

# Appendix 7D: Road Receptor Glare Results (10 Deg)





# ForgeSolar

# Site Configuration: Derrill Water Solar Farm Road 10 Deg

Project site configuration details and results.



Created Jan. 19, 2021 8:18 a.m.
Updated Jan. 29, 2021 3:59 a.m.
DNI varies and peaks at 1,000.0 W/m^2
Analyze every 1 minute(s)
0.5 ocular transmission coefficient
0.002 m pupil diameter
0.017 m eye focal length
9.3 mrad sun subtended angle
Timezone UTC0
Site Configuration ID: 48229.8678

## Summary of Results Glare with potential for temporary after-image predicted

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV array 1	10.0	180.0	1,777	56,917	-
PV array 2	10.0	180.0	697	17,948	-
PV array 3	10.0	180.0	14,080	38,996	-
PV array 4	10.0	180.0	39,428	109,540	-

# **Component Data**

PV Array(s)

Name: PV array 1

Axis tracking: Fixed (no rotation)

Tilt: 10.0 deg
Orientation: 180.0 deg
Rated power: -

Panel material: Light textured glass with AR

coating

Vary reflectivity with sun position? Yes Correlate slope error with surface type? Yes

Slope error: 9.16 mrad Approx. area: 104,635 sq-m



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	50.797429	-4.419972	109.23	2.80	112.03
2	50.797076	-4.421195	110.38	2.80	113.18
3	50.796263	-4.423405	113.22	2.80	116.02
4	50.795978	-4.423383	111.97	2.80	114.77
5	50.795625	-4.424564	114.77	2.80	117.57
6	50.794866	-4.424006	114.96	2.80	117.76
7	50.794160	-4.425143	117.83	2.80	120.63
8	50.793146	-4.424408	120.28	2.80	123.08
9	50.792180	-4.420680	118.45	2.80	121.25
10	50.792343	-4.419972	119.63	2.80	122.43
11	50.792085	-4.419628	119.51	2.80	122.31
12	50.791814	-4.418770	120.50	2.80	123.30
13	50.792004	-4.417504	122.88	2.80	125.68
14	50.793075	-4.418770	119.76	2.80	122.56
15	50.792492	-4.420186	119.57	2.80	122.37
16	50.793794	-4.421881	118.48	2.80	121.28
17	50.794906	-4.422718	116.38	2.80	119.18
18	50.795476	-4.421517	115.69	2.80	118.49
19	50.795788	-4.422353	112.48	2.80	115.28
20	50.796819	-4.419628	109.12	2.80	111.92

Name: PV array 2

Axis tracking: Fixed (no rotation)

Tilt: 10.0 deg Orientation: 180.0 deg Rated power: -

Panel material: Light textured glass with AR

coating

Vary reflectivity with sun position? Yes Correlate slope error with surface type? Yes

**Slope error**: 9.16 mrad **Approx. area**: 123,918 sq-m



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	50.793017	-4.424714	121.10	2.80	123.90
2	50.792088	-4.424113	118.62	2.80	121.42
3	50.790392	-4.422944	115.31	2.80	118.11
4	50.789938	-4.424167	114.47	2.80	117.27
5	50.789314	-4.425604	114.51	2.80	117.31
6	50.788479	-4.424853	109.52	2.80	112.32
7	50.787530	-4.424810	113.00	2.80	115.80
8	50.786248	-4.424177	123.13	2.80	125.93
9	50.785855	-4.423362	123.52	2.80	126.32
10	50.785536	-4.422139	122.27	2.80	125.07
11	50.786953	-4.421291	114.55	2.80	117.35
12	50.787082	-4.421903	114.94	2.80	117.74
13	50.787367	-4.422407	114.49	2.80	117.29
14	50.788032	-4.422729	110.30	2.80	113.10
15	50.788771	-4.422418	107.16	2.80	109.96
16	50.790087	-4.423705	112.58	2.80	115.38
17	50.790229	-4.423115	113.53	2.80	116.33
18	50.788954	-4.422257	106.46	2.80	109.26
19	50.788839	-4.421012	104.92	2.80	107.72
20	50.789212	-4.420455	106.94	2.80	109.74
21	50.790148	-4.421109	111.73	2.80	114.53
22	50.790243	-4.421710	112.87	2.80	115.67
23	50.790840	-4.422182	117.46	2.80	120.26
24	50.791206	-4.421967	117.58	2.80	120.38
25	50.791776	-4.422613	117.19	2.80	119.99
26	50.792284	-4.421905	118.75	2.80	121.55

Name: PV array 3

Axis tracking: Fixed (no rotation)

Tilt: 10.0 deg
Orientation: 180.0 deg
Rated power: -

Panel material: Light textured glass with AR

coating

Vary reflectivity with sun position? Yes Correlate slope error with surface type? Yes

Slope error: 9.16 mrad Approx. area: 55,593 sq-m



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	50.795143	-4.415966	111.26	2.80	114.06
2	50.794139	-4.415215	114.25	2.80	117.05
3	50.794166	-4.414808	112.87	2.80	115.67
4	50.792877	-4.413542	118.54	2.80	121.34
5	50.793366	-4.411214	105.72	2.80	108.52
6	50.793434	-4.410935	103.79	2.80	106.59
7	50.794105	-4.410677	100.41	2.80	103.21
8	50.794641	-4.411374	101.20	2.80	104.00
9	50.794824	-4.411385	101.61	2.80	104.41
10	50.795122	-4.411825	102.45	2.80	105.25
11	50.795109	-4.412179	104.62	2.80	107.42
12	50.794620	-4.413220	106.82	2.80	109.62
13	50.794973	-4.413949	109.04	2.80	111.84
14	50.795163	-4.415054	109.12	2.80	111.92

Name: PV array 4

Axis tracking: Fixed (no rotation)

Tilt: 10.0 deg
Orientation: 180.0 deg
Rated power: -

Panel material: Light textured glass with AR

coating

Vary reflectivity with sun position? Yes Correlate slope error with surface type? Yes

Slope error: 9.16 mrad Approx. area: 228,907 sq-m



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	50.793275	-4.410921	104.89	2.80	107.69
2	50.792597	-4.414462	121.95	2.80	124.75
3	50.791708	-4.413743	115.50	2.80	118.30
4	50.791152	-4.415556	117.59	2.80	120.39
5	50.790135	-4.417681	114.28	2.80	117.08
6	50.789339	-4.416457	110.99	2.80	113.79
7	50.787651	-4.415782	110.89	2.80	113.69
8	50.787311	-4.416683	109.86	2.80	112.66
9	50.786911	-4.417101	104.28	2.80	107.08
10	50.786592	-4.416597	101.77	2.80	104.57
11	50.786185	-4.416425	101.10	2.80	103.90
12	50.784273	-4.419344	115.39	2.80	118.19
13	50.783689	-4.418839	119.07	2.80	121.87
14	50.784605	-4.416329	111.10	2.80	113.90
15	50.784971	-4.413958	103.21	2.80	106.01
16	50.785358	-4.413089	97.54	2.80	100.34
17	50.786660	-4.414333	97.45	2.80	100.25
18	50.786796	-4.413925	97.08	2.80	99.88
19	50.787773	-4.413389	97.50	2.80	100.30
20	50.788580	-4.413507	99.59	2.80	102.39
21	50.790804	-4.411764	104.92	2.80	107.72
22	50.791759	-4.411405	104.86	2.80	107.66
23	50.791979	-4.411502	105.72	2.80	108.52
24	50.792118	-4.411298	105.52	2.80	108.32

### **Discrete Observation Receptors**

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	m	m	m
OP 1	50.799080	-4.437101	136.13	1.50	137.63
OP 2	50.798999	-4.434772	139.29	1.50	140.79
OP 3	50.799277	-4.431854	137.54	1.50	139.04
OP 4	50.801174	-4.408308	124.45	1.50	125.95
OP 5	50.801216	-4.405429	126.83	1.50	128.33
OP 6	50.801504	-4.402361	130.54	1.50	132.04
OP 7	50.793885	-4.398547	132.05	1.50	133.55
OP 8	50.793535	-4.400988	127.82	1.50	129.32
OP 9	50.793220	-4.404099	117.95	1.50	119.45
OP 10	50.793291	-4.406948	124.28	1.50	125.78
OP 11	50.793315	-4.409807	100.99	1.50	102.49
OP 12	50.793020	-4.412350	112.16	1.50	113.66
OP 13	50.792522	-4.415048	123.23	1.50	124.73
OP 14	50.791823	-4.417768	122.17	1.50	123.67
OP 15	50.792077	-4.420713	118.52	1.50	120.02
OP 16	50.792684	-4.423148	119.31	1.50	120.81
OP 17	50.793285	-4.425648	121.13	1.50	122.63
OP 18	50.792634	-4.428079	122.02	1.50	123.52
OP 19	50.791648	-4.430943	122.58	1.50	124.08
OP 20	50.796528	-4.436780	127.80	1.50	129.30
OP 21	50.794696	-4.435314	121.78	1.50	123.28
OP 22	50.793092	-4.434535	118.22	1.50	119.72
OP 23	50.791691	-4.432911	119.98	1.50	121.48
OP 24	50.790178	-4.432064	118.23	1.50	119.73
OP 25	50.788622	-4.431779	119.41	1.50	120.91
OP 26	50.786800	-4.430407	119.97	1.50	121.47
OP 27	50.785067	-4.428895	121.10	1.50	122.60
OP 28	50.783871	-4.427490	129.84	1.50	131.34
OP 29	50.782168	-4.426132	132.76	1.50	134.26
OP 30	50.782284	-4.423799	126.48	1.50	127.98
OP 31	50.782121	-4.421149	117.95	1.50	119.45
OP 32	50.781341	-4.407889	113.23	1.50	114.73
OP 33	50.781914	-4.405062	126.74	1.50	128.24
OP 34	50.782840	-4.403168	126.79	1.50	128.29
OP 35	50.784120	-4.401396	126.11	1.50	127.61

# **PV Array Results**

# Summary of PV Glare Analysis PV configuration and predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File 😯
	deg	deg	min	min	kWh	
PV array 1	10.0	180.0	1,777	56,917	-	-
PV array 2	10.0	180.0	697	17,948	-	-
PV array 3	10.0	180.0	14,080	38,996	-	-
PV array 4	10.0	180.0	39,428	109,540	-	-

Click the name of the PV array to scroll to its results

# PV & Receptor Analysis Results detailed results for each PV array and receptor

#### PV array 1 potential temporary after-image

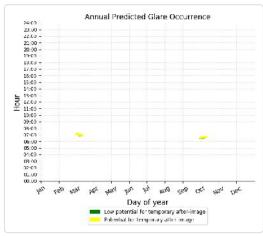


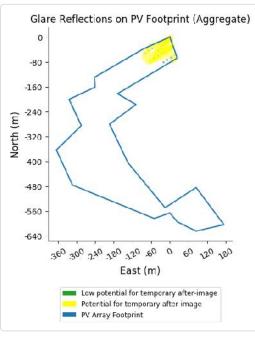
Component	Green glare (min)	Yellow glare (min)
OP: OP 1	16	57
OP: OP 2	0	100
OP: OP 3	0	6
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	674	120
OP: OP 8	479	410
OP: OP 9	82	301
OP: OP 10	115	1878
OP: OP 11	212	1596
OP: OP 12	34	669
OP: OP 13	0	4321
OP: OP 14	0	10398
OP: OP 15	0	5994
OP: OP 16	0	10805
OP: OP 17	0	8028
OP: OP 18	0	4415
OP: OP 19	9	2915
OP: OP 20	77	660
OP: OP 21	31	1211
OP: OP 22	33	1258
OP: OP 23	7	1562
OP: OP 24	1	100
OP: OP 25	7	113
OP: OP 26	0	0
OP: OP 27	0	0

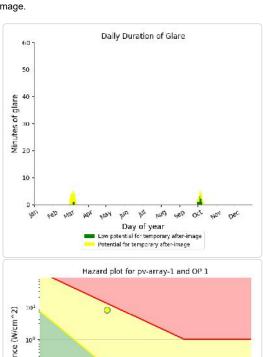
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0

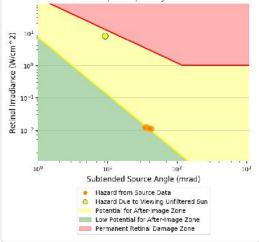
#### PV array 1 - OP Receptor (OP 1)

- 16 minutes of "green" glare with low potential to cause temporary after-image.
- 57 minutes of "yellow" glare with potential to cause temporary after-image.





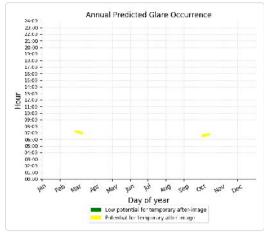


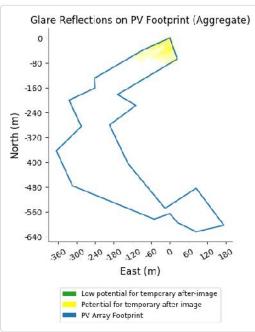


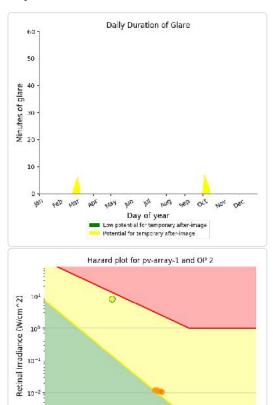
#### PV array 1 - OP Receptor (OP 2)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 100 minutes of "yellow" glare with potential to cause temporary after-image.







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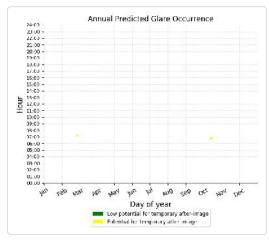
Subtended Source Angle (mrad)

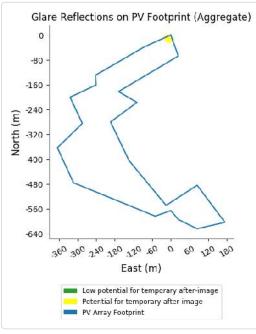
Hazard from Source Data
Hazard Due to Viewing Unfiltered Sun
Potential for After-Image Zone
Low Potential for After-Image Zone
Permanent Retinal Damage Zone

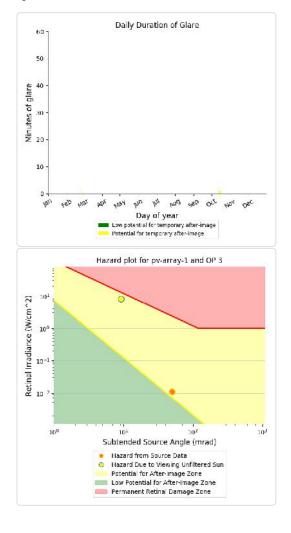
#### PV array 1 - OP Receptor (OP 3)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 6 minutes of "yellow" glare with potential to cause temporary after-image.







#### PV array 1 - OP Receptor (OP 4)

No glare found

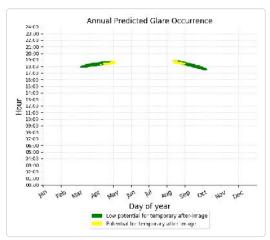
PV array 1 - OP Receptor (OP 5)

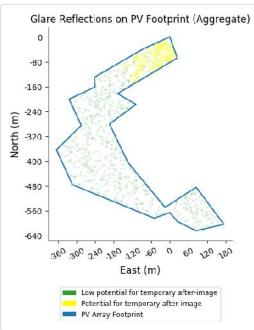
No glare found

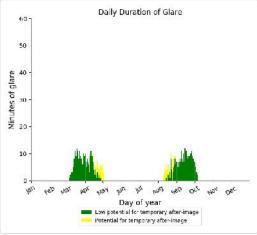
PV array 1 - OP Receptor (OP 6)

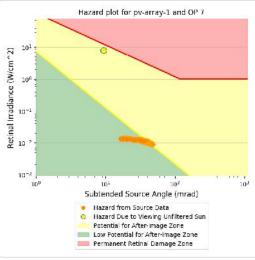
#### PV array 1 - OP Receptor (OP 7)

- 674 minutes of "green" glare with low potential to cause temporary after-image.
- 120 minutes of "yellow" glare with potential to cause temporary after-image.



