30	22:34
4	09:26			08:39		12:33 (15)	07:27		10:16 (17)	06:58		05:36	04:36
	15:57			17:03	32	15:33 (20)	18:12	54	16:47 (23)	20:23		21:33	22:35
5	09:26			08:37		12:30 (15)	07:24		09:25 (12)	06:55		05:34	04:35
	15:58			17:06	37	15:33 (20)	18:14	37	16:44 (23)	20:26		21:35	22:36
6	09:25			08:34		12:29 (15)	07:21		09:21 (12)	06:52		05:31	04:34
	16:00			17:08	40	15:34 (20)	18:16	27	10:42 (17)	20:28		21:37	22:38
7	09:24			08:32		12:27 (15)	07:18		10:19 (17)	06:49		05:29	04:33
	16:02			17:11	43	15:33 (20)	18:19	20	10:39 (17)	20:30		21:40	22:39
8	09:24			08:30		12:26 (15)	07:16		10:21 (17)	06:47		05:26	04:32
	16:03			17:13	46	15:34 (20)	18:21	15	10:36 (17)	20:33		21:42	22:40
9	09:23			08:27		12:25 (15)	07:13		10:24 (17)	06:44		05:24	04:31
	16:05			17:16	46	15:33 (20)	18:24	8	10:32 (17)	20:35		21:44	22:42
10	09:22			08:25		12:24 (15)	07:10			06:41		05:22	04:30
	16:07			17:18	45	15:31 (20)	18:26			20:37		21:46	22:43
11	09:21			08:22		12:24 (15)	07:07			06:38		05:19	04:29
	16:09			17:21	43	15:30 (20)	18:28			20:40		21:49	22:44
12	09:20			08:20		12:23 (15)	07:04			06:35		05:17	04:29
	16:11			17:23	38	15:27 (20)	18:31			20:42		21:51	22:45
13	09:18			08:18		12:22 (15)	07:01			06:32		05:15	04:28
	16:13			17:26	35	12:57 (15)	18:33			20:44		21:53	22:46
14	09:17			08:15		12:23 (15)	06:59			06:30		05:12	04:28
	16:15			17:28	35	12:58 (15)	18:35			20:46		21:55	22:46
15	09:16			08:12		12:22 (15)	06:56			06:27		05:10	04:27
	16:17			17:30	35	12:57 (15)	18:38			20:49		21:57	22:47
16	09:14			08:10		12:22 (15)	06:53			06:24		05:08	04:27
	16:19			17:33	43	16:12 (28)	18:40			20:51		22:00	22:48
17	09:13			08:07		12:22 (15)	06:50			06:21		05:06	04:27
	16:21			17:35	49	16:15 (28)	18:42			20:53		22:02	22:48
18	09:12			08:05		12:23 (15)	06:47			06:18		05:04	04:27
	16:23			17:38	51	16:17 (28)	18:44			20:56		22:04	22:49
19	09:10			08:02		12:23 (15)	06:44			06:16		05:02	04:27
	16:25			17:40	54	16:18 (28)	18:47			20:58		22:06	22:49
20	09:08			08:00		12:23 (15)	06:41			06:13		05:00	04:27
	16:28			17:43	55	16:19 (28)	18:49			21:00		22:08	22:50
21	09:07			07:57		12:23 (15)	06:38			06:10		04:58	04:27
	16:30			17:45	56	16:20 (28)	18:51			21:03		22:10	22:50
22	09:05			07:54		12:24 (15)	06:36			06:07		04:56	04:27
	16:32			17:48	61	16:42 (23)	18:54			21:05		22:12	22:50
23	09:03			07:52		12:26 (15)	06:33			06:05		04:54	04:27
	16:34			17:50	66	16:48 (23)	18:56			21:07		22:14	22:50
24	09:01			07:49		10:20 (17)	06:30			06:02		04:52	04:27
	16:37			17:52	68	16:49 (23)	18:58			21:10		22:16	22:50
25	09:00			07:46		10:16 (17)	06:27			05:59		04:51	04:28
	16:39			17:55	89	16:50 (23)	19:01			21:12		22:18	22:50
26	08:58			07:43		10:15 (17)	06:24			05:57		04:49	04:28
	16:41			17:57	92	16:50 (23)	19:03			21:14		22:20	22:50
27	08:56			07:41		10:15 (17)	06:21			05:54		04:47	04:29
	16:44			18:00	77	16:50 (23)	19:05			21:17		22:22	22:50
28	08:54			07:38		10:15 (17)	06:18			05:51		04:45	04:29
	16:46			18:02	75	16:50 (23)	19:07			21:19		22:24	22:50
29	08:52						07:15			05:49		04:44	04:30
	16:49						20:10			21:21		22:25	22:49
30	08:50		14:16 (33)				07:12			05:46		04:42	04:31
	16:51	3	14:19 (33)				20:12			21:23		22:27	22:49
31	08:48		14:08 (33)				07:10					04:41	
	16:53	21	15:27 (20)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		24			1365			367					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:53 (15)	09:00
	22:48	22:01	20:40	19:13			16:49	46	15:01 (20)	15:51
2	04:33	05:26	06:35	07:41			07:54		11:55 (15)	09:01
	22:48	21:58	20:37	19:10			16:46	45	15:02 (20)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:56 (15)	09:03
	22:47	21:56	20:34	19:07			16:44	45	15:03 (20)	15:49
4	04:35	05:31	06:40	07:46			07:58		11:57 (15)	09:05
	22:46	21:54	20:31	19:04			16:41	43	15:03 (20)	15:48
5	04:36	05:33	06:42	07:48		10:59 (17)	08:01		11:58 (15)	09:07
	22:46	21:51	20:28	19:01	13	11:12 (17)	16:39	41	15:03 (20)	15:47
6	04:37	05:35	06:44	07:50		10:56 (17)	08:03		12:01 (15)	09:09
	22:45	21:49	20:25	18:59	19	11:15 (17)	16:37	36	15:04 (20)	15:46
7	04:38	05:37	06:46	07:53		09:54 (12)	08:06		12:03 (15)	09:10
	22:44	21:47	20:22	18:56	24	11:16 (17)	16:34	31	15:03 (20)	15:45
8	04:40	05:39	06:48	07:55		09:58 (12)	08:08		14:45 (20)	09:12
	22:43	21:44	20:20	18:53	33	17:18 (23)	16:32	18	15:03 (20)	15:45
9	04:41	05:42	06:51	07:57		10:01 (12)	08:10		14:46 (20)	09:13
	22:42	21:42	20:17	18:50	49	17:20 (23)	16:30	17	15:03 (20)	15:44
10	04:43	05:44	06:53	08:00		10:49 (17)	08:13		13:42 (33)	09:15
	22:40	21:39	20:14	18:47	59	17:21 (23)	16:28	20	15:03 (20)	15:43
11	04:44	05:46	06:55	08:02		10:49 (17)	08:15		13:39 (33)	09:16
	22:39	21:37	20:11	18:44	67	17:23 (23)	16:25	20	14:58 (20)	15:43
12	04:46	05:48	06:57	08:04		10:48 (17)	08:18		13:48 (33)	09:17
	22:38	21:34	20:08	18:42	72	17:23 (23)	16:23	3	13:51 (33)	15:43
13	04:47	05:50	06:59	08:06		10:48 (17)	08:20			09:19
	22:36	21:31	20:05	18:39	73	17:23 (23)	16:21			15:42
14	04:49	05:53	07:02	08:09		10:47 (17)	08:22			09:20
	22:35	21:29	20:02	18:36	77	17:23 (23)	16:19			15:42
15	04:50	05:55	07:04	08:11		10:48 (17)	08:25			09:21
	22:34	21:26	19:59	18:33	86	17:23 (23)	16:17			15:42
16	04:52	05:57	07:06	08:13		10:47 (17)	08:27			09:22
	22:32	21:24	19:56	18:31	93	17:22 (23)	16:15			15:42
17	04:54	05:59	07:08	08:16		10:48 (17)	08:29			09:23
	22:30	21:21	19:53	18:28	85	17:22 (23)	16:13			15:42
18	04:56	06:02	07:10	08:18		12:58 (15)	08:32			09:24
	22:29	21:18	19:51	18:25	66	17:20 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		12:57 (15)	08:34			09:25
	22:27	21:16	19:48	18:22	64	17:17 (23)	16:09			15:42
20	04:59	06:06	07:15	08:23		12:55 (15)	08:36			09:25
	22:25	21:13	19:45	18:20	58	17:12 (23)	16:07			15:42
21	05:01	06:08	07:17	08:25		12:54 (15)	08:39			09:26
	22:23	21:10	19:42	18:17	56	16:51 (28)	16:06			15:43
22	05:03	06:11	07:19	08:27		12:53 (15)	08:41			09:27
	22:22	21:07	19:39	18:14	55	16:49 (28)	16:04			15:43
23	05:05	06:13	07:21	08:30		12:53 (15)	08:43			09:27
	22:20	21:05	19:36	18:12	53	16:48 (28)	16:02			15:44
24	05:07	06:15	07:24	08:32		12:52 (15)	08:45			09:28
	22:18	21:02	19:33	18:09	52	16:46 (28)	16:01			15:44
25	05:09	06:17	07:26	07:34		11:52 (15)	08:47			09:28
	22:16	20:59	19:30	17:06	47	15:44 (28)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:51 (15)	08:49			09:28
	22:14	20:56	19:27	17:04	39	15:39 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:52 (15)	08:52			09:28
	22:12	20:54	19:24	17:01	35	12:27 (15)	15:56			15:47
28	05:15	06:24	07:33	07:42		11:52 (15)	08:54			09:28
	22:10	20:51	19:22	16:59	35	12:27 (15)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:52 (15)	08:56			09:28
	22:07	20:48	19:19	16:56	34	12:26 (15)	15:53			15:49
30	05:20	06:29	07:37	07:46		11:53 (15)	08:58			09:28
	22:05	20:45	19:16	16:54	40	14:58 (20)	15:52			15:50
31	05:22	06:31		07:49		11:53 (15)				09:28
	22:03	20:42		16:51	44	15:00 (20)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1428			365		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		11:38 (17)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		09:44 (12)	09:00
	15:53		16:56	63	13:43 (15)	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	56	15:37 (28)	15:51
2	09:27		08:43		11:39 (17)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		09:56 (12)	09:01
	15:54		16:58	59	13:43 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	51	15:37 (28)	15:50
3	09:27		08:41		11:38 (17)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		09:57 (12)	09:03
	15:55		17:01	51	13:42 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	55	15:36 (28)	15:49
4	09:26		08:39		11:39 (17)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:02 (12)	09:05
	15:57		17:03	51	15:59 (28)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	56	15:35 (28)	15:48
5	09:26		08:37		11:39 (17)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:04 (12)	09:07
	15:58		17:06	56	16:02 (28)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	58	15:34 (28)	15:47
6	09:25		08:34		10:34 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		11:10 (17)	09:09
	16:00		17:08	57	16:05 (28)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	55	15:33 (28)	15:46
7	09:24		08:32		10:32 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		11:09 (17)	09:10
	16:02		17:11	55	16:05 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56		16:34	49	13:12 (15)	15:45
8	09:24		08:30		10:27 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		11:09 (17)	09:12
	16:03		17:13	53	16:07 (28)	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53		16:32	50	13:13 (15)	15:45
9	09:23		08:27		10:26 (12)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57		08:10		11:09 (17)	09:13
	16:05		17:16	49	16:07 (28)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	60	13:14 (15)	15:44
10	09:22		08:25		10:15 (12)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13		11:10 (17)	09:15
	16:07		17:18	58	16:07 (28)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	61	13:14 (15)	15:43
11	09:21		08:22		10:16 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		11:10 (17)	09:16
	16:09		17:21	55	16:08 (28)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	63	13:14 (15)	15:43
12	09:20		08:20		10:17 (12)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		11:10 (17)	09:17
	16:11		17:23	48	16:08 (28)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	66	13:15 (15)	15:43
13	09:18		08:17		10:18 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		11:11 (17)	09:19
	16:13		17:26	33	16:07 (28)	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	65	13:15 (15)	15:42
14	09:17	12:02 (9)	08:15		10:21 (12)	06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:11 (17)	09:20
	16:15	8 12:10 (9)	17:28	28	16:08 (28)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	66	13:15 (15)	15:42
15	09:16	12:02 (9)	08:12		15:50 (28)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:13 (17)	09:21
	16:17	9 12:11 (9)	17:30	17	16:07 (28)	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	64	13:15 (15)	15:42
16	09:14	12:02 (9)	08:10		15:51 (28)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:14 (17)	09:22
	16:19	11 12:13 (9)	17:33	14	16:05 (28)	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	62	13:15 (15)	15:42
17	09:13	12:02 (9)	08:07		15:52 (28)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		11:15 (17)	09:23
	16:21	20 13:30 (15)	17:35	12	16:04 (28)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	61	13:14 (15)	15:42
18	09:12	11:58 (9)	08:05		15:56 (28)	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		11:16 (17)	09:24
	16:23	30 13:34 (15)	17:38	6	16:02 (28)	18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	60	13:14 (15)	15:42
19	09:10	11:58 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		11:19 (17)	09:25
	16:25	33 13:35 (15)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	55	13:14 (15)	15:42
20	09:08	11:58 (9)	08:00			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		11:21 (17)	09:25
	16:27	36 13:37 (15)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	47	13:13 (15)	15:42
21	09:07	11:58 (9)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		11:33 (9)	09:26
	16:30	39 13:38 (15)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	39	13:13 (15)	15:43
22	09:05	11:46 (17)	07:54			06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		11:34 (9)	09:27
	16:32	47 13:38 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	36	13:13 (15)	15:43
23	09:03	11:44 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		11:34 (9)	09:27
	16:34	55 13:39 (15)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	33	13:12 (15)	15:44
24	09:01	11:42 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		16:24 (28)	08:45		11:35 (9)	09:28
	16:37	60 13:40 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	8	16:32 (28)	16:01	30	13:11 (15)	15:44
25	09:00	11:42 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		15:22 (28)	08:47		11:41 (9)	09:28
	16:39	61 13:41 (15)	17:55			19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06	12	15:34 (28)	15:59	20	13:09 (15)	15:45
26	08:58	11:41 (17)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		15:20 (28)	08:49		11:41 (9)	09:28
	16:41	62 13:42 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15	15:35 (28)	15:58	11	11:52 (9)	15:46
27	08:56	11:40 (17)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		15:19 (28)	08:52		11:41 (9)	09:28
	16:44	64 13:42 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01	17	15:36 (28)	15:56	10	11:51 (9)	15:47
28	08:54	11:40 (17)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42		09:50 (12)	08:54		11:42 (9)	09:28
	16:46	65 13:43 (15)	18:02			19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59	28	15:37 (28)	15:55	8	11:50 (9)	15:48
29	08:52	11:39 (17)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		09:47 (12)	08:56			09:28
	16:49	65 13:43 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	37	15:37 (28)	15:53			15:49
30	08:50	11:39 (17)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		09:46 (12)	08:58			09:28
	16:51	65 13:43 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	49	15:37 (28)	15:52			15:50
31	08:48	11:39 (17)				07:09		04:41		05:22	06:31		07:49		09:46 (12)				09:28
	16:53	63 13:43 (15)				20:14		22:29		22:03	20:42		16:51	55	15:38 (28)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319			236				199
Total, worst case		793		765									221			1347			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46	10:50 (12)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39		07:51	10:27 (12)	09:00
	15:53		16:56 74	14:26 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49 30	13:49 (15)	15:51
2	09:27		08:43	10:51 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:25 (12)	09:01
	15:54		16:58 73	14:27 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 45	13:52 (15)	15:50
3	09:27		08:41	10:50 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:24 (12)	09:03
	15:55		17:01 74	14:27 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44 54	13:54 (15)	15:49
4	09:26		08:39	10:51 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:22 (12)	09:05
	15:57		17:03 71	14:27 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 61	13:55 (15)	15:48
5	09:26		08:37	10:51 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:22 (12)	09:07
	15:58		17:06 68	14:26 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39 65	13:56 (15)	15:47
6	09:25		08:34	10:53 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:22 (12)	09:09
	16:00		17:08 64	14:26 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37 69	13:57 (15)	15:46
7	09:24		08:32	10:53 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:21 (12)	09:10
	16:02		17:11 59	14:25 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34 72	13:57 (15)	15:45
8	09:24		08:30	10:55 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:21 (12)	09:12
	16:03		17:13 52	14:24 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32 73	13:57 (15)	15:45
9	09:23		08:27	10:56 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:21 (12)	09:13
	16:05		17:16 43	14:22 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30 75	13:58 (15)	15:44
10	09:22		08:25	10:58 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:22 (12)	09:15
	16:07		17:18 26	14:18 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28 72	13:58 (15)	15:43
11	09:21		08:22	12:44 (17)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:21 (12)	09:16
	16:09		17:21 5	12:49 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25 75	13:58 (15)	15:43
12	09:20		08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:22 (12)	09:17
	16:11		17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23 72	13:58 (15)	15:42
13	09:18	12:39 (9)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:23 (12)	09:19
	16:13 5	12:44 (9)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21 72	13:58 (15)	15:42
14	09:17	12:39 (9)	08:15		06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	10:23 (12)	09:20
	16:15 7	12:46 (9)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 68	13:57 (15)	15:42
15	09:16	12:39 (9)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	10:24 (12)	09:21
	16:17 15	12:54 (9)	17:30		18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17 63	13:57 (15)	15:42
16	09:14	12:38 (9)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	10:30 (12)	09:22
	16:19 17	12:55 (9)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15 50	13:57 (15)	15:42
17	09:13	12:38 (9)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:05 (17)	09:23
	16:21 18	12:56 (9)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 45	13:55 (15)	15:42
18	09:12	12:37 (9)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:07 (17)	09:24
	16:23 19	12:56 (9)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11 42	13:55 (15)	15:42
19	09:10	12:38 (9)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:08 (17)	09:25
	16:25 20	12:58 (9)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09 39	13:54 (15)	15:42
20	09:08	12:37 (17)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:09 (17)	09:25
	16:27 22	12:59 (9)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07 33	13:51 (15)	15:42
21	09:07	12:35 (17)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:11 (17)	09:26
	16:30 23	12:58 (9)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06 23	12:34 (9)	15:43
22	09:05	12:34 (17)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:13 (17)	09:27
	16:32 33	14:16 (15)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04 22	12:35 (9)	15:43
23	09:03	12:33 (17)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:14 (9)	09:27
	16:34 39	14:19 (15)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02 20	12:34 (9)	15:44
24	09:01	12:33 (17)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:15 (9)	09:28
	16:37 42	14:21 (15)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01 20	12:35 (9)	15:44
25	09:00	12:32 (17)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:16 (9)	09:28
	16:39 45	14:22 (15)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59 18	12:34 (9)	15:45
26	08:58	10:57 (12)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49	12:17 (9)	09:28
	16:41 50	14:24 (15)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58 17	12:34 (9)	15:46
27	08:56	10:51 (12)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52	12:18 (9)	09:28
	16:44 64	14:24 (15)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56 15	12:33 (9)	15:47
28	08:54	10:51 (12)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54	12:19 (9)	09:28
	16:46 69	14:25 (15)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59		15:55 7	12:26 (9)	15:48
29	08:52	10:51 (12)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56	12:20 (9)	09:28
	16:49 70	14:26 (15)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53 5	12:25 (9)	15:49
30	08:50	10:50 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		08:58		09:28
	16:51 72	14:26 (15)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54		15:52		15:50
31	08:48	10:51 (12)			07:09		04:41		05:22	06:31		07:49	12:13 (17)			09:28
	16:53 74	14:27 (15)			20:14		22:29		22:03	20:42		16:51 7	12:20 (17)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case	704		609									7		1322		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46	10:45 (12)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51	10:19 (12)	09:00
	15:53		16:56 73	14:22 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49 43	13:46 (15)	15:51
2	09:27		08:43	10:46 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:18 (12)	09:01
	15:54		16:58 74	14:23 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 53	13:48 (15)	15:50
3	09:27		08:41	10:45 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:18 (12)	09:03
	15:55		17:01 74	14:22 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44 59	13:50 (15)	15:49
4	09:26		08:39	10:46 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:16 (12)	09:05
	15:57		17:03 73	14:23 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 65	13:51 (15)	15:48
5	09:26		08:37	10:46 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:16 (12)	09:07
	15:58		17:06 71	14:22 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39 70	13:52 (15)	15:47
6	09:25		08:34	10:47 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:16 (12)	09:09
	16:00		17:08 68	14:22 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37 73	13:53 (15)	15:46
7	09:24		08:32	10:47 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:16 (12)	09:10
	16:02		17:11 65	14:21 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34 73	13:52 (15)	15:45
8	09:24		08:30	10:48 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:16 (12)	09:12
	16:03		17:13 58	14:20 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32 73	13:53 (15)	15:45
9	09:23		08:27	10:49 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:16 (12)	09:13
	16:05		17:16 50	14:18 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30 75	13:53 (15)	15:44
10	09:22		08:25	10:50 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:17 (12)	09:15
	16:07		17:18 40	14:16 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28 74	13:54 (15)	15:43
11	09:21		08:22	10:53 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:17 (12)	09:16
	16:09		17:21 22	12:47 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25 69	13:53 (15)	15:43
12	09:20		08:20	12:38 (17)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:18 (12)	09:17
	16:11		17:23 4	12:42 (17)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23 54	13:53 (15)	15:42
13	09:18		08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:20 (12)	09:19
	16:13		17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21 53	13:53 (15)	15:42
14	09:17		08:15		06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	11:57 (17)	09:20
	16:15		17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 51	13:52 (15)	15:42
15	09:16		08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:58 (17)	09:21
	16:17		17:30		18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17 50	13:52 (15)	15:42
16	09:14		08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:59 (17)	09:22
	16:19		17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15 49	13:52 (15)	15:42
17	09:13	12:33 (9)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:00 (17)	09:23
	16:21 5	12:50 (9)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 45	13:50 (15)	15:42
18	09:12	12:33 (9)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:01 (17)	09:24
	16:23 18	12:51 (9)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11 43	13:50 (15)	15:42
19	09:10	12:34 (9)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:03 (17)	09:25
	16:25 19	12:53 (9)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09 38	13:49 (15)	15:42
20	09:08	12:34 (9)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:04 (17)	09:25
	16:27 20	12:54 (9)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07 27	13:41 (15)	15:42
21	09:07	12:31 (17)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:07 (17)	09:26
	16:30 22	12:53 (9)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06 22	12:29 (9)	15:43
22	09:05	12:29 (17)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:10 (9)	09:27
	16:32 27	14:06 (15)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04 20	12:30 (9)	15:43
23	09:03	12:28 (17)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:10 (9)	09:27
	16:34 38	14:14 (15)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02 19	12:29 (9)	15:44
24	09:01	12:27 (17)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:11 (9)	09:28
	16:37 43	14:16 (15)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01 18	12:29 (9)	15:44
25	09:00	12:27 (17)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:11 (9)	09:28
	16:39 45	14:17 (15)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59 5	12:28 (9)	15:45
26	08:58	12:26 (17)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49		09:28
	16:41 49	14:19 (15)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58		15:46
27	08:56	12:25 (17)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52		09:28
	16:44 50	14:19 (15)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56		15:47
28	08:54	12:25 (17)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54		09:28
	16:46 51	14:20 (15)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59		15:55		15:48
29	08:52	10:48 (12)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56		09:28
	16:49 53	14:21 (15)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53		15:49
30	08:50	10:46 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	12:06 (17)	08:58		09:28
	16:51 55	14:21 (15)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54 7	12:13 (17)	15:52		15:50
31	08:48	10:46 (12)			07:09		04:41		05:22	06:31		07:49	10:22 (12)			09:28
	16:53 69	14:22 (15)			20:14		22:29		22:03	20:42		16:51 25	12:17 (17)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case	564		672									32		1221		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		12:03 (26)	08:45		14:59 (17)	07:35	07:07	05:44	04:39
	15:52	20	12:23 (26)	16:56	18	15:17 (17)	18:04	20:16	21:26	22:30
2	09:27		12:03 (26)	08:43		14:59 (17)	07:32	07:04	05:41	04:38
	15:54	20	12:23 (26)	16:58	19	15:18 (17)	18:07	20:19	21:28	22:32
3	09:27		12:03 (26)	08:41		14:58 (17)	07:30	07:01	05:38	04:37
	15:55	20	12:23 (26)	17:01	19	15:17 (17)	18:09	20:21	21:30	22:33
4	09:26		12:03 (26)	08:39		14:59 (17)	07:27	06:58	05:36	04:36
	15:57	21	12:24 (26)	17:03	19	15:18 (17)	18:12	20:23	21:33	22:35
5	09:26		12:04 (26)	08:37		14:59 (17)	07:24	06:55	05:33	04:34
	15:58	26	13:33 (12)	17:06	19	15:18 (17)	18:14	20:26	21:35	22:36
6	09:25		12:04 (26)	08:34		15:00 (17)	07:21	06:52	05:31	04:33
	16:00	29	13:35 (12)	17:08	18	15:18 (17)	18:16	20:28	21:37	22:38
7	09:24		12:05 (26)	08:32		15:00 (17)	07:18	06:49	05:29	04:32
	16:01	31	13:37 (12)	17:11	17	15:17 (17)	18:19	20:30	21:39	22:39
8	09:23		12:06 (26)	08:30		15:00 (17)	07:16	06:46	05:26	04:31
	16:03	33	13:39 (12)	17:13	16	15:16 (17)	18:21	20:33	21:42	22:40
9	09:23		12:06 (26)	08:27		15:02 (17)	07:13	06:44	05:24	04:31
	16:05	33	13:39 (12)	17:15	14	15:16 (17)	18:23	20:35	21:44	22:42
10	09:22		12:07 (26)	08:25		15:03 (17)	07:10	06:41	05:21	04:30
	16:07	35	13:41 (12)	17:18	11	15:14 (17)	18:26	20:37	21:46	22:43
11	09:21		12:07 (26)	08:22		15:07 (17)	07:07	06:38	05:19	04:29
	16:09	35	13:41 (12)	17:20	5	15:12 (17)	18:28	20:39	21:49	22:44
12	09:19		12:08 (26)	08:20			07:04	06:35	05:17	04:29
	16:11	35	13:42 (12)	17:23			18:30	20:42	21:51	22:45
13	09:18		12:09 (26)	08:17			07:01	06:32	05:15	04:28
	16:12	35	13:43 (12)	17:25			18:33	20:44	21:53	22:46
14	09:17		12:10 (26)	08:15			06:58	06:29	05:12	04:28
	16:14	35	13:44 (12)	17:28			18:35	20:46	21:55	22:46
15	09:16		12:11 (26)	08:12			06:56	06:27	05:10	04:27
	16:17	34	13:45 (12)	17:30			18:37	20:49	21:57	22:47
16	09:14		12:12 (26)	08:10			06:53	06:24	05:08	04:27
	16:19	32	13:45 (12)	17:33			18:40	20:51	22:00	22:48
17	09:13		12:14 (26)	08:07			06:50	06:21	05:06	04:27
	16:21	29	13:45 (12)	17:35			18:42	20:53	22:02	22:48
18	09:11		12:16 (26)	08:05			06:47	06:18	05:04	04:26
	16:23	26	13:46 (12)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:25 (12)	08:02			06:44	06:16	05:02	04:26
	16:25	21	13:46 (12)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:25 (12)	07:59			06:41	06:13	05:00	04:26
	16:27	22	13:47 (12)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:26 (12)	07:57			06:38	06:10	04:58	04:26
	16:30	21	13:47 (12)	17:45			18:51	21:03	22:10	22:50
22	09:05		13:26 (12)	07:54			06:35	06:07	04:56	04:27
	16:32	21	13:47 (12)	17:48			18:54	21:05	22:12	22:50
23	09:03		13:27 (12)	07:51			06:33	06:05	04:54	04:27
	16:34	20	13:47 (12)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:28 (12)	07:49			06:30	06:02	04:52	04:27
	16:37	19	13:47 (12)	17:52			18:58	21:09	22:16	22:50
25	09:00		13:29 (12)	07:46			06:27	05:59	04:50	04:28
	16:39	18	13:47 (12)	17:55			19:00	21:12	22:18	22:50
26	08:58		13:30 (12)	07:43			06:24	05:57	04:49	04:28
	16:41	17	13:47 (12)	17:57			19:03	21:14	22:20	22:50
27	08:56		13:30 (12)	07:41			06:21	05:54	04:47	04:29
	16:44	20	15:09 (17)	18:00			19:05	21:16	22:22	22:50
28	08:54		13:32 (12)	07:38			06:18	05:51	04:45	04:29
	16:46	23	15:12 (17)	18:02			19:07	21:19	22:23	22:50
29	08:52		13:35 (12)				07:15	05:49	04:44	04:30
	16:48	21	15:14 (17)				20:10	21:21	22:25	22:49
30	08:50		15:00 (17)				07:12	05:46	04:42	04:31
	16:51	15	15:15 (17)				20:12	21:23	22:27	22:49
31	08:48		15:00 (17)				07:09		04:41	
	16:53	16	15:16 (17)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		783			175					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (17)	08:59		11:49 (26)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (17)	15:51	35	13:23 (12)
2	04:33	05:26	06:35	07:41			07:54		14:31 (17)	09:01		11:50 (26)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (17)	15:50	35	13:24 (12)
3	04:34	05:28	06:37	07:44			07:56		14:31 (17)	09:03		11:50 (26)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (17)	15:49	33	13:23 (12)
4	04:35	05:30	06:39	07:46			07:58		14:29 (17)	09:05		11:50 (26)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (17)	15:48	33	13:23 (12)
5	04:36	05:33	06:42	07:48			08:01		14:29 (17)	09:07		11:50 (26)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (17)	15:47	31	13:22 (12)
6	04:37	05:35	06:44	07:50			08:03		14:29 (17)	09:08		11:50 (26)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (17)	15:46	30	13:22 (12)
7	04:38	05:37	06:46	07:53			08:06		14:29 (17)	09:10		11:51 (26)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (17)	15:45	27	13:21 (12)
8	04:40	05:39	06:48	07:55			08:08		14:29 (17)	09:12		11:51 (26)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (17)	15:44	21	12:12 (26)
9	04:41	05:41	06:51	07:57			08:10		14:30 (17)	09:13		11:51 (26)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (17)	15:44	21	12:12 (26)
10	04:42	05:44	06:53	07:59			08:13		14:29 (17)	09:15		11:52 (26)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (17)	15:43	20	12:12 (26)
11	04:44	05:46	06:55	08:02			08:15		14:30 (17)	09:16		11:53 (26)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (17)	15:43	20	12:13 (26)
12	04:45	05:48	06:57	08:04			08:18		14:32 (17)	09:17		11:53 (26)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (17)	15:42	20	12:13 (26)
13	04:47	05:50	06:59	08:06			08:20		13:07 (12)	09:19		11:54 (26)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (17)	15:42	20	12:14 (26)
14	04:49	05:53	07:02	08:09			08:22		13:04 (12)	09:20		11:54 (26)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (17)	15:42	20	12:14 (26)
15	04:50	05:55	07:04	08:11			08:25		13:03 (12)	09:21		11:54 (26)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (17)	15:42	20	12:14 (26)
16	04:52	05:57	07:06	08:13			08:27		13:03 (12)	09:22		11:55 (26)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (12)	15:42	20	12:15 (26)
17	04:54	05:59	07:08	08:16			08:29		13:02 (12)	09:23		11:55 (26)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (12)	15:42	20	12:15 (26)
18	04:56	06:02	07:10	08:18			08:32		13:02 (12)	09:24		11:56 (26)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (12)	15:42	19	12:15 (26)
19	04:57	06:04	07:13	08:20			08:34		13:02 (12)	09:25		11:56 (26)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (12)	15:42	20	12:16 (26)
20	04:59	06:06	07:15	08:23			08:36		13:01 (12)	09:25		11:57 (26)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (12)	15:42	20	12:17 (26)
21	05:01	06:08	07:17	08:25			08:38		13:02 (12)	09:26		11:57 (26)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (12)	15:43	20	12:17 (26)
22	05:03	06:10	07:19	08:27			08:41		13:02 (12)	09:27		11:58 (26)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (12)	15:43	20	12:18 (26)
23	05:05	06:13	07:21	08:30			08:43		13:02 (12)	09:27		11:58 (26)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (12)	15:44	20	12:18 (26)
24	05:07	06:15	07:24	08:32			08:45		11:55 (26)	09:27		11:58 (26)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (12)	15:44	20	12:18 (26)
25	05:09	06:17	07:26	07:34			08:47		11:52 (26)	09:28		11:59 (26)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (12)	15:45	20	12:19 (26)
26	05:11	06:19	07:28	07:37			08:49		11:51 (26)	09:28		12:00 (26)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (12)	15:46	20	12:20 (26)
27	05:13	06:22	07:30	07:39			08:51		11:50 (26)	09:28		12:00 (26)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (12)	15:47	20	12:20 (26)
28	05:15	06:24	07:32	07:42			08:54		11:49 (26)	09:28		12:00 (26)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (12)	15:48	20	12:20 (26)
29	05:17	06:26	07:35	07:44			08:56		11:50 (26)	09:28		12:01 (26)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (12)	15:49	20	12:21 (26)
30	05:20	06:28	07:37	07:46			08:58		11:49 (26)	09:28		12:01 (26)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (12)	15:50	21	12:22 (26)
31	05:22	06:31		07:49		14:35 (17)				09:28		12:01 (26)
	22:03	20:42		16:51	6	14:41 (17)				15:51	21	12:22 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March	April	May	June	July	August	September	October	November		December	
1	09:28	12:35 (26)	08:45	14:09 (12)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51		08:59	12:23 (26)
	15:52 20	12:55 (26)	16:56 5	14:14 (12)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51 18	12:41 (26)
2	09:27	12:36 (26)	08:43		07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01	12:23 (26)
	15:54 21	12:57 (26)	16:58		18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50 19	12:42 (26)
3	09:27	12:36 (26)	08:41		07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03	12:23 (26)
	15:55 21	12:57 (26)	17:01		18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49 20	12:43 (26)
4	09:26	12:37 (26)	08:39		07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05	12:23 (26)
	15:57 20	12:57 (26)	17:03		18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48 20	12:43 (26)
5	09:26	12:37 (26)	08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07	12:24 (26)
	15:58 20	12:57 (26)	17:06		18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47 20	12:44 (26)
6	09:25	12:38 (26)	08:34		07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:08	12:24 (26)
	16:00 20	12:58 (26)	17:08		18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46 20	12:44 (26)
7	09:24	12:38 (26)	08:32		07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10	12:24 (26)
	16:01 20	12:58 (26)	17:11		18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34		15:45 21	12:45 (26)
8	09:23	12:39 (26)	08:30		07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12	12:25 (26)
	16:03 20	12:59 (26)	17:13		18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44 20	12:45 (26)
9	09:23	12:39 (26)	08:27		07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10		09:13	12:24 (26)
	16:05 19	12:58 (26)	17:15		18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30		15:44 21	12:45 (26)
10	09:22	12:40 (26)	08:25		07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	13:40 (12)	09:15	12:25 (26)
	16:07 19	12:59 (26)	17:18		18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27 5	13:45 (12)	15:43 21	12:46 (26)
11	09:21	12:40 (26)	08:22		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	13:37 (12)	09:16	12:26 (26)
	16:09 19	12:59 (26)	17:20		18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25 11	13:48 (12)	15:43 21	12:47 (26)
12	09:19	12:42 (26)	08:20		07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	13:36 (12)	09:17	12:26 (26)
	16:10 24	14:10 (12)	17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 14	13:50 (12)	15:42 20	12:46 (26)
13	09:18	12:42 (26)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	13:35 (12)	09:19	12:27 (26)
	16:12 27	14:11 (12)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 17	13:52 (12)	15:42 20	12:47 (26)
14	09:17	12:44 (26)	08:15		06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22	13:34 (12)	09:20	12:27 (26)
	16:14 27	14:13 (12)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 18	13:52 (12)	15:42 21	12:48 (26)
15	09:16	12:45 (26)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	13:34 (12)	09:21	12:27 (26)
	16:17 27	14:14 (12)	17:30		18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17 19	13:53 (12)	15:42 21	12:48 (26)
16	09:14	12:46 (26)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	13:34 (12)	09:22	12:28 (26)
	16:19 27	14:15 (12)	17:33		18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15 20	13:54 (12)	15:42 20	12:48 (26)
17	09:13	12:48 (26)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	13:33 (12)	09:23	12:28 (26)
	16:21 25	14:16 (12)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 20	13:53 (12)	15:42 20	12:48 (26)
18	09:11	13:59 (12)	08:05		06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	13:34 (12)	09:24	12:29 (26)
	16:23 18	14:17 (12)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11 20	13:54 (12)	15:42 20	12:49 (26)
19	09:10	13:59 (12)	08:02		06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34	13:34 (12)	09:25	12:30 (26)
	16:25 19	14:18 (12)	17:40		18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 21	13:55 (12)	15:42 20	12:50 (26)
20	09:08	13:59 (12)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	13:34 (12)	09:25	12:30 (26)
	16:27 19	14:18 (12)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 20	13:54 (12)	15:42 20	12:50 (26)
21	09:07	13:59 (12)	07:57		06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	13:35 (12)	09:26	12:30 (26)
	16:30 20	14:19 (12)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 20	13:55 (12)	15:43 20	12:50 (26)
22	09:05	13:59 (12)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41	13:35 (12)	09:27	12:31 (26)
	16:32 20	14:19 (12)	17:47		18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04 19	13:54 (12)	15:43 20	12:51 (26)
23	09:03	13:59 (12)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	13:36 (12)	09:27	12:31 (26)
	16:34 21	14:20 (12)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02 19	13:55 (12)	15:44 20	12:51 (26)
24	09:01	14:00 (12)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	13:37 (12)	09:27	12:31 (26)
	16:36 20	14:20 (12)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	13:55 (12)	15:44 21	12:52 (26)
25	09:00	14:00 (12)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:26 (26)	09:28	12:33 (26)
	16:39 21	14:21 (12)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 25	13:54 (12)	15:45 20	12:53 (26)
26	08:58	14:01 (12)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:25 (26)	09:28	12:33 (26)
	16:41 20	14:21 (12)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 26	13:54 (12)	15:46 20	12:53 (26)
27	08:56	14:01 (12)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	12:24 (26)	09:28	12:34 (26)
	16:44 19	14:20 (12)	18:00		19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 28	13:54 (12)	15:47 20	12:54 (26)
28	08:54	14:02 (12)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:23 (26)	09:28	12:33 (26)
	16:46 18	14:20 (12)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55 28	13:53 (12)	15:47 21	12:54 (26)
29	08:52	14:04 (12)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:23 (26)	09:28	12:34 (26)
	16:48 16	14:20 (12)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 27	13:52 (12)	15:49 20	12:54 (26)
30	08:50	14:04 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:23 (26)	09:28	12:35 (26)
	16:51 14	14:18 (12)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 24	13:51 (12)	15:50 20	12:55 (26)
31	08:48	14:07 (12)			07:09		04:41		05:22	06:31		07:49			09:28	12:35 (26)
	16:53 10	14:17 (12)			20:14		22:29		22:03	20:42		16:51			15:51 20	12:55 (26)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199	
Total, worst case		631		5										419		625

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March	April	May	June
1	09:28		13:54 (26)	08:45		15:12 (12)	07:35	07:06	05:43	04:39
	15:52	9	14:03 (26)	16:56	14	15:26 (12)	18:04	20:16	21:26	22:30
2	09:27		13:54 (26)	08:43		15:12 (12)	07:32	07:04	05:41	04:38
	15:54	11	14:05 (26)	16:58	16	15:28 (12)	18:07	20:19	21:28	22:32
3	09:27		13:54 (26)	08:41		15:11 (12)	07:29	07:01	05:38	04:37
	15:55	12	14:06 (26)	17:01	17	15:28 (12)	18:09	20:21	21:30	22:33
4	09:26		13:54 (26)	08:39		15:11 (12)	07:27	06:58	05:36	04:36
	15:57	13	14:07 (26)	17:03	18	15:29 (12)	18:12	20:23	21:33	22:35
5	09:26		13:53 (26)	08:37		15:11 (12)	07:24	06:55	05:33	04:34
	15:58	15	14:08 (26)	17:06	18	15:29 (12)	18:14	20:26	21:35	22:36
6	09:25		13:53 (26)	08:34		15:11 (12)	07:21	06:52	05:31	04:33
	16:00	16	14:09 (26)	17:08	19	15:30 (12)	18:16	20:28	21:37	22:38
7	09:24		13:54 (26)	08:32		15:11 (12)	07:18	06:49	05:29	04:32
	16:01	16	14:10 (26)	17:10	19	15:30 (12)	18:19	20:30	21:39	22:39
8	09:23		13:54 (26)	08:30		15:11 (12)	07:15	06:46	05:26	04:31
	16:03	17	14:11 (26)	17:13	18	15:29 (12)	18:21	20:32	21:42	22:40
9	09:23		13:53 (26)	08:27		15:12 (12)	07:13	06:44	05:24	04:31
	16:05	18	14:11 (26)	17:15	18	15:30 (12)	18:23	20:35	21:44	22:41
10	09:22		13:53 (26)	08:25		15:12 (12)	07:10	06:41	05:21	04:30
	16:07	19	14:12 (26)	17:18	17	15:29 (12)	18:26	20:37	21:46	22:43
11	09:20		13:53 (26)	08:22		15:13 (12)	07:07	06:38	05:19	04:29
	16:09	19	14:12 (26)	17:20	14	15:27 (12)	18:28	20:39	21:48	22:44
12	09:19		13:54 (26)	08:20		15:16 (12)	07:04	06:35	05:17	04:28
	16:10	19	14:13 (26)	17:23	11	15:27 (12)	18:30	20:42	21:51	22:45
13	09:18		13:53 (26)	08:17		15:18 (12)	07:01	06:32	05:14	04:28
	16:12	21	14:14 (26)	17:25	5	15:23 (12)	18:33	20:44	21:53	22:45
14	09:17		13:54 (26)	08:15			06:58	06:29	05:12	04:27
	16:14	21	14:15 (26)	17:28			18:35	20:46	21:55	22:46
15	09:16		13:54 (26)	08:12			06:56	06:27	05:10	04:27
	16:16	21	14:15 (26)	17:30			18:37	20:49	21:57	22:47
16	09:14		13:54 (26)	08:10			06:53	06:24	05:08	04:27
	16:19	21	14:15 (26)	17:33			18:40	20:51	21:59	22:48
17	09:13		13:54 (26)	08:07			06:50	06:21	05:06	04:27
	16:21	22	14:16 (26)	17:35			18:42	20:53	22:02	22:48
18	09:11		13:55 (26)	08:05			06:47	06:18	05:04	04:26
	16:23	21	14:16 (26)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:55 (26)	08:02			06:44	06:15	05:02	04:26
	16:25	21	14:16 (26)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:56 (26)	07:59			06:41	06:13	05:00	04:26
	16:27	20	14:16 (26)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:56 (26)	07:57			06:38	06:10	04:58	04:26
	16:30	20	14:16 (26)	17:45			18:51	21:02	22:10	22:50
22	09:05		13:57 (26)	07:54			06:35	06:07	04:56	04:27
	16:32	19	14:16 (26)	17:47			18:53	21:05	22:12	22:50
23	09:03		13:58 (26)	07:51			06:32	06:05	04:54	04:27
	16:34	18	14:16 (26)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:59 (26)	07:49			06:30	06:02	04:52	04:27
	16:36	17	14:16 (26)	17:52			18:58	21:09	22:16	22:50
25	08:59		14:01 (26)	07:46			06:27	05:59	04:50	04:28
	16:39	14	14:15 (26)	17:55			19:00	21:12	22:18	22:50
26	08:58		14:02 (26)	07:43			06:24	05:57	04:49	04:28
	16:41	11	14:13 (26)	17:57			19:03	21:14	22:20	22:50
27	08:56		14:05 (26)	07:41			06:21	05:54	04:47	04:29
	16:44	6	14:11 (26)	18:00			19:05	21:16	22:22	22:50
28	08:54			07:38			06:18	05:51	04:45	04:29
	16:46			18:02			19:07	21:19	22:23	22:50
29	08:52						07:15	05:49	04:44	04:30
	16:48						20:10	21:21	22:25	22:49
30	08:50		15:15 (12)				07:12	05:46	04:42	04:31
	16:51	8	15:23 (12)				20:12	21:23	22:27	22:49
31	08:48		15:14 (12)				07:09		04:41	
	16:53	11	15:25 (12)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		476			204					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:42 (12)	08:59		13:35 (26)
	22:48	22:01	20:39	19:13			16:48	16	14:58 (12)	15:51	19	13:54 (26)
2	04:33	05:26	06:35	07:41			07:53		14:41 (12)	09:01		13:37 (26)
	22:48	21:58	20:37	19:10			16:46	18	14:59 (12)	15:50	18	13:55 (26)
3	04:34	05:28	06:37	07:44			07:56		14:40 (12)	09:03		13:37 (26)
	22:47	21:56	20:34	19:07			16:44	19	14:59 (12)	15:49	18	13:55 (26)
4	04:35	05:30	06:39	07:46			07:58		14:40 (12)	09:05		13:38 (26)
	22:46	21:54	20:31	19:04			16:41	20	15:00 (12)	15:48	17	13:55 (26)
5	04:36	05:32	06:42	07:48			08:01		14:41 (12)	09:07		13:39 (26)
	22:45	21:51	20:28	19:01			16:39	19	15:00 (12)	15:47	16	13:55 (26)
6	04:37	05:35	06:44	07:50			08:03		14:41 (12)	09:08		13:40 (26)
	22:45	21:49	20:25	18:58			16:36	19	15:00 (12)	15:46	15	13:55 (26)
7	04:38	05:37	06:46	07:53			08:06		14:41 (12)	09:10		13:41 (26)
	22:44	21:46	20:22	18:56			16:34	18	14:59 (12)	15:45	14	13:55 (26)
8	04:40	05:39	06:48	07:55			08:08		14:42 (12)	09:12		13:42 (26)
	22:43	21:44	20:19	18:53			16:32	17	14:59 (12)	15:44	13	13:55 (26)
9	04:41	05:41	06:50	07:57			08:10		14:43 (12)	09:13		13:42 (26)
	22:41	21:41	20:16	18:50			16:30	16	14:59 (12)	15:44	12	13:54 (26)
10	04:42	05:44	06:53	07:59			08:13		14:43 (12)	09:15		13:43 (26)
	22:40	21:39	20:14	18:47			16:27	14	14:57 (12)	15:43	11	13:54 (26)
11	04:44	05:46	06:55	08:02			08:15		14:45 (12)	09:16		13:45 (26)
	22:39	21:36	20:11	18:44			16:25	11	14:56 (12)	15:43	9	13:54 (26)
12	04:45	05:48	06:57	08:04			08:18		14:47 (12)	09:17		13:46 (26)
	22:38	21:34	20:08	18:41			16:23	7	14:54 (12)	15:42	7	13:53 (26)
13	04:47	05:50	06:59	08:06			08:20			09:19		13:48 (26)
	22:36	21:31	20:05	18:39			16:21			15:42	5	13:53 (26)
14	04:49	05:53	07:01	08:09			08:22			09:20		13:49 (26)
	22:35	21:29	20:02	18:36			16:19			15:42	3	13:52 (26)
15	04:50	05:55	07:04	08:11			08:25		13:37 (26)	09:21		
	22:33	21:26	19:59	18:33			16:17	7	13:44 (26)	15:42		
16	04:52	05:57	07:06	08:13			08:27		13:36 (26)	09:22		
	22:32	21:23	19:56	18:30			16:15	11	13:47 (26)	15:42		
17	04:54	05:59	07:08	08:16			08:29		13:34 (26)	09:23		
	22:30	21:21	19:53	18:28			16:13	14	13:48 (26)	15:42		
18	04:56	06:01	07:10	08:18			08:32		13:33 (26)	09:24		
	22:29	21:18	19:50	18:25			16:11	17	13:50 (26)	15:42		
19	04:57	06:04	07:12	08:20			08:34		13:33 (26)	09:25		
	22:27	21:15	19:47	18:22			16:09	18	13:51 (26)	15:42		
20	04:59	06:06	07:15	08:23			08:36		13:32 (26)	09:25		
	22:25	21:13	19:45	18:19			16:07	19	13:51 (26)	15:42		
21	05:01	06:08	07:17	08:25			08:38		13:32 (26)	09:26		
	22:23	21:10	19:42	18:17			16:06	20	13:52 (26)	15:43		
22	05:03	06:10	07:19	08:27			08:41		13:32 (26)	09:27		
	22:21	21:07	19:39	18:14			16:04	20	13:52 (26)	15:43		
23	05:05	06:13	07:21	08:30			08:43		13:32 (26)	09:27		
	22:20	21:05	19:36	18:11			16:02	21	13:53 (26)	15:44		
24	05:07	06:15	07:23	08:32			08:45		13:33 (26)	09:27		
	22:18	21:02	19:33	18:09			16:00	21	13:54 (26)	15:44		
25	05:09	06:17	07:26	07:34			08:47		13:33 (26)	09:28		
	22:16	20:59	19:30	17:06			15:59	21	13:54 (26)	15:45		
26	05:11	06:19	07:28	07:37			08:49		13:33 (26)	09:28		
	22:14	20:56	19:27	17:04			15:57	21	13:54 (26)	15:46		
27	05:13	06:22	07:30	07:39			08:51		13:33 (26)	09:28		
	22:11	20:53	19:24	17:01			15:56	21	13:54 (26)	15:47		
28	05:15	06:24	07:32	07:41			08:53		13:33 (26)	09:28		
	22:09	20:51	19:21	16:58			15:55	21	13:54 (26)	15:47		
29	05:17	06:26	07:35	07:44		14:47 (12)	08:55		13:35 (26)	09:28		
	22:07	20:48	19:18	16:56	7	14:54 (12)	15:53	20	13:55 (26)	15:48		
30	05:19	06:28	07:37	07:46		14:45 (12)	08:57		13:35 (26)	09:28		13:56 (26)
	22:05	20:45	19:16	16:53	11	14:56 (12)	15:52	20	13:55 (26)	15:50	4	14:00 (26)
31	05:22	06:31		07:49		14:42 (12)				09:28		13:55 (26)
	22:03	20:42		16:51	15	14:57 (12)				15:51	6	14:01 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					33			486			187	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April		May	June
1	09:28			08:45		10:57 (37)	07:35		16:28 (17)	07:06		05:44	04:39
	15:52			16:56	40	13:50 (26)	18:04	11	16:39 (17)	20:16		21:26	22:30
2	09:27			08:43		10:59 (37)	07:32		16:27 (17)	07:04		05:41	04:38
	15:54			16:58	37	13:51 (26)	18:07	13	16:40 (17)	20:19		21:28	22:32
3	09:27			08:41		11:02 (37)	07:30		16:27 (17)	07:01		05:38	04:37
	15:55			17:01	28	13:49 (26)	18:09	14	16:41 (17)	20:21		21:30	22:33
4	09:26			08:39		13:29 (26)	07:27		16:27 (17)	06:58		05:36	04:36
	15:57			17:03	20	13:49 (26)	18:12	17	16:44 (17)	20:23		21:33	22:35
5	09:26			08:37		13:30 (26)	07:24		16:27 (17)	06:55		05:33	04:34
	15:58			17:06	17	13:47 (26)	18:14	19	16:46 (17)	20:26		21:35	22:36
6	09:25			08:34		13:33 (26)	07:21		16:28 (17)	06:52		05:31	04:33
	16:00			17:08	12	13:45 (26)	18:16	17	16:45 (17)	20:28		21:37	22:38
7	09:24			08:32			07:18		16:29 (17)	06:49		05:29	04:32
	16:01			17:11			18:19	15	16:44 (17)	20:30		21:39	22:39
8	09:23			08:30			07:15		16:30 (17)	06:46		05:26	04:32
	16:03			17:13			18:21	12	16:42 (17)	20:32		21:42	22:40
9	09:23			08:27			07:13		16:33 (17)	06:44		05:24	04:31
	16:05			17:15			18:23	6	16:39 (17)	20:35		21:44	22:41
10	09:22			08:25			07:10			06:41		05:21	04:30
	16:07			17:18			18:26			20:37		21:46	22:43
11	09:20			08:22			07:07			06:38		05:19	04:29
	16:09			17:20			18:28			20:39		21:48	22:44
12	09:19			08:20		14:57 (7)	07:04			06:35		05:17	04:29
	16:11			17:23	8	15:05 (7)	18:30			20:42		21:51	22:45
13	09:18			08:17		14:59 (7)	07:01			06:32		05:15	04:28
	16:12			17:25	11	15:10 (7)	18:33			20:44		21:53	22:45
14	09:17		11:05 (37)	08:15		15:02 (7)	06:58			06:29		05:12	04:28
	16:14	3	11:08 (37)	17:28	12	15:14 (12)	18:35			20:46		21:55	22:46
15	09:16		10:59 (37)	08:12		15:06 (12)	06:56			06:27		05:10	04:27
	16:17	10	11:09 (37)	17:30	12	15:18 (12)	18:37			20:49		21:57	22:47
16	09:14		10:52 (37)	08:10		15:06 (12)	06:53			06:24		05:08	04:27
	16:19	18	11:10 (37)	17:33	15	15:21 (12)	18:40			20:51		21:59	22:48
17	09:13		10:51 (37)	08:07		15:05 (12)	06:50			06:21		05:06	04:27
	16:21	19	11:10 (37)	17:35	16	15:21 (12)	18:42			20:53		22:02	22:48
18	09:11		10:51 (37)	08:05		15:05 (12)	06:47			06:18		05:04	04:26
	16:23	20	11:11 (37)	17:38	15	15:20 (12)	18:44			20:56		22:04	22:49
19	09:10		10:51 (37)	08:02		15:06 (12)	06:44			06:16		05:02	04:26
	16:25	21	11:12 (37)	17:40	16	15:22 (12)	18:47			20:58		22:06	22:49
20	09:08		10:51 (37)	07:59		15:07 (12)	06:41			06:13		05:00	04:26
	16:27	22	11:13 (37)	17:43	17	15:24 (12)	18:49			21:00		22:08	22:50
21	09:07		10:51 (37)	07:57		15:07 (12)	06:38			06:10		04:58	04:26
	16:30	22	11:13 (37)	17:45	20	15:27 (12)	18:51			21:02		22:10	22:50
22	09:05		10:51 (37)	07:54		15:08 (12)	06:35			06:07		04:56	04:27
	16:32	27	12:49 (32)	17:47	20	15:28 (12)	18:53			21:05		22:12	22:50
23	09:03		10:51 (37)	07:51		15:09 (12)	06:32			06:05		04:54	04:27
	16:34	39	13:02 (32)	17:50	18	15:27 (12)	18:56			21:07		22:14	22:50
24	09:01		10:52 (37)	07:49		15:12 (12)	06:30			06:02		04:52	04:27
	16:37	40	13:04 (32)	17:52	13	15:25 (12)	18:58			21:09		22:16	22:50
25	08:59		10:52 (37)	07:46		15:16 (12)	06:27			05:59		04:50	04:28
	16:39	39	13:04 (32)	17:55	5	15:21 (12)	19:00			21:12		22:18	22:50
26	08:58		10:52 (37)	07:43			06:24			05:57		04:49	04:28
	16:41	39	13:24 (26)	17:57			19:03			21:14		22:20	22:50
27	08:56		10:53 (37)	07:41			06:21			05:54		04:47	04:29
	16:44	39	13:28 (26)	18:00			19:05			21:16		22:22	22:50
28	08:54		10:53 (37)	07:38		16:32 (17)	06:18			05:51		04:45	04:29
	16:46	41	13:35 (26)	18:02	4	16:36 (17)	19:07			21:19		22:23	22:50
29	08:52		10:54 (37)				07:15			05:49		04:44	04:30
	16:48	41	13:44 (26)				20:10			21:21		22:25	22:49
30	08:50		10:55 (37)				07:12			05:46		04:42	04:31
	16:51	42	13:47 (26)				20:12			21:23		22:27	22:49
31	08:48		10:56 (37)				07:09					04:41	
	16:53	42	13:49 (26)				20:14					22:29	
Potential sun hours	221			260			365			432		521	547
Total, worst case		524			356			124					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51		08:59
	22:48	22:01	20:39	19:13		16:48		15:51
2	04:33	05:26	06:35	07:41		07:54		09:01
	22:48	21:58	20:37	19:10		16:46		15:50
3	04:34	05:28	06:37	07:44		07:56		09:03
	22:47	21:56	20:34	19:07		16:44		15:49
4	04:35	05:30	06:39	07:46		07:58	13:07 (26)	09:05
	22:46	21:54	20:31	19:04		16:41	4 13:11 (26)	15:48
5	04:36	05:33	06:42	07:48	17:09 (17)	08:01	13:02 (26)	09:07
	22:45	21:51	20:28	19:01	9 17:18 (17)	16:39	13 13:15 (26)	15:47
6	04:37	05:35	06:44	07:50	17:06 (17)	08:03	13:01 (26)	09:08
	22:45	21:49	20:25	18:58	14 17:20 (17)	16:36	17 13:18 (26)	15:46
7	04:38	05:37	06:46	07:53	17:04 (17)	08:06	12:58 (26)	09:10
	22:44	21:46	20:22	18:56	16 17:20 (17)	16:34	21 13:19 (26)	15:45
8	04:40	05:39	06:48	07:55	17:03 (17)	08:08	10:32 (37)	09:12
	22:43	21:44	20:19	18:53	18 17:21 (17)	16:32	29 13:20 (26)	15:44
9	04:41	05:41	06:50	07:57	17:02 (17)	08:10	10:30 (37)	09:13
	22:41	21:41	20:16	18:50	18 17:20 (17)	16:30	37 13:22 (26)	15:44
10	04:42	05:44	06:53	07:59	17:01 (17)	08:13	10:28 (37)	09:15
	22:40	21:39	20:14	18:47	16 17:17 (17)	16:27	40 13:21 (26)	15:43
11	04:44	05:46	06:55	08:02	17:01 (17)	08:15	10:27 (37)	09:16
	22:39	21:36	20:11	18:44	14 17:15 (17)	16:25	41 13:19 (26)	15:43
12	04:45	05:48	06:57	08:04	17:01 (17)	08:18	10:27 (37)	09:17
	22:38	21:34	20:08	18:41	12 17:13 (17)	16:23	42 13:19 (26)	15:42
13	04:47	05:50	06:59	08:06	17:02 (17)	08:20	10:25 (37)	09:19
	22:36	21:31	20:05	18:39	10 17:12 (17)	16:21	41 13:15 (26)	15:42
14	04:49	05:53	07:01	08:09	17:06 (17)	08:22	10:25 (37)	09:20
	22:35	21:29	20:02	18:36	2 17:08 (17)	16:19	41 13:07 (26)	15:42
15	04:50	05:55	07:04	08:11		08:25	10:25 (37)	09:21
	22:33	21:26	19:59	18:33		16:17	40 13:01 (26)	15:42
16	04:52	05:57	07:06	08:13		08:27	10:26 (37)	09:22
	22:32	21:23	19:56	18:30		16:15	39 12:58 (26)	15:42
17	04:54	05:59	07:08	08:16	15:45 (12)	08:29	10:25 (37)	09:23
	22:30	21:21	19:53	18:28	9 15:54 (12)	16:13	39 12:37 (32)	15:42
18	04:56	06:02	07:10	08:18	15:42 (12)	08:32	10:26 (37)	09:24
	22:29	21:18	19:50	18:25	15 15:57 (12)	16:11	40 12:38 (32)	15:42
19	04:57	06:04	07:12	08:20	15:40 (12)	08:34	10:26 (37)	09:25
	22:27	21:15	19:47	18:22	18 15:58 (12)	16:09	39 12:37 (32)	15:42
20	04:59	06:06	07:15	08:23	15:39 (12)	08:36	10:26 (37)	09:25
	22:25	21:13	19:45	18:20	21 16:00 (12)	16:07	28 12:25 (32)	15:42
21	05:01	06:08	07:17	08:25	15:37 (12)	08:38	10:27 (37)	09:26
	22:23	21:10	19:42	18:17	18 15:55 (12)	16:06	22 10:49 (37)	15:43
22	05:03	06:10	07:19	08:27	15:37 (12)	08:41	10:27 (37)	09:27
	22:21	21:07	19:39	18:14	16 15:53 (12)	16:04	22 10:49 (37)	15:43
23	05:05	06:13	07:21	08:30	15:36 (12)	08:43	10:28 (37)	09:27
	22:20	21:05	19:36	18:12	16 15:52 (12)	16:02	21 10:49 (37)	15:44
24	05:07	06:15	07:24	08:32	15:35 (12)	08:45	10:29 (37)	09:27
	22:18	21:02	19:33	18:09	16 15:51 (12)	16:01	20 10:49 (37)	15:44
25	05:09	06:17	07:26	07:34	14:36 (12)	08:47	10:29 (37)	09:28
	22:16	20:59	19:30	17:06	15 14:51 (12)	15:59	19 10:48 (37)	15:45
26	05:11	06:19	07:28	07:37	14:35 (12)	08:49	10:31 (37)	09:28
	22:14	20:56	19:27	17:04	14 14:49 (12)	15:57	18 10:49 (37)	15:46
27	05:13	06:22	07:30	07:39	14:35 (12)	08:51	10:38 (37)	09:28
	22:11	20:53	19:24	17:01	12 14:47 (12)	15:56	10 10:48 (37)	15:47
28	05:15	06:24	07:32	07:41	14:30 (7)	08:53	10:44 (37)	09:28
	22:09	20:51	19:21	16:58	12 14:42 (12)	15:55	3 10:47 (37)	15:48
29	05:17	06:26	07:35	07:44	14:27 (7)	08:55		09:28
	22:07	20:48	19:19	16:56	11 14:38 (7)	15:53		15:49
30	05:20	06:28	07:37	07:46	14:26 (7)	08:57		09:28
	22:05	20:45	19:16	16:53	8 14:34 (7)	15:52		15:50
31	05:22	06:31		07:49				09:28
	22:03	20:42		16:51				15:51
Potential sun hours	546	478	386	319		236		199
Total, worst case					330		686	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April			May			June
1	09:27			08:45		15:29 (8)	07:35		15:43 (13)	07:06			05:43		18:54 (37)	04:39
	15:52			16:56	22	15:51 (8)	18:04	38	16:21 (13)	20:16			21:25	25	19:19 (37)	22:30
2	09:27			08:43		15:29 (8)	07:32		15:44 (13)	07:04			05:41		18:56 (37)	04:38
	15:54			16:58	23	15:52 (8)	18:07	36	16:20 (13)	20:19			21:28	20	19:16 (37)	22:32
3	09:27			08:41		15:29 (8)	07:29		15:44 (13)	07:01		19:08 (37)	05:38		18:59 (37)	04:37
	15:55			17:01	23	15:52 (8)	18:09	35	16:19 (13)	20:21	9	19:17 (37)	21:30	15	19:14 (37)	22:33
4	09:26			08:39		15:29 (8)	07:27		15:45 (13)	06:58		19:03 (37)	05:36		19:04 (37)	04:36
	15:57			17:03	24	15:53 (8)	18:11	33	16:18 (13)	20:23	18	19:21 (37)	21:32	5	19:09 (37)	22:35
5	09:25			08:36		15:29 (8)	07:24		15:46 (13)	06:55		18:59 (37)	05:33			04:35
	15:58			17:06	23	15:52 (8)	18:14	32	16:18 (13)	20:25	24	19:23 (37)	21:35			22:36
6	09:25			08:34		15:28 (8)	07:21		15:48 (13)	06:52		18:57 (37)	05:31			04:33
	16:00			17:08	24	15:52 (8)	18:16	28	16:16 (13)	20:28	28	19:25 (37)	21:37			22:37
7	09:24			08:32		15:29 (8)	07:18		15:49 (13)	06:49		18:55 (37)	05:29			04:32
	16:01			17:10	24	15:53 (8)	18:19	25	16:14 (13)	20:30	31	19:26 (37)	21:39			22:39
8	09:23			08:29		15:29 (8)	07:15		15:51 (13)	06:46		18:53 (37)	05:26			04:32
	16:03			17:13	23	15:52 (8)	18:21	21	16:12 (13)	20:32	35	19:42 (26)	21:42			22:40
9	09:22			08:27		15:31 (8)	07:13		15:54 (13)	06:43		18:52 (37)	05:24			04:31
	16:05			17:15	21	15:52 (8)	18:23	15	16:09 (13)	20:35	54	19:59 (26)	21:44			22:41
10	09:21			08:25		15:31 (8)	07:10			06:41		18:51 (37)	05:21			04:30
	16:07			17:18	20	15:51 (8)	18:26			20:37	57	19:59 (26)	21:46			22:42
11	09:20			08:22		15:32 (8)	07:07			06:38		18:49 (37)	05:19			04:29
	16:09			17:20	18	15:50 (8)	18:28			20:39	60	19:59 (26)	21:48			22:43
12	09:19			08:20		15:34 (8)	07:04			06:35		18:48 (37)	05:17			04:29
	16:11			17:23	15	15:49 (8)	18:30			20:42	62	19:58 (26)	21:50			22:44
13	09:18			08:17		15:36 (8)	07:01			06:32		18:48 (37)	05:15			04:28
	16:12			17:25	22	16:09 (13)	18:33			20:44	64	19:59 (26)	21:53			22:45
14	09:17			08:15		15:54 (13)	06:58			06:29		18:47 (37)	05:12			04:28
	16:14			17:28	18	16:12 (13)	18:35			20:46	63	19:58 (26)	21:55			22:46
15	09:15			08:12		15:52 (13)	06:55			06:27		18:46 (37)	05:10			04:27
	16:17			17:30	22	16:14 (13)	18:37			20:48	63	19:57 (26)	21:57			22:47
16	09:14			08:10		15:51 (13)	06:53		17:30 (32)	06:24		18:47 (37)	05:08			04:27
	16:19			17:33	26	16:17 (13)	18:40	8	17:38 (32)	20:51	62	19:57 (26)	21:59			22:47
17	09:13			08:07		15:49 (13)	06:50		17:27 (32)	06:21		18:46 (37)	05:06			04:27
	16:21			17:35	29	16:18 (13)	18:42	13	17:40 (32)	20:53	60	19:55 (26)	22:01			22:48
18	09:11			08:04		15:47 (13)	06:47		17:25 (32)	06:18		18:45 (37)	05:04			04:26
	16:23			17:38	32	16:19 (13)	18:44	17	17:42 (32)	20:55	58	19:53 (26)	22:04			22:49
19	09:10			08:02		15:46 (13)	06:44		17:23 (32)	06:15		18:46 (37)	05:02			04:26
	16:25			17:40	33	16:19 (13)	18:46	19	17:42 (32)	20:58	53	19:52 (26)	22:06			22:49
20	09:08			07:59		15:46 (13)	06:41		17:22 (32)	06:13		18:45 (37)	05:00			04:26
	16:27			17:43	35	16:21 (13)	18:49	21	17:43 (32)	21:00	44	19:29 (37)	22:08			22:49
21	09:06			07:57		15:45 (13)	06:38		17:21 (32)	06:10		18:45 (37)	04:58			04:26
	16:30			17:45	36	16:21 (13)	18:51	22	17:43 (32)	21:02	43	19:28 (37)	22:10			22:50
22	09:05			07:54		15:44 (13)	06:35		17:21 (32)	06:07		18:46 (37)	04:56			04:27
	16:32			17:47	37	16:21 (13)	18:53	22	17:43 (32)	21:05	43	19:29 (37)	22:12			22:50
23	09:03			07:51		15:44 (13)	06:32		17:20 (32)	06:05		18:46 (37)	04:54			04:27
	16:34			17:50	38	16:22 (13)	18:56	22	17:42 (32)	21:07	41	19:27 (37)	22:14			22:50
24	09:01			07:49		15:43 (13)	06:29		17:20 (32)	06:02		18:47 (37)	04:52			04:27
	16:36			17:52	39	16:22 (13)	18:58	22	17:42 (32)	21:09	40	19:27 (37)	22:16			22:50
25	08:59			07:46		15:44 (13)	06:27		17:20 (32)	05:59		18:47 (37)	04:50			04:28
	16:39			17:55	38	16:22 (13)	19:00	21	17:41 (32)	21:12	39	19:26 (37)	22:18			22:50
26	08:57			07:43		15:43 (13)	06:24		17:20 (32)	05:57		18:48 (37)	04:49			04:28
	16:41			17:57	39	16:22 (13)	19:03	20	17:40 (32)	21:14	37	19:25 (37)	22:20			22:50
27	08:55		15:34 (8)	07:40		15:43 (13)	06:21		17:22 (32)	05:54		18:48 (37)	04:47			04:29
	16:44	10	15:44 (8)	18:00	39	16:22 (13)	19:05	17	17:39 (32)	21:16	36	19:24 (37)	22:21			22:50
28	08:54		15:33 (8)	07:38		15:43 (13)	06:18		17:24 (32)	05:51		18:50 (37)	04:45			04:29
	16:46	13	15:46 (8)	18:02	38	16:21 (13)	19:07	13	17:37 (32)	21:19	33	19:23 (37)	22:23			22:49
29	08:51		15:31 (8)				07:15		18:26 (32)	05:49		18:50 (37)	04:44			04:30
	16:48	16	15:47 (8)				20:09	8	18:34 (32)	21:21	31	19:21 (37)	22:25			22:49
30	08:49		15:31 (8)				07:12			05:46		18:52 (37)	04:42			04:31
	16:51	18	15:49 (8)				20:12			21:23	28	19:20 (37)	22:27			22:49
31	08:47		15:29 (8)				07:09						04:41			
	16:53	20	15:49 (8)				20:14						22:28			
Potential sun hours	221			260			365			432			521			547
Total, worst case		77			781			508			1216			65		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August			September			October			November			December
1	04:32	05:24			06:33			18:48 (37)	07:39			07:51		15:00 (8)	08:59
	22:48	22:00			20:39	60		19:58 (26)	19:13			16:48	21	15:21 (8)	15:51
2	04:33	05:26			06:35			18:49 (37)	07:41			07:53		15:00 (8)	09:01
	22:47	21:58			20:36	57		19:57 (26)	19:10			16:46	22	15:22 (8)	15:50
3	04:34	05:28			06:37			18:49 (37)	07:43			07:56		14:59 (8)	09:03
	22:47	21:56			20:34	54		19:56 (26)	19:07			16:44	23	15:22 (8)	15:49
4	04:35	05:30			06:39			18:51 (37)	07:46		16:33 (13)	07:58		14:59 (8)	09:05
	22:46	21:53			20:31	35		19:40 (26)	19:04	11	16:44 (13)	16:41	23	15:22 (8)	15:48
5	04:36	05:33			06:42			18:52 (37)	07:48		16:29 (13)	08:01		14:59 (8)	09:07
	22:45	21:51			20:28	31		19:23 (37)	19:01	18	16:47 (13)	16:39	24	15:23 (8)	15:47
6	04:37	05:35			06:44			18:53 (37)	07:50		16:26 (13)	08:03		14:58 (8)	09:08
	22:44	21:49			20:25	28		19:21 (37)	18:58	24	16:50 (13)	16:36	24	15:22 (8)	15:46
7	04:38	05:37			06:46			18:54 (37)	07:52		16:24 (13)	08:05		14:59 (8)	09:10
	22:43	21:46			20:22	25		19:19 (37)	18:55	27	16:51 (13)	16:34	23	15:22 (8)	15:45
8	04:40	05:39			06:48			18:57 (37)	07:55		16:21 (13)	08:08		14:59 (8)	09:11
	22:42	21:44			20:19	18		19:15 (37)	18:53	30	16:51 (13)	16:32	23	15:22 (8)	15:44
9	04:41	05:41		19:10 (37)	06:50			19:00 (37)	07:57		16:21 (13)	08:10		14:59 (8)	09:13
	22:41	21:41	10	19:20 (37)	20:16	11		19:11 (37)	18:50	32	16:53 (13)	16:30	23	15:22 (8)	15:44
10	04:42	05:44		19:07 (37)	06:53				07:59		16:19 (13)	08:13		15:00 (8)	09:14
	22:40	21:39	17	19:24 (37)	20:13				18:47	34	16:53 (13)	16:27	21	15:21 (8)	15:43
11	04:44	05:46		19:04 (37)	06:55				08:02		16:18 (13)	08:15		15:01 (8)	09:16
	22:39	21:36	22	19:26 (37)	20:11				18:44	36	16:54 (13)	16:25	20	15:21 (8)	15:43
12	04:45	05:48		19:02 (37)	06:57				08:04		16:17 (13)	08:17		15:02 (8)	09:17
	22:37	21:34	26	19:28 (37)	20:08				18:41	37	16:54 (13)	16:23	19	15:21 (8)	15:42
13	04:47	05:50		19:00 (37)	06:59				08:06		16:16 (13)	08:20		15:03 (8)	09:18
	22:36	21:31	29	19:29 (37)	20:05				18:39	38	16:54 (13)	16:21	16	15:19 (8)	15:42
14	04:49	05:53		18:58 (37)	07:01			18:17 (32)	08:08		16:16 (13)	08:22		15:05 (8)	09:20
	22:35	21:28	32	19:30 (37)	20:02	7		18:24 (32)	18:36	38	16:54 (13)	16:19	13	15:18 (8)	15:42
15	04:50	05:55		18:57 (37)	07:04			18:13 (32)	08:11		16:15 (13)	08:24		15:07 (8)	09:21
	22:33	21:26	34	19:31 (37)	19:59	13		18:26 (32)	18:33	39	16:54 (13)	16:17	10	15:17 (8)	15:42
16	04:52	05:57		18:56 (37)	07:06			18:11 (32)	08:13		16:15 (13)	08:27			09:22
	22:32	21:23	36	19:32 (37)	19:56	16		18:27 (32)	18:30	39	16:54 (13)	16:15			15:42
17	04:54	05:59		18:54 (37)	07:08			18:09 (32)	08:15		16:15 (13)	08:29			09:23
	22:30	21:21	38	19:32 (37)	19:53	19		18:28 (32)	18:28	38	16:53 (13)	16:13			15:42
18	04:56	06:01		18:53 (37)	07:10			18:08 (32)	08:18		16:15 (13)	08:31			09:24
	22:28	21:18	40	19:33 (37)	19:50	20		18:28 (32)	18:25	39	16:54 (13)	16:11			15:42
19	04:57	06:04		18:52 (37)	07:12			18:08 (32)	08:20		16:15 (13)	08:34			09:24
	22:27	21:15	41	19:33 (37)	19:47	21		18:29 (32)	18:22	38	16:53 (13)	16:09			15:42
20	04:59	06:06		18:51 (37)	07:15			18:07 (32)	08:22		16:16 (13)	08:36			09:25
	22:25	21:13	42	19:33 (37)	19:44	22		18:29 (32)	18:19	36	16:52 (13)	16:07			15:42
21	05:01	06:08		18:50 (37)	07:17			18:06 (32)	08:25		16:16 (13)	08:38			09:26
	22:23	21:10	43	19:33 (37)	19:42	22		18:28 (32)	18:17	35	16:51 (13)	16:06			15:43
22	05:03	06:10		18:50 (37)	07:19			18:06 (32)	08:27		16:17 (13)	08:40			09:26
	22:21	21:07	43	19:33 (37)	19:39	22		18:28 (32)	18:14	34	16:51 (13)	16:04			15:43
23	05:05	06:13		18:49 (37)	07:21			18:06 (32)	08:29		16:17 (13)	08:43			09:27
	22:19	21:04	44	19:33 (37)	19:36	21		18:27 (32)	18:11	32	16:49 (13)	16:02			15:44
24	05:07	06:15		18:49 (37)	07:23			18:07 (32)	08:32		16:18 (13)	08:45			09:27
	22:17	21:02	54	19:55 (26)	19:33	19		18:26 (32)	18:09	31	16:49 (13)	16:01			15:44
25	05:09	06:17		18:49 (37)	07:26			18:07 (32)	07:34		15:18 (13)	08:47			09:28
	22:15	20:59	58	19:57 (26)	19:30	18		18:25 (32)	17:06	29	15:47 (13)	15:59			15:45
26	05:11	06:19		18:49 (37)	07:28			18:08 (32)	07:37		15:20 (13)	08:49			09:28
	22:13	20:56	60	19:58 (26)	19:27	15		18:23 (32)	17:04	25	15:45 (13)	15:57			15:46
27	05:13	06:22		18:48 (37)	07:30			18:09 (32)	07:39		15:22 (13)	08:51			09:28
	22:11	20:53	63	19:59 (26)	19:24	11		18:20 (32)	17:01	22	15:44 (13)	15:56			15:47
28	05:15	06:24		18:48 (37)	07:32				07:41		15:08 (8)	08:53			09:28
	22:09	20:51	63	19:59 (26)	19:21				16:58	22	15:41 (13)	15:55			15:48
29	05:17	06:26		18:48 (37)	07:34				07:44		15:05 (8)	08:55			09:28
	22:07	20:48	63	19:59 (26)	19:18				16:56	21	15:37 (13)	15:53			15:49
30	05:20	06:28		18:48 (37)	07:37				07:46		15:03 (8)	08:57			09:28
	22:05	20:45	63	19:59 (26)	19:16				16:53	16	15:19 (8)	15:52			15:50
31	05:22	06:30		18:48 (37)					07:49		15:01 (8)				09:28
	22:03	20:42	62	19:58 (26)					16:51	18	15:19 (8)				15:51
Potential sun hours	545	478			386			319				236			200
Total, worst case			983			565			839				305		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (23)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (23)
	15:53	39	13:36 (24)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (24)
2	09:28		12:01 (23)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (23)
	15:54	41	13:36 (24)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (24)
3	09:27		12:01 (23)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (23)
	15:55	41	13:36 (24)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (24)
4	09:27		12:01 (23)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (23)
	15:57	41	13:36 (24)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (24)
5	09:26		12:01 (23)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (23)
	15:58	43	13:37 (24)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (24)
6	09:25		12:02 (23)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (23)
	16:00	41	13:37 (24)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (24)
7	09:25		12:02 (23)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (23)
	16:02	41	13:37 (24)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (24)
8	09:24		12:02 (23)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (23)
	16:03	42	13:38 (24)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (24)
9	09:23		12:03 (23)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (23)
	16:05	41	13:38 (24)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (24)
10	09:22		12:03 (23)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (23)
	16:07	40	13:37 (24)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (24)
11	09:21		12:03 (23)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (23)
	16:09	41	13:38 (24)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (24)
12	09:20		12:03 (23)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (23)
	16:11	39	13:37 (24)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (24)
13	09:19		12:04 (23)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (23)
	16:13	37	13:37 (24)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (24)
14	09:17		12:04 (23)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (23)
	16:15	35	13:36 (24)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (24)
15	09:16		12:04 (23)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (23)	09:21		11:54 (23)
	16:17	32	13:35 (24)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (23)	15:42	38	13:27 (24)
16	09:15		12:04 (23)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (23)	09:22		11:55 (23)
	16:19	24	12:28 (23)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (23)	15:42	37	13:28 (24)
17	09:13		12:06 (23)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (23)	09:23		11:55 (23)
	16:21	24	12:30 (23)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (23)	15:42	37	13:28 (24)
18	09:12		12:06 (23)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (23)	09:24		11:56 (23)
	16:23	24	12:30 (23)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (23)	15:42	36	13:29 (24)
19	09:10		12:06 (23)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (23)	09:25		11:57 (23)
	16:25	24	12:30 (23)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (23)	15:42	36	13:29 (24)
20	09:09		12:07 (23)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (23)	09:26		11:58 (23)
	16:28	23	12:30 (23)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (23)	15:43	36	13:30 (24)
21	09:07		12:08 (23)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (23)	09:26		11:59 (23)
	16:30	21	12:29 (23)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (23)	15:43	35	13:31 (24)
22	09:05		12:09 (23)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (23)	09:27		11:58 (23)
	16:32	20	12:29 (23)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (23)	15:43	36	13:31 (24)
23	09:03		12:09 (23)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (23)	09:27		11:59 (23)
	16:34	19	12:28 (23)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (23)	15:44	36	13:31 (24)
24	09:02		12:10 (23)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (23)	09:28		12:00 (23)
	16:37	17	12:27 (23)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (23)	15:44	36	13:32 (24)
25	09:00		12:12 (23)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (23)	09:28		12:00 (23)
	16:39	15	12:27 (23)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (23)	15:45	37	13:33 (24)
26	08:58		12:14 (23)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (23)	09:28		12:00 (23)
	16:41	11	12:25 (23)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (23)	15:46	37	13:33 (24)
27	08:56		12:17 (23)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (23)	09:28		12:00 (23)
	16:44	4	12:21 (23)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (24)	15:47	38	13:33 (24)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (23)	09:29		12:01 (23)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (24)	15:48	37	13:34 (24)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (23)	09:28		12:00 (23)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (24)	15:49	38	13:34 (24)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (23)	09:28		12:01 (23)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (24)	15:50	39	13:35 (24)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (23)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (24)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November		December		
1	09:28		11:14 (23)	08:46		10:11 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (23)
	15:53	31	12:43 (24)	16:56	18	10:29 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (23)
2	09:28		11:14 (23)	08:44		10:11 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (23)
	15:54	30	12:43 (24)	16:58	17	10:28 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (23)
3	09:27		11:13 (23)	08:41		10:13 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (23)
	15:55	31	12:43 (24)	17:01	14	10:27 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (23)
4	09:27		11:13 (23)	08:39		10:14 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (23)
	15:57	30	12:43 (24)	17:03	11	10:25 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (23)
5	09:26		11:14 (23)	08:37		10:17 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (23)
	15:58	28	12:42 (24)	17:06	7	10:24 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (24)
6	09:25		11:14 (23)	08:35			07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		09:09		11:00 (23)
	16:00	28	12:42 (24)	17:08			18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	7	09:54 (28)	15:46	28	12:28 (24)
7	09:25		11:14 (23)	08:32			07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		09:45 (28)	09:10		11:01 (23)
	16:02	26	12:41 (24)	17:11			18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	11	09:56 (28)	15:45	29	12:30 (24)
8	09:24		11:14 (23)	08:30			07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		09:43 (28)	09:12		11:02 (23)
	16:03	21	11:35 (23)	17:13			18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	14	09:57 (28)	15:45	30	12:31 (24)
9	09:23		11:15 (23)	08:27			07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		09:42 (28)	09:14		11:03 (23)
	16:05	21	11:36 (23)	17:16			18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	17	09:59 (28)	15:44	30	12:32 (24)
10	09:22		11:15 (23)	08:25			07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		09:42 (28)	09:15		11:03 (23)
	16:07	21	11:36 (23)	17:18			18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	18	10:00 (28)	15:44	30	12:32 (24)
11	09:21		11:15 (23)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		09:41 (28)	09:16		11:04 (23)
	16:09	22	11:37 (23)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	19	10:00 (28)	15:43	30	12:33 (24)
12	09:20		11:15 (23)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		09:41 (28)	09:18		11:04 (23)
	16:11	22	11:37 (23)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	19	10:00 (28)	15:43	31	12:34 (24)
13	09:19		11:16 (23)	08:18			07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20		09:41 (28)	09:19		11:05 (23)
	16:13	22	11:38 (23)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	20	10:01 (28)	15:42	31	12:35 (24)
14	09:17		11:16 (23)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		09:42 (28)	09:20		11:06 (23)
	16:15	22	11:38 (23)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	19	10:01 (28)	15:42	30	12:35 (24)
15	09:16		11:16 (23)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		09:41 (28)	09:21		11:06 (23)
	16:17	22	11:38 (23)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	20	10:01 (28)	15:42	31	12:36 (24)
16	09:15		11:16 (23)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27		09:42 (28)	09:22		11:08 (23)
	16:19	22	11:38 (23)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	19	10:01 (28)	15:42	30	12:37 (24)
17	09:13		11:18 (23)	08:08			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		09:43 (28)	09:23		11:09 (23)
	16:21	21	11:39 (23)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	26	11:08 (23)	15:42	30	12:38 (24)
18	09:12		11:18 (23)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		09:43 (28)	09:24		11:08 (23)
	16:23	21	11:39 (23)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	29	11:10 (23)	15:42	30	12:37 (24)
19	09:10		10:13 (28)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34		09:44 (28)	09:25		11:09 (23)
	16:25	27	11:39 (23)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	31	11:12 (23)	15:42	29	12:38 (24)
20	09:09		10:12 (28)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		09:45 (28)	09:26		11:10 (23)
	16:28	30	11:39 (23)	17:43			18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	32	11:13 (23)	15:43	30	12:39 (24)
21	09:07		10:11 (28)	07:57			06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		09:46 (28)	09:26		11:11 (23)
	16:30	32	11:39 (23)	17:45			18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	32	11:14 (23)	15:43	29	12:40 (24)
22	09:05		10:10 (28)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		09:48 (28)	09:27		11:11 (23)
	16:32	32	11:38 (23)	17:48			18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04	29	11:15 (23)	15:43	29	12:40 (24)
23	09:03		10:09 (28)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		09:49 (28)	09:27		11:11 (23)
	16:34	31	11:37 (23)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	27	11:15 (23)	15:44	30	12:40 (24)
24	09:02		10:09 (28)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		10:55 (23)	09:28		11:12 (23)
	16:37	29	11:36 (23)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	21	11:16 (23)	15:45	30	12:41 (24)
25	09:00		10:09 (28)	07:46			06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		10:55 (23)	09:28		11:12 (23)
	16:39	26	11:34 (23)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	21	11:16 (23)	15:45	29	12:41 (24)
26	08:58		10:09 (28)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		10:55 (23)	09:28		11:13 (23)
	16:41	19	10:28 (28)	17:57			19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58	22	11:17 (23)	15:46	30	12:42 (24)
27	08:56		10:09 (28)	07:41			06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52		10:55 (23)	09:28		11:13 (23)
	16:44	20	10:29 (28)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	22	11:17 (23)	15:47	30	12:42 (24)
28	08:54		10:09 (28)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		10:56 (23)	09:29		11:13 (23)
	16:46	19	10:28 (28)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	22	11:18 (23)	15:48	31	12:43 (24)
29	08:52		10:09 (28)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		10:56 (23)	09:29		11:13 (23)
	16:49	20	10:29 (28)				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22	11:18 (23)	15:49	30	12:42 (24)
30	08:50		10:09 (28)				07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58		10:56 (23)	09:28		11:13 (23)
	16:51	19	10:28 (28)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	22	11:18 (23)	15:50	31	12:43 (24)
31	08:48		10:10 (28)				07:10		04:41		05:22	06:31		07:49				09:28		11:14 (23)
	16:54	19	10:29 (28)				20:14		22:29		22:03	20:43		16:51				15:51	30	12:43 (24)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236			199		
Total, worst case		764			67											541			888	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February	March	April	May	June	July	August	September	October	November		December	
1	09:28	12:55 (12)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51		09:00	12:38 (12)
	15:52 16	13:11 (12)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51 20	12:58 (12)
2	09:27	12:55 (12)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01	12:39 (12)
	15:54 16	13:11 (12)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50 20	12:59 (12)
3	09:27	12:55 (12)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03	12:40 (12)
	15:55 17	13:12 (12)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49 20	13:00 (12)
4	09:26	12:55 (12)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05	12:40 (12)
	15:57 17	13:12 (12)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48 20	13:00 (12)
5	09:26	12:55 (12)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07	12:41 (12)
	15:58 18	13:13 (12)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47 19	13:00 (12)
6	09:25	12:55 (12)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:09	12:41 (12)
	16:00 19	13:14 (12)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46 19	13:00 (12)
7	09:24	12:55 (12)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10	12:42 (12)
	16:01 20	13:15 (12)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34		15:45 18	13:00 (12)
8	09:24	12:56 (12)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12	12:43 (12)
	16:03 19	13:15 (12)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44 18	13:01 (12)
9	09:23	12:55 (12)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10		09:13	12:43 (12)
	16:05 20	13:15 (12)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30		15:44 17	13:00 (12)
10	09:22	12:56 (12)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13		09:15	12:44 (12)
	16:07 20	13:16 (12)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27		15:43 17	13:01 (12)
11	09:21	12:57 (12)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		09:16	12:45 (12)
	16:09 20	13:17 (12)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25		15:43 16	13:01 (12)
12	09:19	12:57 (12)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18		09:17	12:45 (12)
	16:11 20	13:17 (12)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23		15:42 16	13:01 (12)
13	09:18	12:57 (12)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20		09:19	12:46 (12)
	16:12 20	13:17 (12)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21		15:42 16	13:02 (12)
14	09:17	12:58 (12)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22		09:20	12:47 (12)
	16:14 20	13:18 (12)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19		15:42 14	13:01 (12)
15	09:16	12:58 (12)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25		09:21	12:47 (12)
	16:17 20	13:18 (12)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17		15:42 14	13:01 (12)
16	09:14	12:58 (12)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		09:22	12:48 (12)
	16:19 20	13:18 (12)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15		15:42 13	13:01 (12)
17	09:13	12:59 (12)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29		09:23	12:48 (12)
	16:21 19	13:18 (12)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13		15:42 14	13:02 (12)
18	09:11	12:59 (12)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32		09:24	12:49 (12)
	16:23 19	13:18 (12)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11		15:42 13	13:02 (12)
19	09:10	13:01 (12)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34	12:41 (12)	09:25	12:50 (12)
	16:25 18	13:19 (12)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 9	12:50 (12)	15:42 13	13:03 (12)
20	09:08	13:02 (12)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	12:39 (12)	09:25	12:51 (12)
	16:27 16	13:18 (12)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 12	12:51 (12)	15:42 12	13:03 (12)
21	09:07	13:02 (12)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	12:38 (12)	09:26	12:51 (12)
	16:30 15	13:17 (12)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 15	12:53 (12)	15:43 12	13:03 (12)
22	09:05	13:04 (12)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41	12:38 (12)	09:27	12:52 (12)
	16:32 12	13:16 (12)	17:48	18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04 16	12:54 (12)	15:43 12	13:04 (12)
23	09:03	13:06 (12)	07:51	06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	12:37 (12)	09:27	12:52 (12)
	16:34 9	13:15 (12)	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02 18	12:55 (12)	15:44 12	13:04 (12)
24	09:01		07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	12:38 (12)	09:28	12:52 (12)
	16:37		17:52	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	12:56 (12)	15:44 12	13:04 (12)
25	09:00		07:46	06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:37 (12)	09:28	12:53 (12)
	16:39		17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 19	12:56 (12)	15:45 13	13:06 (12)
26	08:58		07:43	06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:37 (12)	09:28	12:53 (12)
	16:41		17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 20	12:57 (12)	15:46 13	13:06 (12)
27	08:56		07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52	12:37 (12)	09:28	12:54 (12)
	16:44		18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 20	12:57 (12)	15:47 13	13:07 (12)
28	08:54		07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:37 (12)	09:28	12:53 (12)
	16:46		18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55 20	12:57 (12)	15:48 14	13:07 (12)
29	08:52			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:38 (12)	09:28	12:53 (12)
	16:48			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 20	12:58 (12)	15:49 15	13:08 (12)
30	08:50			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:38 (12)	09:28	12:54 (12)
	16:51			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 20	12:58 (12)	15:50 15	13:09 (12)
31	08:48			07:09		04:41		05:22	06:31		07:49			09:28	12:54 (12)
	16:53			20:14		22:29		22:03	20:42		16:51			15:51 15	13:09 (12)
Potential sun hours	221		260	365	432	521	547	546	478	386	319	236		199	
Total, worst case		410											207		475

