Cottam Solar Project

Environmental Statement Addendum:

Appendix 16.1 Solar Photovoltaic Glint and Glare Study

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SOLAR PROJECT

Contents

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Environmental Statement Addendum

Appendix 16.1 Solar Photovoltaic Glint and Glare Study

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1 Appendix 16.1 Solar Photovoltaic Glint and Glare Study

1.1 Introduction

1.1.1 This document is an addendum to Solar Photovoltaic Glint and Glare Study within the submitted Environmental Statement Appendix 16.1 **[APP-140]**.

1.1.2 This Addendum report should be read in conjunction with the initial Appendix 16.1: Solar Photovoltaic Glint and Glare Study **[APP-140].** This Addendum supplements and updates certain elements of Appendix 16.1 and does not replace it.

1.1.3 This addendum has been prepared to respond to comments made in relevant representations regarding the potential impacts of the Scheme on:

- Blyton Park Race Track; and
- Network Rail Infrastructure Limited ('Network Rail') (in respect of additional receptors identified)

1.1.4 The objectives of this Appendix 16.1 Addendum are to demonstrate that all receptors surrounding the Sites have been taken into account and to determine whether any additional mitigation is required.

1.2 Amended Appendix 16.1: Solar Photovoltaic Glint and Glare Study

1.2.1 The following sections of Appendix 16.1: Solar Photovoltaic Glint and Glare Study **[APP-140]** have been updated to address concerns raised by Network Rail and Blyton Park Driving Centre as set out in Relevant Representations **[RR-022]** and **[RR-033]** respectively.

Blyton Park Race Track Receptors

1.2.2 Drivers using the Blyton Park Race Track have been taken into account in the Glint and Glare Study.

1.2.3 The results of the analysis have shown that solar reflections from the Scheme at Cottam 3a are geometrically possible towards drivers using the race track. The proposed screening is predicted to significantly reduce the visibility of the reflective area. The height of the screening will be sufficient to significantly reduce visibility of reflecting solar panel for typical driver's height. If necessary, the Applicant will implement an interim mitigation measure (opaque fence) before planting is established.

1.2.4 Therefore, no impact is predicted upon drivers using the race track following the establishment of mitigation measures already set out in Outline Landscape and Ecological Management Plan and secured via Requirement 10 in the draft DCO, and no further mitigation is required.

Network Rail Receptors

1.2.5 The Applicant has had further engagement with Network Rail and potential signal locations have been identified and taken into account.

Railway Signal Receptors

1.2.6 The results of the modelling indicate that solar reflections are geometrically possible towards the assessed railway signal. However, existing screening in the form of both vegetation and buildings are predicted to significantly reduce the visibility of the reflective area. Therefore, impacts are not predicted to be experienced in practice due to existing intervening screening. Furthermore, the Applicant has proposed instant screening on the northern and western sides of the Scheme which will further reduce any visibility.

1.2.7 Therefore, no impact is predicted under the current baseline scenario, and no additional mitigation is required.

Identification of Receptors

1.2.8 Section 5 of Appendix 16.1 **[APP-140]** identified receptors that may be affected by the Scheme. This addendum provides an assessment of additional receptors which have been taken into account relating to Blyton Park Race Track and Network Rail.

Blyton Park Race Track Receptors

1.2.9 No guidance exists for the identification of receptors for drivers circuiting the Blyton Park Race Track. The length of the circuit is circa 2.50km. The assessed circuit receptor points are shown in Figure 46 below. A height of 1.5 metres above ground level has been taken as typical eye level for a driver. The distance between road receptors is circa 50m. A total of 50 receptor points have been identified for modelling.

Figure 46: Cottam 3a, Blyton Park Race Track: identified receptors

Network Rail Receptors

Railway Signal Receptors

1.2.10 Network Rail has provided information regarding the signals located in the proximity of the Cottam 3b Site. These are shown in Figure 47 below. Pager Power analysis considered railway signal receptors that:

- Are within 500 metres of the Scheme;
- Have a potential view of the panels.

1.2.11 None of the signals provided by Network Rail are within 500m of the Cottam 3b Site and therefore no significant impact is predicted. However, Network Rail has requested an assessment of signal N4 (650m west of the Cottam 3b Site). The signal height above ground level (agl) is 3.3m and it is facing towards the Cottam 3b Site.

1.2.12 The impact of solar reflections upon railway signals has been assessed by considering the height and location of any identified signals.

Figure 1: Cottam 3b, railway signal location

Geometric Calculation Results – Blyton Park Race Track

1.2.13 The Geometric Assessment Results and Discussion section set out below considers the results as set out in tables 27 and 28 below.

Fixed Systems – Cottam 3a

Table 1: Geometric analysis results for Blyton Park Race Track receptors

Receptor	Are Solar Reflections Geometrically Possible? (GMT)		Comment
	am	pm	
1	Yes.	No.	Solar reflections geometrically possible. However, proposed screening is predicted to significantly reduce the visibility of the proposed development. No impact is predicted.
2-8	Yes.	Yes.	Solar reflections geometrically possible. However, proposed screening is predicted to significantly reduce the visibility of the proposed development. No impact is predicted.
9-50	Yes.	No.	Solar reflections geometrically possible. However, proposed screening is predicted to significantly reduce the visibility of the proposed development. No impact is predicted.

Tracking Systems – Cottam 3a

Table 2: Geometric analysis results for Blyton Park Race Track receptors

Receptor	Are Solar Reflections Geometrically Possible? (GMT)		Comment
	am	pm	
1-20	Yes.	Yes.	Solar reflections geometrically possible. However, proposed screening is predicted to significantly reduce the visibility of the proposed development. No impact is predicted.
21-26	No.	Yes.	Solar reflections geometrically possible. However, proposed screening is predicted to significantly reduce the visibility of the proposed development. No impact is predicted.

Receptor	Are Solar Reflections Geometrically Possible? (GMT)		Comment
	am	pm	
27-34	No.	No.	Solar reflections not geometrically possible. No impact is predicted.
35-37	Yes.	No.	Solar reflections geometrically possible. However, proposed screening is predicted to significantly reduce the visibility of the proposed development. No impact is predicted.
38-50	Yes.	Yes.	Solar reflections geometrically possible. However, proposed screening is predicted to significantly reduce the visibility of the proposed development. No impact is predicted.

Geometric Calculation Results – Railway Signal Receptors

1.2.14 The Geometric Assessment Results and Discussion section set out below considers the results as set out in tables 29 and 30 below.

Fixed Systems – Cottam 3b

Table 3: Geometric analysis results for railway signal receptors

Railway Receptor	Are Solar Reflections Geometrically Possible? (GMT)		Comment
	am	pm	
Railway Signal (N4)	Yes.	No.	Solar reflections geometrically possible. However, existing screening in the form of vegetation and buildings has been identified which is predicted to significantly obstruct the visibility of the reflective area. No impact is predicted.

Tracking Systems – Cottam 3b

Table 30:4 Geometric analysis results for railway signal receptors

Railway Receptor	Are Solar Reflections Geometrically Possible? (GMT)		Comment
	am	pm	
Railway Signal (N4)	Yes.	No.	Solar reflections geometrically possible. However, existing screening in the form of vegetation and buildings has been identified which is predicted to significantly obstruct the visibility of the reflective area. No impact is predicted.

Geometric Assessment Results and Discussion

Blyton Park Race Track Results

1.2.15 No guidance exists for assessing the impact of drivers circuiting a Race Track.

Fixed System – Cottam 3a

1.2.16 The results of the analysis have shown that solar reflections are geometrically possible for drivers across all identified receptors (see orange path in Figure 82 below).

Figure 2: Reflecting area for affected Blyton Park Race Track receptors

1.2.17 Table 33 below shows the times at which solar reflections are possible towards Blyton Park Race Track receptors. The results shown are for the fixed panel configuration which is considered to represent the worst case scenario. Receptor 5 has been taken forward for further discussion.

Table 5: Fixed System: solar reflection times for receptors at Blyton Park Race Track

Receptor	Time of Solar Reflections (GMT)	
	am	pm
1	Between 05:54 and 06:08 from late March to mid- June. Between 05:55 and 06:05 from the beginning of July to late September.	None.
2	Between 05:53 and 06:09 from late March to mid- June. Between 05:54 and 06:05 from the beginning of July to late September.	At circa 18:13 during late March. At circa 18:15 during early August. At circa 18:01 during mid- September.
3	Between 05:53 and 06:09 from late March to mid- June. Between 05:53 and 06:05 from the beginning of July to late September.	At circa 18:12 during late March. At circa 18:08 during mid- April. Between 17:59 and 18:10 from late August to mid- September.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
4	Between 05:53 and 06:08 from late March to mid- June. Between 05:55 and 06:05 from the beginning of July to mid- September.	Between 18:07 and 18:10 from the end of March to mid- April. Between 18:05 and 18:06 from the beginning of May to mid- May. Between 18:03 and 18:15 from the end of July to mid-September.
5	Between 05:52 and 06:08 from late March to mid- June. Between 05:53 and 06:04 from the beginning of July to late September.	Between 18:06 and 18:13 from late March to mid- May. Between 18:11 and 18:14 from mid- June to late June. Between 18:16 and 18:18 during the beginning of August. Between 18:00 and 18:11 from late August to mid-September.
6	Between 05:51 and 06:09 from late March to mid- June. Between 05:53 and 06:04 from the end of June to late September.	Between 18:06 and 18:10 from the beginning of April to the end of April. At circa 18:06 during mid- May. At circa 18:16 during the end of July. Between 18:04 and 18:13 from mid-August to early September.
7	Between 05:51 and 06:08 from late March to late September.	Between 18:08 and 18:12 from late March to mid- April. Between 18:04 and 18:05 during early May. Between 18:14 and 18:15 during the beginning of August. Between 17:59 and 18:03 from early September to mid-September.
8	Between 05:51 and 06:08 from late March to the end of May. Between 05:54 and 06:05 from mid- June to late September.	Between 18:10 and 18:12 during late March. Between 18:00 and 18:03 during mid- September.
9	Between 05:53 and 06:09 from late March to the beginning of June. Between 05:59 and 06:00 during late June. Between 05:55 and 06:05 from mid- July to late September.	None.
10	Between 05:53 and 06:08 from late March to early June. Between 05:55 and 06:05 from early July to late September.	None.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
11	Between 05:54 and 06:08 from late March to late September.	None.
12	Between 05:53 and 06:07 from the end of March to early June. Between 05:57 and 06:04 from late June to mid-September.	None.
13	Between 05:54 and 06:05 from the end of March to mid- September.	None.
14	Between 05:53 and 06:08 from late March to mid- September.	None.
15	Between 05:53 and 06:05 from the end of March to mid- September.	None.
16	Between 05:53 and 06:05 from the beginning of April to late September.	None.
17	Between 05:53 and 06:09 from late March to late September.	None.
18	Between 05:53 and 06:08 from late March to late September.	None.
19	Between 05:53 and 06:08 from late March to late September.	None.
20	Between 05:53 and 06:07 from late March to mid- June. Between 05:54 and 06:04 from early July to mid-September.	None.
21	Between 05:52 and 06:08 from late March to early June. Between 05:58 and 06:03 from early July to early September. At circa 05:53 during late September.	None.
22	Between 05:53 and 06:08 from late March to the end of May. Between 05:56 and 05:59 during late June. Between 05:53 and 06:03 from mid-July to late September.	None.

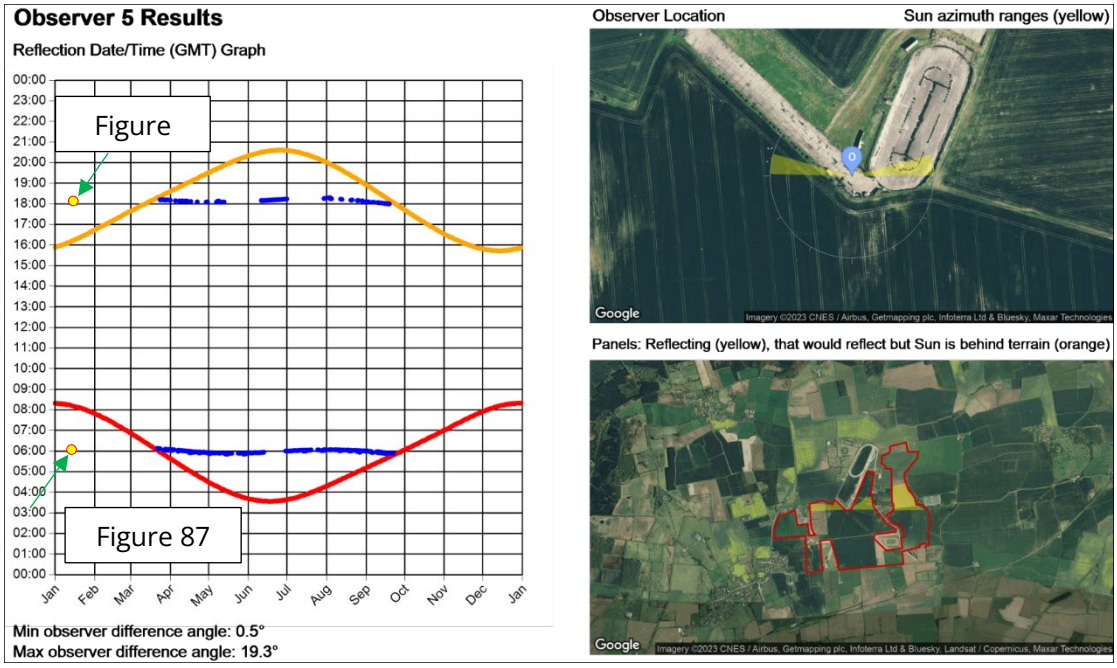
Receptor	Time of Solar Reflections (GMT)	
	am	pm
23	Between 05:53 and 06:07 from late March to mid- June. Between 05:52 and 06:04 from the beginning of July to late September.	None.
24	Between 05:53 and 06:07 from late March to mid- May. Between 05:54 and 05:55 from the end of May to mid- June. Between 05:58 and 06:02 from the end of June to mid- July. Between 05:52 and 06:03 from the end of July to late September.	None.
25	Between 05:57 and 06:07 from late March to late April. At circa 05:53 during mid- May. Between 05:54 and 05:55 during early June. At circa 06:01 during early July. Between 05:53 and 06:03 from late July to late September.	None.
26	Between 06:05 and 06:06 during late March. Between 05:58 and 05:59 during mid- April. Between 05:53 and 05:54 from early May to mid- May. At circa 06:03 during late July. Between 06:00 and 06:01 during late August. Between 05:54 and 05:55 during mid- September.	None.
27	Between 05:59 and 06:05 from the end of March to mid- April. Between 05:56 and 06:00 from the end of August to mid- September.	None.
28	At circa 06:02 during early April. At circa 05:58 during early September.	None.
29	At circa 06:05 during the end of March.	None.
30	At circa 05:56 during mid- September.	None.
31	Between 06:02 and 06:07 from late March to early April. Between 05:54 and 05:58 from early September to late September.	None.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
32	Between 06:00 and 06:04 from the beginning of April to mid- April. Between 05:57 and 06:00 from the end of August to mid- September.	None.
33	Between 05:58 and 06:07 from late March to late April. Between 05:53 and 06:02 from mid- August to late September.	None.
34	Between 05:54 and 06:07 from late March to early May. Between 05:55 and 06:04 from early August to mid-September.	None.
35	Between 05:54 and 06:07 from late March to late May. Between 05:55 and 06:04 from late July to mid-September.	None.
36	Between 05:53 and 06:07 from late March to early June. Between 05:55 and 06:04 from early July to mid-September.	None.
37	Between 05:54 and 06:07 from late March to early June. At circa 05:58 during late June. Between 05:55 and 06:04 from early July to mid-September.	None.
38	Between 05:54 and 06:09 from late March to late September.	None.
39	Between 05:54 and 06:09 from late March to late September.	None.
40	Between 05:53 and 06:09 from late March to late September.	None.
41	Between 05:53 and 06:09 from late March to late September.	None.
42	Between 05:54 and 06:08 from late March to late September.	None.
43	Between 05:54 and 06:06 from the end of March to mid- September.	None.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
44	Between 05:54 and 06:07 from late March to mid- September.	None.
45	Between 05:53 and 06:07 from late March to late September.	None.
46	Between 05:54 and 06:08 from late March to mid- September.	None.
47	Between 05:54 and 06:09 from late March to mid- June. Between 05:53 and 06:05 from the end of June to late September.	None.
48	Between 05:53 and 06:08 from late March to late September.	None.
49	Between 05:53 and 06:08 from late March to mid- September.	None.
50	Between 05:53 and 06:08 from late March to mid- June. Between 05:54 and 06:05 from the end of June to late September.	None.
42	Between 05:54 and 06:08 from late March to late September.	None.

1.2.18 The chart in Figure 83 below shows the time at which solar reflections (blue dots) are predicted to occur for a circuit user at receptor 5 (located at the south of the racing track). The Sun will be low at the horizon when solar reflections are predicted to occur. This is shown in Figure 86 and Figure 87 for the times highlighted (red and yellow dots) in Figure 83.

Figure 3: Fixed System: solar reflections chart for receptor 5



1.2.19 No impact is predicted because the Applicant has proposed screening along the Scheme boundary (see Figure 84 and Figure 85 on the following pages). The height of the screening will be sufficient to significantly reduce the visibility of the reflecting solar panel area for a typical driver's height. If necessary, the Applicant will implement an interim mitigation measure (opaque fence) before planting is established.

Figure 4: Proposed screening along the proposed Scheme boundary (eastern areas)

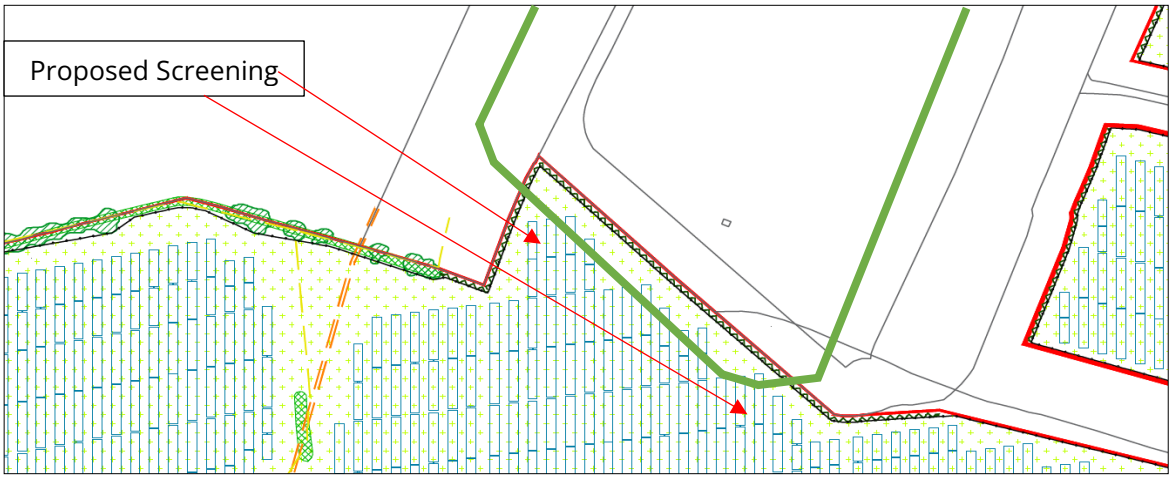


Figure 5: Proposed screening along the proposed Scheme boundary (western areas)

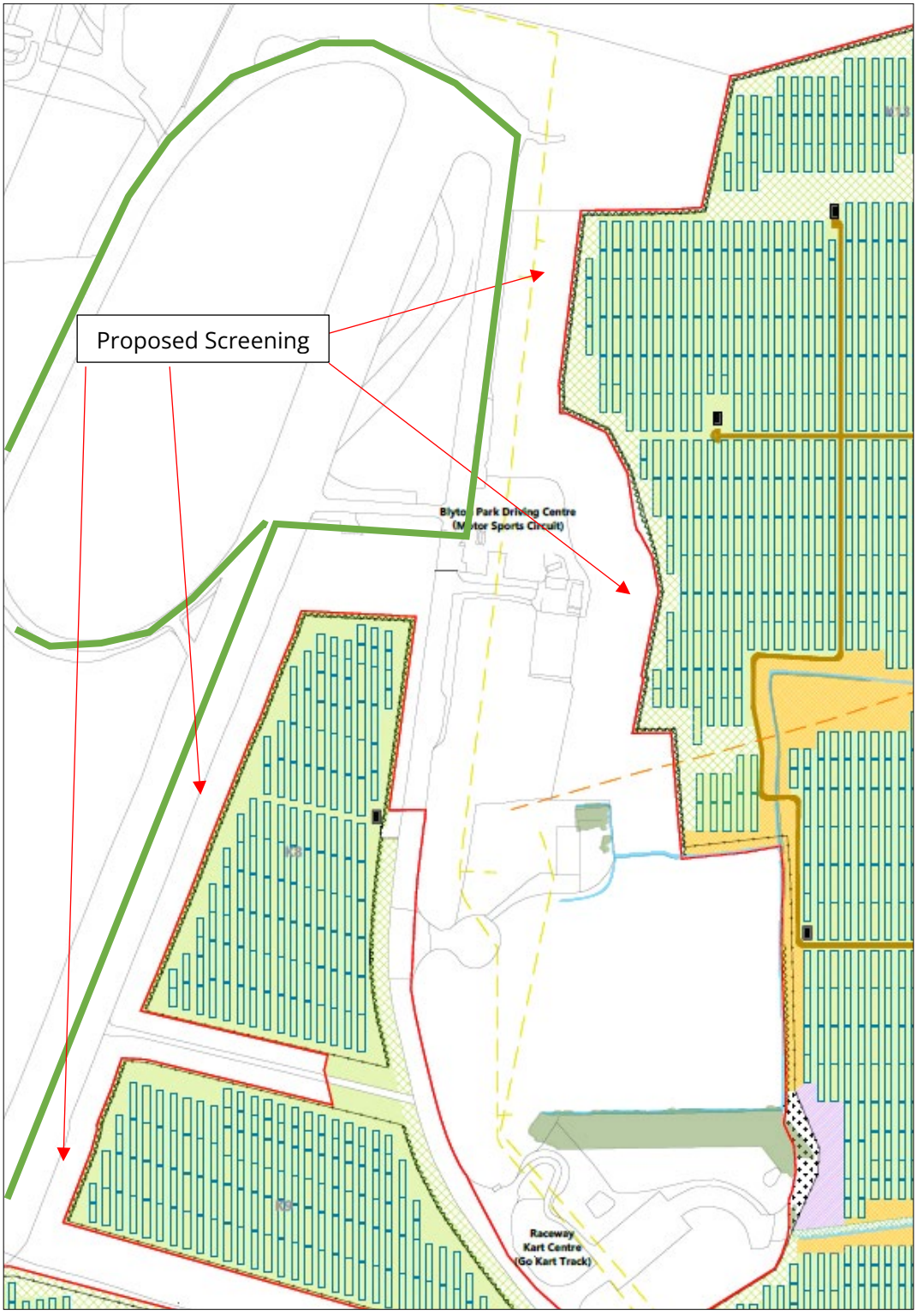


Figure 6: View of the Sun and reflective area from receptor 5 (15th of April 18:10 – circuiting clockwise)