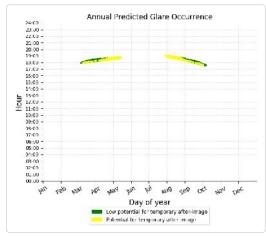


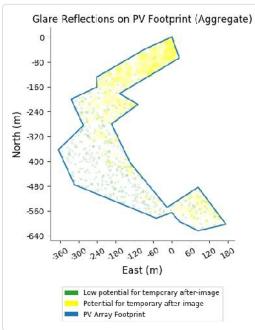


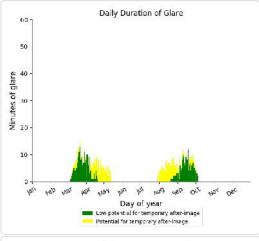


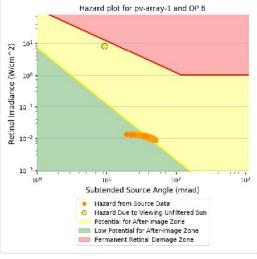
#### PV array 1 - OP Receptor (OP 8)

- 479 minutes of "green" glare with low potential to cause temporary after-image.
- 410 minutes of "yellow" glare with potential to cause temporary after-image.



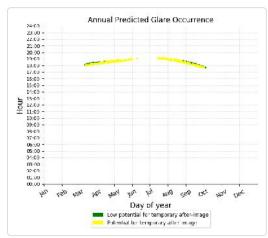


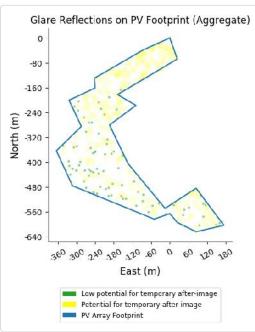


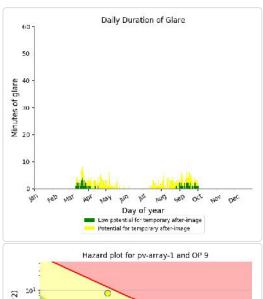


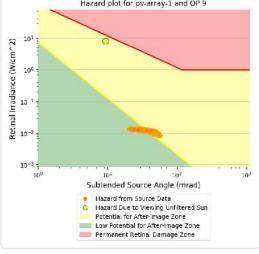
#### PV array 1 - OP Receptor (OP 9)

- 82 minutes of "green" glare with low potential to cause temporary after-image.
- 301 minutes of "yellow" glare with potential to cause temporary after-image.







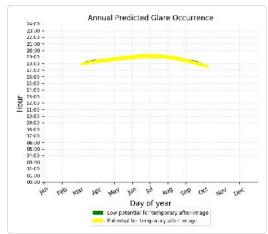


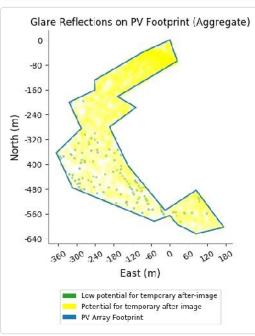
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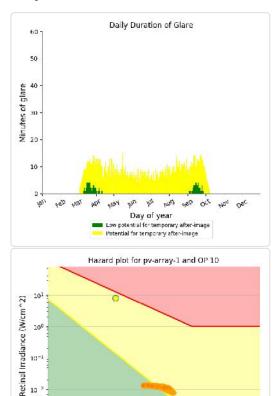
#### PV array 1 - OP Receptor (OP 10)

PV array is expected to produce the following glare for receptors at this location:

- 115 minutes of "green" glare with low potential to cause temporary after-image.
- 1,878 minutes of "yellow" glare with potential to cause temporary after-image.







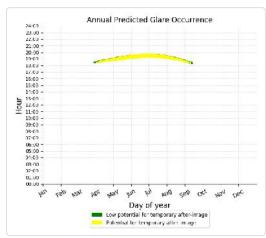
101

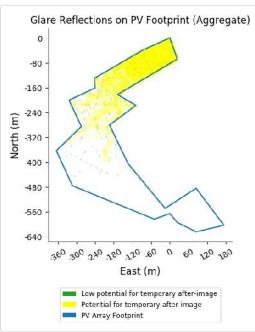
Subtended Source Angle (mrad)

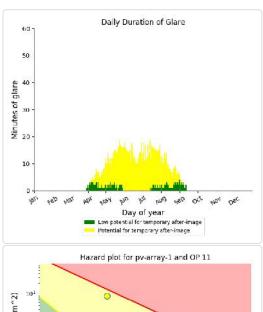
Hazard from Source Data
Hazard Due to Viewing Unfiltered Sun
Potential for After-Image Zone
Low Potential for After-Image Zone
Permanent Retinal Damage Zone

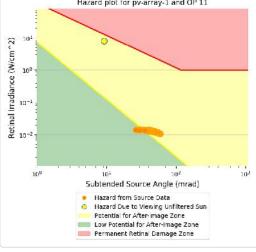
#### PV array 1 - OP Receptor (OP 11)

- 212 minutes of "green" glare with low potential to cause temporary after-image.
- 1,596 minutes of "yellow" glare with potential to cause temporary after-image.



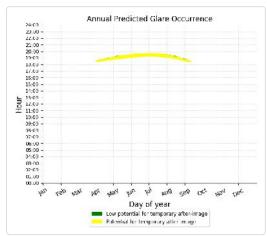


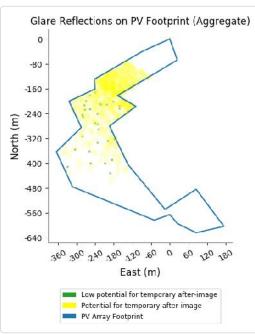


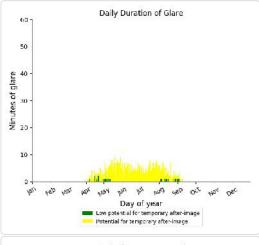


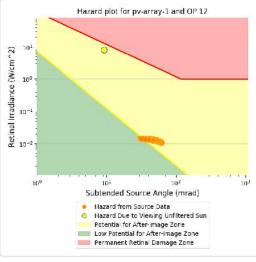
#### PV array 1 - OP Receptor (OP 12)

- 34 minutes of "green" glare with low potential to cause temporary after-image.
- 669 minutes of "yellow" glare with potential to cause temporary after-image.







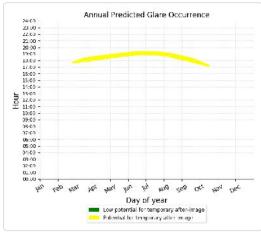


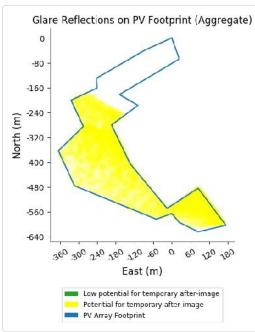
10

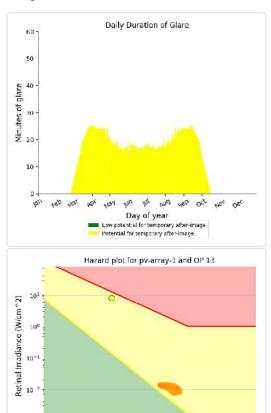
#### PV array 1 - OP Receptor (OP 13)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 4,321 minutes of "yellow" glare with potential to cause temporary after-image.







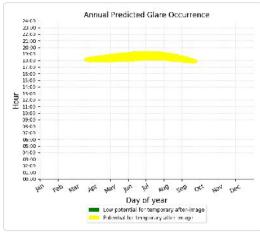
101

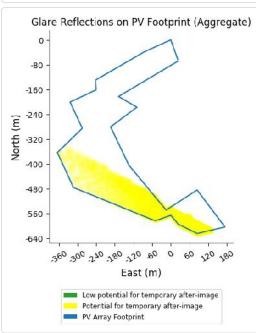
Subtended Source Angle (mrad)

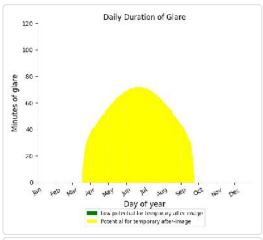
Hazard from Source Data
 Hazard Due to Viewing Unfiltered Sun
 Potential for After image Zone
 Low Potential for After-image Zone
 Permanent Retinal Damage Zone

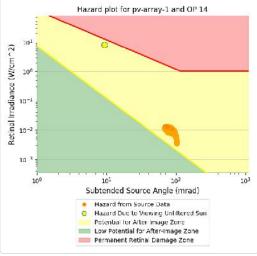
#### PV array 1 - OP Receptor (OP 14)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 10,398 minutes of "yellow" glare with potential to cause temporary after-image.



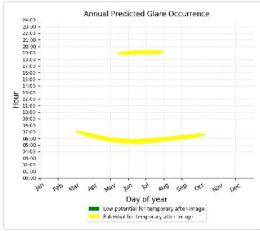


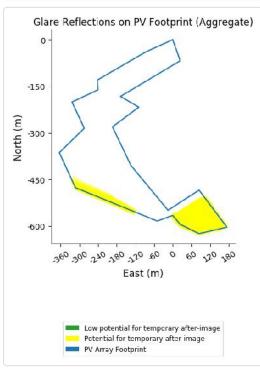


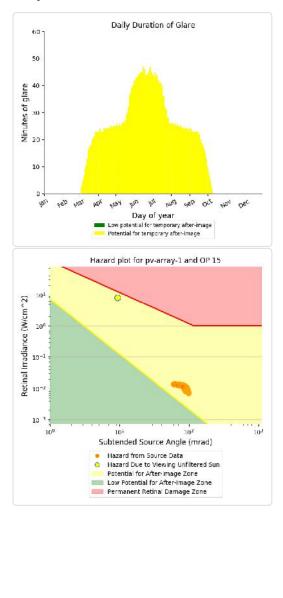


#### PV array 1 - OP Receptor (OP 15)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 5,994 minutes of "yellow" glare with potential to cause temporary after-image.

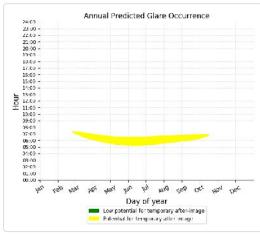


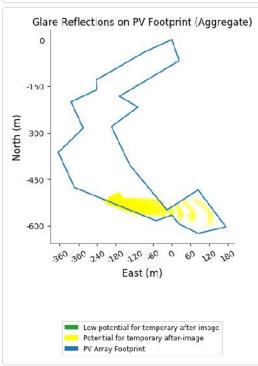


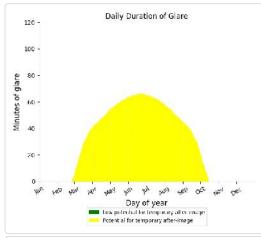


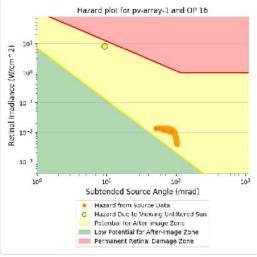
#### PV array 1 - OP Receptor (OP 16)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 10,805 minutes of "yellow" glare with potential to cause temporary after-image.



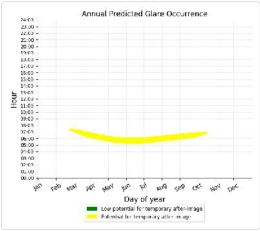


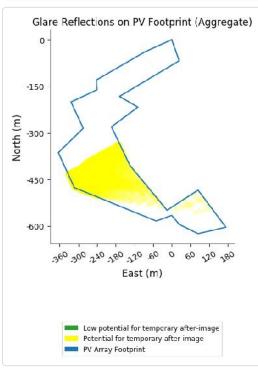


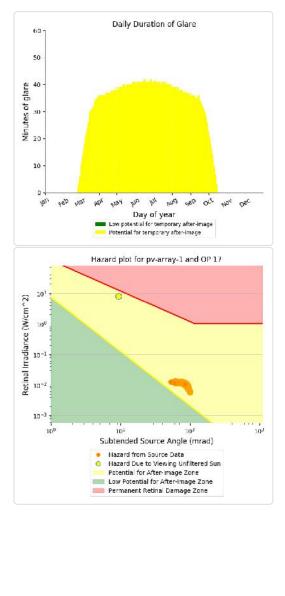


#### PV array 1 - OP Receptor (OP 17)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 8,028 minutes of "yellow" glare with potential to cause temporary after-image.



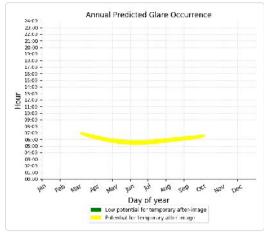


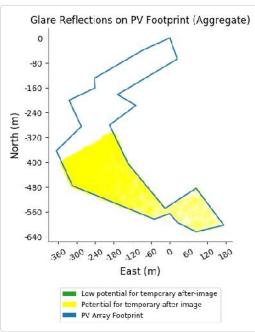


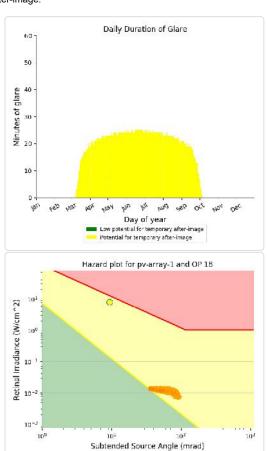
#### PV array 1 - OP Receptor (OP 18)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 4,415 minutes of "yellow" glare with potential to cause temporary after-image.



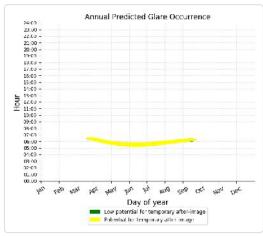


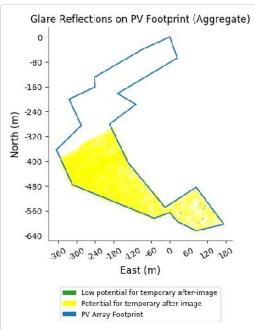


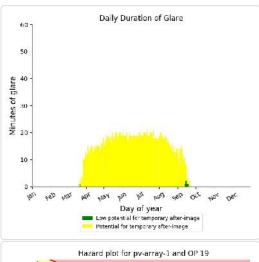
Hazard from Source Data
 Hazard Due to Viewing Unfiltered Sun
 Potential for After-Image Zone
 Low Potential for After-Image Zone
 Permanent Retinal Damage Zone

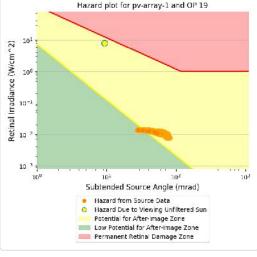
#### PV array 1 - OP Receptor (OP 19)

- 9 minutes of "green" glare with low potential to cause temporary after-image.
- 2,915 minutes of "yellow" glare with potential to cause temporary after-image.