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February			March	April	May	June	July	August	September	October			November			December
1	09:28		08:45		13:54 (26)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39			07:51		14:48 (12)	08:59
	15:52		16:56	19	14:13 (26)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13			16:48	19	15:07 (12)	15:51
2	09:27		08:43		13:56 (26)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41			07:53		14:49 (12)	09:01
	15:54		16:58	16	14:12 (26)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10			16:46	17	15:06 (12)	15:50
3	09:27		08:41		13:58 (26)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44			07:56		14:49 (12)	09:03
	15:55		17:01	12	14:10 (26)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07			16:44	15	15:04 (12)	15:49
4	09:26		08:39		14:02 (26)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46			07:58		14:52 (12)	09:05
	15:57		17:03	5	14:07 (26)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04			16:41	10	15:02 (12)	15:48
5	09:26		08:37			07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48			08:01		14:56 (12)	09:07
	15:58		17:06			18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01			16:39	2	14:58 (12)	15:47
6	09:25		08:34		15:25 (12)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50			08:03			09:08
	16:00		17:08	4	15:29 (12)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58			16:36			15:46
7	09:24		08:32		15:22 (12)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53			08:06		13:31 (26)	09:10
	16:01		17:11	11	15:33 (12)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56			16:34	7	13:38 (26)	15:45
8	09:23		08:30		15:20 (12)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55			08:08		13:28 (26)	09:12
	16:03		17:13	15	15:35 (12)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53			16:32	13	13:41 (26)	15:44
9	09:23		08:27		15:19 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57			08:10		13:27 (26)	09:13
	16:05		17:15	18	15:37 (12)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50			16:30	16	13:43 (26)	15:44
10	09:22		08:25		15:18 (12)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59			08:13		13:25 (26)	09:15
	16:07		17:18	19	15:37 (12)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47			16:27	19	13:44 (26)	15:43
11	09:20		08:22		15:17 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02			08:15		13:24 (26)	09:16
	16:09		17:20	21	15:38 (12)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44			16:25	21	13:45 (26)	15:43
12	09:19		08:20		15:17 (12)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04			08:17		13:24 (26)	09:17
	16:10		17:23	22	15:39 (12)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41			16:23	22	13:46 (26)	15:42
13	09:18	13:53 (26)	08:17		15:17 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06			08:20		13:23 (26)	09:19
	16:12	5 13:58 (26)	17:25	22	15:39 (12)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39			16:21	23	13:46 (26)	15:42
14	09:17	13:51 (26)	08:15		15:16 (12)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09			08:22		13:23 (26)	09:20
	16:14	9 14:00 (26)	17:28	23	15:39 (12)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36			16:19	24	13:47 (26)	15:42
15	09:16	13:50 (26)	08:12		15:17 (12)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11			08:25		11:07 (37)	09:21
	16:17	11 14:01 (26)	17:30	22	15:39 (12)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33			16:17	33	13:48 (26)	15:42
16	09:14	13:50 (26)	08:10		15:17 (12)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13			08:27		11:06 (37)	09:22
	16:19	17 14:07 (26)	17:33	22	15:39 (12)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30			16:15	36	13:48 (26)	15:42
17	09:13	13:49 (26)	08:07		15:17 (12)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16			08:29		11:04 (37)	09:23
	16:21	21 14:10 (26)	17:35	21	15:38 (12)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28			16:13	40	13:48 (26)	15:42
18	09:11	11:38 (37)	08:05		15:18 (12)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18			08:32		11:03 (37)	09:24
	16:23	27 14:11 (26)	17:38	19	15:37 (12)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25			16:11	42	13:49 (26)	15:42
19	09:10	11:35 (37)	08:02		15:20 (12)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20			08:34		11:03 (37)	09:25
	16:25	32 14:12 (26)	17:40	17	15:37 (12)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22			16:09	44	13:49 (26)	15:42
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	16:27	36 14:12 (26)	17:43	14	15:35 (12)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19			16:07	45	13:49 (26)	15:42
21	09:07	11:29 (37)	07:57		15:24 (12)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25		15:53 (12)	08:38		11:05 (37)	09:26
	16:30	42 14:13 (26)	17:45	8	15:32 (12)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17	10	16:03 (12)	16:06	42	13:49 (26)	15:43
22	09:05	11:27 (37)	07:54			06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27		15:51 (12)	08:41		11:08 (37)	09:27
	16:32	45 14:14 (26)	17:47			18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14	15	16:06 (12)	16:04	36	13:48 (26)	15:43
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	16:34	44 14:14 (26)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	17	16:06 (12)	16:02	32	13:49 (26)	15:44
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	16:36	42 14:15 (26)	17:52			18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	19	16:07 (12)	16:01	28	13:49 (26)	15:44
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	16:39	40 14:15 (26)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	20	15:08 (12)	15:59	21	13:48 (26)	15:45
26	08:58	11:32 (37)	07:43			06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37		14:46 (12)	08:49		13:29 (26)	09:28
	16:41	37 14:15 (26)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	22	15:08 (12)	15:57	17	13:46 (26)	15:46
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	16:44	33 14:15 (26)	18:00			19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01	23	15:09 (12)	15:56	12	13:41 (26)	15:47
28	08:54	13:51 (26)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41		14:46 (12)	08:53		13:30 (26)	09:28
	16:46	24 14:15 (26)	18:02			19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	22	15:08 (12)	15:55	9	13:39 (26)	15:47
29	08:52	13:51 (26)				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44		14:46 (12)	08:55		13:35 (26)	09:28
	16:48	23 14:14 (26)				20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56	22	15:08 (12)	15:53	5	13:40 (26)	15:49
30	08:50	13:52 (26)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		14:47 (12)	08:57			09:28
	16:51	22 14:14 (26)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	21	15:08 (12)	15:52			15:50
31	08:48	13:54 (26)				07:09		04:41		05:22	06:31		07:49		14:47 (12)				09:28
	16:53	20 14:14 (26)				20:14		22:29		22:03	20:42		16:51	20	15:07 (12)				15:51
Potential sun hours	221		260			365	432	521	547	546	478	386	319			236			199
Total, worst case		530		330										211			650		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January		February		March		April		May		June
1	09:28		12:11 (32)	08:45		10:15 (13)	07:35		13:26 (26)	07:07		18:42 (17)	05:44		04:39
	15:52	47	14:26 (14)	16:56	119	15:37 (35)	18:04	35	17:05 (9)	20:16	19	19:01 (17)	21:26		22:30
2	09:27		12:11 (32)	08:43		12:16 (32)	07:32		15:45 (7)	07:04		18:43 (17)	05:41		04:38
	15:54	53	14:28 (14)	16:58	114	15:38 (35)	18:07	27	17:09 (9)	20:19	16	18:59 (17)	21:28		22:32
3	09:27		12:10 (32)	08:41		12:17 (32)	07:30		16:34 (12)	07:01		18:46 (17)	05:38		04:37
	15:55	58	14:29 (14)	17:01	113	15:38 (35)	18:09	33	17:12 (9)	20:21	11	18:57 (17)	21:30		22:33
4	09:26		12:10 (32)	08:39		09:39 (37)	07:27		16:31 (12)	06:58			05:36		04:36
	15:57	61	14:29 (14)	17:03	109	15:39 (35)	18:12	43	17:15 (9)	20:23			21:33		22:35
5	09:26		12:10 (32)	08:36		09:39 (37)	07:24		16:29 (12)	06:55			05:34		04:35
	15:58	64	14:30 (14)	17:06	105	15:39 (35)	18:14	46	17:15 (9)	20:26			21:35		22:36
6	09:25		12:09 (32)	08:34		09:40 (37)	07:21		16:26 (12)	06:52			05:31		04:34
	16:00	70	14:31 (14)	17:08	95	15:39 (35)	18:16	49	17:15 (9)	20:28			21:37		22:38
7	09:24		10:10 (13)	08:32		09:40 (37)	07:18		16:25 (12)	06:49			05:29		04:33
	16:01	78	14:32 (14)	17:11	96	15:39 (35)	18:19	50	17:15 (9)	20:30			21:39		22:39
8	09:23		10:10 (13)	08:30		09:38 (37)	07:15		16:23 (12)	06:46			05:26		04:32
	16:03	84	14:33 (14)	17:13	96	15:38 (35)	18:21	52	17:15 (9)	20:32			21:42		22:40
9	09:22		10:10 (13)	08:27		09:36 (37)	07:13		16:22 (12)	06:44			05:24		04:31
	16:05	86	14:33 (14)	17:16	98	15:38 (35)	18:23	53	17:15 (9)	20:35			21:44		22:41
10	09:21		10:11 (13)	08:25		09:33 (37)	07:10		16:20 (12)	06:41			05:21		04:30
	16:07	91	14:34 (14)	17:18	107	15:57 (7)	18:26	54	17:14 (9)	20:37			21:46		22:42
11	09:20		10:10 (13)	08:22		09:29 (37)	07:07		16:19 (12)	06:38			05:19		04:29
	16:09	97	14:34 (14)	17:20	114	16:00 (7)	18:28	54	17:13 (9)	20:39			21:48		22:44
12	09:19		10:09 (13)	08:20		09:27 (37)	07:04		16:18 (12)	06:35			05:17		04:29
	16:11	102	14:35 (14)	17:23	118	16:03 (7)	18:30	54	17:12 (9)	20:42			21:51		22:44
13	09:18		10:09 (13)	08:17		09:24 (37)	07:01		16:18 (12)	06:32			05:15		04:28
	16:13	105	14:35 (14)	17:25	118	16:04 (7)	18:33	52	17:10 (9)	20:44			21:53		22:45
14	09:17		10:10 (13)	08:15		09:21 (37)	06:58		16:17 (12)	06:29			05:12		04:28
	16:15	107	14:36 (14)	17:28	114	16:05 (7)	18:35	51	17:08 (9)	20:46			21:55		22:46
15	09:16		10:10 (13)	08:12		09:18 (37)	06:56		16:17 (12)	06:27			05:10		04:27
	16:17	112	14:37 (14)	17:30	120	16:07 (7)	18:37	47	17:04 (9)	20:49			21:57		22:47
16	09:14		10:02 (13)	08:10		09:13 (37)	06:53		16:17 (12)	06:24			05:08		04:27
	16:19	119	14:37 (14)	17:33	125	16:08 (7)	18:40	46	17:03 (12)	20:51			21:59		22:48
17	09:13		10:02 (13)	08:07		09:13 (37)	06:50		16:17 (12)	06:21			05:06		04:27
	16:21	126	14:37 (14)	17:35	123	16:08 (7)	18:42	46	17:03 (12)	20:53			22:02		22:48
18	09:11		10:02 (13)	08:05		09:13 (37)	06:47		16:16 (12)	06:18			05:04		04:27
	16:23	127	14:37 (14)	17:38	121	16:08 (7)	18:44	46	17:02 (12)	20:56			22:04		22:49
19	09:10		10:02 (13)	08:02		09:15 (37)	06:44		16:16 (12)	06:16			05:02		04:26
	16:25	129	14:37 (14)	17:40	118	16:09 (7)	18:47	56	18:01 (17)	20:58			22:06		22:49
20	09:08		10:02 (13)	07:59		09:16 (37)	06:41		16:16 (12)	06:13			05:00		04:26
	16:27	130	14:37 (14)	17:43	114	16:09 (7)	18:49	60	18:03 (17)	21:00			22:08		22:50
21	09:07		10:03 (13)	07:57		09:17 (37)	06:38		16:16 (12)	06:10			04:58		04:27
	16:30	131	14:37 (14)	17:45	110	16:09 (7)	18:51	64	18:05 (17)	21:02			22:10		22:50
22	09:05		10:03 (13)	07:54		09:18 (37)	06:35		16:17 (12)	06:07			04:56		04:27
	16:32	129	14:36 (14)	17:48	104	16:08 (7)	18:54	63	18:05 (17)	21:05			22:12		22:50
23	09:03		10:04 (13)	07:51		09:20 (37)	06:32		16:17 (12)	06:05			04:54		04:27
	16:34	131	14:36 (14)	17:50	95	16:08 (7)	18:56	64	18:06 (17)	21:07			22:14		22:50
24	09:01		10:04 (13)	07:49		13:09 (26)	06:30		16:18 (12)	06:02			04:52		04:27
	16:37	128	14:35 (14)	17:52	77	16:08 (7)	18:58	64	18:06 (17)	21:09			22:16		22:50
25	08:59		10:05 (13)	07:46		13:11 (26)	06:27		16:18 (12)	05:59			04:50		04:28
	16:39	125	14:34 (14)	17:55	71	16:07 (7)	19:00	62	18:06 (17)	21:12			22:18		22:50
26	08:58		10:05 (13)	07:43		13:13 (26)	06:24		16:20 (12)	05:57			04:49		04:28
	16:41	124	15:28 (35)	17:57	66	16:06 (7)	19:03	61	18:07 (17)	21:14			22:20		22:50
27	08:56		10:06 (13)	07:41		13:16 (26)	06:21		16:22 (12)	05:54			04:47		04:29
	16:44	127	15:30 (35)	18:00	58	16:05 (7)	19:05	57	18:07 (17)	21:16			22:22		22:50
28	08:54		10:07 (13)	07:38		13:19 (26)	06:18		16:23 (12)	05:51			04:45		04:29
	16:46	130	15:33 (35)	18:02	49	16:04 (7)	19:07	54	18:06 (17)	21:19			22:23		22:50
29	08:52		10:08 (13)				07:15		17:26 (12)	05:49			04:44		04:30
	16:48	131	15:35 (35)				20:10	47	19:05 (17)	21:21			22:25		22:49
30	08:50		10:09 (13)				07:12		17:29 (12)	05:46			04:42		04:31
	16:51	129	15:36 (35)				20:12	38	19:04 (17)	21:23			22:27		22:49
31	08:47		10:12 (13)				07:09		18:41 (17)				04:41		
	16:53	126	15:37 (35)				20:14	22	19:03 (17)				22:29		
Potential sun hours	221			260			365			432			521		547
Total, worst case		3257			2867			1550			46				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October			November			December		
1	04:32	05:24	06:33			07:39		16:57 (12)	07:51		09:03 (37)	08:59		09:52 (13)
	22:48	22:01	20:39			19:13	53	17:50 (9)	16:49	107	15:26 (7)	15:51	96	14:16 (14)
2	04:33	05:26	06:35			07:41		16:58 (12)	07:53		09:06 (37)	09:01		09:53 (13)
	22:48	21:58	20:37			19:10	54	17:52 (9)	16:46	98	15:08 (35)	15:50	91	14:16 (14)
3	04:34	05:28	06:37			07:44		16:58 (12)	07:56		09:08 (37)	09:03		09:54 (13)
	22:47	21:56	20:34			19:07	54	17:52 (9)	16:44	96	15:08 (35)	15:49	88	14:17 (14)
4	04:35	05:30	06:39			07:46		16:58 (12)	07:58		09:10 (37)	09:05		09:54 (13)
	22:46	21:54	20:31			19:04	54	17:52 (9)	16:41	94	15:08 (35)	15:48	83	14:17 (14)
5	04:36	05:33	06:42			07:48		17:00 (12)	08:01		09:10 (37)	09:07		09:55 (13)
	22:45	21:51	20:28			19:01	52	17:52 (9)	16:39	95	15:09 (35)	15:47	77	14:17 (14)
6	04:37	05:35	06:44			07:50		17:00 (12)	08:03		09:10 (37)	09:08		09:57 (13)
	22:45	21:49	20:25			18:58	52	17:52 (9)	16:37	105	15:09 (35)	15:46	71	14:17 (14)
7	04:38	05:37	06:46			07:53		17:01 (12)	08:06		09:08 (37)	09:10		11:57 (32)
	22:44	21:46	20:22			18:56	50	17:51 (9)	16:34	111	15:09 (35)	15:45	64	14:17 (14)
8	04:40	05:39	06:48			07:55		17:03 (12)	08:08		11:48 (32)	09:12		11:57 (32)
	22:43	21:44	20:19			18:53	48	17:51 (9)	16:32	112	15:09 (35)	15:44	62	14:17 (14)
9	04:41	05:41	06:51		18:40 (17)	07:57		17:04 (12)	08:10		11:47 (32)	09:13		11:59 (32)
	22:41	21:41	20:16	10	18:50 (17)	18:50	46	17:50 (9)	16:30	113	15:09 (35)	15:44	57	14:17 (14)
10	04:42	05:44	06:53		18:37 (17)	07:59		17:06 (12)	08:13		09:45 (13)	09:15		12:00 (32)
	22:40	21:39	20:14	15	18:52 (17)	18:47	40	17:48 (9)	16:27	121	15:08 (35)	15:43	53	14:17 (14)
11	04:44	05:46	06:55		18:35 (17)	08:02		16:22 (7)	08:15		09:42 (13)	09:16		12:01 (32)
	22:39	21:36	20:11	19	18:54 (17)	18:44	36	17:45 (9)	16:25	127	15:08 (35)	15:43	47	14:16 (14)
12	04:45	05:48	06:57		18:34 (17)	08:04		16:18 (7)	08:17		09:41 (13)	09:17		12:03 (32)
	22:38	21:34	20:08	21	18:55 (17)	18:42	25	17:41 (9)	16:23	130	15:08 (35)	15:42	44	14:17 (14)
13	04:47	05:50	06:59		17:21 (12)	08:06		13:56 (26)	08:20		09:39 (13)	09:19		12:04 (32)
	22:36	21:31	20:05	37	18:55 (17)	18:39	42	17:38 (9)	16:21	131	15:06 (35)	15:42	39	14:17 (14)
14	04:49	05:53	07:02		17:17 (12)	08:09		13:50 (26)	08:22		09:39 (13)	09:20		12:07 (32)
	22:35	21:29	20:02	45	18:55 (17)	18:36	53	16:37 (7)	16:19	131	15:05 (35)	15:42	34	14:17 (14)
15	04:50	05:55	07:04		17:13 (12)	08:11		13:46 (26)	08:25		09:39 (13)	09:21		13:06 (26)
	22:33	21:26	19:59	52	18:55 (17)	18:33	62	16:37 (7)	16:17	128	15:03 (35)	15:42	26	14:16 (14)
16	04:52	05:57	07:06		17:11 (12)	08:13		13:44 (26)	08:27		09:39 (13)	09:22		13:08 (26)
	22:32	21:23	19:56	56	18:55 (17)	18:30	69	16:39 (7)	16:15	124	15:02 (35)	15:42	22	14:15 (14)
17	04:54	05:59	07:08		17:08 (12)	08:16		13:41 (26)	08:29		09:38 (13)	09:23		13:10 (26)
	22:30	21:21	19:53	59	18:54 (17)	18:28	75	16:39 (7)	16:13	125	14:07 (14)	15:42	18	14:15 (14)
18	04:56	06:02	07:10		17:07 (12)	08:18		09:55 (37)	08:32		09:38 (13)	09:24		13:12 (26)
	22:29	21:18	19:50	63	18:55 (17)	18:25	86	16:39 (7)	16:11	129	14:09 (14)	15:42	16	14:15 (14)
19	04:58	06:04	07:12		17:06 (12)	08:20		09:51 (37)	08:34		09:39 (13)	09:25		13:16 (3)
	22:27	21:15	19:47	63	18:54 (17)	18:22	98	16:39 (7)	16:09	131	14:11 (14)	15:42	11	14:15 (14)
20	04:59	06:06	07:15		17:04 (12)	08:23		09:49 (37)	08:36		09:38 (13)	09:25		13:16 (3)
	22:25	21:13	19:45	65	18:53 (17)	18:20	106	16:40 (7)	16:07	129	14:11 (14)	15:42	9	14:14 (14)
21	05:01	06:08	07:17		17:03 (12)	08:25		09:46 (37)	08:38		09:39 (13)	09:26		13:17 (3)
	22:23	21:10	19:42	64	18:51 (17)	18:17	113	16:39 (7)	16:06	131	14:13 (14)	15:43	9	14:15 (14)
22	05:03	06:11	07:19		17:01 (12)	08:27		09:45 (37)	08:41		09:38 (13)	09:26		13:18 (3)
	22:21	21:07	19:39	64	18:50 (17)	18:14	116	16:39 (7)	16:04	131	14:13 (14)	15:43	9	14:16 (14)
23	05:05	06:13	07:21		17:00 (12)	08:30		09:44 (37)	08:43		09:39 (13)	09:27		13:18 (3)
	22:19	21:05	19:36	62	18:48 (17)	18:12	119	16:38 (7)	16:02	128	14:14 (14)	15:44	9	14:16 (14)
24	05:07	06:15	07:24		17:00 (12)	08:32		09:43 (37)	08:45		09:39 (13)	09:27		13:18 (3)
	22:18	21:02	19:33	58	18:46 (17)	18:09	122	16:38 (7)	16:01	127	14:14 (14)	15:44	11	14:17 (14)
25	05:09	06:17	07:26		16:59 (12)	07:34		08:43 (37)	08:47		09:40 (13)	09:28		13:15 (26)
	22:16	20:59	19:30	46	17:45 (12)	17:06	123	15:38 (7)	15:59	124	14:15 (14)	15:45	14	14:17 (14)
26	05:11	06:19	07:28		16:58 (12)	07:37		08:44 (37)	08:49		09:40 (13)	09:28		13:14 (26)
	22:14	20:56	19:27	47	17:45 (12)	17:04	122	15:37 (7)	15:58	119	14:15 (14)	15:46	17	14:18 (14)
27	05:13	06:22	07:30		16:58 (12)	07:39		08:48 (37)	08:51		09:49 (13)	09:28		13:13 (26)
	22:11	20:53	19:24	46	17:44 (12)	17:01	118	15:36 (7)	15:56	112	14:16 (14)	15:47	20	14:19 (14)
28	05:15	06:24	07:32		16:58 (12)	07:41		08:51 (37)	08:53		09:49 (13)	09:28		13:12 (26)
	22:09	20:51	19:21	46	17:44 (12)	16:59	115	15:35 (7)	15:55	109	14:16 (14)	15:48	24	14:21 (14)
29	05:17	06:26	07:35		16:58 (12)	07:44		08:54 (37)	08:55		09:50 (13)	09:28		12:14 (32)
	22:07	20:48	19:19	50	17:48 (9)	16:56	119	15:34 (7)	15:53	106	14:16 (14)	15:49	31	14:23 (14)
30	05:20	06:28	07:37		16:57 (12)	07:46		08:57 (37)	08:57		09:50 (13)	09:28		12:13 (32)
	22:05	20:45	19:16	52	17:49 (9)	16:53	117	15:32 (7)	15:52	103	14:16 (14)	15:50	37	14:25 (14)
31	05:22	06:31				07:49		08:59 (37)				09:28		12:12 (32)
	22:03	20:42				16:51	115	15:29 (7)				15:51	41	14:25 (14)
Potential sun hours	546	478	386			319			236			199		
Total, worst case				1040			2454			3527			1230	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (1)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	1 20:40 (1)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (1)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	1 20:41 (1)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (1)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	1 20:40 (1)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (1)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	1 20:41 (1)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	2 20:42 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	2 20:42 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	2 20:42 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	2 20:43 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (1)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	2 20:43 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	2 20:43 (1)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	2 20:43 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	2 20:43 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	2 20:44 (1)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	2 20:44 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	2 20:44 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	2 20:44 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	2 20:44 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	1 20:44 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	2 20:45 (1)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	1 20:44 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case							34		1					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February	March	April	May		June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44		04:40		20:27 (1)	04:32	20:33 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25		22:30	8	20:35 (1)	22:48	15 20:48 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41		04:38		20:27 (1)	04:33	20:33 (1)	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28		22:31	11	20:38 (1)	22:47	15 20:48 (1)	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39		04:37		20:27 (1)	04:34	20:33 (1)	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30		22:33	12	20:39 (1)	22:47	15 20:48 (1)	21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36		04:36		20:27 (1)	04:35	20:33 (1)	05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32		22:34	12	20:39 (1)	22:46	14 20:47 (1)	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34		04:35		20:27 (1)	04:36	20:33 (1)	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35		22:36	13	20:40 (1)	22:45	14 20:47 (1)	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31		04:34		20:27 (1)	04:37	20:34 (1)	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37		22:37	13	20:40 (1)	22:44	13 20:47 (1)	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29		04:33		20:28 (1)	04:39	20:34 (1)	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39		22:38	14	20:42 (1)	22:43	12 20:46 (1)	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26		04:32		20:28 (1)	04:40	20:34 (1)	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41		22:40	14	20:42 (1)	22:42	12 20:46 (1)	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24		04:31		20:28 (1)	04:41	20:35 (1)	05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44		22:41	14	20:42 (1)	22:41	11 20:46 (1)	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22		04:30		20:29 (1)	04:43	20:35 (1)	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46		22:42	14	20:43 (1)	22:40	11 20:46 (1)	21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19		04:29		20:28 (1)	04:44	20:35 (1)	05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48		22:43	16	20:44 (1)	22:39	9 20:44 (1)	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17		04:29		20:29 (1)	04:46	20:35 (1)	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50		22:44	16	20:45 (1)	22:37	4 20:39 (1)	21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15		04:28		20:29 (1)	04:47	20:35 (1)	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53		22:45	16	20:45 (1)	22:36	3 20:38 (1)	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12		04:28		20:29 (1)	04:49	20:35 (1)	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55		22:46	17	20:46 (1)	22:34	2 20:37 (1)	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10		04:27		20:30 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57		22:47	17	20:47 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08		04:27		20:30 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59		22:47	17	20:47 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06		04:27		20:30 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01		22:48	18	20:48 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04		04:27		20:31 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03		22:48	17	20:48 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02		04:27		20:31 (1)	04:58		06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05		22:49	18	20:49 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00		04:27		20:31 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07		22:49	18	20:49 (1)	22:25		21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58		04:27		20:31 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10		22:49	18	20:49 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56		04:27		20:31 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12		22:50	18	20:49 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54		04:27		20:31 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14		22:50	18	20:49 (1)	22:19		21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52		04:27		20:32 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15		22:50	17	20:49 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51		04:28		20:32 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17		22:50	17	20:49 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49		04:28		20:32 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19		22:50	18	20:50 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47		04:29		20:32 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21		22:49	17	20:49 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46		04:30		20:32 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23		22:49	17	20:49 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44		04:30		20:33 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25		22:49	17	20:50 (1)	22:07		20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42	20:27 (1)	04:31		20:32 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	2 20:29 (1)	22:48	17	20:49 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41	20:27 (1)				05:22		06:31		07:48		09:27
	16:53		20:14		22:28	3 20:30 (1)				22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521		547			545		478	386	319	236	200
Total, worst case						5		469			150					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:35		07:07	05:44	04:40	04:32	05:24	06:33		07:39	08:39 (82)	07:51	09:00
	15:53	16:56		18:05		20:17	21:26	22:30	22:48	22:01	20:40		19:13	09:01 (85)	16:49	15:52
2	09:27	08:43		07:33	08:13 (85)	07:04	05:42	04:39	04:33	05:27	06:35		07:42	08:36 (82)	07:54	09:01
	15:54	16:59		18:07	6 08:19 (85)	20:19	21:28	22:32	22:48	21:58	20:37		19:10	25 09:01 (85)	16:47	15:50
3	09:27	08:41		07:30	08:10 (85)	07:01	05:39	04:38	04:34	05:29	06:38		07:44	08:35 (82)	07:56	09:03
	15:56	17:01		18:10	12 08:22 (85)	20:21	21:30	22:33	22:47	21:56	20:34		19:07	26 09:01 (85)	16:44	15:49
4	09:26	08:39		07:27	08:07 (85)	06:58	05:36	04:36	04:35	05:31	06:40		07:46	08:34 (82)	07:59	09:05
	15:57	17:04		18:12	16 08:23 (85)	20:24	21:33	22:35	22:46	21:54	20:31		19:05	28 09:02 (85)	16:42	15:48
5	09:26	08:37		07:24	08:00 (82)	06:55	05:34	04:35	04:37	05:33	06:42		07:48	08:34 (82)	08:01	09:07
	15:59	17:06		18:14	24 08:24 (85)	20:26	21:35	22:36	22:45	21:51	20:28		19:02	28 09:02 (85)	16:39	15:47
6	09:25	08:34		07:21	07:58 (82)	06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:33 (82)	08:03	09:08
	16:00	17:09		18:17	26 08:24 (85)	20:28	21:37	22:38	22:45	21:49	20:25		18:59	28 09:01 (85)	16:37	15:47
7	09:24	08:32		07:19	07:57 (82)	06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:34 (82)	08:06	09:10
	16:02	17:11		18:19	28 08:25 (85)	20:30	21:40	22:39	22:44	21:47	20:23		18:56	27 09:01 (85)	16:35	15:46
8	09:23	08:30		07:16	07:56 (82)	06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:35 (82)	08:08	09:12
	16:04	17:14		18:21	28 08:24 (85)	20:33	21:42	22:40	22:43	21:44	20:20		18:53	25 09:00 (85)	16:32	15:45
9	09:23	08:27		07:13	07:56 (82)	06:44	05:24	04:31	04:42	05:42	06:51		07:57	08:36 (82)	08:11	09:13
	16:06	17:16		18:24	28 08:24 (85)	20:35	21:44	22:41	22:41	21:42	20:17		18:50	22 08:58 (85)	16:30	15:44
10	09:22	08:25		07:10	07:56 (82)	06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:43 (85)	08:13	09:15
	16:07	17:18		18:26	27 08:23 (85)	20:37	21:46	22:43	22:40	21:39	20:14		18:48	14 08:57 (85)	16:28	15:44
11	09:21	08:23		07:07	07:58 (82)	06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:44 (85)	08:15	09:16
	16:09	17:21		18:28	26 08:24 (85)	20:40	21:49	22:44	22:39	21:37	20:11		18:45	10 08:54 (85)	16:26	15:43
12	09:19	08:20		07:04	07:59 (82)	06:36	05:17	04:29	04:46	05:49	06:58		08:04		08:18	09:17
	16:11	17:23		18:31	23 08:22 (85)	20:42	21:51	22:45	22:38	21:34	20:08		18:42		16:24	15:43
13	09:18	08:18		07:02	07:37 (81)	06:33	05:15	04:29	04:48	05:51	07:00	08:13 (84)	08:07		08:20	09:19
	16:13	17:26		18:33	20 08:21 (85)	20:44	21:53	22:45	22:36	21:31	20:05	8 08:21 (84)	18:39		16:22	15:43
14	09:17	08:15		06:59	07:35 (81)	06:30	05:13	04:28	04:49	05:53	07:02	08:10 (84)	08:09		08:22	09:20
	16:15	17:28		18:35	20 08:18 (85)	20:47	21:55	22:46	22:35	21:29	20:02	13 08:23 (84)	18:36		16:19	15:43
15	09:16	08:13		06:56	07:33 (81)	06:27	05:11	04:28	04:51	05:55	07:04	08:08 (84)	08:11		08:25	09:21
	16:17	17:31		18:38	14 08:14 (85)	20:49	21:57	22:47	22:33	21:26	19:59	16 08:24 (84)	18:34		16:17	15:42
16	09:14	08:10		06:53	07:32 (81)	06:24	05:09	04:28	04:53	05:58	07:06	08:08 (84)	08:13	09:01 (83)	08:27	09:22
	16:19	17:33		18:40	12 07:44 (81)	20:51	22:00	22:48	22:32	21:24	19:57	17 08:25 (84)	18:31	9 09:10 (83)	16:15	15:42
17	09:13	08:07		06:50	07:32 (81)	06:22	05:06	04:27	04:54	06:00	07:08	08:07 (84)	08:16	09:00 (83)	08:29	09:23
	16:21	17:36		18:42	12 07:44 (81)	20:53	22:02	22:48	22:30	21:21	19:54	18 08:25 (84)	18:28	12 09:12 (83)	16:13	15:42
18	09:12	08:05	08:36 (83)	06:47	07:32 (81)	06:19	05:04	04:27	04:56	06:02	07:11	08:06 (84)	08:18	08:59 (83)	08:32	09:24
	16:24	17:38	3 08:39 (83)	18:45	11 07:43 (81)	20:56	22:04	22:49	22:29	21:18	19:51	19 08:25 (84)	18:25	13 09:12 (83)	16:12	15:42
19	09:10	08:02	08:33 (83)	06:44	07:26 (84)	06:16	05:02	04:27	04:58	06:04	07:13	08:05 (84)	08:20	08:59 (83)	08:34	09:25
	16:26	17:41	7 08:40 (83)	18:47	16 07:42 (81)	20:58	22:06	22:49	22:27	21:16	19:48	19 08:24 (84)	18:23	14 09:13 (83)	16:10	15:43
20	09:08	08:00	08:30 (83)	06:42	07:23 (84)	06:13	05:00	04:27	05:00	06:07	07:15	08:05 (84)	08:23	08:58 (83)	08:36	09:25
	16:28	17:43	11 08:41 (83)	18:49	17 07:40 (81)	21:00	22:08	22:50	22:25	21:13	19:45	19 08:24 (84)	18:20	14 09:12 (83)	16:08	15:43
21	09:07	07:57	08:27 (83)	06:39	07:21 (84)	06:11	04:58	04:27	05:02	06:09	07:17	08:05 (84)	08:25	08:58 (83)	08:39	09:26
	16:30	17:46	14 08:41 (83)	18:52	15 07:36 (84)	21:03	22:10	22:50	22:23	21:10	19:42	17 08:22 (84)	18:17	14 09:12 (83)	16:06	15:43
22	09:05	07:54	08:27 (83)	06:36	07:20 (84)	06:08	04:56	04:27	05:04	06:11	07:19	08:06 (84)	08:27	09:01 (83)	08:41	09:27
	16:32	17:48	14 08:41 (83)	18:54	18 07:38 (84)	21:05	22:12	22:50	22:22	21:08	19:39	16 08:22 (84)	18:15	10 09:11 (83)	16:04	15:44
23	09:03	07:52	08:28 (83)	06:33	07:19 (84)	06:05	04:55	04:28	05:06	06:13	07:22	08:07 (84)	08:30	09:04 (83)	08:43	09:27
	16:35	17:50	13 08:41 (83)	18:56	19 07:38 (84)	21:07	22:14	22:50	22:20	21:05	19:36	17 08:24 (81)	18:12	6 09:10 (83)	16:03	15:44
24	09:01	07:49	08:28 (83)	06:30	07:19 (84)	06:02	04:53	04:28	05:08	06:15	07:24	08:09 (84)	08:32	09:06 (83)	08:45	09:27
	16:37	17:53	13 08:41 (83)	18:58	19 07:38 (84)	21:10	22:16	22:50	22:18	21:02	19:33	16 08:25 (81)	18:09	2 09:08 (83)	16:01	15:45
25	09:00	07:46	08:29 (83)	06:27	07:18 (84)	06:00	04:51	04:28	05:10	06:18	07:26	08:15 (81)	07:35		08:47	09:28
	16:39	17:55	10 08:39 (83)	19:01	19 07:37 (84)	21:12	22:18	22:50	22:16	20:59	19:30	11 08:26 (81)	17:07		16:00	15:46
26	08:58	07:44	08:30 (83)	06:24	07:18 (84)	05:57	04:49	04:29	05:12	06:20	07:28	08:14 (81)	07:37		08:49	09:28
	16:42	17:58	7 08:37 (83)	19:03	19 07:37 (84)	21:14	22:20	22:50	22:14	20:57	19:28	12 08:26 (81)	17:04		15:58	15:46
27	08:56	07:41		06:21	07:18 (84)	05:54	04:48	04:29	05:14	06:22	07:31	08:14 (81)	07:39		08:52	09:28
	16:44	18:00		19:05	18 07:36 (84)	21:17	22:22	22:50	22:12	20:54	19:25	12 08:26 (81)	17:02		15:57	15:47
28	08:54	07:38		06:18	07:18 (84)	05:52	04:46	04:30	05:16	06:24	07:33	08:14 (81)	07:42		08:54	09:28
	16:47	18:02		19:08	16 07:34 (84)	21:19	22:23	22:50	22:09	20:51	19:22	12 08:26 (81)	16:59		15:55	15:48
29	08:52			07:16	08:19 (84)	05:49	04:44	04:31	05:18	06:27	07:35	08:14 (81)	07:44		08:56	09:28
	16:49			20:10	14 08:33 (84)	21:21	22:25	22:49	22:07	20:48	19:19	19 08:57 (85)	16:56		15:54	15:49
30	08:50			07:13	08:21 (84)	05:47	04:43	04:32	05:20	06:29	07:37	08:15 (81)	07:47		08:58	09:28
	16:51			20:12	9 08:30 (84)	21:24	22:27	22:49	22:05	20:45	19:16	21 08:59 (85)	16:54		15:53	15:50
31	08:48			07:10			04:41		05:22	06:31			07:49			09:28
	16:54			20:14			22:29		22:03	20:43			16:51			15:51
Potential sun hours	222	260		365		432	521	547	545	478	386		319		236	200
Total, worst case			92		532							282		349		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March	April		May		June		
1	09:28	08:46		07:35	07:07		05:44		07:31 (38)	04:40	06:17 (36)
	15:53	16:56		18:05	20:17		21:26	31	08:02 (38)	22:30	23 06:40 (36)
2	09:27	08:43		07:33	07:04		05:42		07:32 (38)	04:39	06:16 (36)
	15:54	16:59		18:07	20:19		21:28	29	08:01 (38)	22:32	24 06:40 (36)
3	09:27	08:41		07:30	07:01		05:39		07:32 (38)	04:37	06:16 (36)
	15:56	17:01		18:10	20:21		21:31	27	07:59 (38)	22:34	25 06:41 (36)
4	09:26	08:39		07:27	06:58		05:36		07:34 (38)	04:36	06:16 (36)
	15:57	17:04		18:12	20:24		21:33	24	07:58 (38)	22:35	26 06:42 (36)
5	09:26	08:37		07:24	06:55		05:34		07:36 (38)	04:35	06:16 (36)
	15:59	17:06		18:14	20:26		21:35	20	07:56 (38)	22:36	27 06:43 (36)
6	09:25	08:34		07:21	06:53		05:32		07:38 (38)	04:34	06:16 (36)
	16:00	17:09		18:17	20:28		21:37	16	07:54 (38)	22:38	27 06:43 (36)
7	09:24	08:32		07:19	06:50		05:29		07:40 (38)	04:33	06:16 (36)
	16:02	17:11		18:19	20:31		21:40	10	07:50 (38)	22:39	27 06:43 (36)
8	09:24	08:30	09:03 (85)	07:16	06:47		05:27			04:32	06:15 (36)
	16:04	17:14	2 09:05 (85)	18:21	20:33		21:42			22:40	29 06:44 (36)
9	09:23	08:27	09:00 (85)	07:13	06:44		05:24			04:31	06:16 (36)
	16:06	17:16	7 09:07 (85)	18:24	20:35		21:44			22:42	29 06:45 (36)
10	09:22	08:25	08:58 (85)	07:10	06:41	07:48 (38)	05:22			04:31	06:15 (36)
	16:07	17:18	10 09:08 (85)	18:26	20:37	10 07:58 (38)	21:46			22:43	30 06:45 (36)
11	09:21	08:23	08:56 (85)	07:07	06:38	07:45 (38)	05:20			04:30	06:16 (36)
	16:09	17:21	13 09:09 (85)	18:28	20:40	17 08:02 (38)	21:49			22:44	29 06:45 (36)
12	09:20	08:20	08:55 (85)	07:04	06:36	07:41 (38)	05:17			04:29	06:15 (36)
	16:11	17:23	14 09:09 (85)	18:31	20:42	22 08:03 (38)	21:51			22:45	30 06:45 (36)
13	09:18	08:18	08:55 (85)	07:02	06:33	07:37 (38)	05:15			04:29	06:16 (36)
	16:13	17:26	14 09:09 (85)	18:33	20:44	27 08:04 (38)	21:53			22:46	30 06:46 (36)
14	09:17	08:15	08:56 (85)	06:59	06:30	07:35 (38)	05:13			04:28	06:16 (36)
	16:15	17:28	13 09:09 (85)	18:35	20:47	30 08:05 (38)	21:55			22:46	30 06:46 (36)
15	09:16	08:13	08:56 (85)	06:56	06:27	07:34 (38)	05:11			04:28	06:15 (36)
	16:17	17:31	13 09:09 (85)	18:38	20:49	33 08:07 (38)	21:57			22:47	31 06:46 (36)
16	09:14	08:10	08:56 (85)	06:53	06:24	07:33 (38)	05:09			04:28	06:16 (36)
	16:19	17:33	11 09:07 (85)	18:40	20:51	34 08:07 (38)	22:00			22:48	30 06:46 (36)
17	09:13	08:07	08:58 (85)	06:50	06:22	07:32 (38)	05:06			04:27	06:16 (36)
	16:21	17:36	7 09:05 (85)	18:42	20:54	35 08:07 (38)	22:02			22:48	31 06:47 (36)
18	09:12	08:05		06:47	06:19	07:31 (38)	05:04			04:27	06:16 (36)
	16:24	17:38		18:45	20:56	37 08:08 (38)	22:04			22:49	31 06:47 (36)
19	09:10	08:02		06:44	06:16	07:30 (38)	05:02			04:27	06:16 (36)
	16:26	17:41		18:47	20:58	38 08:08 (38)	22:06			22:49	31 06:47 (36)
20	09:08	08:00		06:42	06:13	07:30 (38)	05:00			04:27	06:16 (36)
	16:28	17:43		18:49	21:00	39 08:09 (38)	22:08			22:50	31 06:47 (36)
21	09:07	07:57		06:39	06:11	07:30 (38)	04:58			04:27	06:16 (36)
	16:30	17:46		18:52	21:03	38 08:08 (38)	22:10			22:50	31 06:47 (36)
22	09:05	07:54		06:36	06:08	07:29 (38)	04:56			04:27	06:17 (36)
	16:32	17:48		18:54	21:05	39 08:08 (38)	22:12			22:50	31 06:48 (36)
23	09:03	07:52		06:33	06:05	07:29 (38)	04:55			04:28	06:17 (36)
	16:35	17:50		18:56	21:07	39 08:08 (38)	22:14			22:50	31 06:48 (36)
24	09:02	07:49		06:30	06:02	07:29 (38)	04:53			04:28	06:17 (36)
	16:37	17:53		18:58	21:10	38 08:07 (38)	22:16			22:50	31 06:48 (36)
25	09:00	07:46		06:27	06:00	07:29 (38)	04:51			04:28	06:18 (36)
	16:39	17:55		19:01	21:12	38 08:07 (38)	22:18			22:50	31 06:49 (36)
26	08:58	07:44		06:24	05:57	07:29 (38)	04:49		06:24 (36)	04:29	06:18 (36)
	16:42	17:58		19:03	21:14	37 08:06 (38)	22:20	8	06:32 (36)	22:50	31 06:49 (36)
27	08:56	07:41		06:21	05:54	07:29 (38)	04:48		06:21 (36)	04:29	06:19 (36)
	16:44	18:00		19:05	21:17	37 08:06 (38)	22:22	13	06:34 (36)	22:50	30 06:49 (36)
28	08:54	07:38		06:18	05:52	07:29 (38)	04:46		06:20 (36)	04:30	06:18 (36)
	16:47	18:02		19:08	21:19	36 08:05 (38)	22:24	16	06:36 (36)	22:50	31 06:49 (36)
29	08:52			07:16	05:49	07:30 (38)	04:44		06:19 (36)	04:31	06:19 (36)
	16:49			20:10	21:21	34 08:04 (38)	22:25	18	06:37 (36)	22:49	30 06:49 (36)
30	08:50			07:13	05:47	07:30 (38)	04:43		06:19 (36)	04:31	06:19 (36)
	16:51			20:12	21:24	33 08:03 (38)	22:27	20	06:39 (36)	22:49	30 06:49 (36)
31	08:48			07:10			04:41		06:17 (36)		
	16:54			20:14			22:29	22	06:39 (36)		
Potential sun hours	221	260		365	432		521			547	
Total, worst case			104			691		254			878

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September		October		November		December
1	04:32		06:20 (36)	05:24		06:33		07:44 (38)	07:39		08:28 (85)	09:00
	22:48	30	06:50 (36)	22:01		20:40	17	08:01 (38)	19:13		16:49	9	08:37 (85)	15:51
2	04:33		06:20 (36)	05:27		06:35		07:47 (38)	07:42		08:30 (85)	09:01
	22:48	30	06:50 (36)	21:58		20:37	10	07:57 (38)	19:10		16:47	6	08:36 (85)	15:50
3	04:34		06:20 (36)	05:29		06:38			07:44		07:56		08:33 (85)	09:03
	22:47	29	06:49 (36)	21:56		20:34			19:07		16:44	1	08:34 (85)	15:49
4	04:35		06:20 (36)	05:31		06:40			07:46		07:59			09:05
	22:46	29	06:49 (36)	21:54		20:31			19:05		16:42			15:48
5	04:36		06:21 (36)	05:33		06:42			07:48		08:01			09:07
	22:46	28	06:49 (36)	21:51		20:28			19:02		16:39			15:47
6	04:38		06:21 (36)	05:35	07:49 (38)	06:44			07:51		08:03			09:09
	22:45	28	06:49 (36)	21:49	13 08:02 (38)	20:25			18:59		16:37			15:47
7	04:39		06:23 (36)	05:38	07:46 (38)	06:47			07:53		08:06			09:10
	22:44	27	06:50 (36)	21:47	18 08:04 (38)	20:23			18:56		16:35			15:46
8	04:40		06:23 (36)	05:40	07:44 (38)	06:49			07:55		08:08			09:12
	22:43	26	06:49 (36)	21:44	22 08:06 (38)	20:20			18:53		16:32			15:45
9	04:42		06:23 (36)	05:42	07:43 (38)	06:51			07:57		08:11			09:13
	22:42	26	06:49 (36)	21:42	25 08:08 (38)	20:17			18:50		16:30			15:44
10	04:43		06:24 (36)	05:44	07:41 (38)	06:53			08:00		08:13			09:15
	22:40	24	06:48 (36)	21:39	28 08:09 (38)	20:14			18:48		16:28			15:44
11	04:45		06:25 (36)	05:46	07:40 (38)	06:55			08:02		08:15			09:16
	22:39	23	06:48 (36)	21:37	30 08:10 (38)	20:11			18:45		16:26			15:43
12	04:46		06:25 (36)	05:49	07:39 (38)	06:58			08:04		08:18			09:17
	22:38	23	06:48 (36)	21:34	32 08:11 (38)	20:08			18:42		16:24			15:43
13	04:48		06:26 (36)	05:51	07:38 (38)	07:00			08:07		08:20			09:19
	22:36	21	06:47 (36)	21:32	33 08:11 (38)	20:05			18:39		16:22			15:43
14	04:49		06:28 (36)	05:53	07:37 (38)	07:02			08:09		08:22			09:20
	22:35	18	06:46 (36)	21:29	35 08:12 (38)	20:02			18:36		16:19			15:43
15	04:51		06:28 (36)	05:55	07:36 (38)	07:04			08:11		08:25			09:21
	22:34	17	06:45 (36)	21:26	36 08:12 (38)	19:59			18:34		16:17			15:42
16	04:53		06:30 (36)	05:58	07:36 (38)	07:06			08:14		08:27			09:22
	22:32	14	06:44 (36)	21:24	37 08:13 (38)	19:57			18:31		16:15			15:42
17	04:54		06:31 (36)	06:00	07:35 (38)	07:09			08:16		08:29			09:23
	22:30	11	06:42 (36)	21:21	38 08:13 (38)	19:54			18:28		16:13			15:42
18	04:56		06:35 (36)	06:02	07:36 (38)	07:11			08:18		08:32			09:24
	22:29	5	06:40 (36)	21:18	38 08:14 (38)	19:51			18:25		16:12			15:42
19	04:58			06:04	07:35 (38)	07:13			08:21		08:34			09:25
	22:27			21:16	39 08:14 (38)	19:48			18:23		16:10			15:43
20	05:00			06:07	07:35 (38)	07:15			08:23		08:36			09:25
	22:25			21:13	38 08:13 (38)	19:45			18:20		16:08			15:43
21	05:02			06:09	07:34 (38)	07:17			08:25		08:39			09:26
	22:23			21:10	39 08:13 (38)	19:42			18:17		16:06			15:43
22	05:04			06:11	07:34 (38)	07:20			08:28		08:41			09:27
	22:22			21:08	39 08:13 (38)	19:39			18:15		16:04			15:44
23	05:06			06:13	07:34 (38)	07:22			08:30		08:43			09:27
	22:20			21:05	38 08:12 (38)	19:36			18:12		16:03			15:44
24	05:08			06:15	07:34 (38)	07:24			08:32		09:30 (85)	08:45		09:28
	22:18			21:02	37 08:11 (38)	19:33			18:09	3	09:33 (85)	16:01		15:45
25	05:10			06:18	07:34 (38)	07:26			07:35		08:28 (85)	08:47		09:28
	22:16			20:59	37 08:11 (38)	19:30			17:07	8	08:36 (85)	16:00		15:46
26	05:12			06:20	07:34 (38)	07:28			07:37		08:27 (85)	08:50		09:28
	22:14			20:57	36 08:10 (38)	19:28			17:04	11	08:38 (85)	15:58		15:46
27	05:14			06:22	07:35 (38)	07:31			07:39		08:25 (85)	08:52		09:28
	22:12			20:54	34 08:09 (38)	19:25			17:02	13	08:38 (85)	15:57		15:47
28	05:16			06:24	07:35 (38)	07:33			07:42		08:25 (85)	08:54		09:28
	22:10			20:51	32 08:07 (38)	19:22			16:59	14	08:39 (85)	15:55		15:48
29	05:18			06:27	07:36 (38)	07:35			07:44		08:24 (85)	08:56		09:28
	22:07			20:48	30 08:06 (38)	19:19			16:56	14	08:38 (85)	15:54		15:49
30	05:20			06:29	07:38 (38)	07:37			07:47		08:25 (85)	08:58		09:28
	22:05			20:45	27 08:05 (38)	19:16			16:54	13	08:38 (85)	15:53		15:50
31	05:22			06:31	07:41 (38)				07:49		08:26 (85)			09:28
	22:03			20:43	22 08:03 (38)				16:51	12	08:38 (85)			15:51
Potential sun hours	545			478		386			319			236		200
Total, worst case		409			833		27			88			16	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January	February		March			April	May			June		
1	09:28	08:46		07:35		08:16 (85)	07:07	05:44			04:40		06:01 (38)
	15:53	16:56		18:05	15	08:31 (85)	20:17	21:26			22:30	34	06:35 (38)
2	09:27	08:43		07:33		08:17 (85)	07:04	05:42			04:39		06:01 (38)
	15:54	16:59		18:07	13	08:30 (85)	20:19	21:28			22:32	35	06:36 (38)
3	09:27	08:41		07:30		08:18 (85)	07:01	05:39			04:38		06:01 (38)
	15:56	17:01		18:10	10	08:28 (85)	20:21	21:30			22:33	35	06:36 (38)
4	09:26	08:39		07:27		08:20 (85)	06:58	05:37			04:36		06:00 (38)
	15:57	17:04		18:12	5	08:25 (85)	20:24	21:33			22:35	36	06:36 (38)
5	09:26	08:37		07:24			06:55	05:34			04:35		06:01 (38)
	15:59	17:06		18:14			20:26	21:35			22:36	36	06:37 (38)
6	09:25	08:34		07:21			06:53	05:32			04:34		06:01 (38)
	16:00	17:09		18:17			20:28	21:37			22:38	36	06:37 (38)
7	09:24	08:32		07:19			06:50	05:29			04:33		06:01 (38)
	16:02	17:11		18:19			20:31	21:40			22:39	36	06:37 (38)
8	09:24	08:30		07:16		07:46 (84)	06:47	05:27			04:32		06:01 (38)
	16:04	17:14		18:21	7	07:53 (84)	20:33	21:42			22:40	36	06:37 (38)
9	09:23	08:27		07:13		07:44 (84)	06:44	05:24			04:31		06:02 (38)
	16:06	17:16		18:24	10	07:54 (84)	20:35	21:44			22:41	36	06:38 (38)
10	09:22	08:25		07:10		07:43 (84)	06:41	05:22			04:31		06:01 (38)
	16:07	17:19		18:26	13	07:56 (84)	20:37	21:46			22:43	37	06:38 (38)
11	09:21	08:23		07:07		07:42 (84)	06:38	05:20			04:30		06:02 (38)
	16:09	17:21		18:28	14	07:56 (84)	20:40	21:49			22:44	37	06:39 (38)
12	09:20	08:20		07:04		07:42 (84)	06:36	05:17			04:29		06:02 (38)
	16:11	17:23		18:31	14	07:56 (84)	20:42	21:51			22:45	36	06:38 (38)
13	09:18	08:18		07:02		07:41 (84)	06:33	05:15			04:29		06:02 (38)
	16:13	17:26		18:33	15	07:56 (84)	20:44	21:53			22:46	37	06:39 (38)
14	09:17	08:15		06:59		07:42 (84)	06:30	05:13			04:28		06:03 (38)
	16:15	17:28		18:35	13	07:55 (84)	20:47	21:55			22:46	36	06:39 (38)
15	09:16	08:13		06:56		07:42 (84)	06:27	05:11			04:28		06:02 (38)
	16:17	17:31		18:38	11	07:53 (84)	20:49	21:57			22:47	37	06:39 (38)
16	09:14	08:10		06:53		07:44 (84)	06:24	05:09			04:28		06:02 (38)
	16:19	17:33		18:40	7	07:51 (84)	20:51	22:00			22:48	37	06:39 (38)
17	09:13	08:07		06:50			06:22	05:06		06:12 (38)	04:27		06:03 (38)
	16:21	17:36		18:42			20:54	22:02	10	06:22 (38)	22:48	37	06:40 (38)
18	09:12	08:05		06:47			06:19	05:04		06:11 (38)	04:27		06:03 (38)
	16:24	17:38		18:45			20:56	22:04	14	06:25 (38)	22:49	37	06:40 (38)
19	09:10	08:02		06:44			06:16	05:02		06:09 (38)	04:27		06:03 (38)
	16:26	17:41		18:47			20:58	22:06	18	06:27 (38)	22:49	37	06:40 (38)
20	09:08	08:00		06:42			06:13	05:00		06:08 (38)	04:27		06:03 (38)
	16:28	17:43		18:49			21:00	22:08	20	06:28 (38)	22:50	37	06:40 (38)
21	09:07	07:57		06:39			06:11	04:58		06:06 (38)	04:27		06:03 (38)
	16:30	17:46		18:52			21:03	22:10	23	06:29 (38)	22:50	37	06:40 (38)
22	09:05	07:54		06:36			06:08	04:56		06:05 (38)	04:27		06:04 (38)
	16:32	17:48		18:54			21:05	22:12	25	06:30 (38)	22:50	37	06:41 (38)
23	09:03	07:52		06:33			06:05	04:55		06:03 (38)	04:28		06:04 (38)
	16:35	17:50	8	08:29 (85)	18:56			21:07	22:14	28	06:31 (38)	22:50	37	06:41 (38)
24	09:02	07:49		08:18 (85)	06:30			06:02	04:53		06:03 (38)	04:28		06:04 (38)
	16:37	17:53	12	08:30 (85)	18:58			21:10	22:16	29	06:32 (38)	22:50	37	06:41 (38)
25	09:00	07:46		08:17 (85)	06:27			06:00	04:51		06:02 (38)	04:28		06:05 (38)
	16:39	17:55	14	08:31 (85)	19:01			21:12	22:18	30	06:32 (38)	22:50	37	06:42 (38)
26	08:58	07:44		08:16 (85)	06:24			05:57	04:49		06:02 (38)	04:29		06:05 (38)
	16:42	17:58	15	08:31 (85)	19:03			21:14	22:20	31	06:33 (38)	22:50	36	06:41 (38)
27	08:56	07:41		08:15 (85)	06:21			05:54	04:48		06:01 (38)	04:29		06:05 (38)
	16:44	18:00	16	08:31 (85)	19:05			21:17	22:22	32	06:33 (38)	22:50	37	06:42 (38)
28	08:54	07:38		08:15 (85)	06:18			05:52	04:46		06:01 (38)	04:30		06:05 (38)
	16:47	18:02	15	08:30 (85)	19:08			21:19	22:24	33	06:34 (38)	22:50	37	06:42 (38)
29	08:52				07:16			05:49	04:44		06:01 (38)	04:31		06:05 (38)
	16:49				20:10			21:21	22:25	34	06:35 (38)	22:49	37	06:42 (38)
30	08:50				07:13			05:47	04:43		06:01 (38)	04:32		06:06 (38)
	16:51				20:12			21:24	22:27	34	06:35 (38)	22:49	37	06:43 (38)
31	08:48				07:10				04:41		06:01 (38)			
	16:54				20:14				22:29	34	06:35 (38)			
Potential sun hours	221	260		365			432	521			547		
Total, worst case			80			147				395			1094	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September			October			November	December
1	04:32		06:06 (38)	05:24	06:33			07:39		08:21 (84)	07:51	09:00
	22:48	37	06:43 (38)	22:01	20:40			19:13	14	08:35 (84)	16:49	15:52
2	04:33		06:07 (38)	05:27	06:35			07:42		08:20 (84)	07:54	09:01
	22:48	36	06:43 (38)	21:58	20:37			19:10	15	08:35 (84)	16:47	15:50
3	04:34		06:06 (38)	05:29	06:38			07:44		08:20 (84)	07:56	09:03
	22:47	37	06:43 (38)	21:56	20:34			19:07	13	08:33 (84)	16:44	15:49
4	04:35		06:06 (38)	05:31	06:40			07:46		08:21 (84)	07:59	09:05
	22:46	37	06:43 (38)	21:54	20:31			19:05	12	08:33 (84)	16:42	15:48
5	04:37		06:06 (38)	05:33	06:42			07:48		08:22 (84)	08:01	09:07
	22:46	37	06:43 (38)	21:51	20:28			19:02	9	08:31 (84)	16:39	15:47
6	04:38		06:08 (38)	05:35	06:44			07:51			08:03	09:09
	22:45	36	06:44 (38)	21:49	20:25			18:59			16:37	15:47
7	04:39		06:08 (38)	05:38	06:47			07:53			08:06	09:10
	22:44	36	06:44 (38)	21:47	20:23			18:56			16:35	15:46
8	04:40		06:08 (38)	05:40	06:49			07:55			08:08	09:12
	22:43	36	06:44 (38)	21:44	20:20			18:53			16:32	15:45
9	04:42		06:08 (38)	05:42	06:51			07:57			08:11	09:13
	22:42	36	06:44 (38)	21:42	20:17			18:50			16:30	15:44
10	04:43		06:08 (38)	05:44	06:53			08:00		08:54 (85)	08:13	09:15
	22:40	35	06:43 (38)	21:39	20:14			18:48	7	09:01 (85)	16:28	15:44
11	04:45		06:09 (38)	05:46	06:55			08:02		08:51 (85)	08:15	09:16
	22:39	35	06:44 (38)	21:37	20:11			18:45	11	09:02 (85)	16:26	15:43
12	04:46		06:09 (38)	05:49	06:58			08:04		08:49 (85)	08:18	09:17
	22:38	35	06:44 (38)	21:34	20:08			18:42	14	09:03 (85)	16:24	15:43
13	04:48		06:09 (38)	05:51	07:00			08:07		08:49 (85)	08:20	09:19
	22:36	34	06:43 (38)	21:31	20:05			18:39	15	09:04 (85)	16:22	15:43
14	04:49		06:10 (38)	05:53	07:02			08:09		08:48 (85)	08:22	09:20
	22:35	33	06:43 (38)	21:29	20:02			18:36	15	09:03 (85)	16:19	15:43
15	04:51		06:10 (38)	05:55	07:04			08:11		08:48 (85)	08:25	09:21
	22:34	33	06:43 (38)	21:26	19:59			18:34	16	09:04 (85)	16:17	15:42
16	04:53		06:11 (38)	05:58	07:06			08:14		08:48 (85)	08:27	09:22
	22:32	32	06:43 (38)	21:24	19:57			18:31	15	09:03 (85)	16:15	15:42
17	04:54		06:11 (38)	06:00	07:09			08:16		08:49 (85)	08:29	09:23
	22:30	31	06:42 (38)	21:21	19:54			18:28	13	09:02 (85)	16:14	15:42
18	04:56		06:12 (38)	06:02	07:11			08:18		08:50 (85)	08:32	09:24
	22:29	30	06:42 (38)	21:18	19:51			18:25	11	09:01 (85)	16:12	15:42
19	04:58		06:13 (38)	06:04	07:13			08:20		08:53 (85)	08:34	09:25
	22:27	29	06:42 (38)	21:16	19:48			18:23	6	08:59 (85)	16:10	15:43
20	05:00		06:13 (38)	06:07	07:15			08:23			08:36	09:25
	22:25	28	06:41 (38)	21:13	19:45			18:20			16:08	15:43
21	05:02		06:14 (38)	06:09	07:17			08:25			08:39	09:26
	22:23	27	06:41 (38)	21:10	19:42			18:17			16:06	15:43
22	05:04		06:16 (38)	06:11	07:20			08:28			08:41	09:27
	22:22	24	06:40 (38)	21:08	19:39			18:15			16:04	15:44
23	05:06		06:17 (38)	06:13	07:22			08:30			08:43	09:27
	22:20	21	06:38 (38)	21:05	19:36			18:12			16:03	15:44
24	05:08		06:18 (38)	06:15	07:24			08:32			08:45	09:28
	22:18	19	06:37 (38)	21:02	19:33			18:09			16:01	15:45
25	05:10		06:20 (38)	06:18	07:26			07:35			08:47	09:28
	22:16	16	06:36 (38)	20:59	19:30			17:07			16:00	15:46
26	05:12		06:22 (38)	06:20	07:28			07:37			08:49	09:28
	22:14	12	06:34 (38)	20:57	19:28			17:04			15:58	15:46
27	05:14		06:25 (38)	06:22	07:31		08:27 (84)	07:39			08:52	09:28
	22:12	6	06:31 (38)	20:54	19:25	5	08:32 (84)	17:02			15:57	15:47
28	05:16			06:24	07:33		08:24 (84)	07:42			08:54	09:28
	22:10			20:51	19:22	10	08:34 (84)	16:59			15:55	15:48
29	05:18			06:27	07:35		08:22 (84)	07:44			08:56	09:28
	22:07			20:48	19:19	12	08:34 (84)	16:56			15:54	15:49
30	05:20			06:29	07:37		08:21 (84)	07:47			08:58	09:28
	22:05			20:45	19:16	14	08:35 (84)	16:54			15:53	15:50
31	05:22			06:31				07:49				09:28
	22:03			20:43				16:51				15:51
Potential sun hours	545			478	386			319			236	200
Total, worst case		808				41			186			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April	May			June		
1	09:28	08:46		07:35		08:18 (85)	07:07	05:44			04:40		06:18 (38)
	15:53	16:56		18:05	13	08:31 (85)	20:17	21:26			22:30	28	06:46 (38)
2	09:27	08:43		07:33		08:19 (85)	07:04	05:42			04:39		06:18 (38)
	15:54	16:59		18:07	10	08:29 (85)	20:19	21:28			22:32	28	06:46 (38)
3	09:27	08:41		07:30		08:21 (85)	07:01	05:39			04:38		06:17 (38)
	15:56	17:01		18:10	5	08:26 (85)	20:21	21:31			22:33	29	06:46 (38)
4	09:26	08:39		07:27			06:58	05:37			04:36		06:16 (38)
	15:57	17:04		18:12			20:24	21:33			22:35	30	06:46 (38)
5	09:26	08:37		07:24			06:55	05:34			04:35		06:16 (38)
	15:59	17:06		18:14			20:26	21:35			22:36	31	06:47 (38)
6	09:25	08:34		07:21			06:53	05:32			04:34		06:15 (38)
	16:00	17:09		18:17			20:28	21:37			22:38	32	06:47 (38)
7	09:24	08:32		07:19		07:48 (84)	06:50	05:29			04:33		06:14 (38)
	16:02	17:11		18:19	6	07:54 (84)	20:31	21:40			22:39	32	06:46 (38)
8	09:24	08:30		07:16		07:46 (84)	06:47	05:27			04:32		06:13 (38)
	16:04	17:14		18:21	10	07:56 (84)	20:33	21:42			22:40	33	06:46 (38)
9	09:23	08:27		07:13		07:44 (84)	06:44	05:24			04:31		06:14 (38)
	16:06	17:16		18:24	13	07:57 (84)	20:35	21:44			22:41	33	06:47 (38)
10	09:22	08:25		07:10		07:44 (84)	06:41	05:22			04:31		06:13 (38)
	16:07	17:19		18:26	14	07:58 (84)	20:37	21:46			22:43	33	06:46 (38)
11	09:21	08:23		07:07		07:44 (84)	06:38	05:20			04:30		06:14 (38)
	16:09	17:21		18:28	14	07:58 (84)	20:40	21:49			22:44	33	06:47 (38)
12	09:20	08:20		07:04		07:44 (84)	06:36	05:17			04:29		06:14 (38)
	16:11	17:23		18:31	13	07:57 (84)	20:42	21:51			22:45	32	06:46 (38)
13	09:18	08:18		07:02		07:44 (84)	06:33	05:15			04:29		06:14 (38)
	16:13	17:26		18:33	12	07:56 (84)	20:44	21:53			22:46	33	06:47 (38)
14	09:17	08:15		06:59		07:45 (84)	06:30	05:13			04:28		06:15 (38)
	16:15	17:28		18:35	10	07:55 (84)	20:47	21:55			22:46	32	06:47 (38)
15	09:16	08:13		06:56		07:46 (84)	06:27	05:11			04:28		06:15 (38)
	16:17	17:31		18:38	6	07:52 (84)	20:49	21:57			22:47	32	06:47 (38)
16	09:14	08:10		06:53			06:24	05:09		06:39 (38)	04:28		06:15 (38)
	16:19	17:33		18:40			20:51	22:00	2	06:41 (38)	22:48	32	06:47 (38)
17	09:13	08:07		06:50			06:22	05:06		06:37 (38)	04:27		06:15 (38)
	16:21	17:36		18:42			20:54	22:02	4	06:41 (38)	22:48	32	06:47 (38)
18	09:12	08:05		06:47			06:19	05:04		06:36 (38)	04:27		06:16 (38)
	16:24	17:38		18:45			20:56	22:04	7	06:43 (38)	22:49	31	06:47 (38)
19	09:10	08:02		06:44			06:16	05:02		06:35 (38)	04:27		06:16 (38)
	16:26	17:41		18:47			20:58	22:06	8	06:43 (38)	22:49	31	06:47 (38)
20	09:08	08:00		06:42			06:13	05:00		06:33 (38)	04:27		06:16 (38)
	16:28	17:43		18:49			21:00	22:08	10	06:43 (38)	22:50	31	06:47 (38)
21	09:07	07:57		06:39			06:11	04:58		06:31 (38)	04:27		06:16 (38)
	16:30	17:46		18:52			21:03	22:10	12	06:43 (38)	22:50	31	06:47 (38)
22	09:05	07:54		06:36			06:08	04:56		06:30 (38)	04:27		06:17 (38)
	16:32	17:48	5	08:28 (85)	18:54			21:05	22:12	14	06:44 (38)	22:50	31	06:48 (38)
23	09:03	07:52		08:21 (85)	06:33			06:05	04:55		06:29 (38)	04:28		06:17 (38)
	16:35	17:50	10	08:31 (85)	18:56			21:07	22:14	15	06:44 (38)	22:50	31	06:48 (38)
24	09:02	07:49		08:18 (85)	06:30			06:02	04:53		06:28 (38)	04:28		06:17 (38)
	16:37	17:53	13	08:31 (85)	18:58			21:10	22:16	17	06:45 (38)	22:50	31	06:48 (38)
25	09:00	07:46		08:17 (85)	06:27			06:00	04:51		06:26 (38)	04:28		06:18 (38)
	16:39	17:55	15	08:32 (85)	19:01			21:12	22:18	19	06:45 (38)	22:50	31	06:49 (38)
26	08:58	07:44		08:17 (85)	06:24			05:57	04:49		06:25 (38)	04:29		06:17 (38)
	16:42	17:58	15	08:32 (85)	19:03			21:14	22:20	20	06:45 (38)	22:50	32	06:49 (38)
27	08:56	07:41		08:17 (85)	06:21			05:54	04:48		06:23 (38)	04:29		06:18 (38)
	16:44	18:00	14	08:31 (85)	19:05			21:17	22:22	22	06:45 (38)	22:50	32	06:50 (38)
28	08:54	07:38		08:17 (85)	06:18			05:52	04:46		06:23 (38)	04:30		06:17 (38)
	16:47	18:02	14	08:31 (85)	19:08			21:19	22:24	22	06:45 (38)	22:50	32	06:49 (38)
29	08:52				07:16			05:49	04:44		06:22 (38)	04:31		06:18 (38)
	16:49				20:10			21:21	22:25	24	06:46 (38)	22:49	32	06:50 (38)
30	08:50				07:13			05:47	04:43		06:21 (38)	04:32		06:18 (38)
	16:51				20:12			21:24	22:27	25	06:46 (38)	22:49	33	06:51 (38)
31	08:48				07:10				04:41		06:19 (38)			
	16:54				20:14				22:29	26	06:45 (38)			
Potential sun hours	221	260		365			432	521			547		
Total, worst case			86			126			247			944	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September			October		November	December
1	04:32		06:18 (38)	05:24	06:33			07:39		08:23 (84)	07:51	09:00
	22:48	33	06:51 (38)	22:01	20:40			19:13	13	08:36 (84)	16:49	15:52
2	04:33		06:19 (38)	05:27	06:35			07:42		08:22 (84)	07:54	09:01
	22:48	33	06:52 (38)	21:58	20:37			19:10	14	08:36 (84)	16:47	15:50
3	04:34		06:18 (38)	05:29	06:38			07:44		08:21 (84)	07:56	09:03
	22:47	33	06:51 (38)	21:56	20:34			19:07	14	08:35 (84)	16:44	15:49
4	04:35		06:18 (38)	05:31	06:40			07:46		08:22 (84)	07:59	09:05
	22:46	33	06:51 (38)	21:54	20:31			19:05	13	08:35 (84)	16:42	15:48
5	04:37		06:19 (38)	05:33	06:42			07:48		08:22 (84)	08:01	09:07
	22:46	33	06:52 (38)	21:51	20:28			19:02	12	08:34 (84)	16:39	15:47
6	04:38		06:21 (38)	05:35	06:44			07:51		08:23 (84)	08:03	09:09
	22:45	32	06:53 (38)	21:49	20:25			18:59	9	08:32 (84)	16:37	15:47
7	04:39		06:22 (38)	05:38	06:47			07:53			08:06	09:10
	22:44	31	06:53 (38)	21:47	20:23			18:56			16:35	15:46
8	04:40		06:23 (38)	05:40	06:49			07:55			08:08	09:12
	22:43	30	06:53 (38)	21:44	20:20			18:53			16:32	15:45
9	04:42		06:24 (38)	05:42	06:51			07:57			08:11	09:13
	22:42	29	06:53 (38)	21:42	20:17			18:50			16:30	15:44
10	04:43		06:25 (38)	05:44	06:53			08:00			08:13	09:15
	22:40	28	06:53 (38)	21:39	20:14			18:48			16:28	15:44
11	04:45		06:26 (38)	05:46	06:55			08:02		08:54 (85)	08:15	09:16
	22:39	28	06:54 (38)	21:37	20:11			18:45	7	09:01 (85)	16:26	15:43
12	04:46		06:27 (38)	05:49	06:58			08:04		08:51 (85)	08:18	09:17
	22:38	27	06:54 (38)	21:34	20:08			18:42	12	09:03 (85)	16:24	15:43
13	04:48		06:28 (38)	05:51	07:00			08:07		08:51 (85)	08:20	09:19
	22:36	26	06:54 (38)	21:32	20:05			18:39	13	09:04 (85)	16:22	15:43
14	04:49		06:30 (38)	05:53	07:02			08:09		08:49 (85)	08:22	09:20
	22:35	24	06:54 (38)	21:29	20:02			18:36	15	09:04 (85)	16:19	15:43
15	04:51		06:31 (38)	05:55	07:04			08:11		08:49 (85)	08:25	09:21
	22:34	23	06:54 (38)	21:26	19:59			18:34	15	09:04 (85)	16:17	15:42
16	04:53		06:33 (38)	05:58	07:06			08:14		08:49 (85)	08:27	09:22
	22:32	22	06:55 (38)	21:24	19:57			18:31	15	09:04 (85)	16:15	15:42
17	04:54		06:33 (38)	06:00	07:09			08:16		08:50 (85)	08:29	09:23
	22:30	21	06:54 (38)	21:21	19:54			18:28	14	09:04 (85)	16:14	15:42
18	04:56		06:35 (38)	06:02	07:11			08:18		08:50 (85)	08:32	09:24
	22:29	20	06:55 (38)	21:18	19:51			18:25	12	09:02 (85)	16:12	15:42
19	04:58		06:37 (38)	06:04	07:13			08:21		08:53 (85)	08:34	09:25
	22:27	18	06:55 (38)	21:16	19:48			18:23	8	09:01 (85)	16:10	15:43
20	05:00		06:38 (38)	06:07	07:15			08:23		08:55 (85)	08:36	09:25
	22:25	16	06:54 (38)	21:13	19:45			18:20	3	08:58 (85)	16:08	15:43
21	05:02		06:39 (38)	06:09	07:17			08:25			08:39	09:26
	22:23	15	06:54 (38)	21:10	19:42			18:17			16:06	15:43
22	05:04		06:41 (38)	06:11	07:20			08:28			08:41	09:27
	22:22	13	06:54 (38)	21:08	19:39			18:15			16:04	15:44
23	05:06		06:42 (38)	06:13	07:22			08:30			08:43	09:27
	22:20	11	06:53 (38)	21:05	19:36			18:12			16:03	15:44
24	05:08		06:44 (38)	06:15	07:24			08:32			08:45	09:28
	22:18	9	06:53 (38)	21:02	19:33			18:09			16:01	15:45
25	05:10		06:45 (38)	06:18	07:26			07:35			08:47	09:28
	22:16	8	06:53 (38)	20:59	19:30			17:07			16:00	15:46
26	05:12		06:47 (38)	06:20	07:28			07:37			08:49	09:28
	22:14	6	06:53 (38)	20:57	19:28			17:04			15:58	15:46
27	05:14		06:49 (38)	06:22	07:31			07:39			08:52	09:28
	22:12	3	06:52 (38)	20:54	19:25			17:02			15:57	15:47
28	05:16		06:51 (38)	06:24	07:33		08:29 (84)	07:42			08:54	09:28
	22:10	1	06:52 (38)	20:51	19:22	3	08:32 (84)	16:59			15:55	15:48
29	05:18			06:27	07:35		08:25 (84)	07:44			08:56	09:28
	22:07			20:48	19:19	9	08:34 (84)	16:56			15:54	15:49
30	05:20			06:29	07:37		08:23 (84)	07:47			08:58	09:28
	22:05			20:45	19:16	12	08:35 (84)	16:54			15:53	15:50
31	05:22			06:31				07:49				09:28
	22:03			20:43				16:51				15:51
Potential sun hours	545			478	386			319			236	200
Total, worst case		606				24			189			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March		April	May		June	
1	09:28	08:46		07:35	08:11 (84)	07:07	05:44	07:08 (38)	04:40	06:45 (38)
	15:53	16:56		18:05	6 08:17 (84)	20:17	21:26	1 07:09 (38)	22:30	32 07:17 (38)
2	09:27	08:43		07:33	08:08 (84)	07:04	05:42	07:06 (38)	04:39	06:46 (38)
	15:54	16:59		18:07	11 08:19 (84)	20:19	21:28	6 07:12 (38)	22:32	31 07:17 (38)
3	09:27	08:41		07:30	08:06 (84)	07:01	05:39	07:04 (38)	04:38	06:46 (38)
	15:56	17:01		18:10	13 08:19 (84)	20:21	21:31	9 07:13 (38)	22:33	31 07:17 (38)
4	09:26	08:39		07:27	08:05 (84)	06:58	05:37	07:02 (38)	04:36	06:47 (38)
	15:57	17:04		18:12	14 08:19 (84)	20:24	21:33	13 07:15 (38)	22:35	29 07:16 (38)
5	09:26	08:37		07:24	08:05 (84)	06:55	05:34	07:00 (38)	04:35	06:48 (38)
	15:59	17:06		18:14	14 08:19 (84)	20:26	21:35	16 07:16 (38)	22:36	29 07:17 (38)
6	09:25	08:34		07:21	08:05 (84)	06:53	05:32	06:58 (38)	04:34	06:49 (38)
	16:00	17:09		18:17	13 08:18 (84)	20:28	21:37	19 07:17 (38)	22:38	27 07:16 (38)
7	09:24	08:32		07:19	08:05 (84)	06:50	05:29	06:55 (38)	04:33	06:49 (38)
	16:02	17:11		18:19	12 08:17 (84)	20:31	21:40	22 07:17 (38)	22:39	27 07:16 (38)
8	09:24	08:30		07:16	08:06 (84)	06:47	05:27	06:54 (38)	04:32	06:49 (38)
	16:04	17:14		18:21	10 08:16 (84)	20:33	21:42	24 07:18 (38)	22:40	26 07:15 (38)
9	09:23	08:27		07:13	08:08 (84)	06:44	05:24	06:52 (38)	04:31	06:50 (38)
	16:06	17:16		18:24	5 08:13 (84)	20:35	21:44	27 07:19 (38)	22:42	26 07:16 (38)
10	09:22	08:25		07:10		06:41	05:22	06:50 (38)	04:31	06:51 (38)
	16:07	17:18		18:26		20:37	21:46	29 07:19 (38)	22:43	24 07:15 (38)
11	09:21	08:23		07:07		06:38	05:20	06:48 (38)	04:30	06:52 (38)
	16:09	17:21		18:28		20:40	21:49	32 07:20 (38)	22:44	23 07:15 (38)
12	09:20	08:20		07:04		06:36	05:17	06:46 (38)	04:29	06:52 (38)
	16:11	17:23		18:31		20:42	21:51	34 07:20 (38)	22:45	22 07:14 (38)
13	09:18	08:18		07:02		06:33	05:15	06:45 (38)	04:29	06:53 (38)
	16:13	17:26		18:33		20:44	21:53	35 07:20 (38)	22:46	21 07:14 (38)
14	09:17	08:15		06:59		06:30	05:13	06:43 (38)	04:28	06:53 (38)
	16:15	17:28		18:35		20:47	21:55	37 07:20 (38)	22:46	22 07:15 (38)
15	09:16	08:13	08:44 (85)	06:56		06:27	05:11	06:41 (38)	04:28	06:53 (38)
	16:17	17:31	6 08:50 (85)	18:38		20:49	21:57	39 07:20 (38)	22:47	21 07:14 (38)
16	09:14	08:10	08:42 (85)	06:53		06:24	05:09	06:41 (38)	04:28	06:54 (38)
	16:19	17:33	10 08:52 (85)	18:40		20:51	22:00	39 07:20 (38)	22:48	20 07:14 (38)
17	09:13	08:07	08:40 (85)	06:50		06:22	05:06	06:40 (38)	04:27	06:54 (38)
	16:21	17:36	13 08:53 (85)	18:42		20:54	22:02	40 07:20 (38)	22:48	20 07:14 (38)
18	09:12	08:05	08:40 (85)	06:47		06:19	05:04	06:41 (38)	04:27	06:55 (38)
	16:24	17:38	14 08:54 (85)	18:45		20:56	22:04	40 07:21 (38)	22:49	19 07:14 (38)
19	09:10	08:02	08:39 (85)	06:44		06:16	05:02	06:41 (38)	04:27	06:55 (38)
	16:26	17:41	15 08:54 (85)	18:47		20:58	22:06	40 07:21 (38)	22:49	19 07:14 (38)
20	09:08	08:00	08:39 (85)	06:42		06:13	05:00	06:41 (38)	04:27	06:55 (38)
	16:28	17:43	15 08:54 (85)	18:49		21:00	22:08	39 07:20 (38)	22:50	19 07:14 (38)
21	09:07	07:57	08:39 (85)	06:39		06:11	04:58	06:41 (38)	04:27	06:55 (38)
	16:30	17:46	14 08:53 (85)	18:52		21:03	22:10	39 07:20 (38)	22:50	19 07:14 (38)
22	09:05	07:54	08:39 (85)	06:36		06:08	04:56	06:41 (38)	04:27	06:56 (38)
	16:32	17:48	13 08:52 (85)	18:54		21:05	22:12	39 07:20 (38)	22:50	19 07:15 (38)
23	09:03	07:52	08:41 (85)	06:33		06:05	04:55	06:41 (38)	04:28	06:56 (38)
	16:35	17:50	11 08:52 (85)	18:56		21:07	22:14	39 07:20 (38)	22:50	19 07:15 (38)
24	09:02	07:49	08:42 (85)	06:30		06:02	04:53	06:42 (38)	04:28	06:56 (38)
	16:37	17:53	8 08:50 (85)	18:58		21:10	22:16	38 07:20 (38)	22:50	19 07:15 (38)
25	09:00	07:46		06:27		06:00	04:51	06:42 (38)	04:28	06:57 (38)
	16:39	17:55		19:01		21:12	22:18	37 07:19 (38)	22:50	19 07:16 (38)
26	08:58	07:44		06:24		05:57	04:49	06:43 (38)	04:29	06:56 (38)
	16:42	17:58		19:03		21:14	22:20	37 07:20 (38)	22:50	20 07:16 (38)
27	08:56	07:41		06:21		05:54	04:48	06:43 (38)	04:29	06:56 (38)
	16:44	18:00		19:05		21:17	22:22	36 07:19 (38)	22:50	21 07:17 (38)
28	08:54	07:38		06:18		05:52	04:46	06:43 (38)	04:30	06:56 (38)
	16:47	18:02		19:08		21:19	22:24	36 07:19 (38)	22:50	21 07:17 (38)
29	08:52			07:16		05:49	04:44	06:44 (38)	04:31	06:56 (38)
	16:49			20:10		21:21	22:25	35 07:19 (38)	22:49	21 07:17 (38)
30	08:50			07:13		05:47	04:43	06:45 (38)	04:32	06:56 (38)
	16:51			20:12		21:24	22:27	34 07:19 (38)	22:49	22 07:18 (38)
31	08:48			07:10			04:41	06:44 (38)		
	16:54			20:14			22:29	34 07:18 (38)		
Potential sun hours	221	260		365		432	521		547	
Total, worst case			119		98			945		688