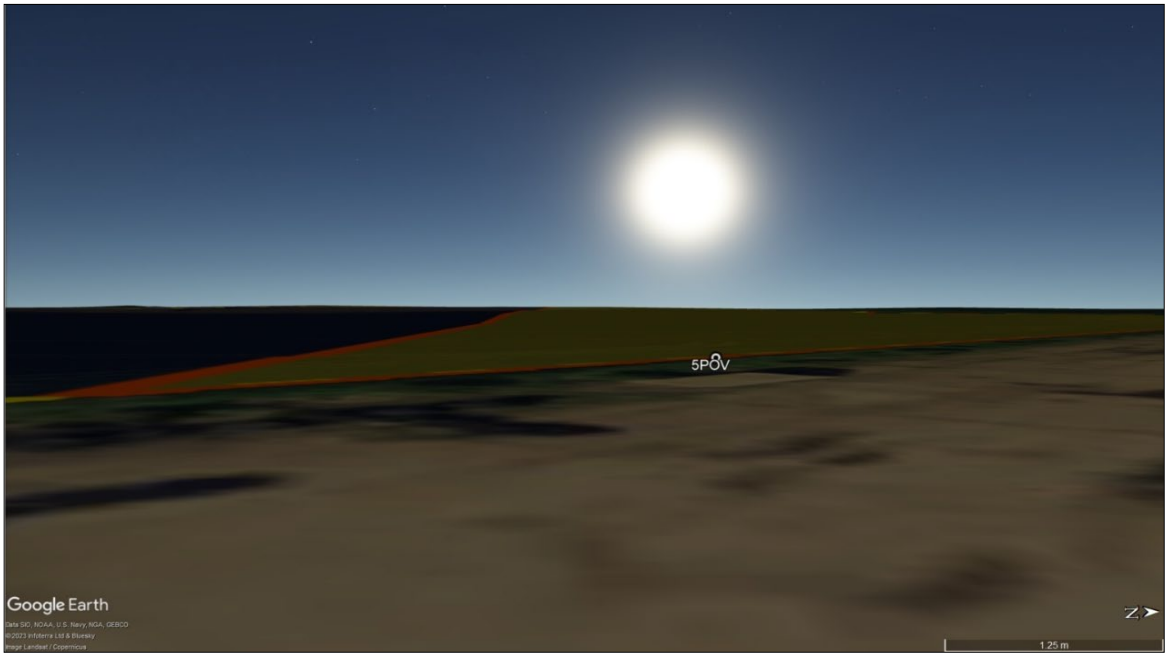
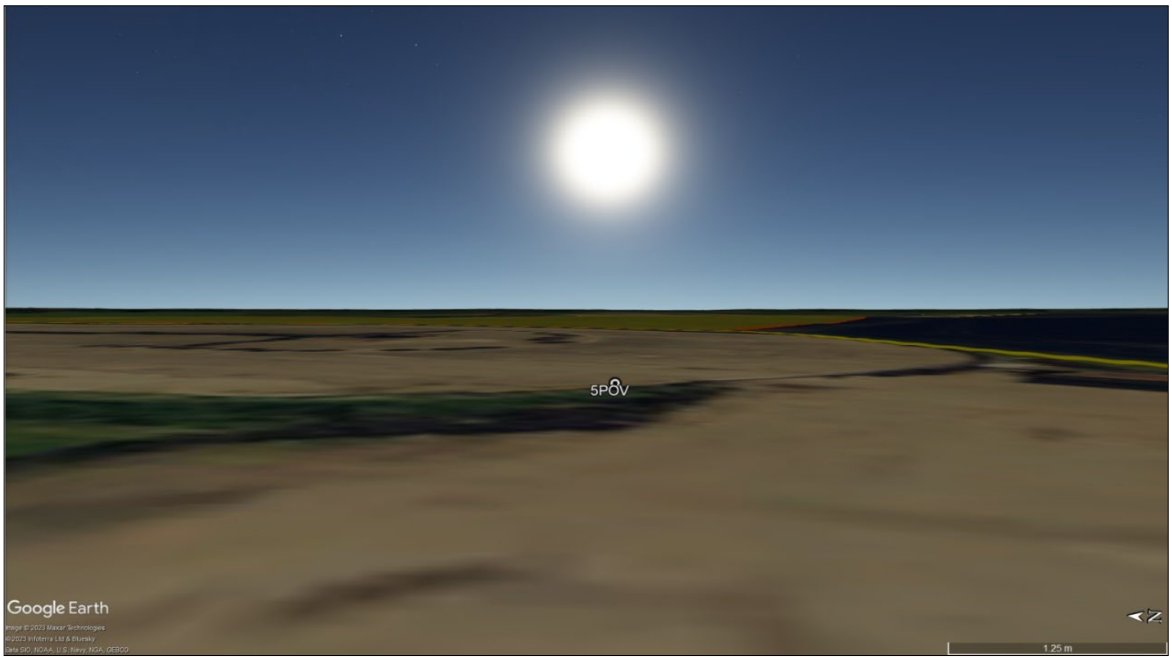


Figure 7: View of the Sun and reflective area from receptor 5 (15th of April 06:10 – circuiting anti-clockwise)



Railway Signal Results

1.2.20 The process for quantifying impact significance is defined in the report appendices. The key considerations for railway signals are:

- Whether a reflection is predicted to reach the signal lens or not.
- Whether the railway signal appears to be LED or incandescent.
- Whether the solar reflections illuminates the signal directly.

1.2.21 Where no solar reflections are geometrically possible or where solar reflections are predicted to be significantly screened, no impact is predicted, and further mitigation is not required.

1.2.22 Where reflections originate from outside 180 degrees of the direction of the signal or where the separation distance to the nearest visible reflecting panel is over 1km, the impact significance is low, and mitigation is not recommended.

1.2.23 Where reflections are predicted to reach the signal from within 180 degrees of the direction of the signal, expert assessment of the following relevant factors is required to determine the impact significance:

- Whether the railway signal appears to be LED or incandescent.
- Whether the solar reflection originates from directly in front of the signal.
- Whether the railway signal has a hood fitted or not.
- The separation distance to the reflecting panel area. Larger separation distances reduce the likelihood of phantom aspect illusion.

1.2.24 Following consideration of these relevant factors, where the solar reflection is not deemed significant, a low impact is predicted, and mitigation is not recommended. Where the solar reflection is deemed significant, the impact significance is moderate, and mitigation is recommended. Where reflections originate from directly in front of an incandescent signal and there are no mitigating factors, the impact significance is high, and mitigation is required.

Fixed Systems – Cottam 3a

1.2.25 The results of the modelling indicate that solar reflections are geometrically possible towards the assessed railway signal. However, existing screening in the form of both vegetation and buildings are predicted to significantly reduce the visibility of the reflective area. Therefore, impacts are not predicted to be experienced in practice due to existing intervening screening (see Figure 88 on the following page). Furthermore, the Applicant has proposed instant screening on the northern and

western sides of the Scheme which will further reduce any visibility. Therefore, no impact is predicted under the current baseline scenario, and no mitigation is required.

Figure 8: Existing screening nearby the railway signal

Fixed System – Cottam 3b

1.2.26 The results of the analysis have shown that solar reflections are geometrically possible for train drivers travelling along 19 out of the 26 identified receptors (see Figure 89 on the following page), equivalent to circa 2km of assessed railway line. Under the current baseline scenario a train driver is predicted to have almost unobstructed visibility of the reflecting area (some existing screening between the Scheme and the railway line might provide sufficient screening however, gaps in the vegetation remain). The reflecting area is expected to be in front of the train driver.

Figure 9: Reflecting area and proposed screening for train driver receptors 1 to 19

1.2.27 Table 34 below shows the times at which solar reflections are possible towards the identified train driver receptors. The results shown are for the fixed panel configuration. Receptor 7 has been taken forward for further discussion.

Table 6: Fixed System: solar reflection times for train driver receptors

Receptor	Time of Solar Reflections (GMT)	
	am	pm
1	Between 05:54 and 06:07 from late March to early May. Between 05:53 and 06:04 from mid- August to late September.	None.
2	Between 05:54 and 06:07 from late March to the beginning of May. Between 05:53 and 06:03 from mid- August to late September.	None.
3	Between 05:54 and 06:07 from late March to the beginning of May. Between 05:53 and 06:03 from mid- August to late September.	None.
4	Between 05:54 and 06:06 from late March to early May. Between 05:54 and 06:03 from mid- August to mid- September.	None.
5	Between 05:54 and 06:08 from late March to the beginning of May. Between 05:52 and 06:03 from mid- August to late September.	None.
6	Between 05:55 and 06:06 from late March to the beginning of May. Between 05:53 and 06:03 from mid- August to late September.	None.
7	Between 05:54 and 06:08 from late March to the beginning of May. Between 05:53 and 06:03 from mid- August to late September.	None.
8	Between 05:54 and 06:06 from late March to the beginning of May. Between 05:53 and 06:03 from mid- August to late September.	None.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
9	Between 05:54 and 06:09 from late March to the beginning of May. Between 05:53 and 06:03 from mid- August to late September.	None.
10	Between 05:54 and 06:06 from late March to the beginning of May. Between 05:53 and 06:03 from mid- August to late September.	None.
11	Between 05:54 and 06:05 from the end of March to the beginning of May. Between 05:54 and 06:03 from mid- August to mid- September.	None.
12	Between 05:54 and 06:07 from late March to the beginning of May. Between 05:52 and 06:03 from mid- August to late September.	None.
13	Between 05:55 and 06:04 from the end of March to the end of April. Between 05:55 and 06:03 from mid- August to mid- September.	None.
14	Between 05:54 and 06:07 from late March to the beginning of May. Between 05:52 and 06:02 from mid- August to late September.	None.
15	Between 05:55 and 06:05 from late March to the end of April. Between 05:54 and 06:02 from mid- August to mid- September.	None.
16	Between 05:54 and 06:08 from late March to the end of April. Between 05:53 and 06:02 from mid- August to late September.	None.
17	At circa 06:03 during the end of March. Between 05:55 and 05:56 during late April. At circa 06:01 during mid- August. Between 05:55 and 05:59 from the beginning of September to mid- September.	None.
18	At circa 05:55 during late April. At circa 06:00 during mid- August.	None.
19	Between 05:57 and 06:00 during mid- April. Between 05:57 and 05:59 during the end of August.	None.
20 – 26	None.	None.

1.2.28 The chart in Figure 90 on the following page shows the time at which solar reflections (blue dots) are predicted to occur for a train driver at receptor 7. The Sun will be low at the horizon when solar reflections are predicted to occur. This is shown in Figure 91 on the following page for the times highlighted (red and yellow dots) in Figure 90.

Figure 10: Fixed System: solar reflections chart for train driver receptor 7

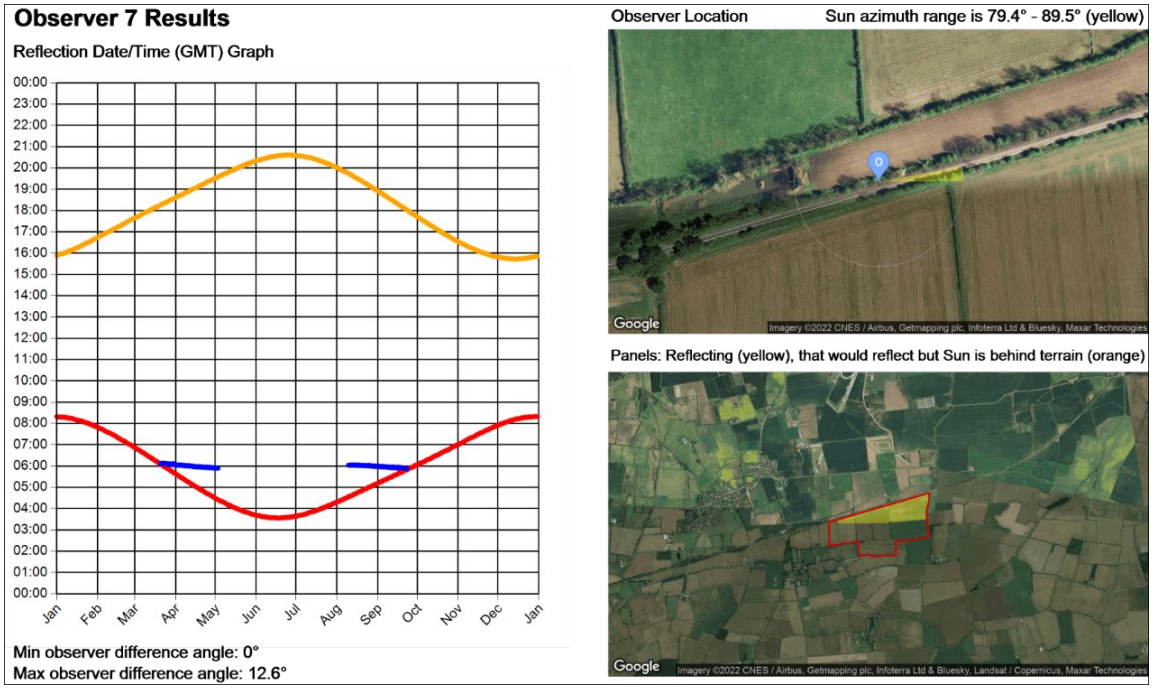
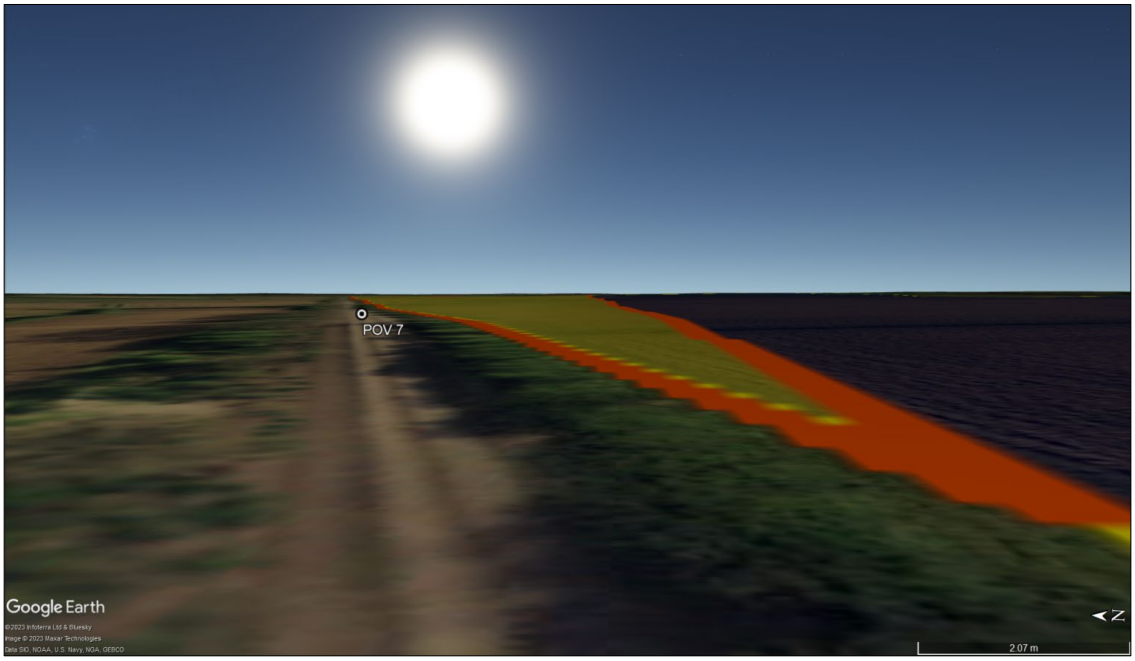


Figure 11: View of the Sun and reflective area from train driver receptor 7 (1st of May 5:55 – travelling east)



1.2.29 The Applicant has proposed instant screening on the northern and western sides of the Scheme to reduce impacts. Therefore, no impact is predicted, and no further mitigation is required.

Tracking System – Cottam 3b

1.2.30 The results of the analysis as set out in paragraph 7.3.2.1 of **C6.3.16.1 ES Appendix 16.1 Solar Photovoltaic Glint and Glare Study [APP-140]** remain unchanged.

1.2.31 Table 34 below shows the times at which solar reflections are possible towards the identified train driver receptors. The results shown are for the fixed panel configuration. Receptor 7 has been taken forward for further discussion.

Table 7: Tracking System: solar reflection times for train driver receptors

Receptor	Time of Solar Reflections (GMT)	
	am	pm
1 – 2	None.	None.
3	At circa 07:37 during early February. At circa 07:06 during early November. At circa 07:41 during late November.	None.
4	Between 07:58 and 08:12 from mid-January to late January. Between 07:30 and 07:50 from mid- November to late November.	None.
5	Between 05:16 and 08:20 from early January to mid- April. Between 05:18 and 08:04 from early September to early December.	None.
6	Between 05:17 and 08:21 from the beginning of January to mid- April. Between 05:16 and 08:21 from the beginning of September to late December.	None.
7	Between 05:20 and 08:29 from the beginning of January to early April. Between 05:25 and 08:22 from early September to the end of December.	At circa 16:30 during the end of January. At circa 16:01 during mid- November.
8	Between 05:23 and 08:22 from the beginning of January to early April. Between 05:20 and 08:23 from early September to the end of December.	At circa 16:11 during mid- January. At circa 17:05 during mid- February. At circa 16:35 during late October. At circa 15:47 during late November.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
9	Between 07:35 and 08:24 from mid-January to mid- February. Between 06:47 and 06:56 during the beginning of March. Between 05:28 and 06:08 from late March to early April. At circa 05:23 during early September. At circa 05:53 during late September. Between 06:22 and 08:06 from mid- October to the beginning of December. Between 08:22 and 08:24 during late December.	Between 16:03 and 16:17 during mid-January. Between 16:47 and 17:13 from early February to mid- February. Between 15:44 and 16:43 from late October to the beginning of December.
10	At circa 08:09 during late January. Between 07:36 and 07:39 during mid-February. At circa 06:44 during early March. At circa 05:40 during the beginning of April. At circa 05:33 during mid- September. Between 06:20 and 06:33 during mid- October. Between 07:05 and 07:09 during the beginning of November. At circa 07:44 during late November.	Between 16:01 and 17:16 from mid-January to mid- February. Between 15:36 and 16:34 from the end of October to mid- December. At circa 15:45 during the end of December.
11	At circa 06:31 during mid- March. Between 08:20 and 08:27 from mid-December to the end of December.	Between 15:53 and 17:17 from early January to late February. Between 15:37 and 16:48 from late October to late December.
12	At circa 08:08 during late January. Between 06:49 and 07:40 from mid-February to the beginning of March. At circa 05:48 during the end of March. Between 05:21 and 05:39 during mid-September. Between 06:23 and 06:37 during mid- October. At circa 07:09 during the beginning of November. At circa 07:43 during late November.	Between 15:48 and 17:19 from the beginning of January to late February. Between 15:38 and 16:45 from late October to late December.
13	At circa 07:59 during early February. At circa 06:45 during early March. At circa 05:27 during early September. At circa 06:21 during early October. At circa 07:29 during early November. Between 08:17 and 08:24 from mid-December to the end of December.	Between 15:48 and 17:20 from the beginning of January to late February. Between 15:34 and 16:51 from late October to late December.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
14	At circa 07:35 during mid- February. Between 05:23 and 05:50 from the end of March to early April. Between 05:25 and 05:40 during mid-September. At circa 07:04 during the beginning of November.	Between 15:47 and 17:20 from the beginning of January to late February. Between 15:37 and 16:51 from late October to the end of December.
15	At circa 07:49 during early February. At circa 05:40 during the beginning of April. Between 05:26 and 05:36 during mid- September. At circa 07:18 during early November.	Between 15:47 and 17:20 from the beginning of January to late February. Between 15:37 and 16:52 from late October to late December.
16	At circa 07:40 during early February. Between 05:56 and 06:04 during late March. Between 05:47 and 05:49 during late September. Between 06:29 and 07:09 from mid- October to early November.	Between 15:48 and 17:21 from the beginning of January to late February. Between 15:38 and 16:52 from late October to the end of December.
17	At circa 08:17 during late January. Between 06:48 and 07:10 during the end of February. Between 06:23 and 06:42 during mid- October. At circa 07:52 during late November. Between 08:21 and 08:25 during late December.	Between 15:49 and 17:21 from the beginning of January to late February. Between 15:38 and 16:52 from late October to the end of December.
18	None.	Between 15:50 and 17:22 from the beginning of January to late February. Between 15:33 and 16:53 from late October to the end of December.
19	At circa 08:18 during mid- January. At circa 07:54 during late November.	Between 15:50 and 17:22 from the beginning of January to late February. Between 15:36 and 16:53 from late October to the end of December.
20	None.	Between 15:48 and 17:22 from the beginning of January to late February. Between 15:36 and 16:53 from late October to the end of December.

Receptor	Time of Solar Reflections (GMT)	
	am	pm
21	None.	Between 15:47 and 17:21 from the beginning of January to late February. Between 15:27 and 16:53 from late October to the end of December.
22	None.	Between 15:47 and 17:22 from the beginning of January to late February. Between 15:33 and 16:53 from late October to the end of December.
23	None.	Between 15:48 and 17:22 from the beginning of January to late February. Between 15:34 and 16:52 from late October to the end of December.
24	None.	Between 15:47 and 17:22 from the beginning of January to late February. Between 15:35 and 16:52 from late October to the end of December.
25	None.	Between 15:48 and 17:22 from the beginning of January to late February. Between 15:36 and 16:53 from late October to the end of December.
26	None.	Between 15:47 and 17:22 from the beginning of January to late February. Between 15:36 and 16:53 from late October to the end of December.

1.2.32 The chart in Figure 92 shows the time at which solar reflections (blue dots) are predicted to occur for a train driver at receptor 7. The Sun will be low at the horizon when solar reflections are predicted to occur. This is shown in Figure 93 below and Figure 94 on the following page for the times highlighted (red and yellow dots) in Figure 92.