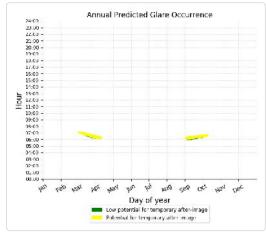


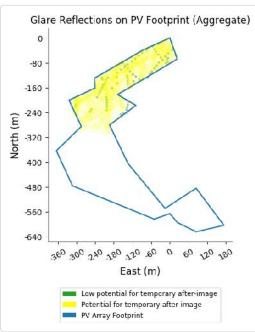


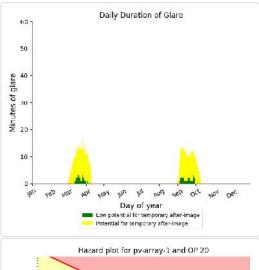


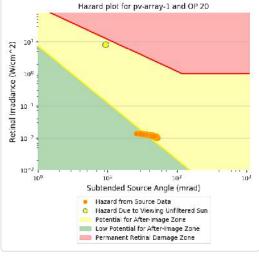
#### PV array 1 - OP Receptor (OP 20)

- 77 minutes of "green" glare with low potential to cause temporary after-image.
- 660 minutes of "yellow" glare with potential to cause temporary after-image.



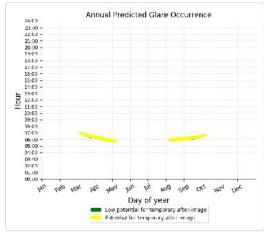


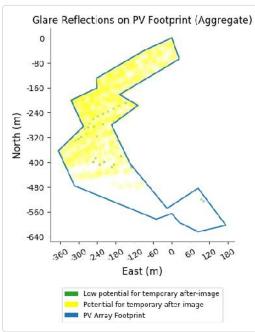


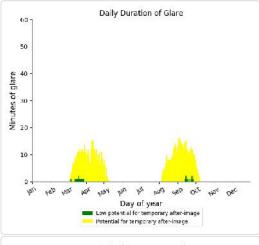


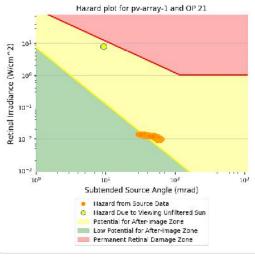
#### PV array 1 - OP Receptor (OP 21)

- 31 minutes of "green" glare with low potential to cause temporary after-image.
- 1,211 minutes of "yellow" glare with potential to cause temporary after-image.



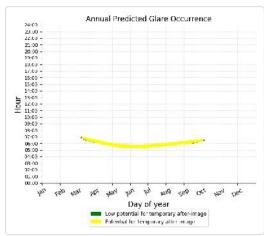


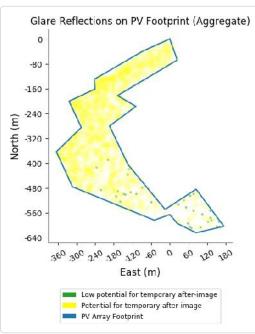


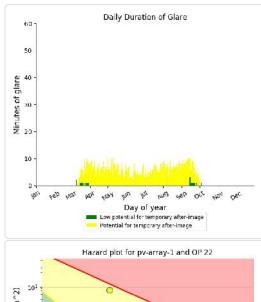


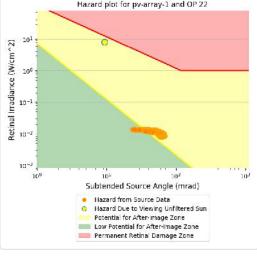
#### PV array 1 - OP Receptor (OP 22)

- 33 minutes of "green" glare with low potential to cause temporary after-image.
- 1,258 minutes of "yellow" glare with potential to cause temporary after-image.





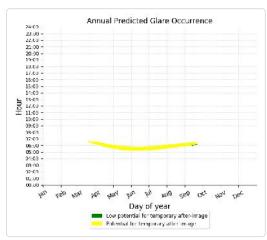


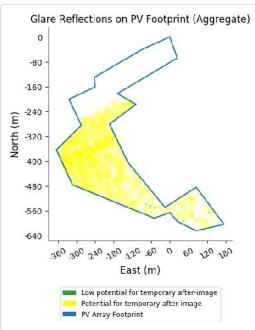


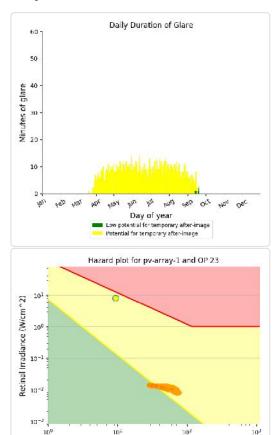
#### PV array 1 - OP Receptor (OP 23)

PV array is expected to produce the following glare for receptors at this location:

- 7 minutes of "green" glare with low potential to cause temporary after-image.
- 1,562 minutes of "yellow" glare with potential to cause temporary after-image.





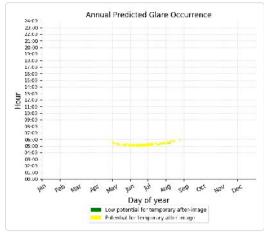


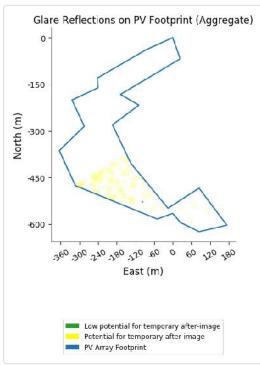
Subtended Source Angle (mrad)

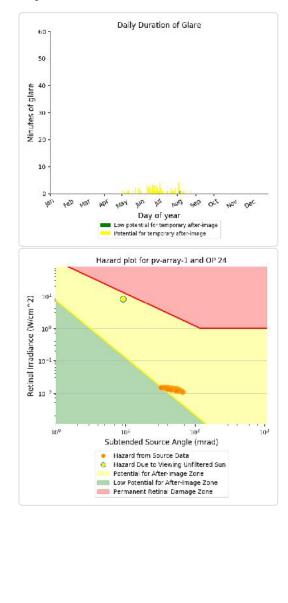
Hazard from Source Data
Hazard Due to Viewing Unfiltered Sun
Potential for After-Image Zone
Low Potential for After-Image Zone
Permanent Retinal Damage Zone

#### PV array 1 - OP Receptor (OP 24)

- 1 minutes of "green" glare with low potential to cause temporary after-image.
- 100 minutes of "yellow" glare with potential to cause temporary after-image.



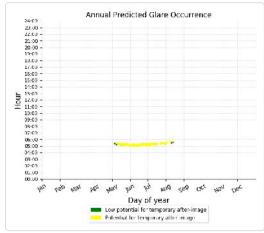


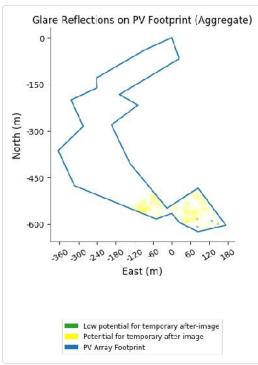


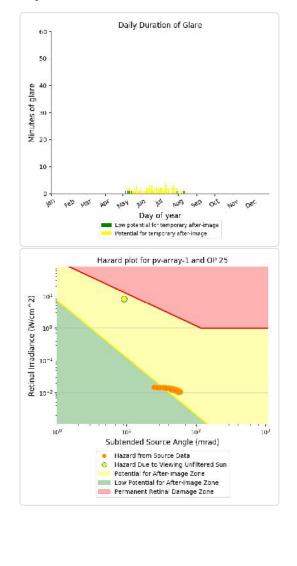
#### PV array 1 - OP Receptor (OP 25)

PV array is expected to produce the following glare for receptors at this location:

- 7 minutes of "green" glare with low potential to cause temporary after-image.
- 113 minutes of "yellow" glare with potential to cause temporary after-image.







#### PV array 1 - OP Receptor (OP 26)

No glare found

PV array 1 - OP Receptor (OP 27)

No glare found

PV array 1 - OP Receptor (OP 28)

No glare found

PV array 1 - OP Receptor (OP 29)

PV array 1 - OP Receptor (OP 30)

No glare found

PV array 1 - OP Receptor (OP 31)

No glare found

PV array 1 - OP Receptor (OP 32)

No glare found

PV array 1 - OP Receptor (OP 33)

No glare found

PV array 1 - OP Receptor (OP 34)

No glare found

PV array 1 - OP Receptor (OP 35)

#### PV array 2 potential temporary after-image



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	153	0
OP: OP 8	163	0
OP: OP 9	85	30
OP: OP 10	48	180
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	556
OP: OP 14	0	1619
OP: OP 15	0	472
OP: OP 16	0	487
OP: OP 17	0	0
OP: OP 18	0	81
OP: OP 19	0	339
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	3
OP: OP 23	0	170
OP: OP 24	1	1778
OP: OP 25	0	2197
OP: OP 26	0	2466
OP: OP 27	0	2267
OP: OP 28	0	154
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	218
OP: OP 33	0	1446
OP: OP 34	29	1750
OP: OP 35	218	1735

PV array 2 - OP Receptor (OP 1)

No glare found

PV array 2 - OP Receptor (OP 2)

No glare found

PV array 2 - OP Receptor (OP 3)

#### PV array 2 - OP Receptor (OP 4)

No glare found

#### PV array 2 - OP Receptor (OP 5)

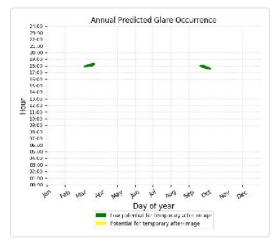
No glare found

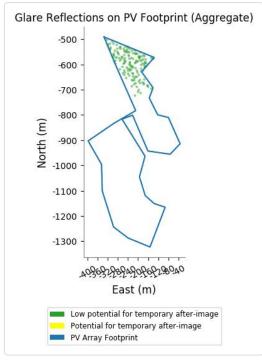
#### PV array 2 - OP Receptor (OP 6)

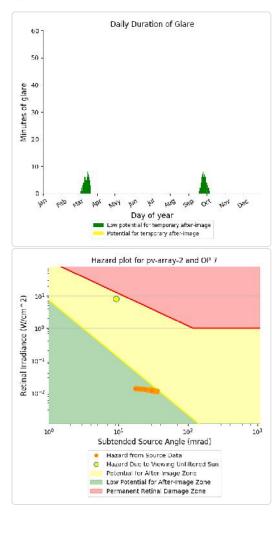
No glare found

#### PV array 2 - OP Receptor (OP 7)

- 153 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

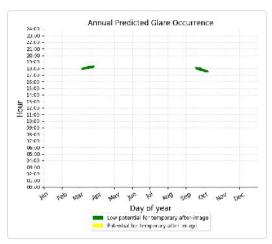


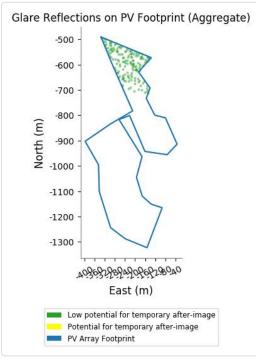


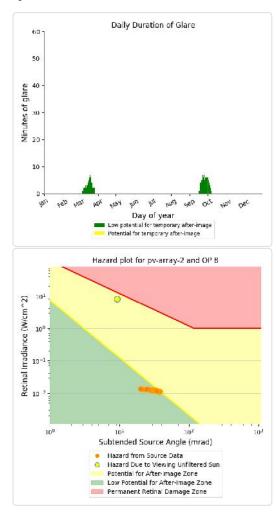


#### PV array 2 - OP Receptor (OP 8)

- 163 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

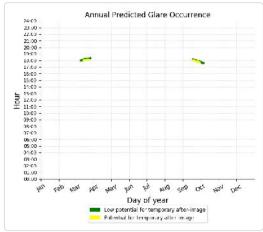


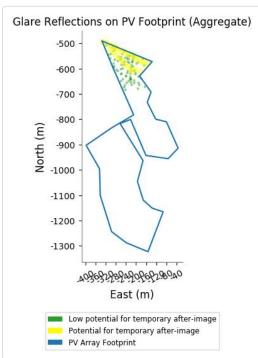


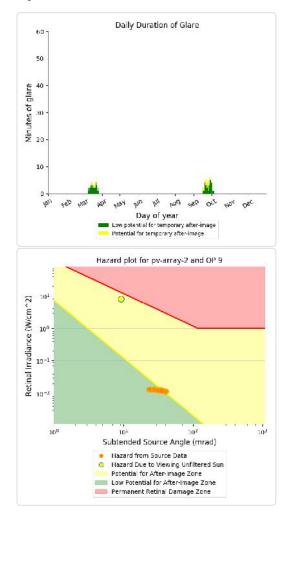


#### PV array 2 - OP Receptor (OP 9)

- 85 minutes of "green" glare with low potential to cause temporary after-image.
- 30 minutes of "yellow" glare with potential to cause temporary after-image.



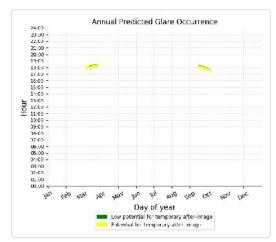


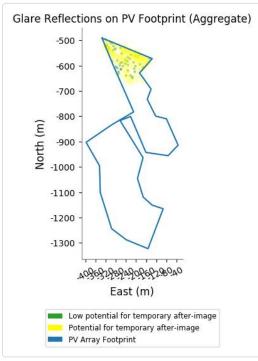


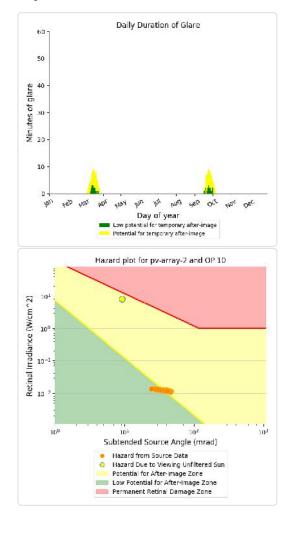
#### PV array 2 - OP Receptor (OP 10)

PV array is expected to produce the following glare for receptors at this location:

- 48 minutes of "green" glare with low potential to cause temporary after-image.
- 180 minutes of "yellow" glare with potential to cause temporary after-image.







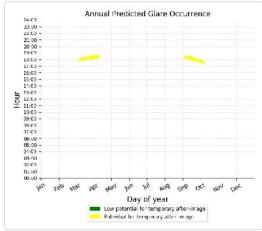
PV array 2 - OP Receptor (OP 11)

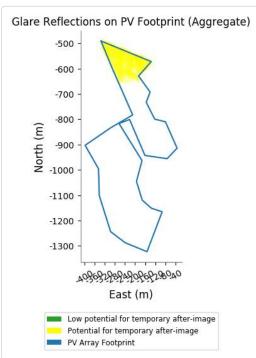
No glare found

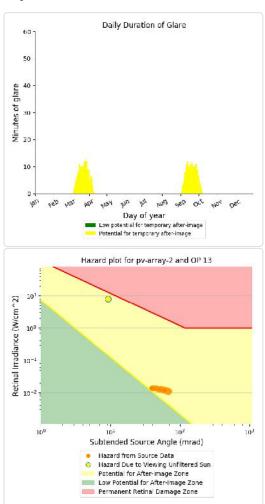
#### PV array 2 - OP Receptor (OP 12)

#### PV array 2 - OP Receptor (OP 13)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 556 minutes of "yellow" glare with potential to cause temporary after-image.