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July		August		September	October		November	December
1	04:32		06:56 (38)	05:24	06:57 (38)	06:33	07:39		07:51	09:00
	22:48	23	07:19 (38)	22:01	33	07:30 (38)	20:40	19:13		16:49	15:52
2	04:33		06:56 (38)	05:27	06:59 (38)	06:35	07:42		07:54	09:01
	22:48	24	07:20 (38)	21:58	31	07:30 (38)	20:37	19:10		16:47	15:50
3	04:34		06:55 (38)	05:29	07:01 (38)	06:38	07:44		07:56	09:03
	22:47	25	07:20 (38)	21:56	28	07:29 (38)	20:34	19:07		16:44	15:49
4	04:35		06:55 (38)	05:31	07:03 (38)	06:40	07:46		07:59	09:05
	22:46	25	07:20 (38)	21:54	26	07:29 (38)	20:31	19:05		16:42	15:48
5	04:37		06:54 (38)	05:33	07:05 (38)	06:42	07:48	08:44 (84)	08:01	09:07
	22:46	27	07:21 (38)	21:51	23	07:28 (38)	20:28	19:02	8	08:52 (84)	16:39	15:47
6	04:38		06:55 (38)	05:35	07:06 (38)	06:44	07:51	08:42 (84)	08:03	09:09
	22:45	28	07:23 (38)	21:49	21	07:27 (38)	20:25	18:59	11	08:53 (84)	16:37	15:47
7	04:39		06:55 (38)	05:38	07:08 (38)	06:47	07:53	08:41 (84)	08:06	09:10
	22:44	28	07:23 (38)	21:47	18	07:26 (38)	20:23	18:56	13	08:54 (84)	16:35	15:46
8	04:40		06:54 (38)	05:40	07:10 (38)	06:49	07:55	08:40 (84)	08:08	09:12
	22:43	30	07:24 (38)	21:44	15	07:25 (38)	20:20	18:53	14	08:54 (84)	16:32	15:45
9	04:42		06:54 (38)	05:42	07:12 (38)	06:51	07:57	08:39 (84)	08:11	09:13
	22:42	30	07:24 (38)	21:42	12	07:24 (38)	20:17	18:50	15	08:54 (84)	16:30	15:44
10	04:43		06:53 (38)	05:44	07:13 (38)	06:53	08:00	08:40 (84)	08:13	09:15
	22:40	31	07:24 (38)	21:39	9	07:22 (38)	20:14	18:48	14	08:54 (84)	16:28	15:44
11	04:45		06:54 (38)	05:46	07:15 (38)	06:55	08:02	08:40 (84)	08:15	09:16
	22:39	32	07:26 (38)	21:37	5	07:20 (38)	20:11	18:45	13	08:53 (84)	16:26	15:43
12	04:46		06:53 (38)	05:49			06:58	08:04	08:42 (84)	08:18	09:17
	22:38	33	07:26 (38)	21:34			20:08	18:42	9	08:51 (84)	16:24	15:43
13	04:48		06:53 (38)	05:51			07:00	08:07	08:45 (84)	08:20	09:19
	22:36	33	07:26 (38)	21:32			20:05	18:39	4	08:49 (84)	16:22	15:43
14	04:49		06:53 (38)	05:53			07:02	08:09		08:22	09:20
	22:35	34	07:27 (38)	21:29			20:02	18:36		16:19	15:43
15	04:51		06:52 (38)	05:55			07:04	08:11		08:25	09:21
	22:34	35	07:27 (38)	21:26			19:59	18:34		16:17	15:42
16	04:53		06:52 (38)	05:58			07:06	08:14		08:27	09:22
	22:32	36	07:28 (38)	21:24			19:57	18:31		16:15	15:42
17	04:54		06:52 (38)	06:00			07:09	08:16	09:17 (85)	08:29	09:23
	22:30	36	07:28 (38)	21:21			19:54	18:28	2	09:19 (85)	16:13	15:42
18	04:56		06:52 (38)	06:02			07:11	08:18	09:13 (85)	08:32	09:24
	22:29	37	07:29 (38)	21:18			19:51	18:25	9	09:22 (85)	16:12	15:42
19	04:58		06:52 (38)	06:04			07:13	08:21	09:12 (85)	08:34	09:25
	22:27	38	07:30 (38)	21:16			19:48	18:23	12	09:24 (85)	16:10	15:43
20	05:00		06:51 (38)	06:07			07:15	08:23	09:10 (85)	08:36	09:25
	22:25	38	07:29 (38)	21:13			19:45	18:20	14	09:24 (85)	16:08	15:43
21	05:02		06:51 (38)	06:09			07:17	08:25	09:10 (85)	08:39	09:26
	22:23	39	07:30 (38)	21:10			19:42	18:17	15	09:25 (85)	16:06	15:43
22	05:04		06:52 (38)	06:11			07:19	08:28	09:09 (85)	08:41	09:27
	22:22	39	07:31 (38)	21:08			19:39	18:15	15	09:24 (85)	16:04	15:44
23	05:06		06:51 (38)	06:13			07:22	08:30	09:09 (85)	08:43	09:27
	22:20	39	07:30 (38)	21:05			19:36	18:12	15	09:24 (85)	16:03	15:44
24	05:08		06:51 (38)	06:15			07:24	08:32	09:09 (85)	08:45	09:28
	22:18	40	07:31 (38)	21:02			19:33	18:09	14	09:23 (85)	16:01	15:45
25	05:10		06:51 (38)	06:18			07:26	07:35	08:10 (85)	08:47	09:28
	22:16	40	07:31 (38)	20:59			19:30	17:07	13	08:23 (85)	16:00	15:46
26	05:12		06:51 (38)	06:20			07:28	07:37	08:13 (85)	08:49	09:28
	22:14	40	07:31 (38)	20:57			19:28	17:04	9	08:22 (85)	15:58	15:46
27	05:14		06:52 (38)	06:22			07:31	07:39	08:14 (85)	08:52	09:28
	22:12	39	07:31 (38)	20:54			19:25	17:02	5	08:19 (85)	15:57	15:47
28	05:16		06:52 (38)	06:24			07:33	07:42		08:54	09:28
	22:10	39	07:31 (38)	20:51			19:22	16:59		15:55	15:48
29	05:18		06:52 (38)	06:27			07:35	07:44		08:56	09:28
	22:07	38	07:30 (38)	20:48			19:19	16:56		15:54	15:49
30	05:20		06:54 (38)	06:29			07:37	07:47		08:58	09:28
	22:05	36	07:30 (38)	20:45			19:16	16:54		15:53	15:50
31	05:22		06:55 (38)	06:31				07:49			09:28
	22:03	35	07:30 (38)	20:43				16:51			15:51
Potential sun hours	545			478			386	319		236	200
Total, worst case		1047			221				224		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March		April	May	June
1	09:28	08:46		07:35		08:22 (22)	07:07	05:44	04:40
	15:53	16:56		18:05	23	08:45 (22)	20:17	21:26	22:31
2	09:28	08:44		07:33		08:21 (22)	07:04	05:41	04:39
	15:54	16:59		18:07	24	08:45 (22)	20:19	21:28	22:32
3	09:27	08:41		07:30		08:21 (22)	07:01	05:39	04:37
	15:56	17:01		18:10	24	08:45 (22)	20:21	21:31	22:34
4	09:27	08:39		07:27		08:20 (22)	06:58	05:36	04:36
	15:57	17:04		18:12	25	08:45 (22)	20:24	21:33	22:35
5	09:26	08:37		07:24		08:20 (22)	06:55	05:34	04:35
	15:59	17:06		18:14	24	08:44 (22)	20:26	21:35	22:37
6	09:25	08:35		07:22		08:20 (22)	06:53	05:31	04:34
	16:00	17:09		18:17	24	08:44 (22)	20:28	21:38	22:38
7	09:25	08:32		07:19		08:20 (22)	06:50	05:29	04:33
	16:02	17:11		18:19	23	08:43 (22)	20:31	21:40	22:39
8	09:24	08:30		07:16		08:21 (22)	06:47	05:27	04:32
	16:04	17:13		18:21	20	08:41 (22)	20:33	21:42	22:41
9	09:23	08:28	09:21 (2)	07:13		08:22 (22)	06:44	05:24	04:31
	16:05	17:16	2 09:23 (2)	18:24	19	08:41 (22)	20:35	21:44	22:42
10	09:22	08:25	09:18 (2)	07:10		08:24 (22)	06:41	05:22	04:30
	16:07	17:18	10 09:28 (2)	18:26	15	08:39 (22)	20:38	21:47	22:43
11	09:21	08:23	09:16 (2)	07:07		08:26 (22)	06:38	05:20	04:30
	16:09	17:21	13 09:29 (2)	18:28	10	08:36 (22)	20:40	21:49	22:44
12	09:20	08:20	09:14 (2)	07:05			06:36	05:17	04:29
	16:11	17:23	16 09:30 (2)	18:31			20:42	21:51	22:45
13	09:19	08:18	09:13 (2)	07:02			06:33	05:15	04:29
	16:13	17:26	17 09:30 (2)	18:33			20:44	21:53	22:46
14	09:17	08:15	09:13 (2)	06:59		07:37 (24)	06:30	05:13	04:28
	16:15	17:28	19 09:32 (2)	18:35	4	07:41 (24)	20:47	21:55	22:47
15	09:16	08:13	09:13 (2)	06:56		07:33 (24)	06:27	05:11	04:28
	16:17	17:31	19 09:32 (2)	18:38	11	07:44 (24)	20:49	21:58	22:47
16	09:15	08:10	09:12 (2)	06:53		07:31 (24)	06:24	05:08	04:27
	16:19	17:33	19 09:31 (2)	18:40	15	07:46 (24)	20:51	22:00	22:48
17	09:13	08:08	09:13 (2)	06:50		07:30 (24)	06:22	05:06	04:27
	16:21	17:36	19 09:32 (2)	18:42	16	07:46 (24)	20:54	22:02	22:49
18	09:12	08:05	09:13 (2)	06:47		07:29 (24)	06:19	05:04	04:27
	16:23	17:38	18 09:31 (2)	18:45	18	07:47 (24)	20:56	22:04	22:49
19	09:10	08:02	09:14 (2)	06:44		07:28 (24)	06:16	05:02	04:27
	16:26	17:41	16 09:30 (2)	18:47	19	07:47 (24)	20:58	22:06	22:50
20	09:09	08:00	09:14 (2)	06:42		07:27 (24)	06:13	05:00	04:27
	16:28	17:43	15 09:29 (2)	18:49	19	07:46 (24)	21:01	22:08	22:50
21	09:07	07:57	09:15 (2)	06:39		07:28 (24)	06:11	04:58	04:27
	16:30	17:46	12 09:27 (2)	18:52	19	07:47 (24)	21:03	22:10	22:50
22	09:05	07:54	09:19 (2)	06:36		07:28 (24)	06:08	04:56	04:27
	16:32	17:48	6 09:25 (2)	18:54	18	07:46 (24)	21:05	22:12	22:50
23	09:04	07:52		06:33		07:28 (24)	06:05	04:54	04:27
	16:35	17:50		18:56	17	07:45 (24)	21:08	22:14	22:51
24	09:02	07:49	08:32 (22)	06:30		07:29 (24)	06:02	04:53	04:28
	16:37	17:53	3 08:35 (22)	18:59	14	07:43 (24)	21:10	22:16	22:51
25	09:00	07:46	08:28 (22)	06:27		07:31 (24)	06:00	04:51	04:28
	16:39	17:55	12 08:40 (22)	19:01	10	07:41 (24)	21:12	22:18	22:51
26	08:58	07:44	08:25 (22)	06:24			05:57	04:49	04:29
	16:42	17:58	16 08:41 (22)	19:03			21:14	22:20	22:50
27	08:56	07:41	08:23 (22)	06:21			05:54	04:47	04:29
	16:44	18:00	19 08:42 (22)	19:05			21:17	22:22	22:50
28	08:54	07:38	08:23 (22)	06:18			05:52	04:46	04:30
	16:46	18:02	21 08:44 (22)	19:08			21:19	22:24	22:50
29	08:52			07:16			05:49	04:44	04:31
	16:49			20:10			21:21	22:26	22:50
30	08:50			07:13			05:47	04:43	04:31
	16:51			20:12			21:24	22:27	22:49
31	08:48			07:10				04:41	
	16:54			20:15				22:29	
Potential sun hours	221	260		365			432	521	547
Total, worst case			272		411				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September			October			November			December
1	04:32	05:24	06:33			07:40			07:52		08:47 (2)	09:00
	22:49	22:01	20:40			19:13			16:49	9	08:56 (2)	15:51
2	04:33	05:26	06:35			07:42		09:06 (22)	07:54			09:02
	22:48	21:59	20:37			19:10	6	09:12 (22)	16:46			15:50
3	04:34	05:29	06:38			07:44		09:02 (22)	07:56			09:04
	22:47	21:56	20:34			19:07	13	09:15 (22)	16:44			15:49
4	04:35	05:31	06:40			07:46		09:00 (22)	07:59			09:05
	22:47	21:54	20:31			19:05	17	09:17 (22)	16:42			15:48
5	04:36	05:33	06:42			07:48		08:58 (22)	08:01			09:07
	22:46	21:52	20:28			19:02	20	09:18 (22)	16:39			15:47
6	04:38	05:35	06:44			07:51		08:57 (22)	08:04			09:09
	22:45	21:49	20:26			18:59	22	09:19 (22)	16:37			15:46
7	04:39	05:37	06:47			07:53		08:57 (22)	08:06			09:10
	22:44	21:47	20:23			18:56	23	09:20 (22)	16:35			15:46
8	04:40	05:40	06:49			07:55		08:55 (22)	08:08			09:12
	22:43	21:44	20:20			18:53	24	09:19 (22)	16:32			15:45
9	04:41	05:42	06:51			07:58		08:55 (22)	08:11			09:14
	22:42	21:42	20:17			18:50	24	09:19 (22)	16:30			15:44
10	04:43	05:44	06:53			08:00		08:55 (22)	08:13			09:15
	22:41	21:39	20:14			18:48	24	09:19 (22)	16:28			15:44
11	04:44	05:46	06:55			08:02		08:54 (22)	08:16			09:16
	22:39	21:37	20:11			18:45	25	09:19 (22)	16:26			15:43
12	04:46	05:49	06:58			08:04		08:55 (22)	08:18			09:18
	22:38	21:34	20:08			18:42	23	09:18 (22)	16:24			15:43
13	04:48	05:51	07:00			08:07		08:55 (22)	08:20			09:19
	22:37	21:32	20:05			18:39	22	09:17 (22)	16:21			15:43
14	04:49	05:53	07:02			08:09		08:55 (22)	08:23			09:20
	22:35	21:29	20:02			18:36	21	09:16 (22)	16:19			15:42
15	04:51	05:55	07:04			08:11		08:57 (22)	08:25			09:21
	22:34	21:26	20:00			18:34	18	09:15 (22)	16:17			15:42
16	04:53	05:58	07:06			08:14		08:58 (22)	08:27			09:22
	22:32	21:24	19:57			18:31	15	09:13 (22)	16:15			15:42
17	04:54	06:00	07:09			08:16		09:01 (22)	08:30			09:23
	22:31	21:21	19:54			18:28	10	09:11 (22)	16:13			15:42
18	04:56	06:02	07:11		08:19 (24)	08:18			08:32			09:24
	22:29	21:19	19:51	9	08:28 (24)	18:25			16:11			15:42
19	04:58	06:04	07:13		08:16 (24)	08:21			08:34			09:25
	22:27	21:16	19:48	13	08:29 (24)	18:23			16:10			15:43
20	05:00	06:06	07:15		08:14 (24)	08:23		09:48 (2)	08:37			09:26
	22:25	21:13	19:45	16	08:30 (24)	18:20	9	09:57 (2)	16:08			15:43
21	05:02	06:09	07:17		08:14 (24)	08:25		09:46 (2)	08:39			09:26
	22:24	21:10	19:42	17	08:31 (24)	18:17	13	09:59 (2)	16:06			15:43
22	05:04	06:11	07:20		08:13 (24)	08:28		09:44 (2)	08:41			09:27
	22:22	21:08	19:39	18	08:31 (24)	18:15	16	10:00 (2)	16:04			15:44
23	05:06	06:13	07:22		08:12 (24)	08:30		09:44 (2)	08:43			09:27
	22:20	21:05	19:36	19	08:31 (24)	18:12	17	10:01 (2)	16:03			15:44
24	05:08	06:15	07:24		08:12 (24)	08:32		09:42 (2)	08:45			09:28
	22:18	21:02	19:33	19	08:31 (24)	18:09	19	10:01 (2)	16:01			15:45
25	05:10	06:18	07:26		08:11 (24)	07:35		08:42 (2)	08:48			09:28
	22:16	20:59	19:31	19	08:30 (24)	17:07	19	09:01 (2)	15:59			15:45
26	05:12	06:20	07:28		08:12 (24)	07:37		08:43 (2)	08:50			09:28
	22:14	20:57	19:28	17	08:29 (24)	17:04	19	09:02 (2)	15:58			15:46
27	05:14	06:22	07:31		08:13 (24)	07:40		08:42 (2)	08:52			09:28
	22:12	20:54	19:25	15	08:28 (24)	17:02	19	09:01 (2)	15:57			15:47
28	05:16	06:24	07:33		08:14 (24)	07:42		08:43 (2)	08:54			09:29
	22:10	20:51	19:22	12	08:26 (24)	16:59	18	09:01 (2)	15:55			15:48
29	05:18	06:27	07:35		08:15 (24)	07:44		08:44 (2)	08:56			09:29
	22:08	20:48	19:19	8	08:23 (24)	16:56	17	09:01 (2)	15:54			15:49
30	05:20	06:29	07:37			07:47		08:44 (2)	08:58			09:28
	22:05	20:45	19:16			16:54	15	08:59 (2)	15:53			15:50
31	05:22	06:31				07:49		08:45 (2)				09:28
	22:03	20:43				16:51	13	08:58 (2)				15:51
Potential sun hours	545	478	386			319			236			200
Total, worst case				182			501			9		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:06	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:35	08:24 (22)	07:07	05:44	04:40	04:32	05:24	06:33		07:40		07:52	09:00
	15:53	16:56		18:05	23 08:47 (22)	20:17	21:26	22:31	22:49	22:01	20:40		19:13		16:49	15:51
2	09:28	08:44		07:33	08:23 (22)	07:04	05:41	04:39	04:33	05:26	06:35		07:42		07:54	09:02
	15:54	16:59		18:07	24 08:47 (22)	20:19	21:28	22:32	22:48	21:59	20:37		19:10		16:46	15:50
3	09:27	08:41		07:30	08:23 (22)	07:01	05:39	04:37	04:34	05:29	06:38		07:44		07:56	09:04
	15:56	17:01		18:10	24 08:47 (22)	20:21	21:31	22:34	22:47	21:56	20:34		19:07		16:44	15:49
4	09:27	08:39		07:27	08:23 (22)	06:58	05:36	04:36	04:35	05:31	06:40		07:46	09:05 (22)	07:59	09:05
	15:57	17:04		18:12	23 08:46 (22)	20:24	21:33	22:35	22:47	21:54	20:31		19:05	11 09:16 (22)	16:42	15:48
5	09:26	08:37		07:24	08:23 (22)	06:55	05:34	04:35	04:36	05:33	06:42		07:48	09:02 (22)	08:01	09:07
	15:59	17:06		18:14	22 08:45 (22)	20:26	21:35	22:37	22:46	21:52	20:28		19:02	16 09:18 (22)	16:39	15:47
6	09:25	08:35		07:22	08:23 (22)	06:53	05:31	04:34	04:38	05:35	06:44		07:51	09:00 (22)	08:04	09:09
	16:00	17:09		18:17	22 08:45 (22)	20:28	21:38	22:38	22:45	21:49	20:26		18:59	19 09:19 (22)	16:37	15:46
7	09:25	08:32		07:19	08:24 (22)	06:50	05:29	04:33	04:39	05:37	06:47		07:53	09:00 (22)	08:06	09:10
	16:02	17:11		18:19	19 08:43 (22)	20:31	21:40	22:39	22:44	21:47	20:23		18:56	20 09:20 (22)	16:35	15:46
8	09:24	08:30		07:16	08:24 (22)	06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:58 (22)	08:08	09:12
	16:04	17:13		18:21	18 08:42 (22)	20:33	21:42	22:41	22:43	21:44	20:20		18:53	23 09:21 (22)	16:32	15:45
9	09:23	08:28		07:13	08:27 (22)	06:44	05:24	04:31	04:41	05:42	06:51		07:58	08:57 (22)	08:11	09:14
	16:05	17:16		18:24	13 08:40 (22)	20:35	21:44	22:42	22:42	21:42	20:17		18:50	23 09:20 (22)	16:30	15:44
10	09:22	08:25		07:10	08:30 (22)	06:41	05:22	04:30	04:43	05:44	06:53		08:00	08:57 (22)	08:13	09:15
	16:07	17:18		18:26	7 08:37 (22)	20:38	21:47	22:43	22:41	21:39	20:14		18:48	24 09:21 (22)	16:28	15:44
11	09:21	08:23		07:07		06:38	05:20	04:30	04:44	05:46	06:55		08:02	08:57 (22)	08:16	09:16
	16:09	17:21		18:28		20:40	21:49	22:44	22:39	21:37	20:11		18:45	23 09:20 (22)	16:26	15:43
12	09:20	08:20		07:05		06:36	05:17	04:29	04:46	05:49	06:58		08:04	08:57 (22)	08:18	09:18
	16:11	17:23		18:31		20:42	21:51	22:45	22:38	21:34	20:08		18:42	24 09:21 (22)	16:24	15:43
13	09:19	08:18		07:02	07:40 (24)	06:33	05:15	04:29	04:48	05:51	07:00		08:07	08:57 (22)	08:20	09:19
	16:13	17:26		18:33	5 07:45 (24)	20:44	21:53	22:46	22:37	21:32	20:05		18:39	23 09:20 (22)	16:21	15:43
14	09:17	08:15		06:59	07:36 (24)	06:30	05:13	04:28	04:49	05:53	07:02		08:09	08:57 (22)	08:23	09:20
	16:15	17:28		18:35	11 07:47 (24)	20:47	21:55	22:47	22:35	21:29	20:02		18:36	21 09:18 (22)	16:19	15:42
15	09:16	08:13		06:56	07:34 (24)	06:27	05:11	04:28	04:51	05:55	07:04		08:11	08:58 (22)	08:25	09:21
	16:17	17:31		18:38	15 07:49 (24)	20:49	21:58	22:47	22:34	21:26	20:00		18:34	20 09:18 (22)	16:17	15:42
16	09:15	08:10		06:53	07:33 (24)	06:24	05:08	04:27	04:53	05:58	07:06		08:14	08:58 (22)	08:27	09:22
	16:19	17:33		18:40	16 07:49 (24)	20:51	22:00	22:48	22:32	21:24	19:57		18:31	18 09:16 (22)	16:15	15:42
17	09:13	08:08		06:50	07:32 (24)	06:22	05:06	04:27	04:54	06:00	07:09		08:16	09:00 (22)	08:30	09:23
	16:21	17:36		18:42	18 07:50 (24)	20:54	22:02	22:49	22:31	21:21	19:54		18:28	15 09:15 (22)	16:13	15:42
18	09:12	08:05		06:47	07:31 (24)	06:19	05:04	04:27	04:56	06:02	07:11		08:18	09:02 (22)	08:32	09:24
	16:23	17:38		18:45	19 07:50 (24)	20:56	22:04	22:49	22:29	21:19	19:51		18:25	10 09:12 (22)	16:11	15:42
19	09:10	08:02		06:44	07:31 (24)	06:16	05:02	04:27	04:58	06:04	07:13	08:22 (24)	08:21		08:34	09:25
	16:26	17:41		18:47	18 07:49 (24)	20:58	22:06	22:50	22:27	21:16	19:48	7 08:29 (24)	18:23		16:10	15:43
20	09:09	08:00		06:42	07:30 (24)	06:13	05:00	04:27	05:00	06:06	07:15	08:19 (24)	08:23		08:37	09:26
	16:28	17:43		18:49	19 07:49 (24)	21:01	22:08	22:50	22:25	21:13	19:45	12 08:31 (24)	18:20		16:08	15:43
21	09:07	07:57		06:39	07:32 (24)	06:11	04:58	04:27	05:02	06:09	07:17	08:18 (24)	08:25		08:39	09:26
	16:30	17:46		18:52	17 07:49 (24)	21:03	22:10	22:50	22:24	21:10	19:42	15 08:33 (24)	18:17		16:06	15:43
22	09:05	07:54		06:36	07:32 (24)	06:08	04:56	04:27	05:04	06:11	07:20	08:16 (24)	08:28		08:41	09:27
	16:32	17:48		18:54	15 07:47 (24)	21:05	22:12	22:50	22:22	21:08	19:39	17 08:33 (24)	18:15		16:04	15:44
23	09:04	07:52		06:33	07:33 (24)	06:05	04:54	04:27	05:06	06:13	07:22	08:15 (24)	08:30		08:43	09:27
	16:35	17:50		18:56	13 07:46 (24)	21:08	22:14	22:51	22:20	21:05	19:36	18 08:33 (24)	18:12		16:03	15:44
24	09:02	07:49	08:30 (22)	06:30	07:35 (24)	06:02	04:53	04:28	05:08	06:15	07:24	08:14 (24)	08:32		08:45	09:28
	16:37	17:53	12 08:42 (22)	18:59	8 07:43 (24)	21:10	22:16	22:51	22:18	21:02	19:33	19 08:33 (24)	18:09		16:01	15:45
25	09:00	07:46	08:28 (22)	06:27		06:00	04:51	04:28	05:10	06:18	07:26	08:14 (24)	07:35		08:48	09:28
	16:39	17:55	15 08:43 (22)	19:01		21:12	22:18	22:51	22:16	20:59	19:31	18 08:32 (24)	17:07		15:59	15:45
26	08:58	07:44	08:26 (22)	06:24		05:57	04:49	04:29	05:12	06:20	07:28	08:14 (24)	07:37		08:50	09:28
	16:42	17:58	19 08:45 (22)	19:03		21:14	22:20	22:50	22:14	20:57	19:28	19 08:33 (24)	17:04		15:58	15:46
27	08:56	07:41	08:25 (22)	06:21		05:54	04:47	04:29	05:14	06:22	07:31	08:14 (24)	07:40		08:52	09:28
	16:44	18:00	20 08:45 (22)	19:05		21:17	22:22	22:50	22:12	20:54	19:25	18 08:32 (24)	17:02		15:57	15:47
28	08:54	07:38	08:25 (22)	06:18		05:52	04:46	04:30	05:16	06:24	07:33	08:15 (24)	07:42		08:54	09:29
	16:46	18:02	22 08:47 (22)	19:08		21:19	22:24	22:50	22:10	20:51	19:22	15 08:30 (24)	16:59		15:55	15:48
29	08:52			07:16		05:49	04:44	04:31	05:18	06:27	07:35	08:15 (24)	07:44		08:56	09:29
	16:49			20:10		21:21	22:26	22:50	22:08	20:48	19:19	13 08:28 (24)	16:56		15:54	15:49
30	08:50			07:13		05:47	04:43	04:31	05:20	06:29	07:37	08:18 (24)	07:47		08:58	09:28
	16:51			20:12		21:24	22:27	22:49	22:05	20:45	19:16	8 08:26 (24)	16:54		15:53	15:50
31	08:48			07:10			04:41		05:22	06:31			07:49			09:28
	16:54			20:15			22:29		22:03	20:43			16:51			15:51
Potential sun hours	221	260		365		432	521	547	545	478	386		319		236	200
Total, worst case			88		369							179		290		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:52
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
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14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
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23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
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	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
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	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
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29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
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31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
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9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
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	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
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	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
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	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
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31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
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Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March	April	May	June	July	August	September	October		November	December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54	09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56	09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59	09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:49		08:01	09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39	15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:38	05:35	06:44	07:51		08:04	09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37	15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06	09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35	15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08	09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32	15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11	09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	15:44
10	09:22	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13	09:15
	16:07	17:18		18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28	15:44
11	09:21	08:23	09:07 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16	09:16
	16:09	17:21	7 09:14 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26	15:43
12	09:20	08:20	09:04 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18	09:18
	16:11	17:23	12 09:16 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24	15:43
13	09:19	08:18	09:03 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20	09:19
	16:13	17:26	16 09:19 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21	15:43
14	09:17	08:15	09:02 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23	09:20
	16:15	17:28	17 09:19 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19	15:42
15	09:16	08:13	09:01 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25	09:21
	16:17	17:31	19 09:20 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17	15:42
16	09:15	08:10	09:00 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27	09:22
	16:19	17:33	20 09:20 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15	15:42
17	09:13	08:08	09:01 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30	09:23
	16:21	17:36	20 09:21 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13	15:42
18	09:12	08:05	09:00 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:36 (22)	08:32	09:24
	16:23	17:38	21 09:21 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	10 09:46 (22)	16:11	15:42
19	09:10	08:02	09:00 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:34 (22)	08:34	09:25
	16:26	17:41	20 09:20 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	14 09:48 (22)	16:10	15:42
20	09:09	08:00	09:00 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:32 (22)	08:37	09:26
	16:28	17:43	19 09:19 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	17 09:49 (22)	16:08	15:43
21	09:07	07:57	09:01 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:32 (22)	08:39	09:26
	16:30	17:46	17 09:18 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:50 (22)	16:06	15:43
22	09:05	07:55	09:02 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:30 (22)	08:41	09:27
	16:32	17:48	16 09:18 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	20 09:50 (22)	16:04	15:44
23	09:04	07:52	09:04 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:30 (22)	08:43	09:27
	16:35	17:50	12 09:16 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:50 (22)	16:03	15:44
24	09:02	07:49	09:06 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:31 (22)	08:45	09:28
	16:37	17:53	7 09:13 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	20 09:51 (22)	16:01	15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:30 (22)	08:48	09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	20 08:50 (22)	15:59	15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:31 (22)	08:50	09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	19 08:50 (22)	15:58	15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:30 (22)	08:52	09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	19 08:49 (22)	15:57	15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:31 (22)	08:54	09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	17 08:48 (22)	15:55	15:48
29	08:52			07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:33 (22)	08:56	09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15 08:48 (22)	15:54	15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:34 (22)	08:58	09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	11 08:45 (22)	15:53	15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:37 (22)		09:28
	16:54			20:15		22:29		22:03	20:43		16:51	6 08:43 (22)		15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236	199
Total, worst case			223									226		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January		February			March			April		May		June		July		August		September		October			November			December
1	09:28		08:46		09:41 (22)	07:35		08:28 (24)	07:07		05:44		04:40		04:32		05:24		06:33		07:39			07:52		09:00 (22)	09:00
	15:53		16:56	3	09:44 (22)	18:05	19	08:47 (24)	20:17		21:26		22:31		22:49		22:01		20:40		19:13			16:49	24	09:24 (22)	15:51
2	09:28		08:44		09:37 (22)	07:33		08:27 (24)	07:04		05:41		04:39		04:33		05:26		06:35		07:42			07:54		09:01 (22)	09:02
	15:54		16:59	10	09:47 (22)	18:07	20	08:47 (24)	20:19		21:28		22:32		22:48		21:59		20:37		19:10			16:46	23	09:24 (22)	15:50
3	09:27		08:41		09:35 (22)	07:30		08:27 (24)	07:01		05:39		04:37		04:34		05:29		06:38		07:44			07:56		09:01 (22)	09:04
	15:56		17:01	15	09:50 (22)	18:10	20	08:47 (24)	20:21		21:31		22:34		22:47		21:56		20:34		19:07			16:44	23	09:24 (22)	15:49
4	09:27		08:39		09:34 (22)	07:27		08:27 (24)	06:58		05:36		04:36		04:35		05:31		06:40		07:46			07:59		09:02 (22)	09:05
	15:57		17:04	17	09:51 (22)	18:12	19	08:46 (24)	20:24		21:33		22:35		22:47		21:54		20:31		19:05			16:42	22	09:24 (22)	15:48
5	09:26		08:37		09:33 (22)	07:24		08:28 (24)	06:55		05:34		04:35		04:36		05:33		06:42		07:48		09:11 (24)	08:01		09:02 (22)	09:07
	15:59		17:06	20	09:53 (22)	18:14	17	08:45 (24)	20:26		21:35		22:37		22:46		21:52		20:28		19:02	3	09:14 (24)	16:39	21	09:23 (22)	15:47
6	09:25		08:35		09:32 (22)	07:22		08:28 (24)	06:53		05:31		04:34		04:37		05:35		06:44		07:51		09:06 (24)	08:04		09:03 (22)	09:09
	16:00		17:08	21	09:53 (22)	18:17	16	08:44 (24)	20:28		21:38		22:38		22:45		21:49		20:26		18:59	11	09:17 (24)	16:37	19	09:22 (22)	15:46
7	09:25		08:32		09:31 (22)	07:19		08:29 (24)	06:50		05:29		04:33		04:39		05:37		06:47		07:53		09:05 (24)	08:06		09:05 (22)	09:10
	16:02		17:11	22	09:53 (22)	18:19	13	08:42 (24)	20:31		21:40		22:39		22:44		21:47		20:23		18:56	15	09:20 (24)	16:35	17	09:22 (22)	15:46
8	09:24		08:30		09:32 (22)	07:16		08:31 (24)	06:47		05:27		04:32		04:40		05:40		06:49		07:55		09:03 (24)	08:08		09:05 (22)	09:12
	16:04		17:13	22	09:54 (22)	18:21	8	08:39 (24)	20:33		21:42		22:41		22:43		21:44		20:20		18:53	17	09:20 (24)	16:32	15	09:20 (22)	15:45
9	09:23		08:28		09:31 (22)	07:13			06:44		05:24		04:31		04:41		05:42		06:51		07:58		09:02 (24)	08:11		09:08 (22)	09:14
	16:05		17:16	23	09:54 (22)	18:24			20:35		21:44		22:42		22:42		21:42		20:17		18:50	18	09:20 (24)	16:30	10	09:18 (22)	15:44
10	09:22		08:25		09:32 (22)	07:10			06:41		05:22		04:30		04:43		05:44		06:53		08:00		09:02 (24)	08:13		09:13 (22)	09:15
	16:07		17:18	23	09:55 (22)	18:26			20:38		21:47		22:43		22:41		21:39		20:14		18:48	19	09:21 (24)	16:28	1	09:14 (22)	15:44
11	09:21		08:23		09:31 (22)	07:07			06:38		05:20		04:30		04:44		05:46		06:55		08:02		09:01 (24)	08:16			09:16
	16:09		17:21	24	09:55 (22)	18:28			20:40		21:49		22:44		22:39		21:37		20:11		18:45	20	09:21 (24)	16:26			15:43
12	09:20		08:20		09:31 (22)	07:05			06:36		05:17		04:29		04:46		05:49		06:58		08:04		09:01 (24)	08:18			09:18
	16:11		17:23	23	09:54 (22)	18:31			20:42		21:51		22:45		22:38		21:34		20:08		18:42	20	09:21 (24)	16:24			15:43
13	09:19		08:18		09:31 (22)	07:02			06:33		05:15		04:28		04:47		05:51		07:00		08:07		09:01 (24)	08:20			09:19
	16:13		17:26	23	09:54 (22)	18:33			20:44		21:53		22:46		22:37		21:32		20:05		18:39	19	09:20 (24)	16:21			15:43
14	09:17		08:15		09:33 (22)	06:59			06:30		05:13		04:28		04:49		05:53		07:02		08:09		09:01 (24)	08:23			09:20
	16:15		17:28	21	09:54 (22)	18:35			20:47		21:55		22:47		22:35		21:29		20:02		18:36	18	09:19 (24)	16:19			15:42
15	09:16		08:13		09:33 (22)	06:56			06:27		05:11		04:28		04:51		05:55		07:04		08:11		09:02 (24)	08:25			09:21
	16:17		17:31	20	09:53 (22)	18:38			20:49		21:58		22:47		22:34		21:26		20:00		18:34	16	09:18 (24)	16:17			15:42
16	09:15		08:10		09:34 (22)	06:53			06:24		05:08		04:27		04:53		05:57		07:06		08:14		09:03 (24)	08:27			09:22
	16:19		17:33	17	09:51 (22)	18:40			20:51		22:00		22:48		22:32		21:24		19:57		18:31	13	09:16 (24)	16:15			15:42
17	09:13		08:08		09:36 (22)	06:50			06:22		05:06		04:27		04:54		06:00		07:09		08:16		09:05 (24)	08:30			09:23
	16:21		17:36	14	09:50 (22)	18:42			20:54		22:02		22:49		22:31		21:21		19:54		18:28	10	09:15 (24)	16:13			15:42
18	09:12		08:05		09:39 (22)	06:47			06:19		05:04		04:27		04:56		06:02		07:11		08:18			08:32			09:24
	16:23		17:38	8	09:47 (22)	18:45			20:56		22:04		22:49		22:29		21:19		19:51		18:25			16:11			15:42
19	09:10		08:02			06:44			06:16		05:02		04:27		04:58		06:04		07:13		08:21			08:34			09:25
	16:26		17:41			18:47			20:58		22:06		22:50		22:27		21:16		19:48		18:23			16:10			15:42
20	09:09		08:00			06:42			06:13		05:00		04:27		05:00		06:06		07:15		08:23			08:37			09:26
	16:28		17:43			18:49			21:01		22:08		22:50		22:25		21:13		19:45		18:20			16:08			15:43
21	09:07		07:57			06:39			06:10		04:58		04:27		05:02		06:09		07:17		08:25			08:39			09:26
	16:30		17:45			18:52			21:03		22:10		22:50		22:24		21:10		19:42		18:17			16:06			15:43
22	09:05		07:54			06:36			06:08		04:56		04:27		05:04		06:11		07:20		08:28			08:41			09:27
	16:32		17:48			18:54			21:05		22:12		22:51		22:22		21:08		19:39		18:15			16:04			15:44
23	09:04		07:52			06:33			06:05		04:54		04:27		05:06		06:13		07:22		08:30			08:43			09:27
	16:35		17:50			18:56			21:08		22:14		22:51		22:20		21:05		19:36		18:12			16:03			15:44
24	09:02		07:49		08:36 (24)	06:30			06:02		04:53		04:28		05:08		06:15		07:24		08:32		10:07 (22)	08:45			09:28
	16:37		17:53	5	08:41 (24)	18:59			21:10		22:16		22:51		22:18		21:02		19:33		18:09	10	10:17 (22)	16:01			15:45
25	09:00		07:46		08:32 (24)	06:27			06:00		04:51		04:28		05:10		06:18		07:26		07:35		09:05 (22)	08:48			09:28
	16:39		17:55	12	08:44 (24)	19:01			21:12		22:18		22:51		22:16		20:59		19:30		17:07	15	09:20 (22)	15:59			15:45
26	08:58		07:44		08:30 (24)	06:24			05:57		04:49		04:29		05:12		06:20		07:28		07:37		09:04 (22)	08:50			09:28
	16:42		17:58	15	08:45 (24)	19:03			21:14		22:20		22:51		22:14		20:57		19:28		17:04	18	09:22 (22)	15:58			15:46
27	08:56		07:41		08:29 (24)	06:21			05:54		04:47		04:29		05:14		06:22		07:31		07:40		09:02 (22)	08:52			09:28
	16:44		18:00	17	08:46 (24)	19:05			21:17		22:22		22:50		22:12		20:54		19:25		17:02	20	09:22 (22)	15:56			15:47
28	08:54		07:38		08:29 (24)	06:18			05:52		04:46		04:30		05:16		06:24		07:33		07:42		09:02 (22)	08:54			09:29
	16:46		18:02	18	08:47 (24)	19:08			21:19		22:24		22:50		22:10		20:51		19:22		16:59	21	09:23 (22)	15:55			15:48
29	08:52					07:16			05:49		04:44		04:30		05:18		06:27		07:35		07:44		09:02 (22)	08:56			09:29
	16:49					20:10			21:21		22:26		22:50		22:08		20:48		19:19		16:56	22	09:24 (22)	15:54			15:49
30	08:50					07:13			05:47		04:43		04:31		05:20		06:29		07:37		07:47		09:01 (22)	08:58			09:28
	16:51					20:12			21:24		22:27		22:49		22:05		20:45		19:16		16:54	23	09:24 (22)	15:53			15:50
31	08:48					07:10					04:41				05:22		06:31				07:49		09:01 (22)				09:28
	16:54					20:15					22:29				22:03		20:43				16:51	23	09:24 (22)				15:51
Potential sun hours	221		260			365			432		521		547		546		478		386		319			236			199
Total, worst case				393			132															351			175		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January			February			March			April	May	June
1	09:28			08:46		09:41 (22)	07:35		08:31 (24)	07:07	05:44	04:40
	15:53			16:56	14	09:55 (22)	18:05	20	08:51 (24)	20:17	21:26	22:31
2	09:28			08:44		09:40 (22)	07:33		08:31 (24)	07:04	05:41	04:39
	15:54			16:59	16	09:56 (22)	18:07	20	08:51 (24)	20:19	21:28	22:32
3	09:27			08:41		09:39 (22)	07:30		08:31 (24)	07:01	05:39	04:37
	15:56			17:01	19	09:58 (22)	18:10	19	08:50 (24)	20:21	21:31	22:34
4	09:27			08:39		09:38 (22)	07:27		08:31 (24)	06:58	05:36	04:36
	15:57			17:04	20	09:58 (22)	18:12	19	08:50 (24)	20:24	21:33	22:35
5	09:26			08:37		09:38 (22)	07:24		08:32 (24)	06:55	05:34	04:35
	15:59			17:06	22	10:00 (22)	18:14	16	08:48 (24)	20:26	21:35	22:37
6	09:25			08:35		09:37 (22)	07:22		08:33 (24)	06:53	05:31	04:34
	16:00			17:08	23	10:00 (22)	18:17	14	08:47 (24)	20:28	21:38	22:38
7	09:25			08:32		09:36 (22)	07:19		08:35 (24)	06:50	05:29	04:33
	16:02			17:11	24	10:00 (22)	18:19	9	08:44 (24)	20:31	21:40	22:39
8	09:24			08:30		09:37 (22)	07:16			06:47	05:27	04:32
	16:04			17:13	24	10:01 (22)	18:21			20:33	21:42	22:41
9	09:23			08:28		09:36 (22)	07:13			06:44	05:24	04:31
	16:05			17:16	24	10:00 (22)	18:24			20:35	21:44	22:42
10	09:22			08:25		09:37 (22)	07:10			06:41	05:22	04:30
	16:07			17:18	24	10:01 (22)	18:26			20:38	21:47	22:43
11	09:21			08:23		09:37 (22)	07:07			06:38	05:20	04:30
	16:09			17:21	23	10:00 (22)	18:28			20:40	21:49	22:44
12	09:20			08:20		09:37 (22)	07:05			06:36	05:17	04:29
	16:11			17:23	23	10:00 (22)	18:31			20:42	21:51	22:45
13	09:19			08:18		09:38 (22)	07:02			06:33	05:15	04:28
	16:13			17:26	21	09:59 (22)	18:33			20:44	21:53	22:46
14	09:17			08:15		09:39 (22)	06:59			06:30	05:13	04:28
	16:15			17:28	20	09:59 (22)	18:35			20:47	21:55	22:47
15	09:16			08:13		09:40 (22)	06:56			06:27	05:11	04:28
	16:17			17:31	17	09:57 (22)	18:38			20:49	21:58	22:47
16	09:15			08:10		09:42 (22)	06:53			06:24	05:08	04:27
	16:19			17:33	13	09:55 (22)	18:40			20:51	22:00	22:48
17	09:13			08:08		09:45 (22)	06:50			06:21	05:06	04:27
	16:21			17:36	8	09:53 (22)	18:42			20:54	22:02	22:49
18	09:12			08:05			06:47			06:19	05:04	04:27
	16:23			17:38			18:45			20:56	22:04	22:49
19	09:10			08:02			06:44			06:16	05:02	04:27
	16:26			17:41			18:47			20:58	22:06	22:50
20	09:09			08:00			06:42			06:13	05:00	04:27
	16:28			17:43			18:49			21:01	22:08	22:50
21	09:07			07:57			06:39			06:10	04:58	04:27
	16:30			17:45			18:52			21:03	22:10	22:50
22	09:05			07:54			06:36			06:08	04:56	04:27
	16:32			17:48			18:54			21:05	22:12	22:51
23	09:04			07:52		08:40 (24)	06:33			06:05	04:54	04:27
	16:35			17:50	5	08:45 (24)	18:56			21:08	22:14	22:51
24	09:02			07:49		08:36 (24)	06:30			06:02	04:53	04:28
	16:37			17:53	12	08:48 (24)	18:59			21:10	22:16	22:51
25	09:00			07:46		08:34 (24)	06:27			06:00	04:51	04:28
	16:39			17:55	15	08:49 (24)	19:01			21:12	22:18	22:51
26	08:58			07:44		08:33 (24)	06:24			05:57	04:49	04:29
	16:42			17:58	17	08:50 (24)	19:03			21:14	22:20	22:51
27	08:56			07:41		08:32 (24)	06:21			05:54	04:47	04:29
	16:44			18:00	18	08:50 (24)	19:05			21:17	22:22	22:50
28	08:54			07:38		08:32 (24)	06:18			05:52	04:46	04:30
	16:46			18:02	19	08:51 (24)	19:08			21:19	22:24	22:50
29	08:52						07:16			05:49	04:44	04:30
	16:49						20:10			21:21	22:26	22:50
30	08:50						07:13			05:47	04:43	04:31
	16:51						20:12			21:24	22:27	22:49
31	08:48		09:43 (22)				07:10				04:41	
	16:54	9	09:52 (22)				20:15				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		9			421			117				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August	September	October		November		December
1	04:32	05:24	06:33	07:39		07:51	09:06 (22)	09:00
	22:49	22:01	20:40	19:13		16:49	24 09:30 (22)	15:51
2	04:33	05:26	06:35	07:42		07:54	09:06 (22)	09:02
	22:48	21:59	20:37	19:10		16:46	24 09:30 (22)	15:50
3	04:34	05:29	06:38	07:44		07:56	09:06 (22)	09:04
	22:47	21:56	20:34	19:07		16:44	24 09:30 (22)	15:49
4	04:35	05:31	06:40	07:46		07:59	09:07 (22)	09:05
	22:47	21:54	20:31	19:05		16:42	23 09:30 (22)	15:48
5	04:36	05:33	06:42	07:48		08:01	09:07 (22)	09:07
	22:46	21:52	20:28	19:02		16:39	22 09:29 (22)	15:47
6	04:37	05:35	06:44	07:51	09:12 (24)	08:04	09:08 (22)	09:09
	22:45	21:49	20:26	18:59	7 09:19 (24)	16:37	21 09:29 (22)	15:46
7	04:39	05:37	06:47	07:53	09:10 (24)	08:06	09:09 (22)	09:10
	22:44	21:47	20:23	18:56	12 09:22 (24)	16:35	20 09:29 (22)	15:46
8	04:40	05:40	06:49	07:55	09:08 (24)	08:08	09:09 (22)	09:12
	22:43	21:44	20:20	18:53	15 09:23 (24)	16:32	18 09:27 (22)	15:45
9	04:41	05:42	06:51	07:58	09:06 (24)	08:11	09:10 (22)	09:14
	22:42	21:42	20:17	18:50	18 09:24 (24)	16:30	17 09:27 (22)	15:44
10	04:43	05:44	06:53	08:00	09:06 (24)	08:13	09:12 (22)	09:15
	22:41	21:39	20:14	18:48	19 09:25 (24)	16:28	13 09:25 (22)	15:44
11	04:44	05:46	06:55	08:02	09:05 (24)	08:16	09:14 (22)	09:16
	22:39	21:37	20:11	18:45	19 09:24 (24)	16:26	9 09:23 (22)	15:43
12	04:46	05:49	06:58	08:04	09:05 (24)	08:18		09:18
	22:38	21:34	20:08	18:42	20 09:25 (24)	16:24		15:43
13	04:47	05:51	07:00	08:07	09:04 (24)	08:20		09:19
	22:37	21:32	20:05	18:39	20 09:24 (24)	16:21		15:43
14	04:49	05:53	07:02	08:09	09:04 (24)	08:23		09:20
	22:35	21:29	20:02	18:36	19 09:23 (24)	16:19		15:42
15	04:51	05:55	07:04	08:11	09:05 (24)	08:25		09:21
	22:34	21:26	20:00	18:34	18 09:23 (24)	16:17		15:42
16	04:53	05:57	07:06	08:14	09:05 (24)	08:27		09:22
	22:32	21:24	19:57	18:31	16 09:21 (24)	16:15		15:42
17	04:54	06:00	07:09	08:16	09:07 (24)	08:30		09:23
	22:31	21:21	19:54	18:28	14 09:21 (24)	16:13		15:42
18	04:56	06:02	07:11	08:18	09:08 (24)	08:32		09:24
	22:29	21:19	19:51	18:25	10 09:18 (24)	16:11		15:42
19	04:58	06:04	07:13	08:21		08:34		09:25
	22:27	21:16	19:48	18:23		16:10		15:42
20	05:00	06:06	07:15	08:23		08:37		09:26
	22:25	21:13	19:45	18:20		16:08		15:43
21	05:02	06:09	07:17	08:25		08:39		09:26
	22:24	21:10	19:42	18:17		16:06		15:43
22	05:04	06:11	07:20	08:28		08:41		09:27
	22:22	21:08	19:39	18:15		16:04		15:44
23	05:06	06:13	07:22	08:30		08:43		09:27
	22:20	21:05	19:36	18:12		16:03		15:44
24	05:08	06:15	07:24	08:32		08:45		09:28
	22:18	21:02	19:33	18:09		16:01		15:45
25	05:10	06:18	07:26	07:35	09:13 (22)	08:48		09:28
	22:16	20:59	19:30	17:07	10 09:23 (22)	15:59		15:45
26	05:12	06:20	07:28	07:37	09:11 (22)	08:50		09:28
	22:14	20:57	19:28	17:04	15 09:26 (22)	15:58		15:46
27	05:14	06:22	07:31	07:40	09:09 (22)	08:52		09:28
	22:12	20:54	19:25	17:01	18 09:27 (22)	15:56		15:47
28	05:16	06:24	07:33	07:42	09:08 (22)	08:54		09:29
	22:10	20:51	19:22	16:59	20 09:28 (22)	15:55		15:48
29	05:18	06:27	07:35	07:44	09:08 (22)	08:56		09:29
	22:08	20:48	19:19	16:56	21 09:29 (22)	15:54		15:49
30	05:20	06:29	07:37	07:47	09:07 (22)	08:58		09:28
	22:05	20:45	19:16	16:54	22 09:29 (22)	15:53		15:50
31	05:22	06:31		07:49	09:07 (22)			09:28
	22:03	20:43		16:51	23 09:30 (22)			15:51
Potential sun hours	546	478	386	319		236		199
Total, worst case				336		215		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:

The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March	April	May	June	July	August	September	October		November		December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	08:41 (22)	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	7 08:48 (22)	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54		09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46		15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56		09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44		15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59		09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42		15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39		15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:37	05:35	06:44	07:51		08:04		09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37		15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06		09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35		15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08		09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32		15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11		09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30		15:44
10	09:22	08:25	09:11 (22)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13		09:15
	16:07	17:18	8 09:19 (22)	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28		15:44
11	09:21	08:23	09:09 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16		09:16
	16:09	17:21	12 09:21 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26		15:43
12	09:20	08:20	09:07 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18		09:18
	16:11	17:23	15 09:22 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24		15:43
13	09:19	08:18	09:06 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20		09:19
	16:13	17:26	18 09:24 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21		15:43
14	09:17	08:15	09:05 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23		09:20
	16:15	17:28	20 09:25 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19		15:42
15	09:16	08:13	09:05 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25		09:21
	16:17	17:31	20 09:25 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17		15:42
16	09:15	08:10	09:04 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27		09:22
	16:19	17:33	21 09:25 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15		15:42
17	09:13	08:08	09:05 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30		09:23
	16:21	17:36	21 09:26 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13		15:42
18	09:12	08:05	09:05 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:42 (22)	08:32		09:24
	16:23	17:38	20 09:25 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	7 09:49 (22)	16:11		15:42
19	09:10	08:02	09:05 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:39 (22)	08:34		09:25
	16:26	17:41	20 09:25 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	13 09:52 (22)	16:10		15:42
20	09:09	08:00	09:05 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:37 (22)	08:37		09:26
	16:28	17:43	19 09:24 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16 09:53 (22)	16:08		15:43
21	09:07	07:57	09:05 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:36 (22)	08:39		09:26
	16:30	17:46	18 09:23 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:54 (22)	16:06		15:43
22	09:05	07:54	09:07 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:35 (22)	08:41		09:27
	16:32	17:48	15 09:22 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	19 09:54 (22)	16:04		15:44
23	09:04	07:52	09:09 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:35 (22)	08:43		09:27
	16:35	17:50	11 09:20 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:55 (22)	16:03		15:44
24	09:02	07:49	09:13 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:34 (22)	08:45		09:28
	16:37	17:53	3 09:16 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	21 09:55 (22)	16:01		15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:34 (22)	08:48		09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	21 08:55 (22)	15:59		15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:34 (22)	08:50		09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	21 08:55 (22)	15:58		15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:34 (22)	08:52		09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	20 08:54 (22)	15:57		15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:35 (22)	08:54		09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	19 08:54 (22)	15:55		15:48
29	08:52			07:16	05:49	04:44	04:30	05:18	06:27	07:35	07:44	08:36 (22)	08:56		09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	17 08:53 (22)	15:54		15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:36 (22)	08:58		09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	16 08:52 (22)	15:53		15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:38 (22)			09:28
	16:54			20:15		22:29		22:03	20:43		16:51	12 08:50 (22)			15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236		199
Total, worst case			241									240		7	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
- The sun is shining all the day, from sunrise to sunset
- The rotor plane is always perpendicular to the line from the WTG to the sun
- The WTG is always operating

	January			February			March	April	May	June	July	August	September	October	November		December		
1	09:28		12:21 (24)	08:46		10:00 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:36 (28)	09:00	10:51 (23)
	15:53	20	12:41 (24)	16:56	20	10:20 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6	09:42 (28)	15:51	28 12:23 (24)
2	09:28		12:22 (24)	08:44		09:59 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:34 (28)	09:02	10:51 (23)
	15:54	19	12:41 (24)	16:58	21	10:20 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11	09:45 (28)	15:50	30 12:24 (24)
3	09:27		12:22 (24)	08:41		10:00 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:33 (28)	09:04	10:52 (23)
	15:55	19	12:41 (24)	17:01	20	10:20 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14	09:47 (28)	15:49	29 12:25 (24)
4	09:27		11:12 (23)	08:39		10:00 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:31 (28)	09:05	10:53 (23)
	15:57	22	12:41 (24)	17:03	20	10:20 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17	09:48 (28)	15:48	30 12:26 (24)
5	09:26		11:11 (23)	08:37		10:01 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:31 (28)	09:07	10:54 (23)
	15:58	26	12:42 (24)	17:06	19	10:20 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18	09:49 (28)	15:47	29 12:27 (24)
6	09:25		11:10 (23)	08:35		10:01 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03		09:30 (28)	09:09	10:56 (23)
	16:00	28	12:42 (24)	17:08	18	10:19 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20	09:50 (28)	15:46	28 12:28 (24)
7	09:25		11:09 (23)	08:32		10:01 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06		09:30 (28)	09:10	10:58 (23)
	16:02	29	12:42 (24)	17:11	17	10:18 (28)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20	09:50 (28)	15:45	26 12:29 (24)
8	09:24		11:09 (23)	08:30		10:03 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08		09:30 (28)	09:12	11:00 (23)
	16:03	30	12:42 (24)	17:13	15	10:18 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20	09:50 (28)	15:45	23 12:30 (24)
9	09:23		11:09 (23)	08:27		10:04 (28)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11		09:30 (28)	09:13	12:11 (24)
	16:05	30	12:42 (24)	17:16	12	10:16 (28)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20	09:50 (28)	15:44	19 12:30 (24)
10	09:22		11:08 (23)	08:25		10:07 (28)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13		09:31 (28)	09:15	12:11 (24)
	16:07	30	12:41 (24)	17:18	5	10:12 (28)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20	09:51 (28)	15:44	19 12:30 (24)
11	09:21		11:09 (23)	08:23			07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15		09:30 (28)	09:16	12:11 (24)
	16:09	28	12:41 (24)	17:21			18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20	09:50 (28)	15:43	20 12:31 (24)
12	09:20		11:08 (23)	08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18		09:31 (28)	09:18	12:11 (24)
	16:11	27	12:40 (24)	17:23			18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27	10:58 (23)	15:43	20 12:31 (24)
13	09:19		11:08 (23)	08:18			07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20		09:32 (28)	09:19	12:12 (24)
	16:13	25	12:39 (24)	17:26			18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31	11:01 (23)	15:42	21 12:33 (24)
14	09:17		11:08 (23)	08:15			06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23		09:33 (28)	09:20	12:12 (24)
	16:15	20	11:28 (23)	17:28			18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32	11:03 (23)	15:42	21 12:33 (24)
15	09:16		11:08 (23)	08:13			06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		09:34 (28)	09:21	12:12 (24)
	16:17	21	11:29 (23)	17:31			18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31	11:03 (23)	15:42	21 12:33 (24)
16	09:15		11:08 (23)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27		09:36 (28)	09:22	12:13 (24)
	16:19	21	11:29 (23)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31	11:05 (23)	15:42	20 12:33 (24)
17	09:13		11:09 (23)	08:08			06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		09:38 (28)	09:23	12:14 (24)
	16:21	22	11:31 (23)	17:36			18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28	11:06 (23)	15:42	21 12:35 (24)
18	09:12		11:09 (23)	08:05			06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		10:44 (23)	09:24	12:14 (24)
	16:23	22	11:31 (23)	17:38			18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22	11:06 (23)	15:42	21 12:35 (24)
19	09:10		11:09 (23)	08:02			06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34		10:45 (23)	09:25	12:14 (24)
	16:25	22	11:31 (23)	17:40			18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22	11:07 (23)	15:42	21 12:35 (24)
20	09:09		11:09 (23)	08:00			06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		10:45 (23)	09:26	12:15 (24)
	16:28	23	11:32 (23)	17:43			18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22	11:07 (23)	15:43	21 12:36 (24)
21	09:07		11:09 (23)	07:57			06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39		10:45 (23)	09:26	12:16 (24)
	16:30	23	11:32 (23)	17:45			18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	11:07 (23)	15:43	21 12:37 (24)
22	09:05		11:10 (23)	07:54			06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		10:45 (23)	09:27	12:16 (24)
	16:32	22	11:32 (23)	17:48			18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	11:08 (23)	15:43	21 12:37 (24)
23	09:03		11:10 (23)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		10:45 (23)	09:27	12:16 (24)
	16:34	22	11:32 (23)	17:50			18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	11:08 (23)	15:44	21 12:37 (24)
24	09:02		11:10 (23)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		10:46 (23)	09:28	12:17 (24)
	16:37	22	11:32 (23)	17:53			18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22	11:08 (23)	15:45	21 12:38 (24)
25	09:00		10:04 (28)	07:46			06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		10:46 (23)	09:28	12:17 (24)
	16:39	28	11:32 (23)	17:55			19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22	11:08 (23)	15:45	21 12:38 (24)
26	08:58		10:03 (28)	07:44			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		10:47 (23)	09:28	12:18 (24)
	16:42	31	11:32 (23)	17:57			19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21	11:08 (23)	15:46	21 12:39 (24)
27	08:56		10:02 (28)	07:41			06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52		10:47 (23)	09:28	12:18 (24)
	16:44	31	11:31 (23)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21	11:08 (23)	15:47	21 12:39 (24)
28	08:54		10:00 (28)	07:38			06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		10:48 (23)	09:29	12:19 (24)
	16:46	32	11:30 (23)	18:02			19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21	11:09 (23)	15:48	21 12:40 (24)
29	08:52		10:00 (28)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		10:49 (23)	09:29	12:19 (24)
	16:49	31	11:29 (23)				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22	12:18 (24)	15:49	21 12:40 (24)
30	08:50		09:59 (28)				07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58		10:49 (23)	09:28	12:20 (24)
	16:51	27	11:26 (23)				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28	12:21 (24)	15:50	20 12:40 (24)
31	08:48		09:59 (28)				07:10		04:41		05:22	06:31		07:49				09:28	12:21 (24)
	16:54	20	10:19 (28)				20:14		22:29		22:03	20:43		16:51				15:51	20 12:41 (24)
Potential sun hours	221			260			365	432	521	547	546	478	386	319	236			199	
Total, worst case		773			167											657			697

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April			May	June
1	09:27	08:45		07:35			07:06			05:44	04:40
	15:53	16:56		18:04			20:16			21:25	22:30
2	09:27	08:43		07:32			07:04			05:41	04:38
	15:54	16:58		18:07			20:19			21:28	22:31
3	09:26	08:41		07:29			07:01			05:39	04:37
	15:55	17:01		18:09			20:21			21:30	22:33
4	09:26	08:39		07:27			06:58		19:38 (63)	05:36	04:36
	15:57	17:03		18:12			20:23	2	19:40 (63)	21:32	22:34
5	09:25	08:36		07:24			06:55		19:34 (63)	05:34	04:35
	15:58	17:06		18:14			20:25	8	19:42 (63)	21:35	22:36
6	09:25	08:34		07:21			06:52		19:32 (63)	05:31	04:34
	16:00	17:08		18:16			20:28	11	19:43 (63)	21:37	22:37
7	09:24	08:32		07:18			06:49		19:31 (63)	05:29	04:33
	16:02	17:11		18:19			20:30	12	19:43 (63)	21:39	22:39
8	09:23	08:29		07:15			06:46		19:31 (63)	05:26	04:32
	16:03	17:13		18:21			20:32	13	19:44 (63)	21:41	22:40
9	09:22	08:27		07:13			06:44		19:31 (63)	05:24	04:31
	16:05	17:16		18:23			20:35	12	19:43 (63)	21:44	22:41
10	09:21	08:24		07:10			06:41		19:31 (63)	05:22	04:30
	16:07	17:18		18:26			20:37	11	19:42 (63)	21:46	22:42
11	09:20	08:22		07:07			06:38		19:32 (63)	05:19	04:30
	16:09	17:21		18:28			20:39	8	19:40 (63)	21:48	22:43
12	09:19	08:20		07:04			06:35		19:34 (63)	05:17	04:29
	16:11	17:23		18:30			20:42	4	19:38 (63)	21:50	22:44
13	09:18	08:17		07:01			06:32			05:15	04:28
	16:13	17:25		18:33			20:44			21:53	22:45
14	09:17	08:15		06:58			06:29			05:13	04:28
	16:15	17:28		18:35			20:46			21:55	22:46
15	09:15	08:12		06:55			06:27		19:48 (62)	05:10	04:27
	16:17	17:30		18:37			20:48	9	19:57 (62)	21:57	22:47
16	09:14	08:10	16:48 (66)	06:53			06:24		19:47 (62)	05:08	04:27
	16:19	17:33	1 16:49 (66)	18:40			20:51	13	20:00 (62)	21:59	22:47
17	09:13	08:07	16:44 (66)	06:50			06:21		19:45 (62)	05:06	04:27
	16:21	17:35	8 16:52 (66)	18:42			20:53	15	20:00 (62)	22:01	22:48
18	09:11	08:04	16:42 (66)	06:47			06:18		19:44 (62)	05:04	04:27
	16:23	17:38	12 16:54 (66)	18:44			20:55	16	20:00 (62)	22:03	22:48
19	09:09	08:02	16:41 (66)	06:44			06:16		19:44 (62)	05:02	04:27
	16:25	17:40	13 16:54 (66)	18:47			20:58	17	20:01 (62)	22:05	22:49
20	09:08	07:59	16:42 (66)	06:41			06:13		19:43 (62)	05:00	04:27
	16:28	17:43	13 16:55 (66)	18:49			21:00	18	20:01 (62)	22:08	22:49
21	09:06	07:57	16:41 (66)	06:38		18:02 (65)	06:10		19:42 (62)	04:58	04:27
	16:30	17:45	14 16:55 (66)	18:51	2	18:04 (65)	21:02	18	20:00 (62)	22:10	22:49
22	09:05	07:54	16:41 (66)	06:35		17:58 (65)	06:07		19:43 (62)	04:56	04:27
	16:32	17:48	13 16:54 (66)	18:53	9	18:07 (65)	21:05	17	20:00 (62)	22:12	22:50
23	09:03	07:51	16:42 (66)	06:32		17:56 (65)	06:05		19:43 (62)	04:54	04:27
	16:34	17:50	11 16:53 (66)	18:56	12	18:08 (65)	21:07	16	19:59 (62)	22:14	22:50
24	09:01	07:49	16:43 (66)	06:30		17:55 (65)	06:02		19:44 (62)	04:52	04:28
	16:37	17:52	9 16:52 (66)	18:58	14	18:09 (65)	21:09	15	19:59 (62)	22:16	22:50
25	08:59	07:46	16:45 (66)	06:27		17:54 (65)	05:59		19:45 (62)	04:51	04:28
	16:39	17:55	4 16:49 (66)	19:00	15	18:09 (65)	21:12	12	19:57 (62)	22:17	22:50
26	08:57	07:43		06:24		17:53 (65)	05:57		19:47 (62)	04:49	04:28
	16:41	17:57		19:03	15	18:08 (65)	21:14	8	19:55 (62)	22:19	22:50
27	08:55	07:40		06:21		17:54 (65)	05:54			04:47	04:29
	16:44	18:00		19:05	15	18:09 (65)	21:16			22:21	22:49
28	08:53	07:38		06:18		17:55 (65)	05:51			04:46	04:30
	16:46	18:02		19:07	13	18:08 (65)	21:18			22:23	22:49
29	08:51			07:15		18:55 (65)	05:49			04:44	04:30
	16:49			20:09	11	19:06 (65)	21:21			22:25	22:49
30	08:49			07:12		18:57 (65)	05:46			04:43	04:31
	16:51			20:12	6	19:03 (65)	21:23			22:26	22:48
31	08:47			07:09						04:41	
	16:53			20:14						22:28	
Potential sun hours	222	260		365			432			521	547
Total, worst case			98		112			255			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August			September			October			November	December
1	04:32	05:24			06:33		19:31 (63)	07:39			07:51	08:59
	22:48	22:00			20:39	8	19:39 (63)	19:13			16:49	15:51
2	04:33	05:26			06:35		19:29 (63)	07:41			07:53	09:01
	22:47	21:58			20:36	11	19:40 (63)	19:10			16:46	15:50
3	04:34	05:28			06:37		19:29 (63)	07:43			07:56	09:03
	22:47	21:56			20:34	12	19:41 (63)	19:07			16:44	15:49
4	04:35	05:31			06:39		19:28 (63)	07:46			07:58	09:05
	22:46	21:53			20:31	13	19:41 (63)	19:04			16:41	15:48
5	04:36	05:33			06:42		19:28 (63)	07:48			08:00	09:06
	22:45	21:51			20:28	12	19:40 (63)	19:01			16:39	15:47
6	04:37	05:35			06:44		19:28 (63)	07:50			08:03	09:08
	22:44	21:48			20:25	11	19:39 (63)	18:58			16:37	15:46
7	04:39	05:37			06:46		19:29 (63)	07:52			08:05	09:10
	22:43	21:46			20:22	8	19:37 (63)	18:56			16:34	15:45
8	04:40	05:39			06:48		19:31 (63)	07:55			08:08	09:11
	22:42	21:44			20:19	3	19:34 (63)	18:53			16:32	15:45
9	04:41	05:42			06:50			07:57			08:10	09:13
	22:41	21:41			20:16			18:50			16:30	15:44
10	04:43	05:44			06:53			07:59			08:12	09:14
	22:40	21:39			20:13			18:47			16:28	15:44
11	04:44	05:46			06:55			08:02			08:15	09:16
	22:39	21:36			20:11			18:44			16:25	15:43
12	04:46	05:48			06:57			08:04			08:17	09:17
	22:37	21:34			20:08			18:42			16:23	15:43
13	04:47	05:50			06:59		18:49 (65)	08:06			08:20	09:18
	22:36	21:31			20:05	5	18:54 (65)	18:39			16:21	15:42
14	04:49	05:53			07:01		18:46 (65)	08:08			08:22	09:19
	22:34	21:28			20:02	10	18:56 (65)	18:36			16:19	15:42
15	04:51	05:55			07:04		18:44 (65)	08:11			08:24	09:20
	22:33	21:26			19:59	13	18:57 (65)	18:33			16:17	15:42
16	04:52	05:57		19:56 (62)	07:06		18:43 (65)	08:13			08:27	09:21
	22:31	21:23	4	20:00 (62)	19:56	14	18:57 (65)	18:30			16:15	15:42
17	04:54	05:59		19:53 (62)	07:08		18:42 (65)	08:15		17:16 (66)	08:29	09:22
	22:30	21:21	9	20:02 (62)	19:53	15	18:57 (65)	18:28	6	17:22 (66)	16:13	15:42
18	04:56	06:02		19:51 (62)	07:10		18:41 (65)	08:18		17:14 (66)	08:31	09:23
	22:28	21:18	13	20:04 (62)	19:50	15	18:56 (65)	18:25	10	17:24 (66)	16:11	15:42
19	04:58	06:04		19:49 (62)	07:12		18:42 (65)	08:20		17:13 (66)	08:34	09:24
	22:26	21:15	15	20:04 (62)	19:47	14	18:56 (65)	18:22	12	17:25 (66)	16:09	15:42
20	05:00	06:06		19:48 (62)	07:15		18:42 (65)	08:22		17:12 (66)	08:36	09:25
	22:25	21:12	17	20:05 (62)	19:44	13	18:55 (65)	18:20	14	17:26 (66)	16:08	15:43
21	05:01	06:08		19:48 (62)	07:17		18:43 (65)	08:25		17:12 (66)	08:38	09:26
	22:23	21:10	17	20:05 (62)	19:42	10	18:53 (65)	18:17	13	17:25 (66)	16:06	15:43
22	05:03	06:11		19:47 (62)	07:19		18:45 (65)	08:27		17:12 (66)	08:40	09:26
	22:21	21:07	18	20:05 (62)	19:39	5	18:50 (65)	18:14	13	17:25 (66)	16:04	15:43
23	05:05	06:13		19:48 (62)	07:21			08:29		17:12 (66)	08:43	09:27
	22:19	21:04	18	20:06 (62)	19:36			18:12	12	17:24 (66)	16:02	15:44
24	05:07	06:15		19:48 (62)	07:23			08:32		17:13 (66)	08:45	09:27
	22:17	21:02	17	20:05 (62)	19:33			18:09	10	17:23 (66)	16:01	15:45
25	05:09	06:17		19:48 (62)	07:26			07:34		16:14 (66)	08:47	09:27
	22:15	20:59	16	20:04 (62)	19:30			17:06	7	16:21 (66)	15:59	15:45
26	05:11	06:20		19:48 (62)	07:28			07:37			08:49	09:28
	22:13	20:56	15	20:03 (62)	19:27			17:04			15:58	15:46
27	05:13	06:22		19:49 (62)	07:30			07:39			08:51	09:28
	22:11	20:53	12	20:01 (62)	19:24			17:01			15:56	15:47
28	05:16	06:24		19:50 (62)	07:32			07:41			08:53	09:28
	22:09	20:50	9	19:59 (62)	19:21			16:59			15:55	15:48
29	05:18	06:26			07:35			07:44			08:55	09:28
	22:07	20:48			19:18			16:56			15:54	15:49
30	05:20	06:28			07:37			07:46			08:57	09:28
	22:05	20:45			19:16			16:54			15:52	15:50
31	05:22	06:31		19:33 (63)				07:48				09:27
	22:02	20:42	5	19:38 (63)				16:51				15:51
Potential sun hours	545	478			386			319			236	200
Total, worst case			185			192			97			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	January	February		March			April		May	June
1	09:27	08:45		07:35			07:06		19:00 (65)	05:44	04:40
	15:53	16:56		18:04			20:16	4	19:04 (65)	21:25	22:30
2	09:27	08:43		07:32			07:04			05:41	04:38
	15:54	16:58		18:07			20:19			21:28	22:31
3	09:26	08:41		07:29			07:01			05:39	04:37
	15:55	17:01		18:09			20:21			21:30	22:33
4	09:26	08:39		07:27			06:58			05:36	04:36
	15:57	17:03		18:12			20:23			21:32	22:34
5	09:25	08:36		07:24			06:55			05:34	04:35
	15:58	17:06		18:14			20:25			21:35	22:36
6	09:25	08:34		07:21			06:52		19:37 (63)	05:31	04:34
	16:00	17:08		18:16			20:28	6	19:43 (63)	21:37	22:37
7	09:24	08:32		07:18			06:49		19:35 (63)	05:29	04:33
	16:02	17:11		18:19			20:30	10	19:45 (63)	21:39	22:39
8	09:23	08:29		07:15			06:46		19:34 (63)	05:26	04:32
	16:03	17:13		18:21			20:32	12	19:46 (63)	21:41	22:40
9	09:22	08:27		07:13			06:44		19:33 (63)	05:24	04:31
	16:05	17:16		18:23			20:35	13	19:46 (63)	21:44	22:41
10	09:21	08:24		07:10			06:41		19:33 (63)	05:22	04:30
	16:07	17:18		18:26			20:37	12	19:45 (63)	21:46	22:42
11	09:20	08:22		07:07			06:38		19:33 (63)	05:19	04:30
	16:09	17:21		18:28			20:39	11	19:44 (63)	21:48	22:43
12	09:19	08:20		07:04			06:35		19:33 (63)	05:17	04:29
	16:11	17:23		18:30			20:42	10	19:43 (63)	21:50	22:44
13	09:18	08:17		07:01			06:32		19:35 (63)	05:15	04:28
	16:13	17:25		18:33			20:44	7	19:42 (63)	21:53	22:45
14	09:17	08:15		06:58			06:29			05:13	04:28
	16:15	17:28		18:35			20:46			21:55	22:46
15	09:15	08:12		06:55			06:27			05:10	04:27
	16:17	17:30		18:37			20:48			21:57	22:47
16	09:14	08:10		06:53			06:24			05:08	04:27
	16:19	17:33		18:40			20:51			21:59	22:47
17	09:13	08:07		06:50			06:21		19:53 (62)	05:06	04:27
	16:21	17:35		18:42			20:53	8	20:01 (62)	22:01	22:48
18	09:11	08:04		16:45 (66)	06:47			06:18	19:50 (62)	05:04	04:27
	16:23	17:38	8	16:53 (66)	18:44			20:55	12	20:02 (62)	22:03	22:48
19	09:09	08:02		16:43 (66)	06:44			06:16		19:49 (62)	05:02	04:27
	16:25	17:40	12	16:55 (66)	18:47			20:58	15	20:04 (62)	22:05	22:49
20	09:08	07:59		16:43 (66)	06:41			06:13		19:48 (62)	05:00	04:27
	16:28	17:43	13	16:56 (66)	18:49			21:00	16	20:04 (62)	22:08	22:49
21	09:06	07:57		16:43 (66)	06:38			06:10		19:46 (62)	04:58	04:27
	16:30	17:45	13	16:56 (66)	18:51			21:02	18	20:04 (62)	22:10	22:49
22	09:05	07:54		16:42 (66)	06:35			06:07		19:47 (62)	04:56	04:27
	16:32	17:48	14	16:56 (66)	18:53			21:05	17	20:04 (62)	22:12	22:50
23	09:03	07:51		16:42 (66)	06:32		18:01 (65)	06:05		19:46 (62)	04:54	04:27
	16:34	17:50	13	16:55 (66)	18:56	7	18:08 (65)	21:07	18	20:04 (62)	22:14	22:50
24	09:01	07:49		16:43 (66)	06:30		17:59 (65)	06:02		19:46 (62)	04:52	04:28
	16:37	17:52	11	16:54 (66)	18:58	11	18:10 (65)	21:09	18	20:04 (62)	22:16	22:50
25	08:59	07:46		16:44 (66)	06:27		17:57 (65)	05:59		19:46 (62)	04:51	04:28
	16:39	17:55	9	16:53 (66)	19:00	14	18:11 (65)	21:12	17	20:03 (62)	22:17	22:50
26	08:57	07:43		16:47 (66)	06:24		17:56 (65)	05:57		19:47 (62)	04:49	04:28
	16:41	17:57	4	16:51 (66)	19:03	15	18:11 (65)	21:14	16	20:03 (62)	22:19	22:50
27	08:55	07:40			06:21		17:56 (65)	05:54		19:47 (62)	04:47	04:29
	16:44	18:00			19:05	16	18:12 (65)	21:16	14	20:01 (62)	22:21	22:49
28	08:53	07:38			06:18		17:56 (65)	05:51		19:49 (62)	04:46	04:30
	16:46	18:02			19:07	15	18:11 (65)	21:18	11	20:00 (62)	22:23	22:49
29	08:51				07:15		18:56 (65)	05:49		19:50 (62)	04:44	04:30
	16:49				20:09	14	19:10 (65)	21:21	7	19:57 (62)	22:25	22:49
30	08:49				07:12		18:56 (65)	05:46			04:43	04:31
	16:51				20:12	13	19:09 (65)	21:23			22:26	22:48
31	08:47				07:09		18:57 (65)				04:41	
	16:53				20:14	10	19:07 (65)				22:28	
Potential sun hours	222	260			365			432			521	547
Total, worst case			97			115			272			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

The calculated times are "worst case" given by the following assumptions:
The sun is shining all the day, from sunrise to sunset
The rotor plane is always perpendicular to the line from the WTG to the sun
The WTG is always operating

	July	August			September			October			November	December
1	04:32	05:24			06:33		19:32 (63)	07:39			07:51	08:59
	22:48	22:00			20:39	11	19:43 (63)	19:13			16:49	15:51
2	04:33	05:26			06:35		19:31 (63)	07:41			07:53	09:01
	22:47	21:58			20:36	12	19:43 (63)	19:10			16:46	15:50
3	04:34	05:28			06:37		19:31 (63)	07:43			07:56	09:03
	22:47	21:56			20:34	13	19:44 (63)	19:07			16:44	15:49
4	04:35	05:31			06:39		19:31 (63)	07:46			07:58	09:05
	22:46	21:53			20:31	12	19:43 (63)	19:04			16:41	15:48
5	04:36	05:33			06:42		19:32 (63)	07:48			08:00	09:06
	22:45	21:51			20:28	10	19:42 (63)	19:01			16:39	15:47
6	04:37	05:35			06:44		19:33 (63)	07:50			08:03	09:08
	22:44	21:48			20:25	7	19:40 (63)	18:58			16:37	15:46
7	04:39	05:37			06:46			07:52			08:05	09:10
	22:43	21:46			20:22			18:56			16:34	15:45
8	04:40	05:39			06:48			07:55			08:08	09:11
	22:42	21:44			20:19			18:53			16:32	15:45
9	04:41	05:42			06:50			07:57			08:10	09:13
	22:41	21:41			20:16			18:50			16:30	15:44
10	04:43	05:44			06:53			07:59			08:12	09:14
	22:40	21:39			20:13			18:47			16:28	15:44
11	04:44	05:46			06:55		18:54 (65)	08:02			08:15	09:16
	22:39	21:36			20:11	1	18:55 (65)	18:44			16:25	15:43
12	04:46	05:48			06:57		18:50 (65)	08:04			08:17	09:17
	22:37	21:34			20:08	9	18:59 (65)	18:42			16:23	15:43
13	04:47	05:50			06:59		18:48 (65)	08:06			08:20	09:18
	22:36	21:31			20:05	12	19:00 (65)	18:39			16:21	15:42
14	04:49	05:53		19:58 (62)	07:01		18:47 (65)	08:08			08:22	09:19
	22:34	21:28	8	20:06 (62)	20:02	14	19:01 (65)	18:36			16:19	15:42
15	04:51	05:55		19:56 (62)	07:04		18:46 (65)	08:11			08:24	09:20
	22:33	21:26	12	20:08 (62)	19:59	15	19:01 (65)	18:33			16:17	15:42
16	04:52	05:57		19:54 (62)	07:06		18:45 (65)	08:13		17:18 (66)	08:27	09:21
	22:31	21:23	15	20:09 (62)	19:56	15	19:00 (65)	18:30	7	17:25 (66)	16:15	15:42
17	04:54	05:59		19:53 (62)	07:08		18:45 (65)	08:15		17:15 (66)	08:29	09:22
	22:30	21:21	16	20:09 (62)	19:53	14	18:59 (65)	18:28	11	17:26 (66)	16:13	15:42
18	04:56	06:02		19:52 (62)	07:10		18:45 (65)	08:18		17:14 (66)	08:31	09:23
	22:28	21:18	18	20:10 (62)	19:50	13	18:58 (65)	18:25	13	17:27 (66)	16:11	15:42
19	04:58	06:04		19:52 (62)	07:12		18:46 (65)	08:20		17:13 (66)	08:34	09:24
	22:26	21:15	18	20:10 (62)	19:47	12	18:58 (65)	18:22	14	17:27 (66)	16:09	15:42
20	05:00	06:06		19:51 (62)	07:15		18:47 (65)	08:22		17:13 (66)	08:36	09:25
	22:25	21:12	18	20:09 (62)	19:44	8	18:55 (65)	18:20	14	17:27 (66)	16:08	15:43
21	05:01	06:08		19:51 (62)	07:17			08:25		17:13 (66)	08:38	09:26
	22:23	21:10	18	20:09 (62)	19:42			18:17	13	17:26 (66)	16:06	15:43
22	05:03	06:11		19:51 (62)	07:19			08:27		17:14 (66)	08:40	09:26
	22:21	21:07	17	20:08 (62)	19:39			18:14	12	17:26 (66)	16:04	15:43
23	05:05	06:13		19:52 (62)	07:21			08:29		17:14 (66)	08:43	09:27
	22:19	21:04	17	20:09 (62)	19:36			18:12	10	17:24 (66)	16:02	15:44
24	05:07	06:15		19:53 (62)	07:23			08:32		17:16 (66)	08:45	09:27
	22:17	21:02	14	20:07 (62)	19:33			18:09	7	17:23 (66)	16:01	15:45
25	05:09	06:17		19:54 (62)	07:26			07:34			08:47	09:27
	22:15	20:59	12	20:06 (62)	19:30			17:06			15:59	15:45
26	05:11	06:20		19:56 (62)	07:28			07:37			08:49	09:28
	22:13	20:56	7	20:03 (62)	19:27			17:04			15:58	15:46
27	05:13	06:22			07:30			07:39			08:51	09:28
	22:11	20:53			19:24			17:01			15:56	15:47
28	05:16	06:24			07:32			07:41			08:53	09:28
	22:09	20:50			19:21			16:59			15:55	15:48
29	05:18	06:26			07:35			07:44			08:55	09:28
	22:07	20:48			19:18			16:56			15:54	15:49
30	05:20	06:28		19:35 (63)	07:37			07:46			08:57	09:28
	22:05	20:45	7	19:42 (63)	19:16			16:54			15:52	15:50
31	05:22	06:31		19:33 (63)				07:48				09:27
	22:02	20:42	10	19:43 (63)				16:51				15:51
Potential sun hours	545	478			386			319			236	200
Total, worst case			207			178			101			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Vedlegg 7.2

Grafisk Moifjellet vindkraftverk

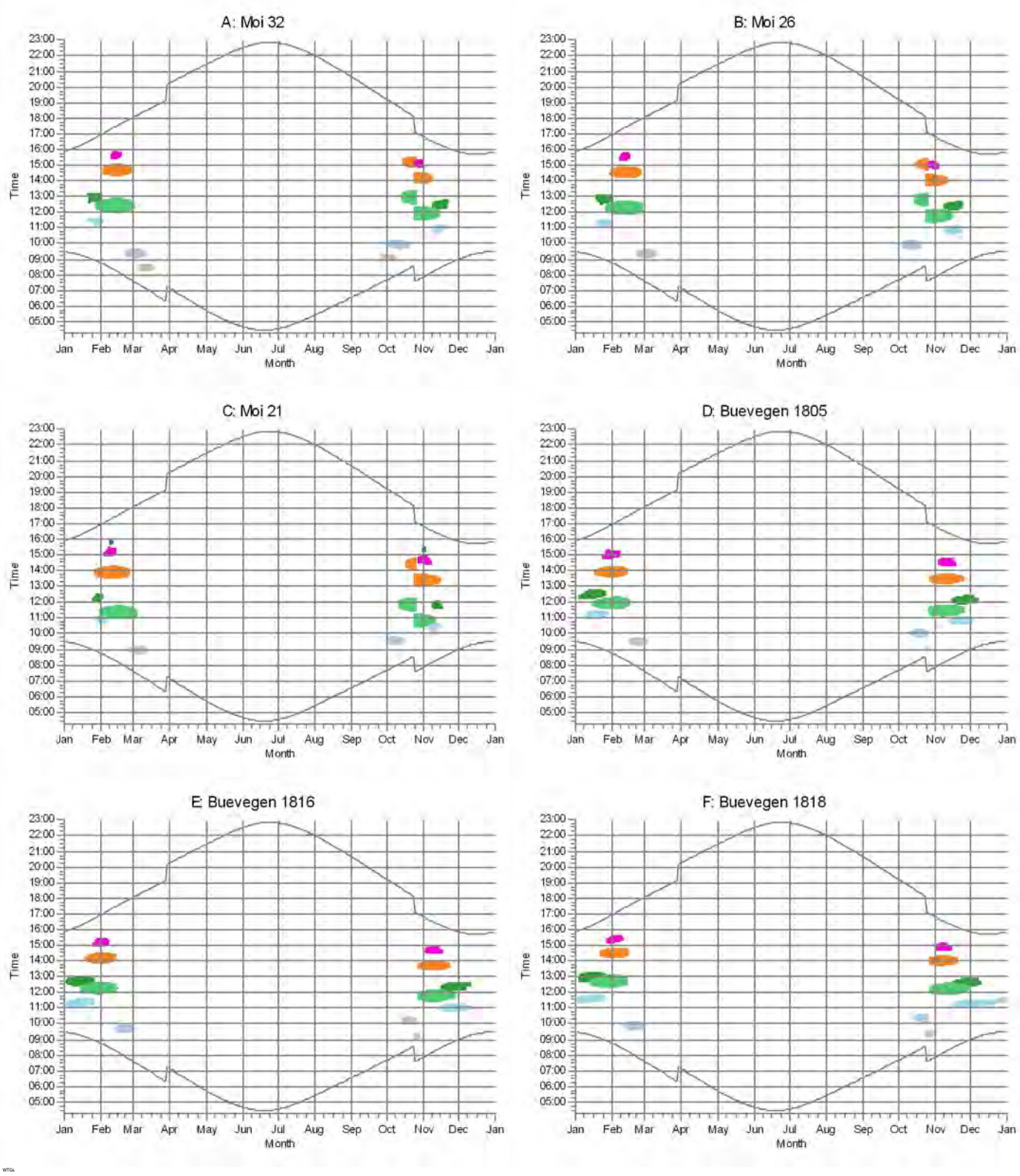
Med nærliggende - worst case

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

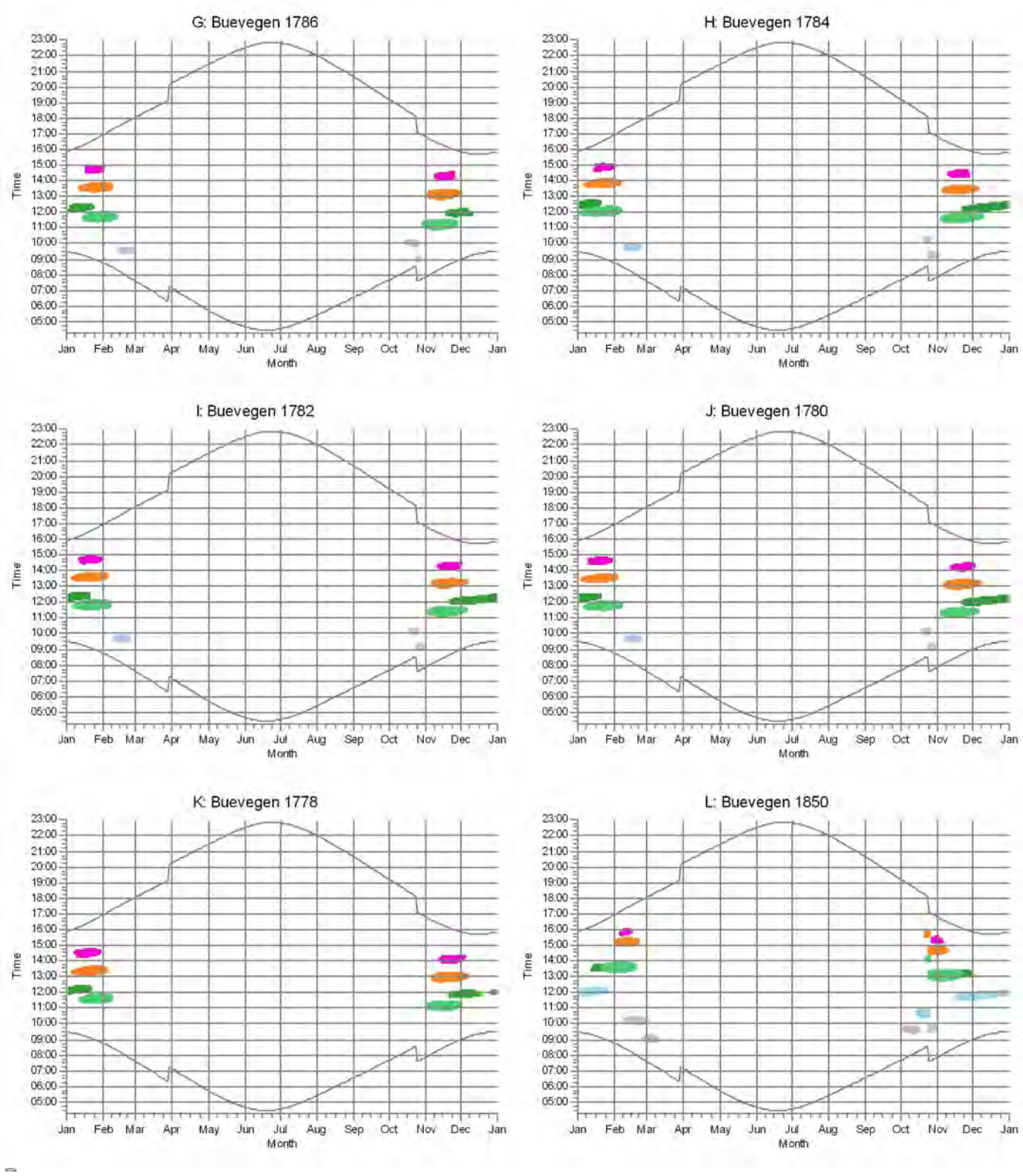


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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

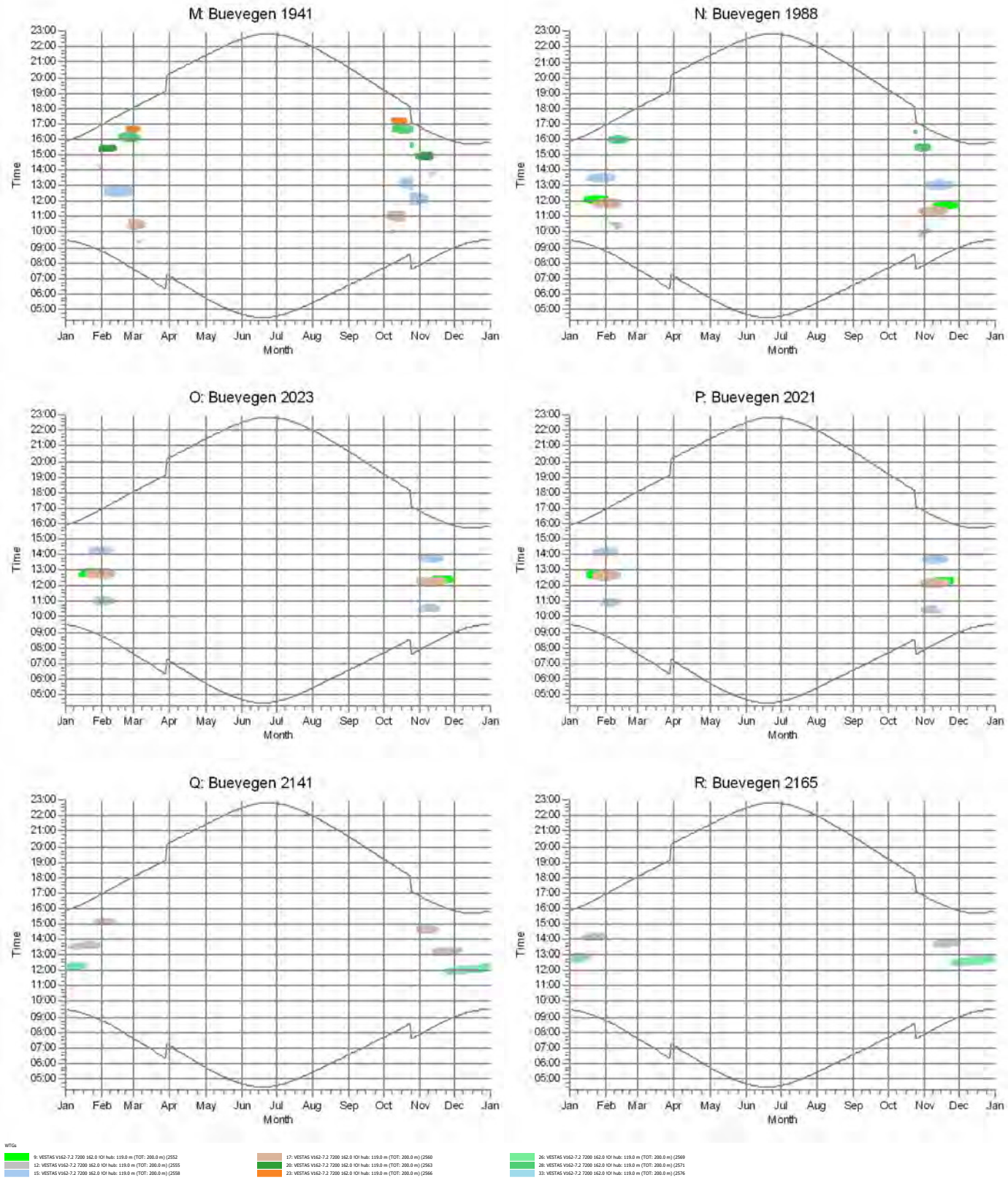


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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

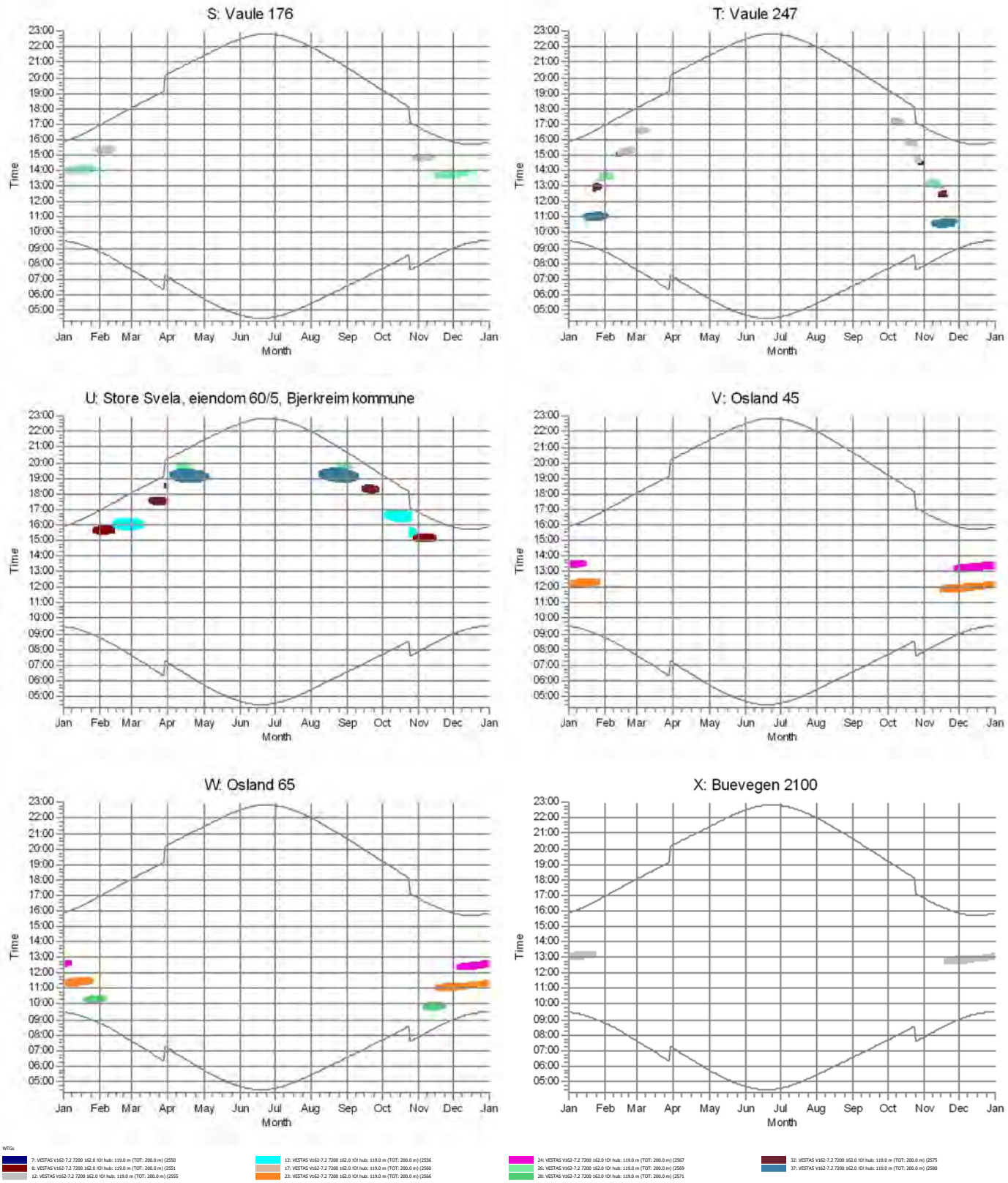


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SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

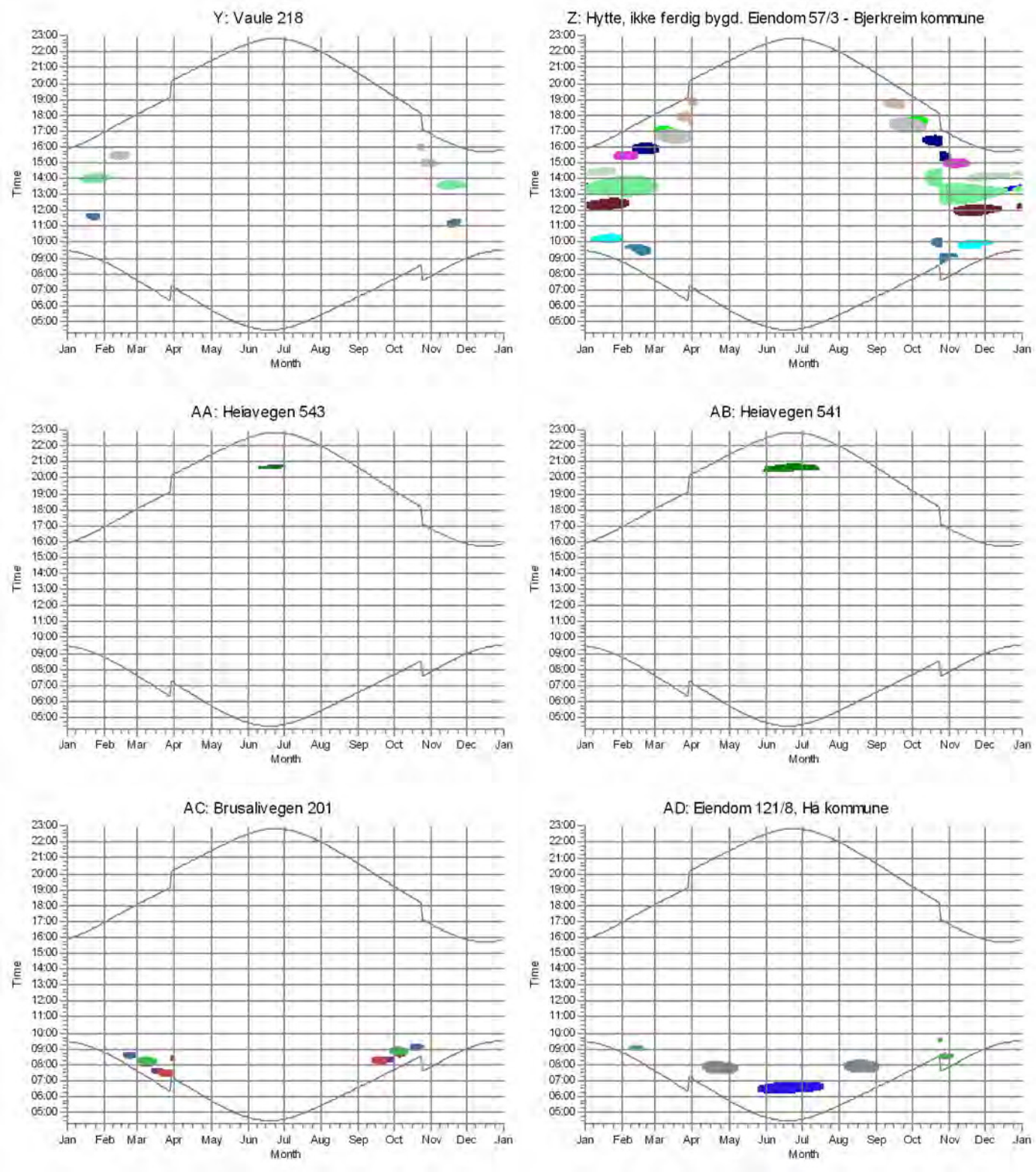


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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

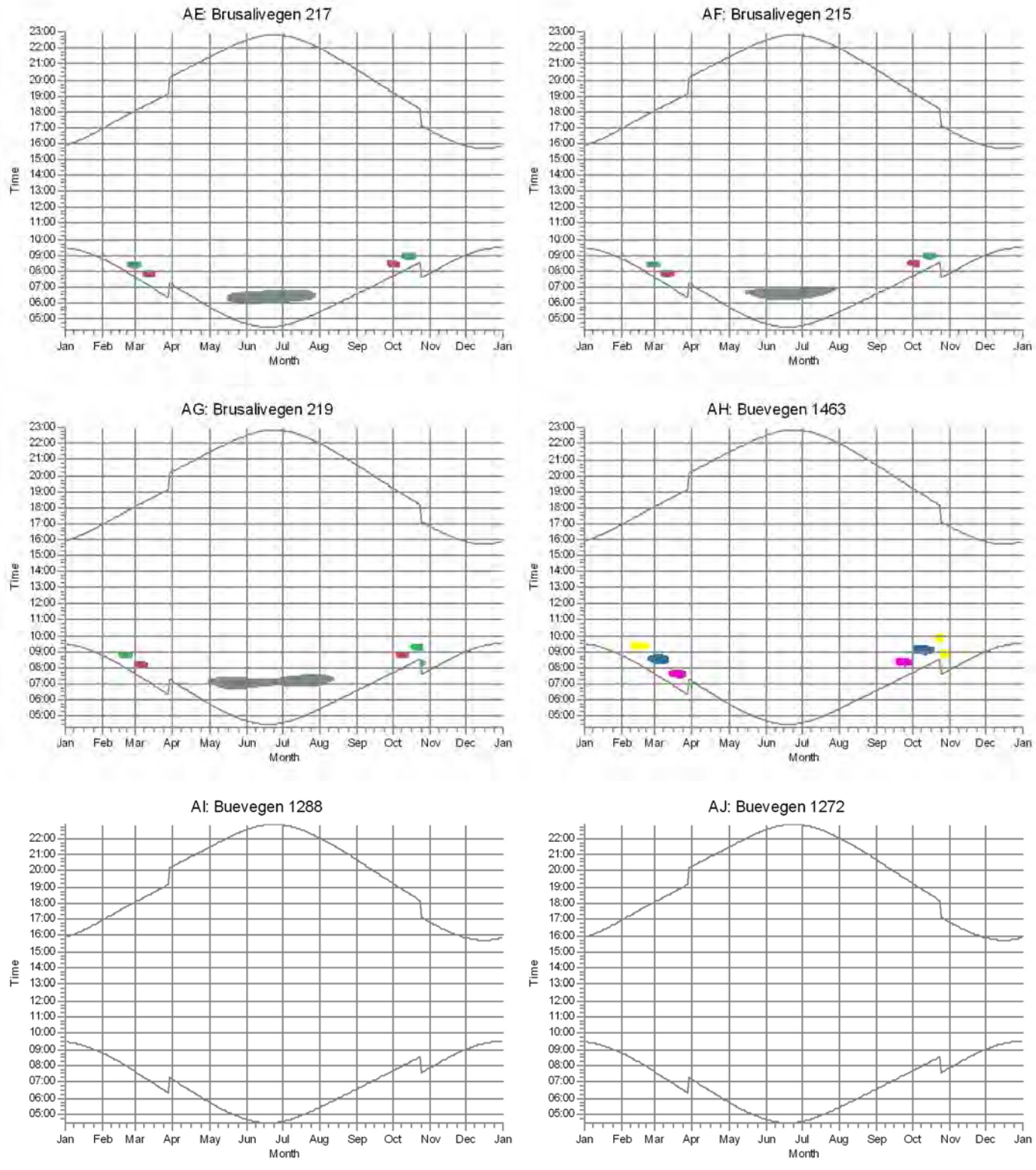


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Calculated:
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SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

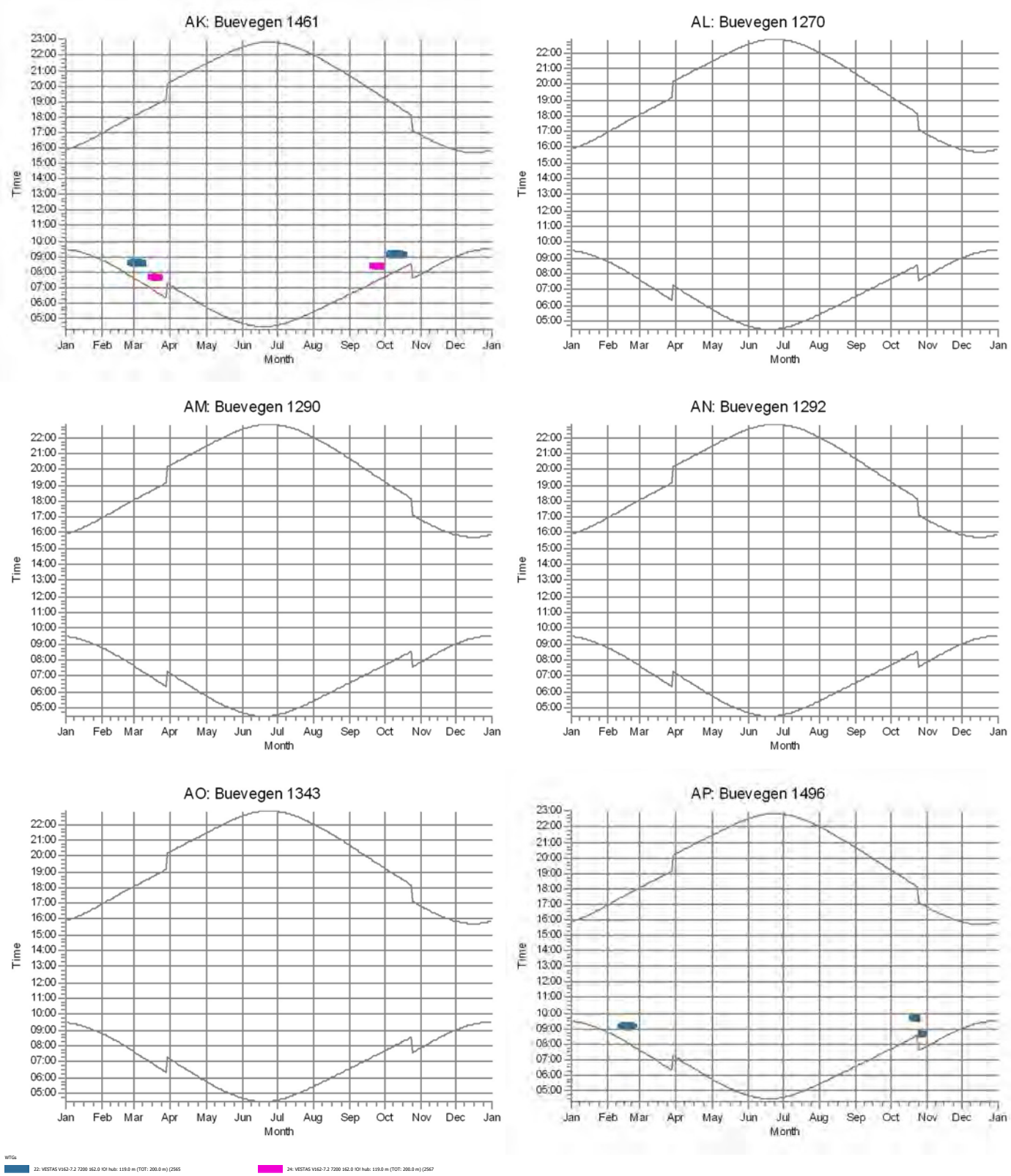


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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

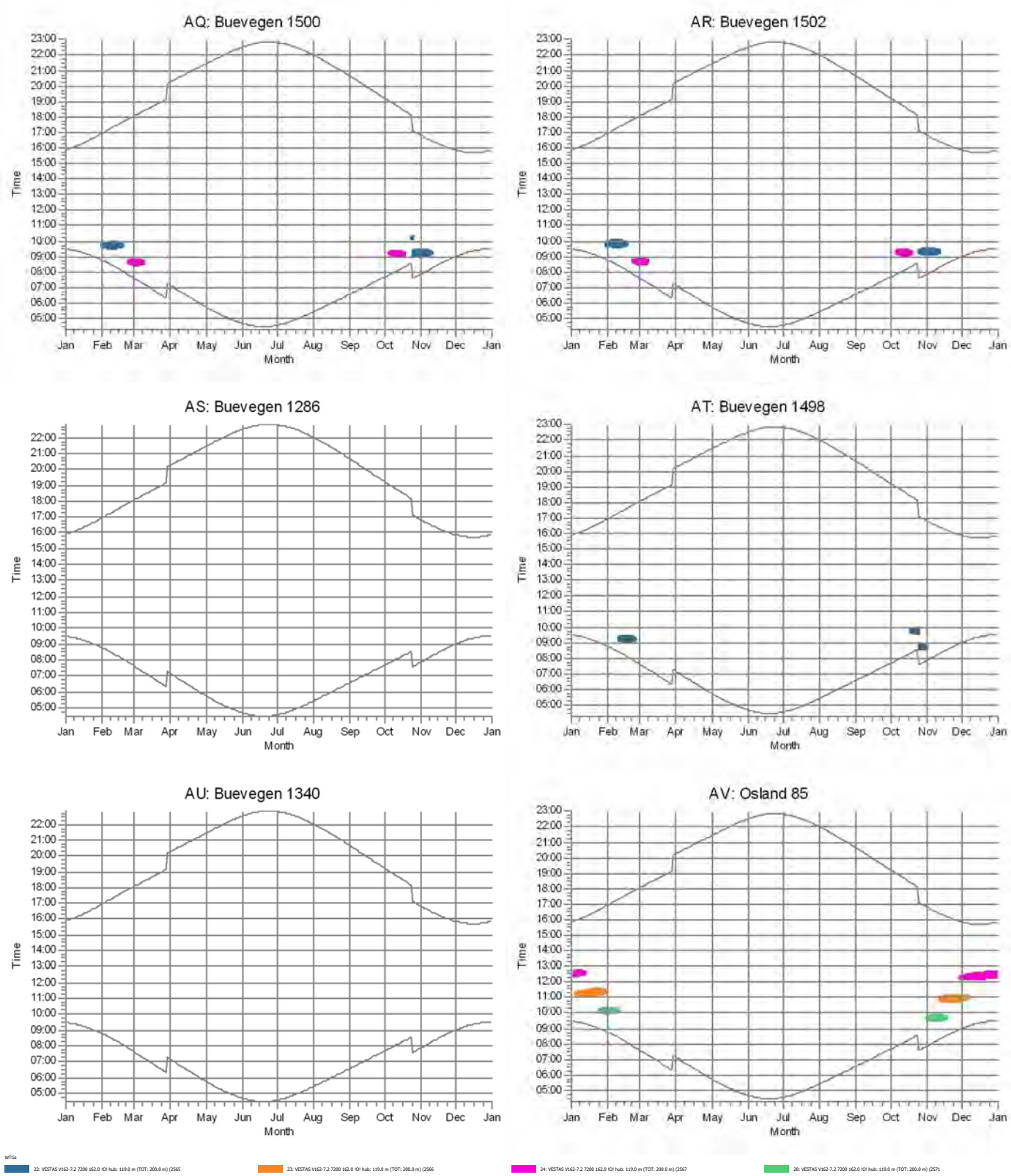


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Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere

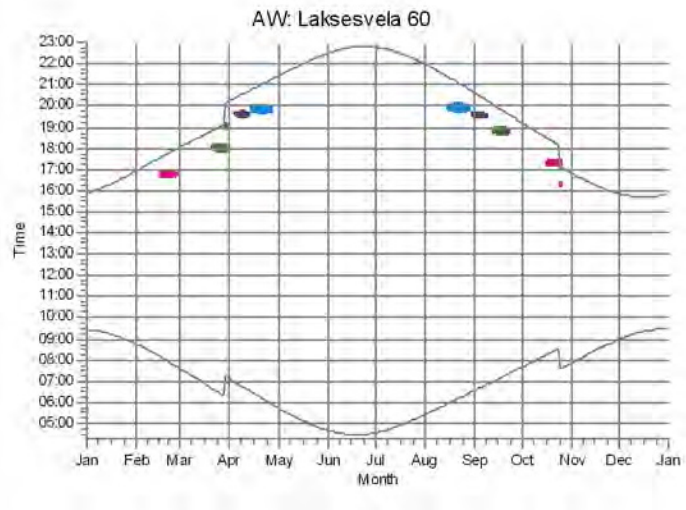


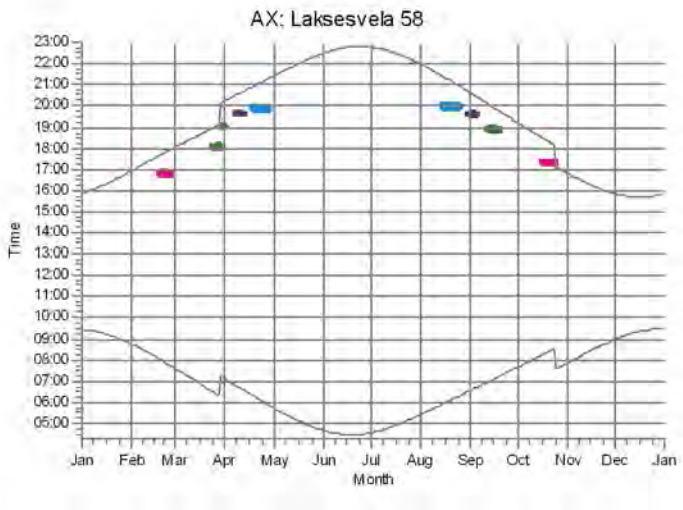
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:12/4.2.271

SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - worst case - mottakere







Vedlegg 8.1

Tabell Moifjellet vindkraftverk

Med nærliggende - realistic case

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

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Calculated:
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SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:19 (33)	07:35		09:10 (15)	07:07	05:44	04:40
	15:53			16:56	51	13:02 (20)	18:05	24	09:34 (15)	20:17	21:26	22:30
2	09:27			08:43		11:24 (33)	07:33		09:10 (15)	07:04	05:41	04:38
	15:54			16:58	34	12:41 (28)	18:07	25	09:35 (15)	20:19	21:28	22:32
3	09:27			08:41		12:08 (28)	07:30		09:10 (15)	07:01	05:39	04:37
	15:55			17:01	43	14:41 (23)	18:09	24	09:34 (15)	20:21	21:30	22:34
4	09:26			08:39		12:07 (28)	07:27		09:10 (15)	06:58	05:36	04:36
	15:57			17:03	56	14:50 (23)	18:12	24	09:34 (15)	20:24	21:33	22:35
5	09:26			08:37		12:06 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	61	14:52 (23)	18:14	23	09:33 (15)	20:26	21:35	22:37
6	09:25			08:34		12:06 (28)	07:21		08:24 (17)	06:52	05:31	04:34
	16:00			17:08	66	14:54 (23)	18:17	28	09:32 (15)	20:28	21:37	22:38
7	09:24			08:32		12:05 (28)	07:19		08:21 (17)	06:50	05:29	04:33
	16:02			17:11	69	14:54 (23)	18:19	32	09:30 (15)	20:30	21:40	22:39
8	09:24			08:30		12:05 (28)	07:16		08:19 (17)	06:47	05:26	04:32
	16:03			17:13	72	14:56 (23)	18:21	32	09:28 (15)	20:33	21:42	22:40
9	09:23			08:27		12:04 (28)	07:13		08:18 (17)	06:44	05:24	04:31
	16:05			17:16	75	14:57 (23)	18:24	29	09:26 (15)	20:35	21:44	22:42
10	09:22			08:25		12:04 (28)	07:10		08:17 (17)	06:41	05:22	04:30
	16:07			17:18	80	15:35 (24)	18:26	18	08:35 (17)	20:37	21:46	22:43
11	09:21			08:23		12:04 (28)	07:07		08:17 (17)	06:38	05:19	04:29
	16:09			17:21	91	15:40 (24)	18:28	18	08:35 (17)	20:40	21:49	22:44
12	09:20			08:20		12:04 (28)	07:04		08:17 (17)	06:35	05:17	04:29
	16:11			17:23	99	15:47 (24)	18:31	19	08:36 (17)	20:42	21:51	22:45
13	09:18			08:18		12:03 (28)	07:01		08:17 (17)	06:32	05:15	04:28
	16:13			17:26	101	15:48 (24)	18:33	18	08:35 (17)	20:44	21:53	22:46
14	09:17			08:15		12:04 (28)	06:59		08:17 (17)	06:30	05:13	04:28
	16:15			17:28	99	15:48 (24)	18:35	17	08:34 (17)	20:47	21:55	22:47
15	09:16			08:13		12:04 (28)	06:56		08:18 (17)	06:27	05:10	04:27
	16:17			17:31	96	15:46 (24)	18:38	15	08:33 (17)	20:49	21:58	22:47
16	09:15			08:10		12:03 (28)	06:53		08:19 (17)	06:24	05:08	04:27
	16:19			17:33	92	15:44 (24)	18:40	12	08:31 (17)	20:51	22:00	22:48
17	09:13			08:07		12:03 (28)	06:50		08:22 (17)	06:21	05:06	04:27
	16:21			17:36	86	15:41 (24)	18:42	5	08:27 (17)	20:53	22:02	22:49
18	09:12			08:05		12:04 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	78	14:58 (23)	18:45			20:56	22:04	22:49
19	09:10			08:02		12:05 (28)	06:44			06:16	05:02	04:27
	16:25			17:40	76	14:58 (23)	18:47			20:58	22:06	22:50
20	09:08			08:00		12:05 (28)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:57 (23)	18:49			21:00	22:08	22:50
21	09:07		11:29 (33)	07:57		12:05 (28)	06:38			06:10	04:58	04:27
	16:30	8	13:08 (20)	17:45	71	14:56 (23)	18:51			21:03	22:10	22:50
22	09:05		11:28 (33)	07:54		12:06 (28)	06:36			06:08	04:56	04:27
	16:32	22	13:07 (20)	17:48	66	14:55 (23)	18:54			21:05	22:12	22:50
23	09:03		11:29 (33)	07:52		09:20 (15)	06:33			06:05	04:54	04:27
	16:34	21	13:08 (20)	17:50	69	14:54 (23)	18:56			21:07	22:14	22:50
24	09:02		11:28 (33)	07:49		09:16 (15)	06:30			06:02	04:52	04:27
	16:37	33	13:08 (20)	17:53	69	14:52 (23)	18:58			21:10	22:16	22:51
25	09:00		11:27 (33)	07:46		09:14 (15)	06:27			05:59	04:51	04:28
	16:39	33	13:08 (20)	17:55	64	14:49 (23)	19:01			21:12	22:18	22:50
26	08:58		11:22 (33)	07:44		09:13 (15)	06:24			05:57	04:49	04:28
	16:41	37	13:08 (20)	17:57	54	14:45 (23)	19:03			21:14	22:20	22:50
27	08:56		11:14 (33)	07:41		09:12 (15)	06:21			05:54	04:47	04:29
	16:44	43	13:07 (20)	18:00	41	12:35 (28)	19:05			21:17	22:22	22:50
28	08:54		11:14 (33)	07:38		09:11 (15)	06:18			05:52	04:46	04:30
	16:46	52	13:07 (20)	18:02	33	12:29 (28)	19:07			21:19	22:24	22:50
29	08:52		11:15 (33)				07:15			05:49	04:44	04:30
	16:49	56	13:07 (20)				20:10			21:21	22:25	22:50
30	08:50		11:15 (33)				07:12			05:46	04:43	04:31
	16:51	59	13:06 (20)				20:12			21:24	22:27	22:49
31	08:48		11:17 (33)				07:10				04:41	
	16:54	57	13:05 (20)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		421			1966			363				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,64			0,61			0,73				
Total reduction		0,26			0,24			0,29				
Total, real		108			479			106				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** A - Moi 32

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September			October		November			December	
1	04:32		05:24		06:33			07:39		08:56 (17)	07:51		11:33 (28)	09:00
	22:49		22:01		20:40			19:13	19	09:15 (17)	16:49	78	14:57 (24)	15:51
2	04:33		05:26		06:35			07:42		08:56 (17)	07:54		11:34 (28)	09:02
	22:48		21:58		20:37			19:10	18	09:14 (17)	16:46	74	14:26 (23)	15:50
3	04:34		05:28		06:37			07:44		08:55 (17)	07:56		11:35 (28)	09:03
	22:47		21:56		20:34			19:07	19	09:14 (17)	16:44	71	14:25 (23)	15:49
4	04:35		05:31		06:40			07:46		08:55 (17)	07:59		11:35 (28)	09:05
	22:47		21:54		20:31			19:04	26	10:01 (15)	16:41	69	14:24 (23)	15:48
5	04:36		05:33		06:42			07:48		08:56 (17)	08:01		11:36 (28)	09:07
	22:46		21:51		20:28			19:02	31	10:05 (15)	16:39	64	14:23 (23)	15:47
6	04:37		05:35		06:44			07:51		08:57 (17)	08:03		11:37 (28)	09:09
	22:45		21:49		20:25			18:59	32	10:06 (15)	16:37	61	14:22 (23)	15:46
7	04:39		05:37		06:46			07:53		08:58 (17)	08:06		11:37 (28)	09:10
	22:44		21:47		20:22			18:56	31	10:07 (15)	16:34	53	14:17 (23)	15:45
8	04:40		05:39		06:49			07:55		09:03 (17)	08:08		11:39 (28)	09:12
	22:43		21:44		20:20			18:53	23	10:08 (15)	16:32	42	14:11 (23)	15:45
9	04:41		05:42		06:51			07:57		09:45 (15)	08:11		10:53 (33)	09:13
	22:42		21:42		20:17			18:50	23	10:08 (15)	16:30	37	12:12 (28)	15:44
10	04:43		05:44		06:53			08:00		09:45 (15)	08:13		10:50 (33)	09:15
	22:40		21:39		20:14			18:47	24	10:09 (15)	16:28	52	12:34 (20)	15:44
11	04:44		05:46		06:55			08:02		09:44 (15)	08:15		10:48 (33)	09:16
	22:39		21:37		20:11			18:45	24	10:08 (15)	16:25	57	12:36 (20)	15:43
12	04:46		05:48		06:57			08:04		09:43 (15)	08:18		10:47 (33)	09:18
	22:38		21:34		20:08			18:42	24	10:07 (15)	16:23	58	12:37 (20)	15:43
13	04:47		05:51		07:00			08:07		09:44 (15)	08:20		10:47 (33)	09:19
	22:37		21:31		20:05			18:39	23	10:07 (15)	16:21	57	12:39 (20)	15:42
14	04:49		05:53		07:02			08:09		09:44 (15)	08:22		10:46 (33)	09:20
	22:35		21:29		20:02			18:36	37	13:05 (28)	16:19	52	12:39 (20)	15:42
15	04:51		05:55		07:04			08:11		09:45 (15)	08:25		10:47 (33)	09:21
	22:34		21:26		19:59			18:33	44	13:09 (28)	16:17	43	12:40 (20)	15:42
16	04:52		05:57		07:06			08:13		09:45 (15)	08:27		10:55 (33)	09:22
	22:32		21:24		19:56			18:31	59	15:19 (23)	16:15	37	12:41 (20)	15:42
17	04:54		06:00		07:08			08:16		09:47 (15)	08:29		11:00 (33)	09:23
	22:30		21:21		19:54			18:28	66	15:22 (23)	16:13	33	12:41 (20)	15:42
18	04:56		06:02		07:11			08:18		09:48 (15)	08:32		11:02 (33)	09:24
	22:29		21:18		19:51			18:25	71	15:24 (23)	16:11	33	12:42 (20)	15:42
19	04:58		06:04		07:13			08:20		09:52 (15)	08:34		11:04 (33)	09:25
	22:27		21:16		19:48			18:22	70	15:26 (23)	16:09	21	12:43 (20)	15:42
20	05:00		06:06		07:15			08:23		12:37 (28)	08:36		11:03 (33)	09:26
	22:25		21:13		19:45			18:20	68	15:26 (23)	16:08	22	12:42 (20)	15:43
21	05:01		06:08		07:17			08:25		12:36 (28)	08:39		11:04 (33)	09:26
	22:24		21:10		19:42			18:17	71	15:27 (23)	16:06	8	12:43 (20)	15:43
22	05:03		06:11		07:19			08:27		12:35 (28)	08:41			09:27
	22:22		21:08		19:39			18:14	74	15:27 (23)	16:04			15:43
23	05:05		06:13		07:22			08:30		12:35 (28)	08:43			09:27
	22:20		21:05		19:36			18:12	76	15:28 (23)	16:02			15:44
24	05:07		06:15		07:24			08:32		12:34 (28)	08:45			09:28
	22:18		21:02		19:33			18:09	78	15:28 (23)	16:01			15:44
25	05:09		06:17		07:26			07:35		11:34 (28)	08:47			09:28
	22:16		20:59		19:30			17:06	86	15:12 (24)	15:59			15:45
26	05:11		06:20		07:28			07:37		11:33 (28)	08:50			09:28
	22:14		20:56		19:27			17:04	94	15:14 (24)	15:58			15:46
27	05:13		06:22		07:30		09:02 (17)	07:39		11:33 (28)	08:52			09:28
	22:12		20:54		19:25	10	09:12 (17)	17:01	97	15:16 (24)	15:56			15:47
28	05:16		06:24		07:33		09:00 (17)	07:42		11:33 (28)	08:54			09:28
	22:10		20:51		19:22	13	09:13 (17)	16:59	101	15:18 (24)	15:55			15:48
29	05:18		06:26		07:35		08:58 (17)	07:44		11:33 (28)	08:56			09:28
	22:07		20:48		19:19	16	09:14 (17)	16:56	102	15:18 (24)	15:54			15:49
30	05:20		06:29		07:37		08:56 (17)	07:47		11:33 (28)	08:58			09:28
	22:05		20:45		19:16	18	09:14 (17)	16:54	99	15:15 (24)	15:52			15:50
31	05:22		06:31					07:49		11:34 (28)				09:28
	22:03		20:42					16:51	90	15:09 (24)				15:51
Potential sun hours	546		478		386			319			236			199
Total, worst case						57			1700			1022		
Sun reduction						0,50			0,50			0,50		
Oper. time red.						0,80			0,80			0,80		
Wind dir. red.						0,72			0,63			0,62		
Total reduction						0,29			0,25			0,25		
Total, real						16			428			255		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		11:16 (33)	07:35		09:09 (15)	07:07	05:44	04:40
	15:53			16:56	59	14:39 (23)	18:05	23	09:32 (15)	20:17	21:26	22:30
2	09:27			08:43		12:00 (28)	07:33		09:09 (15)	07:04	05:41	04:38
	15:54			16:58	53	14:42 (23)	18:07	24	09:33 (15)	20:19	21:28	22:32
3	09:27			08:41		11:58 (28)	07:30		09:09 (15)	07:01	05:39	04:37
	15:55			17:01	59	14:43 (23)	18:09	24	09:33 (15)	20:21	21:30	22:34
4	09:26			08:39		11:58 (28)	07:27		09:09 (15)	06:58	05:36	04:36
	15:57			17:03	63	14:45 (23)	18:12	23	09:32 (15)	20:24	21:33	22:35
5	09:26			08:37		11:57 (28)	07:24		09:10 (15)	06:55	05:34	04:35
	15:58			17:06	67	14:46 (23)	18:14	21	09:31 (15)	20:26	21:35	22:37
6	09:25			08:34		11:57 (28)	07:21		09:10 (15)	06:52	05:31	04:34
	16:00			17:08	69	14:47 (23)	18:17	20	09:30 (15)	20:28	21:37	22:38
7	09:24			08:32		11:56 (28)	07:19		09:11 (15)	06:50	05:29	04:33
	16:02			17:11	72	14:48 (23)	18:19	17	09:28 (15)	20:30	21:40	22:39
8	09:24			08:30		11:56 (28)	07:16		09:13 (15)	06:47	05:26	04:32
	16:03			17:13	82	15:29 (24)	18:21	12	09:25 (15)	20:33	21:42	22:40
9	09:23			08:27		11:56 (28)	07:13		09:16 (15)	06:44	05:24	04:31
	16:05			17:16	91	15:35 (24)	18:24	5	09:21 (15)	20:35	21:44	22:42
10	09:22			08:25		11:55 (28)	07:10			06:41	05:22	04:30
	16:07			17:18	96	15:40 (24)	18:26			20:37	21:46	22:43
11	09:21			08:23		11:55 (28)	07:07			06:38	05:19	04:29
	16:09			17:21	100	15:44 (24)	18:28			20:40	21:49	22:44
12	09:20			08:20		11:55 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	100	15:43 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		11:55 (28)	07:01			06:32	05:15	04:28
	16:13			17:26	97	15:41 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:56 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	95	15:41 (24)	18:35			20:47	21:55	22:47
15	09:16			08:13		11:55 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	89	15:38 (24)	18:38			20:49	21:58	22:47
16	09:15			08:10		11:55 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	78	14:50 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		11:55 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	76	14:49 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		11:57 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	73	14:49 (23)	18:45			20:56	22:04	22:49
19	09:10		12:54 (20)	08:02		11:57 (28)	06:44			06:16	05:02	04:27
	16:25	5	12:59 (20)	17:40	70	14:48 (23)	18:47			20:58	22:06	22:50
20	09:08		11:12 (33)	08:00		11:57 (28)	06:41			06:13	05:00	04:27
	16:28	29	13:02 (20)	17:43	68	14:47 (23)	18:49			21:00	22:08	22:50
21	09:07		11:11 (33)	07:57		11:58 (28)	06:38			06:10	04:58	04:27
	16:30	36	13:02 (20)	17:45	64	14:46 (23)	18:51			21:03	22:10	22:50
22	09:05		11:11 (33)	07:54		11:59 (28)	06:36			06:08	04:56	04:27
	16:32	45	13:02 (20)	17:48	58	14:44 (23)	18:54			21:05	22:12	22:50
23	09:03		11:11 (33)	07:52		09:17 (15)	06:33			06:05	04:54	04:27
	16:34	45	13:02 (20)	17:50	62	14:43 (23)	18:56			21:07	22:14	22:50
24	09:02		11:10 (33)	07:49		09:14 (15)	06:30			06:02	04:52	04:27
	16:37	46	13:02 (20)	17:53	57	14:39 (23)	18:58			21:10	22:16	22:51
25	09:00		11:08 (33)	07:46		09:13 (15)	06:27			05:59	04:51	04:28
	16:39	47	13:02 (20)	17:55	42	12:28 (28)	19:01			21:12	22:18	22:50
26	08:58		11:09 (33)	07:44		09:11 (15)	06:24			05:57	04:49	04:28
	16:41	45	13:02 (20)	17:57	38	12:24 (28)	19:03			21:14	22:20	22:50
27	08:56		11:09 (33)	07:41		09:10 (15)	06:21			05:54	04:47	04:29
	16:44	53	13:01 (20)	18:00	22	09:32 (15)	19:05			21:17	22:22	22:50
28	08:54		11:10 (33)	07:38		09:09 (15)	06:18			05:52	04:46	04:30
	16:46	58	13:01 (20)	18:02	23	09:32 (15)	19:07			21:19	22:24	22:50
29	08:52		11:12 (33)				07:15			05:49	04:44	04:30
	16:49	58	13:00 (20)				20:10			21:21	22:25	22:50
30	08:50		11:12 (33)				07:12			05:46	04:43	04:31
	16:51	58	12:59 (20)				20:12			21:24	22:27	22:49
31	08:48		11:14 (33)				07:10				04:41	
	16:54	56	14:29 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		581			1923			169				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,65			0,61			0,74				
Total reduction		0,26			0,24			0,29				
Total, real		151			468			50				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** B - Moi 26

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:25 (28)	09:00
	22:49	22:01	20:40	19:13			16:49	96	15:09 (24)	15:51
2	04:33	05:26	06:35	07:42			07:54		11:25 (28)	09:02
	22:48	21:58	20:37	19:10			16:46	90	15:04 (24)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:26 (28)	09:03
	22:47	21:56	20:34	19:07			16:44	82	14:58 (24)	15:49
4	04:35	05:31	06:40	07:46			07:59		11:26 (28)	09:05
	22:47	21:54	20:31	19:04			16:41	72	14:17 (23)	15:48
5	04:36	05:33	06:42	07:48		09:51 (15)	08:01		11:27 (28)	09:07
	22:46	21:51	20:28	19:02	10	10:01 (15)	16:39	70	14:17 (23)	15:47
6	04:37	05:35	06:44	07:51		09:48 (15)	08:03		11:28 (28)	09:09
	22:45	21:49	20:25	18:59	15	10:03 (15)	16:37	65	14:16 (23)	15:46
7	04:39	05:37	06:46	07:53		09:46 (15)	08:06		11:28 (28)	09:10
	22:44	21:47	20:22	18:56	18	10:04 (15)	16:34	62	14:14 (23)	15:45
8	04:40	05:39	06:49	07:55		09:45 (15)	08:08		11:29 (28)	09:12
	22:43	21:44	20:20	18:53	21	10:06 (15)	16:32	57	14:13 (23)	15:45
9	04:41	05:42	06:51	07:57		09:44 (15)	08:11		11:30 (28)	09:13
	22:42	21:42	20:17	18:50	22	10:06 (15)	16:30	53	14:12 (23)	15:44
10	04:43	05:44	06:53	08:00		09:44 (15)	08:13		10:47 (33)	09:15
	22:40	21:39	20:14	18:47	23	10:07 (15)	16:28	58	14:10 (23)	15:44
11	04:44	05:46	06:55	08:02		09:43 (15)	08:15		10:45 (33)	09:16
	22:39	21:37	20:11	18:45	23	10:06 (15)	16:25	55	13:59 (23)	15:43
12	04:46	05:48	06:57	08:04		09:42 (15)	08:18		10:44 (33)	09:18
	22:38	21:34	20:08	18:42	24	10:06 (15)	16:23	57	12:31 (20)	15:43
13	04:47	05:51	07:00	08:07		09:43 (15)	08:20		10:43 (33)	09:19
	22:37	21:31	20:05	18:39	23	10:06 (15)	16:21	59	12:32 (20)	15:42
14	04:49	05:53	07:02	08:09		09:42 (15)	08:22		10:42 (33)	09:20
	22:35	21:29	20:02	18:36	23	10:05 (15)	16:19	58	12:33 (20)	15:42
15	04:51	05:55	07:04	08:11		09:43 (15)	08:25		10:42 (33)	09:21
	22:34	21:26	19:59	18:33	33	12:54 (28)	16:17	53	12:34 (20)	15:42
16	04:52	05:57	07:06	08:13		09:44 (15)	08:27		10:42 (33)	09:22
	22:32	21:24	19:56	18:31	39	12:58 (28)	16:15	45	12:35 (20)	15:42
17	04:54	06:00	07:08	08:16		09:45 (15)	08:29		10:41 (33)	09:23
	22:30	21:21	19:54	18:28	46	15:07 (23)	16:13	47	12:35 (20)	15:42
18	04:56	06:02	07:11	08:18		09:46 (15)	08:32		10:44 (33)	09:24
	22:29	21:18	19:51	18:25	59	15:12 (23)	16:11	46	12:36 (20)	15:42
19	04:58	06:04	07:13	08:20		09:49 (15)	08:34		10:46 (33)	09:25
	22:27	21:16	19:48	18:22	62	15:15 (23)	16:09	45	12:37 (20)	15:42
20	05:00	06:06	07:15	08:23		12:30 (28)	08:36		10:46 (33)	09:26
	22:25	21:13	19:45	18:20	60	15:16 (23)	16:08	45	12:37 (20)	15:43
21	05:01	06:08	07:17	08:25		12:29 (28)	08:39		10:46 (33)	09:26
	22:24	21:10	19:42	18:17	65	15:17 (23)	16:06	36	12:37 (20)	15:43
22	05:03	06:11	07:19	08:27		12:27 (28)	08:41		10:48 (33)	09:27
	22:22	21:08	19:39	18:14	70	15:18 (23)	16:04	30	12:38 (20)	15:43
23	05:05	06:13	07:22	08:30		12:27 (28)	08:43		12:30 (20)	09:27
	22:20	21:05	19:36	18:12	72	15:19 (23)	16:02	5	12:35 (20)	15:44
24	05:07	06:15	07:24	08:32		12:26 (28)	08:45			09:28
	22:18	21:02	19:33	18:09	75	15:19 (23)	16:01			15:44
25	05:09	06:17	07:26	07:35		11:26 (28)	08:47			09:28
	22:16	20:59	19:30	17:06	76	14:20 (23)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:25 (28)	08:50			09:28
	22:14	20:56	19:27	17:04	81	15:04 (24)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:25 (28)	08:52			09:28
	22:12	20:54	19:25	17:01	91	15:08 (24)	15:56			15:47
28	05:16	06:24	07:33	07:42		11:25 (28)	08:54			09:28
	22:10	20:51	19:22	16:59	95	15:10 (24)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:24 (28)	08:56			09:28
	22:07	20:48	19:19	16:56	99	15:11 (24)	15:54			15:49
30	05:20	06:29	07:37	07:47		11:25 (28)	08:58			09:28
	22:05	20:45	19:16	16:54	99	15:12 (24)	15:52			15:50
31	05:22	06:31		07:49		11:25 (28)				09:28
	22:03	20:42		16:51	101	15:13 (24)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1425			1286		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,63			0,62		
Total reduction					0,25			0,25		
Total, real					357			321		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		10:42 (33)	07:35		08:50 (15)	07:07	05:44	04:40
	15:53			16:56	72	14:06 (23)	18:05	39	11:29 (28)	20:17	21:26	22:30
2	09:27			08:43		10:44 (33)	07:33		08:50 (15)	07:04	05:41	04:38
	15:54			16:58	72	14:08 (23)	18:07	31	11:25 (28)	20:19	21:28	22:32
3	09:27			08:41		10:46 (33)	07:30		08:49 (15)	07:01	05:39	04:37
	15:55			17:01	71	14:10 (23)	18:09	21	09:10 (15)	20:21	21:31	22:34
4	09:26			08:39		10:47 (33)	07:27		08:48 (15)	06:58	05:36	04:36
	15:57			17:03	77	15:02 (24)	18:12	22	09:10 (15)	20:24	21:33	22:35
5	09:26			08:37		10:50 (33)	07:24		08:48 (15)	06:55	05:34	04:35
	15:58			17:06	77	15:05 (24)	18:14	21	09:09 (15)	20:26	21:35	22:37
6	09:25			08:34		11:05 (28)	07:21		08:48 (15)	06:52	05:31	04:34
	16:00			17:08	82	15:12 (24)	18:17	21	09:09 (15)	20:28	21:37	22:38
7	09:24			08:32		11:03 (28)	07:19		08:48 (15)	06:50	05:29	04:33
	16:02			17:11	92	15:18 (24)	18:19	20	09:08 (15)	20:30	21:40	22:39
8	09:24			08:30		11:03 (28)	07:16		08:48 (15)	06:47	05:26	04:32
	16:03			17:13	101	15:25 (24)	18:21	19	09:07 (15)	20:33	21:42	22:40
9	09:23			08:27		11:02 (28)	07:13		08:48 (15)	06:44	05:24	04:31
	16:05			17:16	112	15:55 (22)	18:24	18	09:06 (15)	20:35	21:44	22:42
10	09:22			08:25		11:01 (28)	07:10		08:49 (15)	06:41	05:22	04:30
	16:07			17:18	104	15:51 (22)	18:26	15	09:04 (15)	20:37	21:46	22:43
11	09:21			08:23		11:01 (28)	07:07		08:51 (15)	06:38	05:19	04:29
	16:09			17:21	101	15:23 (24)	18:28	10	09:01 (15)	20:40	21:49	22:44
12	09:20			08:20		11:00 (28)	07:04			06:35	05:17	04:29
	16:11			17:23	98	15:21 (24)	18:31			20:42	21:51	22:45
13	09:18			08:18		10:59 (28)	07:02			06:33	05:15	04:28
	16:13			17:26	94	15:18 (24)	18:33			20:44	21:53	22:46
14	09:17			08:15		11:00 (28)	06:59			06:30	05:13	04:28
	16:15			17:28	83	14:14 (23)	18:35			20:47	21:55	22:47
15	09:16			08:13		10:59 (28)	06:56			06:27	05:10	04:27
	16:17			17:31	83	14:13 (23)	18:38			20:49	21:58	22:47
16	09:15			08:10		10:59 (28)	06:53			06:24	05:08	04:27
	16:19			17:33	81	14:12 (23)	18:40			20:51	22:00	22:48
17	09:13			08:07		10:59 (28)	06:50			06:21	05:06	04:27
	16:21			17:36	81	14:12 (23)	18:42			20:53	22:02	22:49
18	09:12			08:05		10:59 (28)	06:47			06:19	05:04	04:27
	16:23			17:38	80	14:12 (23)	18:45			20:56	22:04	22:49
19	09:10			08:02		10:59 (28)	06:44			06:16	05:02	04:27
	16:25			17:40	78	14:11 (23)	18:47			20:58	22:06	22:50
20	09:08			08:00		10:59 (28)	06:41			06:13	05:00	04:27
	16:28			17:43	74	14:09 (23)	18:49			21:00	22:08	22:50
21	09:07			07:57		10:59 (28)	06:39			06:10	04:58	04:27
	16:30			17:45	71	14:08 (23)	18:51			21:03	22:10	22:50
22	09:05			07:54		11:00 (28)	06:36			06:08	04:56	04:27
	16:32			17:48	66	14:06 (23)	18:54			21:05	22:12	22:50
23	09:03			07:52		11:01 (28)	06:33			06:05	04:54	04:27
	16:34			17:50	60	14:04 (23)	18:56			21:07	22:14	22:50
24	09:02			07:49		11:01 (28)	06:30			06:02	04:52	04:27
	16:37			17:53	50	14:00 (23)	18:58			21:10	22:16	22:51
25	09:00			07:46		11:02 (28)	06:27			06:00	04:51	04:28
	16:39			17:55	36	11:38 (28)	19:01			21:12	22:18	22:50
26	08:58		12:05 (20)	07:44		08:58 (15)	06:24			05:57	04:49	04:28
	16:41	5	12:10 (20)	17:57	36	11:36 (28)	19:03			21:14	22:20	22:50
27	08:56		12:05 (20)	07:41		08:54 (15)	06:21			05:54	04:47	04:29
	16:44	19	13:53 (23)	18:00	41	11:34 (28)	19:05			21:17	22:22	22:50
28	08:54		11:00 (33)	07:38		08:52 (15)	06:18			05:52	04:46	04:30
	16:46	40	13:59 (23)	18:02	41	11:32 (28)	19:08			21:19	22:24	22:50
29	08:52		10:56 (33)				07:15			05:49	04:44	04:30
	16:49	47	14:02 (23)				20:10			21:21	22:25	22:50
30	08:50		10:50 (33)				07:13			05:46	04:43	04:31
	16:51	55	14:03 (23)				20:12			21:24	22:27	22:49
31	08:48		10:44 (33)				07:10				04:41	
	16:54	62	14:05 (23)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		228			2114			237				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,62			0,63			0,73				
Total reduction		0,25			0,25			0,29				
Total, real		56			530			69				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** C - Moi 21

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December
1	04:32		05:24		06:33		07:39			07:51		10:30 (28)	09:00
	22:49		22:01		20:40		19:13			16:49	107	15:21 (22)	15:51
2	04:33		05:26		06:35		07:42		09:32 (15)	07:54		10:32 (28)	09:02
	22:48		21:58		20:37		19:10	7	09:39 (15)	16:46	110	15:25 (22)	15:50
3	04:34		05:28		06:37		07:44		09:28 (15)	07:56		10:33 (28)	09:03
	22:47		21:56		20:34		19:07	13	09:41 (15)	16:44	97	14:53 (24)	15:49
4	04:35		05:31		06:40		07:46		09:26 (15)	07:59		10:33 (28)	09:05
	22:47		21:54		20:31		19:04	16	09:42 (15)	16:41	89	14:46 (24)	15:48
5	04:36		05:33		06:42		07:48		09:25 (15)	08:01		10:35 (28)	09:07
	22:46		21:51		20:28		19:02	19	09:44 (15)	16:39	81	14:41 (24)	15:47
6	04:37		05:35		06:44		07:51		09:24 (15)	08:03		10:20 (33)	09:09
	22:45		21:49		20:25		18:59	20	09:44 (15)	16:37	77	14:35 (24)	15:46
7	04:39		05:37		06:46		07:53		09:23 (15)	08:06		10:16 (33)	09:10
	22:44		21:47		20:22		18:56	21	09:44 (15)	16:34	77	14:32 (24)	15:45
8	04:40		05:39		06:49		07:55		09:23 (15)	08:08		10:15 (33)	09:12
	22:43		21:44		20:20		18:53	22	09:45 (15)	16:32	71	13:39 (23)	15:45
9	04:41		05:42		06:51		07:57		09:22 (15)	08:11		10:15 (33)	09:13
	22:42		21:42		20:17		18:50	22	09:44 (15)	16:30	72	13:39 (23)	15:44
10	04:43		05:44		06:53		08:00		09:23 (15)	08:13		10:14 (33)	09:15
	22:40		21:39		20:14		18:47	21	09:44 (15)	16:28	71	13:38 (23)	15:44
11	04:44		05:46		06:55		08:02		09:23 (15)	08:15		10:15 (33)	09:16
	22:39		21:37		20:11		18:45	20	09:43 (15)	16:25	61	13:36 (23)	15:43
12	04:46		05:48		06:57		08:04		09:23 (15)	08:18		10:24 (33)	09:18
	22:38		21:34		20:08		18:42	36	12:00 (28)	16:23	52	13:35 (23)	15:43
13	04:47		05:51		07:00		08:07		09:24 (15)	08:20		10:28 (33)	09:19
	22:37		21:31		20:05		18:39	40	12:04 (28)	16:21	47	13:33 (23)	15:42
14	04:49		05:53		07:02		08:09		09:25 (15)	08:22		10:32 (33)	09:20
	22:35		21:29		20:02		18:36	42	12:06 (28)	16:19	39	13:30 (23)	15:42
15	04:51		05:55		07:04		08:11		09:28 (15)	08:25		11:38 (20)	09:21
	22:34		21:26		19:59		18:33	40	12:08 (28)	16:17	19	13:26 (23)	15:42
16	04:52		05:57		07:06		08:13		11:35 (28)	08:27		11:38 (20)	09:22
	22:32		21:24		19:56		18:31	34	12:09 (28)	16:15	4	11:42 (20)	15:42
17	04:54		06:00		07:08		08:16		11:34 (28)	08:29			09:23
	22:30		21:21		19:54		18:28	36	12:10 (28)	16:13			15:42
18	04:56		06:02		07:11		08:18		11:32 (28)	08:32			09:24
	22:29		21:18		19:51		18:25	55	14:33 (23)	16:11			15:42
19	04:58		06:04		07:13		08:20		11:32 (28)	08:34			09:25
	22:27		21:16		19:48		18:22	62	14:36 (23)	16:09			15:42
20	05:00		06:06		07:15		08:23		11:31 (28)	08:36			09:26
	22:25		21:13		19:45		18:20	67	14:37 (23)	16:08			15:43
21	05:01		06:09		07:17		08:25		11:30 (28)	08:39			09:26
	22:24		21:10		19:42		18:17	72	14:39 (23)	16:06			15:43
22	05:03		06:11		07:19		08:27		11:29 (28)	08:41			09:27
	22:22		21:08		19:39		18:14	75	14:40 (23)	16:04			15:43
23	05:05		06:13		07:22		08:30		11:29 (28)	08:43			09:27
	22:20		21:05		19:36		18:12	78	14:41 (23)	16:02			15:44
24	05:07		06:15		07:24		08:32		11:29 (28)	08:45			09:28
	22:18		21:02		19:33		18:09	79	14:41 (23)	16:01			15:45
25	05:09		06:17		07:26		07:35		10:29 (28)	08:47			09:28
	22:16		20:59		19:30		17:07	81	13:42 (23)	15:59			15:45
26	05:11		06:20		07:28		07:37		10:29 (28)	08:50			09:28
	22:14		20:57		19:27		17:04	82	13:43 (23)	15:58			15:46
27	05:13		06:22		07:30		07:39		10:29 (28)	08:52			09:28
	22:12		20:54		19:25		17:01	81	13:42 (23)	15:56			15:47
28	05:16		06:24		07:33		07:42		10:29 (28)	08:54			09:28
	22:10		20:51		19:22		16:59	87	14:45 (24)	15:55			15:48
29	05:18		06:26		07:35		07:44		10:29 (28)	08:56			09:28
	22:07		20:48		19:19		16:56	95	14:48 (24)	15:54			15:49
30	05:20		06:29		07:37		07:47		10:30 (28)	08:58			09:28
	22:05		20:45		19:16		16:54	99	14:51 (24)	15:52			15:50
31	05:22		06:31				07:49		10:31 (28)				09:28
	22:03		20:42				16:51	99	14:52 (24)				15:51
Potential sun hours	546		478		386		319			236			199
Total, worst case								1521			1074		
Sun reduction								0,50			0,50		
Oper. time red.								0,80			0,80		
Wind dir. red.								0,65			0,62		
Total reduction								0,26			0,25		
Total, real								396			264		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April		May	June
1	09:28			08:46			11:39 (28)	07:35		09:25 (15)		07:07	05:44	04:40
	15:53			16:56	88		15:12 (24)	18:05	9	09:34 (15)		20:17	21:26	22:31
2	09:27			08:43			11:39 (28)	07:33				07:04	05:41	04:38
	15:54			16:58	88		15:13 (24)	18:07				20:19	21:28	22:32
3	09:27			08:41			11:40 (28)	07:30				07:01	05:39	04:37
	15:55			17:01	85		15:12 (24)	18:09				20:21	21:31	22:34
4	09:27			08:39			11:39 (28)	07:27				06:58	05:36	04:36
	15:57			17:03	83		15:11 (24)	18:12				20:24	21:33	22:35
5	09:26		12:20 (20)	08:37			11:39 (28)	07:24				06:55	05:34	04:35
	15:58	1	12:21 (20)	17:06	80		15:09 (24)	18:14				20:26	21:35	22:37
6	09:25		12:19 (20)	08:34			11:40 (28)	07:21				06:52	05:31	04:34
	16:00	5	12:24 (20)	17:08	74		15:08 (24)	18:17				20:28	21:37	22:38
7	09:24		12:17 (20)	08:32			11:40 (28)	07:19				06:50	05:29	04:33
	16:02	11	12:28 (20)	17:11	62		14:11 (23)	18:19				20:30	21:40	22:39
8	09:24		12:17 (20)	08:30			11:41 (28)	07:16				06:47	05:26	04:32
	16:03	13	12:30 (20)	17:13	61		14:11 (23)	18:21				20:33	21:42	22:40
9	09:23		12:18 (20)	08:27			11:42 (28)	07:13				06:44	05:24	04:31
	16:05	16	12:34 (20)	17:16	57		14:10 (23)	18:24				20:35	21:44	22:42
10	09:22		11:06 (33)	08:25			11:42 (28)	07:10				06:41	05:22	04:30
	16:07	25	12:39 (20)	17:18	54		14:09 (23)	18:26				20:37	21:46	22:43
11	09:21		11:02 (33)	08:23			11:44 (28)	07:07				06:38	05:19	04:29
	16:09	31	12:41 (20)	17:21	48		14:08 (23)	18:28				20:40	21:49	22:44
12	09:20		11:01 (33)	08:20			11:45 (28)	07:04				06:35	05:17	04:29
	16:11	40	12:41 (20)	17:23	42		14:06 (23)	18:31				20:42	21:51	22:45
13	09:18		11:02 (33)	08:18			11:46 (28)	07:02				06:32	05:15	04:28
	16:13	42	12:42 (20)	17:26	32		14:02 (23)	18:33				20:44	21:53	22:46
14	09:17		11:02 (33)	08:15			11:49 (28)	06:59				06:30	05:13	04:28
	16:15	42	12:42 (20)	17:28	18		12:07 (28)	18:35				20:47	21:55	22:47
15	09:16		11:02 (33)	08:13			11:52 (28)	06:56				06:27	05:10	04:27
	16:17	43	12:42 (20)	17:31	12		12:04 (28)	18:38				20:49	21:58	22:47
16	09:15		11:02 (33)	08:10			09:29 (15)	06:53				06:24	05:08	04:27
	16:19	43	12:42 (20)	17:33	5		09:34 (15)	18:40				20:51	22:00	22:48
17	09:13		11:02 (33)	08:07			09:25 (15)	06:50				06:21	05:06	04:27
	16:21	45	12:42 (20)	17:36	12		09:37 (15)	18:42				20:53	22:02	22:49
18	09:12		11:03 (33)	08:05			09:24 (15)	06:47				06:19	05:04	04:27
	16:23	57	13:55 (23)	17:38	16		09:40 (15)	18:45				20:56	22:04	22:49
19	09:10		11:03 (33)	08:02			09:23 (15)	06:44				06:16	05:02	04:27
	16:25	70	13:59 (23)	17:40	17		09:40 (15)	18:47				20:58	22:06	22:50
20	09:08		11:04 (33)	08:00			09:22 (15)	06:41				06:13	05:00	04:27
	16:28	75	14:01 (23)	17:43	19		09:41 (15)	18:49				21:00	22:08	22:50
21	09:07		11:04 (33)	07:57			09:21 (15)	06:39				06:10	04:58	04:27
	16:30	80	14:03 (23)	17:45	20		09:41 (15)	18:51				21:03	22:10	22:50
22	09:05		11:05 (33)	07:54			09:20 (15)	06:36				06:08	04:56	04:27
	16:32	82	14:05 (23)	17:48	21		09:41 (15)	18:54				21:05	22:12	22:50
23	09:03		11:05 (33)	07:52			09:21 (15)	06:33				06:05	04:54	04:27
	16:34	83	14:05 (23)	17:50	21		09:42 (15)	18:56				21:07	22:14	22:51
24	09:02		11:06 (33)	07:49			09:21 (15)	06:30				06:02	04:52	04:27
	16:37	84	14:07 (23)	17:53	20		09:41 (15)	18:58				21:10	22:16	22:51
25	09:00		11:07 (33)	07:46			09:21 (15)	06:27				05:59	04:51	04:28
	16:39	84	14:52 (24)	17:55	20		09:41 (15)	19:01				21:12	22:18	22:51
26	08:58		11:09 (33)	07:44			09:21 (15)	06:24				05:57	04:49	04:28
	16:41	79	14:57 (24)	17:57	19		09:40 (15)	19:03				21:14	22:20	22:50
27	08:56		11:10 (33)	07:41			09:22 (15)	06:21				05:54	04:47	04:29
	16:44	86	15:12 (24)	18:00	16		09:38 (15)	19:05				21:17	22:22	22:50
28	08:54		11:13 (33)	07:38			09:23 (15)	06:18				05:52	04:46	04:30
	16:46	90	15:13 (24)	18:02	14		09:37 (15)	19:08				21:19	22:24	22:50
29	08:52		11:40 (28)					07:15				05:49	04:44	04:30
	16:49	88	15:14 (24)					20:10				21:21	22:25	22:50
30	08:50		11:39 (28)					07:12				05:46	04:42	04:31
	16:51	88	15:13 (24)					20:12				21:24	22:27	22:49
31	08:48		11:39 (28)					07:10					04:41	
	16:54	88	15:13 (24)					20:14					22:29	
Potential sun hours	221			260			365			432		521	547	
Total, worst case		1491			1104			9						
Sun reduction		0,50			0,50			0,50						
Oper. time red.		0,80			0,80			0,80						
Wind dir. red.		0,62			0,63			0,73						
Total reduction		0,25			0,25			0,29						
Total, real		371			276			3						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** D - Buevegen 1805

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		11:12 (28)	09:00		10:44 (33)
	22:49	22:01	20:40	19:13			16:49	53	13:38 (23)	15:51	31	12:23 (20)
2	04:33	05:26	06:35	07:42			07:54		11:11 (28)	09:02		10:48 (33)
	22:48	21:58	20:37	19:10			16:46	58	13:40 (23)	15:50	27	12:23 (20)
3	04:34	05:28	06:37	07:44			07:56		11:11 (28)	09:03		12:01 (20)
	22:47	21:56	20:34	19:07			16:44	60	13:41 (23)	15:49	17	12:18 (20)
4	04:35	05:31	06:40	07:46			07:59		11:10 (28)	09:05		12:01 (20)
	22:47	21:54	20:31	19:04			16:41	63	13:41 (23)	15:48	13	12:14 (20)
5	04:36	05:33	06:42	07:48			08:01		11:10 (28)	09:07		12:02 (20)
	22:46	21:51	20:28	19:02			16:39	75	14:38 (24)	15:47	11	12:13 (20)
6	04:37	05:35	06:44	07:51			08:03		11:10 (28)	09:09		12:05 (20)
	22:45	21:49	20:25	18:59			16:37	79	14:40 (24)	15:46	5	12:10 (20)
7	04:39	05:37	06:46	07:53			08:06		11:09 (28)	09:10		12:07 (20)
	22:44	21:47	20:22	18:56			16:34	84	14:41 (24)	15:45	2	12:09 (20)
8	04:40	05:39	06:49	07:55			08:08		11:09 (28)	09:12		
	22:43	21:44	20:20	18:53			16:32	87	14:42 (24)	15:45		
9	04:41	05:42	06:51	07:57			08:11		11:10 (28)	09:13		
	22:42	21:42	20:17	18:50			16:30	87	14:43 (24)	15:44		
10	04:43	05:44	06:53	08:00			08:13		11:10 (28)	09:15		
	22:41	21:39	20:14	18:47			16:28	88	14:44 (24)	15:43		
11	04:44	05:46	06:55	08:02			08:15		11:10 (28)	09:16		
	22:39	21:37	20:11	18:45			16:25	88	14:44 (24)	15:43		
12	04:46	05:48	06:57	08:04		10:02 (15)	08:18		11:11 (28)	09:18		
	22:38	21:34	20:08	18:42	2	10:04 (15)	16:23	88	14:45 (24)	15:43		
13	04:47	05:51	07:00	08:07		09:58 (15)	08:20		11:12 (28)	09:19		
	22:37	21:32	20:05	18:39	11	10:09 (15)	16:21	86	14:45 (24)	15:42		
14	04:49	05:53	07:02	08:09		09:55 (15)	08:22		10:45 (33)	09:20		
	22:35	21:29	20:02	18:36	15	10:10 (15)	16:19	89	14:45 (24)	15:42		
15	04:51	05:55	07:04	08:11		09:54 (15)	08:25		10:42 (33)	09:21		
	22:34	21:26	19:59	18:33	18	10:12 (15)	16:17	87	14:45 (24)	15:42		
16	04:52	05:57	07:06	08:13		09:53 (15)	08:27		10:41 (33)	09:22		
	22:32	21:24	19:56	18:31	19	10:12 (15)	16:15	81	14:30 (24)	15:42		
17	04:54	06:00	07:08	08:16		09:53 (15)	08:30		10:41 (33)	09:23		
	22:30	21:21	19:54	18:28	20	10:13 (15)	16:13	83	14:25 (24)	15:42		
18	04:56	06:02	07:11	08:18		09:52 (15)	08:32		10:40 (33)	09:24		
	22:29	21:18	19:51	18:25	21	10:13 (15)	16:11	84	13:41 (23)	15:42		
19	04:58	06:04	07:13	08:20		09:52 (15)	08:34		10:40 (33)	09:25		
	22:27	21:16	19:48	18:22	21	10:13 (15)	16:09	83	13:40 (23)	15:42		
20	05:00	06:06	07:15	08:23		09:52 (15)	08:36		10:39 (33)	09:26		
	22:25	21:13	19:45	18:20	20	10:12 (15)	16:08	82	13:39 (23)	15:43		
21	05:01	06:08	07:17	08:25		09:52 (15)	08:39		10:39 (33)	09:26		
	22:24	21:10	19:42	18:17	20	10:12 (15)	16:06	80	13:38 (23)	15:43		
22	05:03	06:11	07:19	08:27		09:52 (15)	08:41		10:40 (33)	09:27		
	22:22	21:08	19:39	18:14	19	10:11 (15)	16:04	75	13:37 (23)	15:43		
23	05:05	06:13	07:22	08:30		09:53 (15)	08:43		10:39 (33)	09:27		
	22:20	21:05	19:36	18:12	17	10:10 (15)	16:02	69	13:35 (23)	15:44		
24	05:07	06:15	07:24	08:32		09:54 (15)	08:45		10:40 (33)	09:28		
	22:18	21:02	19:33	18:09	14	10:08 (15)	16:01	58	13:32 (23)	15:44		
25	05:09	06:17	07:26	07:35		08:56 (15)	08:47		10:40 (33)	09:28		
	22:16	20:59	19:30	17:06	11	09:07 (15)	15:59	45	12:20 (20)	15:45		
26	05:11	06:20	07:28	07:37		09:01 (15)	08:50		10:41 (33)	09:28		
	22:14	20:57	19:27	17:04	2	09:03 (15)	15:58	43	12:21 (20)	15:46		
27	05:13	06:22	07:30	07:39		11:20 (28)	08:52		10:41 (33)	09:28		
	22:12	20:54	19:25	17:01	14	11:34 (28)	15:56	43	12:21 (20)	15:47		
28	05:16	06:24	07:33	07:42		11:18 (28)	08:54		10:42 (33)	09:28		
	22:10	20:51	19:22	16:59	19	11:37 (28)	15:55	42	12:22 (20)	15:48		
29	05:18	06:26	07:35	07:44		11:15 (28)	08:56		10:42 (33)	09:28		
	22:07	20:48	19:19	16:56	34	13:32 (23)	15:54	42	12:22 (20)	15:49		
30	05:20	06:29	07:37	07:47		11:14 (28)	08:58		10:42 (33)	09:28		
	22:05	20:45	19:16	16:54	42	13:35 (23)	15:52	40	12:22 (20)	15:50		
31	05:22	06:31		07:49		11:13 (28)				09:28		
	22:03	20:42		16:51	50	13:38 (23)				15:51		
Potential sun hours	546	478	386	319			236			199		
Total, worst case					389			2122			106	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,69			0,61			0,64	
Total reduction					0,27			0,25			0,25	
Total, real					107			520			27	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		11:12 (33)	08:46		11:58 (28)	07:35	07:07	05:44	04:40
	15:53	2	11:14 (33)	16:56	88	15:21 (24)	18:05	20:17	21:26	22:30
2	09:27		11:11 (33)	08:43		11:59 (28)	07:33	07:04	05:41	04:38
	15:54	3	11:14 (33)	16:58	85	15:21 (24)	18:07	20:19	21:28	22:32
3	09:27		11:11 (33)	08:41		12:00 (28)	07:30	07:01	05:39	04:37
	15:55	12	12:45 (20)	17:01	84	15:21 (24)	18:09	20:21	21:31	22:34
4	09:27		11:11 (33)	08:39		11:59 (28)	07:27	06:58	05:36	04:36
	15:57	14	12:45 (20)	17:03	82	15:20 (24)	18:12	20:24	21:33	22:35
5	09:26		11:11 (33)	08:37		11:59 (28)	07:24	06:55	05:34	04:35
	15:58	28	12:49 (20)	17:06	81	15:19 (24)	18:14	20:26	21:35	22:37
6	09:25		11:11 (33)	08:34		12:00 (28)	07:21	06:52	05:31	04:34
	16:00	29	12:50 (20)	17:08	75	15:18 (24)	18:17	20:28	21:37	22:38
7	09:24		11:11 (33)	08:32		12:01 (28)	07:19	06:50	05:29	04:33
	16:02	36	12:50 (20)	17:11	64	15:14 (24)	18:19	20:30	21:40	22:39
8	09:24		11:11 (33)	08:30		12:02 (28)	07:16	06:47	05:26	04:32
	16:03	40	12:51 (20)	17:13	57	14:25 (23)	18:21	20:33	21:42	22:40
9	09:23		11:12 (33)	08:27		12:03 (28)	07:13	06:44	05:24	04:31
	16:05	40	12:52 (20)	17:16	53	14:24 (23)	18:24	20:35	21:44	22:42
10	09:22		11:11 (33)	08:25		12:04 (28)	07:10	06:41	05:22	04:30
	16:07	41	12:52 (20)	17:18	48	14:23 (23)	18:26	20:37	21:46	22:43
11	09:21		11:12 (33)	08:23		12:06 (28)	07:07	06:38	05:19	04:29
	16:09	42	12:53 (20)	17:21	43	14:22 (23)	18:28	20:40	21:49	22:44
12	09:20		11:12 (33)	08:20		12:07 (28)	07:04	06:35	05:17	04:29
	16:11	43	12:53 (20)	17:23	35	14:20 (23)	18:31	20:42	21:51	22:45
13	09:18		11:12 (33)	08:18		12:10 (28)	07:02	06:32	05:15	04:28
	16:13	44	12:54 (20)	17:26	22	14:16 (23)	18:33	20:44	21:53	22:46
14	09:17		11:12 (33)	08:15		09:38 (15)	06:59	06:30	05:13	04:28
	16:15	44	12:54 (20)	17:28	10	12:19 (28)	18:35	20:47	21:55	22:47
15	09:16		11:12 (33)	08:13		09:35 (15)	06:56	06:27	05:10	04:27
	16:17	54	12:54 (20)	17:31	12	09:47 (15)	18:38	20:49	21:58	22:47
16	09:15		11:12 (33)	08:10		09:33 (15)	06:53	06:24	05:08	04:27
	16:19	57	12:54 (20)	17:33	16	09:49 (15)	18:40	20:51	22:00	22:48
17	09:13		11:13 (33)	08:07		09:32 (15)	06:50	06:21	05:06	04:27
	16:21	60	12:54 (20)	17:36	18	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:14 (33)	08:05		09:31 (15)	06:47	06:19	05:04	04:27
	16:23	62	12:55 (20)	17:38	20	09:51 (15)	18:45	20:56	22:04	22:49
19	09:10		11:15 (33)	08:02		09:31 (15)	06:44	06:16	05:02	04:27
	16:25	64	12:55 (20)	17:40	20	09:51 (15)	18:47	20:58	22:06	22:50
20	09:08		11:15 (33)	08:00		09:30 (15)	06:41	06:13	05:00	04:27
	16:28	73	14:13 (23)	17:43	21	09:51 (15)	18:49	21:00	22:08	22:50
21	09:07		11:16 (33)	07:57		09:30 (15)	06:38	06:10	04:58	04:27
	16:30	78	14:16 (23)	17:45	21	09:51 (15)	18:51	21:03	22:10	22:50
22	09:05		11:16 (33)	07:54		09:29 (15)	06:36	06:08	04:56	04:27
	16:32	80	14:17 (23)	17:48	22	09:51 (15)	18:54	21:05	22:12	22:50
23	09:03		11:17 (33)	07:52		09:30 (15)	06:33	06:05	04:54	04:27
	16:34	81	14:19 (23)	17:50	21	09:51 (15)	18:56	21:07	22:14	22:51
24	09:02		11:19 (33)	07:49		09:31 (15)	06:30	06:02	04:52	04:27
	16:37	77	14:20 (23)	17:53	19	09:50 (15)	18:58	21:10	22:16	22:51
25	09:00		11:20 (33)	07:46		09:31 (15)	06:27	05:59	04:51	04:28
	16:39	73	14:21 (23)	17:55	18	09:49 (15)	19:01	21:12	22:18	22:51
26	08:58		11:23 (33)	07:44		09:32 (15)	06:24	05:57	04:49	04:28
	16:41	69	15:03 (24)	17:57	15	09:47 (15)	19:03	21:14	22:20	22:50
27	08:56		11:58 (28)	07:41		09:34 (15)	06:21	05:54	04:47	04:29
	16:44	68	15:06 (24)	18:00	11	09:45 (15)	19:05	21:17	22:22	22:50
28	08:54		11:58 (28)	07:38		09:38 (15)	06:18	05:52	04:46	04:30
	16:46	75	15:11 (24)	18:02	2	09:40 (15)	19:07	21:19	22:24	22:50
29	08:52		11:59 (28)				07:15	05:49	04:44	04:30
	16:49	83	15:18 (24)				20:10	21:21	22:25	22:50
30	08:50		11:58 (28)				07:12	05:46	04:42	04:31
	16:51	86	15:21 (24)				20:12	21:24	22:27	22:49
31	08:48		11:58 (28)				07:10		04:41	
	16:54	88	15:22 (24)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		1646			1063					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,63			0,63					
Total reduction		0,25			0,25					
Total, real		411			265					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** E - Buevegen 1816

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:33 (28)	09:00		10:54 (33)
	22:49		22:01		20:40		19:13			16:49	50	13:53 (23)	15:51	43	12:35 (20)
2	04:33		05:26		06:35		07:42			07:54		11:32 (28)	09:02		10:54 (33)
	22:48		21:58		20:37		19:10			16:46	54	13:54 (23)	15:50	42	12:35 (20)
3	04:34		05:28		06:37		07:44			07:56		11:32 (28)	09:03		10:55 (33)
	22:47		21:56		20:34		19:07			16:44	57	13:55 (23)	15:49	40	12:35 (20)
4	04:35		05:31		06:40		07:46			07:59		11:30 (28)	09:05		10:56 (33)
	22:47		21:54		20:31		19:04			16:41	68	14:45 (24)	15:48	39	12:35 (20)
5	04:36		05:33		06:42		07:48			08:01		11:30 (28)	09:07		10:56 (33)
	22:46		21:51		20:28		19:02			16:39	76	14:48 (24)	15:47	39	12:36 (20)
6	04:37		05:35		06:44		07:51			08:03		11:30 (28)	09:09		10:57 (33)
	22:45		21:49		20:25		18:59			16:37	78	14:49 (24)	15:46	30	12:36 (20)
7	04:39		05:37		06:46		07:53			08:06		11:29 (28)	09:10		10:58 (33)
	22:44		21:47		20:22		18:56			16:34	83	14:50 (24)	15:45	29	12:36 (20)
8	04:40		05:39		06:49		07:55			08:08		11:29 (28)	09:12		10:59 (33)
	22:43		21:44		20:20		18:53			16:32	86	14:51 (24)	15:45	15	12:33 (20)
9	04:41		05:42		06:51		07:57			08:11		11:29 (28)	09:13		11:00 (33)
	22:42		21:42		20:17		18:50			16:30	87	14:52 (24)	15:44	12	12:34 (20)
10	04:43		05:44		06:53		08:00			08:13		11:30 (28)	09:15		11:00 (33)
	22:41		21:39		20:14		18:47			16:28	88	14:53 (24)	15:43	4	12:31 (20)
11	04:44		05:46		06:55		08:02			08:15		11:29 (28)	09:16		11:02 (33)
	22:39		21:37		20:11		18:45			16:25	87	14:52 (24)	15:43	2	11:04 (33)
12	04:46		05:48		06:57		08:04			08:18		11:30 (28)	09:18		11:02 (33)
	22:38		21:34		20:08		18:42			16:23	87	14:53 (24)	15:43	2	11:04 (33)
13	04:47		05:51		07:00		08:07			08:20		11:30 (28)	09:19		
	22:37		21:31		20:05		18:39			16:21	83	14:50 (24)	15:42		
14	04:49		05:53		07:02		08:09		10:08 (15)	08:22		11:30 (28)	09:20		
	22:35		21:29		20:02		18:36	8	10:16 (15)	16:19	74	14:42 (24)	15:42		
15	04:51		05:55		07:04		08:11		10:06 (15)	08:25		11:31 (28)	09:21		
	22:34		21:26		19:59		18:33	13	10:19 (15)	16:17	68	14:38 (24)	15:42		
16	04:52		05:57		07:06		08:13		10:04 (15)	08:27		10:56 (33)	09:22		
	22:32		21:24		19:56		18:31	16	10:20 (15)	16:15	69	14:36 (24)	15:42		
17	04:54		06:00		07:08		08:16		10:03 (15)	08:30		10:54 (33)	09:23		
	22:30		21:21		19:54		18:28	18	10:21 (15)	16:13	73	13:55 (23)	15:42		
18	04:56		06:02		07:11		08:18		10:02 (15)	08:32		10:52 (33)	09:24		
	22:29		21:18		19:51		18:25	20	10:22 (15)	16:11	78	13:54 (23)	15:42		
19	04:58		06:04		07:13		08:20		10:01 (15)	08:34		10:52 (33)	09:25		
	22:27		21:16		19:48		18:22	21	10:22 (15)	16:09	81	13:54 (23)	15:42		
20	05:00		06:06		07:15		08:23		10:01 (15)	08:36		10:51 (33)	09:26		
	22:25		21:13		19:45		18:20	21	10:22 (15)	16:08	80	13:52 (23)	15:43		
21	05:01		06:08		07:17		08:25		10:01 (15)	08:39		10:51 (33)	09:26		
	22:24		21:10		19:42		18:17	21	10:22 (15)	16:06	78	13:51 (23)	15:43		
22	05:03		06:11		07:19		08:27		10:00 (15)	08:41		10:51 (33)	09:27		
	22:22		21:08		19:39		18:14	21	10:21 (15)	16:04	75	13:50 (23)	15:43		
23	05:05		06:13		07:22		08:30		10:01 (15)	08:43		10:51 (33)	09:27		
	22:20		21:05		19:36		18:12	20	10:21 (15)	16:02	64	12:31 (20)	15:44		
24	05:07		06:15		07:24		08:32		10:01 (15)	08:45		10:51 (33)	09:28		
	22:18		21:02		19:33		18:09	19	10:20 (15)	16:01	63	12:32 (20)	15:44		
25	05:09		06:17		07:26		07:35		09:02 (15)	08:47		10:51 (33)	09:28		
	22:16		20:59		19:30		17:06	18	09:20 (15)	15:59	60	12:32 (20)	15:45		
26	05:11		06:20		07:28		07:37		09:03 (15)	08:50		10:52 (33)	09:28		
	22:14		20:57		19:27		17:04	15	09:18 (15)	15:58	56	12:33 (20)	15:46		
27	05:13		06:22		07:30		07:39		09:05 (15)	08:52		10:51 (33)	09:28		
	22:12		20:54		19:25		17:01	11	09:16 (15)	15:56	53	12:33 (20)	15:47		
28	05:16		06:24		07:33		07:42		09:08 (15)	08:54		10:52 (33)	09:28		
	22:10		20:51		19:22		16:59	13	11:51 (28)	15:55	44	12:34 (20)	15:48		
29	05:18		06:26		07:35		07:44		11:38 (28)	08:56		10:53 (33)	09:28		
	22:07		20:48		19:19		16:56	26	13:46 (23)	15:54	43	12:34 (20)	15:49		
30	05:20		06:29		07:37		07:47		11:36 (28)	08:58		10:53 (33)	09:28		
	22:05		20:45		19:16		16:54	37	13:50 (23)	15:52	43	12:34 (20)	15:50		
31	05:22		06:31				07:49		11:35 (28)				09:28		11:11 (33)
	22:03		20:42				16:51	44	13:52 (23)				15:51	1	11:12 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								362			2086			298	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,69			0,61			0,65	
Total reduction								0,28			0,24			0,26	
Total, real								100			508			77	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	11:23 (33)	08:46	12:23 (28)	07:35	07:07	05:44	04:40
	15:53 17	11:40 (33)	16:56 82	15:30 (24)	18:05	20:17	21:26	22:30
2	09:27	11:23 (33)	08:43	12:24 (28)	07:33	07:04	05:41	04:38
	15:54 17	11:40 (33)	16:58 86	15:34 (24)	18:07	20:19	21:28	22:32
3	09:27	11:23 (33)	08:41	12:25 (28)	07:30	07:01	05:39	04:37
	15:55 18	11:41 (33)	17:01 84	15:34 (24)	18:09	20:21	21:31	22:34
4	09:26	11:23 (33)	08:39	12:25 (28)	07:27	06:58	05:36	04:36
	15:57 23	12:52 (20)	17:03 85	15:34 (24)	18:12	20:24	21:33	22:35
5	09:26	11:23 (33)	08:37	12:25 (28)	07:24	06:55	05:34	04:35
	15:58 25	12:53 (20)	17:06 82	15:33 (24)	18:14	20:26	21:35	22:37
6	09:25	11:24 (33)	08:34	12:26 (28)	07:21	06:52	05:31	04:34
	16:00 31	13:06 (20)	17:08 79	15:33 (24)	18:17	20:28	21:37	22:38
7	09:24	11:24 (33)	08:32	12:26 (28)	07:19	06:50	05:29	04:33
	16:02 34	13:07 (20)	17:11 74	15:31 (24)	18:19	20:30	21:40	22:39
8	09:24	11:24 (33)	08:30	12:28 (28)	07:16	06:47	05:26	04:32
	16:03 41	13:07 (20)	17:13 68	15:30 (24)	18:21	20:33	21:42	22:40
9	09:23	11:24 (33)	08:27	12:28 (28)	07:13	06:44	05:24	04:31
	16:05 42	13:07 (20)	17:16 60	15:26 (24)	18:24	20:35	21:44	22:42
10	09:22	11:25 (33)	08:25	12:29 (28)	07:10	06:41	05:22	04:30
	16:07 42	13:08 (20)	17:18 51	14:44 (23)	18:26	20:37	21:46	22:43
11	09:21	11:25 (33)	08:23	12:32 (28)	07:07	06:38	05:19	04:29
	16:09 43	13:09 (20)	17:21 45	14:43 (23)	18:28	20:40	21:49	22:44
12	09:20	11:25 (33)	08:20	09:49 (15)	07:04	06:35	05:17	04:29
	16:11 44	13:09 (20)	17:23 45	14:42 (23)	18:31	20:42	21:51	22:45
13	09:18	11:26 (33)	08:18	09:45 (15)	07:01	06:32	05:15	04:28
	16:13 44	13:10 (20)	17:26 43	14:40 (23)	18:33	20:44	21:53	22:46
14	09:17	11:26 (33)	08:15	09:44 (15)	06:59	06:30	05:13	04:28
	16:15 54	13:10 (20)	17:28 27	14:38 (23)	18:35	20:47	21:55	22:47
15	09:16	11:26 (33)	08:13	09:43 (15)	06:56	06:27	05:10	04:27
	16:17 57	13:10 (20)	17:31 18	10:01 (15)	18:38	20:49	21:58	22:47
16	09:15	11:27 (33)	08:10	09:42 (15)	06:53	06:24	05:08	04:27
	16:19 60	13:10 (20)	17:33 20	10:02 (15)	18:40	20:51	22:00	22:48
17	09:13	11:27 (33)	08:07	09:41 (15)	06:50	06:21	05:06	04:27
	16:21 63	13:10 (20)	17:35 21	10:02 (15)	18:42	20:53	22:02	22:49
18	09:12	11:28 (33)	08:05	09:41 (15)	06:47	06:19	05:04	04:27
	16:23 64	13:11 (20)	17:38 22	10:03 (15)	18:45	20:56	22:04	22:49
19	09:10	11:29 (33)	08:02	09:40 (15)	06:44	06:16	05:02	04:27
	16:25 63	13:11 (20)	17:40 23	10:03 (15)	18:47	20:58	22:06	22:50
20	09:08	11:30 (33)	08:00	09:40 (15)	06:41	06:13	05:00	04:27
	16:28 63	13:11 (20)	17:43 23	10:03 (15)	18:49	21:00	22:08	22:50
21	09:07	11:31 (33)	07:57	09:40 (15)	06:38	06:10	04:58	04:27
	16:30 62	13:11 (20)	17:45 22	10:02 (15)	18:51	21:03	22:10	22:50
22	09:05	11:31 (33)	07:54	09:40 (15)	06:36	06:08	04:56	04:27
	16:32 60	13:09 (20)	17:48 22	10:02 (15)	18:54	21:05	22:12	22:50
23	09:03	11:33 (33)	07:52	09:42 (15)	06:33	06:05	04:54	04:27
	16:34 66	14:33 (23)	17:50 20	10:02 (15)	18:56	21:07	22:14	22:50
24	09:02	11:35 (33)	07:49	09:42 (15)	06:30	06:02	04:52	04:27
	16:37 67	14:36 (23)	17:53 18	10:00 (15)	18:58	21:10	22:16	22:51
25	09:00	11:39 (33)	07:46	09:43 (15)	06:27	05:59	04:51	04:28
	16:39 58	14:38 (23)	17:55 16	09:59 (15)	19:01	21:12	22:18	22:50
26	08:58	12:24 (28)	07:44	09:45 (15)	06:24	05:57	04:49	04:28
	16:41 55	14:40 (23)	17:57 11	09:56 (15)	19:03	21:14	22:20	22:50
27	08:56	12:23 (28)	07:41	09:49 (15)	06:21	05:54	04:47	04:29
	16:44 57	14:40 (23)	18:00 2	09:51 (15)	19:05	21:17	22:22	22:50
28	08:54	12:23 (28)	07:38		06:18	05:52	04:46	04:30
	16:46 61	15:15 (24)	18:02		19:07	21:19	22:24	22:50
29	08:52	12:24 (28)			07:15	05:49	04:44	04:30
	16:49 67	15:19 (24)			20:10	21:21	22:25	22:50
30	08:50	12:23 (28)			07:12	05:46	04:42	04:31
	16:51 74	15:23 (24)			20:12	21:24	22:27	22:49
31	08:48	12:24 (28)			07:10		04:41	
	16:53 77	15:26 (24)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case	1549		1149					
Sun reduction	0,50		0,50					
Oper. time red.	0,80		0,80					
Wind dir. red.	0,62		0,62					
Total reduction	0,25		0,25					
Total, real	386		284					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** F - Buevegen 1818

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:59 (28)	09:00		11:07 (33)
	22:49		22:01		20:40		19:13			16:49	51	14:13 (23)	15:51	43	12:51 (20)
2	04:33		05:26		06:35		07:42			07:54		11:58 (28)	09:02		11:08 (33)
	22:48		21:58		20:37		19:10			16:46	61	14:57 (24)	15:50	42	12:51 (20)
3	04:34		05:28		06:37		07:44			07:56		11:57 (28)	09:03		11:08 (33)
	22:47		21:56		20:34		19:07			16:44	71	15:00 (24)	15:49	42	12:51 (20)
4	04:35		05:31		06:40		07:46			07:59		11:56 (28)	09:05		11:09 (33)
	22:47		21:54		20:31		19:04			16:41	76	15:01 (24)	15:48	41	12:52 (20)
5	04:36		05:33		06:42		07:48			08:01		11:55 (28)	09:07		11:09 (33)
	22:46		21:51		20:28		19:02			16:39	80	15:02 (24)	15:47	35	12:52 (20)
6	04:37		05:35		06:44		07:51			08:03		11:55 (28)	09:09		11:10 (33)
	22:45		21:49		20:25		18:59			16:37	82	15:03 (24)	15:46	31	12:52 (20)
7	04:38		05:37		06:46		07:53			08:06		11:54 (28)	09:10		11:11 (33)
	22:44		21:47		20:22		18:56			16:34	84	15:03 (24)	15:45	24	12:40 (20)
8	04:40		05:39		06:49		07:55			08:08		11:54 (28)	09:12		11:11 (33)
	22:43		21:44		20:20		18:53			16:32	87	15:04 (24)	15:45	24	12:41 (20)
9	04:41		05:42		06:51		07:57			08:11		11:55 (28)	09:13		11:12 (33)
	22:42		21:42		20:17		18:50			16:30	87	15:05 (24)	15:44	20	12:37 (20)
10	04:43		05:44		06:53		08:00			08:13		11:55 (28)	09:15		11:12 (33)
	22:40		21:39		20:14		18:47			16:28	81	15:01 (24)	15:43	17	11:29 (33)
11	04:44		05:46		06:55		08:02			08:15		11:54 (28)	09:16		11:14 (33)
	22:39		21:37		20:11		18:45			16:25	78	14:57 (24)	15:43	16	11:30 (33)
12	04:46		05:48		06:57		08:04			08:18		11:55 (28)	09:18		11:14 (33)
	22:38		21:34		20:08		18:42			16:23	74	14:55 (24)	15:43	15	11:29 (33)
13	04:47		05:51		07:00		08:07			08:20		11:56 (28)	09:19		11:15 (33)
	22:37		21:31		20:05		18:39			16:21	67	14:51 (24)	15:42	15	11:30 (33)
14	04:49		05:53		07:02		08:09			08:22		11:55 (28)	09:20		11:16 (33)
	22:35		21:29		20:02		18:36			16:19	62	14:47 (24)	15:42	14	11:30 (33)
15	04:51		05:55		07:04		08:11		10:19 (15)	08:25		11:56 (28)	09:21		11:16 (33)
	22:34		21:26		19:59		18:33	8	10:27 (15)	16:17	57	14:13 (23)	15:42	14	11:30 (33)
16	04:52		05:57		07:06		08:13		10:16 (15)	08:27		11:57 (28)	09:22		11:17 (33)
	22:32		21:24		19:56		18:31	13	10:29 (15)	16:15	54	14:12 (23)	15:42	12	11:29 (33)
17	04:54		06:00		07:08		08:16		10:15 (15)	08:29		11:12 (33)	09:23		11:17 (33)
	22:30		21:21		19:54		18:28	16	10:31 (15)	16:13	58	14:11 (23)	15:42	12	11:29 (33)
18	04:56		06:02		07:11		08:18		10:13 (15)	08:32		11:09 (33)	09:24		11:18 (33)
	22:29		21:18		19:51		18:25	19	10:32 (15)	16:11	67	14:10 (23)	15:42	11	11:29 (33)
19	04:58		06:04		07:13		08:20		10:12 (15)	08:34		11:08 (33)	09:25		11:19 (33)
	22:27		21:16		19:48		18:22	21	10:33 (15)	16:09	66	14:08 (23)	15:42	11	11:30 (33)
20	05:00		06:06		07:15		08:23		10:11 (15)	08:36		11:06 (33)	09:26		11:20 (33)
	22:25		21:13		19:45		18:20	22	10:33 (15)	16:08	60	12:44 (20)	15:43	10	11:30 (33)
21	05:01		06:08		07:17		08:25		10:11 (15)	08:39		11:06 (33)	09:26		11:20 (33)
	22:24		21:10		19:42		18:17	23	10:34 (15)	16:06	62	12:46 (20)	15:43	10	11:30 (33)
22	05:03		06:11		07:19		08:27		10:10 (15)	08:41		11:06 (33)	09:27		11:21 (33)
	22:22		21:08		19:39		18:14	23	10:33 (15)	16:04	63	12:47 (20)	15:43	10	11:31 (33)
23	05:05		06:13		07:22		08:30		10:11 (15)	08:43		11:05 (33)	09:27		11:21 (33)
	22:20		21:05		19:36		18:12	22	10:33 (15)	16:02	63	12:47 (20)	15:44	10	11:31 (33)
24	05:07		06:15		07:24		08:32		10:10 (15)	08:45		11:05 (33)	09:28		11:22 (33)
	22:18		21:02		19:33		18:09	22	10:32 (15)	16:01	64	12:48 (20)	15:44	10	11:32 (33)
25	05:09		06:17		07:26		07:35		09:11 (15)	08:47		11:05 (33)	09:28		11:22 (33)
	22:16		20:59		19:30		17:06	21	09:32 (15)	15:59	63	12:48 (20)	15:45	11	11:33 (33)
26	05:11		06:20		07:28		07:37		09:11 (15)	08:50		11:06 (33)	09:28		11:22 (33)
	22:14		20:56		19:27		17:04	20	09:31 (15)	15:58	59	12:49 (20)	15:46	12	11:34 (33)
27	05:13		06:22		07:30		07:39		09:12 (15)	08:52		11:05 (33)	09:28		11:23 (33)
	22:12		20:54		19:25		17:01	18	09:30 (15)	15:56	57	12:49 (20)	15:47	11	11:34 (33)
28	05:16		06:24		07:33		07:42		09:14 (15)	08:54		11:06 (33)	09:28		11:23 (33)
	22:10		20:51		19:22		16:59	28	14:08 (23)	15:55	53	12:50 (20)	15:48	13	11:36 (33)
29	05:18		06:26		07:35		07:44		09:15 (15)	08:56		11:06 (33)	09:28		11:22 (33)
	22:07		20:48		19:19		16:56	44	14:10 (23)	15:54	44	12:50 (20)	15:49	14	11:36 (33)
30	05:20		06:29		07:37		07:47		09:19 (15)	08:58		11:06 (33)	09:28		11:23 (33)
	22:05		20:45		19:16		16:54	44	14:11 (23)	15:52	43	12:50 (20)	15:50	15	11:38 (33)
31	05:22		06:31				07:49		12:01 (28)				09:28		11:23 (33)
	22:03		20:42				16:51	46	14:13 (23)				15:51	15	11:38 (33)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								410			1974			580	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,68			0,61			0,65	
Total reduction								0,27			0,24			0,26	
Total, real								112			477			151	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		08:46		11:27 (28)	07:35	07:07	05:44	04:40
	15:53		16:56	70	14:51 (24)	18:05	20:17	21:26	22:31
2	09:27	12:04 (20)	08:43		11:27 (28)	07:33	07:04	05:41	04:38
	15:54	1 12:05 (20)	16:58	60	13:50 (23)	18:07	20:19	21:28	22:32
3	09:27	12:04 (20)	08:41		11:28 (28)	07:30	07:01	05:39	04:37
	15:55	4 12:08 (20)	17:01	58	13:50 (23)	18:09	20:21	21:31	22:34
4	09:27	12:04 (20)	08:39		11:28 (28)	07:27	06:58	05:36	04:36
	15:57	7 12:11 (20)	17:03	54	13:48 (23)	18:12	20:24	21:33	22:35
5	09:26	12:04 (20)	08:37		11:28 (28)	07:24	06:55	05:34	04:35
	15:58	17 12:21 (20)	17:06	52	13:47 (23)	18:14	20:26	21:35	22:37
6	09:25	12:05 (20)	08:34		11:29 (28)	07:21	06:52	05:31	04:34
	16:00	16 12:21 (20)	17:08	49	13:47 (23)	18:17	20:28	21:37	22:38
7	09:24	12:05 (20)	08:32		11:29 (28)	07:19	06:50	05:29	04:33
	16:02	19 12:26 (20)	17:11	43	13:44 (23)	18:19	20:30	21:40	22:39
8	09:24	12:05 (20)	08:30		11:31 (28)	07:16	06:47	05:26	04:32
	16:03	22 12:27 (20)	17:13	35	13:42 (23)	18:21	20:33	21:42	22:40
9	09:23	12:06 (20)	08:27		11:32 (28)	07:13	06:44	05:24	04:31
	16:05	22 12:28 (20)	17:16	22	11:54 (28)	18:24	20:35	21:44	22:42
10	09:22	12:06 (20)	08:25		11:34 (28)	07:10	06:41	05:22	04:30
	16:07	22 12:28 (20)	17:18	18	11:52 (28)	18:26	20:37	21:46	22:43
11	09:21	12:07 (20)	08:23		11:37 (28)	07:07	06:38	05:19	04:29
	16:09	22 12:29 (20)	17:21	14	11:51 (28)	18:28	20:40	21:49	22:44
12	09:20	12:07 (20)	08:20		11:41 (28)	07:04	06:35	05:17	04:29
	16:11	28 13:33 (23)	17:23	4	11:45 (28)	18:31	20:42	21:51	22:45
13	09:18	12:08 (20)	08:18			07:02	06:32	05:15	04:28
	16:13	33 13:37 (23)	17:26			18:33	20:44	21:53	22:46
14	09:17	12:08 (20)	08:15		09:30 (15)	06:59	06:30	05:13	04:28
	16:15	36 13:38 (23)	17:28	5	09:35 (15)	18:35	20:47	21:55	22:47
15	09:16	11:34 (28)	08:13		09:27 (15)	06:56	06:27	05:10	04:27
	16:17	47 13:40 (23)	17:31	11	09:38 (15)	18:38	20:49	21:58	22:47
16	09:15	11:32 (28)	08:10		09:25 (15)	06:53	06:24	05:08	04:27
	16:19	54 13:41 (23)	17:33	14	09:39 (15)	18:40	20:51	22:00	22:48
17	09:13	11:31 (28)	08:07		09:23 (15)	06:50	06:21	05:06	04:27
	16:21	57 13:43 (23)	17:36	17	09:40 (15)	18:42	20:53	22:02	22:49
18	09:12	11:30 (28)	08:05		09:23 (15)	06:47	06:19	05:04	04:27
	16:23	72 14:53 (24)	17:38	18	09:41 (15)	18:45	20:56	22:04	22:49
19	09:10	11:29 (28)	08:02		09:22 (15)	06:44	06:16	05:02	04:27
	16:25	85 14:53 (24)	17:40	19	09:41 (15)	18:47	20:58	22:06	22:50
20	09:09	11:28 (28)	08:00		09:22 (15)	06:41	06:13	05:00	04:27
	16:28	88 14:54 (24)	17:43	19	09:41 (15)	18:49	21:00	22:08	22:50
21	09:07	11:28 (28)	07:57		09:22 (15)	06:39	06:10	04:58	04:27
	16:30	88 14:54 (24)	17:45	19	09:41 (15)	18:51	21:03	22:10	22:50
22	09:05	11:28 (28)	07:54		09:22 (15)	06:36	06:08	04:56	04:27
	16:32	89 14:55 (24)	17:48	19	09:41 (15)	18:54	21:05	22:12	22:50
23	09:03	11:26 (28)	07:52		09:23 (15)	06:33	06:05	04:54	04:27
	16:34	87 14:54 (24)	17:50	18	09:41 (15)	18:56	21:07	22:14	22:51
24	09:02	11:26 (28)	07:49		09:23 (15)	06:30	06:02	04:52	04:27
	16:37	81 14:55 (24)	17:53	17	09:40 (15)	18:58	21:10	22:16	22:51
25	09:00	11:26 (28)	07:46		09:24 (15)	06:27	05:59	04:51	04:28
	16:39	82 14:55 (24)	17:55	14	09:38 (15)	19:01	21:12	22:18	22:51
26	08:58	11:26 (28)	07:44		09:25 (15)	06:24	05:57	04:49	04:28
	16:41	83 14:55 (24)	17:57	11	09:36 (15)	19:03	21:14	22:20	22:50
27	08:56	11:25 (28)	07:41		09:30 (15)	06:21	05:54	04:47	04:29
	16:44	83 14:54 (24)	18:00	1	09:31 (15)	19:05	21:17	22:22	22:50
28	08:54	11:26 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	82 14:54 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52	11:26 (28)				07:15	05:49	04:44	04:30
	16:49	80 14:54 (24)				20:10	21:21	22:25	22:50
30	08:50	11:26 (28)				07:13	05:46	04:42	04:31
	16:51	79 14:53 (24)				20:12	21:24	22:27	22:49
31	08:48	11:26 (28)				07:10		04:41	
	16:54	76 14:52 (24)				20:14		22:29	
Potential sun hours	221		260			365	432	521	547
Total, worst case		1562		681					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,61		0,66					
Total reduction		0,24		0,26					
Total, real		382		180					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** G - Buevegen 1786

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		11:03 (28)	09:00		11:49 (20)
	22:49		22:01		20:40		19:13			16:49	19	11:22 (28)	15:51	22	12:11 (20)
2	04:33		05:26		06:35		07:42			07:54		11:01 (28)	09:02		11:49 (20)
	22:48		21:59		20:37		19:10			16:46	23	11:24 (28)	15:50	22	12:11 (20)
3	04:34		05:28		06:37		07:44			07:56		11:01 (28)	09:03		11:49 (20)
	22:47		21:56		20:34		19:07			16:44	36	13:12 (23)	15:49	22	12:11 (20)
4	04:35		05:31		06:40		07:46			07:59		10:59 (28)	09:05		11:50 (20)
	22:47		21:54		20:31		19:04			16:41	43	13:14 (23)	15:48	21	12:11 (20)
5	04:36		05:33		06:42		07:48			08:01		10:59 (28)	09:07		11:50 (20)
	22:46		21:51		20:28		19:02			16:39	48	13:16 (23)	15:47	21	12:11 (20)
6	04:37		05:35		06:44		07:51			08:03		10:58 (28)	09:09		11:51 (20)
	22:45		21:49		20:25		18:59			16:37	53	13:18 (23)	15:46	16	12:07 (20)
7	04:39		05:37		06:46		07:53			08:06		10:57 (28)	09:10		11:51 (20)
	22:44		21:47		20:23		18:56			16:34	55	13:18 (23)	15:45	17	12:08 (20)
8	04:40		05:39		06:49		07:55			08:08		10:57 (28)	09:12		11:52 (20)
	22:43		21:44		20:20		18:53			16:32	58	13:19 (23)	15:45	8	12:00 (20)
9	04:41		05:42		06:51		07:57			08:11		10:57 (28)	09:13		11:53 (20)
	22:42		21:42		20:17		18:50			16:30	63	14:18 (24)	15:44	4	11:57 (20)
10	04:43		05:44		06:53		08:00			08:13		10:58 (28)	09:15		11:53 (20)
	22:41		21:39		20:14		18:47			16:28	71	14:22 (24)	15:43	1	11:54 (20)
11	04:44		05:46		06:55		08:02			08:15		10:57 (28)	09:16		
	22:39		21:37		20:11		18:45			16:25	76	14:23 (24)	15:43		
12	04:46		05:48		06:57		08:04			08:18		10:57 (28)	09:18		
	22:38		21:34		20:08		18:42			16:23	80	14:25 (24)	15:43		
13	04:47		05:51		07:00		08:07			08:20		10:58 (28)	09:19		
	22:37		21:32		20:05		18:39			16:21	81	14:26 (24)	15:42		
14	04:49		05:53		07:02		08:09			08:22		10:58 (28)	09:20		
	22:35		21:29		20:02		18:36			16:19	82	14:26 (24)	15:42		
15	04:51		05:55		07:04		08:11		10:00 (15)	08:25		10:58 (28)	09:21		
	22:34		21:26		19:59		18:33	7	10:07 (15)	16:17	83	14:27 (24)	15:42		
16	04:52		05:57		07:06		08:13		09:57 (15)	08:27		10:59 (28)	09:22		
	22:32		21:24		19:56		18:31	12	10:09 (15)	16:15	83	14:28 (24)	15:42		
17	04:54		06:00		07:08		08:16		09:56 (15)	08:30		11:00 (28)	09:23		
	22:31		21:21		19:54		18:28	15	10:11 (15)	16:13	83	14:29 (24)	15:42		
18	04:56		06:02		07:11		08:18		09:54 (15)	08:32		11:00 (28)	09:24		
	22:29		21:18		19:51		18:25	17	10:11 (15)	16:11	81	14:29 (24)	15:42		
19	04:58		06:04		07:13		08:20		09:54 (15)	08:34		11:01 (28)	09:25		
	22:27		21:16		19:48		18:22	18	10:12 (15)	16:09	87	14:29 (24)	15:42		
20	05:00		06:06		07:15		08:23		09:53 (15)	08:36		11:02 (28)	09:26		
	22:25		21:13		19:45		18:20	19	10:12 (15)	16:08	88	14:29 (24)	15:43		
21	05:01		06:08		07:17		08:25		09:53 (15)	08:39		11:03 (28)	09:26		
	22:24		21:10		19:42		18:17	19	10:12 (15)	16:06	88	14:29 (24)	15:43		
22	05:03		06:11		07:19		08:27		09:52 (15)	08:41		11:04 (28)	09:27		
	22:22		21:08		19:39		18:14	20	10:12 (15)	16:04	88	14:30 (24)	15:43		
23	05:05		06:13		07:22		08:30		09:53 (15)	08:43		11:05 (28)	09:27		
	22:20		21:05		19:36		18:12	19	10:12 (15)	16:02	84	14:29 (24)	15:44		
24	05:07		06:15		07:24		08:32		09:53 (15)	08:45		11:07 (28)	09:28		
	22:18		21:02		19:33		18:09	17	10:10 (15)	16:01	72	14:30 (24)	15:44		
25	05:09		06:17		07:26		07:35		08:54 (15)	08:47		11:08 (28)	09:28		
	22:16		20:59		19:30		17:06	16	09:10 (15)	15:59	58	13:20 (23)	15:45		
26	05:11		06:20		07:28		07:37		08:55 (15)	08:50		11:11 (28)	09:28		
	22:14		20:57		19:27		17:04	14	09:09 (15)	15:58	53	13:20 (23)	15:46		
27	05:13		06:22		07:30		07:39		08:56 (15)	08:52		11:13 (28)	09:28		
	22:12		20:54		19:25		17:01	10	09:06 (15)	15:56	47	13:19 (23)	15:47		
28	05:16		06:24		07:33		07:42			08:54		11:48 (20)	09:28		
	22:10		20:51		19:22		16:59			15:55	35	13:18 (23)	15:48		
29	05:18		06:26		07:35		07:44			08:56		11:48 (20)	09:28		
	22:07		20:48		19:19		16:56			15:54	33	13:17 (23)	15:49		
30	05:20		06:29		07:37		07:47		11:09 (28)	08:58		11:48 (20)	09:28		
	22:05		20:45		19:16		16:54	7	11:16 (28)	15:52	30	13:15 (23)	15:50		
31	05:22		06:31				07:49		11:06 (28)				09:28		
	22:03		20:42				16:51	15	11:21 (28)				15:51		
Potential sun hours	546		478		386		319			236			199		
Total, worst case								225			1881			154	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,61			0,64	
Total reduction								0,29			0,25			0,25	
Total, real								65			461			39	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:18 (20)	08:46	11:53 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:39 (20)	16:56	49	14:04 (23)	18:05	20:17	21:26	22:31
2	09:27		12:18 (20)	08:43	11:54 (28)	07:33	07:04	05:41	04:38
	15:54	21	12:39 (20)	16:58	44	14:02 (23)	18:07	20:19	21:28	22:32
3	09:27		11:54 (28)	08:41	11:56 (28)	07:30	07:01	05:39	04:37
	15:55	27	12:39 (20)	17:01	39	14:01 (23)	18:09	20:21	21:31	22:34
4	09:27		11:52 (28)	08:39	11:57 (28)	07:27	06:58	05:36	04:36
	15:57	32	12:40 (20)	17:03	32	13:59 (23)	18:12	20:24	21:33	22:35
5	09:26		11:51 (28)	08:37	11:59 (28)	07:24	06:55	05:34	04:35
	15:58	33	12:40 (20)	17:06	19	13:55 (23)	18:14	20:26	21:35	22:37
6	09:25		11:50 (28)	08:34	12:04 (28)	07:21	06:52	05:31	04:34
	16:00	36	12:40 (20)	17:08	5	12:09 (28)	18:17	20:28	21:37	22:38
7	09:24		11:50 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	42	13:46 (23)	17:11		18:19	20:30	21:40	22:39
8	09:24		11:50 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	48	13:49 (23)	17:13		18:21	20:33	21:42	22:40
9	09:23		11:50 (28)	08:27	09:42 (15)	07:13	06:44	05:24	04:31
	16:05	53	13:52 (23)	17:16	7	09:49 (15)	18:24	20:35	21:44	22:42
10	09:22		11:49 (28)	08:25	09:40 (15)	07:10	06:41	05:22	04:30
	16:07	57	13:53 (23)	17:18	12	09:52 (15)	18:26	20:37	21:46	22:43
11	09:21		11:49 (28)	08:23	09:39 (15)	07:07	06:38	05:19	04:29
	16:09	60	13:55 (23)	17:21	15	09:54 (15)	18:28	20:40	21:49	22:44
12	09:20		11:48 (28)	08:20	09:37 (15)	07:04	06:35	05:17	04:29
	16:11	61	13:55 (23)	17:23	17	09:54 (15)	18:31	20:42	21:51	22:45
13	09:18		11:49 (28)	08:18	09:36 (15)	07:02	06:32	05:15	04:28
	16:13	64	13:57 (23)	17:26	19	09:55 (15)	18:33	20:44	21:53	22:46
14	09:17		11:48 (28)	08:15	09:37 (15)	06:59	06:30	05:13	04:28
	16:15	65	13:58 (23)	17:28	19	09:56 (15)	18:35	20:47	21:55	22:47
15	09:16		11:48 (28)	08:13	09:36 (15)	06:56	06:27	05:10	04:27
	16:17	71	14:46 (24)	17:31	20	09:56 (15)	18:38	20:49	21:58	22:47
16	09:15		11:47 (28)	08:10	09:36 (15)	06:53	06:24	05:08	04:27
	16:19	81	14:58 (24)	17:33	20	09:56 (15)	18:40	20:51	22:00	22:48
17	09:13		11:48 (28)	08:07	09:36 (15)	06:50	06:21	05:06	04:27
	16:21	89	15:01 (24)	17:36	19	09:55 (15)	18:42	20:53	22:02	22:49
18	09:12		11:48 (28)	08:05	09:37 (15)	06:47	06:19	05:04	04:27
	16:23	88	15:01 (24)	17:38	19	09:56 (15)	18:45	20:56	22:04	22:49
19	09:10		11:48 (28)	08:02	09:37 (15)	06:44	06:16	05:02	04:27
	16:25	85	15:02 (24)	17:40	18	09:55 (15)	18:47	20:58	22:06	22:50
20	09:08		11:48 (28)	08:00	09:38 (15)	06:41	06:13	05:00	04:27
	16:28	79	15:02 (24)	17:43	15	09:53 (15)	18:49	21:00	22:08	22:50
21	09:07		11:48 (28)	07:57	09:39 (15)	06:39	06:10	04:58	04:27
	16:30	80	15:02 (24)	17:45	13	09:52 (15)	18:51	21:03	22:10	22:50
22	09:05		11:48 (28)	07:54	09:41 (15)	06:36	06:08	04:56	04:27
	16:32	82	15:03 (24)	17:48	8	09:49 (15)	18:54	21:05	22:12	22:50
23	09:03		11:48 (28)	07:52		06:33	06:05	04:54	04:27
	16:34	80	15:02 (24)	17:50		18:56	21:07	22:14	22:51
24	09:02		11:48 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	80	15:02 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00		11:49 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	80	15:02 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58		11:49 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	79	15:02 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56		11:49 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	75	15:01 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54		11:50 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	73	15:01 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52		11:51 (28)			07:15	05:49	04:44	04:30
	16:49	69	15:00 (24)			20:10	21:21	22:25	22:50
30	08:50		11:51 (28)			07:12	05:46	04:42	04:31
	16:51	64	14:58 (24)			20:12	21:24	22:27	22:49
31	08:48		11:52 (28)			07:10		04:41	
	16:54	55	14:55 (24)			20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1930		409					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,60		0,67					
Total reduction		0,24		0,27					
Total, real		465		110					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** H - Buevegen 1784