Figure 12: Fixed System: solar reflections chart for train driver receptor 7

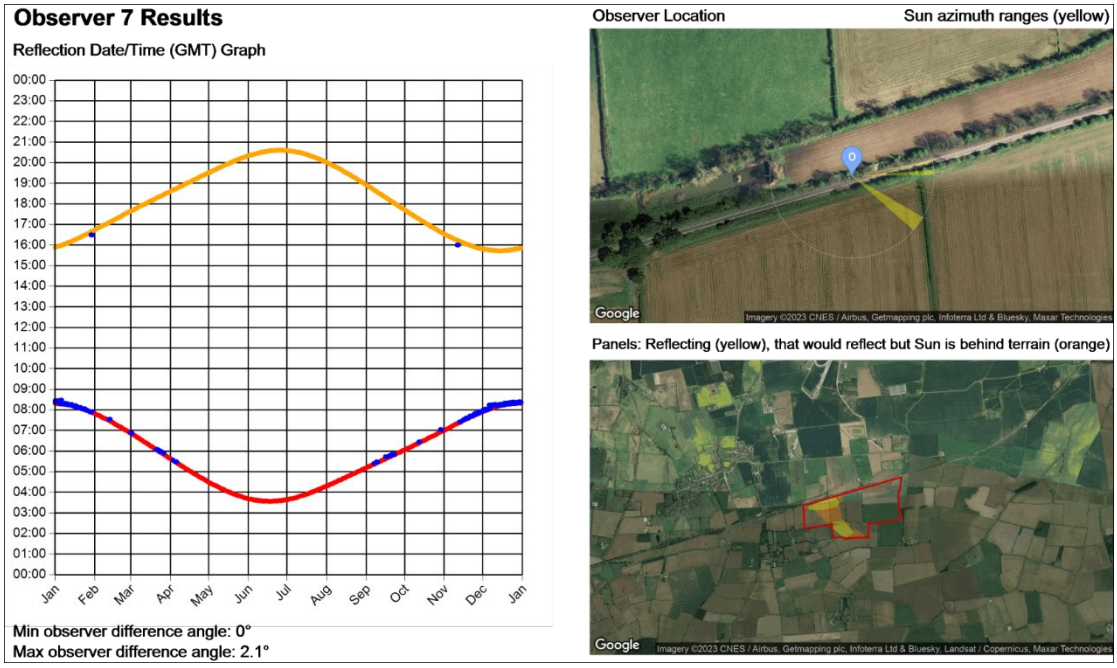


Figure 13: View of the Sun and reflective area from train driver receptor 7 (1st of May 5:55 – travelling east)

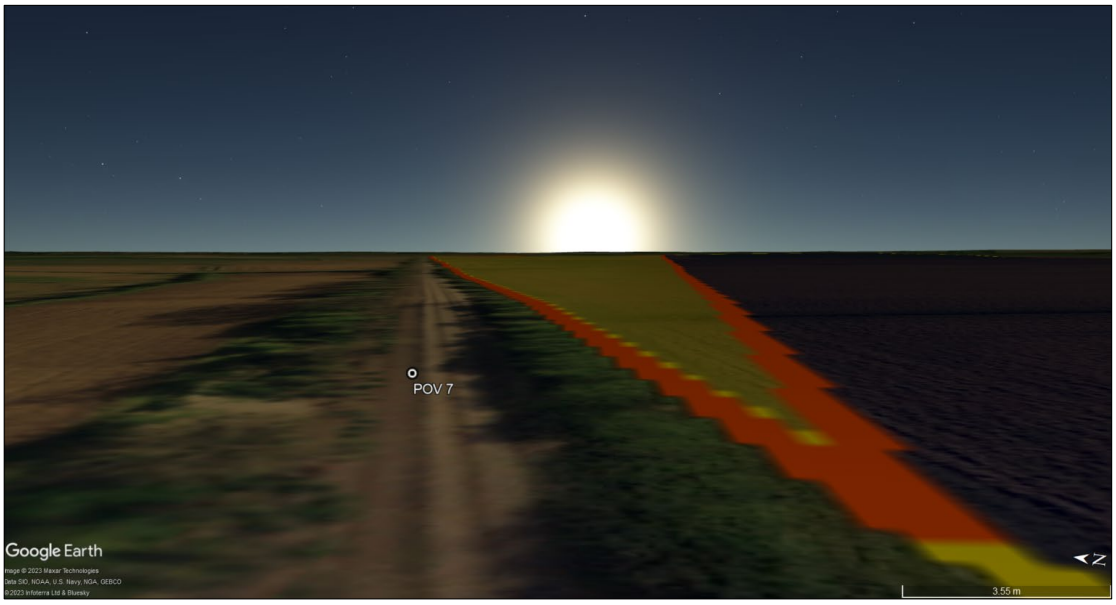
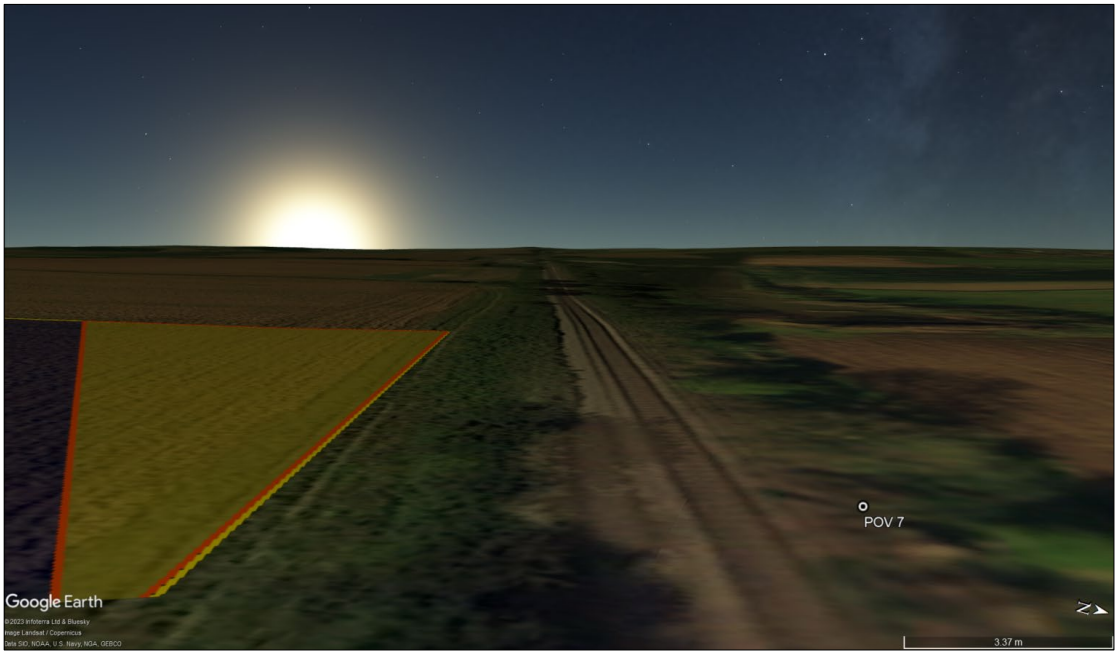


Figure 14: View of the Sun and reflective area from train driver receptor 7 (1st of February 4:40 – travelling west)



1.2.33 Furthermore, the Applicant has proposed instant screening on the northern and western sides of the Scheme to reduce impacts. Therefore, no impact is predicted, and no further mitigation is required.

Overall Conclusions

Network Rail Receptors

1.2.34 The results of the modelling indicate that solar reflections are geometrically possible towards the assessed railway signal receptors. However, existing screening in the form of both vegetation and buildings are predicted to significantly reduce the visibility of the reflective area. Therefore, impacts are not predicted to be experienced in practice due to existing intervening screening. Furthermore, the Applicant has proposed instant screening on the northern and western sides of the Scheme which will further reduce any visibility. Therefore, no impact is predicted under the current baseline scenario, and no further mitigation is required.

1.3 Summary

1.3.1 In summary, the Solar Photovoltaic Glint and Glare Study as set out in **ES: Appendix 16.1 [APP-140]** has been reviewed and the impacts of the Scheme on additional receptors has been taken into account. In summary, no significant impacts have been identified on Network Rail and therefore no additional mitigation is required. Whilst some impacts have been identified on Blyton Race Track these are not considered to be significant subject to the implementation of proposed mitigation measures.

1.3.2 In addition, there are no other changes to the effects or mitigation measures as set out in Appendix 16.1 of the Environmental Statement **[APP-140]**.

1.4 Appendix G – Receptor and Reflector Area Details

1.4.1 To reflect the additional receptors that have been taken into account in this addendum, Blyton Park Race Track and Railway Receptor Details are presented in the tables below respectively.

Cottam 3a

Cottam 3a: Assessed Blyton Park Race Track receptor locations (1 to 50)

No.	Longitude (°)	Latitude (°)	No.	Longitude (°)	Latitude (°)
1	-0.69710	53.45509	26	-0.68844	53.46102
2	-0.69669	53.45470	27	-0.68896	53.46139
3	-0.69625	53.45436	28	-0.68961	53.46159
4	-0.69571	53.45404	29	-0.69019	53.46177
5	-0.69507	53.45377	30	-0.69087	53.46170
6	-0.69439	53.45391	31	-0.69152	53.46146
7	-0.69399	53.45422	32	-0.69207	53.46112
8	-0.69390	53.45469	33	-0.69253	53.46071
9	-0.69377	53.45514	34	-0.69286	53.46034
10	-0.69351	53.45557	35	-0.69316	53.45997
11	-0.69321	53.45598	36	-0.69353	53.45950
12	-0.69270	53.45630	37	-0.69385	53.45911
13	-0.69230	53.45667	38	-0.69417	53.45872
14	-0.69217	53.45710	39	-0.69450	53.45831
15	-0.69205	53.45757	40	-0.69481	53.45792
16	-0.69184	53.45800	41	-0.69514	53.45751
17	-0.69154	53.45840	42	-0.69546	53.45712
18	-0.69112	53.45873	43	-0.69582	53.45667
19	-0.69036	53.45874	44	-0.69613	53.45628
20	-0.68956	53.45870	45	-0.69644	53.45591
21	-0.68899	53.45886	46	-0.69680	53.45546
22	-0.68887	53.45931	47	-0.69413	53.45810
23	-0.68874	53.45974	48	-0.69356	53.45784

No.	Longitude (°)	Latitude (°)	No.	Longitude (°)	Latitude (°)
24	-0.68862	53.46017	49	-0.69283	53.45782
25	-0.68850	53.46060	50	-0.69214	53.45802

Cottam 3b

Cottam 3a: Assessed Train Drivers receptor locations (1 to 26)

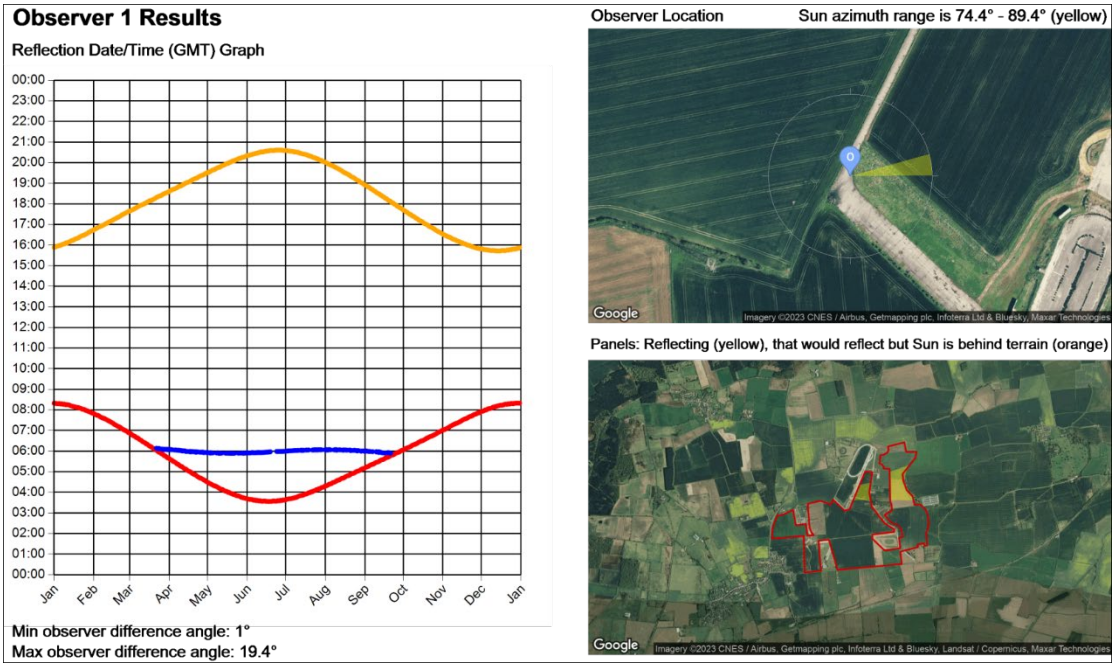
No.	Longitude (°)	Latitude (°)	No.	Longitude (°)	Latitude (°)
1	-0.70474	53.43913	14	-0.68598	53.44240
2	-0.70331	53.43938	15	-0.68447	53.44267
3	-0.70187	53.43963	16	-0.68308	53.44291
4	-0.70037	53.43989	17	-0.68146	53.44319
5	-0.69894	53.44014	18	-0.68006	53.44343
6	-0.69750	53.44039	19	-0.67856	53.44370
7	-0.69604	53.44065	20	-0.67716	53.44394
8	-0.69460	53.44090	21	-0.67580	53.44418
9	-0.69317	53.44115	22	-0.67434	53.44443
10	-0.69170	53.44141	23	-0.67276	53.44471
11	-0.69020	53.44167	24	-0.67136	53.44495
12	-0.68880	53.44191	25	-0.66989	53.44521
13	-0.68730	53.44217	26	-0.66853	53.44544

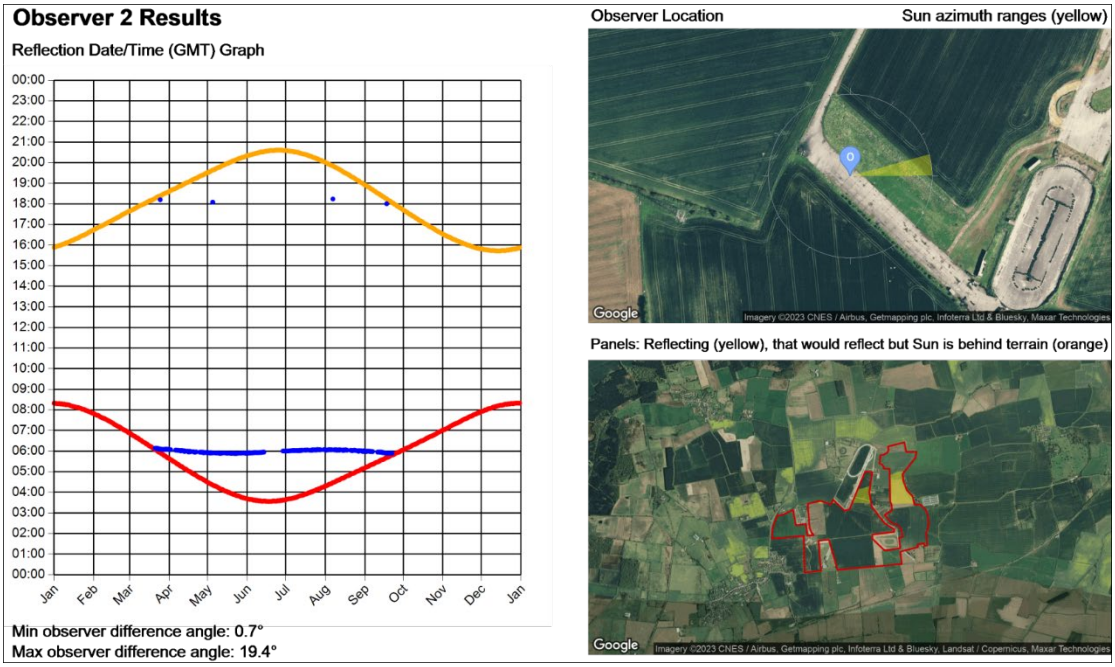
1.5 Appendix H – Detailed Modelling Results

1.5.1 To reflect the additional receptors that have been taken into account in this addendum, Blyton Park Race Track and Railway Receptor modelling results are presented below.

Blyton Park Race Track

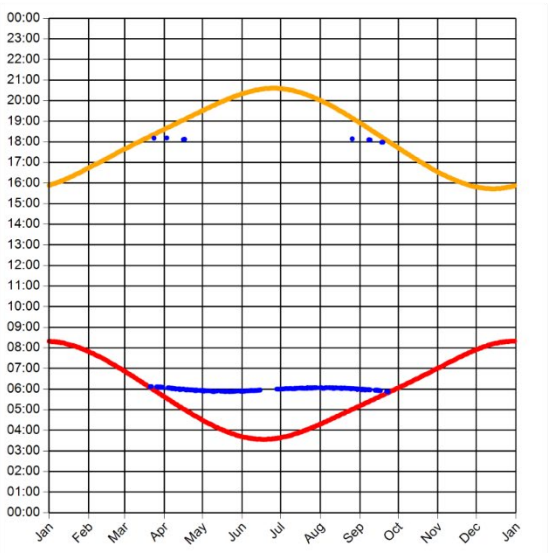
Fixed Systems





Observer 3 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 19.4°

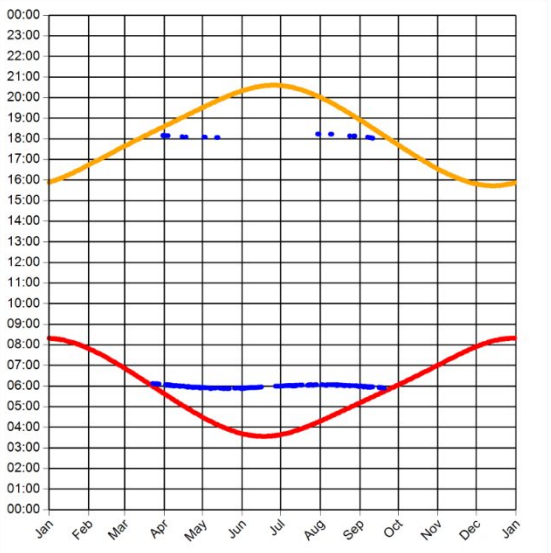
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 4 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 1.1°
Max observer difference angle: 19.5°

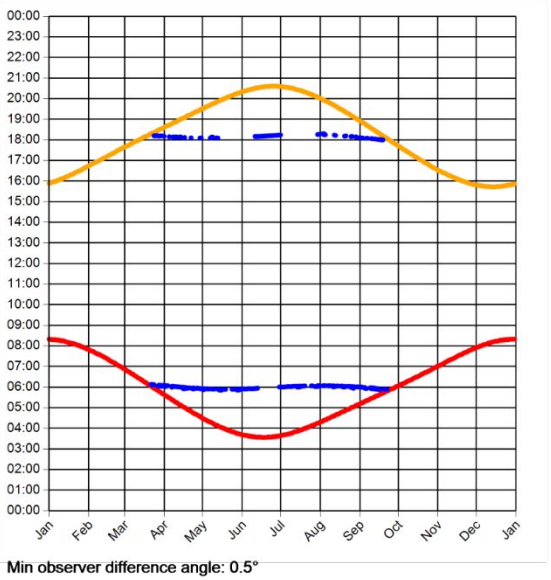
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

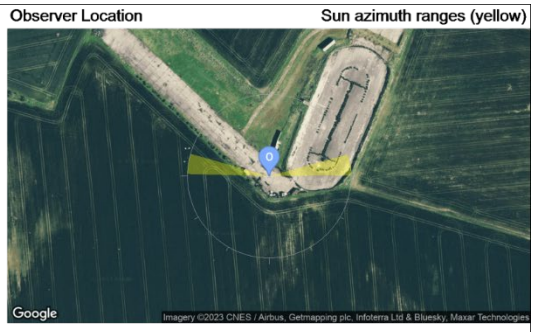
Observer 5 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.5°
Max observer difference angle: 19.3°

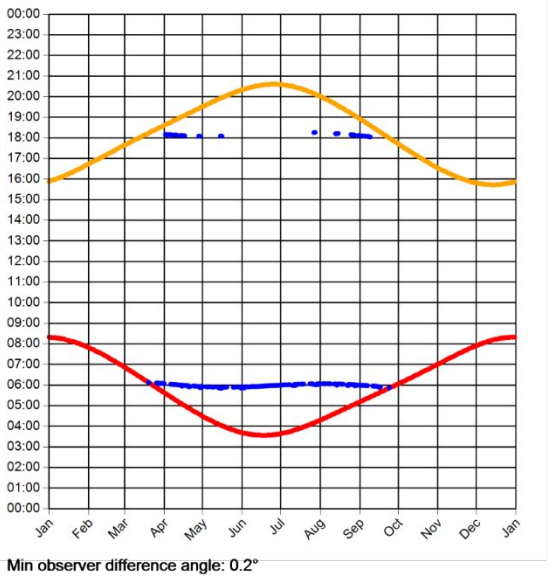
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 6 Results

Reflection Date/Time (GMT) Graph



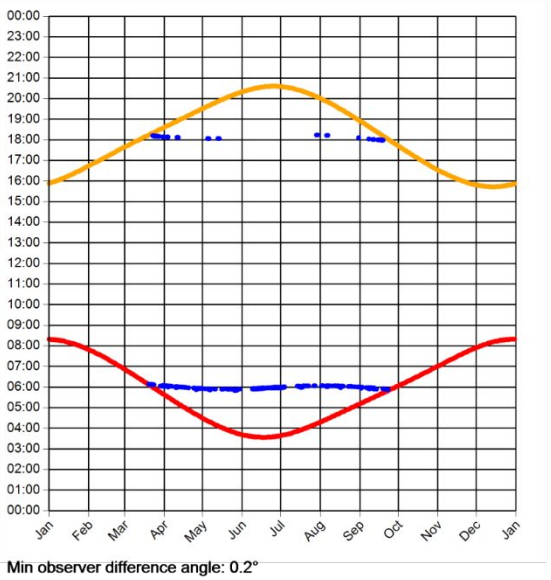
Min observer difference angle: 0.2°
Max observer difference angle: 19.5°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 7 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 19.6°

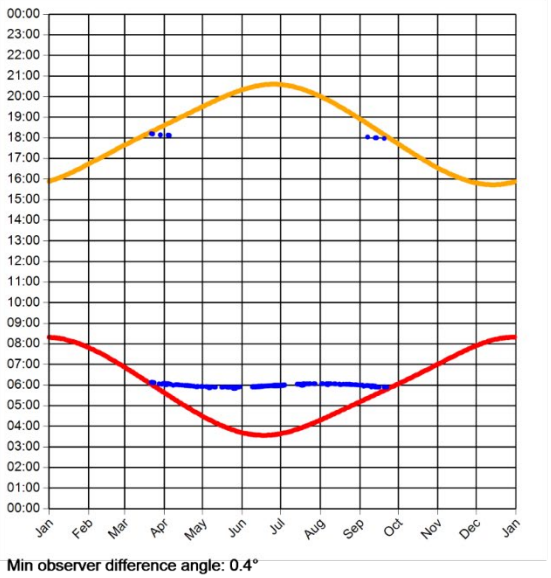
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 8 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.4°
Max observer difference angle: 19.6°

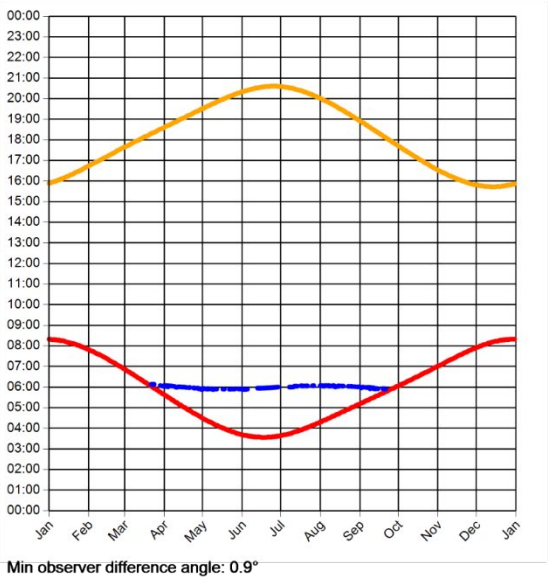
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 9 Results