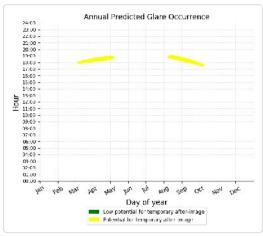


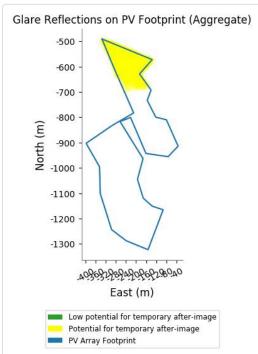
10

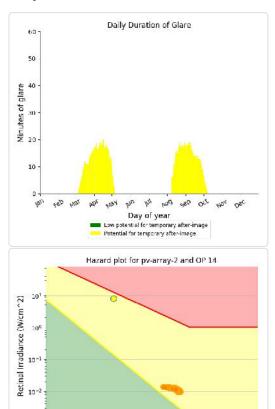
#### PV array 2 - OP Receptor (OP 14)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 1,619 minutes of "yellow" glare with potential to cause temporary after-image.







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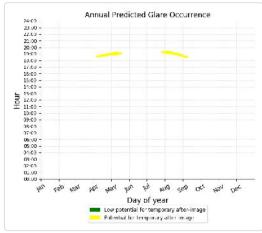
Subtended Source Angle (mrad)
Hazard from Source Data

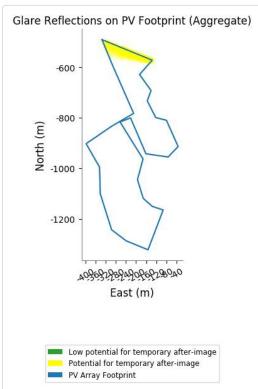
Permanent Retinal Damage Zone

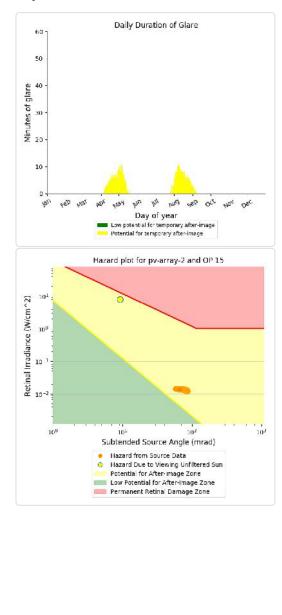
Hazard Due to Viewing Unfiltered Sun Potential for After-Image Zone Low Potential for After-Image Zone

### PV array 2 - OP Receptor (OP 15)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 472 minutes of "yellow" glare with potential to cause temporary after-image.



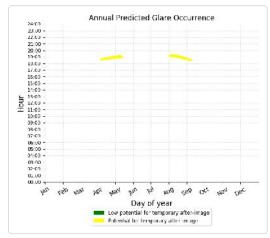


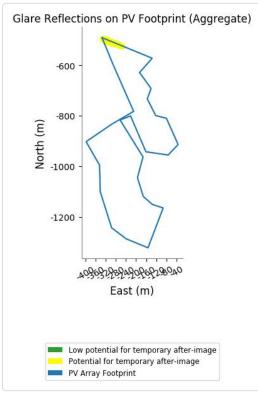


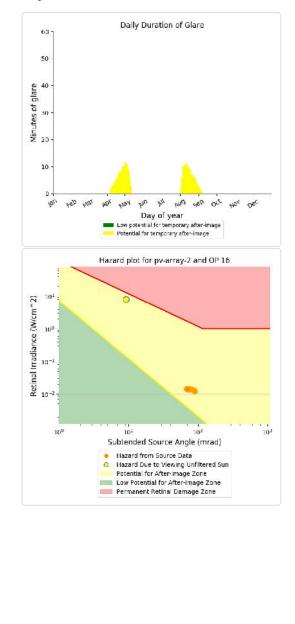
### PV array 2 - OP Receptor (OP 16)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 487 minutes of "yellow" glare with potential to cause temporary after-image.





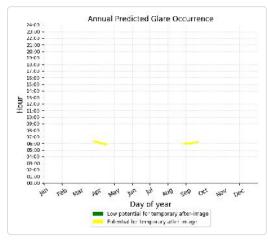


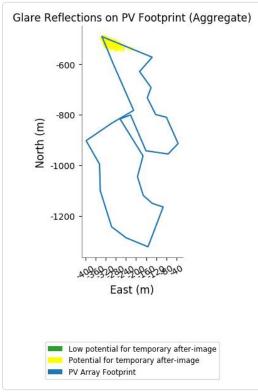
PV array 2 - OP Receptor (OP 17)

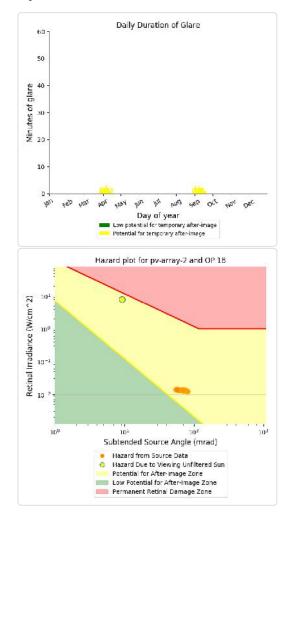
No glare found

### PV array 2 - OP Receptor (OP 18)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 81 minutes of "yellow" glare with potential to cause temporary after-image.



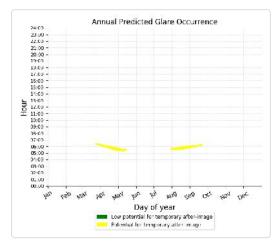


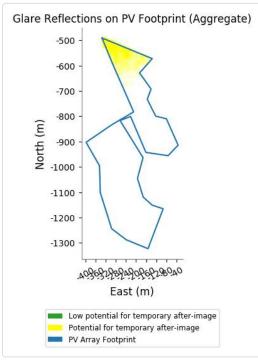


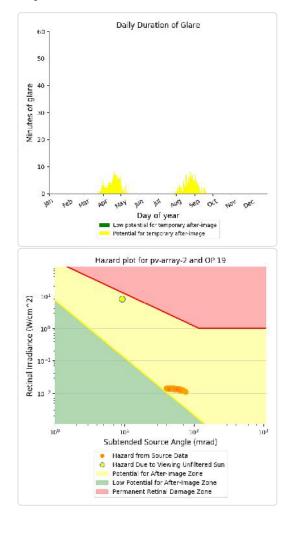
#### PV array 2 - OP Receptor (OP 19)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 339 minutes of "yellow" glare with potential to cause temporary after-image.







PV array 2 - OP Receptor (OP 20)

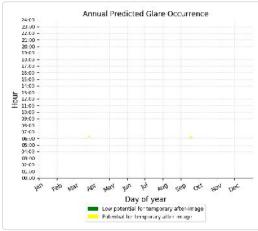
No glare found

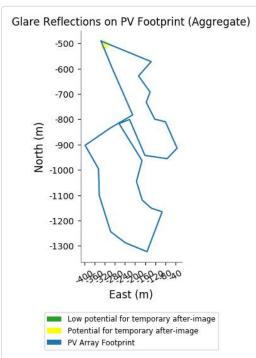
### PV array 2 - OP Receptor (OP 21)

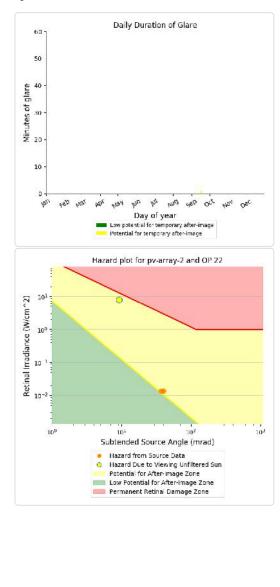
No glare found

### PV array 2 - OP Receptor (OP 22)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 3 minutes of "yellow" glare with potential to cause temporary after-image.

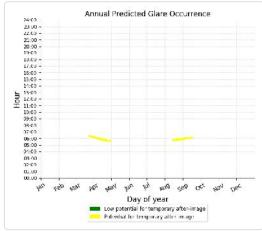


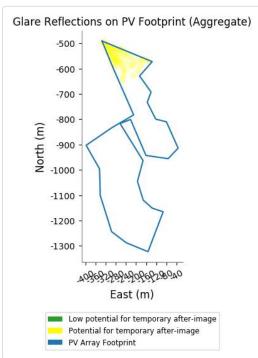


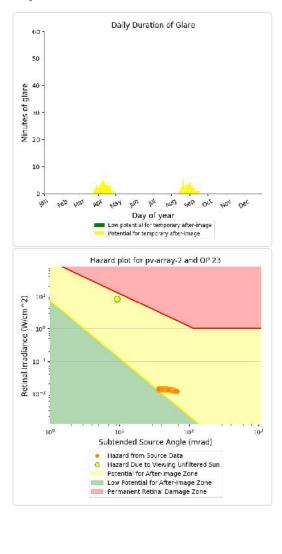


### PV array 2 - OP Receptor (OP 23)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 170 minutes of "yellow" glare with potential to cause temporary after-image.



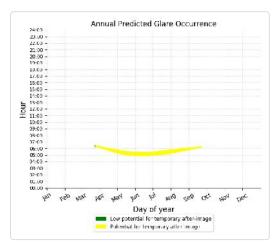


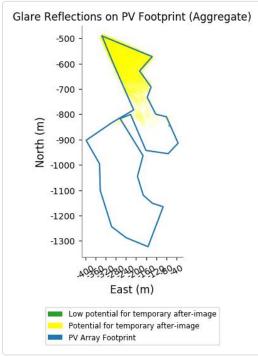


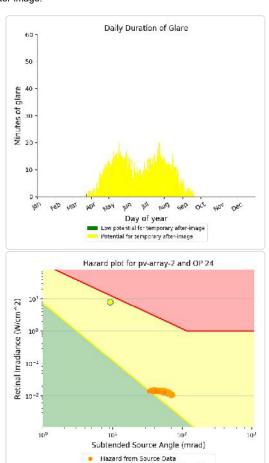
### PV array 2 - OP Receptor (OP 24)

PV array is expected to produce the following glare for receptors at this location:

- 1 minutes of "green" glare with low potential to cause temporary after-image.
- 1,778 minutes of "yellow" glare with potential to cause temporary after-image.







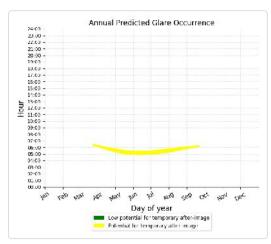
Hazard Due to Viewing Unfiltered Sun Potential for After-Image Zone Low Potential for After-Image Zone

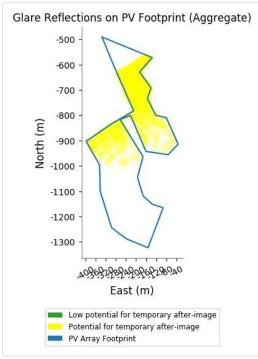
Permanent Retinal Damage Zone

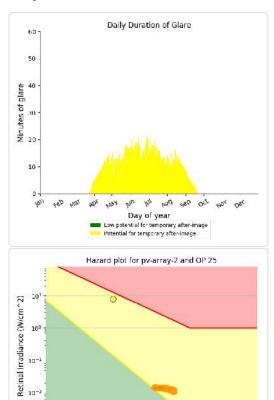
### PV array 2 - OP Receptor (OP 25)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 2,197 minutes of "yellow" glare with potential to cause temporary after-image.







101

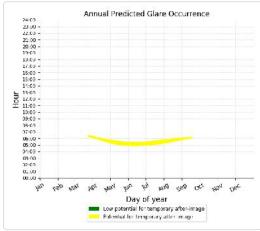
Subtended Source Angle (mrad)
Hazard from Source Data

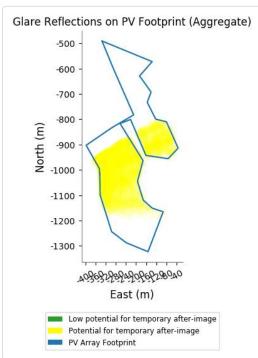
Permanent Retinal Damage Zone

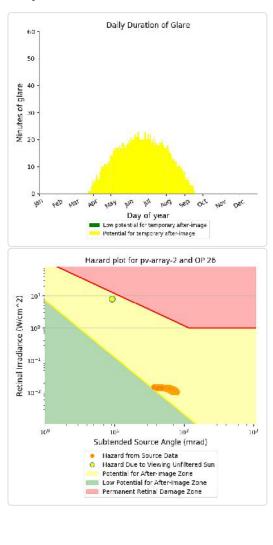
Hazard Due to Viewing Unfiltered Sun Potential for After-Image Zone Low Potential for After-Image Zone

### PV array 2 - OP Receptor (OP 26)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 2,466 minutes of "yellow" glare with potential to cause temporary after-image.

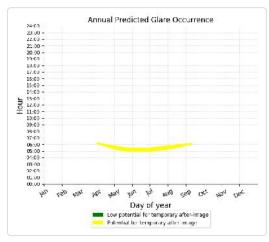


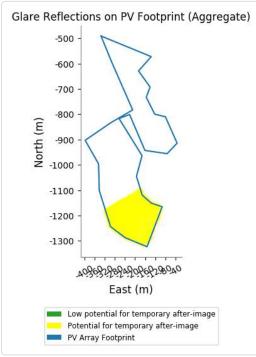


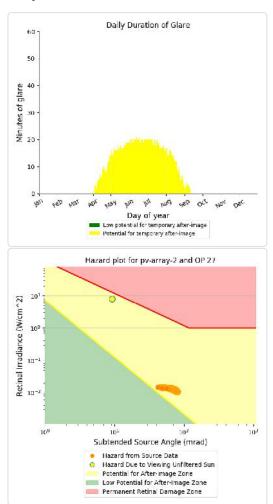


### PV array 2 - OP Receptor (OP 27)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 2,267 minutes of "yellow" glare with potential to cause temporary after-image.



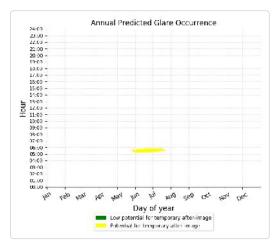


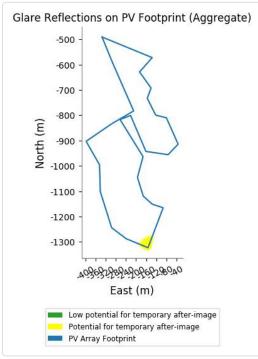


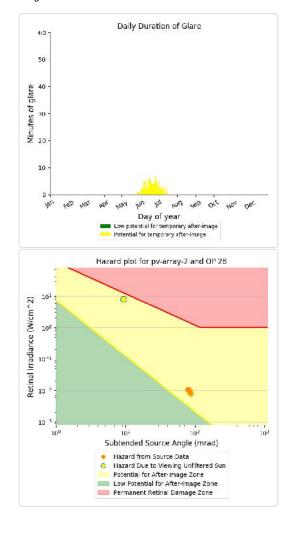
#### PV array 2 - OP Receptor (OP 28)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 154 minutes of "yellow" glare with potential to cause temporary after-image.