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		09:09 (15)	09:00		11:31 (28)
	22:49	22:01	20:40	19:13			16:49	12	09:21 (15)	15:51	60	13:37 (23)
2	04:33	05:26	06:35	07:42			07:54		09:12 (15)	09:02		11:32 (28)
	22:48	21:59	20:37	19:10			16:46	6	09:18 (15)	15:50	56	13:36 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:33 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	52	13:35 (23)
4	04:35	05:31	06:40	07:46			07:59			09:05		11:34 (28)
	22:47	21:54	20:31	19:04			16:41			15:48	49	13:34 (23)
5	04:36	05:33	06:42	07:48			08:01		11:32 (28)	09:07		11:35 (28)
	22:46	21:51	20:28	19:02			16:39	8	11:40 (28)	15:47	43	13:32 (23)
6	04:37	05:35	06:44	07:51			08:03		11:29 (28)	09:09		11:37 (28)
	22:45	21:49	20:25	18:59			16:37	21	13:26 (23)	15:46	36	12:27 (20)
7	04:38	05:37	06:46	07:53			08:06		11:27 (28)	09:10		11:38 (28)
	22:44	21:47	20:22	18:56			16:34	31	13:29 (23)	15:45	34	12:27 (20)
8	04:40	05:39	06:49	07:55			08:08		11:25 (28)	09:12		11:40 (28)
	22:43	21:44	20:20	18:53			16:32	39	13:31 (23)	15:45	32	12:28 (20)
9	04:41	05:42	06:51	07:57			08:11		11:25 (28)	09:13		11:42 (28)
	22:42	21:42	20:17	18:50			16:30	44	13:33 (23)	15:44	28	12:28 (20)
10	04:43	05:44	06:53	08:00			08:13		11:24 (28)	09:15		12:07 (20)
	22:41	21:39	20:14	18:47			16:28	48	13:34 (23)	15:43	21	12:28 (20)
11	04:44	05:46	06:55	08:02			08:15		11:23 (28)	09:16		12:08 (20)
	22:39	21:37	20:11	18:45			16:25	55	14:27 (24)	15:43	21	12:29 (20)
12	04:46	05:48	06:57	08:04			08:18		11:23 (28)	09:18		12:08 (20)
	22:38	21:34	20:08	18:42			16:23	65	14:30 (24)	15:43	21	12:29 (20)
13	04:47	05:51	07:00	08:07			08:20		11:23 (28)	09:19		12:09 (20)
	22:37	21:32	20:05	18:39			16:21	69	14:32 (24)	15:42	21	12:30 (20)
14	04:49	05:53	07:02	08:09			08:22		11:22 (28)	09:20		12:09 (20)
	22:35	21:29	20:02	18:36			16:19	74	14:33 (24)	15:42	21	12:30 (20)
15	04:51	05:55	07:04	08:11			08:25		11:22 (28)	09:21		12:09 (20)
	22:34	21:26	19:59	18:33			16:17	76	14:34 (24)	15:42	21	12:30 (20)
16	04:52	05:57	07:06	08:13			08:27		11:22 (28)	09:22		12:10 (20)
	22:32	21:24	19:56	18:31			16:15	79	14:35 (24)	15:42	20	12:30 (20)
17	04:54	06:00	07:08	08:16			08:30		11:23 (28)	09:23		12:10 (20)
	22:31	21:21	19:54	18:28			16:13	80	14:36 (24)	15:42	21	12:31 (20)
18	04:56	06:02	07:11	08:18			08:32		11:22 (28)	09:24		12:11 (20)
	22:29	21:18	19:51	18:25			16:11	80	14:36 (24)	15:42	20	12:31 (20)
19	04:58	06:04	07:13	08:20			08:34		11:23 (28)	09:25		12:12 (20)
	22:27	21:16	19:48	18:22			16:09	80	14:37 (24)	15:42	20	12:32 (20)
20	05:00	06:06	07:15	08:23		10:11 (15)	08:36		11:22 (28)	09:26		12:12 (20)
	22:25	21:13	19:45	18:20	10	10:21 (15)	16:08	82	14:37 (24)	15:43	20	12:32 (20)
21	05:01	06:08	07:17	08:25		10:10 (15)	08:39		11:23 (28)	09:26		12:12 (20)
	22:24	21:10	19:42	18:17	13	10:23 (15)	16:06	80	14:37 (24)	15:43	20	12:32 (20)
22	05:03	06:11	07:19	08:27		10:08 (15)	08:41		11:24 (28)	09:27		12:13 (20)
	22:22	21:08	19:39	18:14	16	10:24 (15)	16:04	79	14:38 (24)	15:43	20	12:33 (20)
23	05:05	06:13	07:22	08:30		10:07 (15)	08:43		11:24 (28)	09:27		12:13 (20)
	22:20	21:05	19:36	18:12	18	10:25 (15)	16:02	84	14:38 (24)	15:44	20	12:33 (20)
24	05:07	06:15	07:24	08:32		10:06 (15)	08:45		11:25 (28)	09:28		12:14 (20)
	22:18	21:02	19:33	18:09	19	10:25 (15)	16:01	88	14:38 (24)	15:44	21	12:35 (20)
25	05:09	06:17	07:26	07:35		09:06 (15)	08:47		11:25 (28)	09:28		12:15 (20)
	22:16	20:59	19:30	17:06	20	09:26 (15)	15:59	88	14:38 (24)	15:45	20	12:35 (20)
26	05:11	06:20	07:28	07:37		09:06 (15)	08:50		11:26 (28)	09:28		12:15 (20)
	22:14	20:57	19:27	17:04	20	09:26 (15)	15:58	81	14:37 (24)	15:46	20	12:35 (20)
27	05:13	06:22	07:30	07:39		09:06 (15)	08:52		11:27 (28)	09:28		12:16 (20)
	22:12	20:54	19:25	17:01	19	09:25 (15)	15:56	73	14:26 (24)	15:47	20	12:36 (20)
28	05:16	06:24	07:33	07:42		09:06 (15)	08:54		11:28 (28)	09:28		12:16 (20)
	22:10	20:51	19:22	16:59	19	09:25 (15)	15:55	65	13:38 (23)	15:48	21	12:37 (20)
29	05:18	06:26	07:35	07:44		09:06 (15)	08:56		11:29 (28)	09:28		12:16 (20)
	22:07	20:48	19:19	16:56	18	09:24 (15)	15:54	64	13:37 (23)	15:49	20	12:36 (20)
30	05:20	06:29	07:37	07:47		09:07 (15)	08:58		11:29 (28)	09:28		12:17 (20)
	22:05	20:45	19:16	16:54	17	09:24 (15)	15:52	62	13:37 (23)	15:50	20	12:37 (20)
31	05:22	06:31		07:49		09:08 (15)				09:28		12:16 (20)
	22:03	20:42		16:51	15	09:23 (15)				15:51	21	12:37 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					204			1713			840	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,60			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			410			210	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:08 (20)	08:46	11:39 (28)	07:35	07:07	05:44	04:40
	15:53	21 12:29 (20)	16:56	49 13:50 (23)	18:05	20:17	21:26	22:31
2	09:27	12:08 (20)	08:43	11:40 (28)	07:33	07:04	05:41	04:38
	15:54	21 12:29 (20)	16:58	44 13:48 (23)	18:07	20:19	21:28	22:32
3	09:27	12:09 (20)	08:41	11:41 (28)	07:30	07:01	05:39	04:37
	15:55	20 12:29 (20)	17:01	39 13:47 (23)	18:09	20:21	21:31	22:34
4	09:27	12:09 (20)	08:39	11:42 (28)	07:27	06:58	05:36	04:36
	15:57	21 12:30 (20)	17:03	32 13:45 (23)	18:12	20:24	21:33	22:35
5	09:26	12:09 (20)	08:37	11:43 (28)	07:24	06:55	05:34	04:35
	15:58	21 12:30 (20)	17:06	19 12:02 (28)	18:14	20:26	21:35	22:37
6	09:25	12:10 (20)	08:34	11:46 (28)	07:21	06:52	05:31	04:34
	16:00	25 13:32 (23)	17:08	14 12:00 (28)	18:17	20:28	21:37	22:38
7	09:24	11:43 (28)	08:32	11:50 (28)	07:19	06:50	05:29	04:33
	16:02	33 13:35 (23)	17:11	6 11:56 (28)	18:19	20:30	21:40	22:39
8	09:24	11:41 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	41 13:37 (23)	17:13		18:21	20:33	21:42	22:41
9	09:23	11:40 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	47 13:39 (23)	17:16		18:24	20:35	21:44	22:42
10	09:22	11:38 (28)	08:25	09:39 (15)	07:10	06:41	05:22	04:30
	16:07	51 13:40 (23)	17:18	3 09:42 (15)	18:26	20:37	21:46	22:43
11	09:21	11:38 (28)	08:23	09:36 (15)	07:07	06:38	05:19	04:29
	16:09	55 13:42 (23)	17:21	10 09:46 (15)	18:28	20:40	21:49	22:44
12	09:20	11:37 (28)	08:20	09:34 (15)	07:04	06:35	05:17	04:29
	16:11	60 14:46 (24)	17:23	14 09:48 (15)	18:31	20:42	21:51	22:45
13	09:18	11:37 (28)	08:18	09:33 (15)	07:02	06:32	05:15	04:28
	16:13	72 14:49 (24)	17:26	16 09:49 (15)	18:33	20:44	21:53	22:46
14	09:17	11:36 (28)	08:15	09:33 (15)	06:59	06:30	05:13	04:28
	16:15	83 14:49 (24)	17:28	17 09:50 (15)	18:35	20:47	21:55	22:47
15	09:16	11:36 (28)	08:13	09:32 (15)	06:56	06:27	05:10	04:27
	16:17	87 14:50 (24)	17:31	18 09:50 (15)	18:38	20:49	21:58	22:47
16	09:15	11:35 (28)	08:10	09:31 (15)	06:53	06:24	05:08	04:27
	16:19	86 14:50 (24)	17:33	19 09:50 (15)	18:40	20:51	22:00	22:48
17	09:13	11:36 (28)	08:07	09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87 14:51 (24)	17:36	19 09:50 (15)	18:42	20:53	22:02	22:49
18	09:12	11:36 (28)	08:05	09:32 (15)	06:47	06:19	05:04	04:27
	16:23	89 14:52 (24)	17:38	19 09:51 (15)	18:45	20:56	22:04	22:49
19	09:10	11:36 (28)	08:02	09:32 (15)	06:44	06:16	05:02	04:27
	16:25	87 14:52 (24)	17:40	18 09:50 (15)	18:47	20:58	22:06	22:50
20	09:09	11:35 (28)	08:00	09:32 (15)	06:41	06:13	05:00	04:27
	16:28	85 14:53 (24)	17:43	17 09:49 (15)	18:49	21:00	22:08	22:50
21	09:07	11:35 (28)	07:57	09:33 (15)	06:39	06:10	04:58	04:27
	16:30	79 14:53 (24)	17:45	15 09:48 (15)	18:51	21:03	22:10	22:50
22	09:05	11:36 (28)	07:54	09:34 (15)	06:36	06:08	04:56	04:27
	16:32	79 14:53 (24)	17:48	12 09:46 (15)	18:54	21:05	22:12	22:50
23	09:03	11:35 (28)	07:52	09:38 (15)	06:33	06:05	04:54	04:27
	16:34	79 14:52 (24)	17:50	6 09:44 (15)	18:56	21:07	22:14	22:51
24	09:02	11:35 (28)	07:49		06:30	06:02	04:52	04:27
	16:37	79 14:52 (24)	17:53		18:58	21:10	22:16	22:51
25	09:00	11:35 (28)	07:46		06:27	05:59	04:51	04:28
	16:39	78 14:52 (24)	17:55		19:01	21:12	22:18	22:51
26	08:58	11:36 (28)	07:44		06:24	05:57	04:49	04:28
	16:41	77 14:52 (24)	17:57		19:03	21:14	22:20	22:50
27	08:56	11:36 (28)	07:41		06:21	05:54	04:47	04:29
	16:44	74 14:51 (24)	18:00		19:05	21:17	22:22	22:50
28	08:54	11:36 (28)	07:38		06:18	05:52	04:46	04:30
	16:46	71 14:50 (24)	18:02		19:08	21:19	22:24	22:50
29	08:52	11:37 (28)			07:15	05:49	04:44	04:30
	16:49	66 14:49 (24)			20:10	21:21	22:25	22:50
30	08:50	11:37 (28)			07:13	05:46	04:42	04:31
	16:51	56 14:45 (24)			20:12	21:24	22:27	22:49
31	08:48	11:38 (28)			07:10		04:41	
	16:54	51 13:50 (23)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		1881		406				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,61		0,68				
Total reduction		0,24		0,27				
Total, real		457		110				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** I - Buevegen 1782

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51			09:00		11:20 (28)
	22:49	22:01	20:40	19:13			16:49			15:51	56	13:24 (23)
2	04:33	05:26	06:35	07:42			07:54			09:02		11:21 (28)
	22:48	21:59	20:37	19:10			16:46			15:50	52	13:23 (23)
3	04:34	05:28	06:37	07:44			07:56			09:03		11:23 (28)
	22:47	21:56	20:34	19:07			16:44			15:49	49	13:23 (23)
4	04:35	05:31	06:40	07:46			07:59		11:18 (28)	09:05		11:25 (28)
	22:47	21:54	20:31	19:04			16:41	8	11:26 (28)	15:48	42	13:22 (23)
5	04:36	05:33	06:42	07:48			08:01		11:15 (28)	09:07		11:28 (28)
	22:46	21:51	20:28	19:02			16:39	15	11:30 (28)	15:47	34	13:21 (23)
6	04:37	05:35	06:44	07:51			08:03		11:14 (28)	09:09		11:56 (20)
	22:45	21:49	20:25	18:59			16:37	18	11:32 (28)	15:46	26	13:19 (23)
7	04:38	05:37	06:46	07:53			08:06		11:12 (28)	09:10		11:56 (20)
	22:44	21:47	20:23	18:56			16:34	33	13:15 (23)	15:45	21	12:17 (20)
8	04:40	05:39	06:49	07:55			08:08		11:11 (28)	09:12		11:57 (20)
	22:43	21:44	20:20	18:53			16:32	40	13:17 (23)	15:45	21	12:18 (20)
9	04:41	05:42	06:51	07:57			08:11		11:10 (28)	09:13		11:58 (20)
	22:42	21:42	20:17	18:50			16:30	45	13:19 (23)	15:44	20	12:18 (20)
10	04:43	05:44	06:53	08:00			08:13		11:10 (28)	09:15		11:58 (20)
	22:41	21:39	20:14	18:47			16:28	49	13:21 (23)	15:43	20	12:18 (20)
11	04:44	05:46	06:55	08:02			08:15		11:09 (28)	09:16		11:58 (20)
	22:39	21:37	20:11	18:45			16:25	51	13:21 (23)	15:43	21	12:19 (20)
12	04:46	05:48	06:57	08:04			08:18		11:09 (28)	09:18		11:58 (20)
	22:38	21:34	20:08	18:42			16:23	57	14:17 (24)	15:43	21	12:19 (20)
13	04:47	05:51	07:00	08:07			08:20		11:09 (28)	09:19		12:00 (20)
	22:37	21:32	20:05	18:39			16:21	66	14:21 (24)	15:42	20	12:20 (20)
14	04:49	05:53	07:02	08:09			08:23		11:08 (28)	09:20		12:00 (20)
	22:35	21:29	20:02	18:36			16:19	72	14:22 (24)	15:42	20	12:20 (20)
15	04:51	05:55	07:04	08:11			08:25		11:08 (28)	09:21		12:00 (20)
	22:34	21:26	19:59	18:33			16:17	75	14:24 (24)	15:42	20	12:20 (20)
16	04:52	05:57	07:06	08:13			08:27		11:09 (28)	09:22		12:01 (20)
	22:32	21:24	19:56	18:31			16:15	77	14:25 (24)	15:42	19	12:20 (20)
17	04:54	06:00	07:08	08:16			08:30		11:09 (28)	09:23		12:01 (20)
	22:31	21:21	19:54	18:28			16:13	78	14:26 (24)	15:42	20	12:21 (20)
18	04:56	06:02	07:11	08:18			08:32		11:09 (28)	09:24		12:02 (20)
	22:29	21:18	19:51	18:25			16:11	79	14:26 (24)	15:42	19	12:21 (20)
19	04:58	06:04	07:13	08:20		10:07 (15)	08:34		11:10 (28)	09:25		12:02 (20)
	22:27	21:16	19:48	18:22	9	10:16 (15)	16:09	79	14:27 (24)	15:42	20	12:22 (20)
20	05:00	06:06	07:15	08:23		10:05 (15)	08:36		11:10 (28)	09:26		12:03 (20)
	22:25	21:13	19:45	18:20	13	10:18 (15)	16:08	79	14:27 (24)	15:43	19	12:22 (20)
21	05:01	06:08	07:17	08:25		10:04 (15)	08:39		11:10 (28)	09:26		12:03 (20)
	22:24	21:10	19:42	18:17	15	10:19 (15)	16:06	79	14:28 (24)	15:43	19	12:22 (20)
22	05:03	06:11	07:19	08:27		10:02 (15)	08:41		11:11 (28)	09:27		12:04 (20)
	22:22	21:08	19:39	18:14	17	10:19 (15)	16:04	84	14:29 (24)	15:43	19	12:23 (20)
23	05:05	06:13	07:22	08:30		10:02 (15)	08:43		11:12 (28)	09:27		12:04 (20)
	22:20	21:05	19:36	18:12	18	10:20 (15)	16:02	86	14:28 (24)	15:44	19	12:23 (20)
24	05:07	06:15	07:24	08:32		10:01 (15)	08:45		11:13 (28)	09:28		12:05 (20)
	22:18	21:02	19:33	18:09	19	10:20 (15)	16:01	88	14:29 (24)	15:44	19	12:24 (20)
25	05:09	06:17	07:26	07:35		09:01 (15)	08:47		11:13 (28)	09:28		12:06 (20)
	22:16	20:59	19:30	17:06	19	09:20 (15)	15:59	88	14:29 (24)	15:45	19	12:25 (20)
26	05:11	06:20	07:28	07:37		09:02 (15)	08:50		11:14 (28)	09:28		12:06 (20)
	22:14	20:57	19:27	17:04	19	09:21 (15)	15:58	87	14:29 (24)	15:46	19	12:25 (20)
27	05:13	06:22	07:30	07:39		09:01 (15)	08:52		11:15 (28)	09:28		12:06 (20)
	22:12	20:54	19:25	17:01	19	09:20 (15)	15:56	86	14:29 (24)	15:47	20	12:26 (20)
28	05:16	06:24	07:33	07:42		09:02 (15)	08:54		11:16 (28)	09:28		12:07 (20)
	22:10	20:51	19:22	16:59	17	09:19 (15)	15:55	82	14:29 (24)	15:48	20	12:27 (20)
29	05:18	06:26	07:35	07:44		09:02 (15)	08:56		11:17 (28)	09:28		12:07 (20)
	22:07	20:48	19:19	16:56	16	09:18 (15)	15:54	72	14:29 (24)	15:49	19	12:26 (20)
30	05:20	06:29	07:37	07:47		09:04 (15)	08:58		11:18 (28)	09:28		12:07 (20)
	22:05	20:45	19:16	16:54	13	09:17 (15)	15:52	60	14:28 (24)	15:50	20	12:27 (20)
31	05:22	06:31		07:49		09:06 (15)				09:28		12:07 (20)
	22:03	20:42		16:51	9	09:15 (15)				15:51	20	12:27 (20)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					203			1733			753	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,73			0,61			0,63	
Total reduction					0,29			0,24			0,25	
Total, real					59			420			190	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28		12:05 (20)	08:46	11:36 (28)	07:35	07:07	05:44	04:40
	15:53	21	12:26 (20)	16:56	45	13:44 (23)	18:05	20:17	21:26	22:31
2	09:27		12:06 (20)	08:43	11:37 (28)	07:33	07:04	05:41	04:38
	15:54	20	12:26 (20)	16:58	40	13:42 (23)	18:07	20:19	21:28	22:32
3	09:27		12:06 (20)	08:41	11:38 (28)	07:30	07:01	05:39	04:37
	15:55	20	12:26 (20)	17:01	34	13:40 (23)	18:09	20:21	21:31	22:34
4	09:27		12:06 (20)	08:39	11:39 (28)	07:27	06:58	05:36	04:36
	15:57	21	12:27 (20)	17:03	20	11:59 (28)	18:12	20:24	21:33	22:35
5	09:26		12:06 (20)	08:37	11:41 (28)	07:24	06:55	05:34	04:35
	15:58	28	13:28 (23)	17:06	16	11:57 (28)	18:14	20:26	21:35	22:37
6	09:25		12:07 (20)	08:34	11:44 (28)	07:21	06:52	05:31	04:34
	16:00	32	13:31 (23)	17:08	11	11:55 (28)	18:17	20:28	21:37	22:38
7	09:24		11:39 (28)	08:32		07:19	06:50	05:29	04:33
	16:02	38	13:32 (23)	17:11			18:19	20:30	21:40	22:39
8	09:24		11:37 (28)	08:30		07:16	06:47	05:26	04:32
	16:03	46	13:34 (23)	17:13			18:21	20:33	21:42	22:41
9	09:23		11:36 (28)	08:27		07:13	06:44	05:24	04:31
	16:05	50	13:36 (23)	17:16			18:24	20:35	21:44	22:42
10	09:22		11:35 (28)	08:25		09:37 (15)	07:10	06:41	05:22	04:30
	16:07	58	14:41 (24)	17:18	6	09:43 (15)	18:26	20:37	21:46	22:43
11	09:21		11:34 (28)	08:23		09:35 (15)	07:07	06:38	05:19	04:29
	16:09	71	14:43 (24)	17:21	11	09:46 (15)	18:28	20:40	21:49	22:44
12	09:20		11:33 (28)	08:20		09:33 (15)	07:04	06:35	05:17	04:29
	16:11	79	14:44 (24)	17:23	15	09:48 (15)	18:31	20:42	21:51	22:45
13	09:18		11:34 (28)	08:18		09:32 (15)	07:02	06:32	05:15	04:28
	16:13	81	14:45 (24)	17:26	16	09:48 (15)	18:33	20:44	21:53	22:46
14	09:17		11:33 (28)	08:15		09:32 (15)	06:59	06:30	05:13	04:28
	16:15	84	14:45 (24)	17:28	18	09:50 (15)	18:35	20:47	21:55	22:47
15	09:16		11:32 (28)	08:13		09:31 (15)	06:56	06:27	05:10	04:27
	16:17	86	14:46 (24)	17:31	19	09:50 (15)	18:38	20:49	21:58	22:47
16	09:15		11:32 (28)	08:10		09:31 (15)	06:53	06:24	05:08	04:27
	16:19	87	14:46 (24)	17:33	19	09:50 (15)	18:40	20:51	22:00	22:48
17	09:13		11:32 (28)	08:07		09:31 (15)	06:50	06:21	05:06	04:27
	16:21	87	14:47 (24)	17:36	19	09:50 (15)	18:42	20:53	22:02	22:49
18	09:12		11:32 (28)	08:05		09:32 (15)	06:47	06:19	05:04	04:27
	16:23	88	14:48 (24)	17:38	18	09:50 (15)	18:45	20:56	22:04	22:49
19	09:10		11:32 (28)	08:02		09:32 (15)	06:44	06:16	05:02	04:27
	16:25	86	14:48 (24)	17:40	17	09:49 (15)	18:47	20:58	22:06	22:50
20	09:09		11:32 (28)	08:00		09:32 (15)	06:41	06:13	05:00	04:27
	16:28	79	14:48 (24)	17:43	16	09:48 (15)	18:49	21:00	22:08	22:50
21	09:07		11:32 (28)	07:57		09:33 (15)	06:39	06:10	04:58	04:27
	16:30	77	14:48 (24)	17:45	14	09:47 (15)	18:51	21:03	22:10	22:50
22	09:05		11:32 (28)	07:54		09:35 (15)	06:36	06:08	04:56	04:27
	16:32	79	14:49 (24)	17:48	10	09:45 (15)	18:54	21:05	22:12	22:50
23	09:03		11:31 (28)	07:52			06:33	06:05	04:54	04:27
	16:34	78	14:48 (24)	17:50			18:56	21:07	22:14	22:51
24	09:02		11:32 (28)	07:49			06:30	06:02	04:52	04:27
	16:37	77	14:48 (24)	17:53			18:58	21:10	22:16	22:51
25	09:00		11:32 (28)	07:46			06:27	05:59	04:51	04:28
	16:39	75	14:47 (24)	17:55			19:01	21:12	22:18	22:51
26	08:58		11:33 (28)	07:44			06:24	05:57	04:49	04:28
	16:41	73	14:47 (24)	17:57			19:03	21:14	22:20	22:50
27	08:56		11:32 (28)	07:41			06:21	05:54	04:47	04:29
	16:44	70	14:45 (24)	18:00			19:05	21:17	22:22	22:50
28	08:54		11:33 (28)	07:38			06:18	05:52	04:46	04:30
	16:46	66	14:44 (24)	18:02			19:08	21:19	22:24	22:50
29	08:52		11:34 (28)				07:15	05:49	04:44	04:30
	16:49	57	14:41 (24)				20:10	21:21	22:25	22:50
30	08:50		11:34 (28)				07:13	05:46	04:42	04:31
	16:51	52	13:45 (23)				20:12	21:24	22:27	22:49
31	08:48		11:35 (28)				07:10		04:41	
	16:54	48	13:44 (23)				20:14		22:29	
Potential sun hours	221			260		365	432	521	547
Total, worst case		1914		364					
Sun reduction		0,50		0,50					
Oper. time red.		0,80		0,80					
Wind dir. red.		0,61		0,69					
Total reduction		0,24		0,27					
Total, real		467		100					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** J - Buevegen 1780

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October			November			December		
1	04:32		05:24		06:33		07:39			07:51		09:08 (15)	09:00		11:16 (28)
	22:49		22:01		20:40		19:13			16:49	4	09:12 (15)	15:51	74	14:26 (24)
2	04:33		05:26		06:35		07:42			07:54			09:02		11:18 (28)
	22:48		21:59		20:37		19:10			16:46			15:50	58	14:24 (24)
3	04:34		05:28		06:37		07:44			07:56			09:03		11:19 (28)
	22:47		21:56		20:34		19:07			16:44			15:49	51	13:19 (23)
4	04:35		05:31		06:40		07:46			07:59			09:05		11:21 (28)
	22:47		21:54		20:31		19:04			16:41			15:48	46	13:18 (23)
5	04:36		05:33		06:42		07:48			08:01		11:13 (28)	09:07		11:23 (28)
	22:46		21:51		20:28		19:02			16:39	12	11:25 (28)	15:47	39	13:18 (23)
6	04:37		05:35		06:44		07:51			08:03		11:11 (28)	09:09		11:53 (20)
	22:45		21:49		20:25		18:59			16:37	17	11:28 (28)	15:46	32	13:17 (23)
7	04:38		05:37		06:46		07:53			08:06		11:10 (28)	09:10		11:54 (20)
	22:44		21:47		20:23		18:56			16:34	22	13:06 (23)	15:45	28	13:16 (23)
8	04:40		05:39		06:49		07:55			08:08		11:08 (28)	09:12		11:54 (20)
	22:43		21:44		20:20		18:53			16:32	34	13:10 (23)	15:45	22	13:13 (23)
9	04:41		05:42		06:51		07:57			08:11		11:07 (28)	09:13		11:55 (20)
	22:42		21:42		20:17		18:50			16:30	41	13:13 (23)	15:44	20	12:15 (20)
10	04:43		05:44		06:53		08:00			08:13		11:07 (28)	09:15		11:55 (20)
	22:41		21:39		20:14		18:47			16:28	46	13:15 (23)	15:43	20	12:15 (20)
11	04:44		05:46		06:55		08:02			08:15		11:06 (28)	09:16		11:56 (20)
	22:39		21:37		20:11		18:45			16:25	48	13:15 (23)	15:43	20	12:16 (20)
12	04:46		05:48		06:57		08:04			08:18		11:06 (28)	09:18		11:56 (20)
	22:38		21:34		20:08		18:42			16:23	52	13:17 (23)	15:43	20	12:16 (20)
13	04:47		05:51		07:00		08:07			08:20		11:06 (28)	09:19		11:57 (20)
	22:37		21:32		20:05		18:39			16:21	58	14:14 (24)	15:42	20	12:17 (20)
14	04:49		05:53		07:02		08:09			08:23		11:05 (28)	09:20		11:57 (20)
	22:35		21:29		20:02		18:36			16:19	66	14:16 (24)	15:42	20	12:17 (20)
15	04:51		05:55		07:04		08:11			08:25		11:05 (28)	09:21		11:57 (20)
	22:34		21:26		19:59		18:33			16:17	70	14:18 (24)	15:42	20	12:17 (20)
16	04:52		05:57		07:06		08:13			08:27		11:06 (28)	09:22		11:58 (20)
	22:32		21:24		19:56		18:31			16:15	73	14:20 (24)	15:42	19	12:17 (20)
17	04:54		06:00		07:08		08:16			08:30		11:06 (28)	09:23		11:58 (20)
	22:31		21:21		19:54		18:28			16:13	75	14:21 (24)	15:42	19	12:17 (20)
18	04:56		06:02		07:11		08:18			08:32		11:06 (28)	09:24		11:59 (20)
	22:29		21:18		19:51		18:25			16:11	77	14:22 (24)	15:42	19	12:18 (20)
19	04:58		06:04		07:13		08:20		10:09 (15)	08:34		11:06 (28)	09:25		11:59 (20)
	22:27		21:16		19:48		18:22	5	10:14 (15)	16:09	78	14:23 (24)	15:42	20	12:19 (20)
20	05:00		06:06		07:15		08:23		10:05 (15)	08:36		11:06 (28)	09:26		12:00 (20)
	22:25		21:13		19:45		18:20	11	10:16 (15)	16:08	79	14:23 (24)	15:43	19	12:19 (20)
21	05:01		06:08		07:17		08:25		10:04 (15)	08:39		11:07 (28)	09:26		12:00 (20)
	22:24		21:10		19:42		18:17	14	10:18 (15)	16:06	77	14:23 (24)	15:43	19	12:19 (20)
22	05:03		06:11		07:19		08:27		10:02 (15)	08:41		11:08 (28)	09:27		12:01 (20)
	22:22		21:08		19:39		18:14	17	10:19 (15)	16:04	77	14:24 (24)	15:43	19	12:20 (20)
23	05:05		06:13		07:22		08:30		10:02 (15)	08:43		11:08 (28)	09:27		12:01 (20)
	22:20		21:05		19:36		18:12	18	10:20 (15)	16:02	86	14:24 (24)	15:44	19	12:20 (20)
24	05:07		06:15		07:24		08:32		10:01 (15)	08:45		11:09 (28)	09:28		12:02 (20)
	22:18		21:02		19:33		18:09	18	10:19 (15)	16:01	87	14:25 (24)	15:44	19	12:21 (20)
25	05:09		06:17		07:26		07:35		09:01 (15)	08:47		11:10 (28)	09:28		12:03 (20)
	22:16		20:59		19:30		17:06	19	09:20 (15)	15:59	87	14:25 (24)	15:45	19	12:22 (20)
26	05:11		06:20		07:28		07:37		09:01 (15)	08:50		11:11 (28)	09:28		12:03 (20)
	22:14		20:57		19:27		17:04	19	09:20 (15)	15:58	87	14:25 (24)	15:46	19	12:22 (20)
27	05:13		06:22		07:30		07:39		09:01 (15)	08:52		11:11 (28)	09:28		12:03 (20)
	22:12		20:54		19:25		17:01	18	09:19 (15)	15:56	86	14:25 (24)	15:47	20	12:23 (20)
28	05:16		06:24		07:33		07:42		09:02 (15)	08:54		11:13 (28)	09:28		12:04 (20)
	22:10		20:51		19:22		16:59	17	09:19 (15)	15:55	85	14:26 (24)	15:48	20	12:24 (20)
29	05:18		06:26		07:35		07:44		09:02 (15)	08:56		11:14 (28)	09:28		12:04 (20)
	22:07		20:48		19:19		16:56	16	09:18 (15)	15:54	82	14:25 (24)	15:49	19	12:23 (20)
30	05:20		06:29		07:37		07:47		09:03 (15)	08:58		11:14 (28)	09:28		12:04 (20)
	22:05		20:45		19:16		16:54	14	09:17 (15)	15:52	80	14:25 (24)	15:50	20	12:24 (20)
31	05:22		06:31				07:49		09:05 (15)				09:28		12:04 (20)
	22:03		20:42				16:51	11	09:16 (15)				15:51	20	12:24 (20)
Potential sun hours	546		478		386		319			236			199		
Total, worst case								197			1686			799	
Sun reduction								0,50			0,50			0,50	
Oper. time red.								0,80			0,80			0,80	
Wind dir. red.								0,73			0,61			0,63	
Total reduction								0,29			0,24			0,25	
Total, real								57			411			201	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** K - Buevegen 1778

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28		08:46	11:24 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		11:44 (20)
	15:53	16	12:14 (20)	16:56 49 13:35 (23)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	57	14:20 (24)
2	09:28		11:58 (20)	08:43 11:24 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		11:44 (20)
	15:54	18	12:16 (20)	16:58 47 13:34 (23)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	50	14:19 (24)
3	09:27		11:58 (20)	08:41 11:25 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56	11:02 (28)	09:03		11:44 (20)
	15:55	20	12:18 (20)	17:01 42 13:33 (23)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44 12	11:14 (28)	15:49	40	14:19 (24)
4	09:27		11:58 (20)	08:39 11:26 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	10:59 (28)	09:05		11:44 (20)
	15:57	21	12:19 (20)	17:03 35 13:30 (23)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41 17	11:16 (28)	15:48	34	14:19 (24)
5	09:26		11:59 (20)	08:37 11:26 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	10:58 (28)	09:07		11:45 (20)
	15:58	20	12:19 (20)	17:06 23 11:49 (28)	18:14	20:26	21:35	22:37	22:46	21:51	20:28	19:02	16:39 20	11:18 (28)	15:47	31	13:06 (23)
6	09:25		11:59 (20)	08:34 11:28 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	10:57 (28)	09:09		11:45 (20)
	16:00	26	13:18 (23)	17:08 20 11:48 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 23	11:20 (28)	15:46	27	13:05 (23)
7	09:25		12:00 (20)	08:32 11:30 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	10:56 (28)	09:10		11:46 (20)
	16:02	30	13:21 (23)	17:11 16 11:46 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34 37	13:01 (23)	15:45	20	12:06 (20)
8	09:24		12:00 (20)	08:30 11:33 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	10:55 (28)	09:12		11:47 (20)
	16:03	34	14:35 (24)	17:13 11 11:44 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 43	13:03 (23)	15:45	20	12:07 (20)
9	09:23		12:01 (20)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	10:54 (28)	09:13		11:47 (20)
	16:05	41	14:36 (24)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 48	13:05 (23)	15:44	20	12:07 (20)
10	09:22		12:01 (20)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	10:54 (28)	09:15		11:47 (20)
	16:07	50	14:36 (24)	17:18	18:26	20:37	21:46	22:43	22:41	21:39	20:14	18:47	16:28 51	13:06 (23)	15:43	19	12:07 (20)
11	09:21		12:02 (20)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	10:54 (28)	09:16		11:48 (20)
	16:09	57	14:37 (24)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25 52	13:06 (23)	15:43	16	12:04 (20)
12	09:20		11:28 (28)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	10:54 (28)	09:18		11:48 (20)
	16:11	68	14:38 (24)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 55	13:08 (23)	15:43	11	11:59 (20)
13	09:18		11:26 (28)	08:18	07:02	06:32	05:15	04:28	04:47	05:51	07:00	08:07	08:20	10:54 (28)	09:19		11:49 (20)
	16:13	75	14:39 (24)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 62	14:08 (24)	15:42	11	12:00 (20)
14	09:17		11:25 (28)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	10:53 (28)	09:20		11:50 (20)
	16:15	78	14:39 (24)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 69	14:10 (24)	15:42	7	12:00 (20)
15	09:16		11:24 (28)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	10:54 (28)	09:21		11:50 (20)
	16:17	82	14:40 (24)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 71	14:12 (24)	15:42	3	11:53 (20)
16	09:15		11:23 (28)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	10:54 (28)	09:22		11:50 (20)
	16:19	85	14:40 (24)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15 75	14:14 (24)	15:42	3	11:53 (20)
17	09:13		11:23 (28)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	10:55 (28)	09:23		11:51 (20)
	16:21	86	14:41 (24)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 77	14:15 (24)	15:42	1	11:52 (20)
18	09:12		11:23 (28)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:55 (28)	09:24		
	16:23	87	14:42 (24)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 76	14:15 (24)	15:42		
19	09:10		11:22 (28)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34	10:56 (28)	09:25		
	16:25	88	14:42 (24)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09 77	14:16 (24)	15:42		
20	09:09		11:22 (28)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:56 (28)	09:26		
	16:28	86	14:42 (24)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08 77	14:16 (24)	15:43		
21	09:07		11:22 (28)	07:57	06:39	06:10	04:58	04:27	05:01	06:08	07:17	08:25	08:39	10:57 (28)	09:26		
	16:30	83	14:42 (24)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 83	14:17 (24)	15:43		
22	09:05		11:22 (28)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:27	08:41	10:58 (28)	09:27		
	16:32	77	14:42 (24)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04 86	14:18 (24)	15:43		
23	09:03		11:21 (28)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:58 (28)	09:27		
	16:34	77	14:41 (24)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 88	14:18 (24)	15:44		
24	09:02		11:21 (28)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	11:00 (28)	09:28		
	16:37	76	14:41 (24)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 87	14:19 (24)	15:44		
25	09:00		11:21 (28)	07:46	06:27	05:59	04:51	04:28	05:09	06:17	07:26	07:35	08:47	11:00 (28)	09:28		
	16:39	77	14:41 (24)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:06	15:59 86	14:18 (24)	15:45		
26	08:58		11:22 (28)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	11:02 (28)	09:28		
	16:41	74	14:41 (24)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58 85	14:19 (24)	15:46		
27	08:56		11:21 (28)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52	11:03 (28)	09:28		11:56 (20)
	16:44	71	14:39 (24)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 83	14:19 (24)	15:47	3	11:59 (20)
28	08:54		11:21 (28)	07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	11:05 (28)	09:28		11:57 (20)
	16:46	69	14:38 (24)	18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 79	14:19 (24)	15:48	3	12:00 (20)
29	08:52		11:22 (28)		07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	11:07 (28)	09:28		11:56 (20)
	16:49	61	14:36 (24)		20:10	21:21	22:25	22:50	22:07	20:48	19:19	16:56	15:54 73	14:19 (24)	15:49	5	12:07 (20)
30	08:50		11:22 (28)		07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58	11:08 (28)	09:28		11:57 (20)
	16:51	55	13:36 (23)		20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 69	14:19 (24)	15:50	11	12:08 (20)
31	08:48		11:23 (28)		07:10		04:41		05:22	06:31		07:49			09:28		11:57 (20)
	16:54	53	13:36 (23)		20:14		22:29		22:03	20:42		16:51			15:51	11	12:08 (20)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case		1841		243										1761		403	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,62		0,65										0,62		0,62	
Total reduction		0,25		0,26										0,25		0,25	
Total, real		452		63										435		100	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28		11:52 (33)	08:46		13:17 (28)	07:35		08:53 (17)	07:07	05:44	04:40
	15:53	17	12:09 (33)	16:56	36	13:53 (28)	18:05	19	09:12 (17)	20:17	21:26	22:30
2	09:27		11:51 (33)	08:43		13:18 (28)	07:32		08:53 (17)	07:04	05:41	04:38
	15:54	19	12:10 (33)	16:58	43	15:13 (23)	18:07	20	09:13 (17)	20:19	21:28	22:32
3	09:27		11:51 (33)	08:41		13:17 (28)	07:30		08:52 (17)	07:01	05:39	04:37
	15:55	19	12:10 (33)	17:01	52	15:18 (23)	18:09	21	09:13 (17)	20:21	21:30	22:34
4	09:26		11:51 (33)	08:39		13:18 (28)	07:27		08:52 (17)	06:58	05:36	04:36
	15:57	20	12:11 (33)	17:03	54	15:20 (23)	18:12	20	09:12 (17)	20:24	21:33	22:35
5	09:26		11:52 (33)	08:37		13:17 (28)	07:24		08:52 (17)	06:55	05:34	04:35
	15:58	20	12:12 (33)	17:06	58	15:21 (23)	18:14	20	09:12 (17)	20:26	21:35	22:37
6	09:25		11:52 (33)	08:34		13:18 (28)	07:21		08:52 (17)	06:52	05:31	04:34
	16:00	20	12:12 (33)	17:08	62	15:43 (24)	18:16	19	09:11 (17)	20:28	21:37	22:38
7	09:24		11:52 (33)	08:32		13:17 (28)	07:19		08:53 (17)	06:49	05:29	04:33
	16:02	21	12:13 (33)	17:11	68	15:46 (24)	18:19	17	09:10 (17)	20:30	21:40	22:39
8	09:24		11:53 (33)	08:30		13:18 (28)	07:16		08:54 (17)	06:47	05:26	04:32
	16:03	21	12:14 (33)	17:13	72	15:51 (24)	18:21	14	09:08 (17)	20:33	21:42	22:40
9	09:23		11:52 (33)	08:27		13:18 (28)	07:13		08:55 (17)	06:44	05:24	04:31
	16:05	22	12:14 (33)	17:16	78	15:59 (24)	18:24	10	09:05 (17)	20:35	21:44	22:42
10	09:22		11:53 (33)	08:25		13:18 (28)	07:10			06:41	05:22	04:30
	16:07	22	12:15 (33)	17:18	82	16:00 (24)	18:26			20:37	21:46	22:43
11	09:21		11:54 (33)	08:23		10:11 (15)	07:07			06:38	05:19	04:29
	16:09	22	12:16 (33)	17:21	84	16:00 (24)	18:28			20:40	21:49	22:44
12	09:20		11:53 (33)	08:20		10:06 (15)	07:04			06:35	05:17	04:29
	16:11	23	12:16 (33)	17:23	89	15:59 (24)	18:31			20:42	21:51	22:45
13	09:18		11:53 (33)	08:18		10:04 (15)	07:01			06:32	05:15	04:28
	16:13	29	13:27 (20)	17:26	90	15:58 (24)	18:33			20:44	21:53	22:46
14	09:17		11:54 (33)	08:15		10:03 (15)	06:59			06:30	05:13	04:28
	16:15	38	13:37 (20)	17:28	87	15:57 (24)	18:35			20:47	21:55	22:46
15	09:16		11:55 (33)	08:13		10:02 (15)	06:56			06:27	05:10	04:27
	16:17	44	13:43 (20)	17:31	81	15:54 (24)	18:38			20:49	21:57	22:47
16	09:15		11:55 (33)	08:10		10:01 (15)	06:53			06:24	05:08	04:27
	16:19	45	13:44 (20)	17:33	72	15:24 (23)	18:40			20:51	22:00	22:48
17	09:13		11:55 (33)	08:07		10:00 (15)	06:50			06:21	05:06	04:27
	16:21	45	13:44 (20)	17:35	67	15:23 (23)	18:42			20:53	22:02	22:49
18	09:12		11:57 (33)	08:05		10:00 (15)	06:47			06:19	05:04	04:27
	16:23	44	13:46 (20)	17:38	61	15:23 (23)	18:45			20:56	22:04	22:49
19	09:10		11:57 (33)	08:02		10:00 (15)	06:44			06:16	05:02	04:27
	16:25	44	13:46 (20)	17:40	43	15:21 (23)	18:47			20:58	22:06	22:50
20	09:08		11:58 (33)	08:00		09:59 (15)	06:41			06:13	05:00	04:27
	16:28	43	13:46 (20)	17:43	41	15:19 (23)	18:49			21:00	22:08	22:50
21	09:07		11:59 (33)	07:57		09:59 (15)	06:38			06:10	04:58	04:27
	16:30	40	13:46 (20)	17:45	32	15:15 (23)	18:51			21:03	22:10	22:50
22	09:05		11:59 (33)	07:54		09:59 (15)	06:36			06:08	04:56	04:27
	16:32	40	13:46 (20)	17:48	25	10:24 (15)	18:54			21:05	22:12	22:50
23	09:03		12:01 (33)	07:52		10:00 (15)	06:33			06:05	04:54	04:27
	16:34	36	13:46 (20)	17:50	24	10:24 (15)	18:56			21:07	22:14	22:50
24	09:02		12:03 (33)	07:49		10:01 (15)	06:30			06:02	04:52	04:27
	16:37	34	13:46 (20)	17:53	22	10:23 (15)	18:58			21:10	22:16	22:51
25	09:00		12:05 (33)	07:46		09:00 (17)	06:27			05:59	04:51	04:28
	16:39	32	13:46 (28)	17:55	27	10:22 (15)	19:01			21:12	22:18	22:50
26	08:58		13:21 (28)	07:43		08:57 (17)	06:24			05:57	04:49	04:28
	16:41	27	13:48 (28)	17:57	30	10:20 (15)	19:03			21:14	22:20	22:50
27	08:56		13:20 (28)	07:41		08:55 (17)	06:21			05:54	04:47	04:29
	16:44	28	13:48 (28)	18:00	28	10:17 (15)	19:05			21:17	22:22	22:50
28	08:54		13:19 (28)	07:38		08:54 (17)	06:18			05:52	04:46	04:30
	16:46	31	13:50 (28)	18:02	22	10:13 (15)	19:07			21:19	22:24	22:50
29	08:52		13:19 (28)				07:15			05:49	04:44	04:30
	16:49	32	13:51 (28)				20:10			21:21	22:25	22:50
30	08:50		13:18 (28)				07:12			05:46	04:42	04:31
	16:51	33	13:51 (28)				20:12			21:24	22:27	22:49
31	08:48		13:18 (28)				07:10				04:41	
	16:53	34	13:52 (28)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		945			1530			160				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,61			0,61			0,74				
Total reduction		0,24			0,24			0,29				
Total, real		230			370			47				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** L - Buevegen 1850

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		12:48 (28)	09:00		11:36 (33)
	22:49	22:01	20:40	19:13			16:49	83	15:30 (24)	15:51	22	11:58 (33)
2	04:33	05:26	06:35	07:42			07:54		12:48 (28)	09:02		11:36 (33)
	22:48	21:58	20:37	19:10			16:46	76	15:28 (24)	15:50	22	11:58 (33)
3	04:34	05:28	06:37	07:44			07:56		12:48 (28)	09:03		11:36 (33)
	22:47	21:56	20:34	19:07			16:44	71	15:20 (24)	15:49	22	11:58 (33)
4	04:35	05:31	06:40	07:46		09:34 (17)	07:59		12:47 (28)	09:05		11:37 (33)
	22:47	21:54	20:31	19:04	7	09:41 (17)	16:41	66	15:15 (24)	15:48	21	11:58 (33)
5	04:36	05:33	06:42	07:48		09:32 (17)	08:01		12:47 (28)	09:07		11:37 (33)
	22:46	21:51	20:28	19:01	12	09:44 (17)	16:39	62	15:13 (24)	15:47	21	11:58 (33)
6	04:37	05:35	06:44	07:51		09:30 (17)	08:03		12:48 (28)	09:09		11:38 (33)
	22:45	21:49	20:25	18:59	15	09:45 (17)	16:37	57	14:51 (23)	15:46	21	11:59 (33)
7	04:38	05:37	06:46	07:53		09:28 (17)	08:06		12:47 (28)	09:10		11:39 (33)
	22:44	21:47	20:22	18:56	18	09:46 (17)	16:34	55	14:50 (23)	15:45	20	11:59 (33)
8	04:40	05:39	06:48	07:55		09:28 (17)	08:08		12:48 (28)	09:12		11:40 (33)
	22:43	21:44	20:20	18:53	19	09:47 (17)	16:32	50	14:48 (23)	15:45	19	11:59 (33)
9	04:41	05:42	06:51	07:57		09:27 (17)	08:11		12:48 (28)	09:13		11:41 (33)
	22:42	21:42	20:17	18:50	20	09:47 (17)	16:30	42	14:43 (23)	15:44	19	12:00 (33)
10	04:43	05:44	06:53	08:00		09:27 (17)	08:13		12:49 (28)	09:15		11:41 (33)
	22:40	21:39	20:14	18:47	20	09:47 (17)	16:28	35	13:24 (28)	15:43	18	11:59 (33)
11	04:44	05:46	06:55	08:02		09:26 (17)	08:15		12:49 (28)	09:16		11:42 (33)
	22:39	21:37	20:11	18:45	20	09:46 (17)	16:25	34	13:23 (28)	15:43	18	12:00 (33)
12	04:46	05:48	06:57	08:04		09:26 (17)	08:18		12:50 (28)	09:18		11:42 (33)
	22:38	21:34	20:08	18:42	19	09:45 (17)	16:23	33	13:23 (28)	15:43	17	11:59 (33)
13	04:47	05:51	07:00	08:06		09:27 (17)	08:20		12:51 (28)	09:19		11:43 (33)
	22:37	21:31	20:05	18:39	18	09:45 (17)	16:21	32	13:23 (28)	15:42	17	12:00 (33)
14	04:49	05:53	07:02	08:09		09:27 (17)	08:22		12:51 (28)	09:20		11:44 (33)
	22:35	21:29	20:02	18:36	26	10:48 (15)	16:19	31	13:22 (28)	15:42	16	12:00 (33)
15	04:51	05:55	07:04	08:11		09:29 (17)	08:25		12:53 (28)	09:21		11:44 (33)
	22:34	21:26	19:59	18:33	29	10:51 (15)	16:17	28	13:21 (28)	15:42	16	12:00 (33)
16	04:52	05:57	07:06	08:13		09:30 (17)	08:27		12:54 (28)	09:22		11:45 (33)
	22:32	21:24	19:56	18:31	28	10:52 (15)	16:15	27	13:21 (28)	15:42	15	12:00 (33)
17	04:54	05:59	07:08	08:16		10:33 (15)	08:29		11:38 (33)	09:23		11:45 (33)
	22:30	21:21	19:54	18:28	21	10:54 (15)	16:13	32	13:19 (28)	15:42	15	12:00 (33)
18	04:56	06:02	07:10	08:18		10:31 (15)	08:32		11:36 (33)	09:24		11:46 (33)
	22:29	21:18	19:51	18:25	23	10:54 (15)	16:11	35	13:20 (20)	15:42	15	12:01 (33)
19	04:58	06:04	07:13	08:20		10:31 (15)	08:34		11:36 (33)	09:25		11:47 (33)
	22:27	21:16	19:48	18:22	24	10:55 (15)	16:09	36	13:21 (20)	15:42	14	12:01 (33)
20	05:00	06:06	07:15	08:23		10:30 (15)	08:36		11:34 (33)	09:26		11:48 (33)
	22:25	21:13	19:45	18:20	25	10:55 (15)	16:08	40	13:21 (20)	15:42	14	12:02 (33)
21	05:01	06:08	07:17	08:25		10:30 (15)	08:39		11:34 (33)	09:26		11:48 (33)
	22:24	21:10	19:42	18:17	37	15:48 (23)	16:06	40	13:21 (20)	15:43	14	12:02 (33)
22	05:03	06:11	07:19	08:27		10:29 (15)	08:41		11:34 (33)	09:27		11:49 (33)
	22:22	21:08	19:39	18:14	42	15:50 (23)	16:04	43	13:22 (20)	15:43	14	12:03 (33)
23	05:05	06:13	07:22	08:30		10:30 (15)	08:43		11:33 (33)	09:27		11:49 (33)
	22:20	21:05	19:36	18:12	50	15:52 (23)	16:02	44	13:22 (20)	15:44	14	12:03 (33)
24	05:07	06:15	07:24	08:32		10:29 (15)	08:45		11:34 (33)	09:28		11:50 (33)
	22:18	21:02	19:33	18:09	63	15:52 (23)	16:01	44	13:23 (20)	15:44	14	12:04 (33)
25	05:09	06:17	07:26	07:35		09:30 (15)	08:47		11:33 (33)	09:28		11:50 (33)
	22:16	20:59	19:30	17:06	69	14:54 (23)	15:59	44	13:22 (20)	15:45	14	12:04 (33)
26	05:11	06:20	07:28	07:37		09:30 (15)	08:50		11:34 (33)	09:28		11:50 (33)
	22:14	20:56	19:27	17:04	74	14:54 (23)	15:58	44	13:23 (20)	15:46	15	12:05 (33)
27	05:13	06:22	07:30	07:39		09:31 (15)	08:52		11:34 (33)	09:28		11:50 (33)
	22:12	20:54	19:24	17:01	82	15:24 (24)	15:56	44	13:23 (20)	15:47	16	12:06 (33)
28	05:16	06:24	07:33	07:42		09:33 (15)	08:54		11:35 (33)	09:28		11:50 (33)
	22:10	20:51	19:22	16:59	89	15:27 (24)	15:55	37	13:17 (20)	15:48	16	12:06 (33)
29	05:18	06:26	07:35	07:44		09:34 (15)	08:56		11:35 (33)	09:28		11:50 (33)
	22:07	20:48	19:19	16:56	90	15:28 (24)	15:54	29	13:09 (20)	15:49	16	12:06 (33)
30	05:20	06:29	07:37	07:47		09:36 (15)	08:58		11:35 (33)	09:28		11:51 (33)
	22:05	20:45	19:16	16:54	90	15:29 (24)	15:52	23	13:03 (20)	15:50	17	12:08 (33)
31	05:22	06:31		07:49		12:49 (28)				09:28		11:51 (33)
	22:03	20:42		16:51	81	15:30 (24)				15:51	17	12:08 (33)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					1111			1317			529	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,64			0,59			0,64	
Total reduction					0,26			0,23			0,26	
Total, real					286			308			135	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:46		14:11 (33)	07:35		10:14 (17)	07:07	05:44	04:40
	15:53			16:56	18	15:31 (20)	18:05	73	16:49 (23)	20:17	21:26	22:30
2	09:27			08:43		15:15 (20)	07:32		10:15 (17)	07:04	05:41	04:38
	15:54			16:58	17	15:32 (20)	18:07	70	16:50 (23)	20:19	21:28	22:32
3	09:27			08:41		15:14 (20)	07:30		10:16 (17)	07:01	05:39	04:37
	15:55			17:01	19	15:33 (20)	18:09	63	16:48 (23)	20:21	21:30	22:34
4	09:26			08:39		12:33 (15)	07:27		10:16 (17)	06:58	05:36	04:36
	15:57			17:03	32	15:33 (20)	18:12	54	16:47 (23)	20:23	21:33	22:35
5	09:26			08:37		12:30 (15)	07:24		09:25 (12)	06:55	05:34	04:35
	15:58			17:06	37	15:33 (20)	18:14	37	16:44 (23)	20:26	21:35	22:36
6	09:25			08:34		12:29 (15)	07:21		09:21 (12)	06:52	05:31	04:34
	16:00			17:08	40	15:34 (20)	18:16	27	10:42 (17)	20:28	21:37	22:38
7	09:24			08:32		12:27 (15)	07:18		10:19 (17)	06:49	05:29	04:33
	16:02			17:11	43	15:33 (20)	18:19	20	10:39 (17)	20:30	21:40	22:39
8	09:24			08:30		12:26 (15)	07:16		10:21 (17)	06:47	05:26	04:32
	16:03			17:13	46	15:34 (20)	18:21	15	10:36 (17)	20:33	21:42	22:40
9	09:23			08:27		12:25 (15)	07:13		10:24 (17)	06:44	05:24	04:31
	16:05			17:16	46	15:33 (20)	18:24	8	10:32 (17)	20:35	21:44	22:42
10	09:22			08:25		12:24 (15)	07:10			06:41	05:22	04:30
	16:07			17:18	45	15:31 (20)	18:26			20:37	21:46	22:43
11	09:21			08:22		12:24 (15)	07:07			06:38	05:19	04:29
	16:09			17:21	43	15:30 (20)	18:28			20:40	21:49	22:44
12	09:20			08:20		12:23 (15)	07:04			06:35	05:17	04:29
	16:11			17:23	38	15:27 (20)	18:31			20:42	21:51	22:45
13	09:18			08:18		12:22 (15)	07:01			06:32	05:15	04:28
	16:13			17:26	35	12:57 (15)	18:33			20:44	21:53	22:46
14	09:17			08:15		12:23 (15)	06:59			06:30	05:12	04:28
	16:15			17:28	35	12:58 (15)	18:35			20:46	21:55	22:46
15	09:16			08:12		12:22 (15)	06:56			06:27	05:10	04:27
	16:17			17:30	35	12:57 (15)	18:38			20:49	21:57	22:47
16	09:14			08:10		12:22 (15)	06:53			06:24	05:08	04:27
	16:19			17:33	43	16:12 (28)	18:40			20:51	22:00	22:48
17	09:13			08:07		12:22 (15)	06:50			06:21	05:06	04:27
	16:21			17:35	49	16:15 (28)	18:42			20:53	22:02	22:48
18	09:12			08:05		12:23 (15)	06:47			06:18	05:04	04:27
	16:23			17:38	51	16:17 (28)	18:44			20:56	22:04	22:49
19	09:10			08:02		12:23 (15)	06:44			06:16	05:02	04:27
	16:25			17:40	54	16:18 (28)	18:47			20:58	22:06	22:49
20	09:08			08:00		12:23 (15)	06:41			06:13	05:00	04:27
	16:28			17:43	55	16:19 (28)	18:49			21:00	22:08	22:50
21	09:07			07:57		12:23 (15)	06:38			06:10	04:58	04:27
	16:30			17:45	56	16:20 (28)	18:51			21:03	22:10	22:50
22	09:05			07:54		12:24 (15)	06:36			06:07	04:56	04:27
	16:32			17:48	61	16:42 (23)	18:54			21:05	22:12	22:50
23	09:03			07:52		12:26 (15)	06:33			06:05	04:54	04:27
	16:34			17:50	66	16:48 (23)	18:56			21:07	22:14	22:50
24	09:01			07:49		10:20 (17)	06:30			06:02	04:52	04:27
	16:37			17:52	68	16:49 (23)	18:58			21:10	22:16	22:50
25	09:00			07:46		10:16 (17)	06:27			05:59	04:51	04:28
	16:39			17:55	89	16:50 (23)	19:01			21:12	22:18	22:50
26	08:58			07:43		10:15 (17)	06:24			05:57	04:49	04:28
	16:41			17:57	92	16:50 (23)	19:03			21:14	22:20	22:50
27	08:56			07:41		10:15 (17)	06:21			05:54	04:47	04:29
	16:44			18:00	77	16:50 (23)	19:05			21:17	22:22	22:50
28	08:54			07:38		10:15 (17)	06:18			05:51	04:45	04:29
	16:46			18:02	75	16:50 (23)	19:07			21:19	22:24	22:50
29	08:52						07:15			05:49	04:44	04:30
	16:49						20:10			21:21	22:25	22:49
30	08:50		14:16 (33)				07:12			05:46	04:42	04:31
	16:51	3	14:19 (33)				20:12			21:23	22:27	22:49
31	08:48		14:08 (33)				07:10				04:41	
	16:53	21	15:27 (20)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		24			1365			367				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,55			0,60			0,65				
Total reduction		0,22			0,24			0,26				
Total, real		5			328			96				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** M - Buevegen 1941

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		11:53 (15)	09:00
	22:48	22:01	20:40	19:13			16:49	46	15:01 (20)	15:51
2	04:33	05:26	06:35	07:41			07:54		11:55 (15)	09:01
	22:48	21:58	20:37	19:10			16:46	45	15:02 (20)	15:50
3	04:34	05:28	06:37	07:44			07:56		11:56 (15)	09:03
	22:47	21:56	20:34	19:07			16:44	45	15:03 (20)	15:49
4	04:35	05:31	06:40	07:46			07:58		11:57 (15)	09:05
	22:46	21:54	20:31	19:04			16:41	43	15:03 (20)	15:48
5	04:36	05:33	06:42	07:48		10:59 (17)	08:01		11:58 (15)	09:07
	22:46	21:51	20:28	19:01	13	11:12 (17)	16:39	41	15:03 (20)	15:47
6	04:37	05:35	06:44	07:50		10:56 (17)	08:03		12:01 (15)	09:09
	22:45	21:49	20:25	18:59	19	11:15 (17)	16:37	36	15:04 (20)	15:46
7	04:38	05:37	06:46	07:53		09:54 (12)	08:06		12:03 (15)	09:10
	22:44	21:47	20:22	18:56	24	11:16 (17)	16:34	31	15:03 (20)	15:45
8	04:40	05:39	06:48	07:55		09:58 (12)	08:08		14:45 (20)	09:12
	22:43	21:44	20:20	18:53	33	17:18 (23)	16:32	18	15:03 (20)	15:45
9	04:41	05:42	06:51	07:57		10:01 (12)	08:10		14:46 (20)	09:13
	22:42	21:42	20:17	18:50	49	17:20 (23)	16:30	17	15:03 (20)	15:44
10	04:43	05:44	06:53	08:00		10:49 (17)	08:13		13:42 (33)	09:15
	22:40	21:39	20:14	18:47	59	17:21 (23)	16:28	20	15:03 (20)	15:43
11	04:44	05:46	06:55	08:02		10:49 (17)	08:15		13:39 (33)	09:16
	22:39	21:37	20:11	18:44	67	17:23 (23)	16:25	20	14:58 (20)	15:43
12	04:46	05:48	06:57	08:04		10:48 (17)	08:18		13:48 (33)	09:17
	22:38	21:34	20:08	18:42	72	17:23 (23)	16:23	3	13:51 (33)	15:43
13	04:47	05:50	06:59	08:06		10:48 (17)	08:20			09:19
	22:36	21:31	20:05	18:39	73	17:23 (23)	16:21			15:42
14	04:49	05:53	07:02	08:09		10:47 (17)	08:22			09:20
	22:35	21:29	20:02	18:36	77	17:23 (23)	16:19			15:42
15	04:50	05:55	07:04	08:11		10:48 (17)	08:25			09:21
	22:34	21:26	19:59	18:33	86	17:23 (23)	16:17			15:42
16	04:52	05:57	07:06	08:13		10:47 (17)	08:27			09:22
	22:32	21:24	19:56	18:31	93	17:22 (23)	16:15			15:42
17	04:54	05:59	07:08	08:16		10:48 (17)	08:29			09:23
	22:30	21:21	19:53	18:28	85	17:22 (23)	16:13			15:42
18	04:56	06:02	07:10	08:18		12:58 (15)	08:32			09:24
	22:29	21:18	19:51	18:25	66	17:20 (23)	16:11			15:42
19	04:58	06:04	07:13	08:20		12:57 (15)	08:34			09:25
	22:27	21:16	19:48	18:22	64	17:17 (23)	16:09			15:42
20	04:59	06:06	07:15	08:23		12:55 (15)	08:36			09:25
	22:25	21:13	19:45	18:20	58	17:12 (23)	16:07			15:42
21	05:01	06:08	07:17	08:25		12:54 (15)	08:39			09:26
	22:23	21:10	19:42	18:17	56	16:51 (28)	16:06			15:43
22	05:03	06:11	07:19	08:27		12:53 (15)	08:41			09:27
	22:22	21:07	19:39	18:14	55	16:49 (28)	16:04			15:43
23	05:05	06:13	07:21	08:30		12:53 (15)	08:43			09:27
	22:20	21:05	19:36	18:12	53	16:48 (28)	16:02			15:44
24	05:07	06:15	07:24	08:32		12:52 (15)	08:45			09:28
	22:18	21:02	19:33	18:09	52	16:46 (28)	16:01			15:44
25	05:09	06:17	07:26	07:34		11:52 (15)	08:47			09:28
	22:16	20:59	19:30	17:06	47	15:44 (28)	15:59			15:45
26	05:11	06:20	07:28	07:37		11:51 (15)	08:49			09:28
	22:14	20:56	19:27	17:04	39	15:39 (28)	15:58			15:46
27	05:13	06:22	07:30	07:39		11:52 (15)	08:52			09:28
	22:12	20:54	19:24	17:01	35	12:27 (15)	15:56			15:47
28	05:15	06:24	07:33	07:42		11:52 (15)	08:54			09:28
	22:10	20:51	19:22	16:59	35	12:27 (15)	15:55			15:48
29	05:18	06:26	07:35	07:44		11:52 (15)	08:56			09:28
	22:07	20:48	19:19	16:56	34	12:26 (15)	15:53			15:49
30	05:20	06:29	07:37	07:46		11:53 (15)	08:58			09:28
	22:05	20:45	19:16	16:54	40	14:58 (20)	15:52			15:50
31	05:22	06:31		07:49		11:53 (15)				09:28
	22:03	20:42		16:51	44	15:00 (20)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					1428			365		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,62			0,58		
Total reduction					0,25			0,23		
Total, real					353			85		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** N - Buevegen 1988

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		11:38 (17)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51	09:44 (12)	09:00
	15:53		16:56	63	13:43 (15)	18:05	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	56 15:37 (28)	15:51
2	09:27		08:43		11:39 (17)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	09:56 (12)	09:01
	15:54		16:58	59	13:43 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	51 15:37 (28)	15:50
3	09:27		08:41		11:38 (17)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	09:57 (12)	09:03
	15:55		17:01	51	13:42 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	55 15:36 (28)	15:49
4	09:26		08:39		11:39 (17)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:02 (12)	09:05
	15:57		17:03	51	15:59 (28)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	56 15:35 (28)	15:48
5	09:26		08:37		11:39 (17)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:04 (12)	09:07
	15:58		17:06	56	16:02 (28)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	58 15:34 (28)	15:47
6	09:25		08:34		10:34 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	11:10 (17)	09:09
	16:00		17:08	57	16:05 (28)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	55 15:33 (28)	15:46
7	09:24		08:32		10:32 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	11:09 (17)	09:10
	16:02		17:11	55	16:05 (28)	18:19	20:30	21:40	22:39	22:44	21:47	20:22	18:56		16:34	49 13:12 (15)	15:45
8	09:24		08:30		10:27 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	11:09 (17)	09:12
	16:03		17:13	53	16:07 (28)	18:21	20:33	21:42	22:40	22:43	21:44	20:20	18:53		16:32	50 13:13 (15)	15:45
9	09:23		08:27		10:26 (12)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57		08:10	11:09 (17)	09:13
	16:05		17:16	49	16:07 (28)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	60 13:14 (15)	15:44
10	09:22		08:25		10:15 (12)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13	11:10 (17)	09:15
	16:07		17:18	58	16:07 (28)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	61 13:14 (15)	15:43
11	09:21		08:22		10:16 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	11:10 (17)	09:16
	16:09		17:21	55	16:08 (28)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	63 13:14 (15)	15:43
12	09:20		08:20		10:17 (12)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	11:10 (17)	09:17
	16:11		17:23	48	16:08 (28)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	66 13:15 (15)	15:43
13	09:18		08:17		10:18 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	11:11 (17)	09:19
	16:13		17:26	33	16:07 (28)	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	65 13:15 (15)	15:42
14	09:17	12:02 (9)	08:15		10:21 (12)	06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	11:11 (17)	09:20
	16:15	8 12:10 (9)	17:28	28	16:08 (28)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	66 13:15 (15)	15:42
15	09:16	12:02 (9)	08:12		15:50 (28)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:13 (17)	09:21
	16:17	9 12:11 (9)	17:30	17	16:07 (28)	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	64 13:15 (15)	15:42
16	09:14	12:02 (9)	08:10		15:51 (28)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:14 (17)	09:22
	16:19	11 12:13 (9)	17:33	14	16:05 (28)	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	62 13:15 (15)	15:42
17	09:13	12:02 (9)	08:07		15:52 (28)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	11:15 (17)	09:23
	16:21	20 13:30 (15)	17:35	12	16:04 (28)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	61 13:14 (15)	15:42
18	09:12	11:58 (9)	08:05		15:56 (28)	06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	11:16 (17)	09:24
	16:23	30 13:34 (15)	17:38	6	16:02 (28)	18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	60 13:14 (15)	15:42
19	09:10	11:58 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	11:19 (17)	09:25
	16:25	33 13:35 (15)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	55 13:14 (15)	15:42
20	09:08	11:58 (9)	08:00			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	11:21 (17)	09:25
	16:27	36 13:37 (15)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	47 13:13 (15)	15:42
21	09:07	11:58 (9)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	11:33 (9)	09:26
	16:30	39 13:38 (15)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	39 13:13 (15)	15:43
22	09:05	11:46 (17)	07:54			06:36	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	11:34 (9)	09:27
	16:32	47 13:38 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	36 13:13 (15)	15:43
23	09:03	11:44 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	11:34 (9)	09:27
	16:34	55 13:39 (15)	17:50			18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	33 13:12 (15)	15:44
24	09:01	11:42 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	11:35 (9)	09:28
	16:37	60 13:40 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	8 16:24 (28)	16:01	30 13:11 (15)	15:44
25	09:00	11:42 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	15:22 (28)	08:47	11:41 (9)	09:28
	16:39	61 13:41 (15)	17:55			19:01	21:12	22:18	22:50	22:16	20:59	19:30	17:06	12 15:34 (28)	15:59	20 13:09 (15)	15:45
26	08:58	11:41 (17)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	15:20 (28)	08:49	11:41 (9)	09:28
	16:41	62 13:42 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15 15:35 (28)	15:58	11 11:52 (9)	15:46
27	08:56	11:40 (17)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	15:19 (28)	08:52	11:41 (9)	09:28
	16:44	64 13:42 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01	17 15:36 (28)	15:56	10 11:51 (9)	15:47
28	08:54	11:40 (17)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:33	07:42	09:50 (12)	08:54	11:42 (9)	09:28
	16:46	65 13:43 (15)	18:02			19:07	21:19	22:24	22:50	22:10	20:51	19:22	16:59	28 15:37 (28)	15:55	8 11:50 (9)	15:48
29	08:52	11:39 (17)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	09:47 (12)	08:56		09:28
	16:49	65 13:43 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	37 15:37 (28)	15:53		15:49
30	08:50	11:39 (17)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	09:46 (12)	08:58		09:28
	16:51	65 13:43 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	49 15:37 (28)	15:52		15:50
31	08:48	11:39 (17)				07:09		04:41		05:22	06:31		07:49	09:46 (12)			09:28
	16:53	63 13:43 (15)				20:14		22:29		22:03	20:42		16:51	55 15:38 (28)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319			236		199
Total, worst case		793		765									221		1347		
Sun reduction		0,50		0,50									0,50		0,50		
Oper. time red.		0,80		0,80									0,80		0,80		
Wind dir. red.		0,62		0,61									0,60		0,62		
Total reduction		0,25		0,24									0,24		0,25		
Total, real		197		187									53		334		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** O - Buevegen 2023

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:50 (12)	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39		07:51	10:27 (12)	09:00
	15:53		16:56	74	14:26 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	30 13:49 (15)	15:51
2	09:27		08:43		10:51 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54	10:25 (12)	09:01
	15:54		16:58	73	14:27 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	45 13:52 (15)	15:50
3	09:27		08:41		10:50 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56	10:24 (12)	09:03
	15:55		17:01	74	14:27 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	54 13:54 (15)	15:49
4	09:26		08:39		10:51 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58	10:22 (12)	09:05
	15:57		17:03	71	14:27 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	61 13:55 (15)	15:48
5	09:26		08:37		10:51 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01	10:22 (12)	09:07
	15:58		17:06	68	14:26 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	65 13:56 (15)	15:47
6	09:25		08:34		10:53 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03	10:22 (12)	09:09
	16:00		17:08	64	14:26 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	69 13:57 (15)	15:46
7	09:24		08:32		10:53 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06	10:21 (12)	09:10
	16:02		17:11	59	14:25 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	72 13:57 (15)	15:45
8	09:24		08:30		10:55 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08	10:21 (12)	09:12
	16:03		17:13	52	14:24 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73 13:57 (15)	15:45
9	09:23		08:27		10:56 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10	10:21 (12)	09:13
	16:05		17:16	43	14:22 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75 13:58 (15)	15:44
10	09:22		08:25		10:58 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13	10:22 (12)	09:15
	16:07		17:18	26	14:18 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	72 13:58 (15)	15:43
11	09:21		08:22		12:44 (17)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	10:21 (12)	09:16
	16:09		17:21	5	12:49 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	75 13:58 (15)	15:43
12	09:20		08:20			07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18	10:22 (12)	09:17
	16:11		17:23			18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	72 13:58 (15)	15:42
13	09:18	12:39 (9)	08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	10:23 (12)	09:19
	16:13	5 12:44 (9)	17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	72 13:58 (15)	15:42
14	09:17	12:39 (9)	08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22	10:23 (12)	09:20
	16:15	7 12:46 (9)	17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	68 13:57 (15)	15:42
15	09:16	12:39 (9)	08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	10:24 (12)	09:21
	16:17	15 12:54 (9)	17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	63 13:57 (15)	15:42
16	09:14	12:38 (9)	08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	10:30 (12)	09:22
	16:19	17 12:55 (9)	17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	50 13:57 (15)	15:42
17	09:13	12:38 (9)	08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	12:05 (17)	09:23
	16:21	18 12:56 (9)	17:35			18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45 13:55 (15)	15:42
18	09:12	12:37 (9)	08:05			06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32	12:07 (17)	09:24
	16:23	19 12:56 (9)	17:38			18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	42 13:55 (15)	15:42
19	09:10	12:38 (9)	08:02			06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34	12:08 (17)	09:25
	16:25	20 12:58 (9)	17:40			18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	39 13:54 (15)	15:42
20	09:08	12:37 (17)	07:59			06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	12:09 (17)	09:25
	16:27	22 12:59 (9)	17:43			18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	33 13:51 (15)	15:42
21	09:07	12:35 (17)	07:57			06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39	12:11 (17)	09:26
	16:30	23 12:58 (9)	17:45			18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	23 12:34 (9)	15:43
22	09:05	12:34 (17)	07:54			06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41	12:13 (17)	09:27
	16:32	33 14:16 (15)	17:48			18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	22 12:35 (9)	15:43
23	09:03	12:33 (17)	07:52			06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43	12:14 (9)	09:27
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24	09:01	12:33 (17)	07:49			06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45	12:15 (9)	09:28
	16:37	42 14:21 (15)	17:52			18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	20 12:35 (9)	15:44
25	09:00	12:32 (17)	07:46			06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47	12:16 (9)	09:28
	16:39	45 14:22 (15)	17:55			19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	18 12:34 (9)	15:45
26	08:58	10:57 (12)	07:43			06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49	12:17 (9)	09:28
	16:41	50 14:24 (15)	17:57			19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58	17 12:34 (9)	15:46
27	08:56	10:51 (12)	07:41			06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52	12:18 (9)	09:28
	16:44	64 14:24 (15)	18:00			19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56	15 12:33 (9)	15:47
28	08:54	10:51 (12)	07:38			06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54	12:19 (9)	09:28
	16:46	69 14:25 (15)	18:02			19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59		15:55	7 12:26 (9)	15:48
29	08:52	10:51 (12)				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56	12:20 (9)	09:28
	16:49	70 14:26 (15)				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53	5 12:25 (9)	15:49
30	08:50	10:50 (12)				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46		08:58		09:28
	16:51	72 14:26 (15)				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54		15:52		15:50
31	08:48	10:51 (12)				07:09		04:41		05:22	06:31		07:49	12:13 (17)			09:28
	16:53	74 14:27 (15)				20:14		22:29		22:03	20:42		16:51	7 12:20 (17)			15:51
Potential sun hours	221		260			365	432	521	547	546	478	386	319		236		199
Total, worst case		704		609										7		1322	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,62		0,63										0,63		0,62	
Total reduction		0,25		0,25										0,25		0,25	
Total, real		174		153										2		328	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** P - Buevegen 2021

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:46		10:45 (12)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:51		10:19 (12)	09:00
	15:53		16:56	73	14:22 (15)	18:04	20:17	21:26	22:30	22:48	22:01	20:40	19:13		16:49	43	13:46 (15)	15:51
2	09:27		08:43		10:46 (12)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:54		10:18 (12)	09:01
	15:54		16:58	74	14:23 (15)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46	53	13:48 (15)	15:50
3	09:27		08:41		10:45 (12)	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44		07:56		10:18 (12)	09:03
	15:55		17:01	74	14:22 (15)	18:09	20:21	21:30	22:34	22:47	21:56	20:34	19:07		16:44	59	13:50 (15)	15:49
4	09:26		08:39		10:46 (12)	07:27	06:58	05:36	04:36	04:35	05:30	06:40	07:46		07:58		10:16 (12)	09:05
	15:57		17:03	73	14:23 (15)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41	65	13:51 (15)	15:48
5	09:26		08:37		10:46 (12)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		10:16 (12)	09:07
	15:58		17:06	71	14:22 (15)	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01		16:39	70	13:52 (15)	15:47
6	09:25		08:34		10:47 (12)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:50		08:03		10:16 (12)	09:09
	16:00		17:08	68	14:22 (15)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:59		16:37	73	13:53 (15)	15:46
7	09:24		08:32		10:47 (12)	07:18	06:49	05:29	04:33	04:38	05:37	06:46	07:53		08:06		10:16 (12)	09:10
	16:02		17:11	65	14:21 (15)	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56		16:34	73	13:52 (15)	15:45
8	09:24		08:30		10:48 (12)	07:16	06:47	05:26	04:32	04:40	05:39	06:48	07:55		08:08		10:16 (12)	09:12
	16:03		17:13	58	14:20 (15)	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53		16:32	73	13:53 (15)	15:45
9	09:23		08:27		10:49 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57		08:10		10:16 (12)	09:13
	16:05		17:16	50	14:18 (15)	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	75	13:53 (15)	15:44
10	09:22		08:25		10:50 (12)	07:10	06:41	05:22	04:30	04:42	05:44	06:53	08:00		08:13		10:17 (12)	09:15
	16:07		17:18	40	14:16 (15)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:28	74	13:54 (15)	15:43
11	09:21		08:22		10:53 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15		10:17 (12)	09:16
	16:09		17:21	22	12:47 (17)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:44		16:25	69	13:53 (15)	15:43
12	09:20		08:20		12:38 (17)	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04		08:18		10:18 (12)	09:17
	16:11		17:23	4	12:42 (17)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:23	54	13:53 (15)	15:42
13	09:18		08:17			07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20		10:20 (12)	09:19
	16:13		17:25			18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39		16:21	53	13:53 (15)	15:42
14	09:17		08:15			06:59	06:30	05:12	04:28	04:49	05:53	07:02	08:09		08:22		11:57 (17)	09:20
	16:15		17:28			18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19	51	13:52 (15)	15:42
15	09:16		08:12			06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25		11:58 (17)	09:21
	16:17		17:30			18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33		16:17	50	13:52 (15)	15:42
16	09:14		08:10			06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27		11:59 (17)	09:22
	16:19		17:33			18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31		16:15	49	13:52 (15)	15:42
17	09:13		08:07			06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29		12:00 (17)	09:23
	16:21	5	12:50 (9)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13	45	13:50 (15)	15:42
18	09:12		12:33 (9)	08:05		06:47	06:18	05:04	04:27	04:56	06:02	07:10	08:18		08:32		12:01 (17)	09:24
	16:23	18	12:51 (9)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:51	18:25		16:11	43	13:50 (15)	15:42
19	09:10		12:34 (9)	08:02		06:44	06:16	05:02	04:26	04:58	06:04	07:13	08:20		08:34		12:03 (17)	09:25
	16:25	19	12:53 (9)	17:40		18:47	20:58	22:06	22:49	22:27	21:16	19:48	18:22		16:09	38	13:49 (15)	15:42
20	09:08		12:34 (9)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36		12:04 (17)	09:25
	16:27	20	12:54 (9)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20		16:07	27	13:41 (15)	15:42
21	09:07		12:31 (17)	07:57		06:38	06:10	04:58	04:27	05:01	06:08	07:17	08:25		08:39		12:07 (17)	09:26
	16:30	22	12:53 (9)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17		16:06	22	12:29 (9)	15:43
22	09:05		12:29 (17)	07:54		06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27		08:41		12:10 (9)	09:27
	16:32	27	14:06 (15)	17:48		18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14		16:04	20	12:30 (9)	15:43
23	09:03		12:28 (17)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30		08:43		12:10 (9)	09:27
	16:34	38	14:14 (15)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12		16:02	19	12:29 (9)	15:44
24	09:01		12:27 (17)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32		08:45		12:11 (9)	09:28
	16:37	43	14:16 (15)	17:52		18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09		16:01	18	12:29 (9)	15:44
25	09:00		12:27 (17)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34		08:47		12:11 (9)	09:28
	16:39	45	14:17 (15)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06		15:59	5	12:28 (9)	15:45
26	08:58		12:26 (17)	07:43		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37		08:49			09:28
	16:41	49	14:19 (15)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04		15:58			15:46
27	08:56		12:25 (17)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39		08:52			09:28
	16:44	50	14:19 (15)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:24	17:01		15:56			15:47
28	08:54		12:25 (17)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42		08:54			09:28
	16:46	51	14:20 (15)	18:02		19:07	21:19	22:24	22:50	22:09	20:51	19:22	16:59		15:55			15:48
29	08:52		10:48 (12)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44		08:56			09:28
	16:49	53	14:21 (15)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56		15:53			15:49
30	08:50		10:46 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	12:06 (17)	08:58			09:28
	16:51	55	14:21 (15)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:54	7 12:13 (17)	15:52			15:50
31	08:48		10:46 (12)			07:09		04:41		05:22	06:31		07:49	10:22 (12)				09:28
	16:53	69	14:22 (15)			20:14		22:29		22:03	20:42		16:51	25 12:17 (17)				15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236				199
Total, worst case		564		672									32		1221			
Sun reduction		0,50		0,50									0,50		0,50			
Oper. time red.		0,80		0,80									0,80		0,80			
Wind dir. red.		0,61		0,63									0,66		0,62			
Total reduction		0,24		0,25									0,26		0,25			
Total, real		138		169									8		303			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June
1	09:28	12:03 (26)	08:45	14:59 (17)	07:35	07:07	05:44	04:39
	15:52	20 12:23 (26)	16:56	18 15:17 (17)	18:04	20:16	21:26	22:30
2	09:27	12:03 (26)	08:43	14:59 (17)	07:32	07:04	05:41	04:38
	15:54	20 12:23 (26)	16:58	19 15:18 (17)	18:07	20:19	21:28	22:32
3	09:27	12:03 (26)	08:41	14:58 (17)	07:30	07:01	05:38	04:37
	15:55	20 12:23 (26)	17:01	19 15:17 (17)	18:09	20:21	21:30	22:33
4	09:26	12:03 (26)	08:39	14:59 (17)	07:27	06:58	05:36	04:36
	15:57	21 12:24 (26)	17:03	19 15:18 (17)	18:12	20:23	21:33	22:35
5	09:26	12:04 (26)	08:37	14:59 (17)	07:24	06:55	05:33	04:34
	15:58	26 13:33 (12)	17:06	19 15:18 (17)	18:14	20:26	21:35	22:36
6	09:25	12:04 (26)	08:34	15:00 (17)	07:21	06:52	05:31	04:33
	16:00	29 13:35 (12)	17:08	18 15:18 (17)	18:16	20:28	21:37	22:38
7	09:24	12:05 (26)	08:32	15:00 (17)	07:18	06:49	05:29	04:32
	16:01	31 13:37 (12)	17:11	17 15:17 (17)	18:19	20:30	21:39	22:39
8	09:23	12:06 (26)	08:30	15:00 (17)	07:16	06:46	05:26	04:31
	16:03	33 13:39 (12)	17:13	16 15:16 (17)	18:21	20:33	21:42	22:40
9	09:23	12:06 (26)	08:27	15:02 (17)	07:13	06:44	05:24	04:31
	16:05	33 13:39 (12)	17:15	14 15:16 (17)	18:23	20:35	21:44	22:42
10	09:22	12:07 (26)	08:25	15:03 (17)	07:10	06:41	05:21	04:30
	16:07	35 13:41 (12)	17:18	11 15:14 (17)	18:26	20:37	21:46	22:43
11	09:21	12:07 (26)	08:22	15:07 (17)	07:07	06:38	05:19	04:29
	16:09	35 13:41 (12)	17:20	5 15:12 (17)	18:28	20:39	21:49	22:44
12	09:19	12:08 (26)	08:20		07:04	06:35	05:17	04:29
	16:11	35 13:42 (12)	17:23		18:30	20:42	21:51	22:45
13	09:18	12:09 (26)	08:17		07:01	06:32	05:15	04:28
	16:12	35 13:43 (12)	17:25		18:33	20:44	21:53	22:46
14	09:17	12:10 (26)	08:15		06:58	06:29	05:12	04:28
	16:14	35 13:44 (12)	17:28		18:35	20:46	21:55	22:46
15	09:16	12:11 (26)	08:12		06:56	06:27	05:10	04:27
	16:17	34 13:45 (12)	17:30		18:37	20:49	21:57	22:47
16	09:14	12:12 (26)	08:10		06:53	06:24	05:08	04:27
	16:19	32 13:45 (12)	17:33		18:40	20:51	22:00	22:48
17	09:13	12:14 (26)	08:07		06:50	06:21	05:06	04:27
	16:21	29 13:45 (12)	17:35		18:42	20:53	22:02	22:48
18	09:11	12:16 (26)	08:05		06:47	06:18	05:04	04:26
	16:23	26 13:46 (12)	17:38		18:44	20:56	22:04	22:49
19	09:10	13:25 (12)	08:02		06:44	06:16	05:02	04:26
	16:25	21 13:46 (12)	17:40		18:47	20:58	22:06	22:49
20	09:08	13:25 (12)	07:59		06:41	06:13	05:00	04:26
	16:27	22 13:47 (12)	17:43		18:49	21:00	22:08	22:50
21	09:07	13:26 (12)	07:57		06:38	06:10	04:58	04:26
	16:30	21 13:47 (12)	17:45		18:51	21:03	22:10	22:50
22	09:05	13:26 (12)	07:54		06:35	06:07	04:56	04:27
	16:32	21 13:47 (12)	17:48		18:54	21:05	22:12	22:50
23	09:03	13:27 (12)	07:51		06:33	06:05	04:54	04:27
	16:34	20 13:47 (12)	17:50		18:56	21:07	22:14	22:50
24	09:01	13:28 (12)	07:49		06:30	06:02	04:52	04:27
	16:37	19 13:47 (12)	17:52		18:58	21:09	22:16	22:50
25	09:00	13:29 (12)	07:46		06:27	05:59	04:50	04:28
	16:39	18 13:47 (12)	17:55		19:00	21:12	22:18	22:50
26	08:58	13:30 (12)	07:43		06:24	05:57	04:49	04:28
	16:41	17 13:47 (12)	17:57		19:03	21:14	22:20	22:50
27	08:56	13:30 (12)	07:41		06:21	05:54	04:47	04:29
	16:44	20 15:09 (17)	18:00		19:05	21:16	22:22	22:50
28	08:54	13:32 (12)	07:38		06:18	05:51	04:45	04:29
	16:46	23 15:12 (17)	18:02		19:07	21:19	22:23	22:50
29	08:52	13:35 (12)			07:15	05:49	04:44	04:30
	16:48	21 15:14 (17)			20:10	21:21	22:25	22:49
30	08:50	15:00 (17)			07:12	05:46	04:42	04:31
	16:51	15 15:15 (17)			20:12	21:23	22:27	22:49
31	08:48	15:00 (17)			07:09		04:41	
	16:53	16 15:16 (17)			20:14		22:29	
Potential sun hours	221		260		365	432	521	547
Total, worst case		783		175				
Sun reduction		0,50		0,50				
Oper. time red.		0,80		0,80				
Wind dir. red.		0,60		0,55				
Total reduction		0,24		0,22				
Total, real		187		39				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** Q - Buevegen 2141

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:32 (17)	08:59		11:49 (26)
	22:48	22:01	20:39	19:13			16:48	12	14:44 (17)	15:51	35	13:23 (12)
2	04:33	05:26	06:35	07:41			07:54		14:31 (17)	09:01		11:50 (26)
	22:48	21:58	20:37	19:10			16:46	15	14:46 (17)	15:50	35	13:24 (12)
3	04:34	05:28	06:37	07:44			07:56		14:31 (17)	09:03		11:50 (26)
	22:47	21:56	20:34	19:07			16:44	16	14:47 (17)	15:49	33	13:23 (12)
4	04:35	05:30	06:39	07:46			07:58		14:29 (17)	09:05		11:50 (26)
	22:46	21:54	20:31	19:04			16:41	18	14:47 (17)	15:48	33	13:23 (12)
5	04:36	05:33	06:42	07:48			08:01		14:29 (17)	09:07		11:50 (26)
	22:46	21:51	20:28	19:01			16:39	19	14:48 (17)	15:47	31	13:22 (12)
6	04:37	05:35	06:44	07:50			08:03		14:29 (17)	09:08		11:50 (26)
	22:45	21:49	20:25	18:58			16:36	19	14:48 (17)	15:46	30	13:22 (12)
7	04:38	05:37	06:46	07:53			08:06		14:29 (17)	09:10		11:51 (26)
	22:44	21:46	20:22	18:56			16:34	19	14:48 (17)	15:45	27	13:21 (12)
8	04:40	05:39	06:48	07:55			08:08		14:29 (17)	09:12		11:51 (26)
	22:43	21:44	20:19	18:53			16:32	19	14:48 (17)	15:44	21	12:12 (26)
9	04:41	05:41	06:51	07:57			08:10		14:30 (17)	09:13		11:51 (26)
	22:42	21:41	20:17	18:50			16:30	18	14:48 (17)	15:44	21	12:12 (26)
10	04:42	05:44	06:53	07:59			08:13		14:29 (17)	09:15		11:52 (26)
	22:40	21:39	20:14	18:47			16:27	18	14:47 (17)	15:43	20	12:12 (26)
11	04:44	05:46	06:55	08:02			08:15		14:30 (17)	09:16		11:53 (26)
	22:39	21:36	20:11	18:44			16:25	17	14:47 (17)	15:43	20	12:13 (26)
12	04:45	05:48	06:57	08:04			08:18		14:32 (17)	09:17		11:53 (26)
	22:38	21:34	20:08	18:42			16:23	15	14:47 (17)	15:42	20	12:13 (26)
13	04:47	05:50	06:59	08:06			08:20		13:07 (12)	09:19		11:54 (26)
	22:36	21:31	20:05	18:39			16:21	21	14:46 (17)	15:42	20	12:14 (26)
14	04:49	05:53	07:02	08:09			08:22		13:04 (12)	09:20		11:54 (26)
	22:35	21:29	20:02	18:36			16:19	23	14:44 (17)	15:42	20	12:14 (26)
15	04:50	05:55	07:04	08:11			08:25		13:03 (12)	09:21		11:54 (26)
	22:33	21:26	19:59	18:33			16:17	20	14:42 (17)	15:42	20	12:14 (26)
16	04:52	05:57	07:06	08:13			08:27		13:03 (12)	09:22		11:55 (26)
	22:32	21:23	19:56	18:30			16:15	17	13:20 (12)	15:42	20	12:15 (26)
17	04:54	05:59	07:08	08:16			08:29		13:02 (12)	09:23		11:55 (26)
	22:30	21:21	19:53	18:28			16:13	18	13:20 (12)	15:42	20	12:15 (26)
18	04:56	06:02	07:10	08:18			08:32		13:02 (12)	09:24		11:56 (26)
	22:29	21:18	19:50	18:25			16:11	19	13:21 (12)	15:42	19	12:15 (26)
19	04:57	06:04	07:13	08:20			08:34		13:02 (12)	09:25		11:56 (26)
	22:27	21:15	19:48	18:22			16:09	20	13:22 (12)	15:42	20	12:16 (26)
20	04:59	06:06	07:15	08:23			08:36		13:01 (12)	09:25		11:57 (26)
	22:25	21:13	19:45	18:20			16:07	21	13:22 (12)	15:42	20	12:17 (26)
21	05:01	06:08	07:17	08:25			08:38		13:02 (12)	09:26		11:57 (26)
	22:23	21:10	19:42	18:17			16:06	21	13:23 (12)	15:43	20	12:17 (26)
22	05:03	06:10	07:19	08:27			08:41		13:02 (12)	09:27		11:58 (26)
	22:22	21:07	19:39	18:14			16:04	22	13:24 (12)	15:43	20	12:18 (26)
23	05:05	06:13	07:21	08:30			08:43		13:02 (12)	09:27		11:58 (26)
	22:20	21:05	19:36	18:12			16:02	21	13:23 (12)	15:44	20	12:18 (26)
24	05:07	06:15	07:24	08:32			08:45		11:55 (26)	09:27		11:58 (26)
	22:18	21:02	19:33	18:09			16:01	25	13:24 (12)	15:44	20	12:18 (26)
25	05:09	06:17	07:26	07:34			08:47		11:52 (26)	09:28		11:59 (26)
	22:16	20:59	19:30	17:06			15:59	30	13:24 (12)	15:45	20	12:19 (26)
26	05:11	06:19	07:28	07:37			08:49		11:51 (26)	09:28		12:00 (26)
	22:14	20:56	19:27	17:04			15:57	32	13:24 (12)	15:46	20	12:20 (26)
27	05:13	06:22	07:30	07:39			08:51		11:50 (26)	09:28		12:00 (26)
	22:12	20:54	19:24	17:01			15:56	34	13:24 (12)	15:47	20	12:20 (26)
28	05:15	06:24	07:32	07:42			08:54		11:49 (26)	09:28		12:00 (26)
	22:09	20:51	19:21	16:59			15:55	35	13:23 (12)	15:48	20	12:20 (26)
29	05:17	06:26	07:35	07:44			08:56		11:50 (26)	09:28		12:01 (26)
	22:07	20:48	19:19	16:56			15:53	35	13:24 (12)	15:49	20	12:21 (26)
30	05:20	06:28	07:37	07:46			08:58		11:49 (26)	09:28		12:01 (26)
	22:05	20:45	19:16	16:53			15:52	36	13:24 (12)	15:50	21	12:22 (26)
31	05:22	06:31		07:49		14:35 (17)				09:28		12:01 (26)
	22:03	20:42		16:51	6	14:41 (17)				15:51	21	12:22 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					6			655			707	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,58			0,63	
Total reduction					0,22			0,23			0,25	
Total, real					1			151			178	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** R - Buevegen 2165

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:35 (26)	08:45	14:09 (12)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39	07:51		08:59		12:23 (26)
	15:52 20	12:55 (26)	16:56 5	14:14 (12)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48		15:51	18	12:41 (26)
2	09:27	12:36 (26)	08:43		07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54		09:01		12:23 (26)
	15:54 21	12:57 (26)	16:58		18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46		15:50	19	12:42 (26)
3	09:27	12:36 (26)	08:41		07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56		09:03		12:23 (26)
	15:55 21	12:57 (26)	17:01		18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44		15:49	20	12:43 (26)
4	09:26	12:37 (26)	08:39		07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58		09:05		12:23 (26)
	15:57 20	12:57 (26)	17:03		18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41		15:48	20	12:43 (26)
5	09:26	12:37 (26)	08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01		09:07		12:24 (26)
	15:58 20	12:57 (26)	17:06		18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39		15:47	20	12:44 (26)
6	09:25	12:38 (26)	08:34		07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03		09:08		12:24 (26)
	16:00 20	12:58 (26)	17:08		18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36		15:46	20	12:44 (26)
7	09:24	12:38 (26)	08:32		07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06		09:10		12:24 (26)
	16:01 20	12:58 (26)	17:11		18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56	16:34		15:45	21	12:45 (26)
8	09:23	12:39 (26)	08:30		07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08		09:12		12:25 (26)
	16:03 20	12:59 (26)	17:13		18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32		15:44	20	12:45 (26)
9	09:23	12:39 (26)	08:27		07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57	08:10		09:13		12:24 (26)
	16:05 19	12:58 (26)	17:15		18:23	20:35	21:44	22:41	22:42	21:41	20:17	18:50	16:30		15:44	21	12:45 (26)
10	09:22	12:40 (26)	08:25		07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13	13:40 (12)	09:15		12:25 (26)
	16:07 19	12:59 (26)	17:18		18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27 5	13:45 (12)	15:43	21	12:46 (26)
11	09:21	12:40 (26)	08:22		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	13:37 (12)	09:16		12:26 (26)
	16:09 19	12:59 (26)	17:20		18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25 11	13:48 (12)	15:43	21	12:47 (26)
12	09:19	12:42 (26)	08:20		07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18	13:36 (12)	09:17		12:26 (26)
	16:10 24	14:10 (12)	17:23		18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 14	13:50 (12)	15:42	20	12:46 (26)
13	09:18	12:42 (26)	08:17		07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20	13:35 (12)	09:19		12:27 (26)
	16:12 27	14:11 (12)	17:25		18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21 17	13:52 (12)	15:42	20	12:47 (26)
14	09:17	12:44 (26)	08:15		06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09	08:22	13:34 (12)	09:20		12:27 (26)
	16:14 27	14:13 (12)	17:28		18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19 18	13:52 (12)	15:42	21	12:48 (26)
15	09:16	12:45 (26)	08:12		06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25	13:34 (12)	09:21		12:27 (26)
	16:17 27	14:14 (12)	17:30		18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33	16:17 19	13:53 (12)	15:42	21	12:48 (26)
16	09:14	12:46 (26)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27	13:34 (12)	09:22		12:28 (26)
	16:19 27	14:15 (12)	17:33		18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30	16:15 20	13:54 (12)	15:42	20	12:48 (26)
17	09:13	12:48 (26)	08:07		06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29	13:33 (12)	09:23		12:28 (26)
	16:21 25	14:16 (12)	17:35		18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13 20	13:53 (12)	15:42	20	12:48 (26)
18	09:11	13:59 (12)	08:05		06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32	13:34 (12)	09:24		12:29 (26)
	16:23 18	14:17 (12)	17:38		18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11 20	13:54 (12)	15:42	20	12:49 (26)
19	09:10	13:59 (12)	08:02		06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20	08:34	13:34 (12)	09:25		12:30 (26)
	16:25 19	14:18 (12)	17:40		18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09 21	13:55 (12)	15:42	20	12:50 (26)
20	09:08	13:59 (12)	07:59		06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36	13:34 (12)	09:25		12:30 (26)
	16:27 19	14:18 (12)	17:43		18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07 20	13:54 (12)	15:42	20	12:50 (26)
21	09:07	13:59 (12)	07:57		06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38	13:35 (12)	09:26		12:30 (26)
	16:30 20	14:19 (12)	17:45		18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06 20	13:55 (12)	15:43	20	12:50 (26)
22	09:05	13:59 (12)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	08:41	13:35 (12)	09:27		12:31 (26)
	16:32 20	14:19 (12)	17:47		18:54	21:05	22:12	22:50	22:21	21:07	19:39	18:14	16:04 19	13:54 (12)	15:43	20	12:51 (26)
23	09:03	13:59 (12)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43	13:36 (12)	09:27		12:31 (26)
	16:34 21	14:20 (12)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11	16:02 19	13:55 (12)	15:44	20	12:51 (26)
24	09:01	14:00 (12)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	13:37 (12)	09:27		12:31 (26)
	16:36 20	14:20 (12)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09	16:01 18	13:55 (12)	15:44	21	12:52 (26)
25	09:00	14:00 (12)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47	12:26 (26)	09:28		12:33 (26)
	16:39 21	14:21 (12)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59 25	13:54 (12)	15:45	20	12:53 (26)
26	08:58	14:01 (12)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49	12:25 (26)	09:28		12:33 (26)
	16:41 20	14:21 (12)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57 26	13:54 (12)	15:46	20	12:53 (26)
27	08:56	14:01 (12)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:51	12:24 (26)	09:28		12:34 (26)
	16:44 19	14:20 (12)	18:00		19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56 28	13:54 (12)	15:47	20	12:54 (26)
28	08:54	14:02 (12)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54	12:23 (26)	09:28		12:33 (26)
	16:46 18	14:20 (12)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58	15:55 28	13:53 (12)	15:47	21	12:54 (26)
29	08:52	14:04 (12)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56	12:23 (26)	09:28		12:34 (26)
	16:48 16	14:20 (12)			20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53 27	13:52 (12)	15:49	20	12:54 (26)
30	08:50	14:04 (12)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58	12:23 (26)	09:28		12:35 (26)
	16:51 14	14:18 (12)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52 24	13:51 (12)	15:50	20	12:55 (26)
31	08:48	14:07 (12)			07:09		04:41		05:22	06:31		07:49			09:28		12:35 (26)
	16:53 10	14:17 (12)			20:14		22:29		22:03	20:42		16:51			15:51	20	12:55 (26)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	631		5										419		625		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,58		0,55										0,56		0,62		
Total reduction	0,23		0,22										0,23		0,25		
Total, real	147		1										94		154		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March	April	May	June
1	09:28		13:54 (26)	08:45		15:12 (12)	07:35	07:06	05:43	04:39
	15:52	9	14:03 (26)	16:56	14	15:26 (12)	18:04	20:16	21:26	22:30
2	09:27		13:54 (26)	08:43		15:12 (12)	07:32	07:04	05:41	04:38
	15:54	11	14:05 (26)	16:58	16	15:28 (12)	18:07	20:19	21:28	22:32
3	09:27		13:54 (26)	08:41		15:11 (12)	07:29	07:01	05:38	04:37
	15:55	12	14:06 (26)	17:01	17	15:28 (12)	18:09	20:21	21:30	22:33
4	09:26		13:54 (26)	08:39		15:11 (12)	07:27	06:58	05:36	04:36
	15:57	13	14:07 (26)	17:03	18	15:29 (12)	18:12	20:23	21:33	22:35
5	09:26		13:53 (26)	08:37		15:11 (12)	07:24	06:55	05:33	04:34
	15:58	15	14:08 (26)	17:06	18	15:29 (12)	18:14	20:26	21:35	22:36
6	09:25		13:53 (26)	08:34		15:11 (12)	07:21	06:52	05:31	04:33
	16:00	16	14:09 (26)	17:08	19	15:30 (12)	18:16	20:28	21:37	22:38
7	09:24		13:54 (26)	08:32		15:11 (12)	07:18	06:49	05:29	04:32
	16:01	16	14:10 (26)	17:10	19	15:30 (12)	18:19	20:30	21:39	22:39
8	09:23		13:54 (26)	08:30		15:11 (12)	07:15	06:46	05:26	04:31
	16:03	17	14:11 (26)	17:13	18	15:29 (12)	18:21	20:32	21:42	22:40
9	09:23		13:53 (26)	08:27		15:12 (12)	07:13	06:44	05:24	04:31
	16:05	18	14:11 (26)	17:15	18	15:30 (12)	18:23	20:35	21:44	22:41
10	09:22		13:53 (26)	08:25		15:12 (12)	07:10	06:41	05:21	04:30
	16:07	19	14:12 (26)	17:18	17	15:29 (12)	18:26	20:37	21:46	22:43
11	09:20		13:53 (26)	08:22		15:13 (12)	07:07	06:38	05:19	04:29
	16:09	19	14:12 (26)	17:20	14	15:27 (12)	18:28	20:39	21:48	22:44
12	09:19		13:54 (26)	08:20		15:16 (12)	07:04	06:35	05:17	04:28
	16:10	19	14:13 (26)	17:23	11	15:27 (12)	18:30	20:42	21:51	22:45
13	09:18		13:53 (26)	08:17		15:18 (12)	07:01	06:32	05:14	04:28
	16:12	21	14:14 (26)	17:25	5	15:23 (12)	18:33	20:44	21:53	22:45
14	09:17		13:54 (26)	08:15			06:58	06:29	05:12	04:27
	16:14	21	14:15 (26)	17:28			18:35	20:46	21:55	22:46
15	09:16		13:54 (26)	08:12			06:56	06:27	05:10	04:27
	16:16	21	14:15 (26)	17:30			18:37	20:49	21:57	22:47
16	09:14		13:54 (26)	08:10			06:53	06:24	05:08	04:27
	16:19	21	14:15 (26)	17:33			18:40	20:51	21:59	22:48
17	09:13		13:54 (26)	08:07			06:50	06:21	05:06	04:27
	16:21	22	14:16 (26)	17:35			18:42	20:53	22:02	22:48
18	09:11		13:55 (26)	08:05			06:47	06:18	05:04	04:26
	16:23	21	14:16 (26)	17:38			18:44	20:56	22:04	22:49
19	09:10		13:55 (26)	08:02			06:44	06:15	05:02	04:26
	16:25	21	14:16 (26)	17:40			18:47	20:58	22:06	22:49
20	09:08		13:56 (26)	07:59			06:41	06:13	05:00	04:26
	16:27	20	14:16 (26)	17:43			18:49	21:00	22:08	22:50
21	09:07		13:56 (26)	07:57			06:38	06:10	04:58	04:26
	16:30	20	14:16 (26)	17:45			18:51	21:02	22:10	22:50
22	09:05		13:57 (26)	07:54			06:35	06:07	04:56	04:27
	16:32	19	14:16 (26)	17:47			18:53	21:05	22:12	22:50
23	09:03		13:58 (26)	07:51			06:32	06:05	04:54	04:27
	16:34	18	14:16 (26)	17:50			18:56	21:07	22:14	22:50
24	09:01		13:59 (26)	07:49			06:30	06:02	04:52	04:27
	16:36	17	14:16 (26)	17:52			18:58	21:09	22:16	22:50
25	08:59		14:01 (26)	07:46			06:27	05:59	04:50	04:28
	16:39	14	14:15 (26)	17:55			19:00	21:12	22:18	22:50
26	08:58		14:02 (26)	07:43			06:24	05:57	04:49	04:28
	16:41	11	14:13 (26)	17:57			19:03	21:14	22:20	22:50
27	08:56		14:05 (26)	07:41			06:21	05:54	04:47	04:29
	16:44	6	14:11 (26)	18:00			19:05	21:16	22:22	22:50
28	08:54			07:38			06:18	05:51	04:45	04:29
	16:46			18:02			19:07	21:19	22:23	22:50
29	08:52						07:15	05:49	04:44	04:30
	16:48						20:10	21:21	22:25	22:49
30	08:50		15:15 (12)				07:12	05:46	04:42	04:31
	16:51	8	15:23 (12)				20:12	21:23	22:27	22:49
31	08:48		15:14 (12)				07:09		04:41	
	16:53	11	15:25 (12)				20:14		22:29	
Potential sun hours	221			260			365	432	521	547
Total, worst case		476			204					
Sun reduction		0,50			0,50					
Oper. time red.		0,80			0,80					
Wind dir. red.		0,55			0,55					
Total reduction		0,22			0,22					
Total, real		104			45					