Reflection Date/Time (GMT) Graph



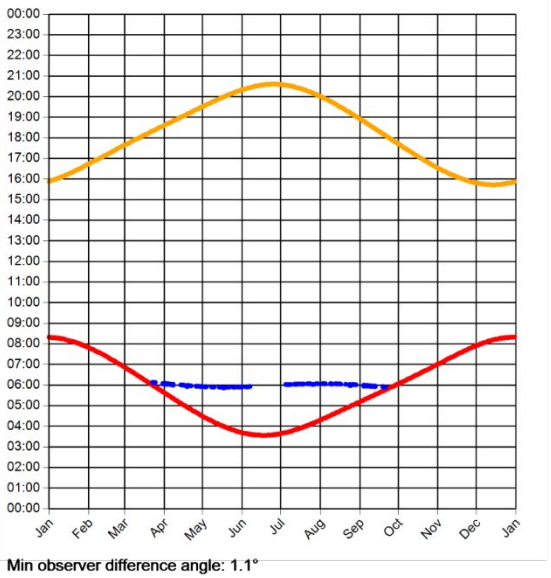
Min observer difference angle: 0.9°
Max observer difference angle: 19.6°

Observer Location — Sun azimuth range is 74.3° - 89.4° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

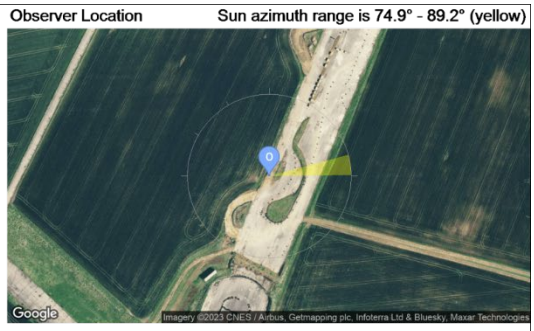
Observer 10 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 1.1°
Max observer difference angle: 19.1°

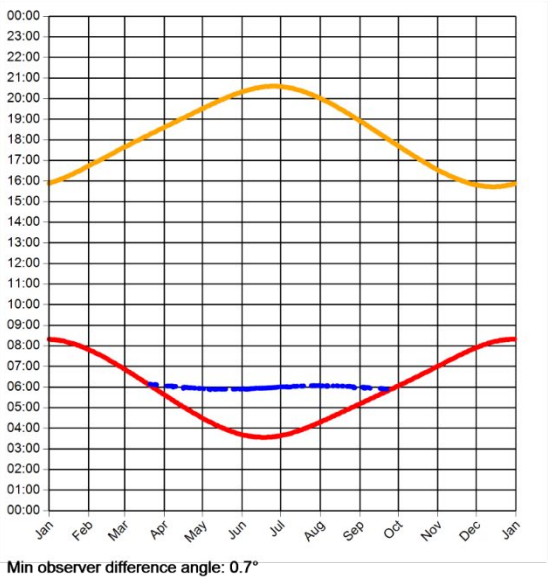
Observer Location — Sun azimuth range is 74.9° - 89.2° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 11 Results

Reflection Date/Time (GMT) Graph



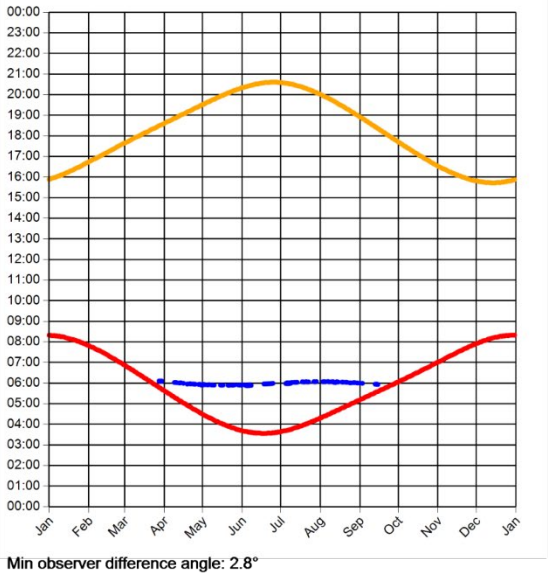
Min observer difference angle: 0.7°
Max observer difference angle: 19.5°

Observer Location — Sun azimuth range is 74.3° - 89.7° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 12 Results

Reflection Date/Time (GMT) Graph



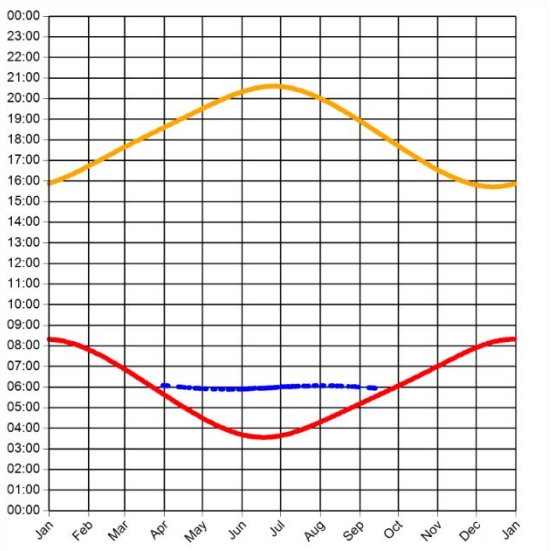
Min observer difference angle: 2.8°
Max observer difference angle: 19.7°

Observer Location — Sun azimuth range is 74.3° - 87.9° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 13 Results

Reflection Date/Time (GMT) Graph



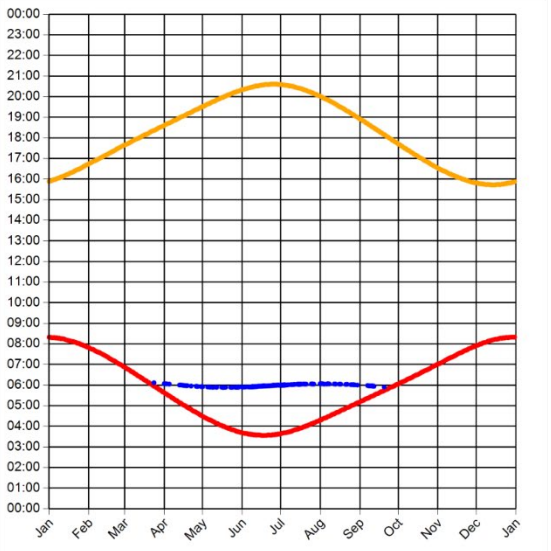
Min observer difference angle: 3.6°
Max observer difference angle: 19.5°

Observer Location — Sun azimuth range is 74.3° - 87.3° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 14 Results

Reflection Date/Time (GMT) Graph



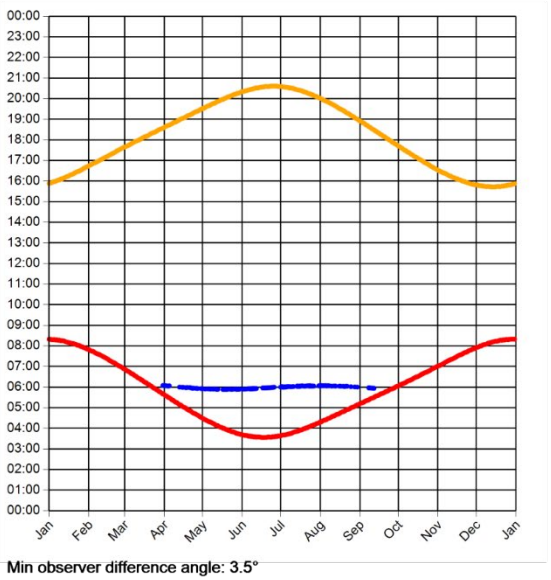
Min observer difference angle: 1.2°
Max observer difference angle: 19.6°

Observer Location — Sun azimuth range is 74.3° - 88.9° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

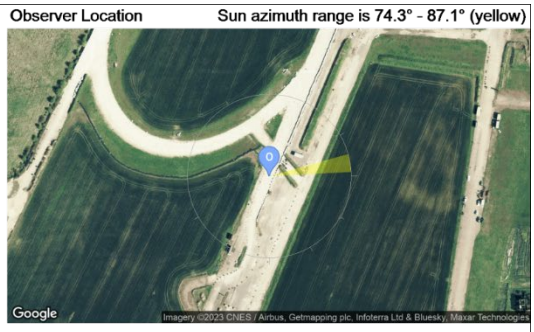
Observer 15 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 3.5°
Max observer difference angle: 19.7°

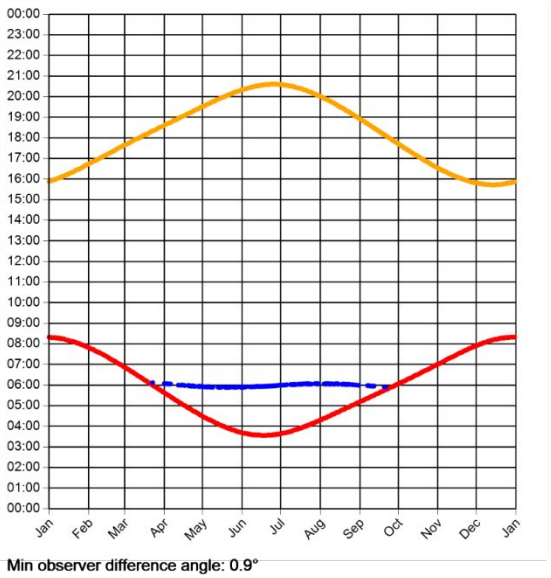
Observer Location — Sun azimuth range is 74.3° - 87.1° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 16 Results

Reflection Date/Time (GMT) Graph



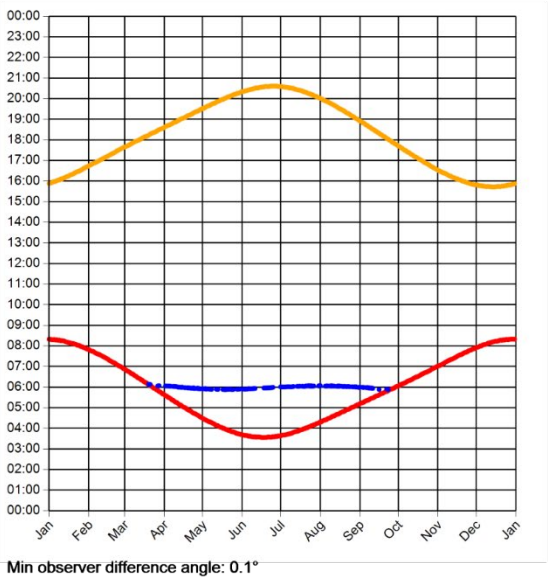
Min observer difference angle: 0.9°
Max observer difference angle: 19.2°

Observer Location — Sun azimuth range is 74.1° - 89.1° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

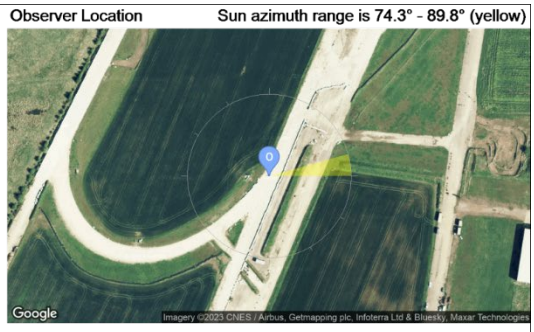
Observer 17 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 19.6°

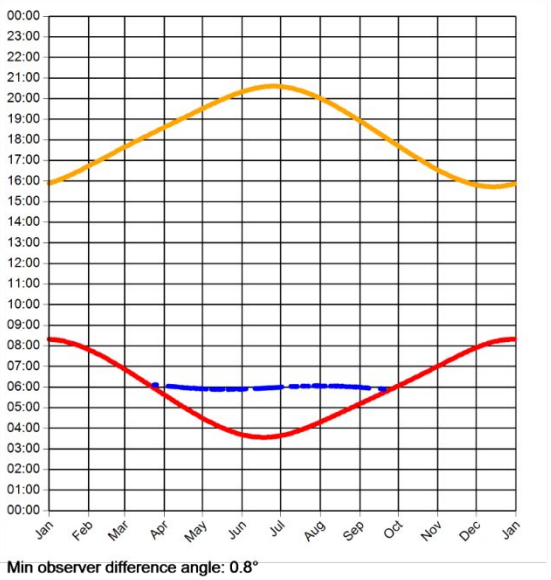
Observer Location — Sun azimuth range is 74.3° - 89.8° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

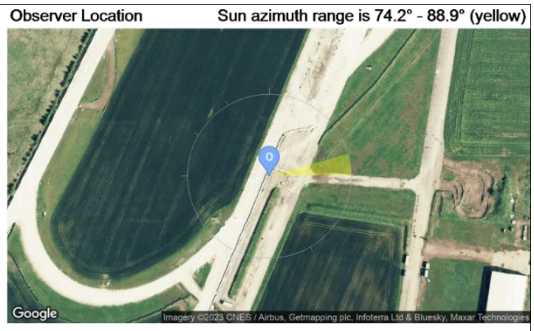
Observer 18 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.8°
Max observer difference angle: 19.4°

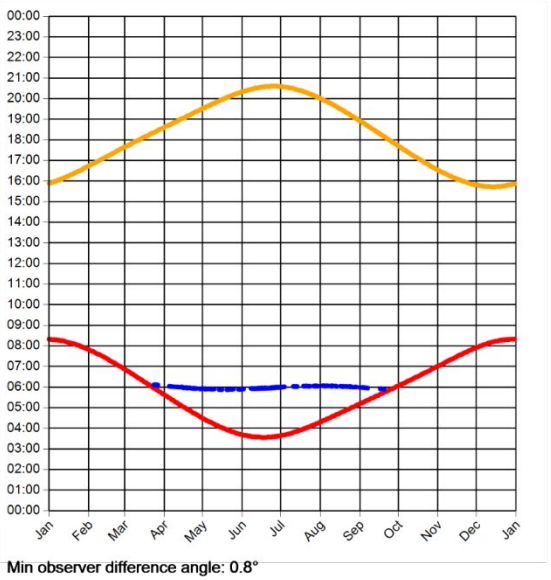
Observer Location — Sun azimuth range is 74.2° - 88.9° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

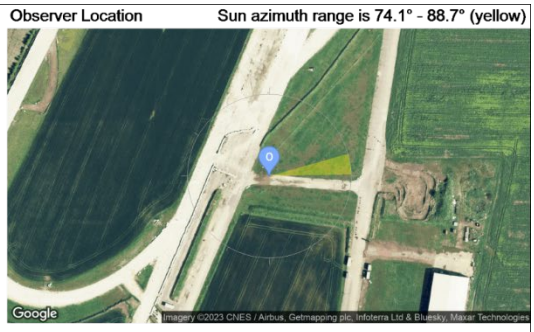
Observer 19 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.8°
Max observer difference angle: 19.4°

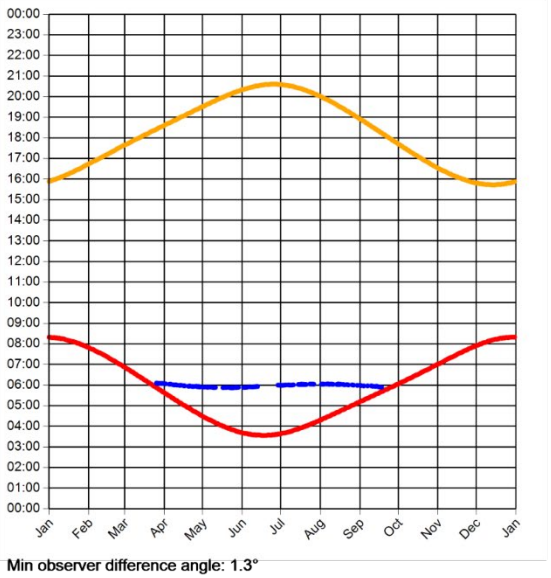
Observer Location — Sun azimuth range is 74.1° - 88.7° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 20 Results

Reflection Date/Time (GMT) Graph



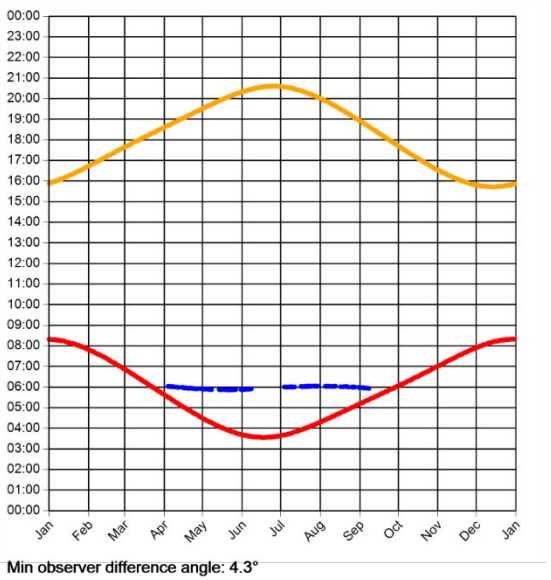
Min observer difference angle: 1.3°
Max observer difference angle: 19.1°

Observer Location — Sun azimuth range is 74.4° - 88.3° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

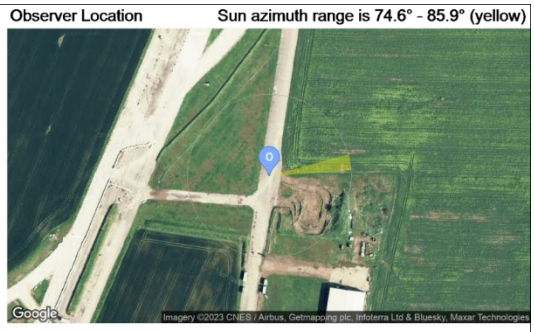
Observer 21 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 4.3°
Max observer difference angle: 18.7°

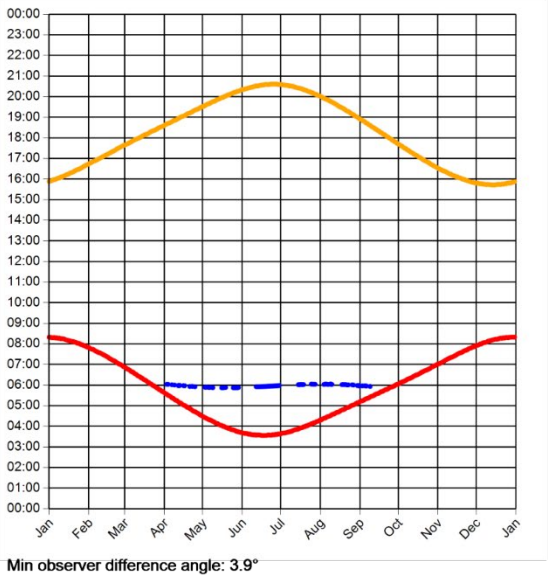
Observer Location — Sun azimuth range is 74.6° - 85.9° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

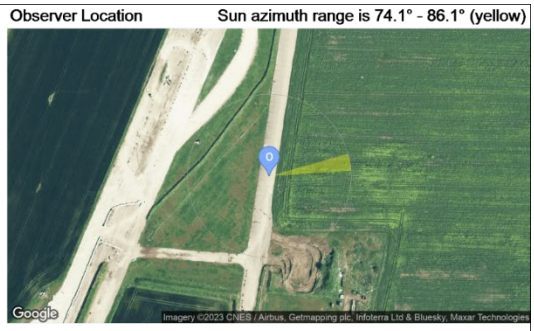
Observer 22 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 3.9°
Max observer difference angle: 19°

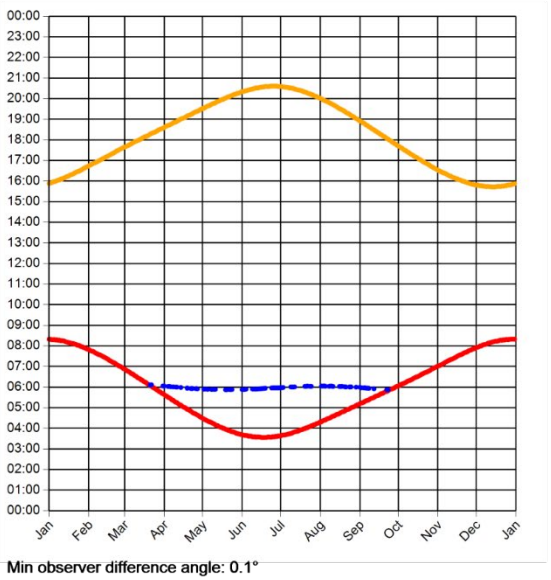
Observer Location — Sun azimuth range is 74.1° - 86.1° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

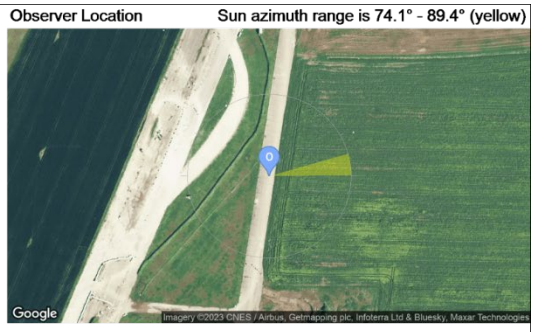
Observer 23 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 18.9°

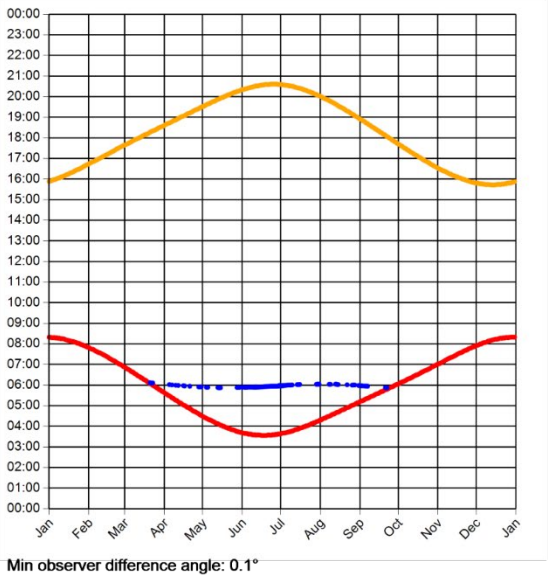
Observer Location — Sun azimuth range is 74.1° - 89.4° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 24 Results