## PV array 2 - OP Receptor (OP 29)

No glare found

PV array 2 - OP Receptor (OP 30)

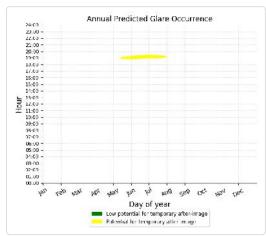
No glare found

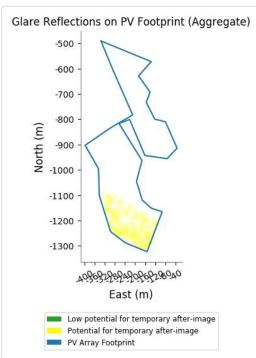
PV array 2 - OP Receptor (OP 31)

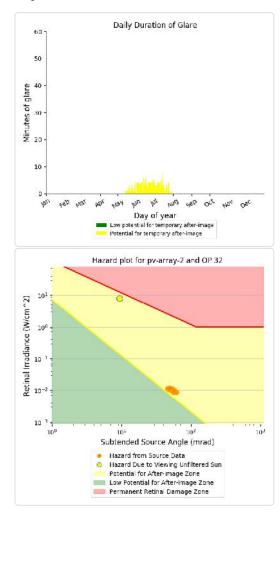
No glare found

### PV array 2 - OP Receptor (OP 32)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 218 minutes of "yellow" glare with potential to cause temporary after-image.

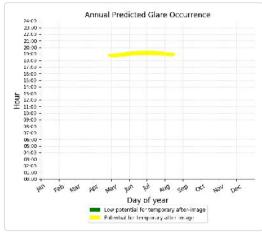


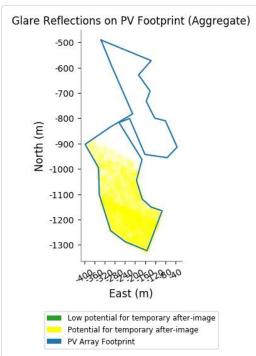


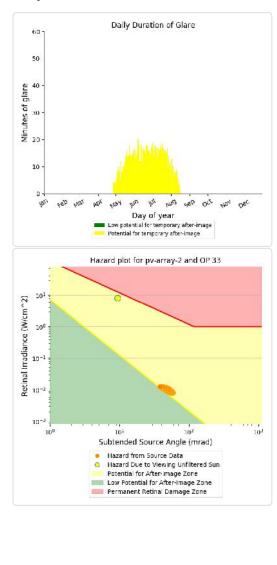


### PV array 2 - OP Receptor (OP 33)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 1,446 minutes of "yellow" glare with potential to cause temporary after-image.

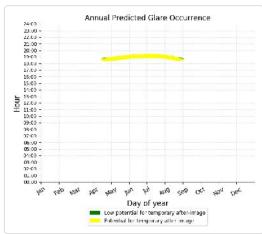


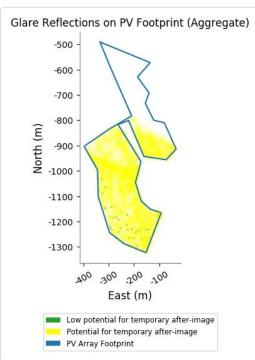


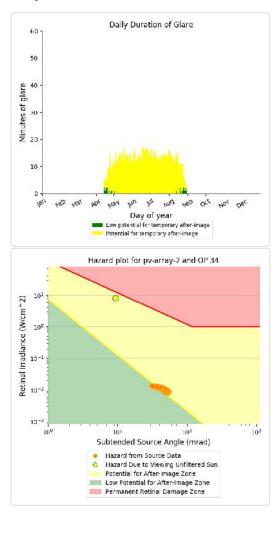


### PV array 2 - OP Receptor (OP 34)

- 29 minutes of "green" glare with low potential to cause temporary after-image.
- 1,750 minutes of "yellow" glare with potential to cause temporary after-image.



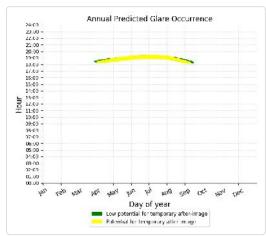


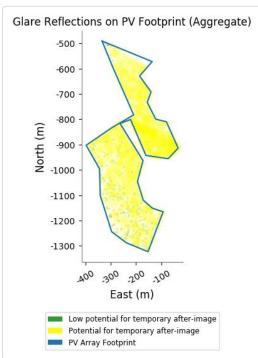


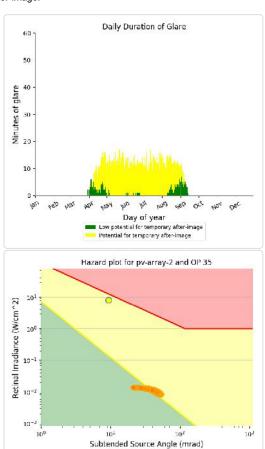
### PV array 2 - OP Receptor (OP 35)

PV array is expected to produce the following glare for receptors at this location:

- 218 minutes of "green" glare with low potential to cause temporary after-image.
- 1,735 minutes of "yellow" glare with potential to cause temporary after-image.







Hazard from Source Data

Hazard Due to Viewing Unfiltered Sun Potential for After-Image Zone Low Potential for After-Image Zone

Permanent Retinal Damage Zone

# PV array 3 potential temporary after-image



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	881	961
OP: OP 8	531	1963
OP: OP 9	199	3834
OP: OP 10	52	8030
OP: OP 11	0	688
OP: OP 12	0	10229
OP: OP 13	0	2420
OP: OP 14	0	2080
OP: OP 15	119	3674
OP: OP 16	384	3450
OP: OP 17	610	803
OP: OP 18	829	610
OP: OP 19	1441	254
OP: OP 20	35	0
OP: OP 21	280	0
OP: OP 22	656	0
OP: OP 23	1343	0
OP: OP 24	2845	0
OP: OP 25	3002	0
OP: OP 26	873	0
OP: OP 27	0	0
OP: OP 28	0	0
OP: OP 29	0	0
OP: OP 30	0	0
OP: OP 31	0	0
OP: OP 32	0	0
OP: OP 33	0	0
OP: OP 34	0	0
OP: OP 35	0	0

PV array 3 - OP Receptor (OP 1)

No glare found

PV array 3 - OP Receptor (OP 2)

No glare found

PV array 3 - OP Receptor (OP 3)

No glare found

#### PV array 3 - OP Receptor (OP 4)

No glare found

#### PV array 3 - OP Receptor (OP 5)

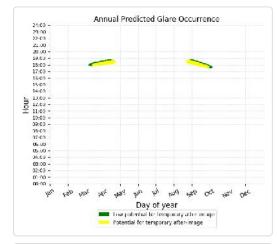
No glare found

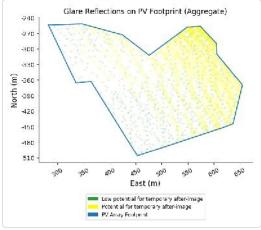
#### PV array 3 - OP Receptor (OP 6)

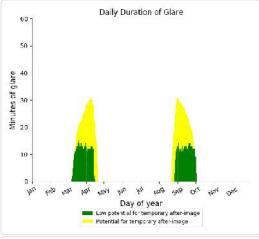
No glare found

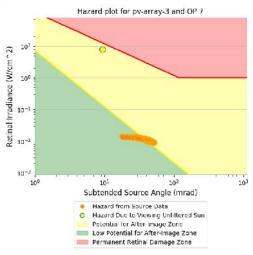
#### PV array 3 - OP Receptor (OP 7)

- 881 minutes of "green" glare with low potential to cause temporary after-image.
- 961 minutes of "yellow" glare with potential to cause temporary after-image.



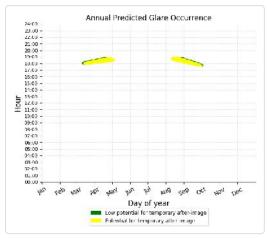


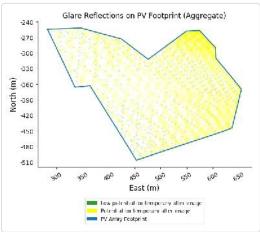


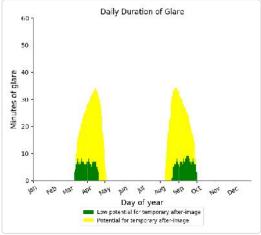


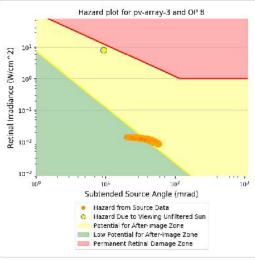
### PV array 3 - OP Receptor (OP 8)

- 531 minutes of "green" glare with low potential to cause temporary after-image.
- 1,963 minutes of "yellow" glare with potential to cause temporary after-image.



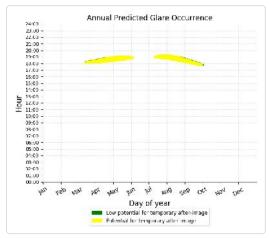


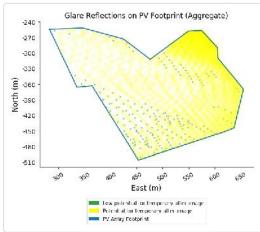


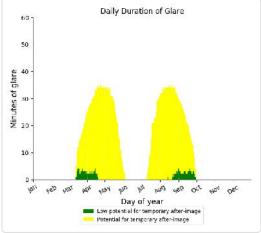


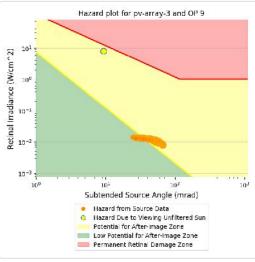
### PV array 3 - OP Receptor (OP 9)

- 199 minutes of "green" glare with low potential to cause temporary after-image.
- 3,834 minutes of "yellow" glare with potential to cause temporary after-image.



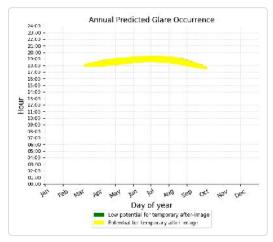


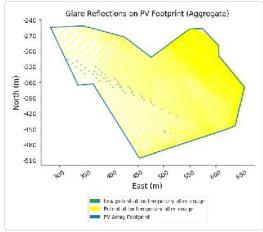


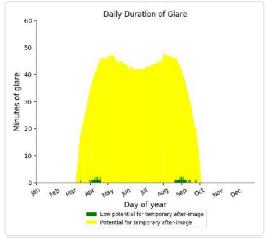


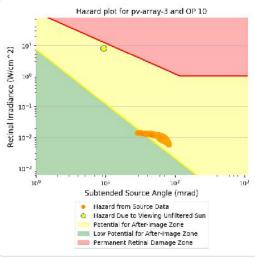
### PV array 3 - OP Receptor (OP 10)

- 52 minutes of "green" glare with low potential to cause temporary after-image.
- 8,030 minutes of "yellow" glare with potential to cause temporary after-image.



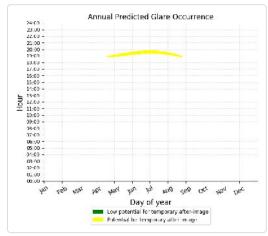


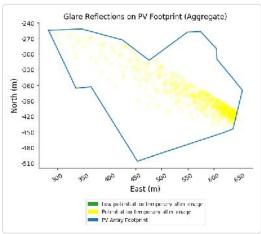


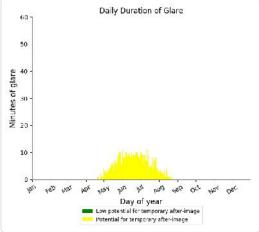


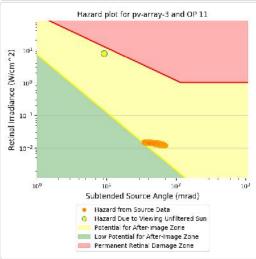
### PV array 3 - OP Receptor (OP 11)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 688 minutes of "yellow" glare with potential to cause temporary after-image.



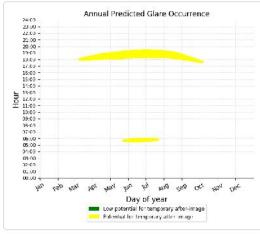


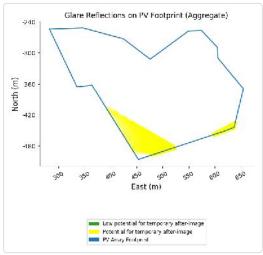


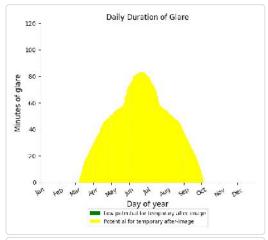


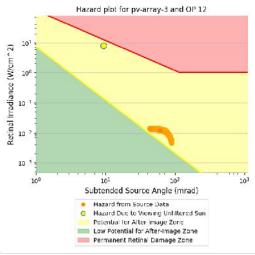
### PV array 3 - OP Receptor (OP 12)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 10,229 minutes of "yellow" glare with potential to cause temporary after-image.



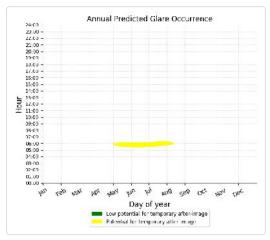


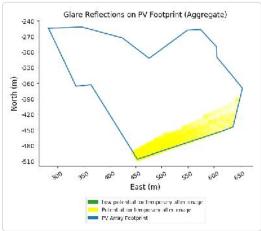


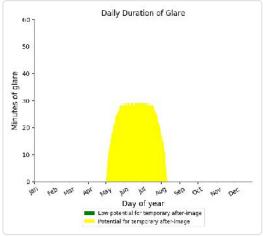


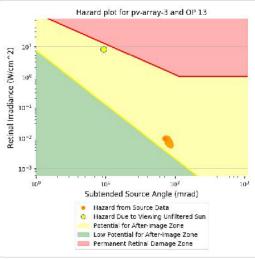
### PV array 3 - OP Receptor (OP 13)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 2,420 minutes of "yellow" glare with potential to cause temporary after-image.



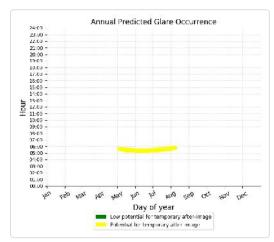


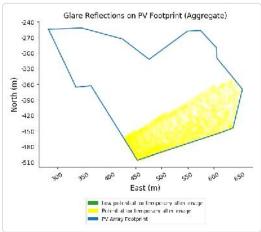


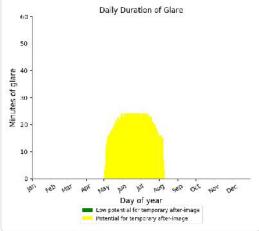


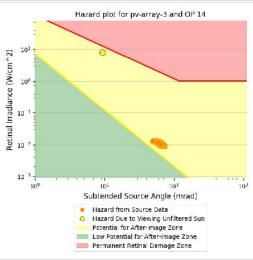
### PV array 3 - OP Receptor (OP 14)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 2,080 minutes of "yellow" glare with potential to cause temporary after-image.



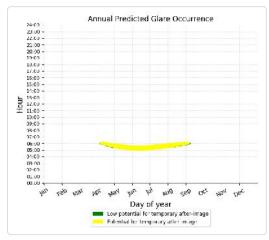


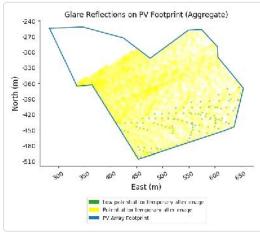


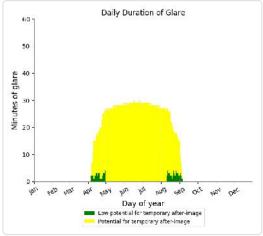


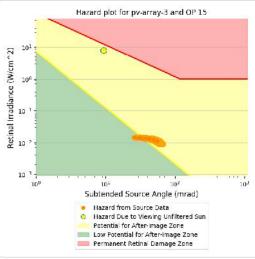
### PV array 3 - OP Receptor (OP 15)

- 119 minutes of "green" glare with low potential to cause temporary after-image.
- 3,674 minutes of "yellow" glare with potential to cause temporary after-image.