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** S - Vaule 176

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December		
1	04:32	05:24	06:33	07:39			07:51		14:42 (12)	08:59		13:35 (26)
	22:48	22:01	20:39	19:13			16:48	16	14:58 (12)	15:51	19	13:54 (26)
2	04:33	05:26	06:35	07:41			07:53		14:41 (12)	09:01		13:37 (26)
	22:48	21:58	20:37	19:10			16:46	18	14:59 (12)	15:50	18	13:55 (26)
3	04:34	05:28	06:37	07:44			07:56		14:40 (12)	09:03		13:37 (26)
	22:47	21:56	20:34	19:07			16:44	19	14:59 (12)	15:49	18	13:55 (26)
4	04:35	05:30	06:39	07:46			07:58		14:40 (12)	09:05		13:38 (26)
	22:46	21:54	20:31	19:04			16:41	20	15:00 (12)	15:48	17	13:55 (26)
5	04:36	05:32	06:42	07:48			08:01		14:41 (12)	09:07		13:39 (26)
	22:45	21:51	20:28	19:01			16:39	19	15:00 (12)	15:47	16	13:55 (26)
6	04:37	05:35	06:44	07:50			08:03		14:41 (12)	09:08		13:40 (26)
	22:45	21:49	20:25	18:58			16:36	19	15:00 (12)	15:46	15	13:55 (26)
7	04:38	05:37	06:46	07:53			08:06		14:41 (12)	09:10		13:41 (26)
	22:44	21:46	20:22	18:56			16:34	18	14:59 (12)	15:45	14	13:55 (26)
8	04:40	05:39	06:48	07:55			08:08		14:42 (12)	09:12		13:42 (26)
	22:43	21:44	20:19	18:53			16:32	17	14:59 (12)	15:44	13	13:55 (26)
9	04:41	05:41	06:50	07:57			08:10		14:43 (12)	09:13		13:42 (26)
	22:41	21:41	20:16	18:50			16:30	16	14:59 (12)	15:44	12	13:54 (26)
10	04:42	05:44	06:53	07:59			08:13		14:43 (12)	09:15		13:43 (26)
	22:40	21:39	20:14	18:47			16:27	14	14:57 (12)	15:43	11	13:54 (26)
11	04:44	05:46	06:55	08:02			08:15		14:45 (12)	09:16		13:45 (26)
	22:39	21:36	20:11	18:44			16:25	11	14:56 (12)	15:43	9	13:54 (26)
12	04:45	05:48	06:57	08:04			08:18		14:47 (12)	09:17		13:46 (26)
	22:38	21:34	20:08	18:41			16:23	7	14:54 (12)	15:42	7	13:53 (26)
13	04:47	05:50	06:59	08:06			08:20			09:19		13:48 (26)
	22:36	21:31	20:05	18:39			16:21			15:42	5	13:53 (26)
14	04:49	05:53	07:01	08:09			08:22			09:20		13:49 (26)
	22:35	21:29	20:02	18:36			16:19			15:42	3	13:52 (26)
15	04:50	05:55	07:04	08:11			08:25		13:37 (26)	09:21		
	22:33	21:26	19:59	18:33			16:17	7	13:44 (26)	15:42		
16	04:52	05:57	07:06	08:13			08:27		13:36 (26)	09:22		
	22:32	21:23	19:56	18:30			16:15	11	13:47 (26)	15:42		
17	04:54	05:59	07:08	08:16			08:29		13:34 (26)	09:23		
	22:30	21:21	19:53	18:28			16:13	14	13:48 (26)	15:42		
18	04:56	06:01	07:10	08:18			08:32		13:33 (26)	09:24		
	22:29	21:18	19:50	18:25			16:11	17	13:50 (26)	15:42		
19	04:57	06:04	07:12	08:20			08:34		13:33 (26)	09:25		
	22:27	21:15	19:47	18:22			16:09	18	13:51 (26)	15:42		
20	04:59	06:06	07:15	08:23			08:36		13:32 (26)	09:25		
	22:25	21:13	19:45	18:19			16:07	19	13:51 (26)	15:42		
21	05:01	06:08	07:17	08:25			08:38		13:32 (26)	09:26		
	22:23	21:10	19:42	18:17			16:06	20	13:52 (26)	15:43		
22	05:03	06:10	07:19	08:27			08:41		13:32 (26)	09:27		
	22:21	21:07	19:39	18:14			16:04	20	13:52 (26)	15:43		
23	05:05	06:13	07:21	08:30			08:43		13:32 (26)	09:27		
	22:20	21:05	19:36	18:11			16:02	21	13:53 (26)	15:44		
24	05:07	06:15	07:23	08:32			08:45		13:33 (26)	09:27		
	22:18	21:02	19:33	18:09			16:00	21	13:54 (26)	15:44		
25	05:09	06:17	07:26	07:34			08:47		13:33 (26)	09:28		
	22:16	20:59	19:30	17:06			15:59	21	13:54 (26)	15:45		
26	05:11	06:19	07:28	07:37			08:49		13:33 (26)	09:28		
	22:14	20:56	19:27	17:04			15:57	21	13:54 (26)	15:46		
27	05:13	06:22	07:30	07:39			08:51		13:33 (26)	09:28		
	22:11	20:53	19:24	17:01			15:56	21	13:54 (26)	15:47		
28	05:15	06:24	07:32	07:41			08:53		13:33 (26)	09:28		
	22:09	20:51	19:21	16:58			15:55	21	13:54 (26)	15:47		
29	05:17	06:26	07:35	07:44		14:47 (12)	08:55		13:35 (26)	09:28		
	22:07	20:48	19:18	16:56	7	14:54 (12)	15:53	20	13:55 (26)	15:48		
30	05:19	06:28	07:37	07:46		14:45 (12)	08:57		13:35 (26)	09:28		13:56 (26)
	22:05	20:45	19:16	16:53	11	14:56 (12)	15:52	20	13:55 (26)	15:50	4	14:00 (26)
31	05:22	06:31		07:49		14:42 (12)				09:28		13:55 (26)
	22:03	20:42		16:51	15	14:57 (12)				15:51	6	14:01 (26)
Potential sun hours	546	478	386	319			236			199		
Total, worst case					33			486			187	
Sun reduction					0,50			0,50			0,50	
Oper. time red.					0,80			0,80			0,80	
Wind dir. red.					0,55			0,55			0,55	
Total reduction					0,22			0,22			0,22	
Total, real					7			107			41	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April	May	June
1	09:28			08:45		10:57 (37)	07:35		16:28 (17)	07:06	05:44	04:39
	15:52			16:56	40	13:50 (26)	18:04	11	16:39 (17)	20:16	21:26	22:30
2	09:27			08:43		10:59 (37)	07:32		16:27 (17)	07:04	05:41	04:38
	15:54			16:58	37	13:51 (26)	18:07	13	16:40 (17)	20:19	21:28	22:32
3	09:27			08:41		11:02 (37)	07:30		16:27 (17)	07:01	05:38	04:37
	15:55			17:01	28	13:49 (26)	18:09	14	16:41 (17)	20:21	21:30	22:33
4	09:26			08:39		13:29 (26)	07:27		16:27 (17)	06:58	05:36	04:36
	15:57			17:03	20	13:49 (26)	18:12	17	16:44 (17)	20:23	21:33	22:35
5	09:26			08:37		13:30 (26)	07:24		16:27 (17)	06:55	05:33	04:34
	15:58			17:06	17	13:47 (26)	18:14	19	16:46 (17)	20:26	21:35	22:36
6	09:25			08:34		13:33 (26)	07:21		16:28 (17)	06:52	05:31	04:33
	16:00			17:08	12	13:45 (26)	18:16	17	16:45 (17)	20:28	21:37	22:38
7	09:24			08:32			07:18		16:29 (17)	06:49	05:29	04:32
	16:01			17:11			18:19	15	16:44 (17)	20:30	21:39	22:39
8	09:23			08:30			07:15		16:30 (17)	06:46	05:26	04:32
	16:03			17:13			18:21	12	16:42 (17)	20:32	21:42	22:40
9	09:23			08:27			07:13		16:33 (17)	06:44	05:24	04:31
	16:05			17:15			18:23	6	16:39 (17)	20:35	21:44	22:41
10	09:22			08:25			07:10			06:41	05:21	04:30
	16:07			17:18			18:26			20:37	21:46	22:43
11	09:20			08:22			07:07			06:38	05:19	04:29
	16:09			17:20			18:28			20:39	21:48	22:44
12	09:19			08:20		14:57 (7)	07:04			06:35	05:17	04:29
	16:11			17:23	8	15:05 (7)	18:30			20:42	21:51	22:45
13	09:18			08:17		14:59 (7)	07:01			06:32	05:15	04:28
	16:12			17:25	11	15:10 (7)	18:33			20:44	21:53	22:45
14	09:17		11:05 (37)	08:15		15:02 (7)	06:58			06:29	05:12	04:28
	16:14	3	11:08 (37)	17:28	12	15:14 (12)	18:35			20:46	21:55	22:46
15	09:16		10:59 (37)	08:12		15:06 (12)	06:56			06:27	05:10	04:27
	16:17	10	11:09 (37)	17:30	12	15:18 (12)	18:37			20:49	21:57	22:47
16	09:14		10:52 (37)	08:10		15:06 (12)	06:53			06:24	05:08	04:27
	16:19	18	11:10 (37)	17:33	15	15:21 (12)	18:40			20:51	21:59	22:48
17	09:13		10:51 (37)	08:07		15:05 (12)	06:50			06:21	05:06	04:27
	16:21	19	11:10 (37)	17:35	16	15:21 (12)	18:42			20:53	22:02	22:48
18	09:11		10:51 (37)	08:05		15:05 (12)	06:47			06:18	05:04	04:26
	16:23	20	11:11 (37)	17:38	15	15:20 (12)	18:44			20:56	22:04	22:49
19	09:10		10:51 (37)	08:02		15:06 (12)	06:44			06:16	05:02	04:26
	16:25	21	11:12 (37)	17:40	16	15:22 (12)	18:47			20:58	22:06	22:49
20	09:08		10:51 (37)	07:59		15:07 (12)	06:41			06:13	05:00	04:26
	16:27	22	11:13 (37)	17:43	17	15:24 (12)	18:49			21:00	22:08	22:50
21	09:07		10:51 (37)	07:57		15:07 (12)	06:38			06:10	04:58	04:26
	16:30	22	11:13 (37)	17:45	20	15:27 (12)	18:51			21:02	22:10	22:50
22	09:05		10:51 (37)	07:54		15:08 (12)	06:35			06:07	04:56	04:27
	16:32	27	12:49 (32)	17:47	20	15:28 (12)	18:53			21:05	22:12	22:50
23	09:03		10:51 (37)	07:51		15:09 (12)	06:32			06:05	04:54	04:27
	16:34	39	13:02 (32)	17:50	18	15:27 (12)	18:56			21:07	22:14	22:50
24	09:01		10:52 (37)	07:49		15:12 (12)	06:30			06:02	04:52	04:27
	16:37	40	13:04 (32)	17:52	13	15:25 (12)	18:58			21:09	22:16	22:50
25	08:59		10:52 (37)	07:46		15:16 (12)	06:27			05:59	04:50	04:28
	16:39	39	13:04 (32)	17:55	5	15:21 (12)	19:00			21:12	22:18	22:50
26	08:58		10:52 (37)	07:43			06:24			05:57	04:49	04:28
	16:41	39	13:24 (26)	17:57			19:03			21:14	22:20	22:50
27	08:56		10:53 (37)	07:41			06:21			05:54	04:47	04:29
	16:44	39	13:28 (26)	18:00			19:05			21:16	22:22	22:50
28	08:54		10:53 (37)	07:38		16:32 (17)	06:18			05:51	04:45	04:29
	16:46	41	13:35 (26)	18:02	4	16:36 (17)	19:07			21:19	22:23	22:50
29	08:52		10:54 (37)				07:15			05:49	04:44	04:30
	16:48	41	13:44 (26)				20:10			21:21	22:25	22:49
30	08:50		10:55 (37)				07:12			05:46	04:42	04:31
	16:51	42	13:47 (26)				20:12			21:23	22:27	22:49
31	08:48		10:56 (37)				07:09				04:41	
	16:53	42	13:49 (26)				20:14				22:29	
Potential sun hours	221			260			365			432	521	547
Total, worst case		524			356			124				
Sun reduction		0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80				
Wind dir. red.		0,67			0,57			0,57				
Total reduction		0,27			0,23			0,23				
Total, real		139			81			28				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** T - Vaule 247

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51			08:59
	22:48	22:01	20:39	19:13			16:48			15:51
2	04:33	05:26	06:35	07:41			07:54			09:01
	22:48	21:58	20:37	19:10			16:46			15:50
3	04:34	05:28	06:37	07:44			07:56			09:03
	22:47	21:56	20:34	19:07			16:44			15:49
4	04:35	05:30	06:39	07:46			07:58		13:07 (26)	09:05
	22:46	21:54	20:31	19:04			16:41	4	13:11 (26)	15:48
5	04:36	05:33	06:42	07:48		17:09 (17)	08:01		13:02 (26)	09:07
	22:45	21:51	20:28	19:01	9	17:18 (17)	16:39	13	13:15 (26)	15:47
6	04:37	05:35	06:44	07:50		17:06 (17)	08:03		13:01 (26)	09:08
	22:45	21:49	20:25	18:58	14	17:20 (17)	16:36	17	13:18 (26)	15:46
7	04:38	05:37	06:46	07:53		17:04 (17)	08:06		12:58 (26)	09:10
	22:44	21:46	20:22	18:56	16	17:20 (17)	16:34	21	13:19 (26)	15:45
8	04:40	05:39	06:48	07:55		17:03 (17)	08:08		10:32 (37)	09:12
	22:43	21:44	20:19	18:53	18	17:21 (17)	16:32	29	13:20 (26)	15:44
9	04:41	05:41	06:50	07:57		17:02 (17)	08:10		10:30 (37)	09:13
	22:41	21:41	20:16	18:50	18	17:20 (17)	16:30	37	13:22 (26)	15:44
10	04:42	05:44	06:53	07:59		17:01 (17)	08:13		10:28 (37)	09:15
	22:40	21:39	20:14	18:47	16	17:17 (17)	16:27	40	13:21 (26)	15:43
11	04:44	05:46	06:55	08:02		17:01 (17)	08:15		10:27 (37)	09:16
	22:39	21:36	20:11	18:44	14	17:15 (17)	16:25	41	13:19 (26)	15:43
12	04:45	05:48	06:57	08:04		17:01 (17)	08:18		10:27 (37)	09:17
	22:38	21:34	20:08	18:41	12	17:13 (17)	16:23	42	13:19 (26)	15:42
13	04:47	05:50	06:59	08:06		17:02 (17)	08:20		10:25 (37)	09:19
	22:36	21:31	20:05	18:39	10	17:12 (17)	16:21	41	13:15 (26)	15:42
14	04:49	05:53	07:01	08:09		17:06 (17)	08:22		10:25 (37)	09:20
	22:35	21:29	20:02	18:36	2	17:08 (17)	16:19	41	13:07 (26)	15:42
15	04:50	05:55	07:04	08:11			08:25		10:25 (37)	09:21
	22:33	21:26	19:59	18:33			16:17	40	13:01 (26)	15:42
16	04:52	05:57	07:06	08:13			08:27		10:26 (37)	09:22
	22:32	21:23	19:56	18:30			16:15	39	12:58 (26)	15:42
17	04:54	05:59	07:08	08:16		15:45 (12)	08:29		10:25 (37)	09:23
	22:30	21:21	19:53	18:28	9	15:54 (12)	16:13	39	12:37 (32)	15:42
18	04:56	06:02	07:10	08:18		15:42 (12)	08:32		10:26 (37)	09:24
	22:29	21:18	19:50	18:25	15	15:57 (12)	16:11	40	12:38 (32)	15:42
19	04:57	06:04	07:12	08:20		15:40 (12)	08:34		10:26 (37)	09:25
	22:27	21:15	19:47	18:22	18	15:58 (12)	16:09	39	12:37 (32)	15:42
20	04:59	06:06	07:15	08:23		15:39 (12)	08:36		10:26 (37)	09:25
	22:25	21:13	19:45	18:20	21	16:00 (12)	16:07	28	12:25 (32)	15:42
21	05:01	06:08	07:17	08:25		15:37 (12)	08:38		10:27 (37)	09:26
	22:23	21:10	19:42	18:17	18	15:55 (12)	16:06	22	10:49 (37)	15:43
22	05:03	06:10	07:19	08:27		15:37 (12)	08:41		10:27 (37)	09:27
	22:21	21:07	19:39	18:14	16	15:53 (12)	16:04	22	10:49 (37)	15:43
23	05:05	06:13	07:21	08:30		15:36 (12)	08:43		10:28 (37)	09:27
	22:20	21:05	19:36	18:12	16	15:52 (12)	16:02	21	10:49 (37)	15:44
24	05:07	06:15	07:24	08:32		15:35 (12)	08:45		10:29 (37)	09:27
	22:18	21:02	19:33	18:09	16	15:51 (12)	16:01	20	10:49 (37)	15:44
25	05:09	06:17	07:26	07:34		14:36 (12)	08:47		10:29 (37)	09:28
	22:16	20:59	19:30	17:06	15	14:51 (12)	15:59	19	10:48 (37)	15:45
26	05:11	06:19	07:28	07:37		14:35 (12)	08:49		10:31 (37)	09:28
	22:14	20:56	19:27	17:04	14	14:49 (12)	15:57	18	10:49 (37)	15:46
27	05:13	06:22	07:30	07:39		14:35 (12)	08:51		10:38 (37)	09:28
	22:11	20:53	19:24	17:01	12	14:47 (12)	15:56	10	10:48 (37)	15:47
28	05:15	06:24	07:32	07:41		14:30 (7)	08:53		10:44 (37)	09:28
	22:09	20:51	19:21	16:58	12	14:42 (12)	15:55	3	10:47 (37)	15:48
29	05:17	06:26	07:35	07:44		14:27 (7)	08:55			09:28
	22:07	20:48	19:19	16:56	11	14:38 (7)	15:53			15:49
30	05:20	06:28	07:37	07:46		14:26 (7)	08:57			09:28
	22:05	20:45	19:16	16:53	8	14:34 (7)	15:52			15:50
31	05:22	06:31		07:49						09:28
	22:03	20:42		16:51						15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					330			686		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,56			0,65		
Total reduction					0,22			0,26		
Total, real					73			178		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere

Shadow receptor: U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February			March			April			May			June		
1	09:27			08:45		15:29 (8)	07:35		15:43 (13)	07:06			05:43		18:54 (37)	04:39		
	15:52			16:56	22	15:51 (8)	18:04	38	16:21 (13)	20:16			21:25	25	19:19 (37)	22:30		
2	09:27			08:43		15:29 (8)	07:32		15:44 (13)	07:04			05:41		18:56 (37)	04:38		
	15:54			16:58	23	15:52 (8)	18:07	36	16:20 (13)	20:19			21:28	20	19:16 (37)	22:32		
3	09:27			08:41		15:29 (8)	07:29		15:44 (13)	07:01		19:08 (37)	05:38		18:59 (37)	04:37		
	15:55			17:01	23	15:52 (8)	18:09	35	16:19 (13)	20:21	9	19:17 (37)	21:30	15	19:14 (37)	22:33		
4	09:26			08:39		15:29 (8)	07:27		15:45 (13)	06:58		19:03 (37)	05:36		19:04 (37)	04:36		
	15:57			17:03	24	15:53 (8)	18:11	33	16:18 (13)	20:23	18	19:21 (37)	21:32	5	19:09 (37)	22:35		
5	09:25			08:36		15:29 (8)	07:24		15:46 (13)	06:55		18:59 (37)	05:33			04:35		
	15:58			17:06	23	15:52 (8)	18:14	32	16:18 (13)	20:25	24	19:23 (37)	21:35			22:36		
6	09:25			08:34		15:28 (8)	07:21		15:48 (13)	06:52		18:57 (37)	05:31			04:33		
	16:00			17:08	24	15:52 (8)	18:16	28	16:16 (13)	20:28	28	19:25 (37)	21:37			22:37		
7	09:24			08:32		15:29 (8)	07:18		15:49 (13)	06:49		18:55 (37)	05:29			04:32		
	16:01			17:10	24	15:53 (8)	18:19	25	16:14 (13)	20:30	31	19:26 (37)	21:39			22:39		
8	09:23			08:29		15:29 (8)	07:15		15:51 (13)	06:46		18:53 (37)	05:26			04:32		
	16:03			17:13	23	15:52 (8)	18:21	21	16:12 (13)	20:32	35	19:42 (26)	21:42			22:40		
9	09:22			08:27		15:31 (8)	07:13		15:54 (13)	06:43		18:52 (37)	05:24			04:31		
	16:05			17:15	21	15:52 (8)	18:23	15	16:09 (13)	20:35	54	19:59 (26)	21:44			22:41		
10	09:21			08:25		15:31 (8)	07:10			06:41		18:51 (37)	05:21			04:30		
	16:07			17:18	20	15:51 (8)	18:26			20:37	57	19:59 (26)	21:46			22:42		
11	09:20			08:22		15:32 (8)	07:07			06:38		18:49 (37)	05:19			04:29		
	16:09			17:20	18	15:50 (8)	18:28			20:39	60	19:59 (26)	21:48			22:43		
12	09:19			08:20		15:34 (8)	07:04			06:35		18:48 (37)	05:17			04:29		
	16:11			17:23	15	15:49 (8)	18:30			20:42	62	19:58 (26)	21:50			22:44		
13	09:18			08:17		15:36 (8)	07:01			06:32		18:48 (37)	05:15			04:28		
	16:12			17:25	22	16:09 (13)	18:33			20:44	64	19:59 (26)	21:53			22:45		
14	09:17			08:15		15:54 (13)	06:58			06:29		18:47 (37)	05:12			04:28		
	16:14			17:28	18	16:12 (13)	18:35			20:46	63	19:58 (26)	21:55			22:46		
15	09:15			08:12		15:52 (13)	06:55			06:27		18:46 (37)	05:10			04:27		
	16:17			17:30	22	16:14 (13)	18:37			20:48	63	19:57 (26)	21:57			22:47		
16	09:14			08:10		15:51 (13)	06:53		17:30 (32)	06:24		18:47 (37)	05:08			04:27		
	16:19			17:33	26	16:17 (13)	18:40	8	17:38 (32)	20:51	62	19:57 (26)	21:59			22:47		
17	09:13			08:07		15:49 (13)	06:50		17:27 (32)	06:21		18:46 (37)	05:06			04:27		
	16:21			17:35	29	16:18 (13)	18:42	13	17:40 (32)	20:53	60	19:55 (26)	22:01			22:48		
18	09:11			08:04		15:47 (13)	06:47		17:25 (32)	06:18		18:45 (37)	05:04			04:26		
	16:23			17:38	32	16:19 (13)	18:44	17	17:42 (32)	20:55	58	19:53 (26)	22:04			22:49		
19	09:10			08:02		15:46 (13)	06:44		17:23 (32)	06:15		18:46 (37)	05:02			04:26		
	16:25			17:40	33	16:19 (13)	18:46	19	17:42 (32)	20:58	53	19:52 (26)	22:06			22:49		
20	09:08			07:59		15:46 (13)	06:41		17:22 (32)	06:13		18:45 (37)	05:00			04:26		
	16:27			17:43	35	16:21 (13)	18:49	21	17:43 (32)	21:00	44	19:29 (37)	22:08			22:49		
21	09:06			07:57		15:45 (13)	06:38		17:21 (32)	06:10		18:45 (37)	04:58			04:26		
	16:30			17:45	36	16:21 (13)	18:51	22	17:43 (32)	21:02	43	19:28 (37)	22:10			22:50		
22	09:05			07:54		15:44 (13)	06:35		17:21 (32)	06:07		18:46 (37)	04:56			04:27		
	16:32			17:47	37	16:21 (13)	18:53	22	17:43 (32)	21:05	43	19:29 (37)	22:12			22:50		
23	09:03			07:51		15:44 (13)	06:32		17:20 (32)	06:05		18:46 (37)	04:54			04:27		
	16:34			17:50	38	16:22 (13)	18:56	22	17:42 (32)	21:07	41	19:27 (37)	22:14			22:50		
24	09:01			07:49		15:43 (13)	06:29		17:20 (32)	06:02		18:47 (37)	04:52			04:27		
	16:36			17:52	39	16:22 (13)	18:58	22	17:42 (32)	21:09	40	19:27 (37)	22:16			22:50		
25	08:59			07:46		15:44 (13)	06:27		17:20 (32)	05:59		18:47 (37)	04:50			04:28		
	16:39			17:55	38	16:22 (13)	19:00	21	17:41 (32)	21:12	39	19:26 (37)	22:18			22:50		
26	08:57			07:43		15:43 (13)	06:24		17:20 (32)	05:57		18:48 (37)	04:49			04:28		
	16:41			17:57	39	16:22 (13)	19:03	20	17:40 (32)	21:14	37	19:25 (37)	22:20			22:50		
27	08:55		15:34 (8)	07:40		15:43 (13)	06:21		17:22 (32)	05:54		18:48 (37)	04:47			04:29		
	16:44	10	15:44 (8)	18:00	39	16:22 (13)	19:05	17	17:39 (32)	21:16	36	19:24 (37)	22:21			22:50		
28	08:54		15:33 (8)	07:38		15:43 (13)	06:18		17:24 (32)	05:51		18:50 (37)	04:45			04:29		
	16:46	13	15:46 (8)	18:02	38	16:21 (13)	19:07	13	17:37 (32)	21:19	33	19:23 (37)	22:23			22:49		
29	08:51		15:31 (8)				07:15		18:26 (32)	05:49		18:50 (37)	04:44			04:30		
	16:48	16	15:47 (8)				20:09	8	18:34 (32)	21:21	31	19:21 (37)	22:25			22:49		
30	08:49		15:31 (8)				07:12			05:46		18:52 (37)	04:42			04:31		
	16:51	18	15:49 (8)				20:12			21:23	28	19:20 (37)	22:27			22:49		
31	08:47		15:29 (8)				07:09						04:41					
	16:53	20	15:49 (8)				20:14						22:28					
Potential sun hours	221			260			365			432			521			547		
Total, worst case		77			781			508			1216			65				
Sun reduction		0,50			0,50			0,50			0,50			0,50				
Oper. time red.		0,80			0,80			0,80			0,80			0,80				
Wind dir. red.		0,53			0,54			0,58			0,68			0,68				
Total reduction		0,21			0,22			0,23			0,27			0,27				
Total, real		16			169			118			331			18				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Nedre Skøyen vei 2 .
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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere

Shadow receptor: U - Store Svela, eiendom 60/5, Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August			September			October			November			December
1	04:32	05:24			06:33		18:48 (37)	07:39			07:51		15:00 (8)	08:59
	22:48	22:00			20:39	60	19:58 (26)	19:13			16:48	21	15:21 (8)	15:51
2	04:33	05:26			06:35		18:49 (37)	07:41			07:53		15:00 (8)	09:01
	22:47	21:58			20:36	57	19:57 (26)	19:10			16:46	22	15:22 (8)	15:50
3	04:34	05:28			06:37		18:49 (37)	07:43			07:56		14:59 (8)	09:03
	22:47	21:56			20:34	54	19:56 (26)	19:07			16:44	23	15:22 (8)	15:49
4	04:35	05:30			06:39		18:51 (37)	07:46		16:33 (13)	07:58		14:59 (8)	09:05
	22:46	21:53			20:31	35	19:40 (26)	19:04	11	16:44 (13)	16:41	23	15:22 (8)	15:48
5	04:36	05:33			06:42		18:52 (37)	07:48		16:29 (13)	08:01		14:59 (8)	09:07
	22:45	21:51			20:28	31	19:23 (37)	19:01	18	16:47 (13)	16:39	24	15:23 (8)	15:47
6	04:37	05:35			06:44		18:53 (37)	07:50		16:26 (13)	08:03		14:58 (8)	09:08
	22:44	21:49			20:25	28	19:21 (37)	18:58	24	16:50 (13)	16:36	24	15:22 (8)	15:46
7	04:38	05:37			06:46		18:54 (37)	07:52		16:24 (13)	08:05		14:59 (8)	09:10
	22:43	21:46			20:22	25	19:19 (37)	18:55	27	16:51 (13)	16:34	23	15:22 (8)	15:45
8	04:40	05:39			06:48		18:57 (37)	07:55		16:21 (13)	08:08		14:59 (8)	09:11
	22:42	21:44			20:19	18	19:15 (37)	18:53	30	16:51 (13)	16:32	23	15:22 (8)	15:44
9	04:41	05:41		19:10 (37)	06:50		19:00 (37)	07:57		16:21 (13)	08:10		14:59 (8)	09:13
	22:41	21:41	10	19:20 (37)	20:16	11	19:11 (37)	18:50	32	16:53 (13)	16:30	23	15:22 (8)	15:44
10	04:42	05:44		19:07 (37)	06:53			07:59		16:19 (13)	08:13		15:00 (8)	09:14
	22:40	21:39	17	19:24 (37)	20:13			18:47	34	16:53 (13)	16:27	21	15:21 (8)	15:43
11	04:44	05:46		19:04 (37)	06:55			08:02		16:18 (13)	08:15		15:01 (8)	09:16
	22:39	21:36	22	19:26 (37)	20:11			18:44	36	16:54 (13)	16:25	20	15:21 (8)	15:43
12	04:45	05:48		19:02 (37)	06:57			08:04		16:17 (13)	08:17		15:02 (8)	09:17
	22:37	21:34	26	19:28 (37)	20:08			18:41	37	16:54 (13)	16:23	19	15:21 (8)	15:42
13	04:47	05:50		19:00 (37)	06:59			08:06		16:16 (13)	08:20		15:03 (8)	09:18
	22:36	21:31	29	19:29 (37)	20:05			18:39	38	16:54 (13)	16:21	16	15:19 (8)	15:42
14	04:49	05:53		18:58 (37)	07:01		18:17 (32)	08:08		16:16 (13)	08:22		15:05 (8)	09:20
	22:35	21:28	32	19:30 (37)	20:02	7	18:24 (32)	18:36	38	16:54 (13)	16:19	13	15:18 (8)	15:42
15	04:50	05:55		18:57 (37)	07:04		18:13 (32)	08:11		16:15 (13)	08:24		15:07 (8)	09:21
	22:33	21:26	34	19:31 (37)	19:59	13	18:26 (32)	18:33	39	16:54 (13)	16:17	10	15:17 (8)	15:42
16	04:52	05:57		18:56 (37)	07:06		18:11 (32)	08:13		16:15 (13)	08:27			09:22
	22:32	21:23	36	19:32 (37)	19:56	16	18:27 (32)	18:30	39	16:54 (13)	16:15			15:42
17	04:54	05:59		18:54 (37)	07:08		18:09 (32)	08:15		16:15 (13)	08:29			09:23
	22:30	21:21	38	19:32 (37)	19:53	19	18:28 (32)	18:28	38	16:53 (13)	16:13			15:42
18	04:56	06:01		18:53 (37)	07:10		18:08 (32)	08:18		16:15 (13)	08:31			09:24
	22:28	21:18	40	19:33 (37)	19:50	20	18:28 (32)	18:25	39	16:54 (13)	16:11			15:42
19	04:57	06:04		18:52 (37)	07:12		18:08 (32)	08:20		16:15 (13)	08:34			09:24
	22:27	21:15	41	19:33 (37)	19:47	21	18:29 (32)	18:22	38	16:53 (13)	16:09			15:42
20	04:59	06:06		18:51 (37)	07:15		18:07 (32)	08:22		16:16 (13)	08:36			09:25
	22:25	21:13	42	19:33 (37)	19:44	22	18:29 (32)	18:19	36	16:52 (13)	16:07			15:42
21	05:01	06:08		18:50 (37)	07:17		18:06 (32)	08:25		16:16 (13)	08:38			09:26
	22:23	21:10	43	19:33 (37)	19:42	22	18:28 (32)	18:17	35	16:51 (13)	16:06			15:43
22	05:03	06:10		18:50 (37)	07:19		18:06 (32)	08:27		16:17 (13)	08:40			09:26
	22:21	21:07	43	19:33 (37)	19:39	22	18:28 (32)	18:14	34	16:51 (13)	16:04			15:43
23	05:05	06:13		18:49 (37)	07:21		18:06 (32)	08:29		16:17 (13)	08:43			09:27
	22:19	21:04	44	19:33 (37)	19:36	21	18:27 (32)	18:11	32	16:49 (13)	16:02			15:44
24	05:07	06:15		18:49 (37)	07:23		18:07 (32)	08:32		16:18 (13)	08:45			09:27
	22:17	21:02	54	19:55 (26)	19:33	19	18:26 (32)	18:09	31	16:49 (13)	16:01			15:44
25	05:09	06:17		18:49 (37)	07:26		18:07 (32)	07:34		15:18 (13)	08:47			09:28
	22:15	20:59	58	19:57 (26)	19:30	18	18:25 (32)	17:06	29	15:47 (13)	15:59			15:45
26	05:11	06:19		18:49 (37)	07:28		18:08 (32)	07:37		15:20 (13)	08:49			09:28
	22:13	20:56	60	19:58 (26)	19:27	15	18:23 (32)	17:04	25	15:45 (13)	15:57			15:46
27	05:13	06:22		18:48 (37)	07:30		18:09 (32)	07:39		15:22 (13)	08:51			09:28
	22:11	20:53	63	19:59 (26)	19:24	11	18:20 (32)	17:01	22	15:44 (13)	15:56			15:47
28	05:15	06:24		18:48 (37)	07:32			07:41		15:08 (8)	08:53			09:28
	22:09	20:51	63	19:59 (26)	19:21			16:58	22	15:41 (13)	15:55			15:48
29	05:17	06:26		18:48 (37)	07:34			07:44		15:05 (8)	08:55			09:28
	22:07	20:48	63	19:59 (26)	19:18			16:56	21	15:37 (13)	15:53			15:49
30	05:20	06:28		18:48 (37)	07:37			07:46		15:03 (8)	08:57			09:28
	22:05	20:45	63	19:59 (26)	19:16			16:53	16	15:19 (8)	15:52			15:50
31	05:22	06:30		18:48 (37)				07:49		15:01 (8)				09:28
	22:03	20:42	62	19:58 (26)				16:51	18	15:19 (8)				15:51
Potential sun hours	545	478			386			319			236			200
Total, worst case			983			565			839			305		
Sun reduction			0,50			0,50			0,50			0,50		
Oper. time red.			0,80			0,80			0,80			0,80		
Wind dir. red.			0,68			0,65			0,55			0,53		
Total reduction			0,27			0,26			0,22			0,21		
Total, real			268			147			184			64		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** V - Osland 45

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:02 (23)	08:46	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51			09:00		11:45 (23)
	15:53	39	13:36 (24)	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49			15:51	40	13:20 (24)
2	09:28		12:01 (23)	08:44	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54			09:02		11:46 (23)
	15:54	41	13:36 (24)	16:58	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46			15:50	40	13:20 (24)
3	09:27		12:01 (23)	08:41	07:30	07:01	05:39	04:37	04:34	05:28	06:37	07:44	07:56			09:03		11:46 (23)
	15:55	41	13:36 (24)	17:01	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44			15:49	41	13:21 (24)
4	09:27		12:01 (23)	08:39	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59			09:05		11:47 (23)
	15:57	41	13:36 (24)	17:03	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41			15:48	41	13:22 (24)
5	09:26		12:01 (23)	08:37	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01			09:07		11:47 (23)
	15:58	43	13:37 (24)	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39			15:47	41	13:22 (24)
6	09:25		12:02 (23)	08:35	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03			09:09		11:48 (23)
	16:00	41	13:37 (24)	17:08	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37			15:46	42	13:23 (24)
7	09:25		12:02 (23)	08:32	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06			09:10		11:49 (23)
	16:02	41	13:37 (24)	17:11	18:19	20:30	21:40	22:39	22:44	21:47	20:23	18:56	16:34			15:45	41	13:24 (24)
8	09:24		12:02 (23)	08:30	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08			09:12		11:49 (23)
	16:03	42	13:38 (24)	17:13	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32			15:45	41	13:24 (24)
9	09:23		12:03 (23)	08:27	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11			09:13		11:50 (23)
	16:05	41	13:38 (24)	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	41	13:25 (24)
10	09:22		12:03 (23)	08:25	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13			09:15		11:50 (23)
	16:07	40	13:37 (24)	17:18	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28			15:43	41	13:25 (24)
11	09:21		12:03 (23)	08:23	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		11:52 (23)
	16:09	41	13:38 (24)	17:21	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:25			15:43	40	13:26 (24)
12	09:20		12:03 (23)	08:20	07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18			09:18		11:52 (23)
	16:11	39	13:37 (24)	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:43	39	13:26 (24)
13	09:19		12:04 (23)	08:18	07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20			09:19		11:53 (23)
	16:13	37	13:37 (24)	17:26	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21			15:42	39	13:27 (24)
14	09:17		12:04 (23)	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23			09:20		11:54 (23)
	16:15	35	13:36 (24)	17:28	18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19			15:42	38	13:27 (24)
15	09:16		12:04 (23)	08:13	06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25		11:50 (23)	09:21		11:54 (23)
	16:17	32	13:35 (24)	17:31	18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	5	11:55 (23)	15:42	38	13:27 (24)
16	09:15		12:04 (23)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27		11:47 (23)	09:22		11:55 (23)
	16:19	24	12:28 (23)	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:56	18:31	16:15	11	11:58 (23)	15:42	37	13:28 (24)
17	09:13		12:06 (23)	08:07	06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30		11:46 (23)	09:23		11:55 (23)
	16:21	24	12:30 (23)	17:36	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	15	12:01 (23)	15:42	37	13:28 (24)
18	09:12		12:06 (23)	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32		11:44 (23)	09:24		11:56 (23)
	16:23	24	12:30 (23)	17:38	18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	17	12:01 (23)	15:42	36	13:29 (24)
19	09:10		12:06 (23)	08:02	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:20	08:34		11:44 (23)	09:25		11:57 (23)
	16:25	24	12:30 (23)	17:40	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:22	16:09	19	12:03 (23)	15:42	36	13:29 (24)
20	09:09		12:07 (23)	08:00	06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36		11:44 (23)	09:26		11:58 (23)
	16:28	23	12:30 (23)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:08	20	12:04 (23)	15:43	36	13:30 (24)
21	09:07		12:08 (23)	07:57	06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39		11:43 (23)	09:26		11:59 (23)
	16:30	21	12:29 (23)	17:45	18:51	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22	12:05 (23)	15:43	35	13:31 (24)
22	09:05		12:09 (23)	07:54	06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41		11:43 (23)	09:27		11:58 (23)
	16:32	20	12:29 (23)	17:48	18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23	12:06 (23)	15:43	36	13:31 (24)
23	09:03		12:09 (23)	07:52	06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43		11:43 (23)	09:27		11:59 (23)
	16:34	19	12:28 (23)	17:50	18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23	12:06 (23)	15:44	36	13:31 (24)
24	09:02		12:10 (23)	07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		11:43 (23)	09:28		12:00 (23)
	16:37	17	12:27 (23)	17:53	18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	24	12:07 (23)	15:44	36	13:32 (24)
25	09:00		12:12 (23)	07:46	06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48		11:43 (23)	09:28		12:00 (23)
	16:39	15	12:27 (23)	17:55	19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	24	12:07 (23)	15:45	37	13:33 (24)
26	08:58		12:14 (23)	07:44	06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50		11:43 (23)	09:28		12:00 (23)
	16:41	11	12:25 (23)	17:57	19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	25	12:08 (23)	15:46	37	13:33 (24)
27	08:56		12:17 (23)	07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		11:43 (23)	09:28		12:00 (23)
	16:44	4	12:21 (23)	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	32	13:14 (24)	15:47	38	13:33 (24)
28	08:54			07:38	06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54		11:44 (23)	09:29		12:01 (23)
	16:46			18:02	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	35	13:16 (24)	15:48	37	13:34 (24)
29	08:52				07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56		11:44 (23)	09:28		12:00 (23)
	16:49				20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	37	13:17 (24)	15:49	38	13:34 (24)
30	08:50				07:13	05:46	04:42	04:31	05:20	06:29	07:37	07:47	08:58		11:44 (23)	09:28		12:01 (23)
	16:51				20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	39	13:18 (24)	15:50	39	13:35 (24)
31	08:48				07:10		04:41		05:22	06:31		07:49				09:28		12:01 (23)
	16:54				20:14		22:29		22:03	20:43		16:51				15:51	39	13:35 (24)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		820												371			1193	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,62												0,63			0,61	
Total reduction		0,25												0,25			0,24	
Total, real		203												93			290	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** W - Osland 65

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	11:14 (23)	08:46	10:11 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51		09:00		10:57 (23)
	15:53 31	12:43 (24)	16:56 18	10:29 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49		15:51	22	11:19 (23)
2	09:28	11:14 (23)	08:44	10:11 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54		09:02		10:58 (23)
	15:54 30	12:43 (24)	16:58 17	10:28 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46		15:50	21	11:19 (23)
3	09:27	11:13 (23)	08:41	10:13 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56		09:04		10:58 (23)
	15:55 31	12:43 (24)	17:01 14	10:27 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44		15:49	21	11:19 (23)
4	09:27	11:13 (23)	08:39	10:14 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59		09:05		10:59 (23)
	15:57 30	12:43 (24)	17:03 11	10:25 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41		15:48	20	11:19 (23)
5	09:26	11:14 (23)	08:37	10:17 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01		09:07		10:59 (23)
	15:58 28	12:42 (24)	17:06 7	10:24 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39		15:47	26	12:26 (24)
6	09:25	11:14 (23)	08:35		07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:47 (28)	09:09		11:00 (23)
	16:00 28	12:42 (24)	17:08		18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37 7	09:54 (28)	15:46	28	12:28 (24)
7	09:25	11:14 (23)	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:45 (28)	09:10		11:01 (23)
	16:02 26	12:41 (24)	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34 11	09:56 (28)	15:45	29	12:30 (24)
8	09:24	11:14 (23)	08:30		07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:43 (28)	09:12		11:02 (23)
	16:03 21	11:35 (23)	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32 14	09:57 (28)	15:45	30	12:31 (24)
9	09:23	11:15 (23)	08:27		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:42 (28)	09:14		11:03 (23)
	16:05 21	11:36 (23)	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30 17	09:59 (28)	15:44	30	12:32 (24)
10	09:22	11:15 (23)	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:42 (28)	09:15		11:03 (23)
	16:07 21	11:36 (23)	17:18		18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28 18	10:00 (28)	15:44	30	12:32 (24)
11	09:21	11:15 (23)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:41 (28)	09:16		11:04 (23)
	16:09 22	11:37 (23)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26 19	10:00 (28)	15:43	30	12:33 (24)
12	09:20	11:15 (23)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:41 (28)	09:18		11:04 (23)
	16:11 22	11:37 (23)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23 19	10:00 (28)	15:43	31	12:34 (24)
13	09:19	11:16 (23)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:41 (28)	09:19		11:05 (23)
	16:13 22	11:38 (23)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21 20	10:01 (28)	15:42	31	12:35 (24)
14	09:17	11:16 (23)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:42 (28)	09:20		11:06 (23)
	16:15 22	11:38 (23)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19 19	10:01 (28)	15:42	30	12:35 (24)
15	09:16	11:16 (23)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:41 (28)	09:21		11:06 (23)
	16:17 22	11:38 (23)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17 20	10:01 (28)	15:42	31	12:36 (24)
16	09:15	11:16 (23)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:42 (28)	09:22		11:08 (23)
	16:19 22	11:38 (23)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15 19	10:01 (28)	15:42	30	12:37 (24)
17	09:13	11:18 (23)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:43 (28)	09:23		11:09 (23)
	16:21 21	11:39 (23)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13 26	11:08 (23)	15:42	30	12:38 (24)
18	09:12	11:18 (23)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:43 (28)	09:24		11:08 (23)
	16:23 21	11:39 (23)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11 29	11:10 (23)	15:42	30	12:37 (24)
19	09:10	10:13 (28)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:44 (28)	09:25		11:09 (23)
	16:25 27	11:39 (23)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09 31	11:12 (23)	15:42	29	12:38 (24)
20	09:09	10:12 (28)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	09:45 (28)	09:26		11:10 (23)
	16:28 30	11:39 (23)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08 32	11:13 (23)	15:43	30	12:39 (24)
21	09:07	10:11 (28)	07:57		06:39	06:10	04:58	04:27	05:01	06:09	07:17	08:25	08:39	09:46 (28)	09:26		11:11 (23)
	16:30 32	11:39 (23)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06 32	11:14 (23)	15:43	29	12:40 (24)
22	09:05	10:10 (28)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	09:48 (28)	09:27		11:11 (23)
	16:32 32	11:38 (23)	17:48		18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:14	16:04 29	11:15 (23)	15:43	29	12:40 (24)
23	09:03	10:09 (28)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	09:49 (28)	09:27		11:11 (23)
	16:34 31	11:37 (23)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02 27	11:15 (23)	15:44	30	12:40 (24)
24	09:02	10:09 (28)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:55 (23)	09:28		11:12 (23)
	16:37 29	11:36 (23)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01 21	11:16 (23)	15:45	30	12:41 (24)
25	09:00	10:09 (28)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:55 (23)	09:28		11:12 (23)
	16:39 26	11:34 (23)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59 21	11:16 (23)	15:45	29	12:41 (24)
26	08:58	10:09 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:55 (23)	09:28		11:13 (23)
	16:41 19	10:28 (28)	17:57		19:03	21:14	22:20	22:51	22:14	20:57	19:27	17:04	15:58 22	11:17 (23)	15:46	30	12:42 (24)
27	08:56	10:09 (28)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:55 (23)	09:28		11:13 (23)
	16:44 20	10:29 (28)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56 22	11:17 (23)	15:47	30	12:42 (24)
28	08:54	10:09 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:56 (23)	09:29		11:13 (23)
	16:46 19	10:28 (28)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55 22	11:18 (23)	15:48	31	12:43 (24)
29	08:52	10:09 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:56 (23)	09:29		11:13 (23)
	16:49 20	10:29 (28)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54 22	11:18 (23)	15:49	30	12:42 (24)
30	08:50	10:09 (28)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:56 (23)	09:28		11:13 (23)
	16:51 19	10:28 (28)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52 22	11:18 (23)	15:50	31	12:43 (24)
31	08:48	10:10 (28)			07:10		04:41		05:22	06:31		07:49			09:28		11:14 (23)
	16:54 19	10:29 (28)			20:14		22:29		22:03	20:43		16:51			15:51	30	12:43 (24)
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case	764		67										541		888		
Sun reduction	0,50		0,50										0,50		0,50		
Oper. time red.	0,80		0,80										0,80		0,80		
Wind dir. red.	0,68		0,72										0,70		0,65		
Total reduction	0,27		0,29										0,28		0,26		
Total, real	208		19										151		231		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** X - Buevegen 2100

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January			February	March	April	May	June	July	August	September	October	November			December		
1	09:28		12:55 (12)	08:45	07:35	07:07	05:44	04:39	04:32	05:24	06:33	07:39	07:51			09:00		12:38 (12)
	15:52	16	13:11 (12)	16:56	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13	16:48			15:51	20	12:58 (12)
2	09:27		12:55 (12)	08:43	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41	07:54			09:01		12:39 (12)
	15:54	16	13:11 (12)	16:58	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10	16:46			15:50	20	12:59 (12)
3	09:27		12:55 (12)	08:41	07:30	07:01	05:38	04:37	04:34	05:28	06:37	07:44	07:56			09:03		12:40 (12)
	15:55	17	13:12 (12)	17:01	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07	16:44			15:49	20	13:00 (12)
4	09:26		12:55 (12)	08:39	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46	07:58			09:05		12:40 (12)
	15:57	17	13:12 (12)	17:03	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04	16:41			15:48	20	13:00 (12)
5	09:26		12:55 (12)	08:37	07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48	08:01			09:07		12:41 (12)
	15:58	18	13:13 (12)	17:06	18:14	20:26	21:35	22:36	22:46	21:51	20:28	19:01	16:39			15:47	19	13:00 (12)
6	09:25		12:55 (12)	08:34	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50	08:03			09:09		12:41 (12)
	16:00	19	13:14 (12)	17:08	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58	16:36			15:46	19	13:00 (12)
7	09:24		12:55 (12)	08:32	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53	08:06			09:10		12:42 (12)
	16:01	20	13:15 (12)	17:11	18:19	20:30	21:40	22:39	22:44	21:46	20:22	18:56	16:34			15:45	18	13:00 (12)
8	09:24		12:56 (12)	08:30	07:16	06:46	05:26	04:31	04:40	05:39	06:48	07:55	08:08			09:12		12:43 (12)
	16:03	19	13:15 (12)	17:13	18:21	20:33	21:42	22:40	22:43	21:44	20:19	18:53	16:32			15:44	18	13:01 (12)
9	09:23		12:55 (12)	08:27	07:13	06:44	05:24	04:31	04:41	05:41	06:51	07:57	08:10			09:13		12:43 (12)
	16:05	20	13:15 (12)	17:16	18:23	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30			15:44	17	13:00 (12)
10	09:22		12:56 (12)	08:25	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59	08:13			09:15		12:44 (12)
	16:07	20	13:16 (12)	17:18	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47	16:27			15:43	17	13:01 (12)
11	09:21		12:57 (12)	08:22	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15			09:16		12:45 (12)
	16:09	20	13:17 (12)	17:20	18:28	20:39	21:49	22:44	22:39	21:36	20:11	18:44	16:25			15:43	16	13:01 (12)
12	09:19		12:57 (12)	08:20	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04	08:18			09:17		12:45 (12)
	16:11	20	13:17 (12)	17:23	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23			15:42	16	13:01 (12)
13	09:18		12:57 (12)	08:17	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06	08:20			09:19		12:46 (12)
	16:12	20	13:17 (12)	17:25	18:33	20:44	21:53	22:46	22:36	21:31	20:05	18:39	16:21			15:42	16	13:02 (12)
14	09:17		12:58 (12)	08:15	06:58	06:29	05:12	04:28	04:49	05:53	07:02	08:09	08:22			09:20		12:47 (12)
	16:14	20	13:18 (12)	17:28	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36	16:19			15:42	14	13:01 (12)
15	09:16		12:58 (12)	08:12	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11	08:25			09:21		12:47 (12)
	16:17	20	13:18 (12)	17:30	18:37	20:49	21:57	22:47	22:34	21:26	19:59	18:33	16:17			15:42	14	13:01 (12)
16	09:14		12:58 (12)	08:10	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13	08:27			09:22		12:48 (12)
	16:19	20	13:18 (12)	17:33	18:40	20:51	22:00	22:48	22:32	21:23	19:56	18:30	16:15			15:42	13	13:01 (12)
17	09:13		12:59 (12)	08:07	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16	08:29			09:23		12:48 (12)
	16:21	19	13:18 (12)	17:35	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28	16:13			15:42	14	13:02 (12)
18	09:11		12:59 (12)	08:05	06:47	06:18	05:04	04:26	04:56	06:02	07:10	08:18	08:32			09:24		12:49 (12)
	16:23	19	13:18 (12)	17:38	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25	16:11			15:42	13	13:02 (12)
19	09:10		13:01 (12)	08:02	06:44	06:16	05:02	04:26	04:57	06:04	07:13	08:20	08:34		12:41 (12)	09:25		12:50 (12)
	16:25	18	13:19 (12)	17:40	18:47	20:58	22:06	22:49	22:27	21:15	19:48	18:22	16:09	9	12:50 (12)	15:42	13	13:03 (12)
20	09:08		13:02 (12)	07:59	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23	08:36		12:39 (12)	09:25		12:51 (12)
	16:27	16	13:18 (12)	17:43	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:20	16:07	12	12:51 (12)	15:42	12	13:03 (12)
21	09:07		13:02 (12)	07:57	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	08:38		12:38 (12)	09:26		12:51 (12)
	16:30	15	13:17 (12)	17:45	18:51	21:03	22:10	22:50	22:23	21:10	19:42	18:17	16:06	15	12:53 (12)	15:43	12	13:03 (12)
22	09:05		13:04 (12)	07:54	06:35	06:07	04:56	04:27	05:03	06:11	07:19	08:27	08:41		12:38 (12)	09:27		12:52 (12)
	16:32	12	13:16 (12)	17:48	18:54	21:05	22:12	22:50	22:22	21:07	19:39	18:14	16:04	16	12:54 (12)	15:43	12	13:04 (12)
23	09:03		13:06 (12)	07:51	06:33	06:05	04:54	04:27	05:05	06:13	07:21	08:30	08:43		12:37 (12)	09:27		12:52 (12)
	16:34	9	13:15 (12)	17:50	18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:12	16:02	18	12:55 (12)	15:44	12	13:04 (12)
24	09:01			07:49	06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45		12:38 (12)	09:28		12:52 (12)
	16:37			17:52	18:58	21:10	22:16	22:50	22:18	21:02	19:33	18:09	16:01	18	12:56 (12)	15:44	12	13:04 (12)
25	09:00			07:46	06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	08:47		12:37 (12)	09:28		12:53 (12)
	16:39			17:55	19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06	15:59	19	12:56 (12)	15:45	13	13:06 (12)
26	08:58			07:43	06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	08:49		12:37 (12)	09:28		12:53 (12)
	16:41			17:57	19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04	15:57	20	12:57 (12)	15:46	13	13:06 (12)
27	08:56			07:41	06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	08:52		12:37 (12)	09:28		12:54 (12)
	16:44			18:00	19:05	21:16	22:22	22:50	22:12	20:54	19:24	17:01	15:56	20	12:57 (12)	15:47	13	13:07 (12)
28	08:54			07:38	06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:42	08:54		12:37 (12)	09:28		12:53 (12)
	16:46			18:02	19:07	21:19	22:24	22:50	22:09	20:51	19:21	16:59	15:55	20	12:57 (12)	15:48	14	13:07 (12)
29	08:52				07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	08:56		12:38 (12)	09:28		12:53 (12)
	16:48				20:10	21:21	22:25	22:49	22:07	20:48	19:19	16:56	15:53	20	12:58 (12)	15:49	15	13:08 (12)
30	08:50				07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	08:58		12:38 (12)	09:28		12:54 (12)
	16:51				20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53	15:52	20	12:58 (12)	15:50	15	13:09 (12)
31	08:48				07:09		04:41		05:22	06:31		07:49				09:28		12:54 (12)
	16:53				20:14		22:29		22:03	20:42		16:51				15:51	15	13:09 (12)
Potential sun hours	221			260	365	432	521	547	546	478	386	319	236			199		
Total, worst case		410												207			475	
Sun reduction		0,50												0,50			0,50	
Oper. time red.		0,80												0,80			0,80	
Wind dir. red.		0,61												0,61			0,61	
Total reduction		0,24												0,24			0,24	
Total, real		99												50			115	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** Y - Vaule 218

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October		November		December
1	09:28		08:45	13:54 (26)	07:35	07:06	05:44	04:39	04:32	05:24	06:33	07:39		07:51	14:48 (12)	08:59
	15:52		16:56 19	14:13 (26)	18:04	20:16	21:26	22:30	22:48	22:01	20:39	19:13		16:48 19	15:07 (12)	15:51
2	09:27		08:43	13:56 (26)	07:32	07:04	05:41	04:38	04:33	05:26	06:35	07:41		07:53	14:49 (12)	09:01
	15:54		16:58 16	14:12 (26)	18:07	20:19	21:28	22:32	22:48	21:58	20:37	19:10		16:46 17	15:06 (12)	15:50
3	09:27		08:41	13:58 (26)	07:29	07:01	05:38	04:37	04:34	05:28	06:37	07:44		07:56	14:49 (12)	09:03
	15:55		17:01 12	14:10 (26)	18:09	20:21	21:30	22:33	22:47	21:56	20:34	19:07		16:44 15	15:04 (12)	15:49
4	09:26		08:39	14:02 (26)	07:27	06:58	05:36	04:36	04:35	05:30	06:39	07:46		07:58	14:52 (12)	09:05
	15:57		17:03 5	14:07 (26)	18:12	20:23	21:33	22:35	22:46	21:54	20:31	19:04		16:41 10	15:02 (12)	15:48
5	09:26		08:37		07:24	06:55	05:33	04:34	04:36	05:33	06:42	07:48		08:01	14:56 (12)	09:07
	15:58		17:06		18:14	20:26	21:35	22:36	22:45	21:51	20:28	19:01		16:39 2	14:58 (12)	15:47
6	09:25		08:34	15:25 (12)	07:21	06:52	05:31	04:33	04:37	05:35	06:44	07:50		08:03		09:08
	16:00		17:08 4	15:29 (12)	18:16	20:28	21:37	22:38	22:45	21:49	20:25	18:58		16:36		15:46
7	09:24		08:32	15:22 (12)	07:18	06:49	05:29	04:32	04:38	05:37	06:46	07:53		08:06	13:31 (26)	09:10
	16:01		17:11 11	15:33 (12)	18:19	20:30	21:39	22:39	22:44	21:46	20:22	18:56		16:34 7	13:38 (26)	15:45
8	09:23		08:30	15:20 (12)	07:15	06:46	05:26	04:31	04:40	05:39	06:48	07:55		08:08	13:28 (26)	09:12
	16:03		17:13 15	15:35 (12)	18:21	20:32	21:42	22:40	22:43	21:44	20:19	18:53		16:32 13	13:41 (26)	15:44
9	09:23		08:27	15:19 (12)	07:13	06:44	05:24	04:31	04:41	05:41	06:50	07:57		08:10	13:27 (26)	09:13
	16:05		17:15 18	15:37 (12)	18:23	20:35	21:44	22:41	22:41	21:41	20:16	18:50		16:30 16	13:43 (26)	15:44
10	09:22		08:25	15:18 (12)	07:10	06:41	05:21	04:30	04:42	05:44	06:53	07:59		08:13	13:25 (26)	09:15
	16:07		17:18 19	15:37 (12)	18:26	20:37	21:46	22:43	22:40	21:39	20:14	18:47		16:27 19	13:44 (26)	15:43
11	09:20		08:22	15:17 (12)	07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02		08:15	13:24 (26)	09:16
	16:09		17:20 21	15:38 (12)	18:28	20:39	21:48	22:44	22:39	21:36	20:11	18:44		16:25 21	13:45 (26)	15:43
12	09:19		08:20	15:17 (12)	07:04	06:35	05:17	04:29	04:45	05:48	06:57	08:04		08:17	13:24 (26)	09:17
	16:10		17:23 22	15:39 (12)	18:30	20:42	21:51	22:45	22:38	21:34	20:08	18:41		16:23 22	13:46 (26)	15:42
13	09:18	13:53 (26)	08:17	15:17 (12)	07:01	06:32	05:15	04:28	04:47	05:50	06:59	08:06		08:20	13:23 (26)	09:19
	16:12 5	13:58 (26)	17:25 22	15:39 (12)	18:33	20:44	21:53	22:45	22:36	21:31	20:05	18:39		16:21 23	13:46 (26)	15:42
14	09:17	13:51 (26)	08:15	15:16 (12)	06:58	06:29	05:12	04:27	04:49	05:53	07:01	08:09		08:22	13:23 (26)	09:20
	16:14 9	14:00 (26)	17:28 23	15:39 (12)	18:35	20:46	21:55	22:46	22:35	21:29	20:02	18:36		16:19 24	13:47 (26)	15:42
15	09:16	13:50 (26)	08:12	15:17 (12)	06:56	06:27	05:10	04:27	04:50	05:55	07:04	08:11		08:25	11:07 (37)	09:21
	16:17 11	14:01 (26)	17:30 22	15:39 (12)	18:37	20:49	21:57	22:47	22:33	21:26	19:59	18:33		16:17 33	13:48 (26)	15:42
16	09:14	13:50 (26)	08:10	15:17 (12)	06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:13		08:27	11:06 (37)	09:22
	16:19 17	14:07 (26)	17:33 22	15:39 (12)	18:40	20:51	21:59	22:48	22:32	21:23	19:56	18:30		16:15 36	13:48 (26)	15:42
17	09:13	13:49 (26)	08:07	15:17 (12)	06:50	06:21	05:06	04:27	04:54	05:59	07:08	08:16		08:29	11:04 (37)	09:23
	16:21 21	14:10 (26)	17:35 21	15:38 (12)	18:42	20:53	22:02	22:48	22:30	21:21	19:53	18:28		16:13 40	13:48 (26)	15:42
18	09:11	11:38 (37)	08:05	15:18 (12)	06:47	06:18	05:04	04:26	04:56	06:01	07:10	08:18		08:32	11:03 (37)	09:24
	16:23 27	14:11 (26)	17:38 19	15:37 (12)	18:44	20:56	22:04	22:49	22:29	21:18	19:50	18:25		16:11 42	13:49 (26)	15:42
19	09:10	11:35 (37)	08:02	15:20 (12)	06:44	06:16	05:02	04:26	04:57	06:04	07:12	08:20		08:34	11:03 (37)	09:25
	16:25 32	14:12 (26)	17:40 17	15:37 (12)	18:47	20:58	22:06	22:49	22:27	21:15	19:47	18:22		16:09 44	13:49 (26)	15:42
20	09:08	11:32 (37)	07:59	15:21 (12)	06:41	06:13	05:00	04:26	04:59	06:06	07:15	08:23		08:36	11:02 (37)	09:25
	16:27 36	14:12 (26)	17:43 14	15:35 (12)	18:49	21:00	22:08	22:50	22:25	21:13	19:45	18:19		16:07 45	13:49 (26)	15:42
21	09:07	11:29 (37)	07:57	15:24 (12)	06:38	06:10	04:58	04:26	05:01	06:08	07:17	08:25	15:53 (12)	08:38	11:05 (37)	09:26
	16:30 42	14:13 (26)	17:45 8	15:32 (12)	18:51	21:02	22:10	22:50	22:23	21:10	19:42	18:17 10	16:03 (12)	16:06 42	13:49 (26)	15:43
22	09:05	11:27 (37)	07:54		06:35	06:07	04:56	04:27	05:03	06:10	07:19	08:27	15:51 (12)	08:41	11:08 (37)	09:27
	16:32 45	14:14 (26)	17:47		18:53	21:05	22:12	22:50	22:21	21:07	19:39	18:14 15	16:06 (12)	16:04 36	13:48 (26)	15:43
23	09:03	11:28 (37)	07:51		06:32	06:05	04:54	04:27	05:05	06:13	07:21	08:30	15:49 (12)	08:43	11:12 (37)	09:27
	16:34 44	14:14 (26)	17:50		18:56	21:07	22:14	22:50	22:20	21:05	19:36	18:11 17	16:06 (12)	16:02 32	13:49 (26)	15:44
24	09:01	11:29 (37)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:23	08:32	15:48 (12)	08:45	11:16 (37)	09:27
	16:36 42	14:15 (26)	17:52		18:58	21:09	22:16	22:50	22:18	21:02	19:33	18:09 19	16:07 (12)	16:01 28	13:49 (26)	15:44
25	08:59	11:31 (37)	07:46		06:27	05:59	04:50	04:28	05:09	06:17	07:26	07:34	14:48 (12)	08:47	13:27 (26)	09:28
	16:39 40	14:15 (26)	17:55		19:00	21:12	22:18	22:50	22:16	20:59	19:30	17:06 20	15:08 (12)	15:59 21	13:48 (26)	15:45
26	08:58	11:32 (37)	07:43		06:24	05:57	04:49	04:28	05:11	06:19	07:28	07:37	14:46 (12)	08:49	13:29 (26)	09:28
	16:41 37	14:15 (26)	17:57		19:03	21:14	22:20	22:50	22:14	20:56	19:27	17:04 22	15:08 (12)	15:57 17	13:46 (26)	15:46
27	08:56	11:34 (37)	07:41		06:21	05:54	04:47	04:29	05:13	06:22	07:30	07:39	14:46 (12)	08:51	13:29 (26)	09:28
	16:44 33	14:15 (26)	18:00		19:05	21:16	22:22	22:50	22:11	20:53	19:24	17:01 23	15:09 (12)	15:56 12	13:41 (26)	15:47
28	08:54	13:51 (26)	07:38		06:18	05:51	04:45	04:29	05:15	06:24	07:32	07:41	14:46 (12)	08:53	13:30 (26)	09:28
	16:46 24	14:15 (26)	18:02		19:07	21:19	22:23	22:50	22:09	20:51	19:21	16:58 22	15:08 (12)	15:55 9	13:39 (26)	15:47
29	08:52	13:51 (26)			07:15	05:49	04:44	04:30	05:17	06:26	07:35	07:44	14:46 (12)	08:55	13:35 (26)	09:28
	16:48 23	14:14 (26)			20:10	21:21	22:25	22:49	22:07	20:48	19:18	16:56 22	15:08 (12)	15:53 5	13:40 (26)	15:49
30	08:50	13:52 (26)			07:12	05:46	04:42	04:31	05:20	06:28	07:37	07:46	14:47 (12)	08:57		09:28
	16:51 22	14:14 (26)			20:12	21:23	22:27	22:49	22:05	20:45	19:16	16:53 21	15:08 (12)	15:52		15:50
31	08:48	13:54 (26)			07:09		04:41		05:22	06:31		07:49	14:47 (12)			09:28
	16:53 20	14:14 (26)			20:14		22:29		22:03	20:42		16:51 20	15:07 (12)			15:51
Potential sun hours	221		260		365	432	521	547	546	478	386	319		236		199
Total, worst case		530		330									211		650	
Sun reduction		0,50		0,50									0,50		0,50	
Oper. time red.		0,80		0,80									0,80		0,80	
Wind dir. red.		0,58		0,55									0,54		0,57	
Total reduction		0,23		0,22									0,22		0,23	
Total, real		122		72									46		148	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Nedre Skøyen vei 2 .
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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April		May	June
1	09:28		12:11 (32) | 08:45		10:15 (13) | 07:35		13:26 (26) | 07:07		18:42 (17) | 05:44	| 04:39
	15:52	47	14:26 (14) | 16:56	119	15:37 (35) | 18:04	35	17:05 (9) | 20:16	19	19:01 (17) | 21:26	| 22:30
2	09:27		12:11 (32) | 08:43		12:16 (32) | 07:32		15:45 (7) | 07:04		18:43 (17) | 05:41	| 04:38
	15:54	53	14:28 (14) | 16:58	114	15:38 (35) | 18:07	27	17:09 (9) | 20:19	16	18:59 (17) | 21:28	| 22:32
3	09:27		12:10 (32) | 08:41		12:17 (32) | 07:30		16:34 (12) | 07:01		18:46 (17) | 05:38	| 04:37
	15:55	58	14:29 (14) | 17:01	113	15:38 (35) | 18:09	33	17:12 (9) | 20:21	11	18:57 (17) | 21:30	| 22:33
4	09:26		12:10 (32) | 08:39		09:39 (37) | 07:27		16:31 (12) | 06:58			| 05:36	| 04:36
	15:57	61	14:29 (14) | 17:03	109	15:39 (35) | 18:12	43	17:15 (9) | 20:23			| 21:33	| 22:35
5	09:26		12:10 (32) | 08:36		09:39 (37) | 07:24		16:29 (12) | 06:55			| 05:34	| 04:35
	15:58	64	14:30 (14) | 17:06	105	15:39 (35) | 18:14	46	17:15 (9) | 20:26			| 21:35	| 22:36
6	09:25		12:09 (32) | 08:34		09:40 (37) | 07:21		16:26 (12) | 06:52			| 05:31	| 04:34
	16:00	70	14:31 (14) | 17:08	95	15:39 (35) | 18:16	49	17:15 (9) | 20:28			| 21:37	| 22:38
7	09:24		10:10 (13) | 08:32		09:40 (37) | 07:18		16:25 (12) | 06:49			| 05:29	| 04:33
	16:01	78	14:32 (14) | 17:11	96	15:39 (35) | 18:19	50	17:15 (9) | 20:30			| 21:39	| 22:39
8	09:23		10:10 (13) | 08:30		09:38 (37) | 07:15		16:23 (12) | 06:46			| 05:26	| 04:32
	16:03	84	14:33 (14) | 17:13	96	15:38 (35) | 18:21	52	17:15 (9) | 20:32			| 21:42	| 22:40
9	09:22		10:10 (13) | 08:27		09:36 (37) | 07:13		16:22 (12) | 06:44			| 05:24	| 04:31
	16:05	86	14:33 (14) | 17:16	98	15:38 (35) | 18:23	53	17:15 (9) | 20:35			| 21:44	| 22:41
10	09:21		10:11 (13) | 08:25		09:33 (37) | 07:10		16:20 (12) | 06:41			| 05:21	| 04:30
	16:07	91	14:34 (14) | 17:18	107	15:57 (7) | 18:26	54	17:14 (9) | 20:37			| 21:46	| 22:42
11	09:20		10:10 (13) | 08:22		09:29 (37) | 07:07		16:19 (12) | 06:38			| 05:19	| 04:29
	16:09	97	14:34 (14) | 17:20	114	16:00 (7) | 18:28	54	17:13 (9) | 20:39			| 21:48	| 22:44
12	09:19		10:09 (13) | 08:20		09:27 (37) | 07:04		16:18 (12) | 06:35			| 05:17	| 04:29
	16:11	102	14:35 (14) | 17:23	118	16:03 (7) | 18:30	54	17:12 (9) | 20:42			| 21:51	| 22:44
13	09:18		10:09 (13) | 08:17		09:24 (37) | 07:01		16:18 (12) | 06:32			| 05:15	| 04:28
	16:13	105	14:35 (14) | 17:25	118	16:04 (7) | 18:33	52	17:10 (9) | 20:44			| 21:53	| 22:45
14	09:17		10:10 (13) | 08:15		09:21 (37) | 06:58		16:17 (12) | 06:29			| 05:12	| 04:28
	16:15	107	14:36 (14) | 17:28	114	16:05 (7) | 18:35	51	17:08 (9) | 20:46			| 21:55	| 22:46
15	09:16		10:10 (13) | 08:12		09:18 (37) | 06:56		16:17 (12) | 06:27			| 05:10	| 04:27
	16:17	112	14:37 (14) | 17:30	120	16:07 (7) | 18:37	47	17:04 (9) | 20:49			| 21:57	| 22:47
16	09:14		10:02 (13) | 08:10		09:13 (37) | 06:53		16:17 (12) | 06:24			| 05:08	| 04:27
	16:19	119	14:37 (14) | 17:33	125	16:08 (7) | 18:40	46	17:03 (12) | 20:51			| 21:59	| 22:48
17	09:13		10:02 (13) | 08:07		09:13 (37) | 06:50		16:17 (12) | 06:21			| 05:06	| 04:27
	16:21	126	14:37 (14) | 17:35	123	16:08 (7) | 18:42	46	17:03 (12) | 20:53			| 22:02	| 22:48
18	09:11		10:02 (13) | 08:05		09:13 (37) | 06:47		16:16 (12) | 06:18			| 05:04	| 04:27
	16:23	127	14:37 (14) | 17:38	121	16:08 (7) | 18:44	46	17:02 (12) | 20:56			| 22:04	| 22:49
19	09:10		10:02 (13) | 08:02		09:15 (37) | 06:44		16:16 (12) | 06:16			| 05:02	| 04:26
	16:25	129	14:37 (14) | 17:40	118	16:09 (7) | 18:47	56	18:01 (17) | 20:58			| 22:06	| 22:49
20	09:08		10:02 (13) | 07:59		09:16 (37) | 06:41		16:16 (12) | 06:13			| 05:00	| 04:26
	16:27	130	14:37 (14) | 17:43	114	16:09 (7) | 18:49	60	18:03 (17) | 21:00			| 22:08	| 22:50
21	09:07		10:03 (13) | 07:57		09:17 (37) | 06:38		16:16 (12) | 06:10			| 04:58	| 04:27
	16:30	131	14:37 (14) | 17:45	110	16:09 (7) | 18:51	64	18:05 (17) | 21:02			| 22:10	| 22:50
22	09:05		10:03 (13) | 07:54		09:18 (37) | 06:35		16:17 (12) | 06:07			| 04:56	| 04:27
	16:32	129	14:36 (14) | 17:48	104	16:08 (7) | 18:54	63	18:05 (17) | 21:05			| 22:12	| 22:50
23	09:03		10:04 (13) | 07:51		09:20 (37) | 06:32		16:17 (12) | 06:05			| 04:54	| 04:27
	16:34	131	14:36 (14) | 17:50	95	16:08 (7) | 18:56	64	18:06 (17) | 21:07			| 22:14	| 22:50
24	09:01		10:04 (13) | 07:49		13:09 (26) | 06:30		16:18 (12) | 06:02			| 04:52	| 04:27
	16:37	128	14:35 (14) | 17:52	77	16:08 (7) | 18:58	64	18:06 (17) | 21:09			| 22:16	| 22:50
25	08:59		10:05 (13) | 07:46		13:11 (26) | 06:27		16:18 (12) | 05:59			| 04:50	| 04:28
	16:39	125	14:34 (14) | 17:55	71	16:07 (7) | 19:00	62	18:06 (17) | 21:12			| 22:18	| 22:50
26	08:58		10:05 (13) | 07:43		13:13 (26) | 06:24		16:20 (12) | 05:57			| 04:49	| 04:28
	16:41	124	15:28 (35) | 17:57	66	16:06 (7) | 19:03	61	18:07 (17) | 21:14			| 22:20	| 22:50
27	08:56		10:06 (13) | 07:41		13:16 (26) | 06:21		16:22 (12) | 05:54			| 04:47	| 04:29
	16:44	127	15:30 (35) | 18:00	58	16:05 (7) | 19:05	57	18:07 (17) | 21:16			| 22:22	| 22:50
28	08:54		10:07 (13) | 07:38		13:19 (26) | 06:18		16:23 (12) | 05:51			| 04:45	| 04:29
	16:46	130	15:33 (35) | 18:02	49	16:04 (7) | 19:07	54	18:06 (17) | 21:19			| 22:23	| 22:50
29	08:52		10:08 (13) |		| 07:15		17:26 (12) | 05:49			| 04:44	| 04:30
	16:48	131	15:35 (35) |		| 20:10	47	19:05 (17) | 21:21			| 22:25	| 22:49
30	08:50		10:09 (13) |		| 07:12		17:29 (12) | 05:46			| 04:42	| 04:31
	16:51	129	15:36 (35) |		| 20:12	38	19:04 (17) | 21:23			| 22:27	| 22:49
31	08:47		10:12 (13) |		| 07:09		18:41 (17) |			| 04:41	|
	16:53	126	15:37 (35) |		| 20:14	22	19:03 (17) |			| 22:29	|
Potential sun hours	221		| 260		| 365		| 432		| 521	| 547
Total, worst case	| 3257		| 2867		| 1550		| 46		|	|
Sun reduction	| 0,50		| 0,50		| 0,50		| 0,50		|	|
Oper. time red.	| 0,80		| 0,80		| 0,80		| 0,80		|	|
Wind dir. red.	| 0,60		| 0,59		| 0,58		| 0,62		|	|
Total reduction	| 0,24		| 0,24		| 0,23		| 0,25		|	|
Total, real	| 786		| 675		| 361		| 11		|	|

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere

Shadow receptor: Z - Hytte, ikke ferdig bygd. Eiendom 57/3 - Bjerkreim kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September		October		November		December		
1	04:32	05:24	06:33		07:39		16:57 (12)	07:51	09:03 (37)	08:59	09:52 (13)
	22:48	22:01	20:39		19:13	53	17:50 (9)	16:49 107	15:26 (7)	15:51 96	14:16 (14)
2	04:33	05:26	06:35		07:41		16:58 (12)	07:53	09:06 (37)	09:01	09:53 (13)
	22:48	21:58	20:37		19:10	54	17:52 (9)	16:46 98	15:08 (35)	15:50 91	14:16 (14)
3	04:34	05:28	06:37		07:44		16:58 (12)	07:56	09:08 (37)	09:03	09:54 (13)
	22:47	21:56	20:34		19:07	54	17:52 (9)	16:44 96	15:08 (35)	15:49 88	14:17 (14)
4	04:35	05:30	06:39		07:46		16:58 (12)	07:58	09:10 (37)	09:05	09:54 (13)
	22:46	21:54	20:31		19:04	54	17:52 (9)	16:41 94	15:08 (35)	15:48 83	14:17 (14)
5	04:36	05:33	06:42		07:48		17:00 (12)	08:01	09:10 (37)	09:07	09:55 (13)
	22:45	21:51	20:28		19:01	52	17:52 (9)	16:39 95	15:09 (35)	15:47 77	14:17 (14)
6	04:37	05:35	06:44		07:50		17:00 (12)	08:03	09:10 (37)	09:08	09:57 (13)
	22:45	21:49	20:25		18:58	52	17:52 (9)	16:37 105	15:09 (35)	15:46 71	14:17 (14)
7	04:38	05:37	06:46		07:53		17:01 (12)	08:06	09:08 (37)	09:10	11:57 (32)
	22:44	21:46	20:22		18:56	50	17:51 (9)	16:34 111	15:09 (35)	15:45 64	14:17 (14)
8	04:40	05:39	06:48		07:55		17:03 (12)	08:08	11:48 (32)	09:12	11:57 (32)
	22:43	21:44	20:19		18:53	48	17:51 (9)	16:32 112	15:09 (35)	15:44 62	14:17 (14)
9	04:41	05:41	06:51	18:40 (17)	07:57		17:04 (12)	08:10	11:47 (32)	09:13	11:59 (32)
	22:41	21:41	20:16 10	18:50 (17)	18:50	46	17:50 (9)	16:30 113	15:09 (35)	15:44 57	14:17 (14)
10	04:42	05:44	06:53	18:37 (17)	07:59		17:06 (12)	08:13	09:45 (13)	09:15	12:00 (32)
	22:40	21:39	20:14 15	18:52 (17)	18:47	40	17:48 (9)	16:27 121	15:08 (35)	15:43 53	14:17 (14)
11	04:44	05:46	06:55	18:35 (17)	08:02		16:22 (7)	08:15	09:42 (13)	09:16	12:01 (32)
	22:39	21:36	20:11 19	18:54 (17)	18:44	36	17:45 (9)	16:25 127	15:08 (35)	15:43 47	14:16 (14)
12	04:45	05:48	06:57	18:34 (17)	08:04		16:18 (7)	08:17	09:41 (13)	09:17	12:03 (32)
	22:38	21:34	20:08 21	18:55 (17)	18:42	25	17:41 (9)	16:23 130	15:08 (35)	15:42 44	14:17 (14)
13	04:47	05:50	06:59	17:21 (12)	08:06		13:56 (26)	08:20	09:39 (13)	09:19	12:04 (32)
	22:36	21:31	20:05 37	18:55 (17)	18:39	42	17:38 (9)	16:21 131	15:06 (35)	15:42 39	14:17 (14)
14	04:49	05:53	07:02	17:17 (12)	08:09		13:50 (26)	08:22	09:39 (13)	09:20	12:07 (32)
	22:35	21:29	20:02 45	18:55 (17)	18:36	53	16:37 (7)	16:19 131	15:05 (35)	15:42 34	14:17 (14)
15	04:50	05:55	07:04	17:13 (12)	08:11		13:46 (26)	08:25	09:39 (13)	09:21	13:06 (26)
	22:33	21:26	19:59 52	18:55 (17)	18:33	62	16:37 (7)	16:17 128	15:03 (35)	15:42 26	14:16 (14)
16	04:52	05:57	07:06	17:11 (12)	08:13		13:44 (26)	08:27	09:39 (13)	09:22	13:08 (26)
	22:32	21:23	19:56 56	18:55 (17)	18:30	69	16:39 (7)	16:15 124	15:02 (35)	15:42 22	14:15 (14)
17	04:54	05:59	07:08	17:08 (12)	08:16		13:41 (26)	08:29	09:38 (13)	09:23	13:10 (26)
	22:30	21:21	19:53 59	18:54 (17)	18:28	75	16:39 (7)	16:13 125	14:07 (14)	15:42 18	14:15 (14)
18	04:56	06:02	07:10	17:07 (12)	08:18		09:55 (37)	08:32	09:38 (13)	09:24	13:12 (26)
	22:29	21:18	19:50 63	18:55 (17)	18:25	86	16:39 (7)	16:11 129	14:09 (14)	15:42 16	14:15 (14)
19	04:58	06:04	07:12	17:06 (12)	08:20		09:51 (37)	08:34	09:39 (13)	09:25	13:16 (3)
	22:27	21:15	19:47 63	18:54 (17)	18:22	98	16:39 (7)	16:09 131	14:11 (14)	15:42 11	14:15 (14)
20	04:59	06:06	07:15	17:04 (12)	08:23		09:49 (37)	08:36	09:38 (13)	09:25	13:16 (3)
	22:25	21:13	19:45 65	18:53 (17)	18:20	106	16:40 (7)	16:07 129	14:11 (14)	15:42 9	14:14 (14)
21	05:01	06:08	07:17	17:03 (12)	08:25		09:46 (37)	08:38	09:39 (13)	09:26	13:17 (3)
	22:23	21:10	19:42 64	18:51 (17)	18:17	113	16:39 (7)	16:06 131	14:13 (14)	15:43 9	14:15 (14)
22	05:03	06:11	07:19	17:01 (12)	08:27		09:45 (37)	08:41	09:38 (13)	09:26	13:18 (3)
	22:21	21:07	19:39 64	18:50 (17)	18:14	116	16:39 (7)	16:04 131	14:13 (14)	15:43 9	14:16 (14)
23	05:05	06:13	07:21	17:00 (12)	08:30		09:44 (37)	08:43	09:39 (13)	09:27	13:18 (3)
	22:19	21:05	19:36 62	18:48 (17)	18:12	119	16:38 (7)	16:02 128	14:14 (14)	15:44 9	14:16 (14)
24	05:07	06:15	07:24	17:00 (12)	08:32		09:43 (37)	08:45	09:39 (13)	09:27	13:18 (3)
	22:18	21:02	19:33 58	18:46 (17)	18:09	122	16:38 (7)	16:01 127	14:14 (14)	15:44 11	14:17 (14)
25	05:09	06:17	07:26	16:59 (12)	07:34		08:43 (37)	08:47	09:40 (13)	09:28	13:15 (26)
	22:16	20:59	19:30 46	17:45 (12)	17:06	123	15:38 (7)	15:59 124	14:15 (14)	15:45 14	14:17 (14)
26	05:11	06:19	07:28	16:58 (12)	07:37		08:44 (37)	08:49	09:40 (13)	09:28	13:14 (26)
	22:14	20:56	19:27 47	17:45 (12)	17:04	122	15:37 (7)	15:58 119	14:15 (14)	15:46 17	14:18 (14)
27	05:13	06:22	07:30	16:58 (12)	07:39		08:48 (37)	08:51	09:49 (13)	09:28	13:13 (26)
	22:11	20:53	19:24 46	17:44 (12)	17:01	118	15:36 (7)	15:56 112	14:16 (14)	15:47 20	14:19 (14)
28	05:15	06:24	07:32	16:58 (12)	07:41		08:51 (37)	08:53	09:49 (13)	09:28	13:12 (26)
	22:09	20:51	19:21 46	17:44 (12)	16:59	115	15:35 (7)	15:55 109	14:16 (14)	15:48 24	14:21 (14)
29	05:17	06:26	07:35	16:58 (12)	07:44		08:54 (37)	08:55	09:50 (13)	09:28	12:14 (32)
	22:07	20:48	19:19 50	17:48 (9)	16:56	119	15:34 (7)	15:53 106	14:16 (14)	15:49 31	14:23 (14)
30	05:20	06:28	07:37	16:57 (12)	07:46		08:57 (37)	08:57	09:50 (13)	09:28	12:13 (32)
	22:05	20:45	19:16 52	17:49 (9)	16:53	117	15:32 (7)	15:52 103	14:16 (14)	15:50 37	14:25 (14)
31	05:22	06:31			07:49		08:59 (37)			09:28	12:12 (32)
	22:03	20:42			16:51	115	15:29 (7)			15:51 41	14:25 (14)
Potential sun hours	546	478	386		319			236		199	
Total, worst case				1040		2454		3527		1230	
Sun reduction				0,50		0,50		0,50		0,50	
Oper. time red.				0,80		0,80		0,80		0,80	
Wind dir. red.				0,59		0,59		0,60		0,59	
Total reduction				0,24		0,24		0,24		0,24	
Total, real				245		577		846		289	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AA - Heiavegen 543

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June		July		August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40		04:32	20:43 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30		22:48	1 20:44 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38		04:33		05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31		22:47		21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37		04:34		05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33		22:47		21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36		04:35		05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34		22:46		21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35		04:36		05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36		22:45		21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34		04:37		05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37		22:44		21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33		04:39		05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38		22:43		21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32		04:40		05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40		22:42		21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31		04:41		05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41		22:41		21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30		04:43		05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42		22:40		21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:39 (1)	04:44		05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	1 20:40 (1)	22:39		21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:40 (1)	04:46		05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	1 20:41 (1)	22:37		21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:39 (1)	04:47		05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	1 20:40 (1)	22:36		21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:40 (1)	04:49		05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	1 20:41 (1)	22:34		21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:40 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	2 20:42 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:40 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	2 20:42 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:40 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	2 20:42 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:41 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	2 20:43 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:41 (1)	04:58		06:04	07:12	08:20	08:33	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	2 20:43 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:41 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	2 20:43 (1)	22:25		21:12	19:44	18:20	16:07	15:43
21	09:06	07:56	06:38	06:10	04:58	04:27	20:41 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	2 20:43 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:41 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	2 20:43 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:42 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	2 20:44 (1)	22:19		21:04	19:36	18:12	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:42 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	2 20:44 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:42 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	2 20:44 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:42 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	2 20:44 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:42 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	2 20:44 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:43 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	1 20:44 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:43 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	2 20:45 (1)	22:07		20:48	19:18	16:56	15:54	15:49
30	08:49		07:12	05:46	04:42	04:31	20:43 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	22:48	1 20:44 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41			05:22		06:31		07:48		09:27
	16:53		20:14		22:28			22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547		545		478	386	319	236	200
Total, worst case						34		1						
Sun reduction						0,50		0,50						
Oper. time red.						0,80		0,80						
Wind dir. red.						0,74		0,74						
Total reduction						0,29		0,29						
Total, real						10		0						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AB - Heiavegen 541

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:27	08:45	07:35	07:06	05:44	04:40	20:27 (1)	04:32	20:33 (1)	05:24	06:33	07:39	07:51	08:59
	15:53	16:56	18:04	20:16	21:25	22:30	8 20:35 (1)	22:48	15 20:48 (1)	22:00	20:39	19:13	16:49	15:51
2	09:27	08:43	07:32	07:04	05:41	04:38	20:27 (1)	04:33	20:33 (1)	05:26	06:35	07:41	07:53	09:01
	15:54	16:58	18:07	20:19	21:28	22:31	11 20:38 (1)	22:47	15 20:48 (1)	21:58	20:36	19:10	16:46	15:50
3	09:26	08:41	07:29	07:01	05:39	04:37	20:27 (1)	04:34	20:33 (1)	05:28	06:37	07:43	07:56	09:03
	15:55	17:01	18:09	20:21	21:30	22:33	12 20:39 (1)	22:47	15 20:48 (1)	21:56	20:33	19:07	16:44	15:49
4	09:26	08:38	07:27	06:58	05:36	04:36	20:27 (1)	04:35	20:33 (1)	05:30	06:39	07:46	07:58	09:05
	15:57	17:03	18:11	20:23	21:32	22:34	12 20:39 (1)	22:46	14 20:47 (1)	21:53	20:31	19:04	16:41	15:48
5	09:25	08:36	07:24	06:55	05:34	04:35	20:27 (1)	04:36	20:33 (1)	05:33	06:42	07:48	08:00	09:06
	15:58	17:06	18:14	20:25	21:35	22:36	13 20:40 (1)	22:45	14 20:47 (1)	21:51	20:28	19:01	16:39	15:47
6	09:25	08:34	07:21	06:52	05:31	04:34	20:27 (1)	04:37	20:34 (1)	05:35	06:44	07:50	08:03	09:08
	16:00	17:08	18:16	20:28	21:37	22:37	13 20:40 (1)	22:44	13 20:47 (1)	21:48	20:25	18:58	16:37	15:46
7	09:24	08:32	07:18	06:49	05:29	04:33	20:28 (1)	04:39	20:34 (1)	05:37	06:46	07:52	08:05	09:10
	16:02	17:11	18:19	20:30	21:39	22:38	14 20:42 (1)	22:43	12 20:46 (1)	21:46	20:22	18:56	16:34	15:45
8	09:23	08:29	07:15	06:46	05:26	04:32	20:28 (1)	04:40	20:34 (1)	05:39	06:48	07:55	08:08	09:11
	16:03	17:13	18:21	20:32	21:41	22:40	14 20:42 (1)	22:42	12 20:46 (1)	21:44	20:19	18:53	16:32	15:45
9	09:22	08:27	07:12	06:44	05:24	04:31	20:28 (1)	04:41	20:35 (1)	05:41	06:50	07:57	08:10	09:13
	16:05	17:16	18:23	20:35	21:44	22:41	14 20:42 (1)	22:41	11 20:46 (1)	21:41	20:16	18:50	16:30	15:44
10	09:21	08:24	07:10	06:41	05:22	04:30	20:29 (1)	04:43	20:35 (1)	05:44	06:53	07:59	08:12	09:14
	16:07	17:18	18:26	20:37	21:46	22:42	14 20:43 (1)	22:40	11 20:46 (1)	21:39	20:13	18:47	16:27	15:43
11	09:20	08:22	07:07	06:38	05:19	04:29	20:28 (1)	04:44	20:35 (1)	05:46	06:55	08:01	08:15	09:16
	16:09	17:20	18:28	20:39	21:48	22:43	16 20:44 (1)	22:39	9 20:44 (1)	21:36	20:11	18:44	16:25	15:43
12	09:19	08:20	07:04	06:35	05:17	04:29	20:29 (1)	04:46	20:35 (1)	05:48	06:57	08:04	08:17	09:17
	16:11	17:23	18:30	20:41	21:50	22:44	16 20:45 (1)	22:37	4 20:39 (1)	21:34	20:08	18:41	16:23	15:43
13	09:18	08:17	07:01	06:32	05:15	04:28	20:29 (1)	04:47	20:35 (1)	05:50	06:59	08:06	08:20	09:18
	16:13	17:25	18:33	20:44	21:53	22:45	16 20:45 (1)	22:36	3 20:38 (1)	21:31	20:05	18:39	16:21	15:42
14	09:17	08:15	06:58	06:29	05:12	04:28	20:29 (1)	04:49	20:35 (1)	05:53	07:01	08:08	08:22	09:19
	16:15	17:28	18:35	20:46	21:55	22:46	17 20:46 (1)	22:34	2 20:37 (1)	21:28	20:02	18:36	16:19	15:42
15	09:15	08:12	06:55	06:27	05:10	04:27	20:30 (1)	04:51		05:55	07:04	08:11	08:24	09:20
	16:17	17:30	18:37	20:48	21:57	22:47	17 20:47 (1)	22:33		21:26	19:59	18:33	16:17	15:42
16	09:14	08:10	06:53	06:24	05:08	04:27	20:30 (1)	04:52		05:57	07:06	08:13	08:27	09:21
	16:19	17:33	18:40	20:51	21:59	22:47	17 20:47 (1)	22:31		21:23	19:56	18:30	16:15	15:42
17	09:12	08:07	06:50	06:21	05:06	04:27	20:30 (1)	04:54		05:59	07:08	08:15	08:29	09:22
	16:21	17:35	18:42	20:53	22:01	22:48	18 20:48 (1)	22:30		21:20	19:53	18:28	16:13	15:42
18	09:11	08:04	06:47	06:18	05:04	04:27	20:31 (1)	04:56		06:02	07:10	08:18	08:31	09:23
	16:23	17:38	18:44	20:55	22:03	22:48	17 20:48 (1)	22:28		21:18	19:50	18:25	16:11	15:42
19	09:09	08:02	06:44	06:16	05:02	04:27	20:31 (1)	04:58		06:04	07:12	08:20	08:34	09:24
	16:25	17:40	18:46	20:58	22:05	22:49	18 20:49 (1)	22:26		21:15	19:47	18:22	16:09	15:42
20	09:08	07:59	06:41	06:13	05:00	04:27	20:31 (1)	05:00		06:06	07:15	08:22	08:36	09:25
	16:27	17:43	18:49	21:00	22:07	22:49	18 20:49 (1)	22:25		21:12	19:44	18:19	16:07	15:42
21	09:06	07:56	06:38	06:10	04:58	04:27	20:31 (1)	05:01		06:08	07:17	08:25	08:38	09:25
	16:30	17:45	18:51	21:02	22:10	22:49	18 20:49 (1)	22:23		21:10	19:42	18:17	16:06	15:43
22	09:05	07:54	06:35	06:07	04:56	04:27	20:31 (1)	05:03		06:11	07:19	08:27	08:40	09:26
	16:32	17:47	18:53	21:05	22:12	22:50	18 20:49 (1)	22:21		21:07	19:39	18:14	16:04	15:43
23	09:03	07:51	06:32	06:05	04:54	04:27	20:31 (1)	05:05		06:13	07:21	08:29	08:42	09:27
	16:34	17:50	18:56	21:07	22:14	22:50	18 20:49 (1)	22:19		21:04	19:36	18:11	16:02	15:44
24	09:01	07:48	06:29	06:02	04:52	04:27	20:32 (1)	05:07		06:15	07:23	08:32	08:45	09:27
	16:37	17:52	18:58	21:09	22:15	22:50	17 20:49 (1)	22:17		21:02	19:33	18:09	16:01	15:44
25	08:59	07:46	06:27	05:59	04:51	04:28	20:32 (1)	05:09		06:17	07:26	07:34	08:47	09:27
	16:39	17:55	19:00	21:11	22:17	22:50	17 20:49 (1)	22:15		20:59	19:30	17:06	15:59	15:45
26	08:57	07:43	06:24	05:57	04:49	04:28	20:32 (1)	05:11		06:19	07:28	07:36	08:49	09:27
	16:41	17:57	19:03	21:14	22:19	22:50	18 20:50 (1)	22:13		20:56	19:27	17:04	15:58	15:46
27	08:55	07:40	06:21	05:54	04:47	04:29	20:32 (1)	05:13		06:22	07:30	07:39	08:51	09:28
	16:44	18:00	19:05	21:16	22:21	22:49	17 20:49 (1)	22:11		20:53	19:24	17:01	15:56	15:47
28	08:53	07:38	06:18	05:51	04:46	04:30	20:32 (1)	05:15		06:24	07:32	07:41	08:53	09:28
	16:46	18:02	19:07	21:18	22:23	22:49	17 20:49 (1)	22:09		20:50	19:21	16:59	15:55	15:48
29	08:51		07:15	05:49	04:44	04:30	20:33 (1)	05:18		06:26	07:34	07:44	08:55	09:28
	16:49		20:09	21:21	22:25	22:49	17 20:50 (1)	22:07		20:48	19:18	16:56	15:53	15:49
30	08:49		07:12	05:46	04:42	20:27 (1) 04:31	20:32 (1)	05:20		06:28	07:37	07:46	08:57	09:28
	16:51		20:12	21:23	22:26	2 20:29 (1) 22:48	17 20:49 (1)	22:05		20:45	19:16	16:53	15:52	15:50
31	08:47		07:09		04:41	20:27 (1)		05:22		06:31		07:48		09:27
	16:53		20:14		22:28	3 20:30 (1)		22:02		20:42		16:51		15:51
Potential sun hours	222	260	365	432	521	547	545		478	386	319	236	200
Total, worst case					5	469	150						
Sun reduction					0,50	0,50	0,50						
Oper. time red.					0,80	0,80	0,80						
Wind dir. red.					0,73	0,73	0,73						
Total reduction					0,29	0,29	0,29						
Total, real					1	138	44						