Reflection Date/Time (GMT) Graph



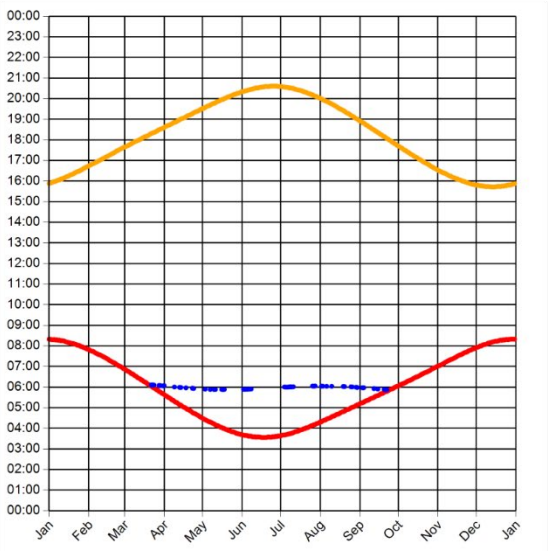
Min observer difference angle: 0.1°
Max observer difference angle: 18.8°

Observer Location — Sun azimuth range is 74° - 89.3° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

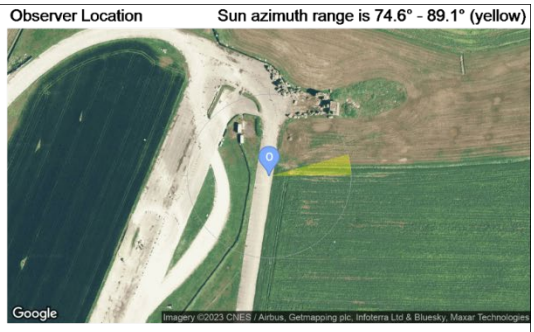
Observer 25 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 18.7°

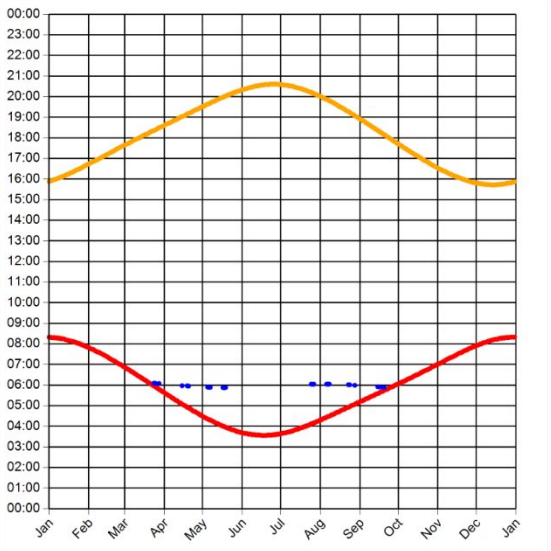
Observer Location — Sun azimuth range is 74.6° - 89.1° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 26 Results

Reflection Date/Time (GMT) Graph



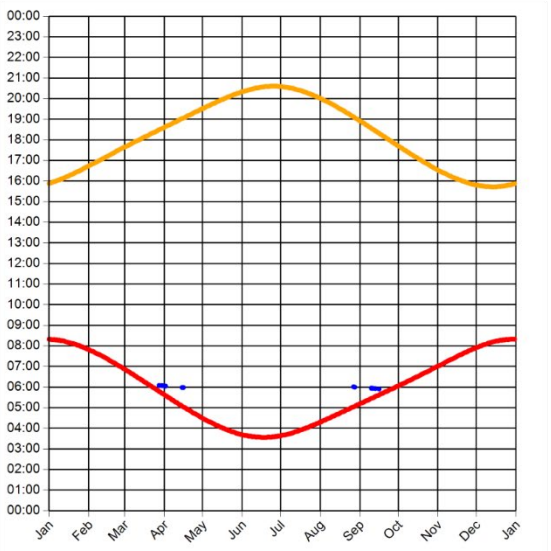
Min observer difference angle: 0.8°
Max observer difference angle: 16°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

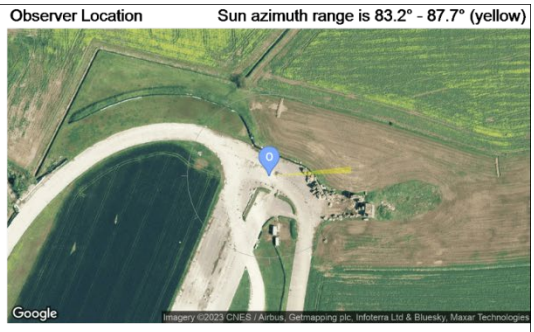
Observer 27 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 2°
Max observer difference angle: 8.3°

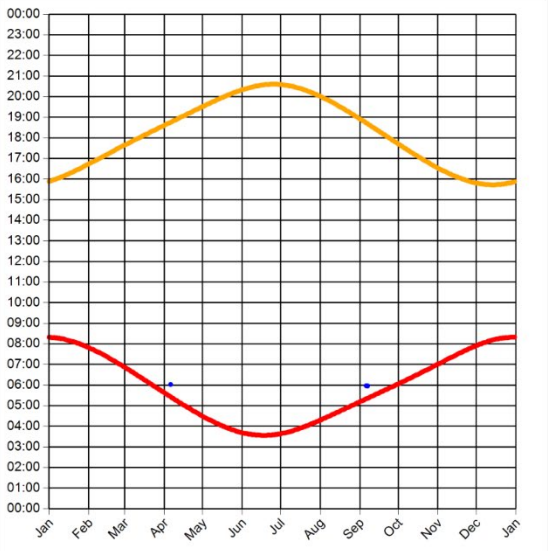
Observer Location — Sun azimuth range is 83.2° - 87.7° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

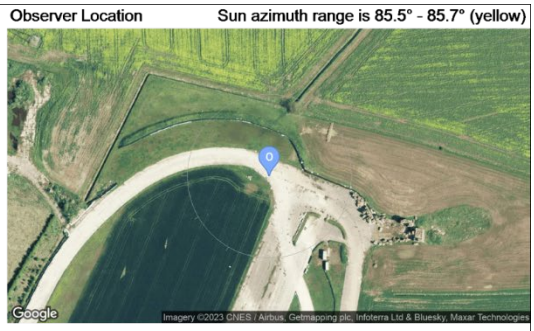
Observer 28 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 5°
Max observer difference angle: 5.2°

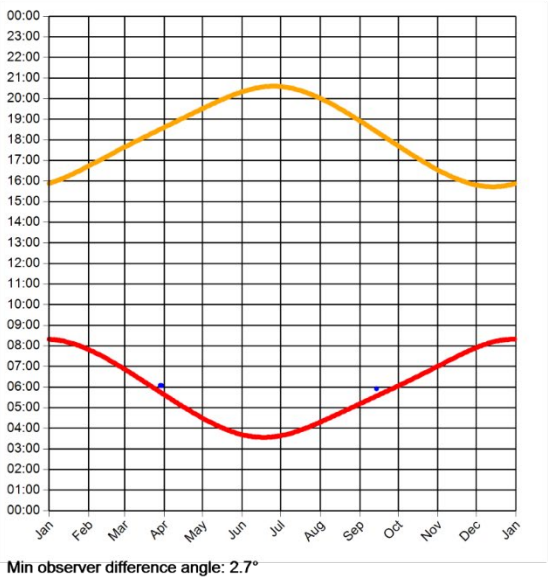
Observer Location — Sun azimuth range is 85.5° - 85.7° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

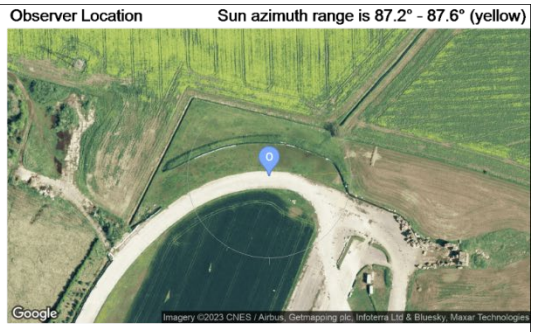
Observer 29 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 2.7°
Max observer difference angle: 2.9°

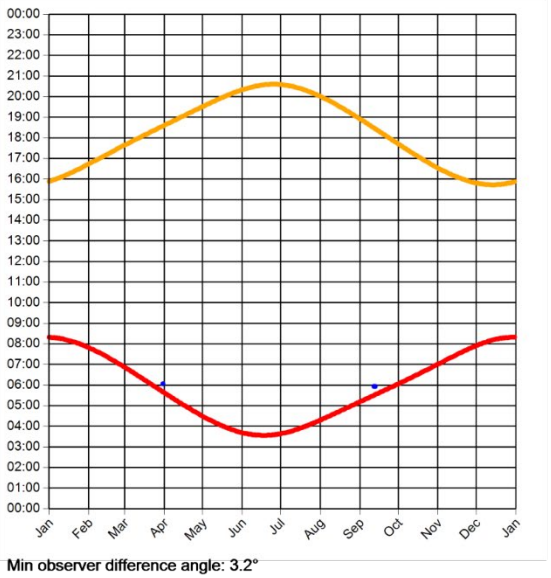
Observer Location — Sun azimuth range is 87.2° - 87.6° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

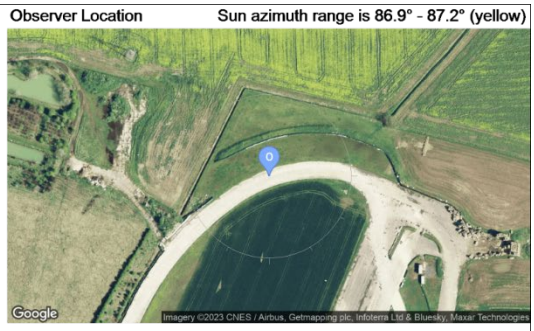
Observer 30 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 3.2°
Max observer difference angle: 3.4°

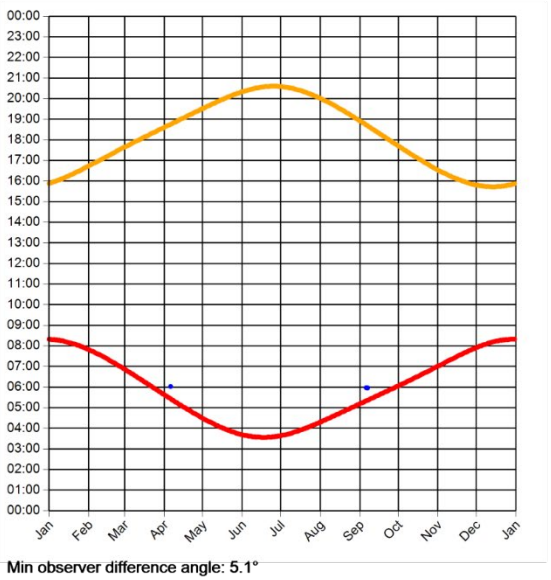
Observer Location — Sun azimuth range is 86.9° - 87.2° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 31 Results

Reflection Date/Time (GMT) Graph



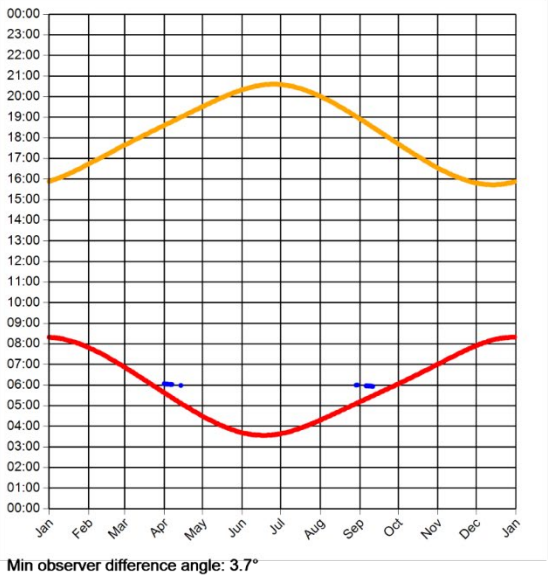
Min observer difference angle: 5.1°
Max observer difference angle: 5.3°

Observer Location — Sun azimuth range is 85.5° - 85.7° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

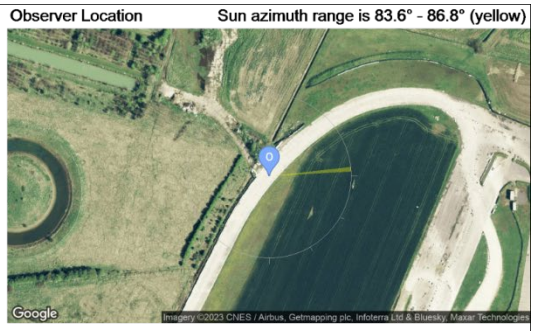
Observer 32 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 3.7°
Max observer difference angle: 7.7°

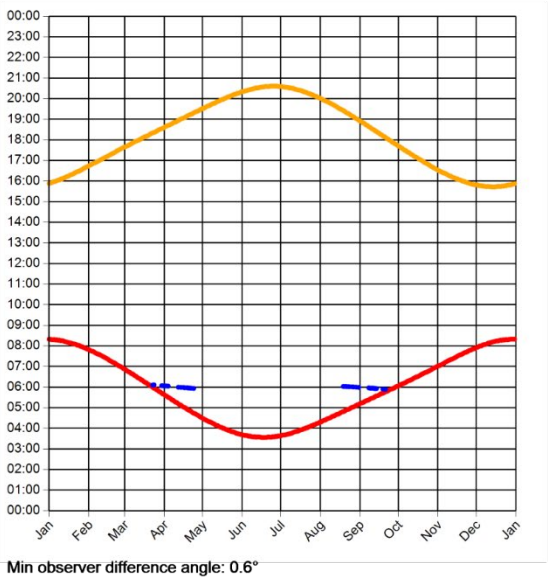
Observer Location — Sun azimuth range is 83.6° - 86.8° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

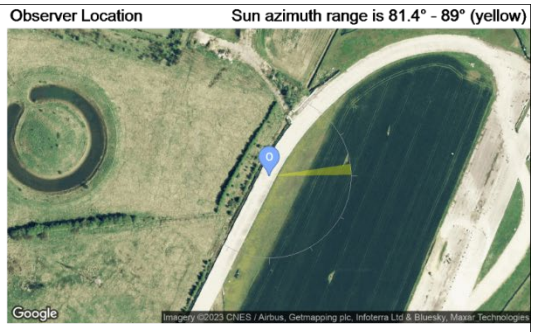
Observer 33 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.6°
Max observer difference angle: 10.5°

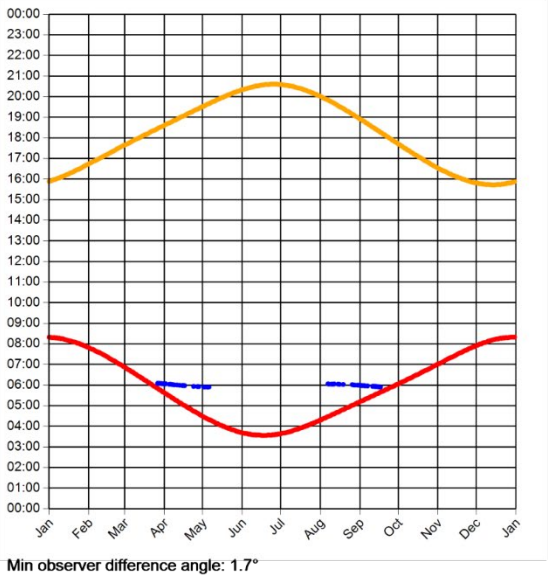
Observer Location — Sun azimuth range is 81.4° - 89° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 34 Results

Reflection Date/Time (GMT) Graph



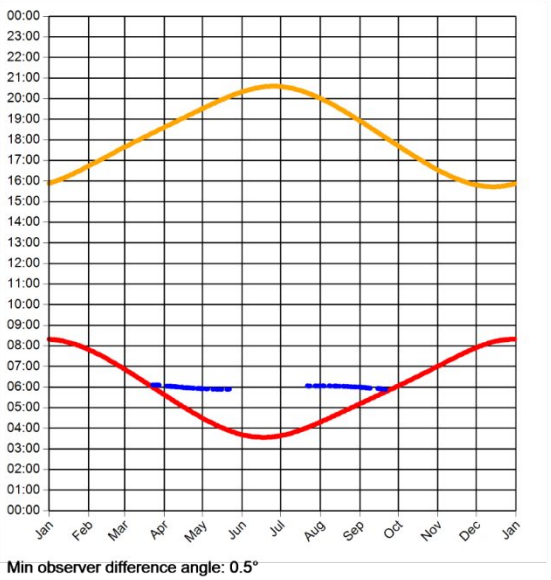
Min observer difference angle: 1.7°
Max observer difference angle: 13.6°

Observer Location — Sun azimuth range is 79.1° - 88.1° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

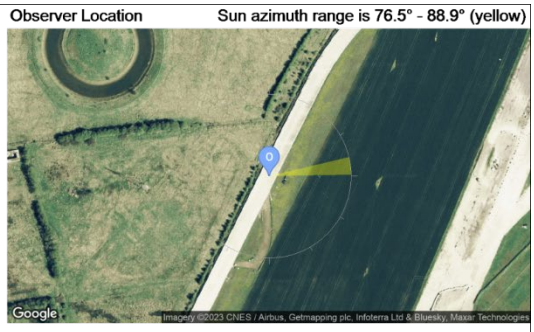
Observer 35 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.5°
Max observer difference angle: 16.9°

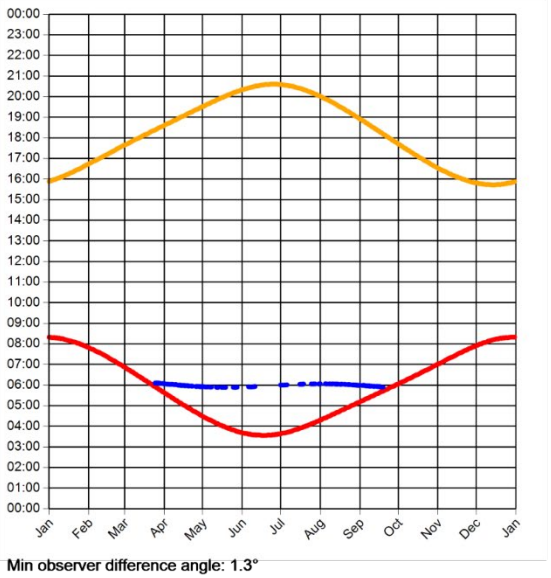
Observer Location — Sun azimuth range is 76.5° - 88.9° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

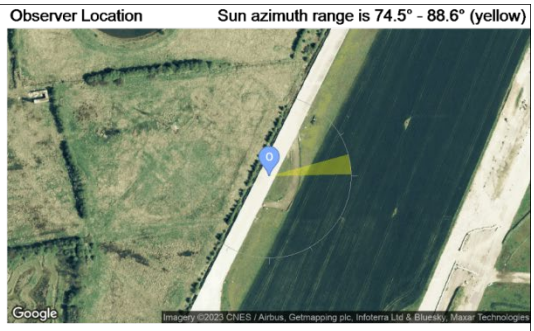
Observer 36 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 1.3°
Max observer difference angle: 19.1°

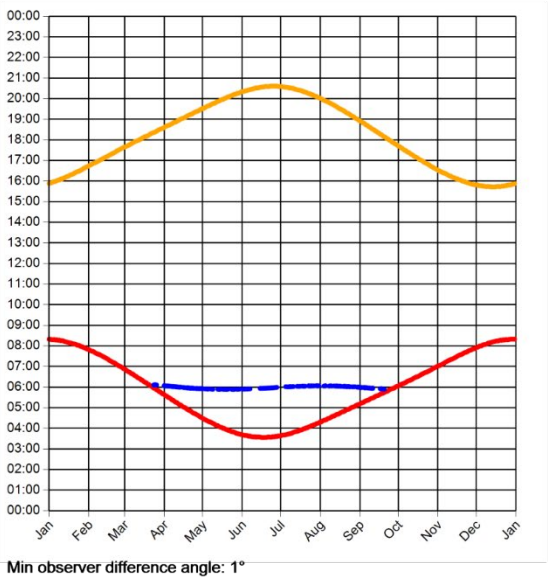
Observer Location — Sun azimuth range is 74.5° - 88.6° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

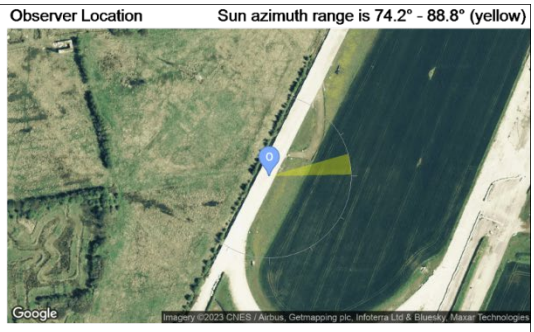
Observer 37 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 1°
Max observer difference angle: 19.3°

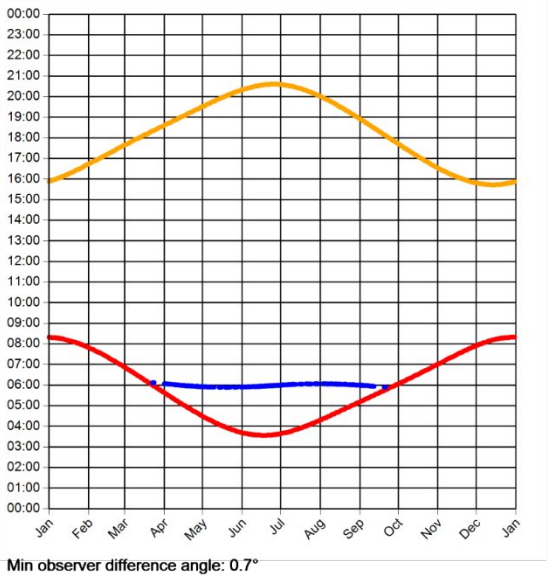
Observer Location — Sun azimuth range is 74.2° - 88.8° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

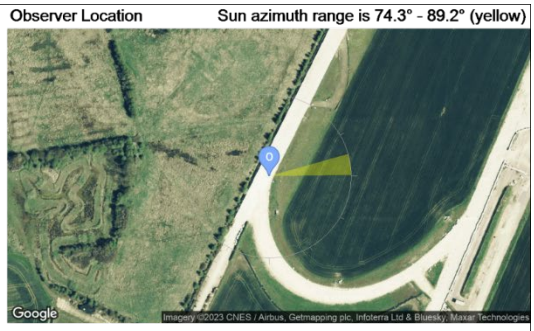
Observer 38 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.7°
Max observer difference angle: 19.5°

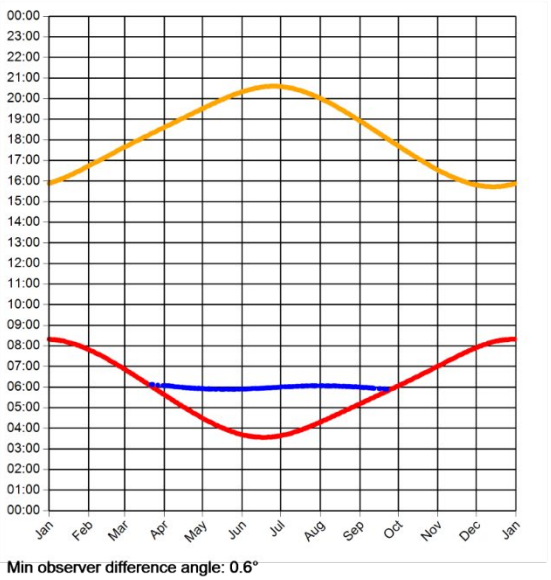
Observer Location — Sun azimuth range is 74.3° - 89.2° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