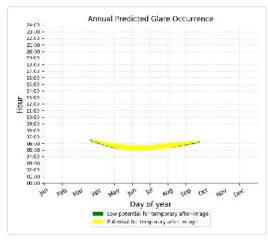


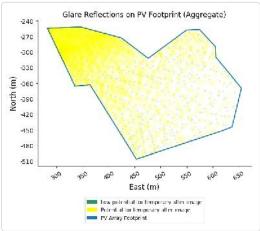


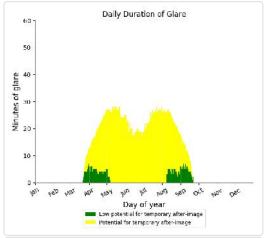


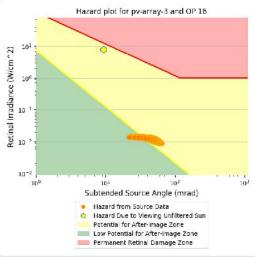
### PV array 3 - OP Receptor (OP 16)

- 384 minutes of "green" glare with low potential to cause temporary after-image.
- 3,450 minutes of "yellow" glare with potential to cause temporary after-image.



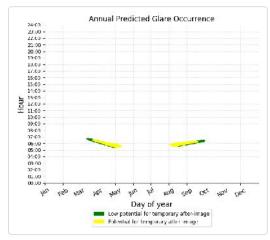


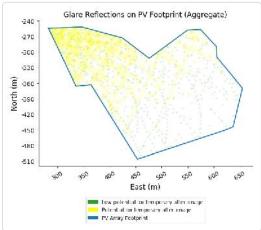


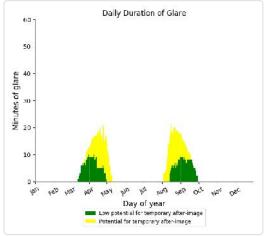


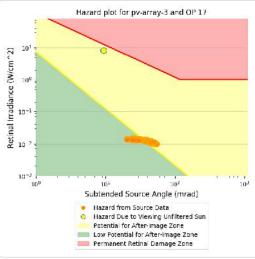
### PV array 3 - OP Receptor (OP 17)

- 610 minutes of "green" glare with low potential to cause temporary after-image.
- 803 minutes of "yellow" glare with potential to cause temporary after-image.



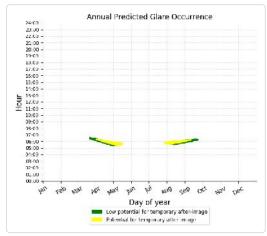


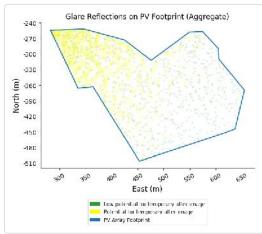


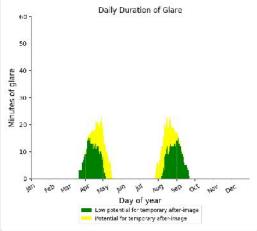


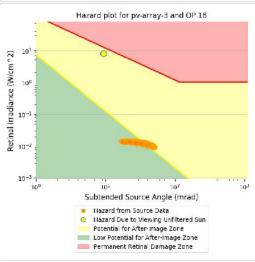
### PV array 3 - OP Receptor (OP 18)

- 829 minutes of "green" glare with low potential to cause temporary after-image.
- 610 minutes of "yellow" glare with potential to cause temporary after-image.



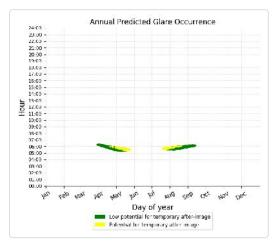


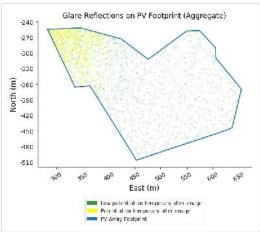


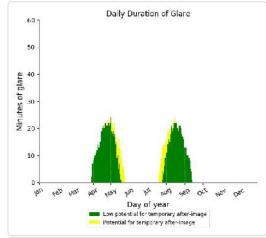


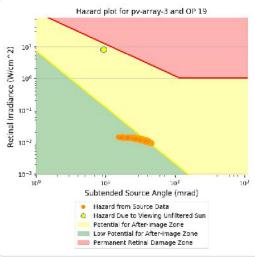
### PV array 3 - OP Receptor (OP 19)

- 1,441 minutes of "green" glare with low potential to cause temporary after-image.
- 254 minutes of "yellow" glare with potential to cause temporary after-image.



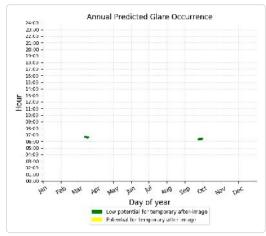


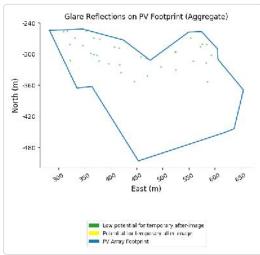


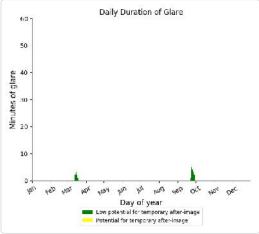


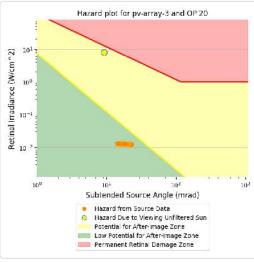
### PV array 3 - OP Receptor (OP 20)

- 35 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



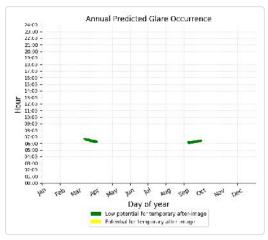


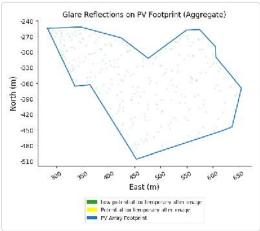


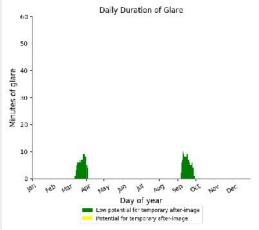


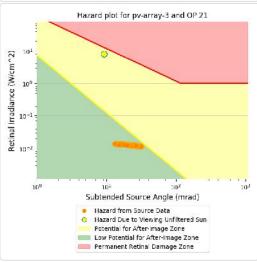
### PV array 3 - OP Receptor (OP 21)

- 280 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



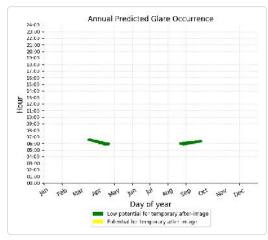


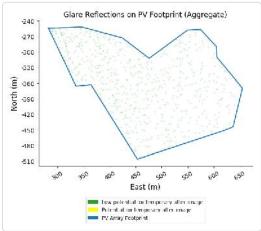


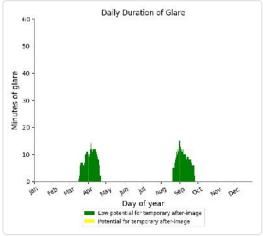


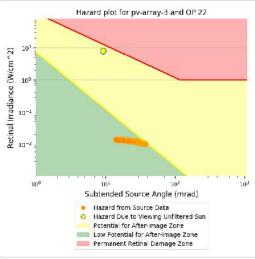
### PV array 3 - OP Receptor (OP 22)

- 656 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



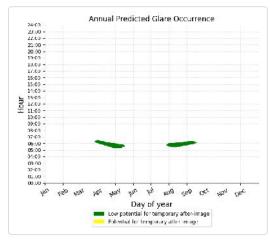


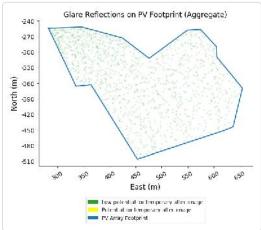


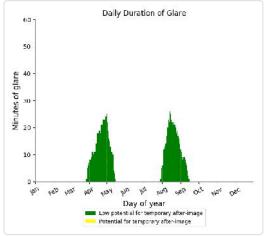


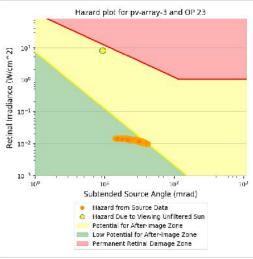
### PV array 3 - OP Receptor (OP 23)

- 1,343 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



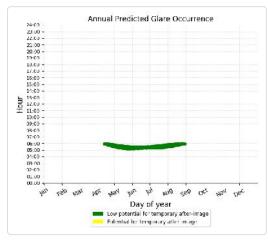


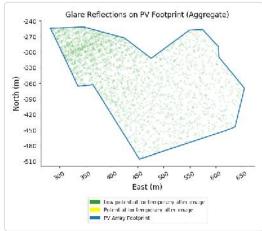


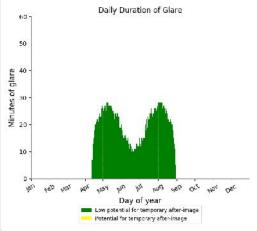


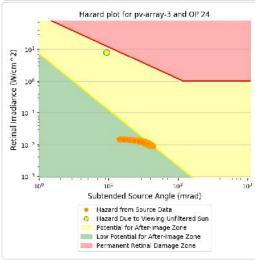
### PV array 3 - OP Receptor (OP 24)

- 2,845 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



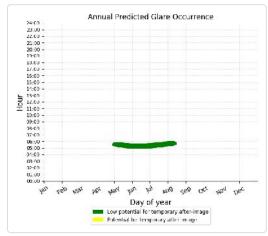


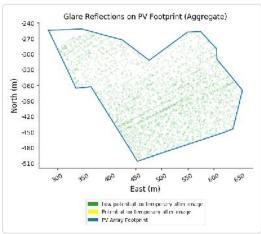


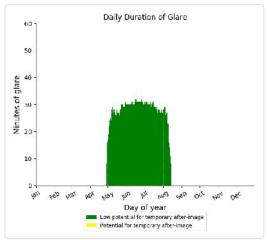


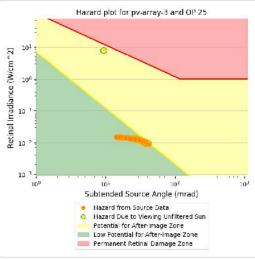
### PV array 3 - OP Receptor (OP 25)

- 3,002 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.





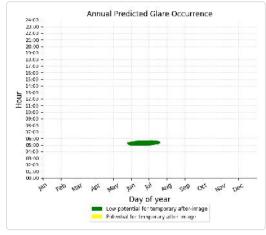


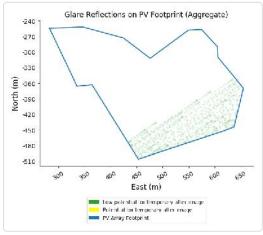


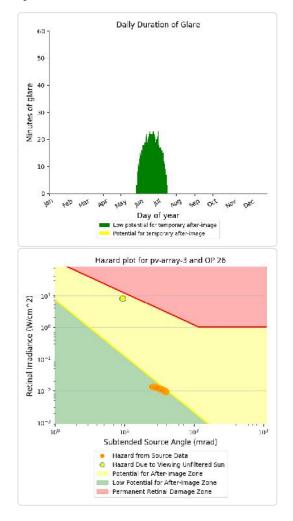
#### PV array 3 - OP Receptor (OP 26)

PV array is expected to produce the following glare for receptors at this location:

- 873 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.







PV array 3 - OP Receptor (OP 27)

No glare found

PV array 3 - OP Receptor (OP 28)

No glare found

PV array 3 - OP Receptor (OP 29)

No glare found

PV array 3 - OP Receptor (OP 30)

No glare found

PV array 3 - OP Receptor (OP 31)

No glare found

PV array 3 - OP Receptor (OP 32)

No glare found

PV array 3 - OP Receptor (OP 33)

No glare found

PV array 3 - OP Receptor (OP 34)

No glare found

PV array 3 - OP Receptor (OP 35)

No glare found

# PV array 4 potential temporary after-image



Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	1	506
OP: OP 8	0	700
OP: OP 9	0	886
OP: OP 10	0	1538
OP: OP 11	0	0
OP: OP 12	38623	57805
OP: OP 13	0	9775
OP: OP 14	0	630
OP: OP 15	0	922
OP: OP 16	0	414
OP: OP 17	2	114
OP: OP 18	20	269
OP: OP 19	86	486
OP: OP 20	0	0
OP: OP 21	36	2
OP: OP 22	119	105
OP: OP 23	115	395
OP: OP 24	119	956
OP: OP 25	156	1616
OP: OP 26	88	3664
OP: OP 27	11	3396
OP: OP 28	0	1413
OP: OP 29	0	1959
OP: OP 30	0	1364
OP: OP 31	0	0
OP: OP 32	0	3373
OP: OP 33	1	4849
OP: OP 34	18	6005
OP: OP 35	33	6398

PV array 4 - OP Receptor (OP 1)

No glare found

PV array 4 - OP Receptor (OP 2)

No glare found

PV array 4 - OP Receptor (OP 3)

No glare found

#### PV array 4 - OP Receptor (OP 4)

No glare found

#### PV array 4 - OP Receptor (OP 5)

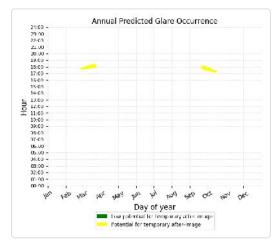
No glare found

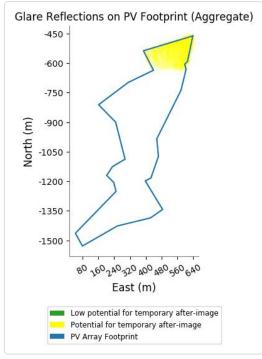
#### PV array 4 - OP Receptor (OP 6)

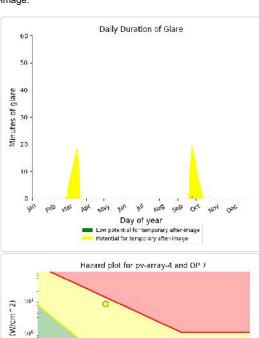
No glare found

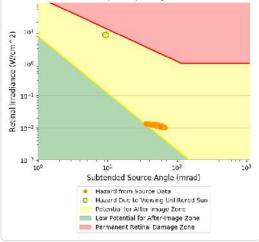
#### PV array 4 - OP Receptor (OP 7)

- 1 minutes of "green" glare with low potential to cause temporary after-image.
- 506 minutes of "yellow" glare with potential to cause temporary after-image.



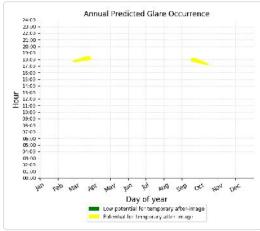


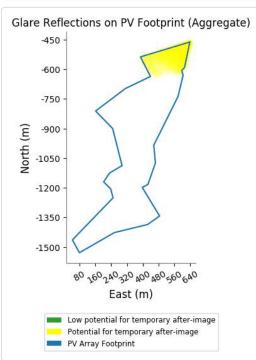


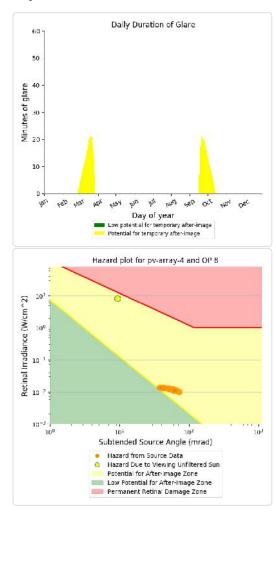


## PV array 4 - OP Receptor (OP 8)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 700 minutes of "yellow" glare with potential to cause temporary after-image.