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AC - Brusalivegen 201

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June	July	August	September		October		November	December
1	09:28	08:46		07:35		07:07	05:44	04:40	04:32	05:24	06:33		07:39	08:39 (82)	07:51	09:00
	15:53	16:56		18:05		20:17	21:26	22:30	22:48	22:01	20:40		19:13 22	09:01 (85)	16:49	15:52
2	09:27	08:43		07:33	08:13 (85)	07:04	05:42	04:39	04:33	05:27	06:35		07:42	08:36 (82)	07:54	09:01
	15:54	16:59		18:07 6	08:19 (85)	20:19	21:28	22:32	22:48	21:58	20:37		19:10 25	09:01 (85)	16:47	15:50
3	09:27	08:41		07:30	08:10 (85)	07:01	05:39	04:38	04:34	05:29	06:38		07:44	08:35 (82)	07:56	09:03
	15:56	17:01		18:10 12	08:22 (85)	20:21	21:30	22:33	22:47	21:56	20:34		19:07 26	09:01 (85)	16:44	15:49
4	09:26	08:39		07:27	08:07 (85)	06:58	05:36	04:36	04:35	05:31	06:40		07:46	08:34 (82)	07:59	09:05
	15:57	17:04		18:12 16	08:23 (85)	20:24	21:33	22:35	22:46	21:54	20:31		19:05 28	09:02 (85)	16:42	15:48
5	09:26	08:37		07:24	08:00 (82)	06:55	05:34	04:35	04:37	05:33	06:42		07:48	08:34 (82)	08:01	09:07
	15:59	17:06		18:14 24	08:24 (85)	20:26	21:35	22:36	22:45	21:51	20:28		19:02 28	09:02 (85)	16:39	15:47
6	09:25	08:34		07:21	07:58 (82)	06:53	05:32	04:34	04:38	05:35	06:44		07:51	08:33 (82)	08:03	09:08
	16:00	17:09		18:17 26	08:24 (85)	20:28	21:37	22:38	22:45	21:49	20:25		18:59 28	09:01 (85)	16:37	15:47
7	09:24	08:32		07:19	07:57 (82)	06:50	05:29	04:33	04:39	05:38	06:47		07:53	08:34 (82)	08:06	09:10
	16:02	17:11		18:19 28	08:25 (85)	20:30	21:40	22:39	22:44	21:47	20:23		18:56 27	09:01 (85)	16:35	15:46
8	09:23	08:30		07:16	07:56 (82)	06:47	05:27	04:32	04:40	05:40	06:49		07:55	08:35 (82)	08:08	09:12
	16:04	17:14		18:21 28	08:24 (85)	20:33	21:42	22:40	22:43	21:44	20:20		18:53 25	09:00 (85)	16:32	15:45
9	09:23	08:27		07:13	07:56 (82)	06:44	05:24	04:31	04:42	05:42	06:51		07:57	08:36 (82)	08:11	09:13
	16:06	17:16		18:24 28	08:24 (85)	20:35	21:44	22:41	22:41	21:42	20:17		18:50 22	08:58 (85)	16:30	15:44
10	09:22	08:25		07:10	07:56 (82)	06:41	05:22	04:31	04:43	05:44	06:53		08:00	08:43 (85)	08:13	09:15
	16:07	17:18		18:26 27	08:23 (85)	20:37	21:46	22:43	22:40	21:39	20:14		18:48 14	08:57 (85)	16:28	15:44
11	09:21	08:23		07:07	07:58 (82)	06:38	05:20	04:30	04:45	05:46	06:55		08:02	08:44 (85)	08:15	09:16
	16:09	17:21		18:28 26	08:24 (85)	20:40	21:49	22:44	22:39	21:37	20:11		18:45 10	08:54 (85)	16:26	15:43
12	09:19	08:20		07:04	07:59 (82)	06:36	05:17	04:29	04:46	05:49	06:58		08:04		08:18	09:17
	16:11	17:23		18:31 23	08:22 (85)	20:42	21:51	22:45	22:38	21:34	20:08		18:42		16:24	15:43
13	09:18	08:18		07:02	07:37 (81)	06:33	05:15	04:29	04:48	05:51	07:00	08:13 (84)	08:07		08:20	09:19
	16:13	17:26		18:33 20	08:21 (85)	20:44	21:53	22:45	22:36	21:31	20:05 8	08:21 (84)	18:39		16:22	15:43
14	09:17	08:15		06:59	07:35 (81)	06:30	05:13	04:28	04:49	05:53	07:02	08:10 (84)	08:09		08:22	09:20
	16:15	17:28		18:35 20	08:18 (85)	20:47	21:55	22:46	22:35	21:29	20:02 13	08:23 (84)	18:36		16:19	15:43
15	09:16	08:13		06:56	07:33 (81)	06:27	05:11	04:28	04:51	05:55	07:04	08:08 (84)	08:11		08:25	09:21
	16:17	17:31		18:38 14	08:14 (85)	20:49	21:57	22:47	22:33	21:26	19:59 16	08:24 (84)	18:34		16:17	15:42
16	09:14	08:10		06:53	07:32 (81)	06:24	05:09	04:28	04:53	05:58	07:06	08:08 (84)	08:13	09:01 (83)	08:27	09:22
	16:19	17:33		18:40 12	07:44 (81)	20:51	22:00	22:48	22:32	21:24	19:57 17	08:25 (84)	18:31 9	09:10 (83)	16:15	15:42
17	09:13	08:07		06:50	07:32 (81)	06:22	05:06	04:27	04:54	06:00	07:08	08:07 (84)	08:16	09:00 (83)	08:29	09:23
	16:21	17:36		18:42 12	07:44 (81)	20:53	22:02	22:48	22:30	21:21	19:54 18	08:25 (84)	18:28 12	09:12 (83)	16:13	15:42
18	09:12	08:05	08:36 (83)	06:47	07:32 (81)	06:19	05:04	04:27	04:56	06:02	07:11	08:06 (84)	08:18	08:59 (83)	08:32	09:24
	16:24	17:38 3	08:39 (83)	18:45 11	07:43 (81)	20:56	22:04	22:49	22:29	21:18	19:51 19	08:25 (84)	18:25 13	09:12 (83)	16:12	15:42
19	09:10	08:02	08:33 (83)	06:44	07:26 (84)	06:16	05:02	04:27	04:58	06:04	07:13	08:05 (84)	08:20	08:59 (83)	08:34	09:25
	16:26	17:41 7	08:40 (83)	18:47 16	07:42 (81)	20:58	22:06	22:49	22:27	21:16	19:48 19	08:24 (84)	18:23 14	09:13 (83)	16:10	15:43
20	09:08	08:00	08:30 (83)	06:42	07:23 (84)	06:13	05:00	04:27	05:00	06:07	07:15	08:05 (84)	08:23	08:58 (83)	08:36	09:25
	16:28	17:43 11	08:41 (83)	18:49 17	07:40 (81)	21:00	22:08	22:50	22:25	21:13	19:45 19	08:24 (84)	18:20 14	09:12 (83)	16:08	15:43
21	09:07	07:57	08:27 (83)	06:39	07:21 (84)	06:11	04:58	04:27	05:02	06:09	07:17	08:05 (84)	08:25	08:58 (83)	08:39	09:26
	16:30	17:46 14	08:41 (83)	18:52 15	07:36 (84)	21:03	22:10	22:50	22:23	21:10	19:42 17	08:22 (84)	18:17 14	09:12 (83)	16:06	15:43
22	09:05	07:54	08:27 (83)	06:36	07:20 (84)	06:08	04:56	04:27	05:04	06:11	07:19	08:06 (84)	08:27	09:01 (83)	08:41	09:27
	16:32	17:48 14	08:41 (83)	18:54 18	07:38 (84)	21:05	22:12	22:50	22:22	21:08	19:39 16	08:22 (84)	18:15 10	09:11 (83)	16:04	15:44
23	09:03	07:52	08:28 (83)	06:33	07:19 (84)	06:05	04:55	04:28	05:06	06:13	07:22	08:07 (84)	08:30	09:04 (83)	08:43	09:27
	16:35	17:50 13	08:41 (83)	18:56 19	07:38 (84)	21:07	22:14	22:50	22:20	21:05	19:36 17	08:24 (81)	18:12 6	09:10 (83)	16:03	15:44
24	09:01	07:49	08:28 (83)	06:30	07:19 (84)	06:02	04:53	04:28	05:08	06:15	07:24	08:09 (84)	08:32	09:06 (83)	08:45	09:27
	16:37	17:53 13	08:41 (83)	18:58 19	07:38 (84)	21:10	22:16	22:50	22:18	21:02	19:33 16	08:25 (81)	18:09 2	09:08 (83)	16:01	15:45
25	09:00	07:46	08:29 (83)	06:27	07:18 (84)	06:00	04:51	04:28	05:10	06:18	07:26	08:15 (81)	07:35		08:47	09:28
	16:39	17:55 10	08:39 (83)	19:01 19	07:37 (84)	21:12	22:18	22:50	22:16	20:59	19:30 11	08:26 (81)	17:07		16:00	15:46
26	08:58	07:44	08:30 (83)	06:24	07:18 (84)	05:57	04:49	04:29	05:12	06:20	07:28	08:14 (81)	07:37		08:49	09:28
	16:42	17:58 7	08:37 (83)	19:03 19	07:37 (84)	21:14	22:20	22:50	22:14	20:57	19:28 12	08:26 (81)	17:04		15:58	15:46
27	08:56	07:41		06:21	07:18 (84)	05:54	04:48	04:29	05:14	06:22	07:31	08:14 (81)	07:39		08:52	09:28
	16:44	18:00		19:05 18	07:36 (84)	21:17	22:22	22:50	22:12	20:54	19:25 12	08:26 (81)	17:02		15:57	15:47
28	08:54	07:38		06:18	07:18 (84)	05:52	04:46	04:30	05:16	06:24	07:33	08:14 (81)	07:42		08:54	09:28
	16:47	18:02		19:08 16	07:34 (84)	21:19	22:23	22:50	22:09	20:51	19:22 12	08:26 (81)	16:59		15:55	15:48
29	08:52			07:16	08:19 (84)	05:49	04:44	04:31	05:18	06:27	07:35	08:14 (81)	07:44		08:56	09:28
	16:49			20:10 14	08:33 (84)	21:21	22:25	22:49	22:07	20:48	19:19 19	08:57 (85)	16:56		15:54	15:49
30	08:50			07:13	08:21 (84)	05:47	04:43	04:32	05:20	06:29	07:37	08:15 (81)	07:47		08:58	09:28
	16:51			20:12 9	08:30 (84)	21:24	22:27	22:49	22:05	20:45	19:16 21	08:59 (85)	16:54		15:53	15:50
31	08:48			07:10			04:41		05:22	06:31			07:49			09:28
	16:54			20:14			22:29		22:03	20:43			16:51			15:51
Potential sun hours	222	260		365		432	521	547	545	478	386		319		236	200
Total, worst case			92		532							282		349		
Sun reduction			0,50		0,50							0,50		0,50		
Oper. time red.			0,80		0,80							0,80		0,80		
Wind dir. red.			0,73		0,70							0,69		0,72		
Total reduction			0,29		0,28							0,28		0,29		
Total, real			27		149							78		100		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April		May			June		
1	09:28	08:46		07:35	07:07		05:44		07:31 (38)	04:40		06:17 (36)
	15:53	16:56		18:05	20:17		21:26	31	08:02 (38)	22:30	23	06:40 (36)
2	09:27	08:43		07:33	07:04		05:42		07:32 (38)	04:39		06:16 (36)
	15:54	16:59		18:07	20:19		21:28	29	08:01 (38)	22:32	24	06:40 (36)
3	09:27	08:41		07:30	07:01		05:39		07:32 (38)	04:37		06:16 (36)
	15:56	17:01		18:10	20:21		21:31	27	07:59 (38)	22:34	25	06:41 (36)
4	09:26	08:39		07:27	06:58		05:36		07:34 (38)	04:36		06:16 (36)
	15:57	17:04		18:12	20:24		21:33	24	07:58 (38)	22:35	26	06:42 (36)
5	09:26	08:37		07:24	06:55		05:34		07:36 (38)	04:35		06:16 (36)
	15:59	17:06		18:14	20:26		21:35	20	07:56 (38)	22:36	27	06:43 (36)
6	09:25	08:34		07:21	06:53		05:32		07:38 (38)	04:34		06:16 (36)
	16:00	17:09		18:17	20:28		21:37	16	07:54 (38)	22:38	27	06:43 (36)
7	09:24	08:32		07:19	06:50		05:29		07:40 (38)	04:33		06:16 (36)
	16:02	17:11		18:19	20:31		21:40	10	07:50 (38)	22:39	27	06:43 (36)
8	09:24	08:30	09:03 (85)	07:16	06:47		05:27			04:32		06:15 (36)
	16:04	17:14	2 09:05 (85)	18:21	20:33		21:42			22:40	29	06:44 (36)
9	09:23	08:27	09:00 (85)	07:13	06:44		05:24			04:31		06:16 (36)
	16:06	17:16	7 09:07 (85)	18:24	20:35		21:44			22:42	29	06:45 (36)
10	09:22	08:25	08:58 (85)	07:10	06:41		07:48 (38)	05:22		04:31		06:15 (36)
	16:07	17:18	10 09:08 (85)	18:26	20:37	10	07:58 (38)	21:46		22:43	30	06:45 (36)
11	09:21	08:23	08:56 (85)	07:07	06:38		07:45 (38)	05:20		04:30		06:16 (36)
	16:09	17:21	13 09:09 (85)	18:28	20:40	17	08:02 (38)	21:49		22:44	29	06:45 (36)
12	09:20	08:20	08:55 (85)	07:04	06:36		07:41 (38)	05:17		04:29		06:15 (36)
	16:11	17:23	14 09:09 (85)	18:31	20:42	22	08:03 (38)	21:51		22:45	30	06:45 (36)
13	09:18	08:18	08:55 (85)	07:02	06:33		07:37 (38)	05:15		04:29		06:16 (36)
	16:13	17:26	14 09:09 (85)	18:33	20:44	27	08:04 (38)	21:53		22:46	30	06:46 (36)
14	09:17	08:15	08:56 (85)	06:59	06:30		07:35 (38)	05:13		04:28		06:16 (36)
	16:15	17:28	13 09:09 (85)	18:35	20:47	30	08:05 (38)	21:55		22:46	30	06:46 (36)
15	09:16	08:13	08:56 (85)	06:56	06:27		07:34 (38)	05:11		04:28		06:15 (36)
	16:17	17:31	13 09:09 (85)	18:38	20:49	33	08:07 (38)	21:57		22:47	31	06:46 (36)
16	09:14	08:10	08:56 (85)	06:53	06:24		07:33 (38)	05:09		04:28		06:16 (36)
	16:19	17:33	11 09:07 (85)	18:40	20:51	34	08:07 (38)	22:00		22:48	30	06:46 (36)
17	09:13	08:07	08:58 (85)	06:50	06:22		07:32 (38)	05:06		04:27		06:16 (36)
	16:21	17:36	7 09:05 (85)	18:42	20:54	35	08:07 (38)	22:02		22:48	31	06:47 (36)
18	09:12	08:05		06:47	06:19		07:31 (38)	05:04		04:27		06:16 (36)
	16:24	17:38		18:45	20:56	37	08:08 (38)	22:04		22:49	31	06:47 (36)
19	09:10	08:02		06:44	06:16		07:30 (38)	05:02		04:27		06:16 (36)
	16:26	17:41		18:47	20:58	38	08:08 (38)	22:06		22:49	31	06:47 (36)
20	09:08	08:00		06:42	06:13		07:30 (38)	05:00		04:27		06:16 (36)
	16:28	17:43		18:49	21:00	39	08:09 (38)	22:08		22:50	31	06:47 (36)
21	09:07	07:57		06:39	06:11		07:30 (38)	04:58		04:27		06:16 (36)
	16:30	17:46		18:52	21:03	38	08:08 (38)	22:10		22:50	31	06:47 (36)
22	09:05	07:54		06:36	06:08		07:29 (38)	04:56		04:27		06:17 (36)
	16:32	17:48		18:54	21:05	39	08:08 (38)	22:12		22:50	31	06:48 (36)
23	09:03	07:52		06:33	06:05		07:29 (38)	04:55		04:28		06:17 (36)
	16:35	17:50		18:56	21:07	39	08:08 (38)	22:14		22:50	31	06:48 (36)
24	09:02	07:49		06:30	06:02		07:29 (38)	04:53		04:28		06:17 (36)
	16:37	17:53		18:58	21:10	38	08:07 (38)	22:16		22:50	31	06:48 (36)
25	09:00	07:46		06:27	06:00		07:29 (38)	04:51		04:28		06:18 (36)
	16:39	17:55		19:01	21:12	38	08:07 (38)	22:18		22:50	31	06:49 (36)
26	08:58	07:44		06:24	05:57		07:29 (38)	04:49	06:24 (36)	04:29		06:18 (36)
	16:42	17:58		19:03	21:14	37	08:06 (38)	22:20	8 06:32 (36)	22:50	31	06:49 (36)
27	08:56	07:41		06:21	05:54		07:29 (38)	04:48	06:21 (36)	04:29		06:19 (36)
	16:44	18:00		19:05	21:17	37	08:06 (38)	22:22	13 06:34 (36)	22:50	30	06:49 (36)
28	08:54	07:38		06:18	05:52		07:29 (38)	04:46	06:20 (36)	04:30		06:18 (36)
	16:47	18:02		19:08	21:19	36	08:05 (38)	22:24	16 06:36 (36)	22:50	31	06:49 (36)
29	08:52			07:16	05:49		07:30 (38)	04:44	06:19 (36)	04:31		06:19 (36)
	16:49			20:10	21:21	34	08:04 (38)	22:25	18 06:37 (36)	22:49	30	06:49 (36)
30	08:50			07:13	05:47		07:30 (38)	04:43	06:19 (36)	04:31		06:19 (36)
	16:51			20:12	21:24	33	08:03 (38)	22:27	20 06:39 (36)	22:49	30	06:49 (36)
31	08:48			07:10				04:41	06:17 (36)			
	16:54			20:14				22:29	22 06:39 (36)			
Potential sun hours	221	260		365	432			521		547		
Total, worst case			104			691			254		878	
Sun reduction			0,50			0,50			0,50		0,50	
Oper. time red.			0,80			0,80			0,80		0,80	
Wind dir. red.			0,74			0,65			0,62		0,58	
Total reduction			0,29			0,26			0,25		0,23	
Total, real			31			178			63		204	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AD - Eiendom 121/8, Hå kommune

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September		October		November		December
1	04:32	06:20 (36)	05:24		06:33	07:44 (38)	07:39		07:51	08:28 (85)	09:00
	22:48 30	06:50 (36)	22:01		20:40 17	08:01 (38)	19:13		16:49 9	08:37 (85)	15:51
2	04:33	06:20 (36)	05:27		06:35	07:47 (38)	07:42		07:54	08:30 (85)	09:01
	22:48 30	06:50 (36)	21:58		20:37 10	07:57 (38)	19:10		16:47 6	08:36 (85)	15:50
3	04:34	06:20 (36)	05:29		06:38		07:44		07:56	08:33 (85)	09:03
	22:47 29	06:49 (36)	21:56		20:34		19:07		16:44 1	08:34 (85)	15:49
4	04:35	06:20 (36)	05:31		06:40		07:46		07:59		09:05
	22:46 29	06:49 (36)	21:54		20:31		19:05		16:42		15:48
5	04:36	06:21 (36)	05:33		06:42		07:48		08:01		09:07
	22:46 28	06:49 (36)	21:51		20:28		19:02		16:39		15:47
6	04:38	06:21 (36)	05:35	07:49 (38)	06:44		07:51		08:03		09:09
	22:45 28	06:49 (36)	21:49 13	08:02 (38)	20:25		18:59		16:37		15:47
7	04:39	06:23 (36)	05:38	07:46 (38)	06:47		07:53		08:06		09:10
	22:44 27	06:50 (36)	21:47 18	08:04 (38)	20:23		18:56		16:35		15:46
8	04:40	06:23 (36)	05:40	07:44 (38)	06:49		07:55		08:08		09:12
	22:43 26	06:49 (36)	21:44 22	08:06 (38)	20:20		18:53		16:32		15:45
9	04:42	06:23 (36)	05:42	07:43 (38)	06:51		07:57		08:11		09:13
	22:42 26	06:49 (36)	21:42 25	08:08 (38)	20:17		18:50		16:30		15:44
10	04:43	06:24 (36)	05:44	07:41 (38)	06:53		08:00		08:13		09:15
	22:40 24	06:48 (36)	21:39 28	08:09 (38)	20:14		18:48		16:28		15:44
11	04:45	06:25 (36)	05:46	07:40 (38)	06:55		08:02		08:15		09:16
	22:39 23	06:48 (36)	21:37 30	08:10 (38)	20:11		18:45		16:26		15:43
12	04:46	06:25 (36)	05:49	07:39 (38)	06:58		08:04		08:18		09:17
	22:38 23	06:48 (36)	21:34 32	08:11 (38)	20:08		18:42		16:24		15:43
13	04:48	06:26 (36)	05:51	07:38 (38)	07:00		08:07		08:20		09:19
	22:36 21	06:47 (36)	21:32 33	08:11 (38)	20:05		18:39		16:22		15:43
14	04:49	06:28 (36)	05:53	07:37 (38)	07:02		08:09		08:22		09:20
	22:35 18	06:46 (36)	21:29 35	08:12 (38)	20:02		18:36		16:19		15:43
15	04:51	06:28 (36)	05:55	07:36 (38)	07:04		08:11		08:25		09:21
	22:34 17	06:45 (36)	21:26 36	08:12 (38)	19:59		18:34		16:17		15:42
16	04:53	06:30 (36)	05:58	07:36 (38)	07:06		08:14		08:27		09:22
	22:32 14	06:44 (36)	21:24 37	08:13 (38)	19:57		18:31		16:15		15:42
17	04:54	06:31 (36)	06:00	07:35 (38)	07:09		08:16		08:29		09:23
	22:30 11	06:42 (36)	21:21 38	08:13 (38)	19:54		18:28		16:13		15:42
18	04:56	06:35 (36)	06:02	07:36 (38)	07:11		08:18		08:32		09:24
	22:29 5	06:40 (36)	21:18 38	08:14 (38)	19:51		18:25		16:12		15:42
19	04:58		06:04	07:35 (38)	07:13		08:21		08:34		09:25
	22:27		21:16 39	08:14 (38)	19:48		18:23		16:10		15:43
20	05:00		06:07	07:35 (38)	07:15		08:23		08:36		09:25
	22:25		21:13 38	08:13 (38)	19:45		18:20		16:08		15:43
21	05:02		06:09	07:34 (38)	07:17		08:25		08:39		09:26
	22:23		21:10 39	08:13 (38)	19:42		18:17		16:06		15:43
22	05:04		06:11	07:34 (38)	07:20		08:28		08:41		09:27
	22:22		21:08 39	08:13 (38)	19:39		18:15		16:04		15:44
23	05:06		06:13	07:34 (38)	07:22		08:30		08:43		09:27
	22:20		21:05 38	08:12 (38)	19:36		18:12		16:03		15:44
24	05:08		06:15	07:34 (38)	07:24		08:32	09:30 (85)	08:45		09:28
	22:18		21:02 37	08:11 (38)	19:33		18:09 3	09:33 (85)	16:01		15:45
25	05:10		06:18	07:34 (38)	07:26		07:35	08:28 (85)	08:47		09:28
	22:16		20:59 37	08:11 (38)	19:30		17:07 8	08:36 (85)	16:00		15:46
26	05:12		06:20	07:34 (38)	07:28		07:37	08:27 (85)	08:50		09:28
	22:14		20:57 36	08:10 (38)	19:28		17:04 11	08:38 (85)	15:58		15:46
27	05:14		06:22	07:35 (38)	07:31		07:39	08:25 (85)	08:52		09:28
	22:12		20:54 34	08:09 (38)	19:25		17:02 13	08:38 (85)	15:57		15:47
28	05:16		06:24	07:35 (38)	07:33		07:42	08:25 (85)	08:54		09:28
	22:10		20:51 32	08:07 (38)	19:22		16:59 14	08:39 (85)	15:55		15:48
29	05:18		06:27	07:36 (38)	07:35		07:44	08:24 (85)	08:56		09:28
	22:07		20:48 30	08:06 (38)	19:19		16:56 14	08:38 (85)	15:54		15:49
30	05:20		06:29	07:38 (38)	07:37		07:47	08:25 (85)	08:58		09:28
	22:05		20:45 27	08:05 (38)	19:16		16:54 13	08:38 (85)	15:53		15:50
31	05:22		06:31	07:41 (38)			07:49	08:26 (85)			09:28
	22:03		20:43 22	08:03 (38)			16:51 12	08:38 (85)			15:51
Potential sun hours	545		478		386		319		236		200
Total, worst case	409		833		27		88		16		
Sun reduction	0,50		0,50		0,50		0,50		0,50		
Oper. time red.	0,80		0,80		0,80		0,80		0,80		
Wind dir. red.	0,58		0,65		0,65		0,74		0,74		
Total reduction	0,23		0,26		0,26		0,29		0,29		
Total, real	95		215		7		26		5		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February			March			April		May			June		
1	09:28		08:46			07:35		08:16 (85)	07:07		05:44			04:40		06:01 (38)
	15:53		16:56			18:05	15	08:31 (85)	20:17		21:26			22:30	34	06:35 (38)
2	09:27		08:43			07:33		08:17 (85)	07:04		05:42			04:39		06:01 (38)
	15:54		16:59			18:07	13	08:30 (85)	20:19		21:28			22:32	35	06:36 (38)
3	09:27		08:41			07:30		08:18 (85)	07:01		05:39			04:38		06:01 (38)
	15:56		17:01			18:10	10	08:28 (85)	20:21		21:30			22:33	35	06:36 (38)
4	09:26		08:39			07:27		08:20 (85)	06:58		05:37			04:36		06:00 (38)
	15:57		17:04			18:12	5	08:25 (85)	20:24		21:33			22:35	36	06:36 (38)
5	09:26		08:37			07:24			06:55		05:34			04:35		06:01 (38)
	15:59		17:06			18:14			20:26		21:35			22:36	36	06:37 (38)
6	09:25		08:34			07:21			06:53		05:32			04:34		06:01 (38)
	16:00		17:09			18:17			20:28		21:37			22:38	36	06:37 (38)
7	09:24		08:32			07:19			06:50		05:29			04:33		06:01 (38)
	16:02		17:11			18:19			20:31		21:40			22:39	36	06:37 (38)
8	09:24		08:30			07:16		07:46 (84)	06:47		05:27			04:32		06:01 (38)
	16:04		17:14			18:21	7	07:53 (84)	20:33		21:42			22:40	36	06:37 (38)
9	09:23		08:27			07:13		07:44 (84)	06:44		05:24			04:31		06:02 (38)
	16:06		17:16			18:24	10	07:54 (84)	20:35		21:44			22:41	36	06:38 (38)
10	09:22		08:25			07:10		07:43 (84)	06:41		05:22			04:31		06:01 (38)
	16:07		17:19			18:26	13	07:56 (84)	20:37		21:46			22:43	37	06:38 (38)
11	09:21		08:23			07:07		07:42 (84)	06:38		05:20			04:30		06:02 (38)
	16:09		17:21			18:28	14	07:56 (84)	20:40		21:49			22:44	37	06:39 (38)
12	09:20		08:20			07:04		07:42 (84)	06:36		05:17			04:29		06:02 (38)
	16:11		17:23			18:31	14	07:56 (84)	20:42		21:51			22:45	36	06:38 (38)
13	09:18		08:18			07:02		07:41 (84)	06:33		05:15			04:29		06:02 (38)
	16:13		17:26			18:33	15	07:56 (84)	20:44		21:53			22:46	37	06:39 (38)
14	09:17		08:15			06:59		07:42 (84)	06:30		05:13			04:28		06:03 (38)
	16:15		17:28			18:35	13	07:55 (84)	20:47		21:55			22:46	36	06:39 (38)
15	09:16		08:13			06:56		07:42 (84)	06:27		05:11			04:28		06:02 (38)
	16:17		17:31			18:38	11	07:53 (84)	20:49		21:57			22:47	37	06:39 (38)
16	09:14		08:10			06:53		07:44 (84)	06:24		05:09			04:28		06:02 (38)
	16:19		17:33			18:40	7	07:51 (84)	20:51		22:00			22:48	37	06:39 (38)
17	09:13		08:07			06:50			06:22		05:06		06:12 (38)	04:27		06:03 (38)
	16:21		17:36			18:42			20:54		22:02	10	06:22 (38)	22:48	37	06:40 (38)
18	09:12		08:05			06:47			06:19		05:04		06:11 (38)	04:27		06:03 (38)
	16:24		17:38			18:45			20:56		22:04	14	06:25 (38)	22:49	37	06:40 (38)
19	09:10		08:02			06:44			06:16		05:02		06:09 (38)	04:27		06:03 (38)
	16:26		17:41			18:47			20:58		22:06	18	06:27 (38)	22:49	37	06:40 (38)
20	09:08		08:00			06:42			06:13		05:00		06:08 (38)	04:27		06:03 (38)
	16:28		17:43			18:49			21:00		22:08	20	06:28 (38)	22:50	37	06:40 (38)
21	09:07		07:57			06:39			06:11		04:58		06:06 (38)	04:27		06:03 (38)
	16:30		17:46			18:52			21:03		22:10	23	06:29 (38)	22:50	37	06:40 (38)
22	09:05		07:54			06:36			06:08		04:56		06:05 (38)	04:27		06:04 (38)
	16:32		17:48			18:54			21:05		22:12	25	06:30 (38)	22:50	37	06:41 (38)
23	09:03		07:52		08:21 (85)	06:33			06:05		04:55		06:03 (38)	04:28		06:04 (38)
	16:35		17:50	8	08:29 (85)	18:56			21:07		22:14	28	06:31 (38)	22:50	37	06:41 (38)
24	09:02		07:49		08:18 (85)	06:30			06:02		04:53		06:03 (38)	04:28		06:04 (38)
	16:37		17:53	12	08:30 (85)	18:58			21:10		22:16	29	06:32 (38)	22:50	37	06:41 (38)
25	09:00		07:46		08:17 (85)	06:27			06:00		04:51		06:02 (38)	04:28		06:05 (38)
	16:39		17:55	14	08:31 (85)	19:01			21:12		22:18	30	06:32 (38)	22:50	37	06:42 (38)
26	08:58		07:44		08:16 (85)	06:24			05:57		04:49		06:02 (38)	04:29		06:05 (38)
	16:42		17:58	15	08:31 (85)	19:03			21:14		22:20	31	06:33 (38)	22:50	36	06:41 (38)
27	08:56		07:41		08:15 (85)	06:21			05:54		04:48		06:01 (38)	04:29		06:05 (38)
	16:44		18:00	16	08:31 (85)	19:05			21:17		22:22	32	06:33 (38)	22:50	37	06:42 (38)
28	08:54		07:38		08:15 (85)	06:18			05:52		04:46		06:01 (38)	04:30		06:05 (38)
	16:47		18:02	15	08:30 (85)	19:08			21:19		22:24	33	06:34 (38)	22:50	37	06:42 (38)
29	08:52					07:16			05:49		04:44		06:01 (38)	04:31		06:05 (38)
	16:49					20:10			21:21		22:25	34	06:35 (38)	22:49	37	06:42 (38)
30	08:50					07:13			05:47		04:43		06:01 (38)	04:32		06:06 (38)
	16:51					20:12			21:24		22:27	34	06:35 (38)	22:49	37	06:43 (38)
31	08:48					07:10					04:41		06:01 (38)			
	16:54					20:14					22:29	34	06:35 (38)			
Potential sun hours	221		260			365			432		521			547		
Total, worst case				80			147					395			1094	
Sun reduction				0,50			0,50					0,50			0,50	
Oper. time red.				0,80			0,80					0,80			0,80	
Wind dir. red.				0,72			0,71					0,58			0,58	
Total reduction				0,29			0,28					0,23			0,23	
Total, real				23			42					91			252	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AE - Brusalivegen 217

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July			August	September			October			November	December
1	04:32		06:06 (38)	05:24	06:33			07:39		08:21 (84)	07:51	09:00
	22:48	37	06:43 (38)	22:01	20:40			19:13	14	08:35 (84)	16:49	15:52
2	04:33		06:07 (38)	05:27	06:35			07:42		08:20 (84)	07:54	09:01
	22:48	36	06:43 (38)	21:58	20:37			19:10	15	08:35 (84)	16:47	15:50
3	04:34		06:06 (38)	05:29	06:38			07:44		08:20 (84)	07:56	09:03
	22:47	37	06:43 (38)	21:56	20:34			19:07	13	08:33 (84)	16:44	15:49
4	04:35		06:06 (38)	05:31	06:40			07:46		08:21 (84)	07:59	09:05
	22:46	37	06:43 (38)	21:54	20:31			19:05	12	08:33 (84)	16:42	15:48
5	04:37		06:06 (38)	05:33	06:42			07:48		08:22 (84)	08:01	09:07
	22:46	37	06:43 (38)	21:51	20:28			19:02	9	08:31 (84)	16:39	15:47
6	04:38		06:08 (38)	05:35	06:44			07:51			08:03	09:09
	22:45	36	06:44 (38)	21:49	20:25			18:59			16:37	15:47
7	04:39		06:08 (38)	05:38	06:47			07:53			08:06	09:10
	22:44	36	06:44 (38)	21:47	20:23			18:56			16:35	15:46
8	04:40		06:08 (38)	05:40	06:49			07:55			08:08	09:12
	22:43	36	06:44 (38)	21:44	20:20			18:53			16:32	15:45
9	04:42		06:08 (38)	05:42	06:51			07:57			08:11	09:13
	22:42	36	06:44 (38)	21:42	20:17			18:50			16:30	15:44
10	04:43		06:08 (38)	05:44	06:53			08:00		08:54 (85)	08:13	09:15
	22:40	35	06:43 (38)	21:39	20:14			18:48	7	09:01 (85)	16:28	15:44
11	04:45		06:09 (38)	05:46	06:55			08:02		08:51 (85)	08:15	09:16
	22:39	35	06:44 (38)	21:37	20:11			18:45	11	09:02 (85)	16:26	15:43
12	04:46		06:09 (38)	05:49	06:58			08:04		08:49 (85)	08:18	09:17
	22:38	35	06:44 (38)	21:34	20:08			18:42	14	09:03 (85)	16:24	15:43
13	04:48		06:09 (38)	05:51	07:00			08:07		08:49 (85)	08:20	09:19
	22:36	34	06:43 (38)	21:31	20:05			18:39	15	09:04 (85)	16:22	15:43
14	04:49		06:10 (38)	05:53	07:02			08:09		08:48 (85)	08:22	09:20
	22:35	33	06:43 (38)	21:29	20:02			18:36	15	09:03 (85)	16:19	15:43
15	04:51		06:10 (38)	05:55	07:04			08:11		08:48 (85)	08:25	09:21
	22:34	33	06:43 (38)	21:26	19:59			18:34	16	09:04 (85)	16:17	15:42
16	04:53		06:11 (38)	05:58	07:06			08:14		08:48 (85)	08:27	09:22
	22:32	32	06:43 (38)	21:24	19:57			18:31	15	09:03 (85)	16:15	15:42
17	04:54		06:11 (38)	06:00	07:09			08:16		08:49 (85)	08:29	09:23
	22:30	31	06:42 (38)	21:21	19:54			18:28	13	09:02 (85)	16:14	15:42
18	04:56		06:12 (38)	06:02	07:11			08:18		08:50 (85)	08:32	09:24
	22:29	30	06:42 (38)	21:18	19:51			18:25	11	09:01 (85)	16:12	15:42
19	04:58		06:13 (38)	06:04	07:13			08:20		08:53 (85)	08:34	09:25
	22:27	29	06:42 (38)	21:16	19:48			18:23	6	08:59 (85)	16:10	15:43
20	05:00		06:13 (38)	06:07	07:15			08:23			08:36	09:25
	22:25	28	06:41 (38)	21:13	19:45			18:20			16:08	15:43
21	05:02		06:14 (38)	06:09	07:17			08:25			08:39	09:26
	22:23	27	06:41 (38)	21:10	19:42			18:17			16:06	15:43
22	05:04		06:16 (38)	06:11	07:20			08:28			08:41	09:27
	22:22	24	06:40 (38)	21:08	19:39			18:15			16:04	15:44
23	05:06		06:17 (38)	06:13	07:22			08:30			08:43	09:27
	22:20	21	06:38 (38)	21:05	19:36			18:12			16:03	15:44
24	05:08		06:18 (38)	06:15	07:24			08:32			08:45	09:28
	22:18	19	06:37 (38)	21:02	19:33			18:09			16:01	15:45
25	05:10		06:20 (38)	06:18	07:26			07:35			08:47	09:28
	22:16	16	06:36 (38)	20:59	19:30			17:07			16:00	15:46
26	05:12		06:22 (38)	06:20	07:28			07:37			08:49	09:28
	22:14	12	06:34 (38)	20:57	19:28			17:04			15:58	15:46
27	05:14		06:25 (38)	06:22	07:31		08:27 (84)	07:39			08:52	09:28
	22:12	6	06:31 (38)	20:54	19:25	5	08:32 (84)	17:02			15:57	15:47
28	05:16			06:24	07:33		08:24 (84)	07:42			08:54	09:28
	22:10			20:51	19:22	10	08:34 (84)	16:59			15:55	15:48
29	05:18			06:27	07:35		08:22 (84)	07:44			08:56	09:28
	22:07			20:48	19:19	12	08:34 (84)	16:56			15:54	15:49
30	05:20			06:29	07:37		08:21 (84)	07:47			08:58	09:28
	22:05			20:45	19:16	14	08:35 (84)	16:54			15:53	15:50
31	05:22			06:31				07:49				09:28
	22:03			20:43				16:51				15:51
Potential sun hours	545			478	386			319			236	200
Total, worst case		808				41			186			
Sun reduction		0,50				0,50			0,50			
Oper. time red.		0,80				0,80			0,80			
Wind dir. red.		0,58				0,70			0,72			
Total reduction		0,23				0,28			0,29			
Total, real		186				11			53			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February			March			April		May			June		
1	09:28		08:46			07:35		08:18 (85)	07:07		05:44			04:40		06:18 (38)
	15:53		16:56			18:05	13	08:31 (85)	20:17		21:26			22:30	28	06:46 (38)
2	09:27		08:43			07:33		08:19 (85)	07:04		05:42			04:39		06:18 (38)
	15:54		16:59			18:07	10	08:29 (85)	20:19		21:28			22:32	28	06:46 (38)
3	09:27		08:41			07:30		08:21 (85)	07:01		05:39			04:38		06:17 (38)
	15:56		17:01			18:10	5	08:26 (85)	20:21		21:31			22:33	29	06:46 (38)
4	09:26		08:39			07:27			06:58		05:37			04:36		06:16 (38)
	15:57		17:04			18:12			20:24		21:33			22:35	30	06:46 (38)
5	09:26		08:37			07:24			06:55		05:34			04:35		06:16 (38)
	15:59		17:06			18:14			20:26		21:35			22:36	31	06:47 (38)
6	09:25		08:34			07:21			06:53		05:32			04:34		06:15 (38)
	16:00		17:09			18:17			20:28		21:37			22:38	32	06:47 (38)
7	09:24		08:32			07:19		07:48 (84)	06:50		05:29			04:33		06:14 (38)
	16:02		17:11			18:19	6	07:54 (84)	20:31		21:40			22:39	32	06:46 (38)
8	09:24		08:30			07:16		07:46 (84)	06:47		05:27			04:32		06:13 (38)
	16:04		17:14			18:21	10	07:56 (84)	20:33		21:42			22:40	33	06:46 (38)
9	09:23		08:27			07:13		07:44 (84)	06:44		05:24			04:31		06:14 (38)
	16:06		17:16			18:24	13	07:57 (84)	20:35		21:44			22:41	33	06:47 (38)
10	09:22		08:25			07:10		07:44 (84)	06:41		05:22			04:31		06:13 (38)
	16:07		17:19			18:26	14	07:58 (84)	20:37		21:46			22:43	33	06:46 (38)
11	09:21		08:23			07:07		07:44 (84)	06:38		05:20			04:30		06:14 (38)
	16:09		17:21			18:28	14	07:58 (84)	20:40		21:49			22:44	33	06:47 (38)
12	09:20		08:20			07:04		07:44 (84)	06:36		05:17			04:29		06:14 (38)
	16:11		17:23			18:31	13	07:57 (84)	20:42		21:51			22:45	32	06:46 (38)
13	09:18		08:18			07:02		07:44 (84)	06:33		05:15			04:29		06:14 (38)
	16:13		17:26			18:33	12	07:56 (84)	20:44		21:53			22:46	33	06:47 (38)
14	09:17		08:15			06:59		07:45 (84)	06:30		05:13			04:28		06:15 (38)
	16:15		17:28			18:35	10	07:55 (84)	20:47		21:55			22:46	32	06:47 (38)
15	09:16		08:13			06:56		07:46 (84)	06:27		05:11			04:28		06:15 (38)
	16:17		17:31			18:38	6	07:52 (84)	20:49		21:57			22:47	32	06:47 (38)
16	09:14		08:10			06:53			06:24		05:09		06:39 (38)	04:28		06:15 (38)
	16:19		17:33			18:40			20:51		22:00	2	06:41 (38)	22:48	32	06:47 (38)
17	09:13		08:07			06:50			06:22		05:06		06:37 (38)	04:27		06:15 (38)
	16:21		17:36			18:42			20:54		22:02	4	06:41 (38)	22:48	32	06:47 (38)
18	09:12		08:05			06:47			06:19		05:04		06:36 (38)	04:27		06:16 (38)
	16:24		17:38			18:45			20:56		22:04	7	06:43 (38)	22:49	31	06:47 (38)
19	09:10		08:02			06:44			06:16		05:02		06:35 (38)	04:27		06:16 (38)
	16:26		17:41			18:47			20:58		22:06	8	06:43 (38)	22:49	31	06:47 (38)
20	09:08		08:00			06:42			06:13		05:00		06:33 (38)	04:27		06:16 (38)
	16:28		17:43			18:49			21:00		22:08	10	06:43 (38)	22:50	31	06:47 (38)
21	09:07		07:57			06:39			06:11		04:58		06:31 (38)	04:27		06:16 (38)
	16:30		17:46			18:52			21:03		22:10	12	06:43 (38)	22:50	31	06:47 (38)
22	09:05		07:54		08:23 (85)	06:36			06:08		04:56		06:30 (38)	04:27		06:17 (38)
	16:32		17:48	5	08:28 (85)	18:54			21:05		22:12	14	06:44 (38)	22:50	31	06:48 (38)
23	09:03		07:52		08:21 (85)	06:33			06:05		04:55		06:29 (38)	04:28		06:17 (38)
	16:35		17:50	10	08:31 (85)	18:56			21:07		22:14	15	06:44 (38)	22:50	31	06:48 (38)
24	09:02		07:49		08:18 (85)	06:30			06:02		04:53		06:28 (38)	04:28		06:17 (38)
	16:37		17:53	13	08:31 (85)	18:58			21:10		22:16	17	06:45 (38)	22:50	31	06:48 (38)
25	09:00		07:46		08:17 (85)	06:27			06:00		04:51		06:26 (38)	04:28		06:18 (38)
	16:39		17:55	15	08:32 (85)	19:01			21:12		22:18	19	06:45 (38)	22:50	31	06:49 (38)
26	08:58		07:44		08:17 (85)	06:24			05:57		04:49		06:25 (38)	04:29		06:17 (38)
	16:42		17:58	15	08:32 (85)	19:03			21:14		22:20	20	06:45 (38)	22:50	32	06:49 (38)
27	08:56		07:41		08:17 (85)	06:21			05:54		04:48		06:23 (38)	04:29		06:18 (38)
	16:44		18:00	14	08:31 (85)	19:05			21:17		22:22	22	06:45 (38)	22:50	32	06:50 (38)
28	08:54		07:38		08:17 (85)	06:18			05:52		04:46		06:23 (38)	04:30		06:17 (38)
	16:47		18:02	14	08:31 (85)	19:08			21:19		22:24	22	06:45 (38)	22:50	32	06:49 (38)
29	08:52					07:16			05:49		04:44		06:22 (38)	04:31		06:18 (38)
	16:49					20:10			21:21		22:25	24	06:46 (38)	22:49	32	06:50 (38)
30	08:50					07:13			05:47		04:43		06:21 (38)	04:32		06:18 (38)
	16:51					20:12			21:24		22:27	25	06:46 (38)	22:49	33	06:51 (38)
31	08:48					07:10					04:41		06:19 (38)			
	16:54					20:14					22:29	26	06:45 (38)			
Potential sun hours	221		260			365			432		521			547		
Total, worst case				86			126					247			944	
Sun reduction				0,50			0,50					0,50			0,50	
Oper. time red.				0,80			0,80					0,80			0,80	
Wind dir. red.				0,73			0,71					0,58			0,58	
Total reduction				0,29			0,28					0,23			0,23	
Total, real				25			36					58			220	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AF - Brusalivegen 215

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July			August	September			October			November	December
1	04:32		06:18 (38)	05:24	06:33			07:39		08:23 (84)	07:51	09:00
	22:48	33	06:51 (38)	22:01	20:40			19:13	13	08:36 (84)	16:49	15:52
2	04:33		06:19 (38)	05:27	06:35			07:42		08:22 (84)	07:54	09:01
	22:48	33	06:52 (38)	21:58	20:37			19:10	14	08:36 (84)	16:47	15:50
3	04:34		06:18 (38)	05:29	06:38			07:44		08:21 (84)	07:56	09:03
	22:47	33	06:51 (38)	21:56	20:34			19:07	14	08:35 (84)	16:44	15:49
4	04:35		06:18 (38)	05:31	06:40			07:46		08:22 (84)	07:59	09:05
	22:46	33	06:51 (38)	21:54	20:31			19:05	13	08:35 (84)	16:42	15:48
5	04:37		06:19 (38)	05:33	06:42			07:48		08:22 (84)	08:01	09:07
	22:46	33	06:52 (38)	21:51	20:28			19:02	12	08:34 (84)	16:39	15:47
6	04:38		06:21 (38)	05:35	06:44			07:51		08:23 (84)	08:03	09:09
	22:45	32	06:53 (38)	21:49	20:25			18:59	9	08:32 (84)	16:37	15:47
7	04:39		06:22 (38)	05:38	06:47			07:53			08:06	09:10
	22:44	31	06:53 (38)	21:47	20:23			18:56			16:35	15:46
8	04:40		06:23 (38)	05:40	06:49			07:55			08:08	09:12
	22:43	30	06:53 (38)	21:44	20:20			18:53			16:32	15:45
9	04:42		06:24 (38)	05:42	06:51			07:57			08:11	09:13
	22:42	29	06:53 (38)	21:42	20:17			18:50			16:30	15:44
10	04:43		06:25 (38)	05:44	06:53			08:00			08:13	09:15
	22:40	28	06:53 (38)	21:39	20:14			18:48			16:28	15:44
11	04:45		06:26 (38)	05:46	06:55			08:02		08:54 (85)	08:15	09:16
	22:39	28	06:54 (38)	21:37	20:11			18:45	7	09:01 (85)	16:26	15:43
12	04:46		06:27 (38)	05:49	06:58			08:04		08:51 (85)	08:18	09:17
	22:38	27	06:54 (38)	21:34	20:08			18:42	12	09:03 (85)	16:24	15:43
13	04:48		06:28 (38)	05:51	07:00			08:07		08:51 (85)	08:20	09:19
	22:36	26	06:54 (38)	21:32	20:05			18:39	13	09:04 (85)	16:22	15:43
14	04:49		06:30 (38)	05:53	07:02			08:09		08:49 (85)	08:22	09:20
	22:35	24	06:54 (38)	21:29	20:02			18:36	15	09:04 (85)	16:19	15:43
15	04:51		06:31 (38)	05:55	07:04			08:11		08:49 (85)	08:25	09:21
	22:34	23	06:54 (38)	21:26	19:59			18:34	15	09:04 (85)	16:17	15:42
16	04:53		06:33 (38)	05:58	07:06			08:14		08:49 (85)	08:27	09:22
	22:32	22	06:55 (38)	21:24	19:57			18:31	15	09:04 (85)	16:15	15:42
17	04:54		06:33 (38)	06:00	07:09			08:16		08:50 (85)	08:29	09:23
	22:30	21	06:54 (38)	21:21	19:54			18:28	14	09:04 (85)	16:14	15:42
18	04:56		06:35 (38)	06:02	07:11			08:18		08:50 (85)	08:32	09:24
	22:29	20	06:55 (38)	21:18	19:51			18:25	12	09:02 (85)	16:12	15:42
19	04:58		06:37 (38)	06:04	07:13			08:21		08:53 (85)	08:34	09:25
	22:27	18	06:55 (38)	21:16	19:48			18:23	8	09:01 (85)	16:10	15:43
20	05:00		06:38 (38)	06:07	07:15			08:23		08:55 (85)	08:36	09:25
	22:25	16	06:54 (38)	21:13	19:45			18:20	3	08:58 (85)	16:08	15:43
21	05:02		06:39 (38)	06:09	07:17			08:25			08:39	09:26
	22:23	15	06:54 (38)	21:10	19:42			18:17			16:06	15:43
22	05:04		06:41 (38)	06:11	07:20			08:28			08:41	09:27
	22:22	13	06:54 (38)	21:08	19:39			18:15			16:04	15:44
23	05:06		06:42 (38)	06:13	07:22			08:30			08:43	09:27
	22:20	11	06:53 (38)	21:05	19:36			18:12			16:03	15:44
24	05:08		06:44 (38)	06:15	07:24			08:32			08:45	09:28
	22:18	9	06:53 (38)	21:02	19:33			18:09			16:01	15:45
25	05:10		06:45 (38)	06:18	07:26			07:35			08:47	09:28
	22:16	8	06:53 (38)	20:59	19:30			17:07			16:00	15:46
26	05:12		06:47 (38)	06:20	07:28			07:37			08:49	09:28
	22:14	6	06:53 (38)	20:57	19:28			17:04			15:58	15:46
27	05:14		06:49 (38)	06:22	07:31			07:39			08:52	09:28
	22:12	3	06:52 (38)	20:54	19:25			17:02			15:57	15:47
28	05:16		06:51 (38)	06:24	07:33		08:29 (84)	07:42			08:54	09:28
	22:10	1	06:52 (38)	20:51	19:22	3	08:32 (84)	16:59			15:55	15:48
29	05:18			06:27	07:35		08:25 (84)	07:44			08:56	09:28
	22:07			20:48	19:19	9	08:34 (84)	16:56			15:54	15:49
30	05:20			06:29	07:37		08:23 (84)	07:47			08:58	09:28
	22:05			20:45	19:16	12	08:35 (84)	16:54			15:53	15:50
31	05:22			06:31				07:49				09:28
	22:03			20:43				16:51				15:51
Potential sun hours	545			478	386			319			236	200
Total, worst case		606				24			189			
Sun reduction		0,50				0,50			0,50			
Oper. time red.		0,80				0,80			0,80			
Wind dir. red.		0,58				0,70			0,72			
Total reduction		0,23				0,28			0,29			
Total, real		141				7			54			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May		June	
1	09:28	08:46		07:35	08:11 (84)	07:07	05:44	07:08 (38)	04:40	06:45 (38)
	15:53	16:56		18:05	6 08:17 (84)	20:17	21:26	1 07:09 (38)	22:30	32 07:17 (38)
2	09:27	08:43		07:33	08:08 (84)	07:04	05:42	07:06 (38)	04:39	06:46 (38)
	15:54	16:59		18:07	11 08:19 (84)	20:19	21:28	6 07:12 (38)	22:32	31 07:17 (38)
3	09:27	08:41		07:30	08:06 (84)	07:01	05:39	07:04 (38)	04:38	06:46 (38)
	15:56	17:01		18:10	13 08:19 (84)	20:21	21:31	9 07:13 (38)	22:33	31 07:17 (38)
4	09:26	08:39		07:27	08:05 (84)	06:58	05:37	07:02 (38)	04:36	06:47 (38)
	15:57	17:04		18:12	14 08:19 (84)	20:24	21:33	13 07:15 (38)	22:35	29 07:16 (38)
5	09:26	08:37		07:24	08:05 (84)	06:55	05:34	07:00 (38)	04:35	06:48 (38)
	15:59	17:06		18:14	14 08:19 (84)	20:26	21:35	16 07:16 (38)	22:36	29 07:17 (38)
6	09:25	08:34		07:21	08:05 (84)	06:53	05:32	06:58 (38)	04:34	06:49 (38)
	16:00	17:09		18:17	13 08:18 (84)	20:28	21:37	19 07:17 (38)	22:38	27 07:16 (38)
7	09:24	08:32		07:19	08:05 (84)	06:50	05:29	06:55 (38)	04:33	06:49 (38)
	16:02	17:11		18:19	12 08:17 (84)	20:31	21:40	22 07:17 (38)	22:39	27 07:16 (38)
8	09:24	08:30		07:16	08:06 (84)	06:47	05:27	06:54 (38)	04:32	06:49 (38)
	16:04	17:14		18:21	10 08:16 (84)	20:33	21:42	24 07:18 (38)	22:40	26 07:15 (38)
9	09:23	08:27		07:13	08:08 (84)	06:44	05:24	06:52 (38)	04:31	06:50 (38)
	16:06	17:16		18:24	5 08:13 (84)	20:35	21:44	27 07:19 (38)	22:42	26 07:16 (38)
10	09:22	08:25		07:10		06:41	05:22	06:50 (38)	04:31	06:51 (38)
	16:07	17:18		18:26		20:37	21:46	29 07:19 (38)	22:43	24 07:15 (38)
11	09:21	08:23		07:07		06:38	05:20	06:48 (38)	04:30	06:52 (38)
	16:09	17:21		18:28		20:40	21:49	32 07:20 (38)	22:44	23 07:15 (38)
12	09:20	08:20		07:04		06:36	05:17	06:46 (38)	04:29	06:52 (38)
	16:11	17:23		18:31		20:42	21:51	34 07:20 (38)	22:45	22 07:14 (38)
13	09:18	08:18		07:02		06:33	05:15	06:45 (38)	04:29	06:53 (38)
	16:13	17:26		18:33		20:44	21:53	35 07:20 (38)	22:46	21 07:14 (38)
14	09:17	08:15		06:59		06:30	05:13	06:43 (38)	04:28	06:53 (38)
	16:15	17:28		18:35		20:47	21:55	37 07:20 (38)	22:46	22 07:15 (38)
15	09:16	08:13	08:44 (85)	06:56		06:27	05:11	06:41 (38)	04:28	06:53 (38)
	16:17	17:31	6 08:50 (85)	18:38		20:49	21:57	39 07:20 (38)	22:47	21 07:14 (38)
16	09:14	08:10	08:42 (85)	06:53		06:24	05:09	06:41 (38)	04:28	06:54 (38)
	16:19	17:33	10 08:52 (85)	18:40		20:51	22:00	39 07:20 (38)	22:48	20 07:14 (38)
17	09:13	08:07	08:40 (85)	06:50		06:22	05:06	06:40 (38)	04:27	06:54 (38)
	16:21	17:36	13 08:53 (85)	18:42		20:54	22:02	40 07:20 (38)	22:48	20 07:14 (38)
18	09:12	08:05	08:40 (85)	06:47		06:19	05:04	06:41 (38)	04:27	06:55 (38)
	16:24	17:38	14 08:54 (85)	18:45		20:56	22:04	40 07:21 (38)	22:49	19 07:14 (38)
19	09:10	08:02	08:39 (85)	06:44		06:16	05:02	06:41 (38)	04:27	06:55 (38)
	16:26	17:41	15 08:54 (85)	18:47		20:58	22:06	40 07:21 (38)	22:49	19 07:14 (38)
20	09:08	08:00	08:39 (85)	06:42		06:13	05:00	06:41 (38)	04:27	06:55 (38)
	16:28	17:43	15 08:54 (85)	18:49		21:00	22:08	39 07:20 (38)	22:50	19 07:14 (38)
21	09:07	07:57	08:39 (85)	06:39		06:11	04:58	06:41 (38)	04:27	06:55 (38)
	16:30	17:46	14 08:53 (85)	18:52		21:03	22:10	39 07:20 (38)	22:50	19 07:14 (38)
22	09:05	07:54	08:39 (85)	06:36		06:08	04:56	06:41 (38)	04:27	06:56 (38)
	16:32	17:48	13 08:52 (85)	18:54		21:05	22:12	39 07:20 (38)	22:50	19 07:15 (38)
23	09:03	07:52	08:41 (85)	06:33		06:05	04:55	06:41 (38)	04:28	06:56 (38)
	16:35	17:50	11 08:52 (85)	18:56		21:07	22:14	39 07:20 (38)	22:50	19 07:15 (38)
24	09:02	07:49	08:42 (85)	06:30		06:02	04:53	06:42 (38)	04:28	06:56 (38)
	16:37	17:53	8 08:50 (85)	18:58		21:10	22:16	38 07:20 (38)	22:50	19 07:15 (38)
25	09:00	07:46		06:27		06:00	04:51	06:42 (38)	04:28	06:57 (38)
	16:39	17:55		19:01		21:12	22:18	37 07:19 (38)	22:50	19 07:16 (38)
26	08:58	07:44		06:24		05:57	04:49	06:43 (38)	04:29	06:56 (38)
	16:42	17:58		19:03		21:14	22:20	37 07:20 (38)	22:50	20 07:16 (38)
27	08:56	07:41		06:21		05:54	04:48	06:43 (38)	04:29	06:56 (38)
	16:44	18:00		19:05		21:17	22:22	36 07:19 (38)	22:50	21 07:17 (38)
28	08:54	07:38		06:18		05:52	04:46	06:43 (38)	04:30	06:56 (38)
	16:47	18:02		19:08		21:19	22:24	36 07:19 (38)	22:50	21 07:17 (38)
29	08:52			07:16		05:49	04:44	06:44 (38)	04:31	06:56 (38)
	16:49			20:10		21:21	22:25	35 07:19 (38)	22:49	21 07:17 (38)
30	08:50			07:13		05:47	04:43	06:45 (38)	04:32	06:56 (38)
	16:51			20:12		21:24	22:27	34 07:19 (38)	22:49	22 07:18 (38)
31	08:48			07:10			04:41	06:44 (38)		
	16:54			20:14			22:29	34 07:18 (38)		
Potential sun hours	221	260		365		432	521		547	
Total, worst case			119		98			945		688
Sun reduction			0,50		0,50			0,50		0,50
Oper. time red.			0,80		0,80			0,80		0,80
Wind dir. red.			0,74		0,72			0,59		0,59
Total reduction			0,29		0,29			0,24		0,24
Total, real			35		28			224		163

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AG - Brusalivegen 219

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September	October		November	December
1	04:32	06:56 (38)	05:24	06:57 (38)	06:33	07:39		07:51	09:00
	22:48	23 07:19 (38)	22:01	33 07:30 (38)	20:40	19:13		16:49	15:52
2	04:33	06:56 (38)	05:27	06:59 (38)	06:35	07:42		07:54	09:01
	22:48	24 07:20 (38)	21:58	31 07:30 (38)	20:37	19:10		16:47	15:50
3	04:34	06:55 (38)	05:29	07:01 (38)	06:38	07:44		07:56	09:03
	22:47	25 07:20 (38)	21:56	28 07:29 (38)	20:34	19:07		16:44	15:49
4	04:35	06:55 (38)	05:31	07:03 (38)	06:40	07:46		07:59	09:05
	22:46	25 07:20 (38)	21:54	26 07:29 (38)	20:31	19:05		16:42	15:48
5	04:37	06:54 (38)	05:33	07:05 (38)	06:42	07:48	08:44 (84)	08:01	09:07
	22:46	27 07:21 (38)	21:51	23 07:28 (38)	20:28	19:02	8 08:52 (84)	16:39	15:47
6	04:38	06:55 (38)	05:35	07:06 (38)	06:44	07:51	08:42 (84)	08:03	09:09
	22:45	28 07:23 (38)	21:49	21 07:27 (38)	20:25	18:59	11 08:53 (84)	16:37	15:47
7	04:39	06:55 (38)	05:38	07:08 (38)	06:47	07:53	08:41 (84)	08:06	09:10
	22:44	28 07:23 (38)	21:47	18 07:26 (38)	20:23	18:56	13 08:54 (84)	16:35	15:46
8	04:40	06:54 (38)	05:40	07:10 (38)	06:49	07:55	08:40 (84)	08:08	09:12
	22:43	30 07:24 (38)	21:44	15 07:25 (38)	20:20	18:53	14 08:54 (84)	16:32	15:45
9	04:42	06:54 (38)	05:42	07:12 (38)	06:51	07:57	08:39 (84)	08:11	09:13
	22:42	30 07:24 (38)	21:42	12 07:24 (38)	20:17	18:50	15 08:54 (84)	16:30	15:44
10	04:43	06:53 (38)	05:44	07:13 (38)	06:53	08:00	08:40 (84)	08:13	09:15
	22:40	31 07:24 (38)	21:39	9 07:22 (38)	20:14	18:48	14 08:54 (84)	16:28	15:44
11	04:45	06:54 (38)	05:46	07:15 (38)	06:55	08:02	08:40 (84)	08:15	09:16
	22:39	32 07:26 (38)	21:37	5 07:20 (38)	20:11	18:45	13 08:53 (84)	16:26	15:43
12	04:46	06:53 (38)	05:49		06:58	08:04	08:42 (84)	08:18	09:17
	22:38	33 07:26 (38)	21:34		20:08	18:42	9 08:51 (84)	16:24	15:43
13	04:48	06:53 (38)	05:51		07:00	08:07	08:45 (84)	08:20	09:19
	22:36	33 07:26 (38)	21:32		20:05	18:39	4 08:49 (84)	16:22	15:43
14	04:49	06:53 (38)	05:53		07:02	08:09		08:22	09:20
	22:35	34 07:27 (38)	21:29		20:02	18:36		16:19	15:43
15	04:51	06:52 (38)	05:55		07:04	08:11		08:25	09:21
	22:34	35 07:27 (38)	21:26		19:59	18:34		16:17	15:42
16	04:53	06:52 (38)	05:58		07:06	08:14		08:27	09:22
	22:32	36 07:28 (38)	21:24		19:57	18:31		16:15	15:42
17	04:54	06:52 (38)	06:00		07:09	08:16	09:17 (85)	08:29	09:23
	22:30	36 07:28 (38)	21:21		19:54	18:28	2 09:19 (85)	16:13	15:42
18	04:56	06:52 (38)	06:02		07:11	08:18	09:13 (85)	08:32	09:24
	22:29	37 07:29 (38)	21:18		19:51	18:25	9 09:22 (85)	16:12	15:42
19	04:58	06:52 (38)	06:04		07:13	08:21	09:12 (85)	08:34	09:25
	22:27	38 07:30 (38)	21:16		19:48	18:23	12 09:24 (85)	16:10	15:43
20	05:00	06:51 (38)	06:07		07:15	08:23	09:10 (85)	08:36	09:25
	22:25	38 07:29 (38)	21:13		19:45	18:20	14 09:24 (85)	16:08	15:43
21	05:02	06:51 (38)	06:09		07:17	08:25	09:10 (85)	08:39	09:26
	22:23	39 07:30 (38)	21:10		19:42	18:17	15 09:25 (85)	16:06	15:43
22	05:04	06:52 (38)	06:11		07:19	08:28	09:09 (85)	08:41	09:27
	22:22	39 07:31 (38)	21:08		19:39	18:15	15 09:24 (85)	16:04	15:44
23	05:06	06:51 (38)	06:13		07:22	08:30	09:09 (85)	08:43	09:27
	22:20	39 07:30 (38)	21:05		19:36	18:12	15 09:24 (85)	16:03	15:44
24	05:08	06:51 (38)	06:15		07:24	08:32	09:09 (85)	08:45	09:28
	22:18	40 07:31 (38)	21:02		19:33	18:09	14 09:23 (85)	16:01	15:45
25	05:10	06:51 (38)	06:18		07:26	07:35	08:10 (85)	08:47	09:28
	22:16	40 07:31 (38)	20:59		19:30	17:07	13 08:23 (85)	16:00	15:46
26	05:12	06:51 (38)	06:20		07:28	07:37	08:13 (85)	08:49	09:28
	22:14	40 07:31 (38)	20:57		19:28	17:04	9 08:22 (85)	15:58	15:46
27	05:14	06:52 (38)	06:22		07:31	07:39	08:14 (85)	08:52	09:28
	22:12	39 07:31 (38)	20:54		19:25	17:02	5 08:19 (85)	15:57	15:47
28	05:16	06:52 (38)	06:24		07:33	07:42		08:54	09:28
	22:10	39 07:31 (38)	20:51		19:22	16:59		15:55	15:48
29	05:18	06:52 (38)	06:27		07:35	07:44		08:56	09:28
	22:07	38 07:30 (38)	20:48		19:19	16:56		15:54	15:49
30	05:20	06:54 (38)	06:29		07:37	07:47		08:58	09:28
	22:05	36 07:30 (38)	20:45		19:16	16:54		15:53	15:50
31	05:22	06:55 (38)	06:31			07:49			09:28
	22:03	35 07:30 (38)	20:43			16:51			15:51
Potential sun hours	545		478		386	319		236	200
Total, worst case		1047		221			224		
Sun reduction		0,50		0,50			0,50		
Oper. time red.		0,80		0,80			0,80		
Wind dir. red.		0,59		0,59			0,73		
Total reduction		0,24		0,24			0,29		
Total, real		248		52			65		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June
1	09:28	08:46		07:35		08:22 (22)	07:07	05:44	04:40
	15:53	16:56		18:05	23	08:45 (22)	20:17	21:26	22:31
2	09:28	08:44		07:33		08:21 (22)	07:04	05:41	04:39
	15:54	16:59		18:07	24	08:45 (22)	20:19	21:28	22:32
3	09:27	08:41		07:30		08:21 (22)	07:01	05:39	04:37
	15:56	17:01		18:10	24	08:45 (22)	20:21	21:31	22:34
4	09:27	08:39		07:27		08:20 (22)	06:58	05:36	04:36
	15:57	17:04		18:12	25	08:45 (22)	20:24	21:33	22:35
5	09:26	08:37		07:24		08:20 (22)	06:55	05:34	04:35
	15:59	17:06		18:14	24	08:44 (22)	20:26	21:35	22:37
6	09:25	08:35		07:22		08:20 (22)	06:53	05:31	04:34
	16:00	17:09		18:17	24	08:44 (22)	20:28	21:38	22:38
7	09:25	08:32		07:19		08:20 (22)	06:50	05:29	04:33
	16:02	17:11		18:19	23	08:43 (22)	20:31	21:40	22:39
8	09:24	08:30		07:16		08:21 (22)	06:47	05:27	04:32
	16:04	17:13		18:21	20	08:41 (22)	20:33	21:42	22:41
9	09:23	08:28	09:21 (2)	07:13		08:22 (22)	06:44	05:24	04:31
	16:05	17:16	2 09:23 (2)	18:24	19	08:41 (22)	20:35	21:44	22:42
10	09:22	08:25	09:18 (2)	07:10		08:24 (22)	06:41	05:22	04:30
	16:07	17:18	10 09:28 (2)	18:26	15	08:39 (22)	20:38	21:47	22:43
11	09:21	08:23	09:16 (2)	07:07		08:26 (22)	06:38	05:20	04:30
	16:09	17:21	13 09:29 (2)	18:28	10	08:36 (22)	20:40	21:49	22:44
12	09:20	08:20	09:14 (2)	07:05			06:36	05:17	04:29
	16:11	17:23	16 09:30 (2)	18:31			20:42	21:51	22:45
13	09:19	08:18	09:13 (2)	07:02			06:33	05:15	04:29
	16:13	17:26	17 09:30 (2)	18:33			20:44	21:53	22:46
14	09:17	08:15	09:13 (2)	06:59		07:37 (24)	06:30	05:13	04:28
	16:15	17:28	19 09:32 (2)	18:35	4	07:41 (24)	20:47	21:55	22:47
15	09:16	08:13	09:13 (2)	06:56		07:33 (24)	06:27	05:11	04:28
	16:17	17:31	19 09:32 (2)	18:38	11	07:44 (24)	20:49	21:58	22:47
16	09:15	08:10	09:12 (2)	06:53		07:31 (24)	06:24	05:08	04:27
	16:19	17:33	19 09:31 (2)	18:40	15	07:46 (24)	20:51	22:00	22:48
17	09:13	08:08	09:13 (2)	06:50		07:30 (24)	06:22	05:06	04:27
	16:21	17:36	19 09:32 (2)	18:42	16	07:46 (24)	20:54	22:02	22:49
18	09:12	08:05	09:13 (2)	06:47		07:29 (24)	06:19	05:04	04:27
	16:23	17:38	18 09:31 (2)	18:45	18	07:47 (24)	20:56	22:04	22:49
19	09:10	08:02	09:14 (2)	06:44		07:28 (24)	06:16	05:02	04:27
	16:26	17:41	16 09:30 (2)	18:47	19	07:47 (24)	20:58	22:06	22:50
20	09:09	08:00	09:14 (2)	06:42		07:27 (24)	06:13	05:00	04:27
	16:28	17:43	15 09:29 (2)	18:49	19	07:46 (24)	21:01	22:08	22:50
21	09:07	07:57	09:15 (2)	06:39		07:28 (24)	06:11	04:58	04:27
	16:30	17:46	12 09:27 (2)	18:52	19	07:47 (24)	21:03	22:10	22:50
22	09:05	07:54	09:19 (2)	06:36		07:28 (24)	06:08	04:56	04:27
	16:32	17:48	6 09:25 (2)	18:54	18	07:46 (24)	21:05	22:12	22:50
23	09:04	07:52		06:33		07:28 (24)	06:05	04:54	04:27
	16:35	17:50		18:56	17	07:45 (24)	21:08	22:14	22:51
24	09:02	07:49	08:32 (22)	06:30		07:29 (24)	06:02	04:53	04:28
	16:37	17:53	3 08:35 (22)	18:59	14	07:43 (24)	21:10	22:16	22:51
25	09:00	07:46	08:28 (22)	06:27		07:31 (24)	06:00	04:51	04:28
	16:39	17:55	12 08:40 (22)	19:01	10	07:41 (24)	21:12	22:18	22:51
26	08:58	07:44	08:25 (22)	06:24			05:57	04:49	04:29
	16:42	17:58	16 08:41 (22)	19:03			21:14	22:20	22:50
27	08:56	07:41	08:23 (22)	06:21			05:54	04:47	04:29
	16:44	18:00	19 08:42 (22)	19:05			21:17	22:22	22:50
28	08:54	07:38	08:23 (22)	06:18			05:52	04:46	04:30
	16:46	18:02	21 08:44 (22)	19:08			21:19	22:24	22:50
29	08:52			07:16			05:49	04:44	04:31
	16:49			20:10			21:21	22:26	22:50
30	08:50			07:13			05:47	04:43	04:31
	16:51			20:12			21:24	22:27	22:49
31	08:48			07:10				04:41	
	16:54			20:15				22:29	
Potential sun hours	221	260		365			432	521	547
Total, worst case			272		411				
Sun reduction			0,50		0,50				
Oper. time red.			0,80		0,80				
Wind dir. red.			0,73		0,71				
Total reduction			0,29		0,28				
Total, real			80		117				

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AH - Buevegen 1463

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July		August		September			October			November			December	
1	04:32		05:24		06:33			07:40			07:52		08:47 (2)	09:00	
	22:49		22:01		20:40			19:13			16:49	9	08:56 (2)	15:51	
2	04:33		05:26		06:35			07:42		09:06 (22)	07:54			09:02	
	22:48		21:59		20:37			19:10	6	09:12 (22)	16:46			15:50	
3	04:34		05:29		06:38			07:44		09:02 (22)	07:56			09:04	
	22:47		21:56		20:34			19:07	13	09:15 (22)	16:44			15:49	
4	04:35		05:31		06:40			07:46		09:00 (22)	07:59			09:05	
	22:47		21:54		20:31			19:05	17	09:17 (22)	16:42			15:48	
5	04:36		05:33		06:42			07:48		08:58 (22)	08:01			09:07	
	22:46		21:52		20:28			19:02	20	09:18 (22)	16:39			15:47	
6	04:38		05:35		06:44			07:51		08:57 (22)	08:04			09:09	
	22:45		21:49		20:26			18:59	22	09:19 (22)	16:37			15:46	
7	04:39		05:37		06:47			07:53		08:57 (22)	08:06			09:10	
	22:44		21:47		20:23			18:56	23	09:20 (22)	16:35			15:46	
8	04:40		05:40		06:49			07:55		08:55 (22)	08:08			09:12	
	22:43		21:44		20:20			18:53	24	09:19 (22)	16:32			15:45	
9	04:41		05:42		06:51			07:58		08:55 (22)	08:11			09:14	
	22:42		21:42		20:17			18:50	24	09:19 (22)	16:30			15:44	
10	04:43		05:44		06:53			08:00		08:55 (22)	08:13			09:15	
	22:41		21:39		20:14			18:48	24	09:19 (22)	16:28			15:44	
11	04:44		05:46		06:55			08:02		08:54 (22)	08:16			09:16	
	22:39		21:37		20:11			18:45	25	09:19 (22)	16:26			15:43	
12	04:46		05:49		06:58			08:04		08:55 (22)	08:18			09:18	
	22:38		21:34		20:08			18:42	23	09:18 (22)	16:24			15:43	
13	04:48		05:51		07:00			08:07		08:55 (22)	08:20			09:19	
	22:37		21:32		20:05			18:39	22	09:17 (22)	16:21			15:43	
14	04:49		05:53		07:02			08:09		08:55 (22)	08:23			09:20	
	22:35		21:29		20:02			18:36	21	09:16 (22)	16:19			15:42	
15	04:51		05:55		07:04			08:11		08:57 (22)	08:25			09:21	
	22:34		21:26		20:00			18:34	18	09:15 (22)	16:17			15:42	
16	04:53		05:58		07:06			08:14		08:58 (22)	08:27			09:22	
	22:32		21:24		19:57			18:31	15	09:13 (22)	16:15			15:42	
17	04:54		06:00		07:09			08:16		09:01 (22)	08:30			09:23	
	22:31		21:21		19:54			18:28	10	09:11 (22)	16:13			15:42	
18	04:56		06:02		07:11		08:19 (24)	08:18			08:32			09:24	
	22:29		21:19		19:51	9	08:28 (24)	18:25			16:11			15:42	
19	04:58		06:04		07:13		08:16 (24)	08:21			08:34			09:25	
	22:27		21:16		19:48	13	08:29 (24)	18:23			16:10			15:43	
20	05:00		06:06		07:15		08:14 (24)	08:23		09:48 (2)	08:37			09:26	
	22:25		21:13		19:45	16	08:30 (24)	18:20	9	09:57 (2)	16:08			15:43	
21	05:02		06:09		07:17		08:14 (24)	08:25		09:46 (2)	08:39			09:26	
	22:24		21:10		19:42	17	08:31 (24)	18:17	13	09:59 (2)	16:06			15:43	
22	05:04		06:11		07:20		08:13 (24)	08:28		09:44 (2)	08:41			09:27	
	22:22		21:08		19:39	18	08:31 (24)	18:15	16	10:00 (2)	16:04			15:44	
23	05:06		06:13		07:22		08:12 (24)	08:30		09:44 (2)	08:43			09:27	
	22:20		21:05		19:36	19	08:31 (24)	18:12	17	10:01 (2)	16:03			15:44	
24	05:08		06:15		07:24		08:12 (24)	08:32		09:42 (2)	08:45			09:28	
	22:18		21:02		19:33	19	08:31 (24)	18:09	19	10:01 (2)	16:01			15:45	
25	05:10		06:18		07:26		08:11 (24)	07:35		08:42 (2)	08:48			09:28	
	22:16		20:59		19:31	19	08:30 (24)	17:07	19	09:01 (2)	15:59			15:45	
26	05:12		06:20		07:28		08:12 (24)	07:37		08:43 (2)	08:50			09:28	
	22:14		20:57		19:28	17	08:29 (24)	17:04	19	09:02 (2)	15:58			15:46	
27	05:14		06:22		07:31		08:13 (24)	07:40		08:42 (2)	08:52			09:28	
	22:12		20:54		19:25	15	08:28 (24)	17:02	19	09:01 (2)	15:57			15:47	
28	05:16		06:24		07:33		08:14 (24)	07:42		08:43 (2)	08:54			09:29	
	22:10		20:51		19:22	12	08:26 (24)	16:59	18	09:01 (2)	15:55			15:48	
29	05:18		06:27		07:35		08:15 (24)	07:44		08:44 (2)	08:56			09:29	
	22:08		20:48		19:19	8	08:23 (24)	16:56	17	09:01 (2)	15:54			15:49	
30	05:20		06:29		07:37			07:47		08:44 (2)	08:58			09:28	
	22:05		20:45		19:16			16:54	15	08:59 (2)	15:53			15:50	
31	05:22		06:31					07:49		08:45 (2)				09:28	
	22:03		20:43					16:51	13	08:58 (2)				15:51	
Potential sun hours	545		478		386			319			236			200	
Total, worst case						182			501			9			
Sun reduction						0,50			0,50			0,50			
Oper. time red.						0,80			0,80			0,80			
Wind dir. red.						0,70			0,73			0,74			
Total reduction						0,28			0,29			0,29			
Total, real						51			146			3			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AI - Buevegen 1288

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
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Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AJ - Buevegen 1272

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
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13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:06	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Licensed user:
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+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AK - Buevegen 1461

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:35	08:24 (22)	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05 23	08:47 (22)	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	08:23 (22)	07:04	05:41	04:39	04:33	05:26	06:35	07:42	07:54	09:02
	15:54	16:59	18:07 24	08:47 (22)	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	15:50
3	09:27	08:41	07:30	08:23 (22)	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10 24	08:47 (22)	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	15:49
4	09:27	08:39	07:27	08:23 (22)	06:58	05:36	04:36	04:35	05:31	06:40	07:46 09:05 (22)	07:59	09:05
	15:57	17:04	18:12 23	08:46 (22)	20:24	21:33	22:35	22:47	21:54	20:31	19:05 11 09:16 (22)	16:42	15:48
5	09:26	08:37	07:24	08:23 (22)	06:55	05:34	04:35	04:36	05:33	06:42	07:48 09:02 (22)	08:01	09:07
	15:59	17:06	18:14 22	08:45 (22)	20:26	21:35	22:37	22:46	21:52	20:28	19:02 16 09:18 (22)	16:39	15:47
6	09:25	08:35	07:22	08:23 (22)	06:53	05:31	04:34	04:38	05:35	06:44	07:51 09:00 (22)	08:04	09:09
	16:00	17:09	18:17 22	08:45 (22)	20:28	21:38	22:38	22:45	21:49	20:26	18:59 19 09:19 (22)	16:37	15:46
7	09:25	08:32	07:19	08:24 (22)	06:50	05:29	04:33	04:39	05:37	06:47	07:53 09:00 (22)	08:06	09:10
	16:02	17:11	18:19 19	08:43 (22)	20:31	21:40	22:39	22:44	21:47	20:23	18:56 20 09:20 (22)	16:35	15:46
8	09:24	08:30	07:16	08:24 (22)	06:47	05:27	04:32	04:40	05:40	06:49	07:55 08:58 (22)	08:08	09:12
	16:04	17:13	18:21 18	08:42 (22)	20:33	21:42	22:41	22:43	21:44	20:20	18:53 23 09:21 (22)	16:32	15:45
9	09:23	08:28	07:13	08:27 (22)	06:44	05:24	04:31	04:41	05:42	06:51	07:58 08:57 (22)	08:11	09:14
	16:05	17:16	18:24 13	08:40 (22)	20:35	21:44	22:42	22:42	21:42	20:17	18:50 23 09:20 (22)	16:30	15:44
10	09:22	08:25	07:10	08:30 (22)	06:41	05:22	04:30	04:43	05:44	06:53	08:00 08:57 (22)	08:13	09:15
	16:07	17:18	18:26 7	08:37 (22)	20:38	21:47	22:43	22:41	21:39	20:14	18:48 24 09:21 (22)	16:28	15:44
11	09:21	08:23	07:07		06:38	05:20	04:30	04:44	05:46	06:55	08:02 08:57 (22)	08:16	09:16
	16:09	17:21	18:28		20:40	21:49	22:44	22:39	21:37	20:11	18:45 23 09:20 (22)	16:26	15:43
12	09:20	08:20	07:05		06:36	05:17	04:29	04:46	05:49	06:58	08:04 08:57 (22)	08:18	09:18
	16:11	17:23	18:31		20:42	21:51	22:45	22:38	21:34	20:08	18:42 24 09:21 (22)	16:24	15:43
13	09:19	08:18	07:02	07:40 (24)	06:33	05:15	04:29	04:48	05:51	07:00	08:07 08:57 (22)	08:20	09:19
	16:13	17:26	18:33 5	07:45 (24)	20:44	21:53	22:46	22:37	21:32	20:05	18:39 23 09:20 (22)	16:21	15:43
14	09:17	08:15	06:59	07:36 (24)	06:30	05:13	04:28	04:49	05:53	07:02	08:09 08:57 (22)	08:23	09:20
	16:15	17:28	18:35 11	07:47 (24)	20:47	21:55	22:47	22:35	21:29	20:02	18:36 21 09:18 (22)	16:19	15:42
15	09:16	08:13	06:56	07:34 (24)	06:27	05:11	04:28	04:51	05:55	07:04	08:11 08:58 (22)	08:25	09:21
	16:17	17:31	18:38 15	07:49 (24)	20:49	21:58	22:47	22:34	21:26	20:00	18:34 20 09:18 (22)	16:17	15:42
16	09:15	08:10	06:53	07:33 (24)	06:24	05:08	04:27	04:53	05:58	07:06	08:14 08:58 (22)	08:27	09:22
	16:19	17:33	18:40 16	07:49 (24)	20:51	22:00	22:48	22:32	21:24	19:57	18:31 18 09:16 (22)	16:15	15:42
17	09:13	08:08	06:50	07:32 (24)	06:22	05:06	04:27	04:54	06:00	07:09	08:16 09:00 (22)	08:30	09:23
	16:21	17:36	18:42 18	07:50 (24)	20:54	22:02	22:49	22:31	21:21	19:54	18:28 15 09:15 (22)	16:13	15:42
18	09:12	08:05	06:47	07:31 (24)	06:19	05:04	04:27	04:56	06:02	07:11	08:18 09:02 (22)	08:32	09:24
	16:23	17:38	18:45 19	07:50 (24)	20:56	22:04	22:49	22:29	21:19	19:51	18:25 10 09:12 (22)	16:11	15:42
19	09:10	08:02	06:44	07:31 (24)	06:16	05:02	04:27	04:58	06:04	07:13 08:22 (24)	08:21	08:34	09:25
	16:26	17:41	18:47 18	07:49 (24)	20:58	22:06	22:50	22:27	21:16	19:48 7 08:29 (24)	18:23	16:10	15:43
20	09:09	08:00	06:42	07:30 (24)	06:13	05:00	04:27	05:00	06:06	07:15 08:19 (24)	08:23	08:37	09:26
	16:28	17:43	18:49 19	07:49 (24)	21:01	22:08	22:50	22:25	21:13	19:45 12 08:31 (24)	18:20	16:08	15:43
21	09:07	07:57	06:39	07:32 (24)	06:11	04:58	04:27	05:02	06:09	07:17 08:18 (24)	08:25	08:39	09:26
	16:30	17:46	18:52 17	07:49 (24)	21:03	22:10	22:50	22:24	21:10	19:42 15 08:33 (24)	18:17	16:06	15:43
22	09:05	07:54	06:36	07:32 (24)	06:08	04:56	04:27	05:04	06:11	07:20 08:16 (24)	08:28	08:41	09:27
	16:32	17:48	18:54 15	07:47 (24)	21:05	22:12	22:50	22:22	21:08	19:39 17 08:33 (24)	18:15	16:04	15:44
23	09:04	07:52	06:33	07:33 (24)	06:05	04:54	04:27	05:06	06:13	07:22 08:15 (24)	08:30	08:43	09:27
	16:35	17:50	18:56 13	07:46 (24)	21:08	22:14	22:51	22:20	21:05	19:36 18 08:33 (24)	18:12	16:03	15:44
24	09:02	07:49 08:30 (22)	06:30	07:35 (24)	06:02	04:53	04:28	05:08	06:15	07:24 08:14 (24)	08:32	08:45	09:28
	16:37	17:53 12 08:42 (22)	18:59 8	07:43 (24)	21:10	22:16	22:51	22:18	21:02	19:33 19 08:33 (24)	18:09	16:01	15:45
25	09:00	07:46 08:28 (22)	06:27		06:00	04:51	04:28	05:10	06:18	07:26 08:14 (24)	07:35	08:48	09:28
	16:39	17:55 15 08:43 (22)	19:01		21:12	22:18	22:51	22:16	20:59	19:31 18 08:32 (24)	17:07	15:59	15:45
26	08:58	07:44 08:26 (22)	06:24		05:57	04:49	04:29	05:12	06:20	07:28 08:14 (24)	07:37	08:50	09:28
	16:42	17:58 19 08:45 (22)	19:03		21:14	22:20	22:50	22:14	20:57	19:28 19 08:33 (24)	17:04	15:58	15:46
27	08:56	07:41 08:25 (22)	06:21		05:54	04:47	04:29	05:14	06:22	07:31 08:14 (24)	07:40	08:52	09:28
	16:44	18:00 20 08:45 (22)	19:05		21:17	22:22	22:50	22:12	20:54	19:25 18 08:32 (24)	17:02	15:57	15:47
28	08:54	07:38 08:25 (22)	06:18		05:52	04:46	04:30	05:16	06:24	07:33 08:15 (24)	07:42	08:54	09:29
	16:46	18:02 22 08:47 (22)	19:08		21:19	22:24	22:50	22:10	20:51	19:22 15 08:30 (24)	16:59	15:55	15:48
29	08:52		07:16		05:49	04:44	04:31	05:18	06:27	07:35 08:15 (24)	07:44	08:56	09:29
	16:49		20:10		21:21	22:26	22:50	22:08	20:48	19:19 13 08:28 (24)	16:56	15:54	15:49
30	08:50		07:13		05:47	04:43	04:31	05:20	06:29	07:37 08:18 (24)	07:47	08:58	09:28
	16:51		20:12		21:24	22:27	22:49	22:05	20:45	19:16 8 08:26 (24)	16:54	15:53	15:50
31	08:48		07:10			04:41		05:22	06:31		07:49		09:28
	16:54		20:15			22:29		22:03	20:43		16:51		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200	
Total, worst case		88	369						179	290			
Sun reduction		0,50	0,50						0,50	0,50			
Oper. time red.		0,80	0,80						0,80	0,80			
Wind dir. red.		0,73	0,71						0,70	0,73			
Total reduction		0,29	0,29						0,28	0,29			
Total, real		26	105						50	84			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AL - Buevegen 1270

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:37	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:18	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:16	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:40	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:29	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:25	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:32	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:52
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AM - Buevegen 1290

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AN - Buevegen 1292

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
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	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
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13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
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16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
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	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
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	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
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	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
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28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
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31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AO - Buevegen 1343

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
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	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
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	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
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	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
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	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
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	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:

19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AP - Buevegen 1496

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April	May	June	July	August	September	October		November	December
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	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54	09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56	09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59	09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:49		08:01	09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39	15:47
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	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37	15:46
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	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35	15:46
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	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30	15:44
10	09:22	08:25		07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13	09:15
	16:07	17:18		18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28	15:44
11	09:21	08:23	09:07 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16	09:16
	16:09	17:21	7 09:14 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26	15:43
12	09:20	08:20	09:04 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18	09:18
	16:11	17:23	12 09:16 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24	15:43
13	09:19	08:18	09:03 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20	09:19
	16:13	17:26	16 09:19 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21	15:43
14	09:17	08:15	09:02 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23	09:20
	16:15	17:28	17 09:19 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19	15:42
15	09:16	08:13	09:01 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25	09:21
	16:17	17:31	19 09:20 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17	15:42
16	09:15	08:10	09:00 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27	09:22
	16:19	17:33	20 09:20 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15	15:42
17	09:13	08:08	09:01 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30	09:23
	16:21	17:36	20 09:21 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13	15:42
18	09:12	08:05	09:00 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:36 (22)	08:32	09:24
	16:23	17:38	21 09:21 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	10 09:46 (22)	16:11	15:42
19	09:10	08:02	09:00 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:34 (22)	08:34	09:25
	16:26	17:41	20 09:20 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	14 09:48 (22)	16:10	15:42
20	09:09	08:00	09:00 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:32 (22)	08:37	09:26
	16:28	17:43	19 09:19 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	17 09:49 (22)	16:08	15:43
21	09:07	07:57	09:01 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:32 (22)	08:39	09:26
	16:30	17:46	17 09:18 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:50 (22)	16:06	15:43
22	09:05	07:55	09:02 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:30 (22)	08:41	09:27
	16:32	17:48	16 09:18 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	20 09:50 (22)	16:04	15:44
23	09:04	07:52	09:04 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:30 (22)	08:43	09:27
	16:35	17:50	12 09:16 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:50 (22)	16:03	15:44
24	09:02	07:49	09:06 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:31 (22)	08:45	09:28
	16:37	17:53	7 09:13 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	20 09:51 (22)	16:01	15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:30 (22)	08:48	09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	20 08:50 (22)	15:59	15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:31 (22)	08:50	09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	19 08:50 (22)	15:58	15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:30 (22)	08:52	09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	19 08:49 (22)	15:57	15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:31 (22)	08:54	09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	17 08:48 (22)	15:55	15:48
29	08:52			07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:33 (22)	08:56	09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15 08:48 (22)	15:54	15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:34 (22)	08:58	09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	11 08:45 (22)	15:53	15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:37 (22)		09:28
	16:54			20:15		22:29		22:03	20:43		16:51	6 08:43 (22)		15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236	199
Total, worst case			223									226		
Sun reduction			0,50									0,50		
Oper. time red.			0,80									0,80		
Wind dir. red.			0,74									0,74		
Total reduction			0,29									0,29		
Total, real			66									67		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AQ - Buevegen 1500