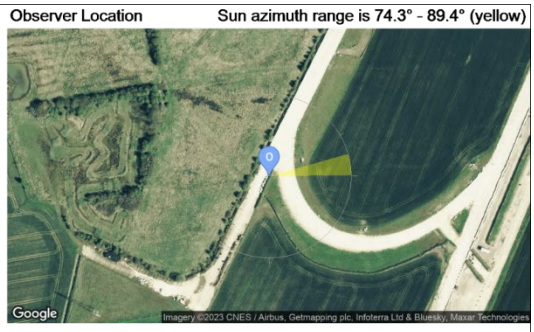
Observer 39 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.6°
Max observer difference angle: 19.5°

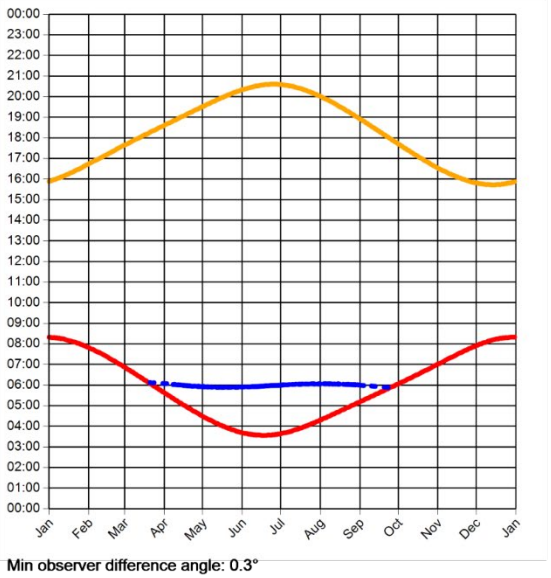
Observer Location — Sun azimuth range is 74.3° - 89.4° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 40 Results

Reflection Date/Time (GMT) Graph



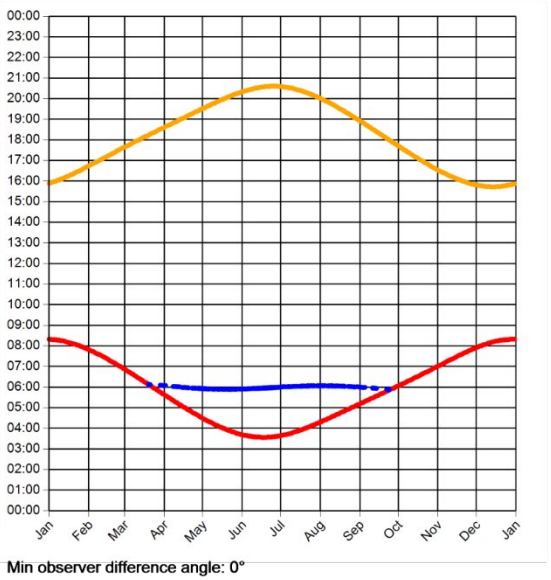
Min observer difference angle: 0.3°
Max observer difference angle: 19.5°

Observer Location — Sun azimuth range is 74.3° - 89.6° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 41 Results

Reflection Date/Time (GMT) Graph



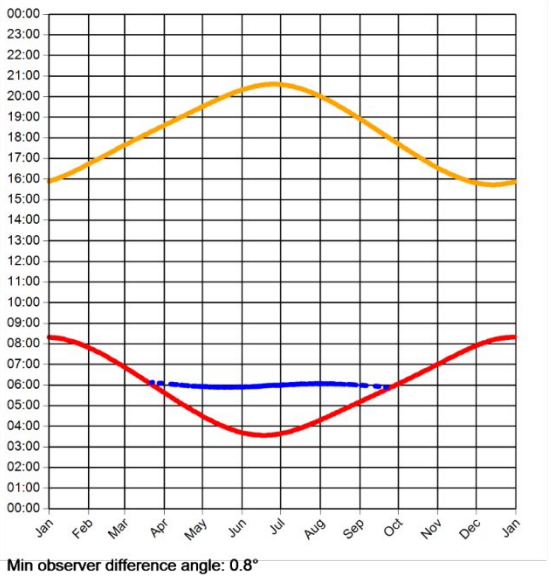
Min observer difference angle: 0°
Max observer difference angle: 19.6°

Observer Location — Sun azimuth range is 74.2° - 89.8° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 42 Results

Reflection Date/Time (GMT) Graph



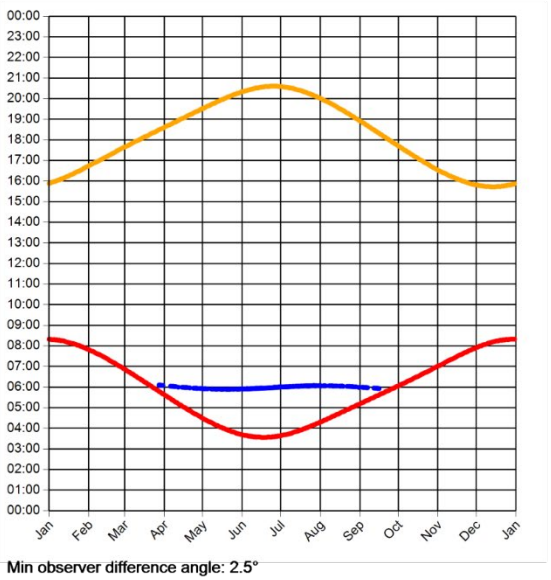
Min observer difference angle: 0.8°
Max observer difference angle: 19.8°

Observer Location — Sun azimuth range is 74.3° - 89.5° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

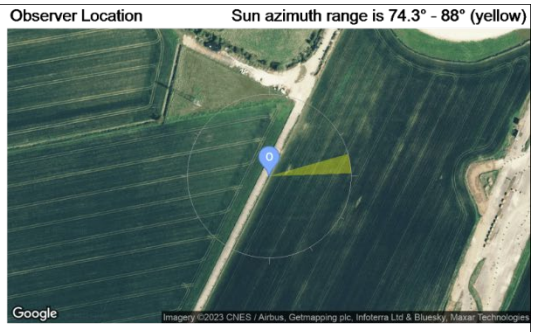
Observer 43 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 2.5°
Max observer difference angle: 19.5°

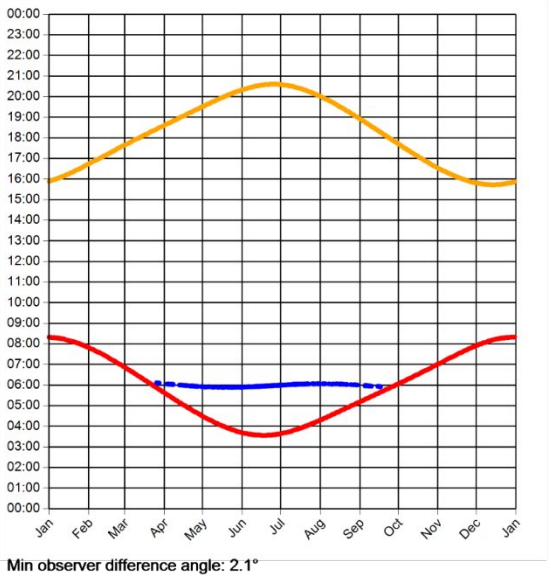
Observer Location — Sun azimuth range is 74.3° - 88° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

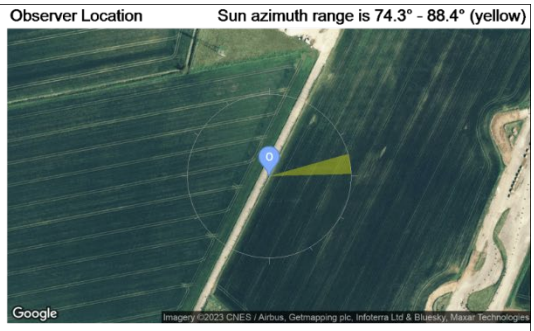
Observer 44 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 2.1°
Max observer difference angle: 19.6°

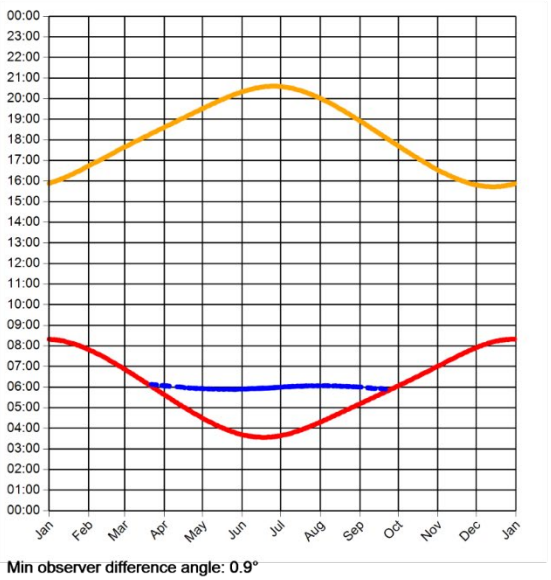
Observer Location — Sun azimuth range is 74.3° - 88.4° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 45 Results

Reflection Date/Time (GMT) Graph



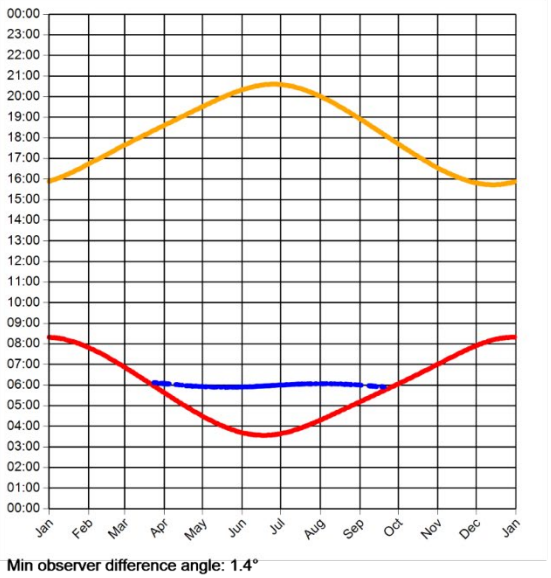
Min observer difference angle: 0.9°
Max observer difference angle: 19.4°

Observer Location — Sun azimuth range is 74.2° - 89.4° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

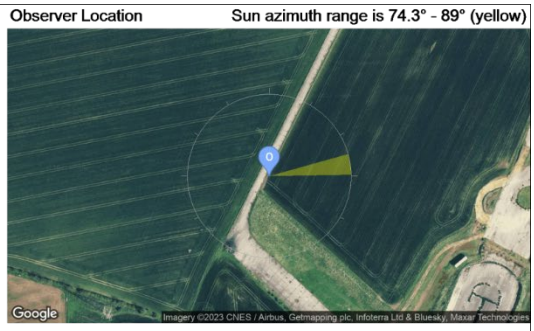
Observer 46 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 1.4°
Max observer difference angle: 19.6°

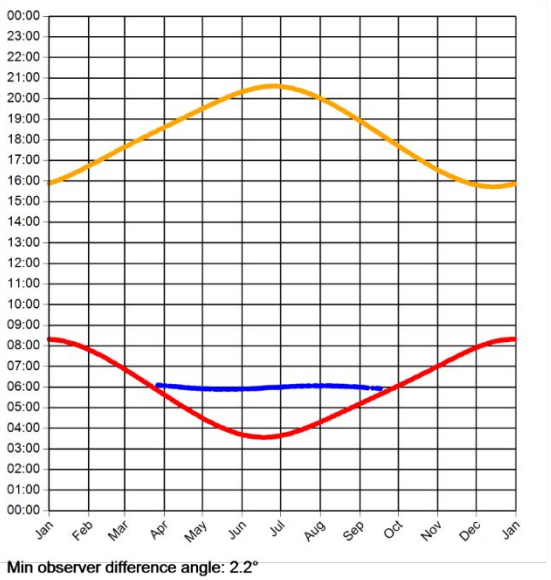
Observer Location — Sun azimuth range is 74.3° - 89° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

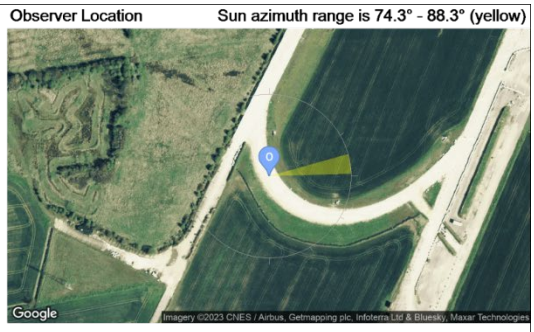
Observer 47 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 2.2°
Max observer difference angle: 19.6°

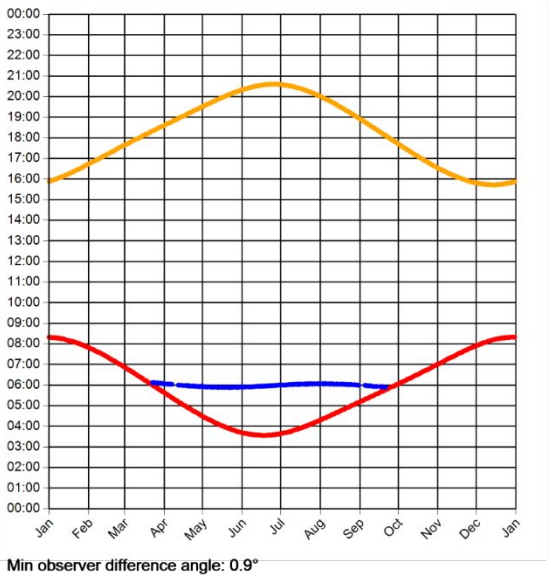
Observer Location — Sun azimuth range is 74.3° - 88.3° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 48 Results

Reflection Date/Time (GMT) Graph



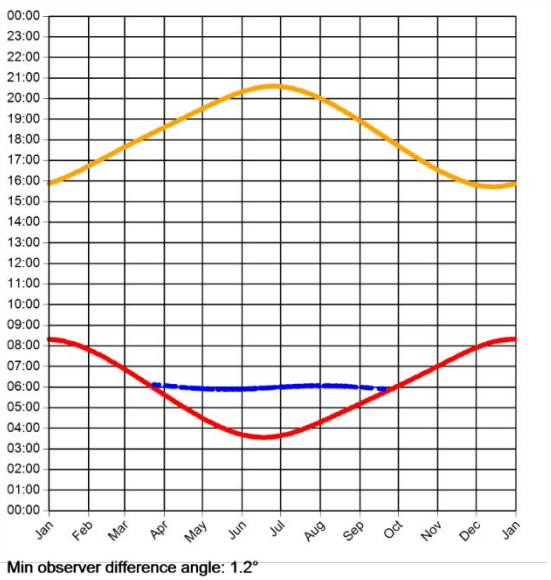
Min observer difference angle: 0.9°
Max observer difference angle: 19.5°

Observer Location — Sun azimuth range is 74.3° - 89.2° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 49 Results

Reflection Date/Time (GMT) Graph



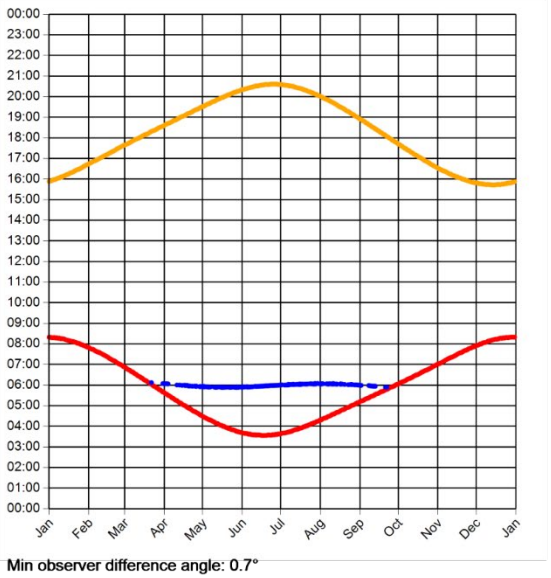
Min observer difference angle: 1.2°
Max observer difference angle: 19.7°

Observer Location — Sun azimuth range is 74.3° - 88.9° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 50 Results

Reflection Date/Time (GMT) Graph



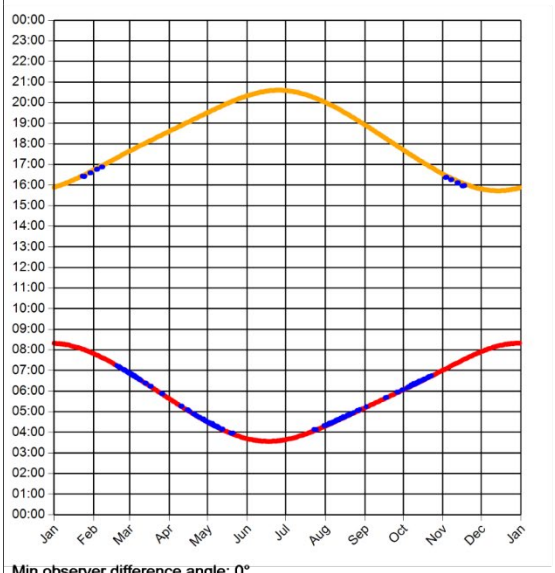
Min observer difference angle: 0.7°
Max observer difference angle: 19.6°

Observer Location — Sun azimuth range is 74.4° - 89.4° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

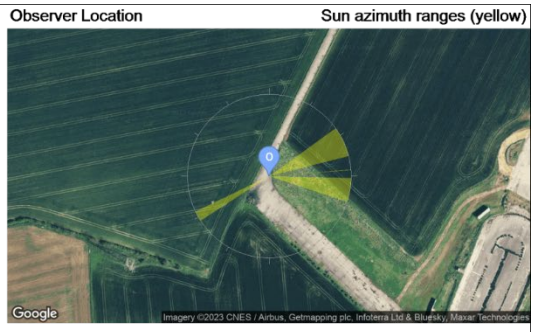
Observer 1 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 0.8°

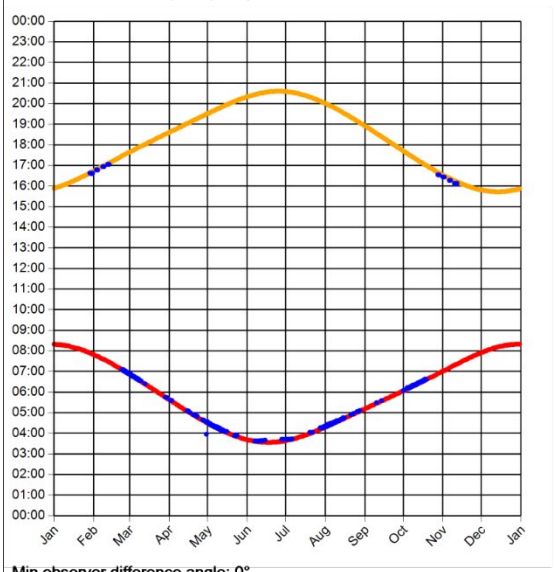
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

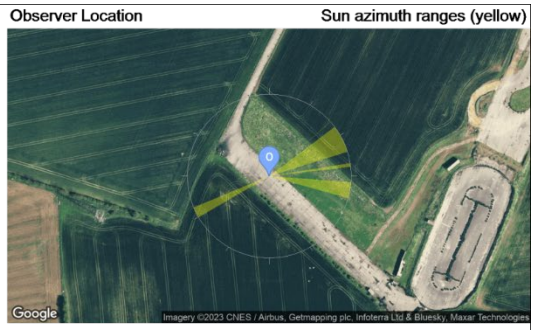
Observer 2 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 0.8°

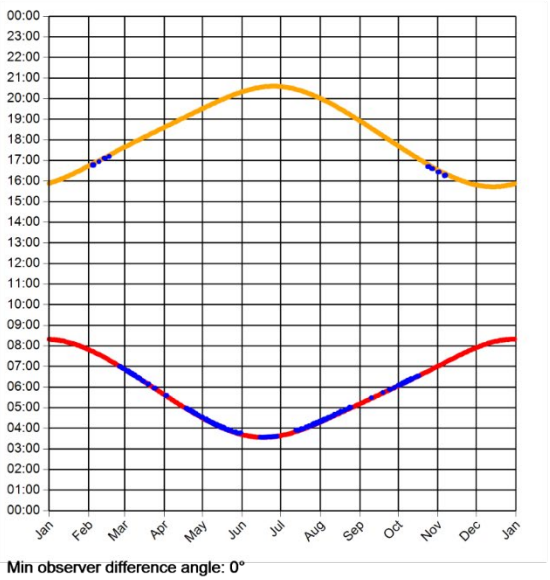
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

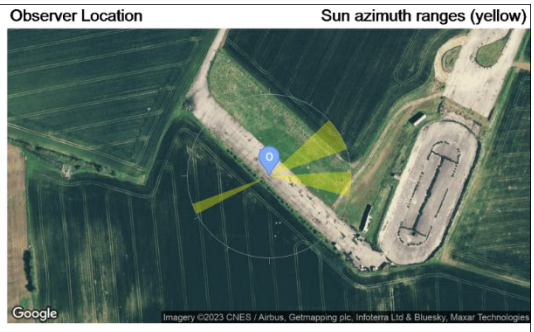
Observer 3 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 0.8°

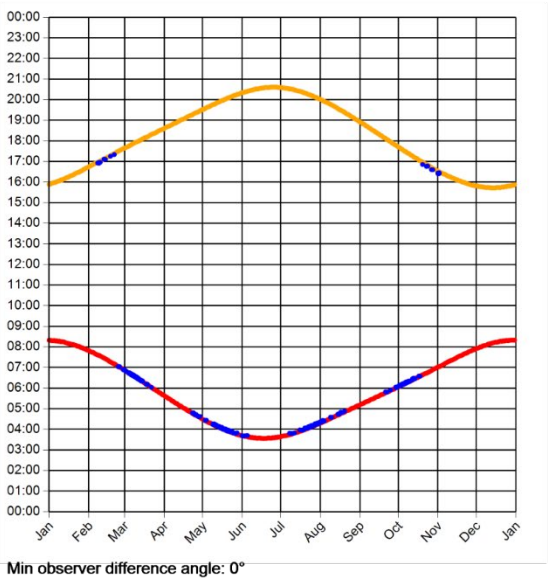
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