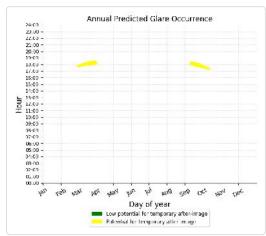


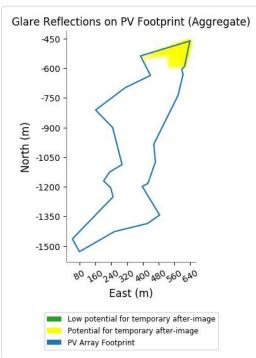


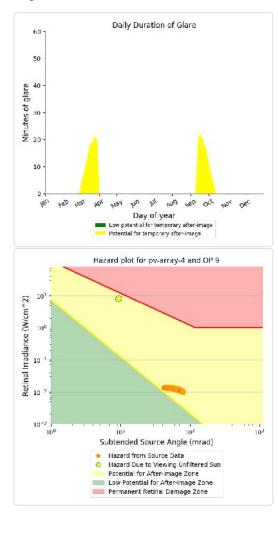


## PV array 4 - OP Receptor (OP 9)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 886 minutes of "yellow" glare with potential to cause temporary after-image.



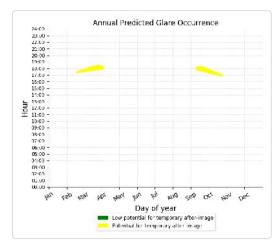


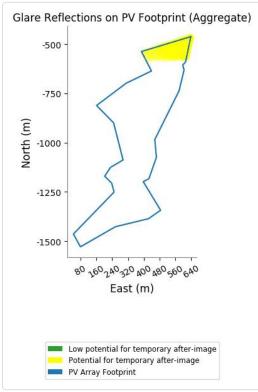


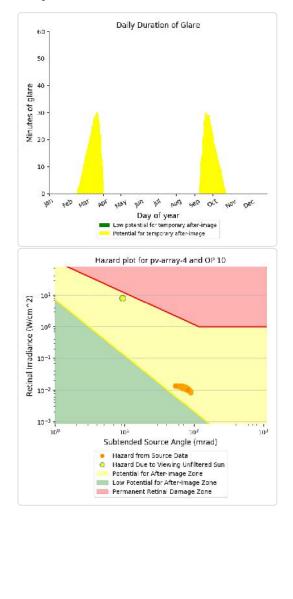
## PV array 4 - OP Receptor (OP 10)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 1,538 minutes of "yellow" glare with potential to cause temporary after-image.





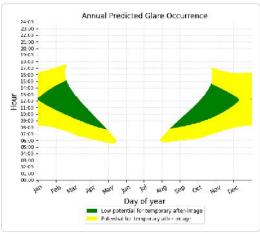


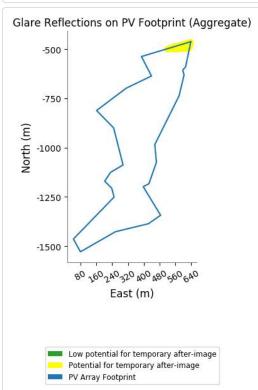
PV array 4 - OP Receptor (OP 11)

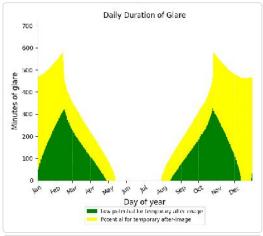
No glare found

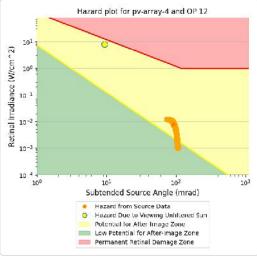
## PV array 4 - OP Receptor (OP 12)

- 38,623 minutes of "green" glare with low potential to cause temporary after-image.
- 57,805 minutes of "yellow" glare with potential to cause temporary after-image.



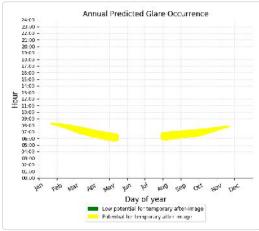


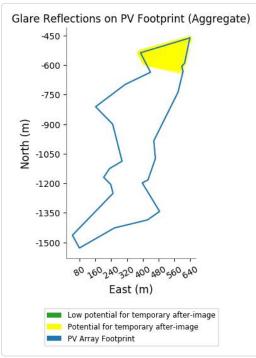


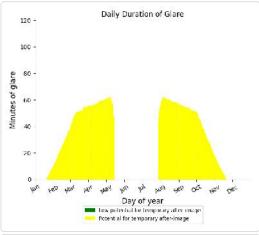


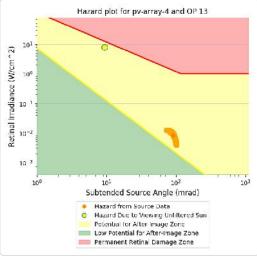
## PV array 4 - OP Receptor (OP 13)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 9,775 minutes of "yellow" glare with potential to cause temporary after-image.



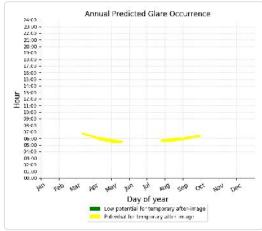


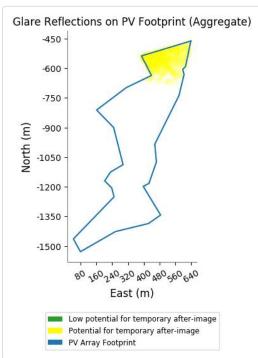


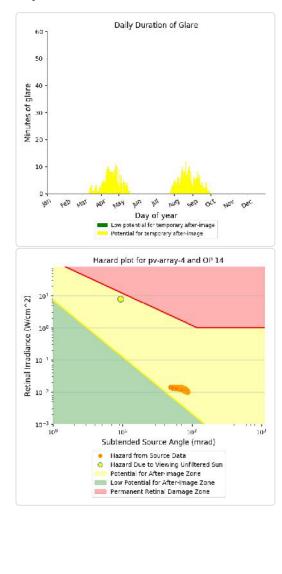


## PV array 4 - OP Receptor (OP 14)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 630 minutes of "yellow" glare with potential to cause temporary after-image.

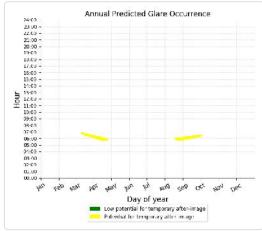


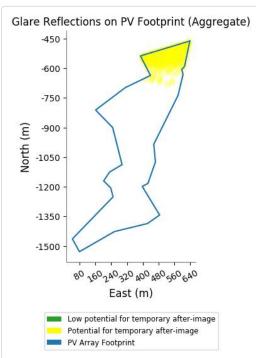


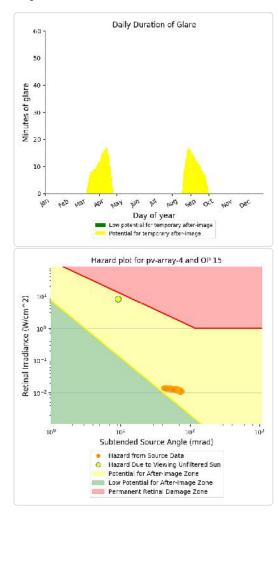


## PV array 4 - OP Receptor (OP 15)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 922 minutes of "yellow" glare with potential to cause temporary after-image.

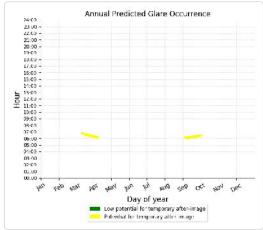


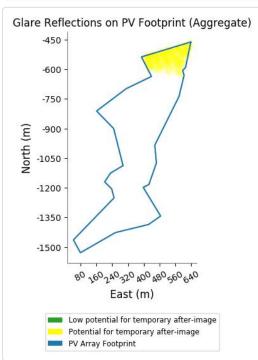


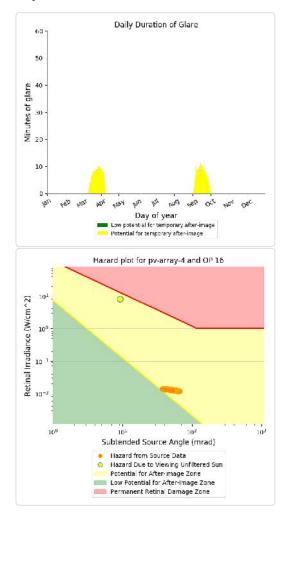


## PV array 4 - OP Receptor (OP 16)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 414 minutes of "yellow" glare with potential to cause temporary after-image.

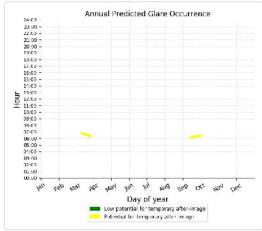


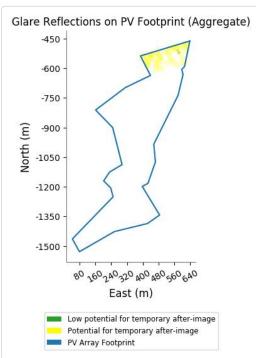


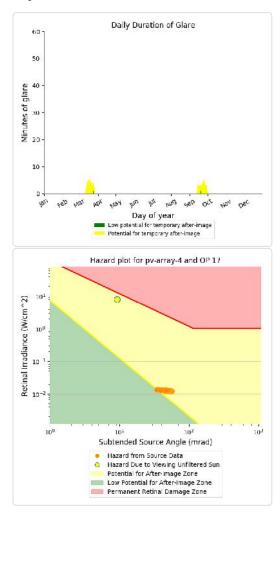


## PV array 4 - OP Receptor (OP 17)

- 2 minutes of "green" glare with low potential to cause temporary after-image.
- 114 minutes of "yellow" glare with potential to cause temporary after-image.

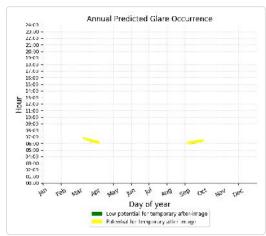


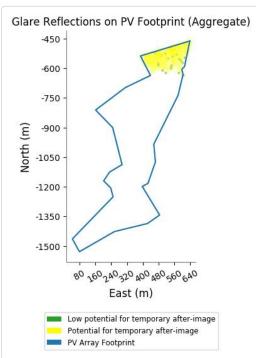


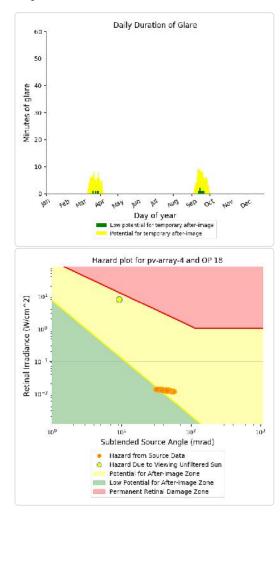


## PV array 4 - OP Receptor (OP 18)

- 20 minutes of "green" glare with low potential to cause temporary after-image.
- 269 minutes of "yellow" glare with potential to cause temporary after-image.



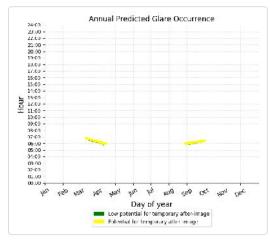


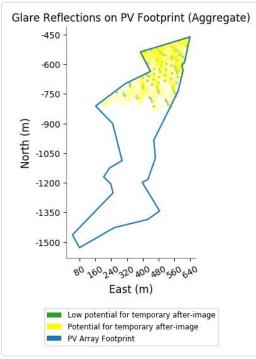


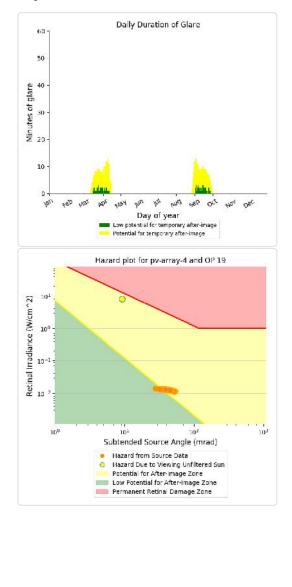
## PV array 4 - OP Receptor (OP 19)

PV array is expected to produce the following glare for receptors at this location:

- 86 minutes of "green" glare with low potential to cause temporary after-image.
- 486 minutes of "yellow" glare with potential to cause temporary after-image.





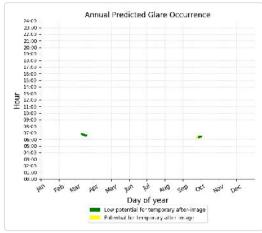


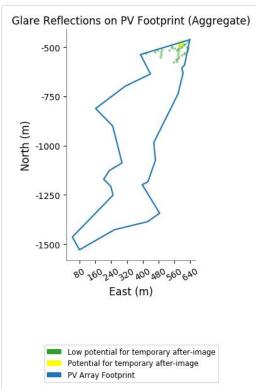
PV array 4 - OP Receptor (OP 20)

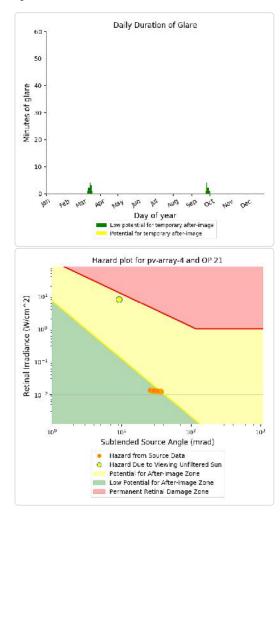
No glare found

## PV array 4 - OP Receptor (OP 21)

- 36 minutes of "green" glare with low potential to cause temporary after-image.
- 2 minutes of "yellow" glare with potential to cause temporary after-image.

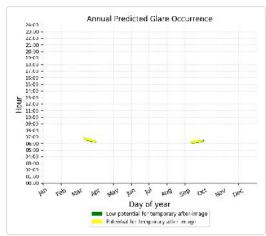


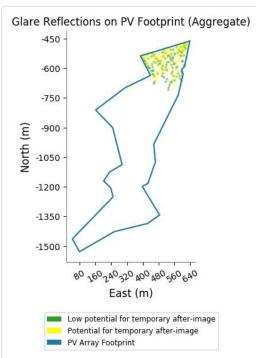


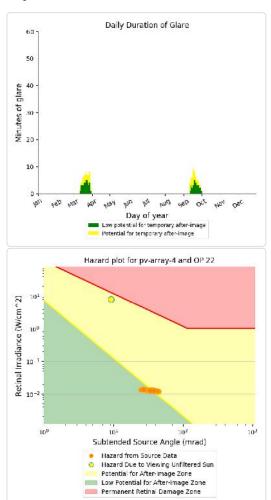


## PV array 4 - OP Receptor (OP 22)

- 119 minutes of "green" glare with low potential to cause temporary after-image.
- 105 minutes of "yellow" glare with potential to cause temporary after-image.