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April	May	June	July	August	September	October		November		December
1	09:28	08:46		09:41 (22)		08:28 (24)	07:07	05:44	04:40	04:32	05:24	06:33	07:39		07:52		09:00 (22)	09:00
	15:53	16:56	3	09:44 (22)	19	08:47 (24)	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	24	09:24 (22)	15:51
2	09:28	08:44		09:37 (22)		08:27 (24)	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54		09:01 (22)	09:02
	15:54	16:59	10	09:47 (22)	20	08:47 (24)	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46	23	09:24 (22)	15:50
3	09:27	08:41		09:35 (22)		08:27 (24)	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56		09:01 (22)	09:04
	15:56	17:01	15	09:50 (22)	20	08:47 (24)	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44	23	09:24 (22)	15:49
4	09:27	08:39		09:34 (22)		08:27 (24)	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59		09:02 (22)	09:05
	15:57	17:04	17	09:51 (22)	19	08:46 (24)	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42	22	09:24 (22)	15:48
5	09:26	08:37		09:33 (22)		08:28 (24)	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		09:02 (22)	09:07
	15:59	17:06	20	09:53 (22)	17	08:45 (24)	20:26	21:35	22:37	22:46	21:52	20:28	19:02	3	09:14 (24)	21	09:23 (22)	15:47
6	09:25	08:35		09:32 (22)		08:28 (24)	06:53	05:31	04:34	04:37	05:35	06:44	07:51		09:06 (24)		09:03 (22)	09:09
	16:00	17:08	21	09:53 (22)	16	08:44 (24)	20:28	21:38	22:38	22:45	21:49	20:26	18:59	11	09:17 (24)	19	09:22 (22)	15:46
7	09:25	08:32		09:31 (22)		08:29 (24)	06:50	05:29	04:33	04:39	05:37	06:47	07:53		09:05 (24)		09:05 (22)	09:10
	16:02	17:11	22	09:53 (22)	13	08:42 (24)	20:31	21:40	22:39	22:44	21:47	20:23	18:56	15	09:20 (24)	17	09:22 (22)	15:46
8	09:24	08:30		09:32 (22)		08:31 (24)	06:47	05:27	04:32	04:40	05:40	06:49	07:55		09:03 (24)		09:05 (22)	09:12
	16:04	17:13	22	09:54 (22)	8	08:39 (24)	20:33	21:42	22:41	22:43	21:44	20:20	18:53	17	09:20 (24)	15	09:20 (22)	15:45
9	09:23	08:28		09:31 (22)			06:44	05:24	04:31	04:41	05:42	06:51	07:58		09:02 (24)		09:08 (22)	09:14
	16:05	17:16	23	09:54 (22)			20:35	21:44	22:42	22:42	21:42	20:17	18:50	18	09:20 (24)	10	09:18 (22)	15:44
10	09:22	08:25		09:32 (22)			06:41	05:22	04:30	04:43	05:44	06:53	08:00		09:02 (24)		09:13 (22)	09:15
	16:07	17:18	23	09:55 (22)			20:38	21:47	22:43	22:41	21:39	20:14	18:48	19	09:21 (24)	1	09:14 (22)	15:44
11	09:21	08:23		09:31 (22)			06:38	05:20	04:30	04:44	05:46	06:55	08:02		09:01 (24)			09:16
	16:09	17:21	24	09:55 (22)			20:40	21:49	22:44	22:39	21:37	20:11	18:45	20	09:21 (24)			15:43
12	09:20	08:20		09:31 (22)			06:36	05:17	04:29	04:46	05:49	06:58	08:04		09:01 (24)			09:18
	16:11	17:23	23	09:54 (22)			20:42	21:51	22:45	22:38	21:34	20:08	18:42	20	09:21 (24)			15:43
13	09:19	08:18		09:31 (22)			06:33	05:15	04:28	04:47	05:51	07:00	08:07		09:01 (24)			09:19
	16:13	17:26	23	09:54 (22)			20:44	21:53	22:46	22:37	21:32	20:05	18:39	19	09:20 (24)			15:43
14	09:17	08:15		09:33 (22)			06:30	05:13	04:28	04:49	05:53	07:02	08:09		09:01 (24)			09:20
	16:15	17:28	21	09:54 (22)			20:47	21:55	22:47	22:35	21:29	20:02	18:36	18	09:19 (24)			15:42
15	09:16	08:13		09:33 (22)			06:27	05:11	04:28	04:51	05:55	07:04	08:11		09:02 (24)			09:21
	16:17	17:31	20	09:53 (22)			20:49	21:58	22:47	22:34	21:26	20:00	18:34	16	09:18 (24)			15:42
16	09:15	08:10		09:34 (22)			06:24	05:08	04:27	04:53	05:57	07:06	08:14		09:03 (24)			09:22
	16:19	17:33	17	09:51 (22)			20:51	22:00	22:48	22:32	21:24	19:57	18:31	13	09:16 (24)			15:42
17	09:13	08:08		09:36 (22)			06:22	05:06	04:27	04:54	06:00	07:09	08:16		09:05 (24)			09:23
	16:21	17:36	14	09:50 (22)			20:54	22:02	22:49	22:31	21:21	19:54	18:28	10	09:15 (24)			15:42
18	09:12	08:05		09:39 (22)			06:19	05:04	04:27	04:56	06:02	07:11	08:18					09:24
	16:23	17:38	8	09:47 (22)			20:56	22:04	22:49	22:29	21:19	19:51	18:25					15:42
19	09:10	08:02			06:44		06:16	05:02	04:27	04:58	06:04	07:13	08:21					09:25
	16:26	17:41			18:47		20:58	22:06	22:50	22:27	21:16	19:48	18:23					15:42
20	09:09	08:00			06:42		06:13	05:00	04:27	05:00	06:06	07:15	08:23					09:26
	16:28	17:43			18:49		21:01	22:08	22:50	22:25	21:13	19:45	18:20					15:43
21	09:07	07:57			06:39		06:10	04:58	04:27	05:02	06:09	07:17	08:25					09:26
	16:30	17:45			18:52		21:03	22:10	22:50	22:24	21:10	19:42	18:17					15:43
22	09:05	07:54			06:36		06:08	04:56	04:27	05:04	06:11	07:20	08:28					09:27
	16:32	17:48			18:54		21:05	22:12	22:51	22:22	21:08	19:39	18:15					15:44
23	09:04	07:52			06:33		06:05	04:54	04:27	05:06	06:13	07:22	08:30					09:27
	16:35	17:50			18:56		21:08	22:14	22:51	22:20	21:05	19:36	18:12					15:44
24	09:02	07:49		08:36 (24)	06:30		06:02	04:53	04:28	05:08	06:15	07:24	08:32		10:07 (22)		08:45	09:28
	16:37	17:53	5	08:41 (24)	18:59		21:10	22:16	22:51	22:18	21:02	19:33	18:09	10	10:17 (22)		16:01	15:45
25	09:00	07:46		08:32 (24)	06:27		06:00	04:51	04:28	05:10	06:18	07:26	07:35		09:05 (22)		08:48	09:28
	16:39	17:55	12	08:44 (24)	19:01		21:12	22:18	22:51	22:16	20:59	19:30	17:07	15	09:20 (22)		15:59	15:45
26	08:58	07:44		08:30 (24)	06:24		05:57	04:49	04:29	05:12	06:20	07:28	07:37		09:04 (22)		08:50	09:28
	16:42	17:58	15	08:45 (24)	19:03		21:14	22:20	22:51	22:14	20:57	19:28	17:04	18	09:22 (22)		15:58	15:46
27	08:56	07:41		08:29 (24)	06:21		05:54	04:47	04:29	05:14	06:22	07:31	07:40		09:02 (22)		08:52	09:28
	16:44	18:00	17	08:46 (24)	19:05		21:17	22:22	22:50	22:12	20:54	19:25	17:02	20	09:22 (22)		15:56	15:47
28	08:54	07:38		08:29 (24)	06:18		05:52	04:46	04:30	05:16	06:24	07:33	07:42		09:02 (22)		08:54	09:29
	16:46	18:02	18	08:47 (24)	19:08		21:19	22:24	22:50	22:10	20:51	19:22	16:59	21	09:23 (22)		15:55	15:48
29	08:52				07:16		05:49	04:44	04:30	05:18	06:27	07:35	07:44		09:02 (22)		08:56	09:29
	16:49				20:10		21:21	22:26	22:50	22:08	20:48	19:19	16:56	22	09:24 (22)		15:54	15:49
30	08:50				07:13		05:47	04:43	04:31	05:20	06:29	07:37	07:47		09:01 (22)		08:58	09:28
	16:51				20:12		21:24	22:27	22:49	22:05	20:45	19:16	16:54	23	09:24 (22)		15:53	15:50
31	08:48				07:10			04:41		05:22	06:31		07:49		09:01 (22)			09:28
	16:54				20:15			22:29		22:03	20:43		16:51	23	09:24 (22)			15:51
Potential sun hours	221	260			365		432	521	547	546	478	386	319			236		199
Total, worst case			393		132									351		175		
Sun reduction			0,50		0,50									0,50		0,50		
Oper. time red.			0,80		0,80									0,80		0,80		
Wind dir. red.			0,73		0,73									0,73		0,73		
Total reduction			0,29		0,29									0,29		0,29		
Total, real			114		38									102		51		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March		April	May	June
1	09:28		08:46	09:41 (22)	07:35	08:31 (24)	07:07	05:44	04:40
	15:53		16:56	14 09:55 (22)	18:05	20 08:51 (24)	20:17	21:26	22:31
2	09:28		08:44	09:40 (22)	07:33	08:31 (24)	07:04	05:41	04:39
	15:54		16:59	16 09:56 (22)	18:07	20 08:51 (24)	20:19	21:28	22:32
3	09:27		08:41	09:39 (22)	07:30	08:31 (24)	07:01	05:39	04:37
	15:56		17:01	19 09:58 (22)	18:10	19 08:50 (24)	20:21	21:31	22:34
4	09:27		08:39	09:38 (22)	07:27	08:31 (24)	06:58	05:36	04:36
	15:57		17:04	20 09:58 (22)	18:12	19 08:50 (24)	20:24	21:33	22:35
5	09:26		08:37	09:38 (22)	07:24	08:32 (24)	06:55	05:34	04:35
	15:59		17:06	22 10:00 (22)	18:14	16 08:48 (24)	20:26	21:35	22:37
6	09:25		08:35	09:37 (22)	07:22	08:33 (24)	06:53	05:31	04:34
	16:00		17:08	23 10:00 (22)	18:17	14 08:47 (24)	20:28	21:38	22:38
7	09:25		08:32	09:36 (22)	07:19	08:35 (24)	06:50	05:29	04:33
	16:02		17:11	24 10:00 (22)	18:19	9 08:44 (24)	20:31	21:40	22:39
8	09:24		08:30	09:37 (22)	07:16		06:47	05:27	04:32
	16:04		17:13	24 10:01 (22)	18:21		20:33	21:42	22:41
9	09:23		08:28	09:36 (22)	07:13		06:44	05:24	04:31
	16:05		17:16	24 10:00 (22)	18:24		20:35	21:44	22:42
10	09:22		08:25	09:37 (22)	07:10		06:41	05:22	04:30
	16:07		17:18	24 10:01 (22)	18:26		20:38	21:47	22:43
11	09:21		08:23	09:37 (22)	07:07		06:38	05:20	04:30
	16:09		17:21	23 10:00 (22)	18:28		20:40	21:49	22:44
12	09:20		08:20	09:37 (22)	07:05		06:36	05:17	04:29
	16:11		17:23	23 10:00 (22)	18:31		20:42	21:51	22:45
13	09:19		08:18	09:38 (22)	07:02		06:33	05:15	04:28
	16:13		17:26	21 09:59 (22)	18:33		20:44	21:53	22:46
14	09:17		08:15	09:39 (22)	06:59		06:30	05:13	04:28
	16:15		17:28	20 09:59 (22)	18:35		20:47	21:55	22:47
15	09:16		08:13	09:40 (22)	06:56		06:27	05:11	04:28
	16:17		17:31	17 09:57 (22)	18:38		20:49	21:58	22:47
16	09:15		08:10	09:42 (22)	06:53		06:24	05:08	04:27
	16:19		17:33	13 09:55 (22)	18:40		20:51	22:00	22:48
17	09:13		08:08	09:45 (22)	06:50		06:21	05:06	04:27
	16:21		17:36	8 09:53 (22)	18:42		20:54	22:02	22:49
18	09:12		08:05		06:47		06:19	05:04	04:27
	16:23		17:38		18:45		20:56	22:04	22:49
19	09:10		08:02		06:44		06:16	05:02	04:27
	16:26		17:41		18:47		20:58	22:06	22:50
20	09:09		08:00		06:42		06:13	05:00	04:27
	16:28		17:43		18:49		21:01	22:08	22:50
21	09:07		07:57		06:39		06:10	04:58	04:27
	16:30		17:45		18:52		21:03	22:10	22:50
22	09:05		07:54		06:36		06:08	04:56	04:27
	16:32		17:48		18:54		21:05	22:12	22:51
23	09:04		07:52	08:40 (24)	06:33		06:05	04:54	04:27
	16:35		17:50	5 08:45 (24)	18:56		21:08	22:14	22:51
24	09:02		07:49	08:36 (24)	06:30		06:02	04:53	04:28
	16:37		17:53	12 08:48 (24)	18:59		21:10	22:16	22:51
25	09:00		07:46	08:34 (24)	06:27		06:00	04:51	04:28
	16:39		17:55	15 08:49 (24)	19:01		21:12	22:18	22:51
26	08:58		07:44	08:33 (24)	06:24		05:57	04:49	04:29
	16:42		17:58	17 08:50 (24)	19:03		21:14	22:20	22:51
27	08:56		07:41	08:32 (24)	06:21		05:54	04:47	04:29
	16:44		18:00	18 08:50 (24)	19:05		21:17	22:22	22:50
28	08:54		07:38	08:32 (24)	06:18		05:52	04:46	04:30
	16:46		18:02	19 08:51 (24)	19:08		21:19	22:24	22:50
29	08:52				07:16		05:49	04:44	04:30
	16:49				20:10		21:21	22:26	22:50
30	08:50				07:13		05:47	04:43	04:31
	16:51				20:12		21:24	22:27	22:49
31	08:48	09:43 (22)			07:10			04:41	
	16:54	9 09:52 (22)			20:15			22:29	
Potential sun hours	221		260		365		432	521	547
Total, worst case		9		421		117			
Sun reduction		0,50		0,50		0,50			
Oper. time red.		0,80		0,80		0,80			
Wind dir. red.		0,72		0,73		0,73			
Total reduction		0,29		0,29		0,29			
Total, real		3		122		34			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AR - Buevegen 1502

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August	September	October			November			December
1	04:32	05:24	06:33	07:39			07:51		09:06 (22)	09:00
	22:49	22:01	20:40	19:13			16:49	24	09:30 (22)	15:51
2	04:33	05:26	06:35	07:42			07:54		09:06 (22)	09:02
	22:48	21:59	20:37	19:10			16:46	24	09:30 (22)	15:50
3	04:34	05:29	06:38	07:44			07:56		09:06 (22)	09:04
	22:47	21:56	20:34	19:07			16:44	24	09:30 (22)	15:49
4	04:35	05:31	06:40	07:46			07:59		09:07 (22)	09:05
	22:47	21:54	20:31	19:05			16:42	23	09:30 (22)	15:48
5	04:36	05:33	06:42	07:48			08:01		09:07 (22)	09:07
	22:46	21:52	20:28	19:02			16:39	22	09:29 (22)	15:47
6	04:37	05:35	06:44	07:51		09:12 (24)	08:04		09:08 (22)	09:09
	22:45	21:49	20:26	18:59	7	09:19 (24)	16:37	21	09:29 (22)	15:46
7	04:39	05:37	06:47	07:53		09:10 (24)	08:06		09:09 (22)	09:10
	22:44	21:47	20:23	18:56	12	09:22 (24)	16:35	20	09:29 (22)	15:46
8	04:40	05:40	06:49	07:55		09:08 (24)	08:08		09:09 (22)	09:12
	22:43	21:44	20:20	18:53	15	09:23 (24)	16:32	18	09:27 (22)	15:45
9	04:41	05:42	06:51	07:58		09:06 (24)	08:11		09:10 (22)	09:14
	22:42	21:42	20:17	18:50	18	09:24 (24)	16:30	17	09:27 (22)	15:44
10	04:43	05:44	06:53	08:00		09:06 (24)	08:13		09:12 (22)	09:15
	22:41	21:39	20:14	18:48	19	09:25 (24)	16:28	13	09:25 (22)	15:44
11	04:44	05:46	06:55	08:02		09:05 (24)	08:16		09:14 (22)	09:16
	22:39	21:37	20:11	18:45	19	09:24 (24)	16:26	9	09:23 (22)	15:43
12	04:46	05:49	06:58	08:04		09:05 (24)	08:18			09:18
	22:38	21:34	20:08	18:42	20	09:25 (24)	16:24			15:43
13	04:47	05:51	07:00	08:07		09:04 (24)	08:20			09:19
	22:37	21:32	20:05	18:39	20	09:24 (24)	16:21			15:43
14	04:49	05:53	07:02	08:09		09:04 (24)	08:23			09:20
	22:35	21:29	20:02	18:36	19	09:23 (24)	16:19			15:42
15	04:51	05:55	07:04	08:11		09:05 (24)	08:25			09:21
	22:34	21:26	20:00	18:34	18	09:23 (24)	16:17			15:42
16	04:53	05:57	07:06	08:14		09:05 (24)	08:27			09:22
	22:32	21:24	19:57	18:31	16	09:21 (24)	16:15			15:42
17	04:54	06:00	07:09	08:16		09:07 (24)	08:30			09:23
	22:31	21:21	19:54	18:28	14	09:21 (24)	16:13			15:42
18	04:56	06:02	07:11	08:18		09:08 (24)	08:32			09:24
	22:29	21:19	19:51	18:25	10	09:18 (24)	16:11			15:42
19	04:58	06:04	07:13	08:21			08:34			09:25
	22:27	21:16	19:48	18:23			16:10			15:42
20	05:00	06:06	07:15	08:23			08:37			09:26
	22:25	21:13	19:45	18:20			16:08			15:43
21	05:02	06:09	07:17	08:25			08:39			09:26
	22:24	21:10	19:42	18:17			16:06			15:43
22	05:04	06:11	07:20	08:28			08:41			09:27
	22:22	21:08	19:39	18:15			16:04			15:44
23	05:06	06:13	07:22	08:30			08:43			09:27
	22:20	21:05	19:36	18:12			16:03			15:44
24	05:08	06:15	07:24	08:32			08:45			09:28
	22:18	21:02	19:33	18:09			16:01			15:45
25	05:10	06:18	07:26	07:35		09:13 (22)	08:48			09:28
	22:16	20:59	19:30	17:07	10	09:23 (22)	15:59			15:45
26	05:12	06:20	07:28	07:37		09:11 (22)	08:50			09:28
	22:14	20:57	19:28	17:04	15	09:26 (22)	15:58			15:46
27	05:14	06:22	07:31	07:40		09:09 (22)	08:52			09:28
	22:12	20:54	19:25	17:01	18	09:27 (22)	15:56			15:47
28	05:16	06:24	07:33	07:42		09:08 (22)	08:54			09:29
	22:10	20:51	19:22	16:59	20	09:28 (22)	15:55			15:48
29	05:18	06:27	07:35	07:44		09:08 (22)	08:56			09:29
	22:08	20:48	19:19	16:56	21	09:29 (22)	15:54			15:49
30	05:20	06:29	07:37	07:47		09:07 (22)	08:58			09:28
	22:05	20:45	19:16	16:54	22	09:29 (22)	15:53			15:50
31	05:22	06:31		07:49		09:07 (22)				09:28
	22:03	20:43		16:51	23	09:30 (22)				15:51
Potential sun hours	546	478	386	319			236			199
Total, worst case					336			215		
Sun reduction					0,50			0,50		
Oper. time red.					0,80			0,80		
Wind dir. red.					0,73			0,72		
Total reduction					0,29			0,29		
Total, real					98			62		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AS - Buevegen 1286

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:52
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:42	07:30	07:01	05:39	04:38	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:29	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:11
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:33	15:45
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	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:51	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:08	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:05	08:18	09:18
	16:11	17:24	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:37	16:20	15:43
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:28	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:26	16:12	15:42
19	09:10	08:03	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:11	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:33	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:51	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:03	04:53	04:28	05:08	06:16	07:24	08:32	08:46	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:34	18:09	16:01	15:45
25	09:00	07:47	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:06	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:22	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:29
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AT - Buevegen 1498

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March	April	May	June	July	August	September	October		November		December
1	09:28	08:46		07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:40		07:52	08:41 (22)	09:00
	15:53	16:56		18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13		16:49	7 08:48 (22)	15:51
2	09:28	08:44		07:33	07:04	05:41	04:39	04:33	05:26	06:35	07:42		07:54		09:02
	15:54	16:59		18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10		16:46		15:50
3	09:27	08:41		07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44		07:56		09:04
	15:56	17:01		18:10	20:21	21:31	22:34	22:47	21:56	20:34	19:07		16:44		15:49
4	09:27	08:39		07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46		07:59		09:05
	15:57	17:04		18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05		16:42		15:48
5	09:26	08:37		07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48		08:01		09:07
	15:59	17:06		18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02		16:39		15:47
6	09:25	08:35		07:22	06:53	05:31	04:34	04:37	05:35	06:44	07:51		08:04		09:09
	16:00	17:09		18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59		16:37		15:46
7	09:25	08:32		07:19	06:50	05:29	04:33	04:39	05:37	06:47	07:53		08:06		09:10
	16:02	17:11		18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56		16:35		15:46
8	09:24	08:30		07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55		08:08		09:12
	16:04	17:13		18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53		16:32		15:45
9	09:23	08:28		07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:58		08:11		09:14
	16:05	17:16		18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50		16:30		15:44
10	09:22	08:25	09:11 (22)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00		08:13		09:15
	16:07	17:18	8 09:19 (22)	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48		16:28		15:44
11	09:21	08:23	09:09 (22)	07:07	06:38	05:20	04:30	04:44	05:46	06:55	08:02		08:16		09:16
	16:09	17:21	12 09:21 (22)	18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45		16:26		15:43
12	09:20	08:20	09:07 (22)	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04		08:18		09:18
	16:11	17:23	15 09:22 (22)	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42		16:24		15:43
13	09:19	08:18	09:06 (22)	07:02	06:33	05:15	04:28	04:48	05:51	07:00	08:07		08:20		09:19
	16:13	17:26	18 09:24 (22)	18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39		16:21		15:43
14	09:17	08:15	09:05 (22)	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09		08:23		09:20
	16:15	17:28	20 09:25 (22)	18:35	20:47	21:56	22:47	22:35	21:29	20:02	18:36		16:19		15:42
15	09:16	08:13	09:05 (22)	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11		08:25		09:21
	16:17	17:31	20 09:25 (22)	18:38	20:49	21:58	22:47	22:34	21:26	20:00	18:34		16:17		15:42
16	09:15	08:10	09:04 (22)	06:53	06:24	05:08	04:27	04:53	05:58	07:06	08:14		08:27		09:22
	16:19	17:33	21 09:25 (22)	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31		16:15		15:42
17	09:13	08:08	09:05 (22)	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16		08:30		09:23
	16:21	17:36	21 09:26 (22)	18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28		16:13		15:42
18	09:12	08:05	09:05 (22)	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	09:42 (22)	08:32		09:24
	16:23	17:38	20 09:25 (22)	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	7 09:49 (22)	16:11		15:42
19	09:10	08:02	09:05 (22)	06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	09:39 (22)	08:34		09:25
	16:26	17:41	20 09:25 (22)	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	13 09:52 (22)	16:10		15:42
20	09:09	08:00	09:05 (22)	06:42	06:13	05:00	04:27	05:00	06:06	07:15	08:23	09:37 (22)	08:37		09:26
	16:28	17:43	19 09:24 (22)	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16 09:53 (22)	16:08		15:43
21	09:07	07:57	09:05 (22)	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	09:36 (22)	08:39		09:26
	16:30	17:46	18 09:23 (22)	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	18 09:54 (22)	16:06		15:43
22	09:05	07:54	09:07 (22)	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	09:35 (22)	08:41		09:27
	16:32	17:48	15 09:22 (22)	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	19 09:54 (22)	16:04		15:44
23	09:04	07:52	09:09 (22)	06:33	06:05	04:54	04:27	05:06	06:13	07:22	08:30	09:35 (22)	08:43		09:27
	16:35	17:50	11 09:20 (22)	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	20 09:55 (22)	16:03		15:44
24	09:02	07:49	09:13 (22)	06:30	06:02	04:53	04:28	05:08	06:15	07:24	08:32	09:34 (22)	08:45		09:28
	16:37	17:53	3 09:16 (22)	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	21 09:55 (22)	16:01		15:45
25	09:00	07:46		06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:34 (22)	08:48		09:28
	16:39	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:31	17:07	21 08:55 (22)	15:59		15:45
26	08:58	07:44		06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:34 (22)	08:50		09:28
	16:42	17:58		19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	21 08:55 (22)	15:58		15:46
27	08:56	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:31	07:40	08:34 (22)	08:52		09:29
	16:44	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	20 08:54 (22)	15:57		15:47
28	08:54	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:35 (22)	08:54		09:29
	16:46	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	19 08:54 (22)	15:55		15:48
29	08:52			07:16	05:49	04:44	04:30	05:18	06:27	07:35	07:44	08:36 (22)	08:56		09:29
	16:49			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	17 08:53 (22)	15:54		15:49
30	08:50			07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:36 (22)	08:58		09:28
	16:51			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	16 08:52 (22)	15:53		15:50
31	08:48			07:10		04:41		05:22	06:31		07:49	08:38 (22)			09:28
	16:54			20:15		22:29		22:03	20:43		16:51	12 08:50 (22)			15:51
Potential sun hours	221	260		365	432	521	547	546	478	386	319		236		199
Total, worst case			241									240		7	
Sun reduction			0,50									0,50		0,50	
Oper. time red.			0,80									0,80		0,80	
Wind dir. red.			0,74									0,74		0,74	
Total reduction			0,29									0,29		0,29	
Total, real			71									71		2	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:
Moifjellet og Mellomstrand vrk

Licensed user:
Multiconsult Norge AS
Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AU - Buevegen 1340

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February	March	April	May	June	July	August	September	October	November	December
1	09:28	08:46	07:36	07:07	05:44	04:40	04:32	05:24	06:33	07:40	07:52	09:00
	15:53	16:56	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	15:51
2	09:28	08:44	07:33	07:04	05:42	04:39	04:33	05:27	06:36	07:42	07:54	09:02
	15:54	16:59	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:47	15:50
3	09:27	08:41	07:30	07:01	05:39	04:37	04:34	05:29	06:38	07:44	07:56	09:04
	15:56	17:01	18:10	20:22	21:31	22:34	22:47	21:56	20:34	19:08	16:44	15:49
4	09:27	08:39	07:27	06:58	05:37	04:36	04:35	05:31	06:40	07:46	07:59	09:05
	15:57	17:04	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:05	16:42	15:48
5	09:26	08:37	07:24	06:56	05:34	04:35	04:36	05:33	06:42	07:49	08:01	09:07
	15:59	17:06	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	15:47
6	09:25	08:35	07:22	06:53	05:32	04:34	04:38	05:35	06:44	07:51	08:04	09:09
	16:00	17:09	18:17	20:28	21:38	22:38	22:45	21:49	20:26	18:59	16:37	15:47
7	09:25	08:32	07:19	06:50	05:29	04:33	04:39	05:38	06:47	07:53	08:06	09:10
	16:02	17:11	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:35	15:46
8	09:24	08:30	07:16	06:47	05:27	04:32	04:40	05:40	06:49	07:55	08:08	09:12
	16:04	17:14	18:22	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	15:45
9	09:23	08:28	07:13	06:44	05:24	04:31	04:42	05:42	06:51	07:58	08:11	09:14
	16:06	17:16	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	15:44
10	09:22	08:25	07:10	06:41	05:22	04:31	04:43	05:44	06:53	08:00	08:13	09:15
	16:07	17:19	18:26	20:38	21:47	22:43	22:41	21:39	20:14	18:48	16:28	15:44
11	09:21	08:23	07:07	06:38	05:20	04:30	04:45	05:46	06:55	08:02	08:16	09:16
	16:09	17:21	18:29	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	15:43
12	09:20	08:20	07:05	06:36	05:17	04:29	04:46	05:49	06:58	08:04	08:18	09:18
	16:11	17:23	18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:24	15:43
13	09:19	08:18	07:02	06:33	05:15	04:29	04:48	05:51	07:00	08:07	08:20	09:19
	16:13	17:26	18:33	20:45	21:53	22:46	22:37	21:32	20:05	18:39	16:22	15:43
14	09:17	08:15	06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:20
	16:15	17:28	18:36	20:47	21:56	22:47	22:35	21:29	20:03	18:36	16:19	15:42
15	09:16	08:13	06:56	06:27	05:11	04:28	04:51	05:55	07:04	08:11	08:25	09:21
	16:17	17:31	18:38	20:49	21:58	22:47	22:34	21:27	20:00	18:34	16:17	15:42
16	09:15	08:10	06:53	06:24	05:09	04:27	04:53	05:58	07:06	08:14	08:27	09:22
	16:19	17:33	18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	15:42
17	09:13	08:08	06:50	06:22	05:06	04:27	04:54	06:00	07:09	08:16	08:30	09:23
	16:21	17:36	18:43	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:14	15:42
18	09:12	08:05	06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	09:24
	16:24	17:38	18:45	20:56	22:04	22:49	22:29	21:19	19:51	18:25	16:12	15:42
19	09:10	08:02	06:45	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	09:25
	16:26	17:41	18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:10	15:43
20	09:09	08:00	06:42	06:13	05:00	04:27	05:00	06:07	07:15	08:23	08:37	09:26
	16:28	17:43	18:49	21:01	22:08	22:50	22:26	21:13	19:45	18:20	16:08	15:43
21	09:07	07:57	06:39	06:11	04:58	04:27	05:02	06:09	07:17	08:25	08:39	09:26
	16:30	17:46	18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	15:43
22	09:05	07:55	06:36	06:08	04:56	04:27	05:04	06:11	07:20	08:28	08:41	09:27
	16:32	17:48	18:54	21:05	22:12	22:51	22:22	21:08	19:39	18:15	16:04	15:44
23	09:04	07:52	06:33	06:05	04:55	04:28	05:06	06:13	07:22	08:30	08:43	09:27
	16:35	17:50	18:56	21:08	22:14	22:51	22:20	21:05	19:36	18:12	16:03	15:44
24	09:02	07:49	06:30	06:02	04:53	04:28	05:08	06:16	07:24	08:32	08:45	09:28
	16:37	17:53	18:59	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	15:45
25	09:00	07:46	06:27	06:00	04:51	04:28	05:10	06:18	07:26	07:35	08:48	09:28
	16:39	17:55	19:01	21:12	22:18	22:51	22:16	21:00	19:31	17:07	16:00	15:46
26	08:58	07:44	06:24	05:57	04:49	04:29	05:12	06:20	07:28	07:37	08:50	09:28
	16:42	17:58	19:03	21:15	22:20	22:51	22:14	20:57	19:28	17:04	15:58	15:46
27	08:56	07:41	06:21	05:55	04:48	04:29	05:14	06:22	07:31	07:40	08:52	09:29
	16:44	18:00	19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:02	15:57	15:47
28	08:54	07:38	06:19	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	09:29
	16:47	18:03	19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	15:48
29	08:52		07:16	05:49	04:44	04:31	05:18	06:27	07:35	07:44	08:56	09:29
	16:49		20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:57	15:54	15:49
30	08:50		07:13	05:47	04:43	04:31	05:20	06:29	07:37	07:47	08:58	09:28
	16:51		20:12	21:24	22:27	22:49	22:05	20:46	19:16	16:54	15:53	15:50
31	08:48		07:10		04:41		05:22	06:31		07:49		09:28
	16:54		20:15		22:29		22:03	20:43		16:52		15:51
Potential sun hours	221	260	365	432	521	547	545	478	386	319	236	200
Total, worst case												
Sun reduction												
Oper. time red.												
Wind dir. red.												
Total reduction												
Total, real												

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Project:

Moifjellet og Mellomstrand vrk

Licensed user:

Multiconsult Norge AS

Nedre Skøyen vei 2 .
NO-0276 Oslo
+47 21 58 60 15
Martine / martine.bjugg@multiconsult.no

Calculated:

19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AV - Osland 85

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January		February		March	April	May	June	July	August	September	October	November		December		
1	09:28	12:21 (24)	08:46	10:00 (28)	07:35	07:07	05:44	04:40	04:32	05:24	06:33	07:39	07:51	09:36 (28)	09:00	10:51 (23)	
	15:53	20 12:41 (24)	16:56	20 10:20 (28)	18:05	20:17	21:26	22:31	22:49	22:01	20:40	19:13	16:49	6 09:42 (28)	15:51	28 12:23 (24)	
2	09:28	12:22 (24)	08:44	09:59 (28)	07:33	07:04	05:41	04:38	04:33	05:26	06:35	07:42	07:54	09:34 (28)	09:02	10:51 (23)	
	15:54	19 12:41 (24)	16:58	21 10:20 (28)	18:07	20:19	21:28	22:32	22:48	21:59	20:37	19:10	16:46	11 09:45 (28)	15:50	30 12:24 (24)	
3	09:27	12:22 (24)	08:41	10:00 (28)	07:30	07:01	05:39	04:37	04:34	05:28	06:38	07:44	07:56	09:33 (28)	09:04	10:52 (23)	
	15:55	19 12:41 (24)	17:01	20 10:20 (28)	18:09	20:21	21:31	22:34	22:47	21:56	20:34	19:07	16:44	14 09:47 (28)	15:49	29 12:25 (24)	
4	09:27	11:12 (23)	08:39	10:00 (28)	07:27	06:58	05:36	04:36	04:35	05:31	06:40	07:46	07:59	09:31 (28)	09:05	10:53 (23)	
	15:57	22 12:41 (24)	17:03	20 10:20 (28)	18:12	20:24	21:33	22:35	22:47	21:54	20:31	19:04	16:41	17 09:48 (28)	15:48	30 12:26 (24)	
5	09:26	11:11 (23)	08:37	10:01 (28)	07:24	06:55	05:34	04:35	04:36	05:33	06:42	07:48	08:01	09:31 (28)	09:07	10:54 (23)	
	15:58	26 12:42 (24)	17:06	19 10:20 (28)	18:14	20:26	21:35	22:37	22:46	21:52	20:28	19:02	16:39	18 09:49 (28)	15:47	29 12:27 (24)	
6	09:25	11:10 (23)	08:35	10:01 (28)	07:21	06:52	05:31	04:34	04:37	05:35	06:44	07:51	08:03	09:30 (28)	09:09	10:56 (23)	
	16:00	28 12:42 (24)	17:08	18 10:19 (28)	18:17	20:28	21:37	22:38	22:45	21:49	20:25	18:59	16:37	20 09:50 (28)	15:46	28 12:28 (24)	
7	09:25	11:09 (23)	08:32	10:01 (28)	07:19	06:50	05:29	04:33	04:39	05:37	06:46	07:53	08:06	09:30 (28)	09:10	10:58 (23)	
	16:02	29 12:42 (24)	17:11	17 10:18 (28)	18:19	20:31	21:40	22:39	22:44	21:47	20:23	18:56	16:34	20 09:50 (28)	15:45	26 12:29 (24)	
8	09:24	11:09 (23)	08:30	10:03 (28)	07:16	06:47	05:26	04:32	04:40	05:39	06:49	07:55	08:08	09:30 (28)	09:12	11:00 (23)	
	16:03	30 12:42 (24)	17:13	15 10:18 (28)	18:21	20:33	21:42	22:41	22:43	21:44	20:20	18:53	16:32	20 09:50 (28)	15:45	23 12:30 (24)	
9	09:23	11:09 (23)	08:27	10:04 (28)	07:13	06:44	05:24	04:31	04:41	05:42	06:51	07:57	08:11	09:30 (28)	09:13	12:11 (24)	
	16:05	30 12:42 (24)	17:16	12 10:16 (28)	18:24	20:35	21:44	22:42	22:42	21:42	20:17	18:50	16:30	20 09:50 (28)	15:44	19 12:30 (24)	
10	09:22	11:08 (23)	08:25	10:07 (28)	07:10	06:41	05:22	04:30	04:43	05:44	06:53	08:00	08:13	09:31 (28)	09:15	12:11 (24)	
	16:07	30 12:41 (24)	17:18	5 10:12 (28)	18:26	20:37	21:47	22:43	22:41	21:39	20:14	18:47	16:28	20 09:51 (28)	15:44	19 12:30 (24)	
11	09:21	11:09 (23)	08:23		07:07	06:38	05:19	04:29	04:44	05:46	06:55	08:02	08:15	09:30 (28)	09:16	12:11 (24)	
	16:09	28 12:41 (24)	17:21		18:28	20:40	21:49	22:44	22:39	21:37	20:11	18:45	16:26	20 09:50 (28)	15:43	20 12:31 (24)	
12	09:20	11:08 (23)	08:20		07:04	06:35	05:17	04:29	04:46	05:48	06:57	08:04	08:18	09:31 (28)	09:18	12:11 (24)	
	16:11	27 12:40 (24)	17:23		18:31	20:42	21:51	22:45	22:38	21:34	20:08	18:42	16:23	27 10:58 (23)	15:43	20 12:31 (24)	
13	09:19	11:08 (23)	08:18		07:02	06:33	05:15	04:28	04:47	05:51	07:00	08:07	08:20	09:32 (28)	09:19	12:12 (24)	
	16:13	25 12:39 (24)	17:26		18:33	20:44	21:53	22:46	22:37	21:32	20:05	18:39	16:21	31 11:01 (23)	15:42	21 12:33 (24)	
14	09:17	11:08 (23)	08:15		06:59	06:30	05:13	04:28	04:49	05:53	07:02	08:09	08:23	09:33 (28)	09:20	12:12 (24)	
	16:15	20 11:28 (23)	17:28		18:35	20:47	21:55	22:47	22:35	21:29	20:02	18:36	16:19	32 11:03 (23)	15:42	21 12:33 (24)	
15	09:16	11:08 (23)	08:13		06:56	06:27	05:10	04:27	04:51	05:55	07:04	08:11	08:25	09:34 (28)	09:21	12:12 (24)	
	16:17	21 11:29 (23)	17:31		18:38	20:49	21:58	22:47	22:34	21:26	19:59	18:33	16:17	31 11:03 (23)	15:42	21 12:33 (24)	
16	09:15	11:08 (23)	08:10		06:53	06:24	05:08	04:27	04:52	05:57	07:06	08:14	08:27	09:36 (28)	09:22	12:13 (24)	
	16:19	21 11:29 (23)	17:33		18:40	20:51	22:00	22:48	22:32	21:24	19:57	18:31	16:15	31 11:05 (23)	15:42	20 12:33 (24)	
17	09:13	11:09 (23)	08:08		06:50	06:21	05:06	04:27	04:54	06:00	07:08	08:16	08:30	09:38 (28)	09:23	12:14 (24)	
	16:21	22 11:31 (23)	17:36		18:42	20:54	22:02	22:49	22:31	21:21	19:54	18:28	16:13	28 11:06 (23)	15:42	21 12:35 (24)	
18	09:12	11:09 (23)	08:05		06:47	06:19	05:04	04:27	04:56	06:02	07:11	08:18	08:32	10:44 (23)	09:24	12:14 (24)	
	16:23	22 11:31 (23)	17:38		18:45	20:56	22:04	22:49	22:29	21:18	19:51	18:25	16:11	22 11:06 (23)	15:42	21 12:35 (24)	
19	09:10	11:09 (23)	08:02		06:44	06:16	05:02	04:27	04:58	06:04	07:13	08:21	08:34	10:45 (23)	09:25	12:14 (24)	
	16:25	22 11:31 (23)	17:40		18:47	20:58	22:06	22:50	22:27	21:16	19:48	18:23	16:09	22 11:07 (23)	15:42	21 12:35 (24)	
20	09:09	11:09 (23)	08:00		06:41	06:13	05:00	04:27	05:00	06:06	07:15	08:23	08:36	10:45 (23)	09:26	12:15 (24)	
	16:28	23 11:32 (23)	17:43		18:49	21:01	22:08	22:50	22:25	21:13	19:45	18:20	16:08	22 11:07 (23)	15:43	21 12:36 (24)	
21	09:07	11:09 (23)	07:57		06:39	06:10	04:58	04:27	05:02	06:09	07:17	08:25	08:39	10:45 (23)	09:26	12:16 (24)	
	16:30	23 11:32 (23)	17:45		18:52	21:03	22:10	22:50	22:24	21:10	19:42	18:17	16:06	22 11:07 (23)	15:43	21 12:37 (24)	
22	09:05	11:10 (23)	07:54		06:36	06:08	04:56	04:27	05:03	06:11	07:19	08:28	08:41	10:45 (23)	09:27	12:16 (24)	
	16:32	22 11:32 (23)	17:48		18:54	21:05	22:12	22:50	22:22	21:08	19:39	18:14	16:04	23 11:08 (23)	15:43	21 12:37 (24)	
23	09:03	11:10 (23)	07:52		06:33	06:05	04:54	04:27	05:05	06:13	07:22	08:30	08:43	10:45 (23)	09:27	12:16 (24)	
	16:34	22 11:32 (23)	17:50		18:56	21:07	22:14	22:51	22:20	21:05	19:36	18:12	16:02	23 11:08 (23)	15:44	21 12:37 (24)	
24	09:02	11:10 (23)	07:49		06:30	06:02	04:52	04:27	05:07	06:15	07:24	08:32	08:45	10:46 (23)	09:28	12:17 (24)	
	16:37	22 11:32 (23)	17:53		18:58	21:10	22:16	22:51	22:18	21:02	19:33	18:09	16:01	22 11:08 (23)	15:45	21 12:38 (24)	
25	09:00	10:04 (28)	07:46		06:27	06:00	04:51	04:28	05:09	06:17	07:26	07:35	08:48	10:46 (23)	09:28	12:17 (24)	
	16:39	28 11:32 (23)	17:55		19:01	21:12	22:18	22:51	22:16	20:59	19:30	17:07	15:59	22 11:08 (23)	15:45	21 12:38 (24)	
26	08:58	10:03 (28)	07:44		06:24	05:57	04:49	04:28	05:11	06:20	07:28	07:37	08:50	10:47 (23)	09:28	12:18 (24)	
	16:42	31 11:32 (23)	17:57		19:03	21:14	22:20	22:50	22:14	20:57	19:27	17:04	15:58	21 11:08 (23)	15:46	21 12:39 (24)	
27	08:56	10:02 (28)	07:41		06:21	05:54	04:47	04:29	05:14	06:22	07:30	07:39	08:52	10:47 (23)	09:28	12:18 (24)	
	16:44	31 11:31 (23)	18:00		19:05	21:17	22:22	22:50	22:12	20:54	19:25	17:01	15:56	21 11:08 (23)	15:47	21 12:39 (24)	
28	08:54	10:00 (28)	07:38		06:18	05:52	04:46	04:30	05:16	06:24	07:33	07:42	08:54	10:48 (23)	09:29	12:19 (24)	
	16:46	32 11:30 (23)	18:02		19:08	21:19	22:24	22:50	22:10	20:51	19:22	16:59	15:55	21 11:09 (23)	15:48	21 12:40 (24)	
29	08:52	10:00 (28)			07:15	05:49	04:44	04:30	05:18	06:26	07:35	07:44	08:56	10:49 (23)	09:29	12:19 (24)	
	16:49	31 11:29 (23)			20:10	21:21	22:26	22:50	22:08	20:48	19:19	16:56	15:54	22 12:18 (24)	15:49	21 12:40 (24)	
30	08:50	09:59 (28)			07:13	05:46	04:43	04:31	05:20	06:29	07:37	07:47	08:58	10:49 (23)	09:28	12:20 (24)	
	16:51	27 11:26 (23)			20:12	21:24	22:27	22:49	22:05	20:45	19:16	16:54	15:52	28 12:21 (24)	15:50	20 12:40 (24)	
31	08:48	09:59 (28)			07:10		04:41		05:22	06:31		07:49			09:28	12:21 (24)	
	16:54	20 10:19 (28)			20:14		22:29		22:03	20:43		16:51			15:51	20 12:41 (24)	
Potential sun hours	221		260		365	432	521	547	546	478	386	319	236		199		
Total, worst case		773		167										657		697	
Sun reduction		0,50		0,50										0,50		0,50	
Oper. time red.		0,80		0,80										0,80		0,80	
Wind dir. red.		0,67		0,72										0,70		0,64	
Total reduction		0,27		0,29										0,28		0,25	
Total, real		208		48										183		177	

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm)		First time (hh:mm) with flicker	(WTG causing flicker first time)
	Sun set (hh:mm)	Minutes with flicker	Last time (hh:mm) with flicker	(WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April		May	June
1	09:27	08:45		07:35		07:06		05:44	04:40
	15:53	16:56		18:04		20:16		21:25	22:30
2	09:27	08:43		07:32		07:04		05:41	04:38
	15:54	16:58		18:07		20:19		21:28	22:31
3	09:26	08:41		07:29		07:01		05:39	04:37
	15:55	17:01		18:09		20:21		21:30	22:33
4	09:26	08:39		07:27		06:58	19:38 (63)	05:36	04:36
	15:57	17:03		18:12		20:23	2 19:40 (63)	21:32	22:34
5	09:25	08:36		07:24		06:55	19:34 (63)	05:34	04:35
	15:58	17:06		18:14		20:25	8 19:42 (63)	21:35	22:36
6	09:25	08:34		07:21		06:52	19:32 (63)	05:31	04:34
	16:00	17:08		18:16		20:28	11 19:43 (63)	21:37	22:37
7	09:24	08:32		07:18		06:49	19:31 (63)	05:29	04:33
	16:02	17:11		18:19		20:30	12 19:43 (63)	21:39	22:39
8	09:23	08:29		07:15		06:46	19:31 (63)	05:26	04:32
	16:03	17:13		18:21		20:32	13 19:44 (63)	21:41	22:40
9	09:22	08:27		07:13		06:44	19:31 (63)	05:24	04:31
	16:05	17:16		18:23		20:35	12 19:43 (63)	21:44	22:41
10	09:21	08:24		07:10		06:41	19:31 (63)	05:22	04:30
	16:07	17:18		18:26		20:37	11 19:42 (63)	21:46	22:42
11	09:20	08:22		07:07		06:38	19:32 (63)	05:19	04:30
	16:09	17:21		18:28		20:39	8 19:40 (63)	21:48	22:43
12	09:19	08:20		07:04		06:35	19:34 (63)	05:17	04:29
	16:11	17:23		18:30		20:42	4 19:38 (63)	21:50	22:44
13	09:18	08:17		07:01		06:32		05:15	04:28
	16:13	17:25		18:33		20:44		21:53	22:45
14	09:17	08:15		06:58		06:29		05:13	04:28
	16:15	17:28		18:35		20:46		21:55	22:46
15	09:15	08:12		06:55		06:27	19:48 (62)	05:10	04:27
	16:17	17:30		18:37		20:48	9 19:57 (62)	21:57	22:47
16	09:14	08:10	16:48 (66)	06:53		06:24	19:47 (62)	05:08	04:27
	16:19	17:33	1 16:49 (66)	18:40		20:51	13 20:00 (62)	21:59	22:47
17	09:13	08:07	16:44 (66)	06:50		06:21	19:45 (62)	05:06	04:27
	16:21	17:35	8 16:52 (66)	18:42		20:53	15 20:00 (62)	22:01	22:48
18	09:11	08:04	16:42 (66)	06:47		06:18	19:44 (62)	05:04	04:27
	16:23	17:38	12 16:54 (66)	18:44		20:55	16 20:00 (62)	22:03	22:48
19	09:09	08:02	16:41 (66)	06:44		06:16	19:44 (62)	05:02	04:27
	16:25	17:40	13 16:54 (66)	18:47		20:58	17 20:01 (62)	22:05	22:49
20	09:08	07:59	16:42 (66)	06:41		06:13	19:43 (62)	05:00	04:27
	16:28	17:43	13 16:55 (66)	18:49		21:00	18 20:01 (62)	22:08	22:49
21	09:06	07:57	16:41 (66)	06:38	18:02 (65)	06:10	19:42 (62)	04:58	04:27
	16:30	17:45	14 16:55 (66)	18:51	2 18:04 (65)	21:02	18 20:00 (62)	22:10	22:49
22	09:05	07:54	16:41 (66)	06:35	17:58 (65)	06:07	19:43 (62)	04:56	04:27
	16:32	17:48	13 16:54 (66)	18:53	9 18:07 (65)	21:05	17 20:00 (62)	22:12	22:50
23	09:03	07:51	16:42 (66)	06:32	17:56 (65)	06:05	19:43 (62)	04:54	04:27
	16:34	17:50	11 16:53 (66)	18:56	12 18:08 (65)	21:07	16 19:59 (62)	22:14	22:50
24	09:01	07:49	16:43 (66)	06:30	17:55 (65)	06:02	19:44 (62)	04:52	04:28
	16:37	17:52	9 16:52 (66)	18:58	14 18:09 (65)	21:09	15 19:59 (62)	22:16	22:50
25	08:59	07:46	16:45 (66)	06:27	17:54 (65)	05:59	19:45 (62)	04:51	04:28
	16:39	17:55	4 16:49 (66)	19:00	15 18:09 (65)	21:12	12 19:57 (62)	22:17	22:50
26	08:57	07:43		06:24	17:53 (65)	05:57	19:47 (62)	04:49	04:28
	16:41	17:57		19:03	15 18:08 (65)	21:14	8 19:55 (62)	22:19	22:50
27	08:55	07:40		06:21	17:54 (65)	05:54		04:47	04:29
	16:44	18:00		19:05	15 18:09 (65)	21:16		22:21	22:49
28	08:53	07:38		06:18	17:55 (65)	05:51		04:46	04:30
	16:46	18:02		19:07	13 18:08 (65)	21:18		22:23	22:49
29	08:51			07:15	18:55 (65)	05:49		04:44	04:30
	16:49			20:09	11 19:06 (65)	21:21		22:25	22:49
30	08:49			07:12	18:57 (65)	05:46		04:43	04:31
	16:51			20:12	6 19:03 (65)	21:23		22:26	22:48
31	08:47			07:09				04:41	
	16:53			20:14				22:28	
Potential sun hours	222	260		365		432		521	547
Total, worst case			98		112		255		
Sun reduction			0,50		0,50		0,50		
Oper. time red.			0,80		0,80		0,80		
Wind dir. red.			0,57		0,62		0,69		
Total reduction			0,23		0,25		0,27		
Total, real			22		28		70		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AW - Laksesvela 60

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August			September			October			November	December
1	04:32	05:24			06:33		19:31 (63)	07:39			07:51	08:59
	22:48	22:00			20:39	8	19:39 (63)	19:13			16:49	15:51
2	04:33	05:26			06:35		19:29 (63)	07:41			07:53	09:01
	22:47	21:58			20:36	11	19:40 (63)	19:10			16:46	15:50
3	04:34	05:28			06:37		19:29 (63)	07:43			07:56	09:03
	22:47	21:56			20:34	12	19:41 (63)	19:07			16:44	15:49
4	04:35	05:31			06:39		19:28 (63)	07:46			07:58	09:05
	22:46	21:53			20:31	13	19:41 (63)	19:04			16:41	15:48
5	04:36	05:33			06:42		19:28 (63)	07:48			08:00	09:06
	22:45	21:51			20:28	12	19:40 (63)	19:01			16:39	15:47
6	04:37	05:35			06:44		19:28 (63)	07:50			08:03	09:08
	22:44	21:48			20:25	11	19:39 (63)	18:58			16:37	15:46
7	04:39	05:37			06:46		19:29 (63)	07:52			08:05	09:10
	22:43	21:46			20:22	8	19:37 (63)	18:56			16:34	15:45
8	04:40	05:39			06:48		19:31 (63)	07:55			08:08	09:11
	22:42	21:44			20:19	3	19:34 (63)	18:53			16:32	15:45
9	04:41	05:42			06:50			07:57			08:10	09:13
	22:41	21:41			20:16			18:50			16:30	15:44
10	04:43	05:44			06:53			07:59			08:12	09:14
	22:40	21:39			20:13			18:47			16:28	15:44
11	04:44	05:46			06:55			08:02			08:15	09:16
	22:39	21:36			20:11			18:44			16:25	15:43
12	04:46	05:48			06:57			08:04			08:17	09:17
	22:37	21:34			20:08			18:42			16:23	15:43
13	04:47	05:50			06:59		18:49 (65)	08:06			08:20	09:18
	22:36	21:31			20:05	5	18:54 (65)	18:39			16:21	15:42
14	04:49	05:53			07:01		18:46 (65)	08:08			08:22	09:19
	22:34	21:28			20:02	10	18:56 (65)	18:36			16:19	15:42
15	04:51	05:55			07:04		18:44 (65)	08:11			08:24	09:20
	22:33	21:26			19:59	13	18:57 (65)	18:33			16:17	15:42
16	04:52	05:57		19:56 (62)	07:06		18:43 (65)	08:13			08:27	09:21
	22:31	21:23	4	20:00 (62)	19:56	14	18:57 (65)	18:30			16:15	15:42
17	04:54	05:59		19:53 (62)	07:08		18:42 (65)	08:15		17:16 (66)	08:29	09:22
	22:30	21:21	9	20:02 (62)	19:53	15	18:57 (65)	18:28	6	17:22 (66)	16:13	15:42
18	04:56	06:02		19:51 (62)	07:10		18:41 (65)	08:18		17:14 (66)	08:31	09:23
	22:28	21:18	13	20:04 (62)	19:50	15	18:56 (65)	18:25	10	17:24 (66)	16:11	15:42
19	04:58	06:04		19:49 (62)	07:12		18:42 (65)	08:20		17:13 (66)	08:34	09:24
	22:26	21:15	15	20:04 (62)	19:47	14	18:56 (65)	18:22	12	17:25 (66)	16:09	15:42
20	05:00	06:06		19:48 (62)	07:15		18:42 (65)	08:22		17:12 (66)	08:36	09:25
	22:25	21:12	17	20:05 (62)	19:44	13	18:55 (65)	18:20	14	17:26 (66)	16:08	15:43
21	05:01	06:08		19:48 (62)	07:17		18:43 (65)	08:25		17:12 (66)	08:38	09:26
	22:23	21:10	17	20:05 (62)	19:42	10	18:53 (65)	18:17	13	17:25 (66)	16:06	15:43
22	05:03	06:11		19:47 (62)	07:19		18:45 (65)	08:27		17:12 (66)	08:40	09:26
	22:21	21:07	18	20:05 (62)	19:39	5	18:50 (65)	18:14	13	17:25 (66)	16:04	15:43
23	05:05	06:13		19:48 (62)	07:21			08:29		17:12 (66)	08:43	09:27
	22:19	21:04	18	20:06 (62)	19:36			18:12	12	17:24 (66)	16:02	15:44
24	05:07	06:15		19:48 (62)	07:23			08:32		17:13 (66)	08:45	09:27
	22:17	21:02	17	20:05 (62)	19:33			18:09	10	17:23 (66)	16:01	15:45
25	05:09	06:17		19:48 (62)	07:26			07:34		16:14 (66)	08:47	09:27
	22:15	20:59	16	20:04 (62)	19:30			17:06	7	16:21 (66)	15:59	15:45
26	05:11	06:20		19:48 (62)	07:28			07:37			08:49	09:28
	22:13	20:56	15	20:03 (62)	19:27			17:04			15:58	15:46
27	05:13	06:22		19:49 (62)	07:30			07:39			08:51	09:28
	22:11	20:53	12	20:01 (62)	19:24			17:01			15:56	15:47
28	05:16	06:24		19:50 (62)	07:32			07:41			08:53	09:28
	22:09	20:50	9	19:59 (62)	19:21			16:59			15:55	15:48
29	05:18	06:26			07:35			07:44			08:55	09:28
	22:07	20:48			19:18			16:56			15:54	15:49
30	05:20	06:28			07:37			07:46			08:57	09:28
	22:05	20:45			19:16			16:54			15:52	15:50
31	05:22	06:31		19:33 (63)				07:48				09:27
	22:02	20:42	5	19:38 (63)				16:51				15:51
Potential sun hours	545	478			386			319			236	200
Total, worst case			185			192			97			
Sun reduction			0,50			0,50			0,50			
Oper. time red.			0,80			0,80			0,80			
Wind dir. red.			0,69			0,65			0,57			
Total reduction			0,28			0,26			0,23			
Total, real			51			49			22			

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	January	February		March		April		May	June
1	09:27	08:45		07:35		07:06	19:00 (65)	05:44	04:40
	15:53	16:56		18:04		20:16	4 19:04 (65)	21:25	22:30
2	09:27	08:43		07:32		07:04		05:41	04:38
	15:54	16:58		18:07		20:19		21:28	22:31
3	09:26	08:41		07:29		07:01		05:39	04:37
	15:55	17:01		18:09		20:21		21:30	22:33
4	09:26	08:39		07:27		06:58		05:36	04:36
	15:57	17:03		18:12		20:23		21:32	22:34
5	09:25	08:36		07:24		06:55		05:34	04:35
	15:58	17:06		18:14		20:25		21:35	22:36
6	09:25	08:34		07:21		06:52	19:37 (63)	05:31	04:34
	16:00	17:08		18:16		20:28	6 19:43 (63)	21:37	22:37
7	09:24	08:32		07:18		06:49	19:35 (63)	05:29	04:33
	16:02	17:11		18:19		20:30	10 19:45 (63)	21:39	22:39
8	09:23	08:29		07:15		06:46	19:34 (63)	05:26	04:32
	16:03	17:13		18:21		20:32	12 19:46 (63)	21:41	22:40
9	09:22	08:27		07:13		06:44	19:33 (63)	05:24	04:31
	16:05	17:16		18:23		20:35	13 19:46 (63)	21:44	22:41
10	09:21	08:24		07:10		06:41	19:33 (63)	05:22	04:30
	16:07	17:18		18:26		20:37	12 19:45 (63)	21:46	22:42
11	09:20	08:22		07:07		06:38	19:33 (63)	05:19	04:30
	16:09	17:21		18:28		20:39	11 19:44 (63)	21:48	22:43
12	09:19	08:20		07:04		06:35	19:33 (63)	05:17	04:29
	16:11	17:23		18:30		20:42	10 19:43 (63)	21:50	22:44
13	09:18	08:17		07:01		06:32	19:35 (63)	05:15	04:28
	16:13	17:25		18:33		20:44	7 19:42 (63)	21:53	22:45
14	09:17	08:15		06:58		06:29		05:13	04:28
	16:15	17:28		18:35		20:46		21:55	22:46
15	09:15	08:12		06:55		06:27		05:10	04:27
	16:17	17:30		18:37		20:48		21:57	22:47
16	09:14	08:10		06:53		06:24		05:08	04:27
	16:19	17:33		18:40		20:51		21:59	22:47
17	09:13	08:07		06:50		06:21	19:53 (62)	05:06	04:27
	16:21	17:35		18:42		20:53	8 20:01 (62)	22:01	22:48
18	09:11	08:04	16:45 (66)	06:47		06:18	19:50 (62)	05:04	04:27
	16:23	17:38	8 16:53 (66)	18:44		20:55	12 20:02 (62)	22:03	22:48
19	09:09	08:02	16:43 (66)	06:44		06:16	19:49 (62)	05:02	04:27
	16:25	17:40	12 16:55 (66)	18:47		20:58	15 20:04 (62)	22:05	22:49
20	09:08	07:59	16:43 (66)	06:41		06:13	19:48 (62)	05:00	04:27
	16:28	17:43	13 16:56 (66)	18:49		21:00	16 20:04 (62)	22:08	22:49
21	09:06	07:57	16:43 (66)	06:38		06:10	19:46 (62)	04:58	04:27
	16:30	17:45	13 16:56 (66)	18:51		21:02	18 20:04 (62)	22:10	22:49
22	09:05	07:54	16:42 (66)	06:35		06:07	19:47 (62)	04:56	04:27
	16:32	17:48	14 16:56 (66)	18:53		21:05	17 20:04 (62)	22:12	22:50
23	09:03	07:51	16:42 (66)	06:32	18:01 (65)	06:05	19:46 (62)	04:54	04:27
	16:34	17:50	13 16:55 (66)	18:56	7 18:08 (65)	21:07	18 20:04 (62)	22:14	22:50
24	09:01	07:49	16:43 (66)	06:30	17:59 (65)	06:02	19:46 (62)	04:52	04:28
	16:37	17:52	11 16:54 (66)	18:58	11 18:10 (65)	21:09	18 20:04 (62)	22:16	22:50
25	08:59	07:46	16:44 (66)	06:27	17:57 (65)	05:59	19:46 (62)	04:51	04:28
	16:39	17:55	9 16:53 (66)	19:00	14 18:11 (65)	21:12	17 20:03 (62)	22:17	22:50
26	08:57	07:43	16:47 (66)	06:24	17:56 (65)	05:57	19:47 (62)	04:49	04:28
	16:41	17:57	4 16:51 (66)	19:03	15 18:11 (65)	21:14	16 20:03 (62)	22:19	22:50
27	08:55	07:40		06:21	17:56 (65)	05:54	19:47 (62)	04:47	04:29
	16:44	18:00		19:05	16 18:12 (65)	21:16	14 20:01 (62)	22:21	22:49
28	08:53	07:38		06:18	17:56 (65)	05:51	19:49 (62)	04:46	04:30
	16:46	18:02		19:07	15 18:11 (65)	21:18	11 20:00 (62)	22:23	22:49
29	08:51			07:15	18:56 (65)	05:49	19:50 (62)	04:44	04:30
	16:49			20:09	14 19:10 (65)	21:21	7 19:57 (62)	22:25	22:49
30	08:49			07:12	18:56 (65)	05:46		04:43	04:31
	16:51			20:12	13 19:09 (65)	21:23		22:26	22:48
31	08:47			07:09	18:57 (65)			04:41	
	16:53			20:14	10 19:07 (65)			22:28	
Potential sun hours	222	260		365		432		521	547
Total, worst case			97		115		272		
Sun reduction			0,50		0,50		0,50		
Oper. time red.			0,80		0,80		0,80		
Wind dir. red.			0,57		0,63		0,69		
Total reduction			0,23		0,25		0,28		
Total, real			22		29		75		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

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Calculated:
19.11.2025 15:20/4.2.271

SHADOW - Calendar

Calculation: Moifjellet med eksisterende vkv - real case - mottakere **Shadow receptor:** AX - Laksesvela 58

Assumptions for shadow calculations

Sunshine probability S/S0 (Sun hours/Possible sun hours) []

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50	0,50

Operational time

N	NNE	ENE	E	ESE	SSE	S	SSW	WSW	W	WNW	NNW	Sum
644	231	315	644	959	714	721	455	378	420	574	938	6 993

	July	August		September		October		November	December
1	04:32	05:24		06:33	19:32 (63)	07:39		07:51	08:59
	22:48	22:00		20:39	11 19:43 (63)	19:13		16:49	15:51
2	04:33	05:26		06:35	19:31 (63)	07:41		07:53	09:01
	22:47	21:58		20:36	12 19:43 (63)	19:10		16:46	15:50
3	04:34	05:28		06:37	19:31 (63)	07:43		07:56	09:03
	22:47	21:56		20:34	13 19:44 (63)	19:07		16:44	15:49
4	04:35	05:31		06:39	19:31 (63)	07:46		07:58	09:05
	22:46	21:53		20:31	12 19:43 (63)	19:04		16:41	15:48
5	04:36	05:33		06:42	19:32 (63)	07:48		08:00	09:06
	22:45	21:51		20:28	10 19:42 (63)	19:01		16:39	15:47
6	04:37	05:35		06:44	19:33 (63)	07:50		08:03	09:08
	22:44	21:48		20:25	7 19:40 (63)	18:58		16:37	15:46
7	04:39	05:37		06:46		07:52		08:05	09:10
	22:43	21:46		20:22		18:56		16:34	15:45
8	04:40	05:39		06:48		07:55		08:08	09:11
	22:42	21:44		20:19		18:53		16:32	15:45
9	04:41	05:42		06:50		07:57		08:10	09:13
	22:41	21:41		20:16		18:50		16:30	15:44
10	04:43	05:44		06:53		07:59		08:12	09:14
	22:40	21:39		20:13		18:47		16:28	15:44
11	04:44	05:46		06:55	18:54 (65)	08:02		08:15	09:16
	22:39	21:36		20:11	1 18:55 (65)	18:44		16:25	15:43
12	04:46	05:48		06:57	18:50 (65)	08:04		08:17	09:17
	22:37	21:34		20:08	9 18:59 (65)	18:42		16:23	15:43
13	04:47	05:50		06:59	18:48 (65)	08:06		08:20	09:18
	22:36	21:31		20:05	12 19:00 (65)	18:39		16:21	15:42
14	04:49	05:53	19:58 (62)	07:01	18:47 (65)	08:08		08:22	09:19
	22:34	21:28	8 20:06 (62)	20:02	14 19:01 (65)	18:36		16:19	15:42
15	04:51	05:55	19:56 (62)	07:04	18:46 (65)	08:11		08:24	09:20
	22:33	21:26	12 20:08 (62)	19:59	15 19:01 (65)	18:33		16:17	15:42
16	04:52	05:57	19:54 (62)	07:06	18:45 (65)	08:13	17:18 (66)	08:27	09:21
	22:31	21:23	15 20:09 (62)	19:56	15 19:00 (65)	18:30	7 17:25 (66)	16:15	15:42
17	04:54	05:59	19:53 (62)	07:08	18:45 (65)	08:15	17:15 (66)	08:29	09:22
	22:30	21:21	16 20:09 (62)	19:53	14 18:59 (65)	18:28	11 17:26 (66)	16:13	15:42
18	04:56	06:02	19:52 (62)	07:10	18:45 (65)	08:18	17:14 (66)	08:31	09:23
	22:28	21:18	18 20:10 (62)	19:50	13 18:58 (65)	18:25	13 17:27 (66)	16:11	15:42
19	04:58	06:04	19:52 (62)	07:12	18:46 (65)	08:20	17:13 (66)	08:34	09:24
	22:26	21:15	18 20:10 (62)	19:47	12 18:58 (65)	18:22	14 17:27 (66)	16:09	15:42
20	05:00	06:06	19:51 (62)	07:15	18:47 (65)	08:22	17:13 (66)	08:36	09:25
	22:25	21:12	18 20:09 (62)	19:44	8 18:55 (65)	18:20	14 17:27 (66)	16:08	15:43
21	05:01	06:08	19:51 (62)	07:17		08:25	17:13 (66)	08:38	09:26
	22:23	21:10	18 20:09 (62)	19:42		18:17	13 17:26 (66)	16:06	15:43
22	05:03	06:11	19:51 (62)	07:19		08:27	17:14 (66)	08:40	09:26
	22:21	21:07	17 20:08 (62)	19:39		18:14	12 17:26 (66)	16:04	15:43
23	05:05	06:13	19:52 (62)	07:21		08:29	17:14 (66)	08:43	09:27
	22:19	21:04	17 20:09 (62)	19:36		18:12	10 17:24 (66)	16:02	15:44
24	05:07	06:15	19:53 (62)	07:23		08:32	17:16 (66)	08:45	09:27
	22:17	21:02	14 20:07 (62)	19:33		18:09	7 17:23 (66)	16:01	15:45
25	05:09	06:17	19:54 (62)	07:26		07:34		08:47	09:27
	22:15	20:59	12 20:06 (62)	19:30		17:06		15:59	15:45
26	05:11	06:20	19:56 (62)	07:28		07:37		08:49	09:28
	22:13	20:56	7 20:03 (62)	19:27		17:04		15:58	15:46
27	05:13	06:22		07:30		07:39		08:51	09:28
	22:11	20:53		19:24		17:01		15:56	15:47
28	05:16	06:24		07:32		07:41		08:53	09:28
	22:09	20:50		19:21		16:59		15:55	15:48
29	05:18	06:26		07:35		07:44		08:55	09:28
	22:07	20:48		19:18		16:56		15:54	15:49
30	05:20	06:28	19:35 (63)	07:37		07:46		08:57	09:28
	22:05	20:45	7 19:42 (63)	19:16		16:54		15:52	15:50
31	05:22	06:31	19:33 (63)			07:48			09:27
	22:02	20:42	10 19:43 (63)			16:51			15:51
Potential sun hours	545	478		386		319		236	200
Total, worst case			207		178		101		
Sun reduction			0,50		0,50		0,50		
Oper. time red.			0,80		0,80		0,80		
Wind dir. red.			0,69		0,65		0,57		
Total reduction			0,28		0,26		0,23		
Total, real			57		46		23		

Table layout: For each day in each month the following matrix apply

Day in month	Sun rise (hh:mm) Sun set (hh:mm)	Minutes with flicker	First time (hh:mm) with flicker Last time (hh:mm) with flicker	(WTG causing flicker first time) (WTG causing flicker last time)

Vedlegg 8.2

Grafisk Moifjellet vindkraftverk

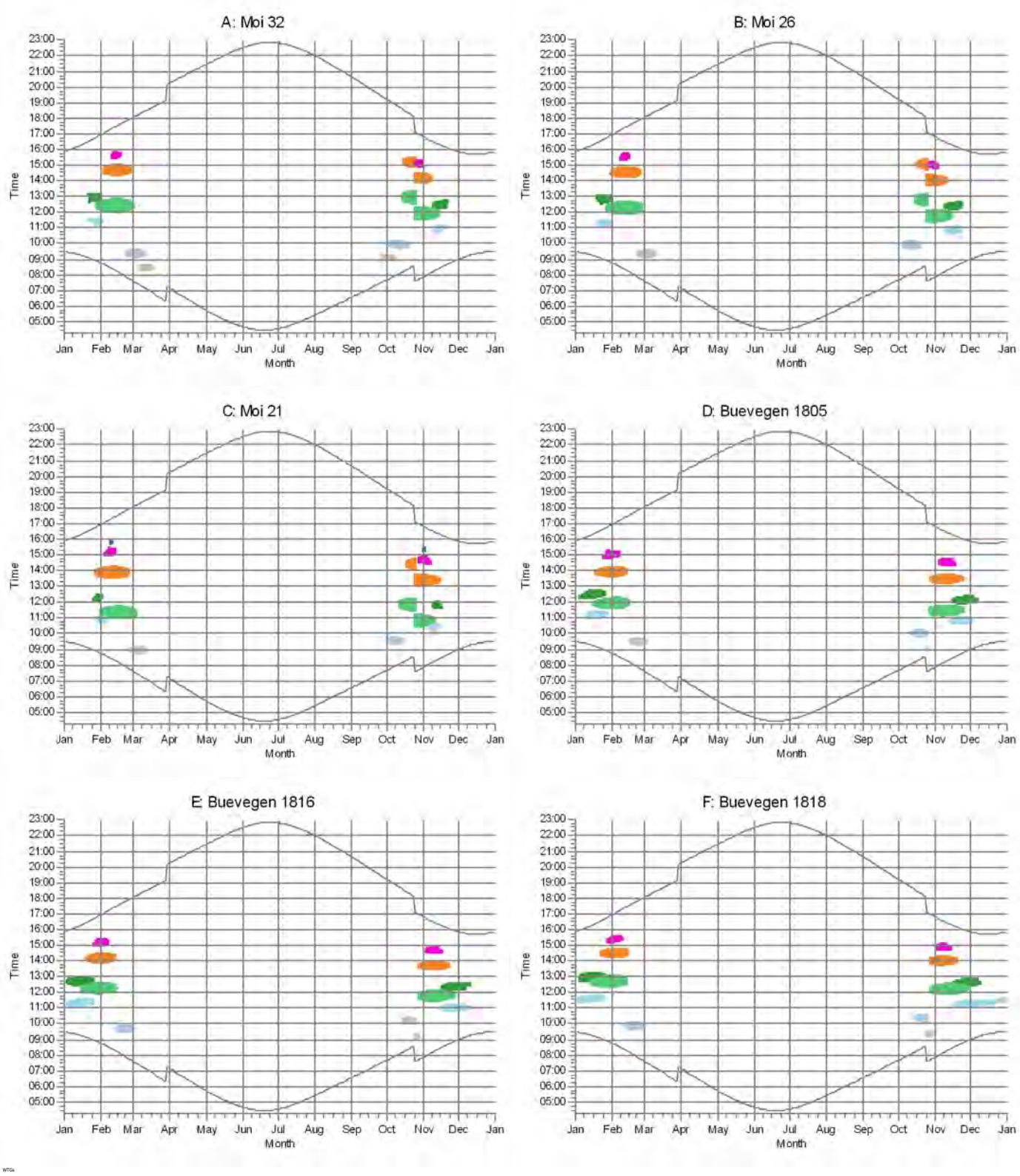
Med nærliggende - realistic case

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SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - real case - mottakere

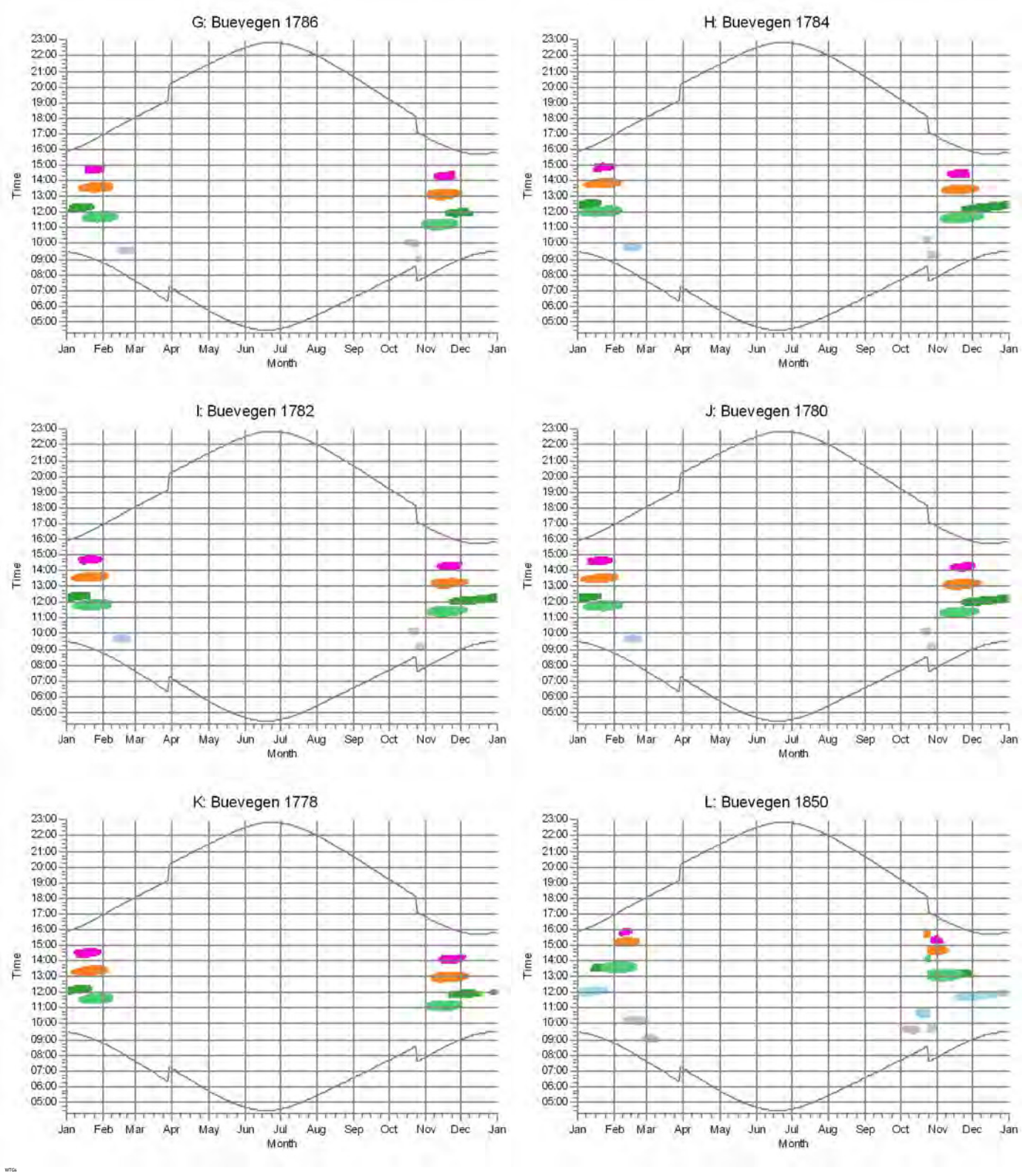


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SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - real case - mottakere

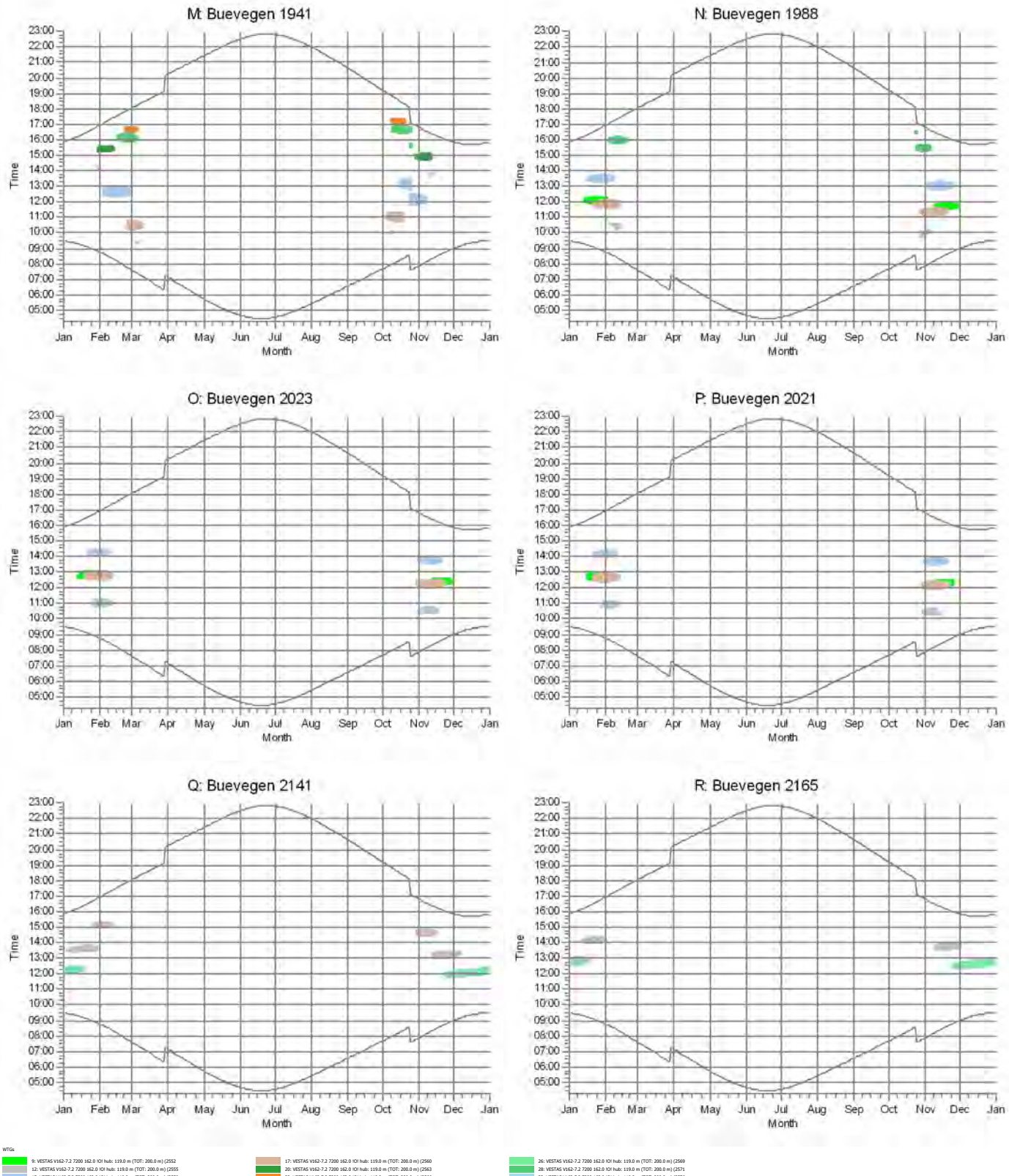


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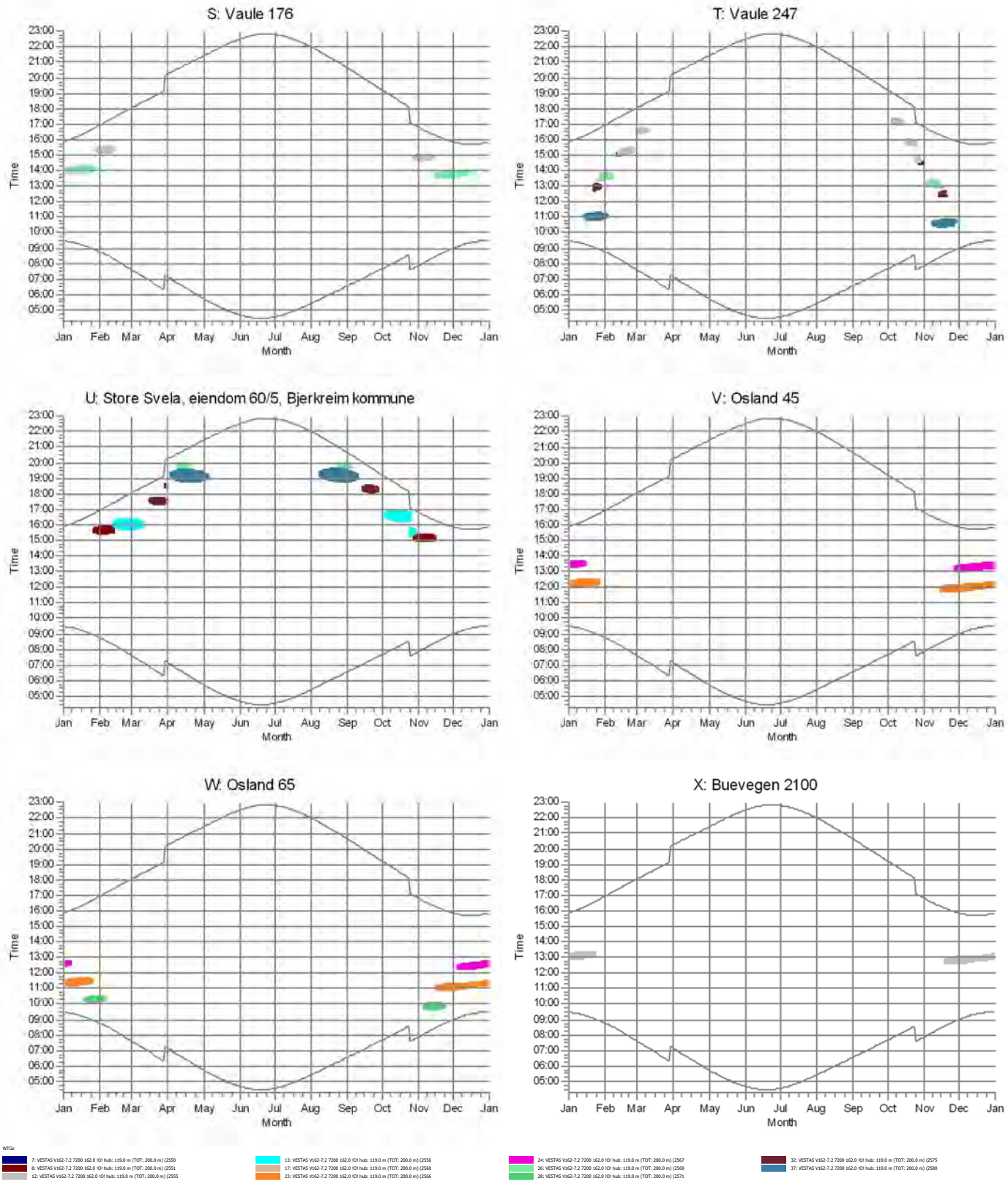


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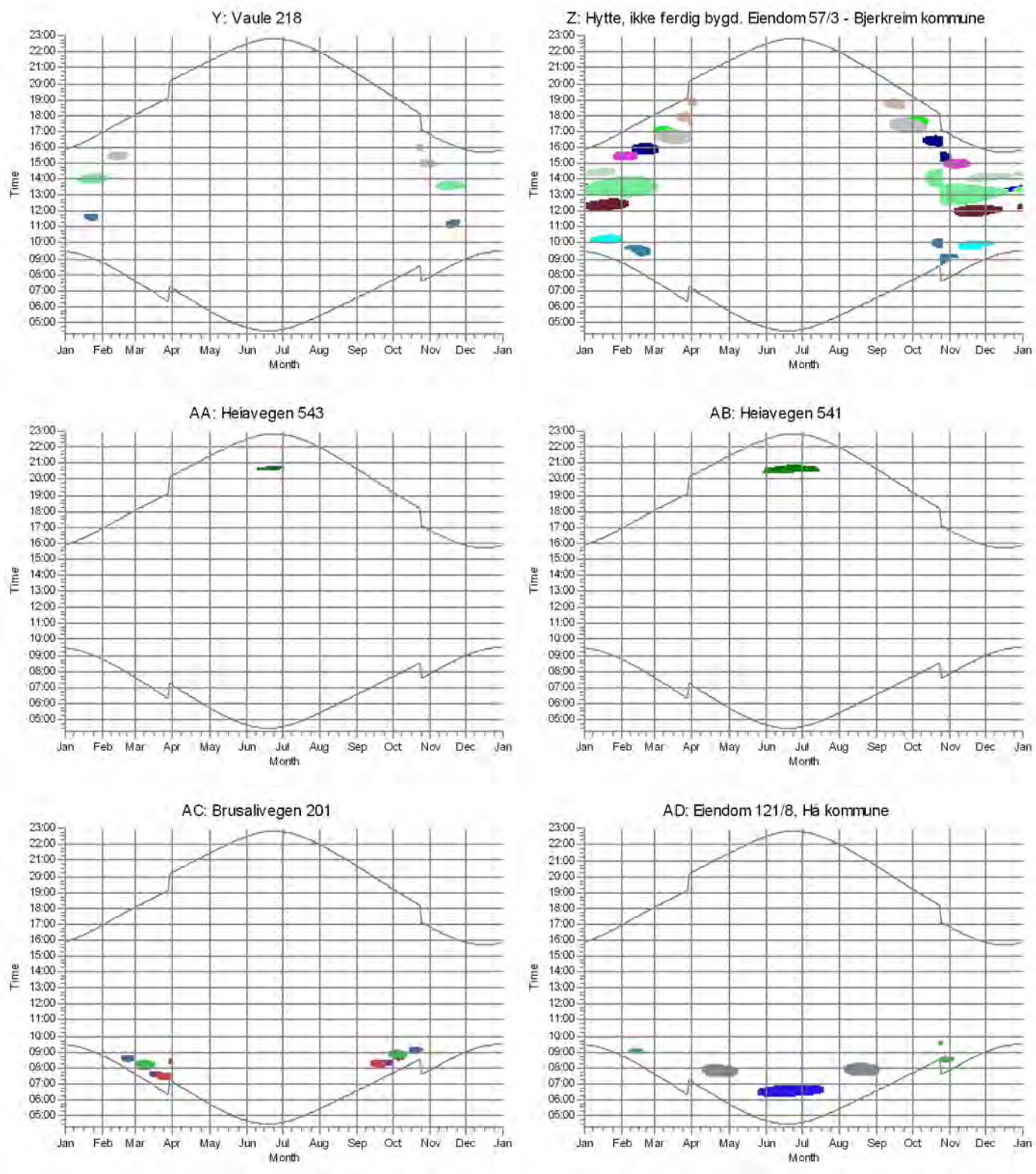


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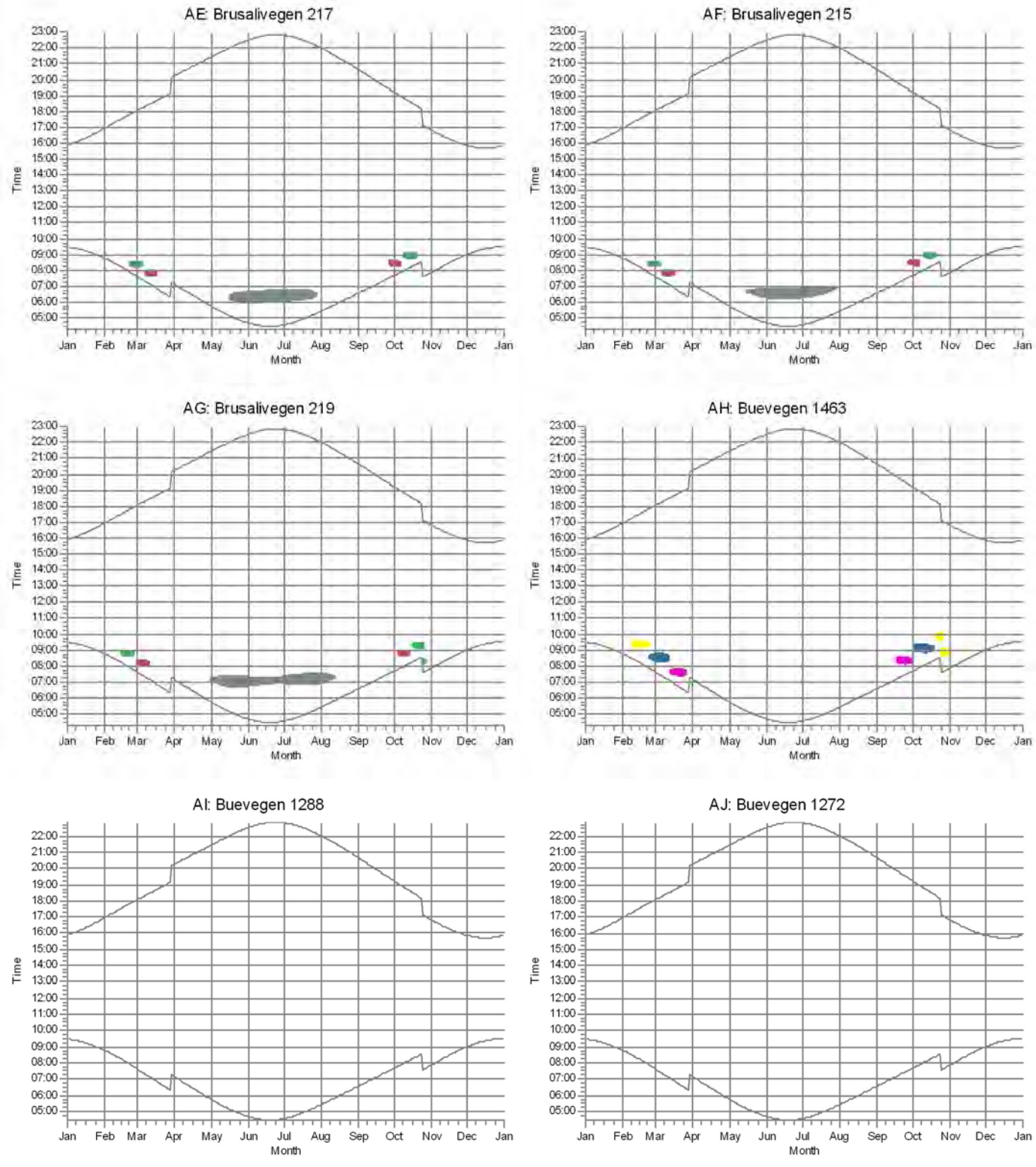


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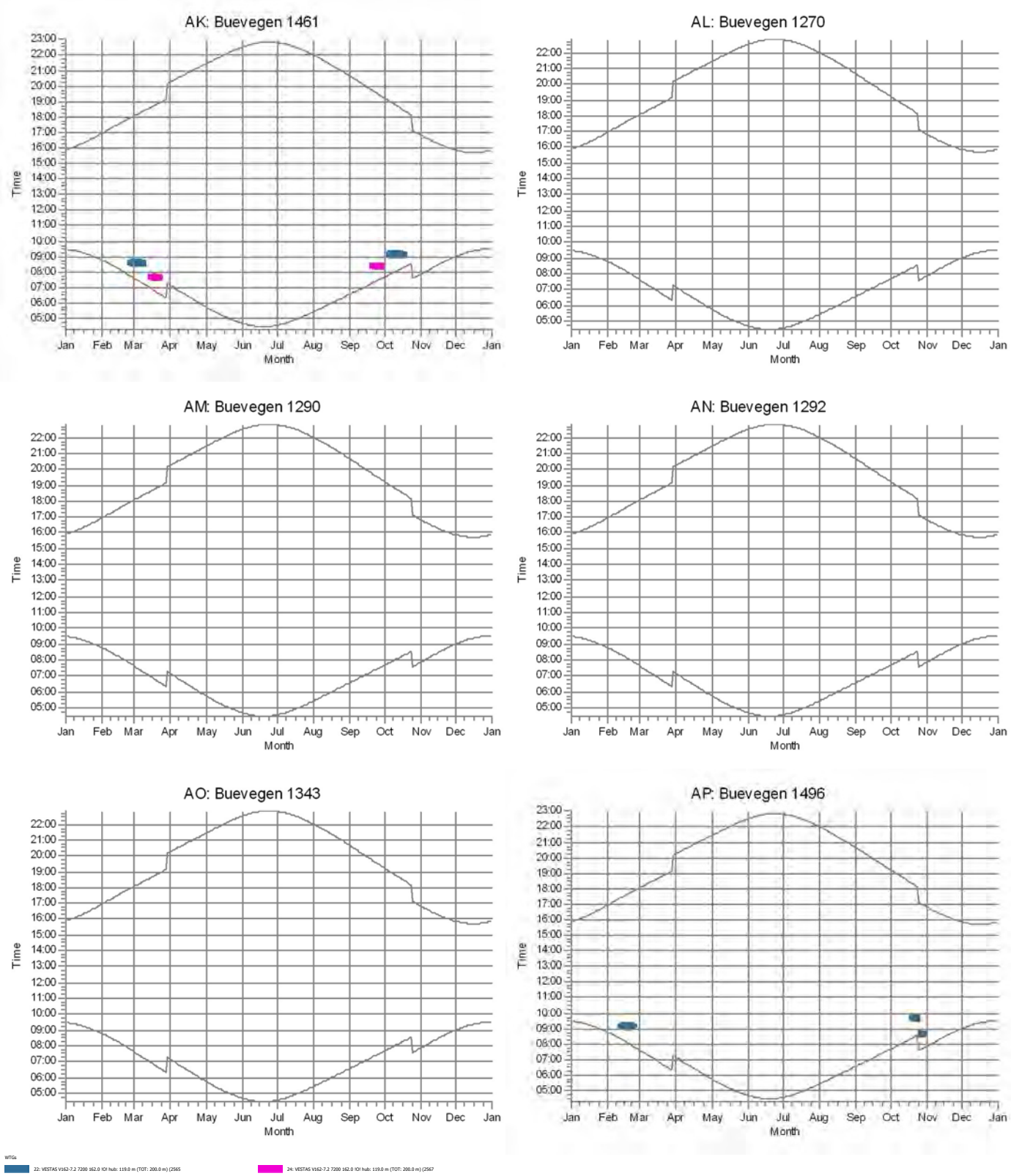


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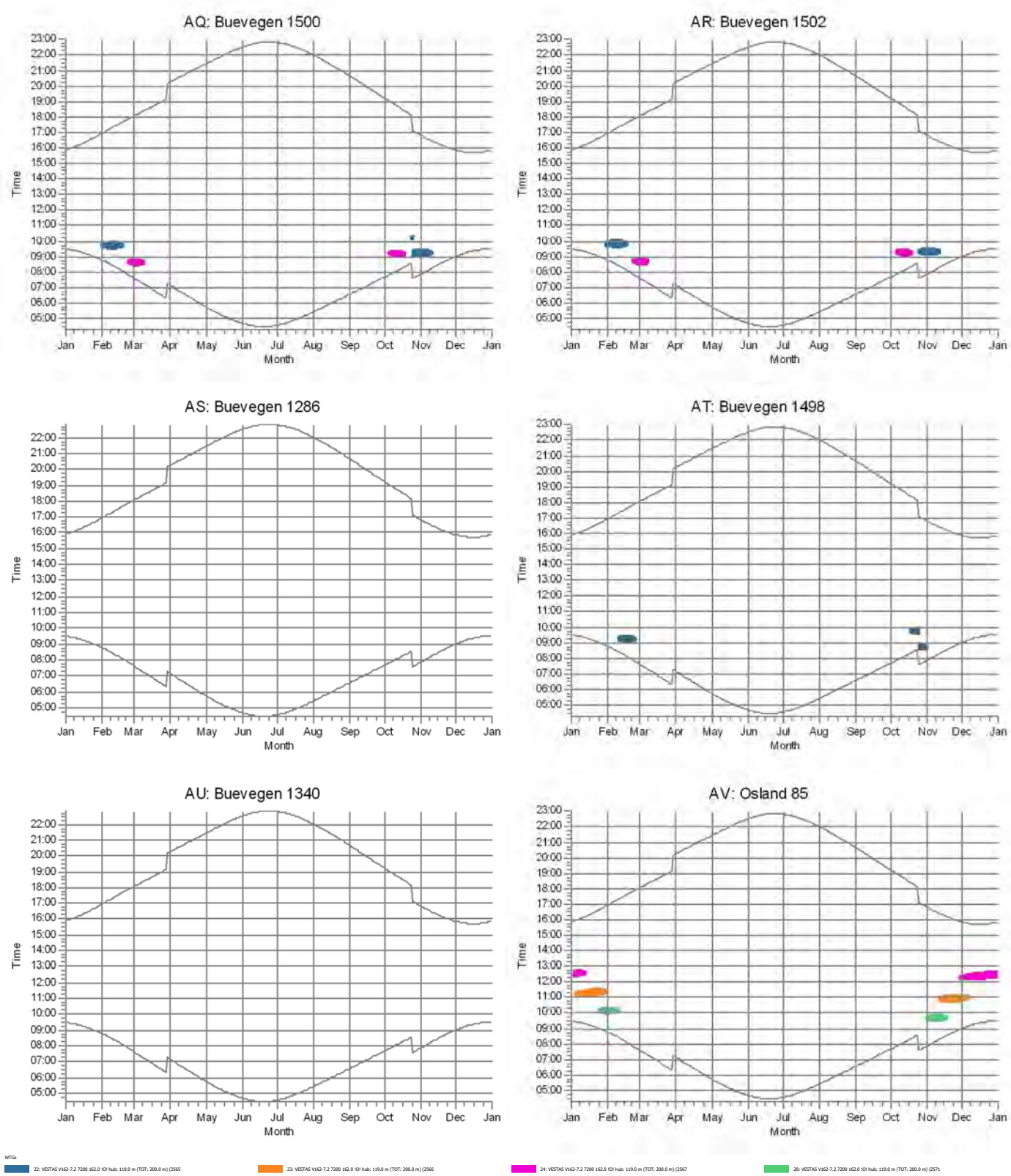


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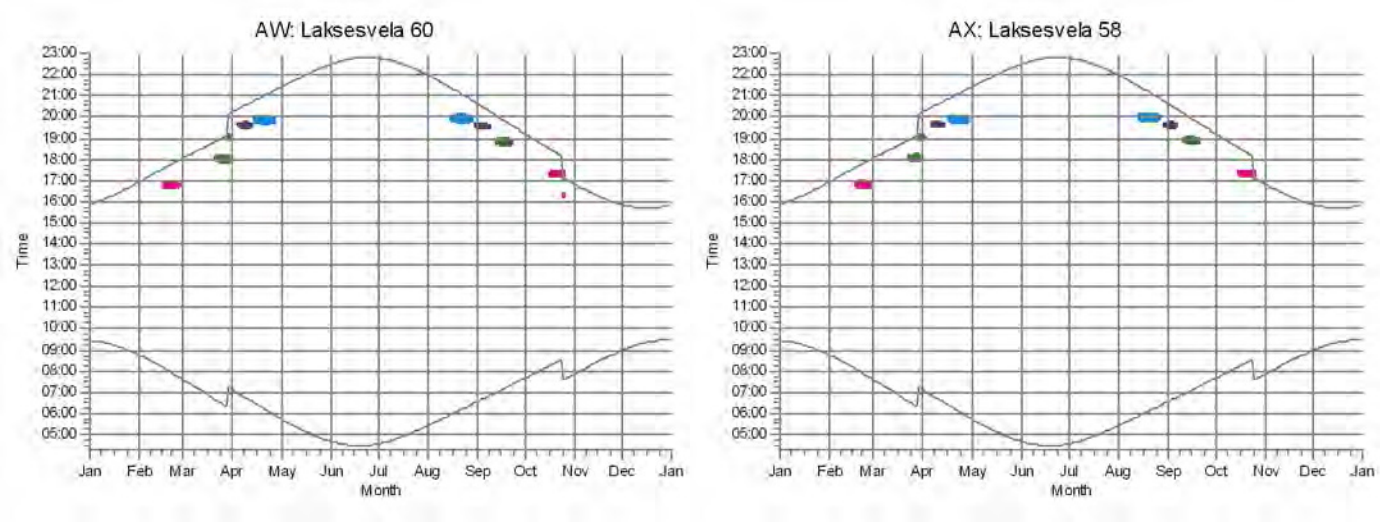


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SHADOW - Calendar, graphical

Calculation: Moifjellet med eksisterende vkv - real case - mottakere



WTGs

62: Siemens Gamesa SG 5.0-132 MkII 5000 132.0 IOI hub: 125,0 m (TOT: 191,0 m) (24)
63: Siemens Gamesa SG 5.0-132 MkII 5000 132.0 IOI hub: 125,0 m (TOT: 191,0 m) (25)
65: Siemens Gamesa SG 5.0-132 MkII 5000 132.0 IOI hub: 125,0 m (TOT: 191,0 m) (27)
66: Siemens Gamesa SG 5.0-132 MkII 5000 132.0 IOI hub: 125,0 m (TOT: 191,0 m) (28)