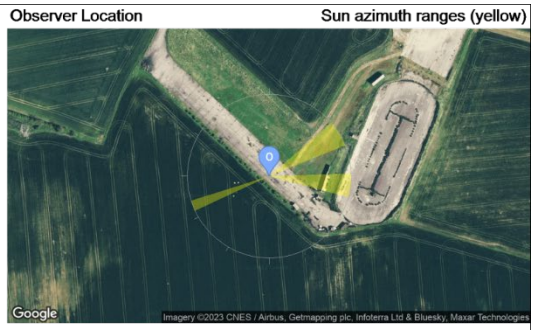
Observer 4 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 0.8°

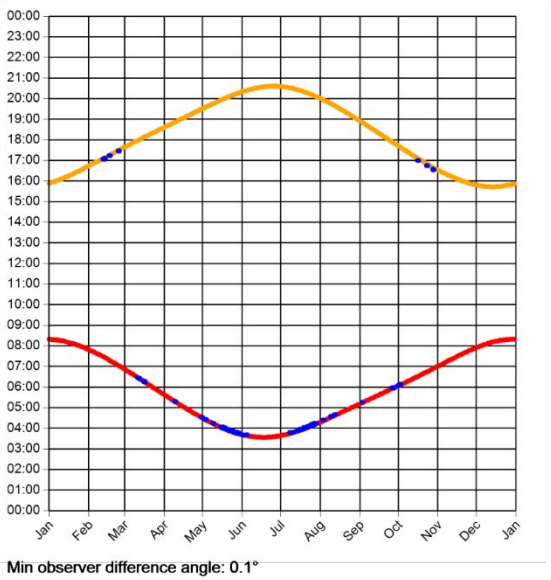
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

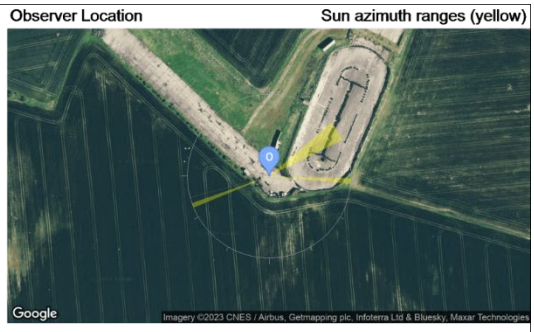
Observer 5 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.7°

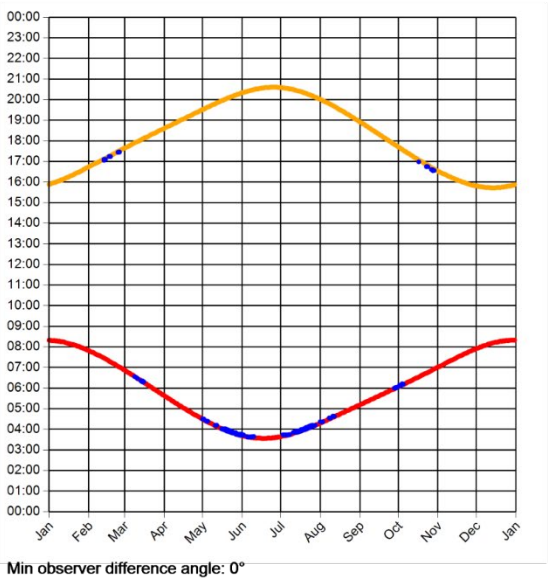
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 6 Results

Reflection Date/Time (GMT) Graph



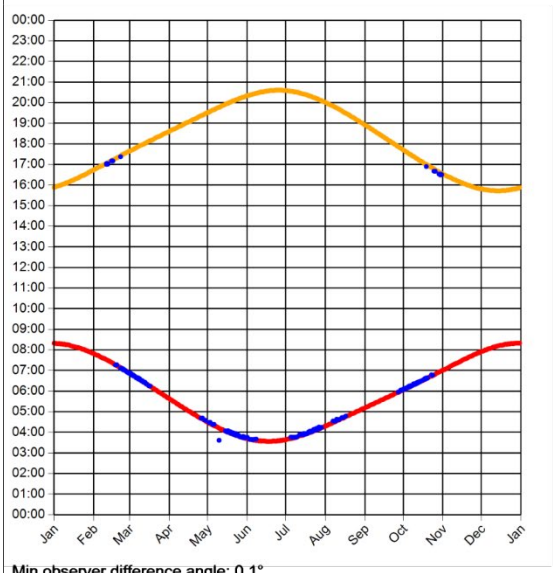
Min observer difference angle: 0°
Max observer difference angle: 0.6°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 7 Results

Reflection Date/Time (GMT) Graph



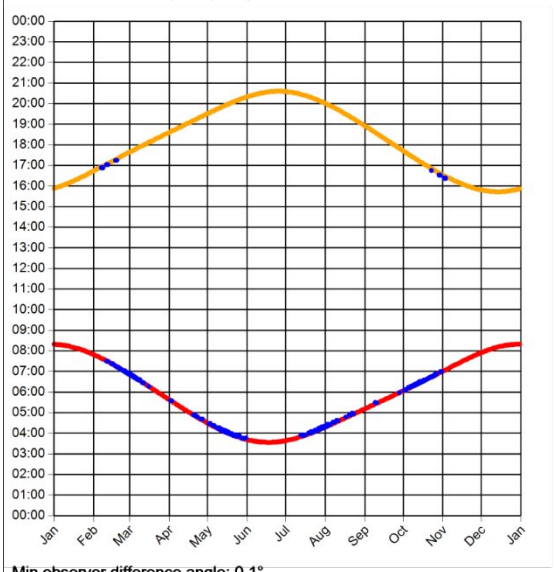
Min observer difference angle: 0.1°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 8 Results

Reflection Date/Time (GMT) Graph



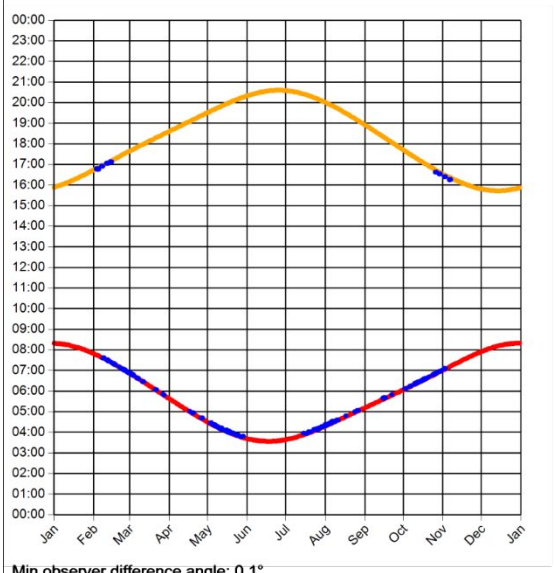
Min observer difference angle: 0.1°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 9 Results

Reflection Date/Time (GMT) Graph



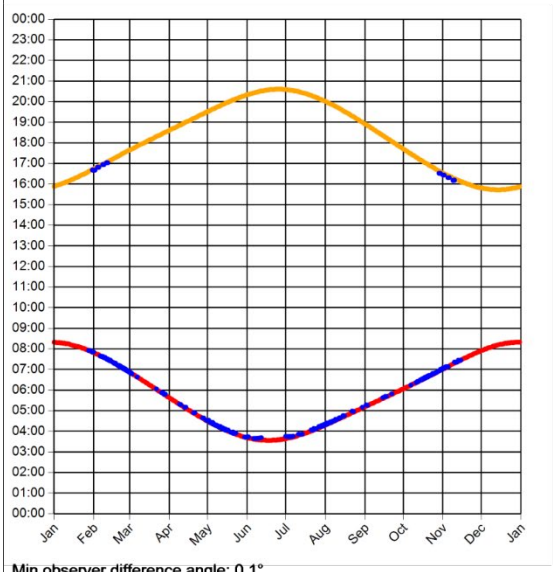
Min observer difference angle: 0.1°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 10 Results

Reflection Date/Time (GMT) Graph



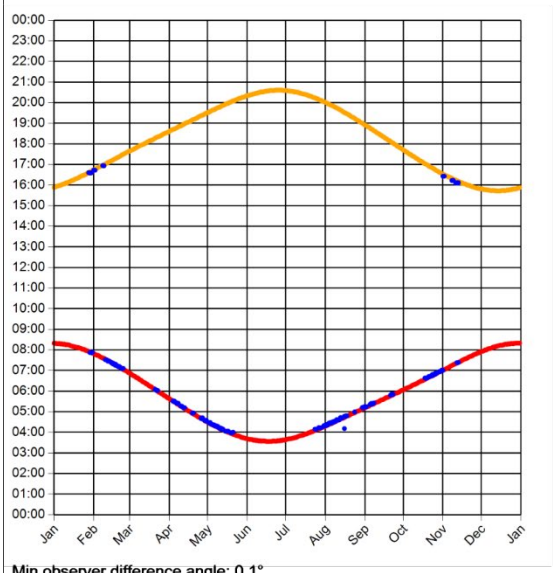
Min observer difference angle: 0.1°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 11 Results

Reflection Date/Time (GMT) Graph



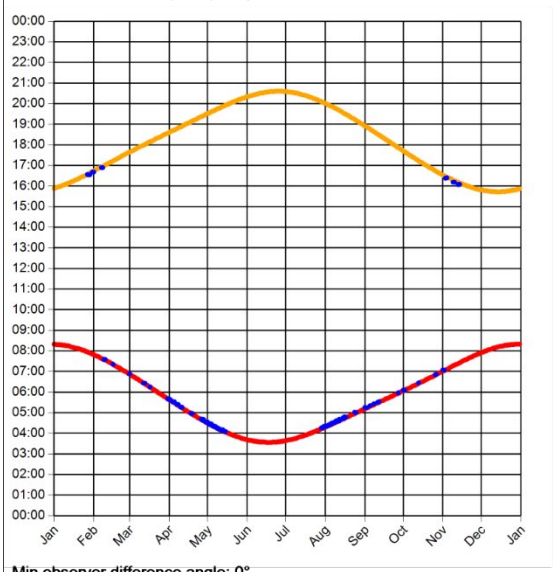
Min observer difference angle: 0.1°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 12 Results

Reflection Date/Time (GMT) Graph



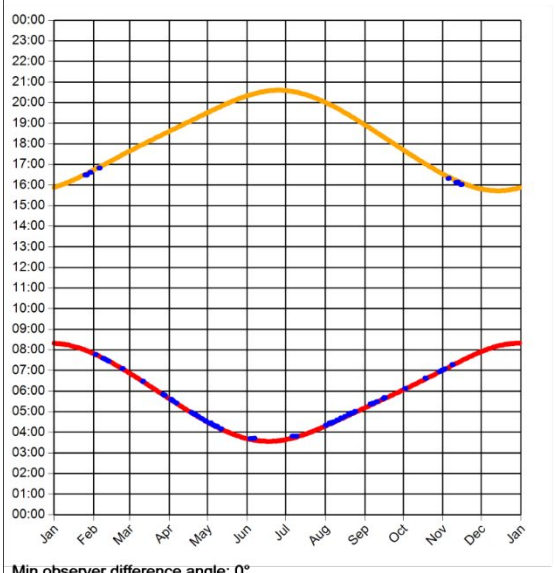
Min observer difference angle: 0°
Max observer difference angle: 0.6°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 13 Results

Reflection Date/Time (GMT) Graph



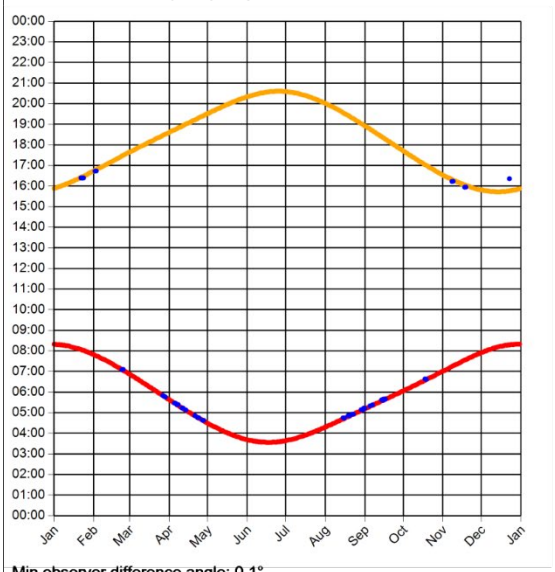
Min observer difference angle: 0°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

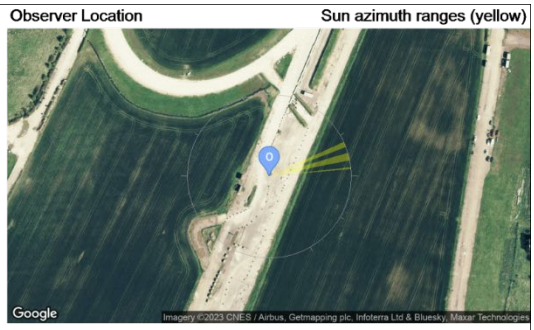
Observer 14 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

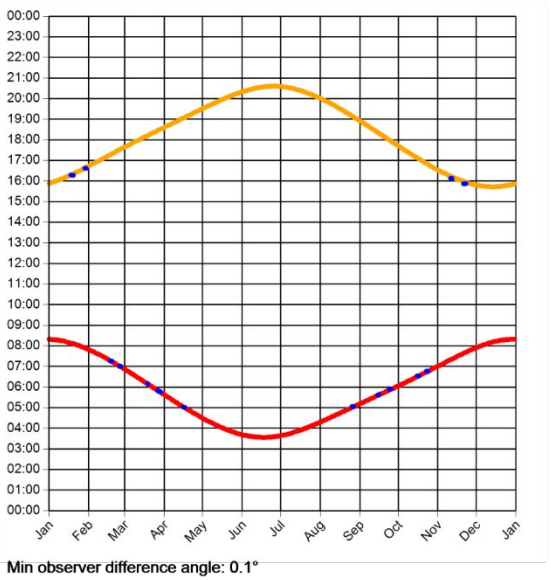
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 15 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

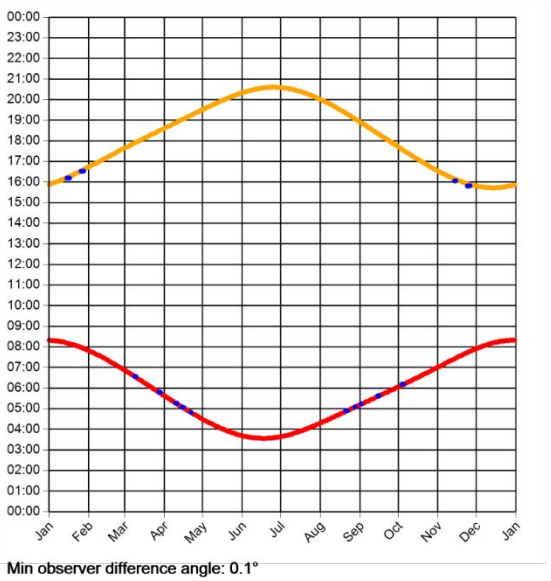
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 16 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

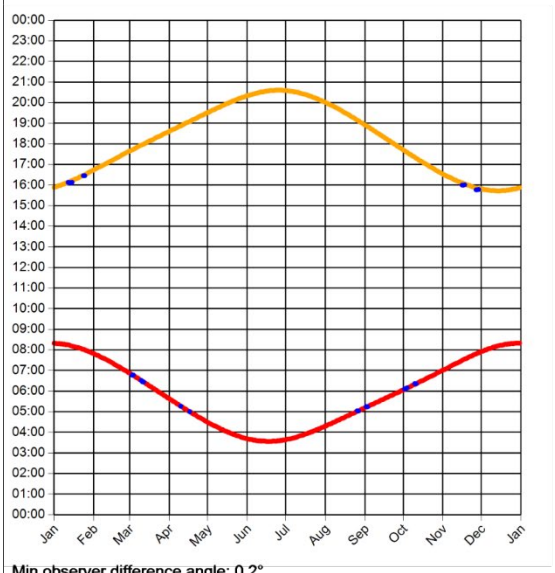
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 17 Results

Reflection Date/Time (GMT) Graph



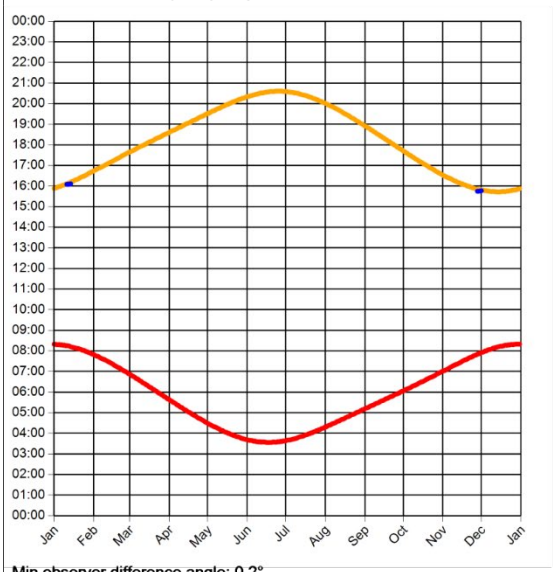
Min observer difference angle: 0.2°
Max observer difference angle: 0.4°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

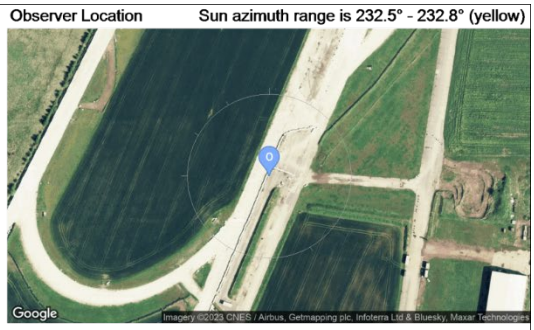
Observer 18 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 0.4°

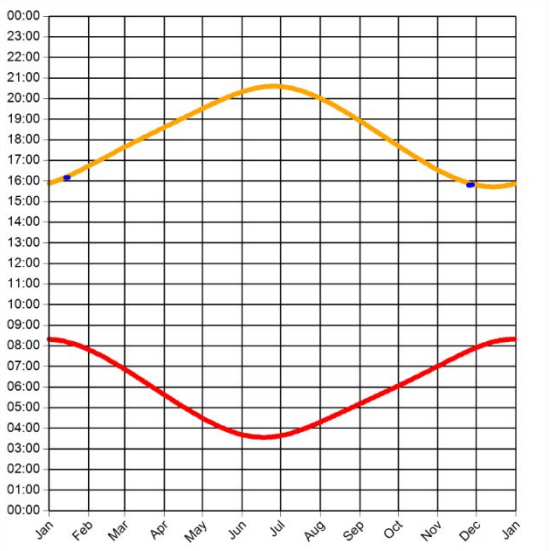
Observer Location — Sun azimuth range is 232.5° - 232.8° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 19 Results

Reflection Date/Time (GMT) Graph



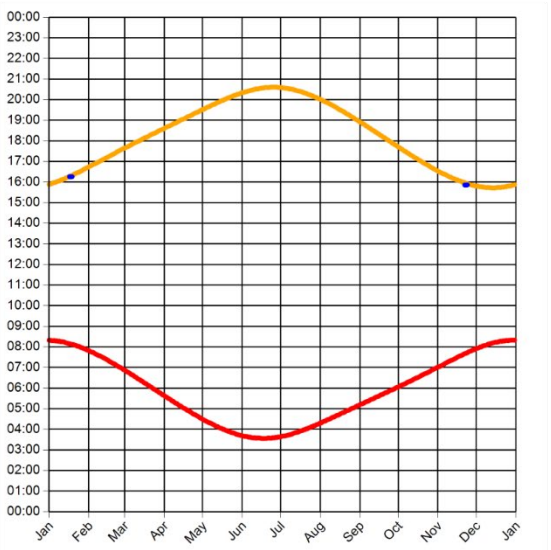
Min observer difference angle: 0.2°
Max observer difference angle: 0.4°

Observer Location — Sun azimuth range is 233.5° - 233.7° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 20 Results

Reflection Date/Time (GMT) Graph



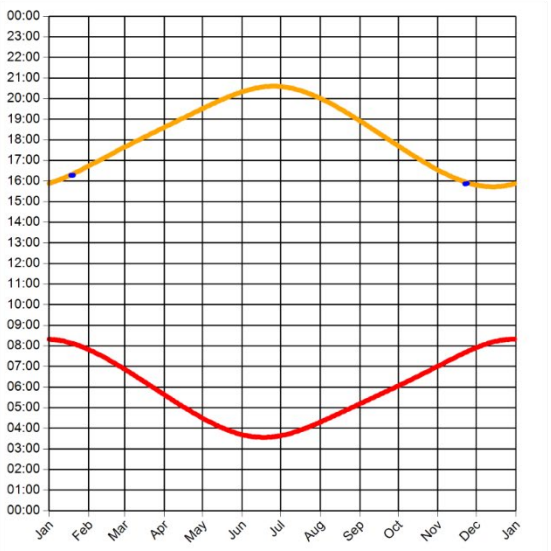
Min observer difference angle: 0.2°
Max observer difference angle: 0.4°

Observer Location — Sun azimuth range is 234.7° - 234.9° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 21 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 0.3°

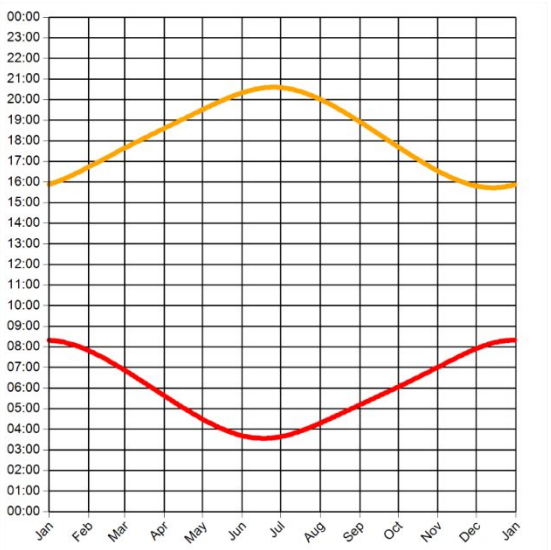
Observer Location

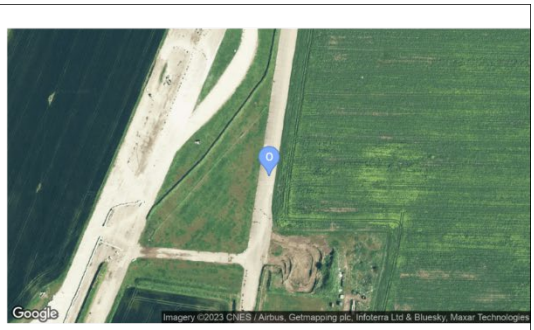
Sun azimuth range is 234.9° - 235.2° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 22 Results