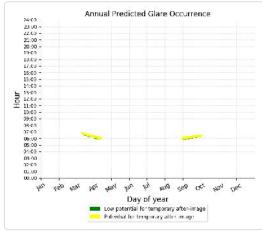


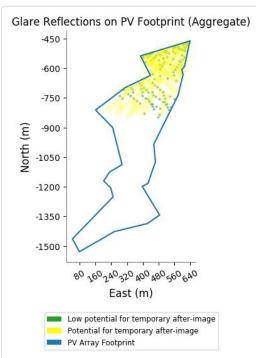


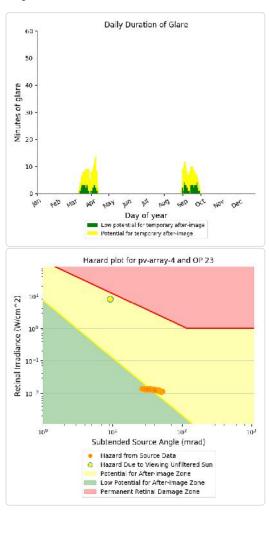


## PV array 4 - OP Receptor (OP 23)

- 115 minutes of "green" glare with low potential to cause temporary after-image.
- 395 minutes of "yellow" glare with potential to cause temporary after-image.

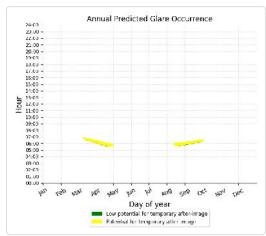


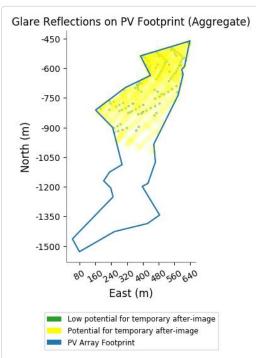


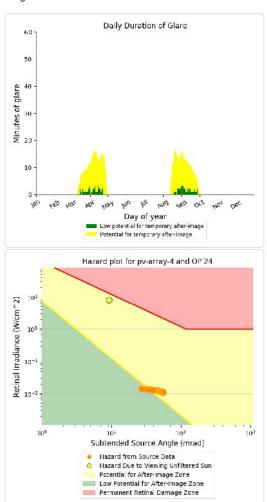


## PV array 4 - OP Receptor (OP 24)

- 119 minutes of "green" glare with low potential to cause temporary after-image.
- 956 minutes of "yellow" glare with potential to cause temporary after-image.

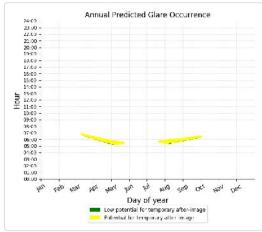


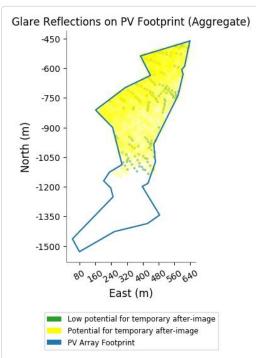


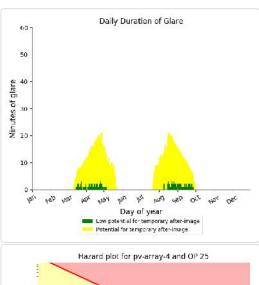


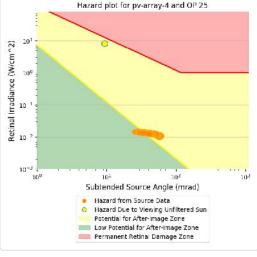
## PV array 4 - OP Receptor (OP 25)

- 156 minutes of "green" glare with low potential to cause temporary after-image.
- 1,616 minutes of "yellow" glare with potential to cause temporary after-image.



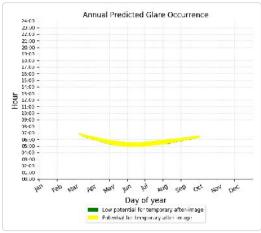


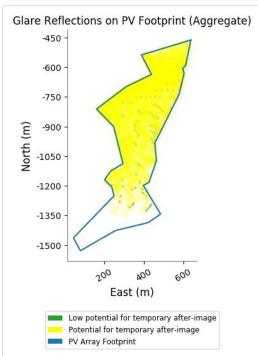


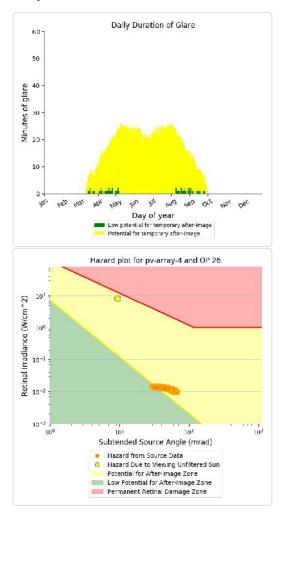


## PV array 4 - OP Receptor (OP 26)

- 88 minutes of "green" glare with low potential to cause temporary after-image.
- 3,664 minutes of "yellow" glare with potential to cause temporary after-image.

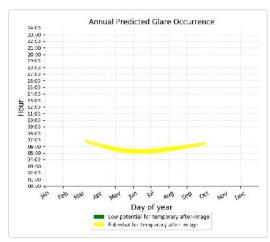


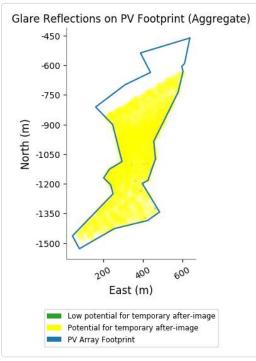


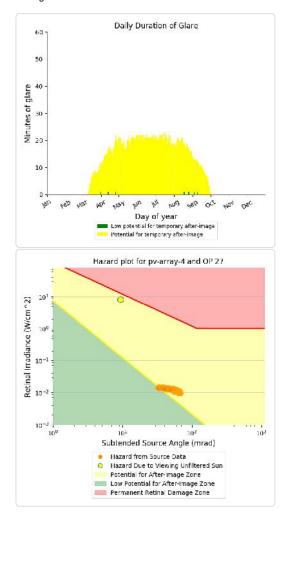


## PV array 4 - OP Receptor (OP 27)

- 11 minutes of "green" glare with low potential to cause temporary after-image.
- 3,396 minutes of "yellow" glare with potential to cause temporary after-image.

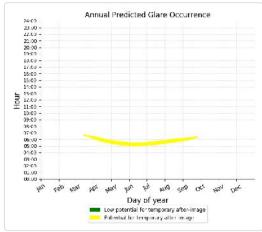


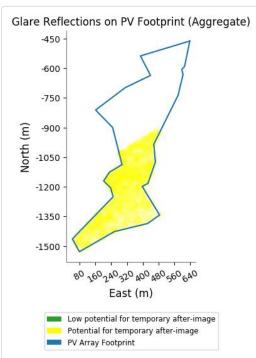


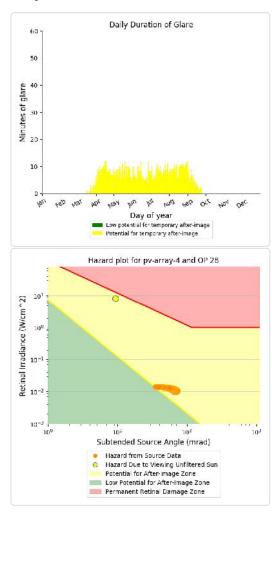


## PV array 4 - OP Receptor (OP 28)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 1,413 minutes of "yellow" glare with potential to cause temporary after-image.

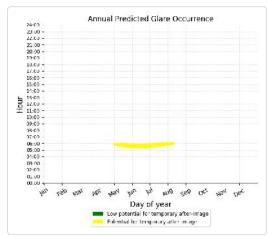


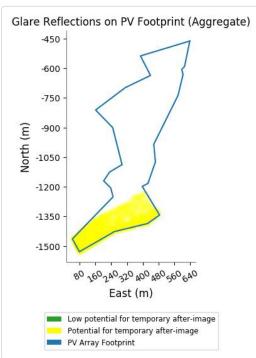


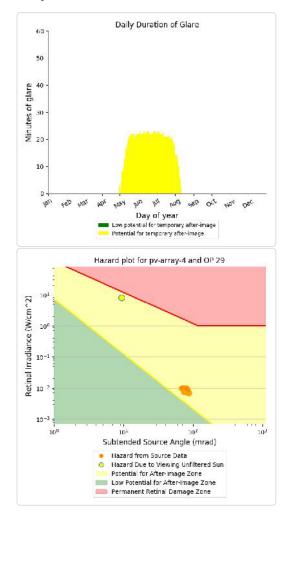


## PV array 4 - OP Receptor (OP 29)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 1,959 minutes of "yellow" glare with potential to cause temporary after-image.



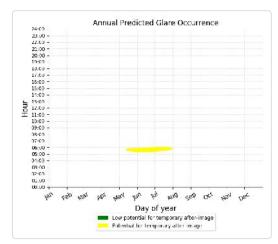


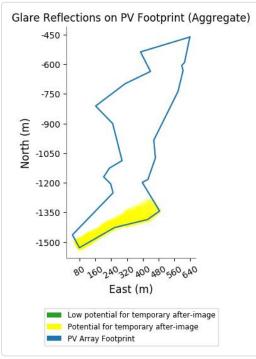


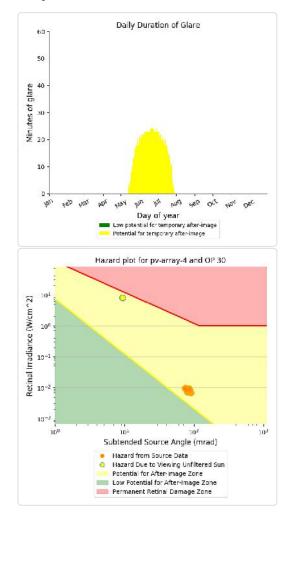
## PV array 4 - OP Receptor (OP 30)

PV array is expected to produce the following glare for receptors at this location:

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 1,364 minutes of "yellow" glare with potential to cause temporary after-image.





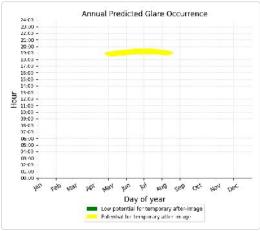


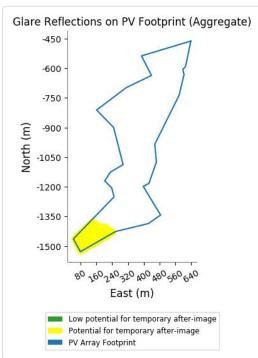
PV array 4 - OP Receptor (OP 31)

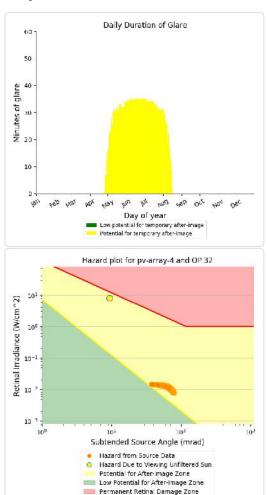
No glare found

## PV array 4 - OP Receptor (OP 32)

- 0 minutes of "green" glare with low potential to cause temporary after-image.
- 3,373 minutes of "yellow" glare with potential to cause temporary after-image.

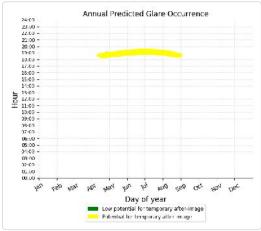


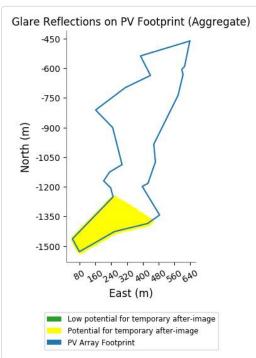


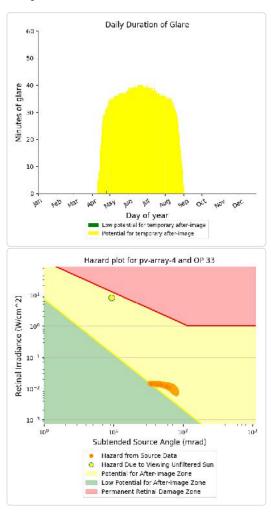


## PV array 4 - OP Receptor (OP 33)

- 1 minutes of "green" glare with low potential to cause temporary after-image.
- 4,849 minutes of "yellow" glare with potential to cause temporary after-image.

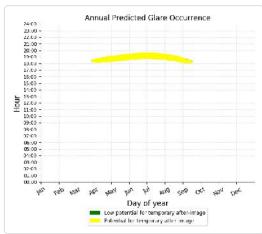


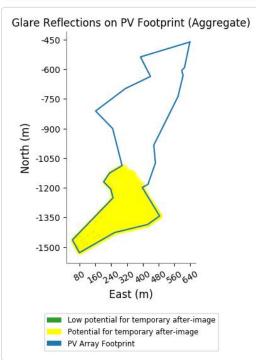


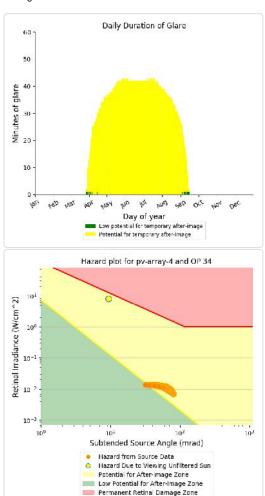


## PV array 4 - OP Receptor (OP 34)

- 18 minutes of "green" glare with low potential to cause temporary after-image.
- 6,005 minutes of "yellow" glare with potential to cause temporary after-image.



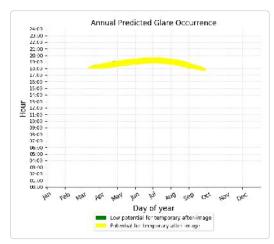


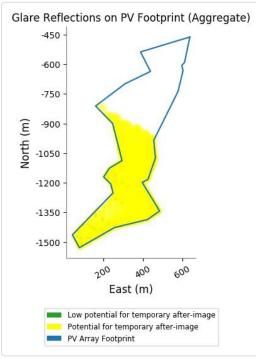


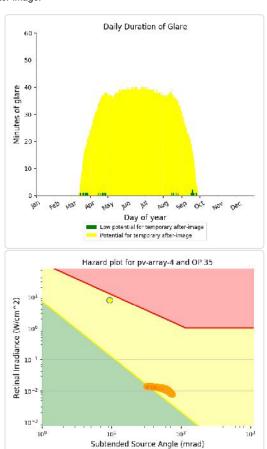
## PV array 4 - OP Receptor (OP 35)

PV array is expected to produce the following glare for receptors at this location:

- 33 minutes of "green" glare with low potential to cause temporary after-image.
- 6,398 minutes of "yellow" glare with potential to cause temporary after-image.







Hazard from Source Data

Permanent Retinal Damage Zone

Hazard Due to Viewing Unfiltered Sun Potential for After-Image Zone Low Potential for After-Image Zone

## Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.
- Detailed system geometry is not rigorously simulated.
- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of
  more rigorous modeling methods.
- Several calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect
  results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections
  will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size.
  Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous
  point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a
  continuous, not discrete, spectrum.
- · Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- · Glare vector plots are simplified representations of analysis data. Actual glare emanations and results may differ.
- Glare analysis methods used: OP V1, FP V1, Route V1
- · Refer to the Help page for assumptions and limitations not listed here.