Reflection Date/Time (GMT) Graph

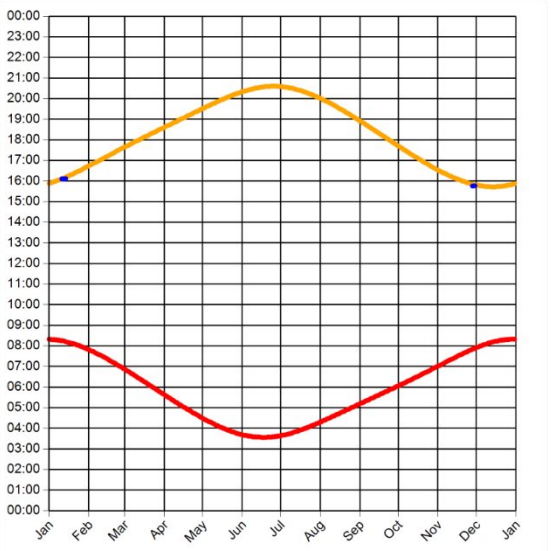




Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 23 Results

Reflection Date/Time (GMT) Graph



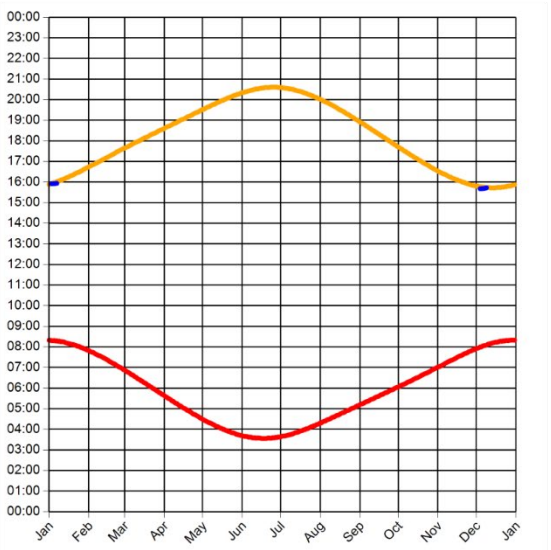
Min observer difference angle: 0.3°
Max observer difference angle: 0.3°

Observer Location — Sun azimuth range is 232.7° - 232.9° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 25 Results

Reflection Date/Time (GMT) Graph



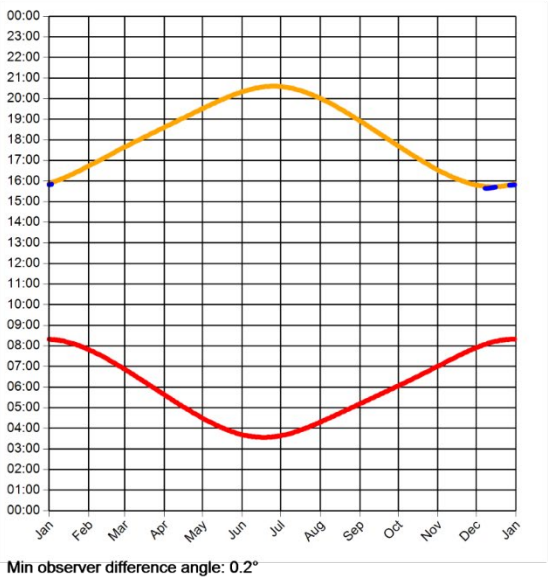
Min observer difference angle: 0.2°
Max observer difference angle: 0.3°

Observer Location — Sun azimuth range is 230.6° - 230.9° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

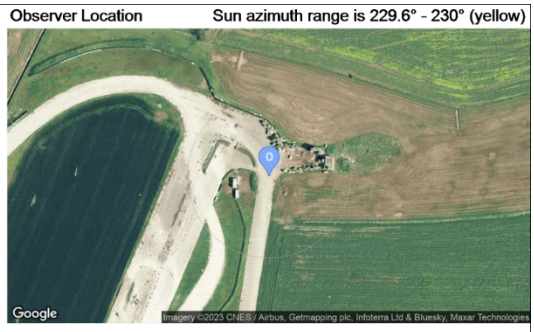
Observer 26 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 0.3°

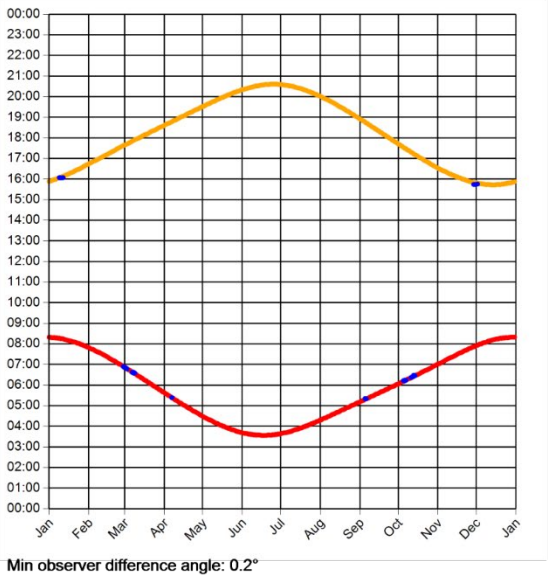
Observer Location — Sun azimuth range is 229.6° - 230° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 38 Results

Reflection Date/Time (GMT) Graph



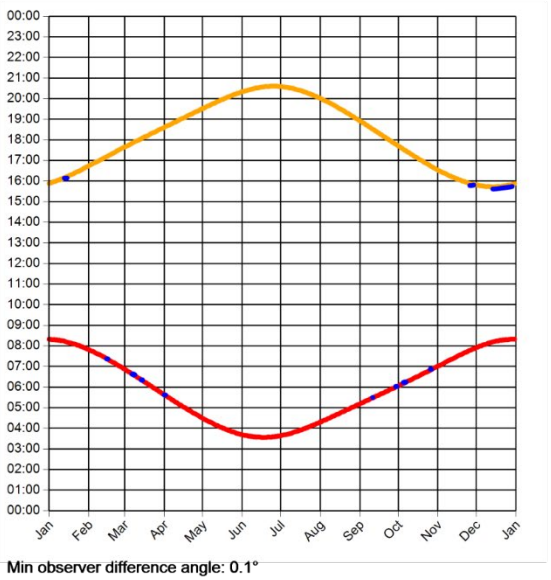
Min observer difference angle: 0.2°
Max observer difference angle: 0.3°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

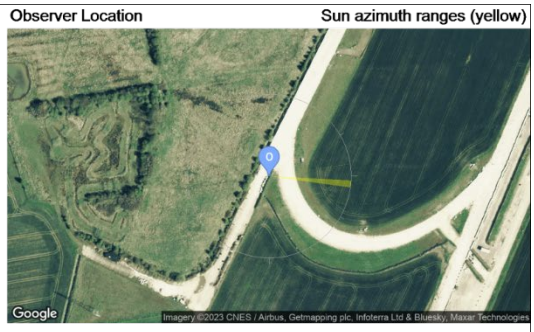
Observer 39 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

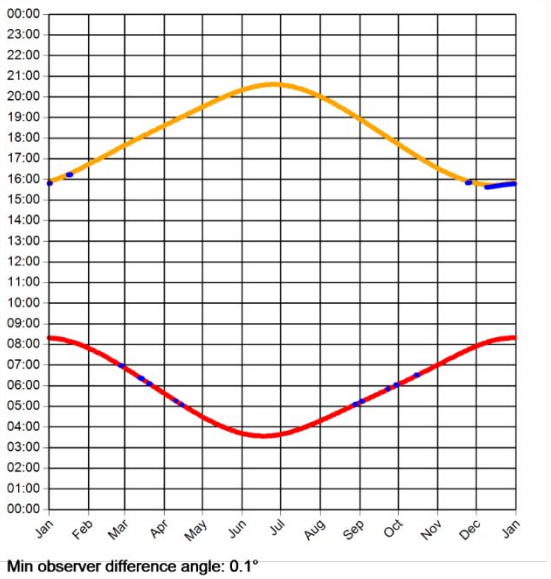
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 40 Results

Reflection Date/Time (GMT) Graph



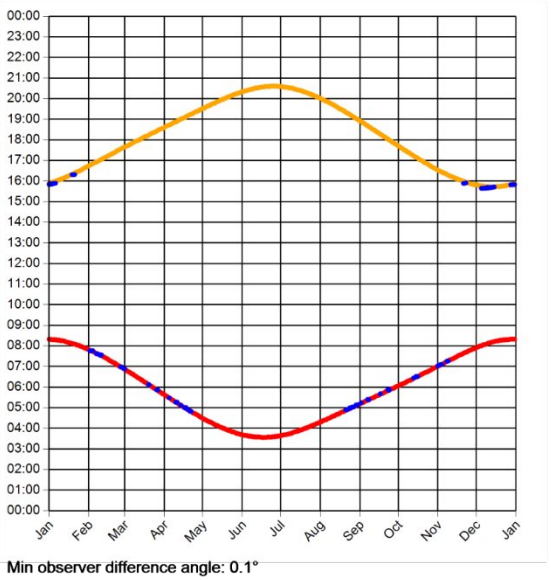
Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

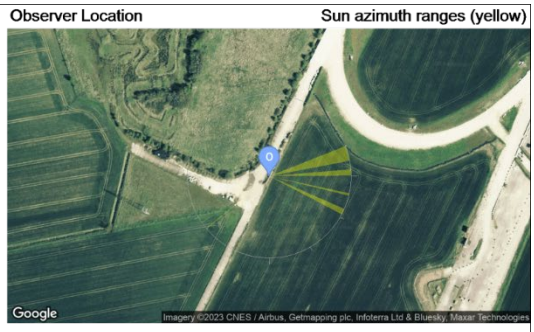
Observer 41 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.6°

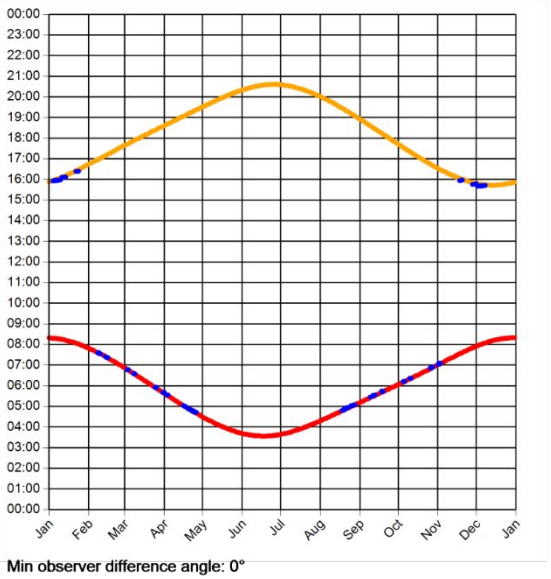
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 42 Results

Reflection Date/Time (GMT) Graph



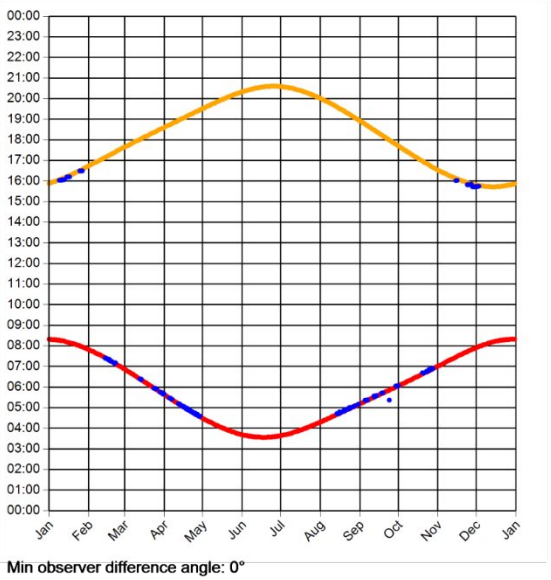
Min observer difference angle: 0°
Max observer difference angle: 0.6°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

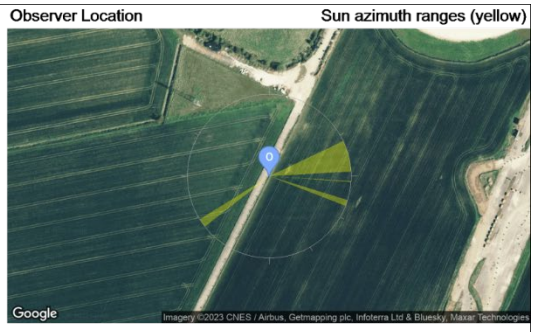
Observer 43 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 0.6°

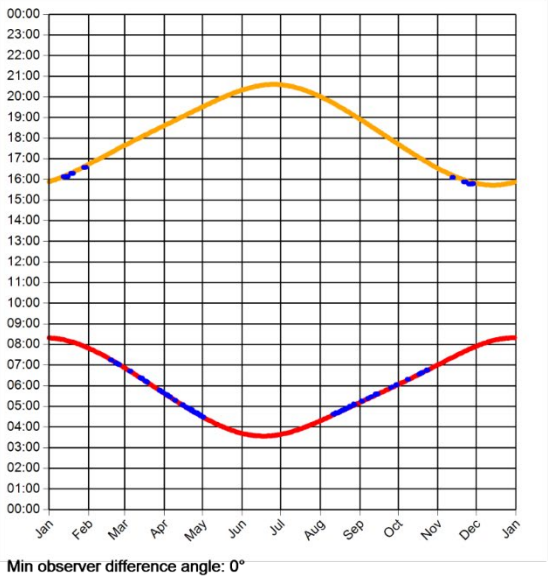
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 44 Results

Reflection Date/Time (GMT) Graph



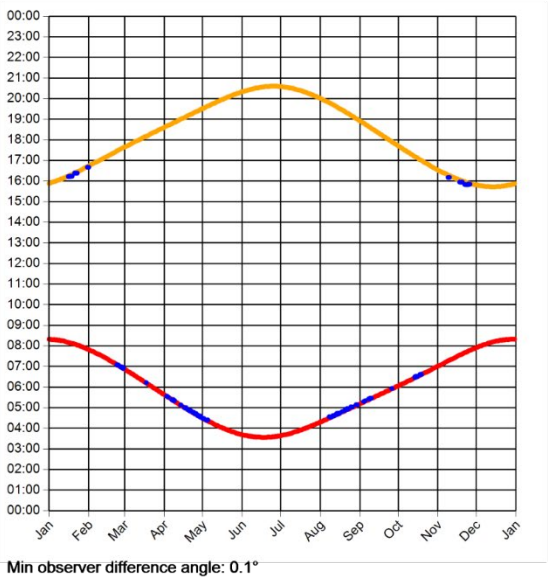
Min observer difference angle: 0°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 45 Results

Reflection Date/Time (GMT) Graph



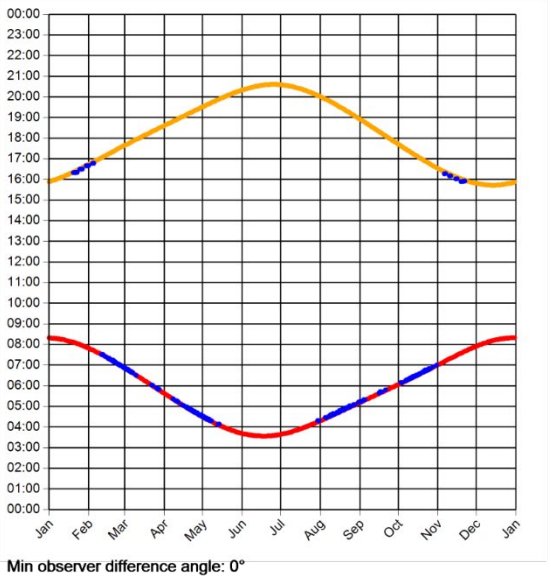
Min observer difference angle: 0.1°
Max observer difference angle: 0.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

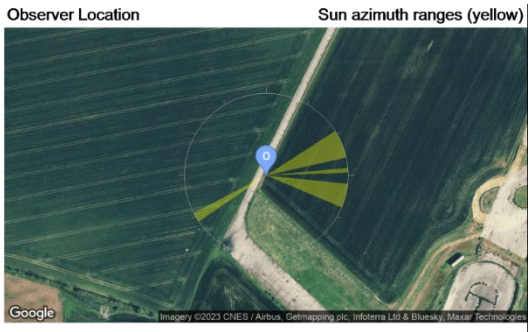
Observer 46 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 0.8°

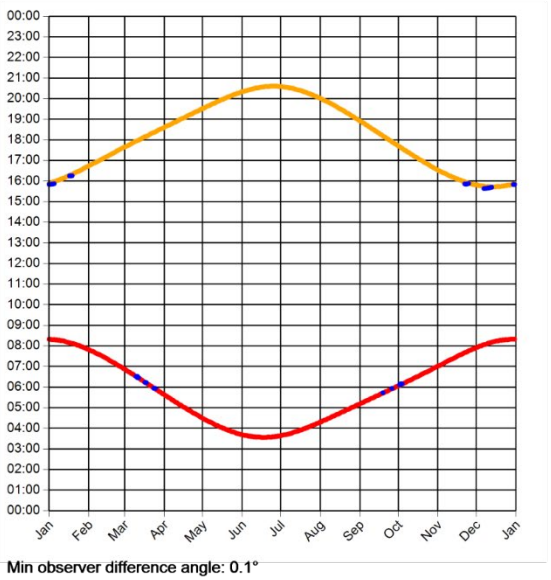
Observer Location — Sun azimuth ranges (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 47 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

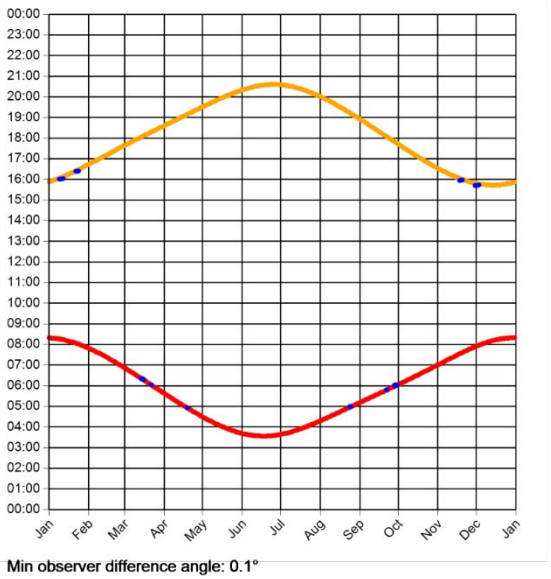
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

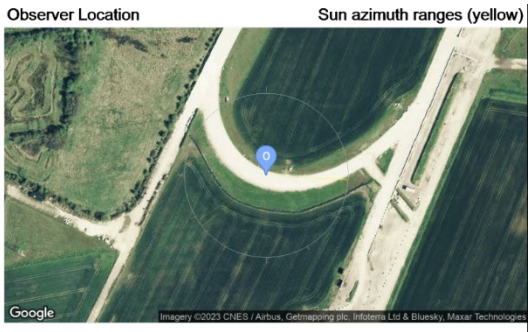
Observer 48 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

Observer Location

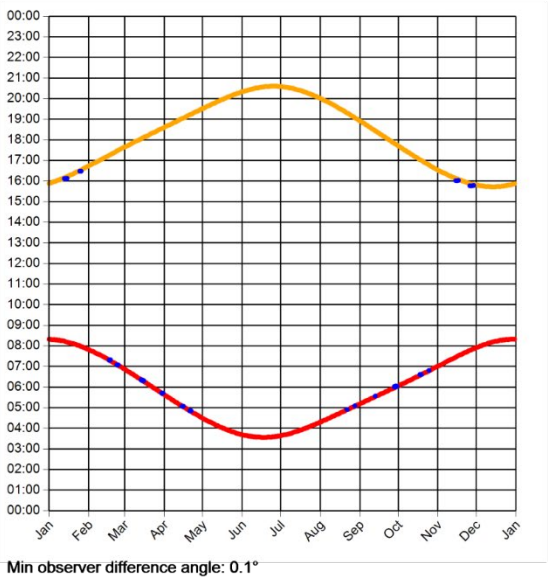


Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 49 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

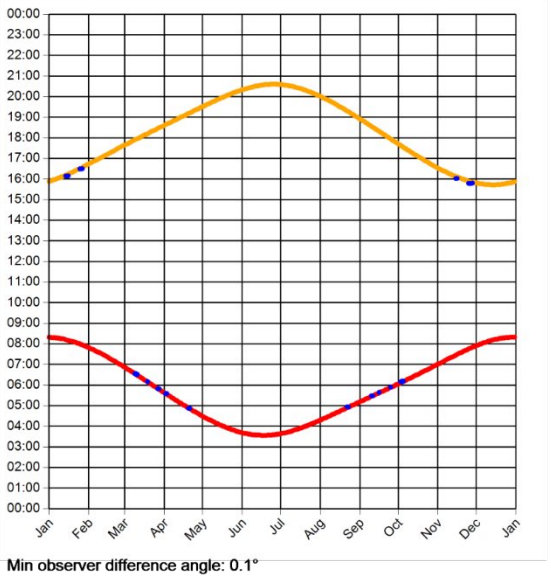
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 50 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 0.5°

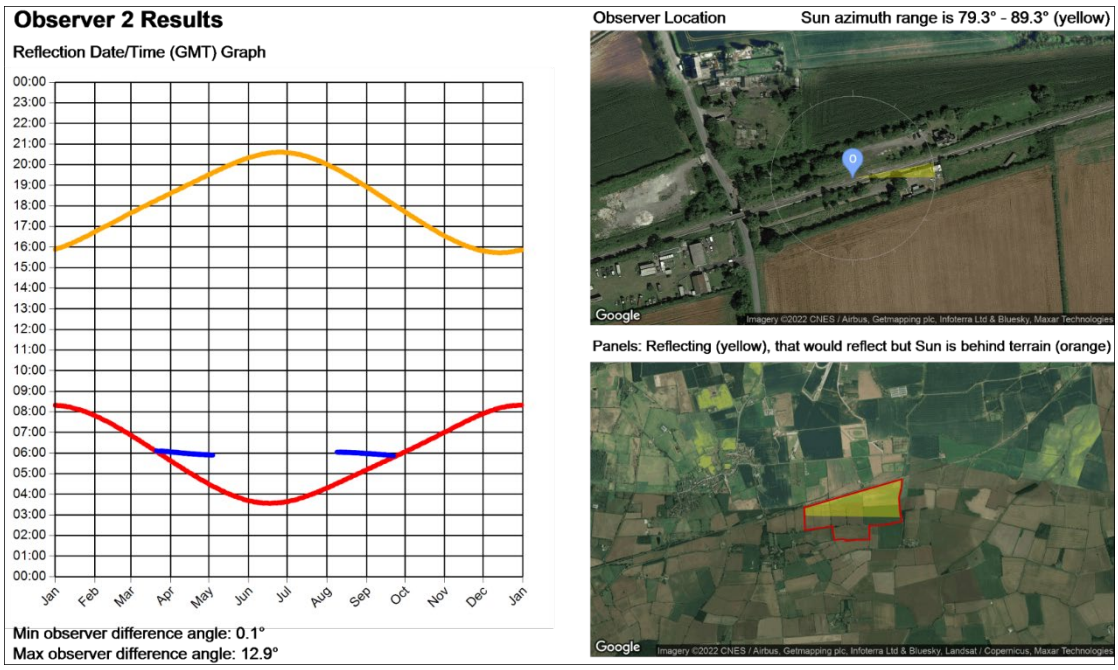
Observer Location

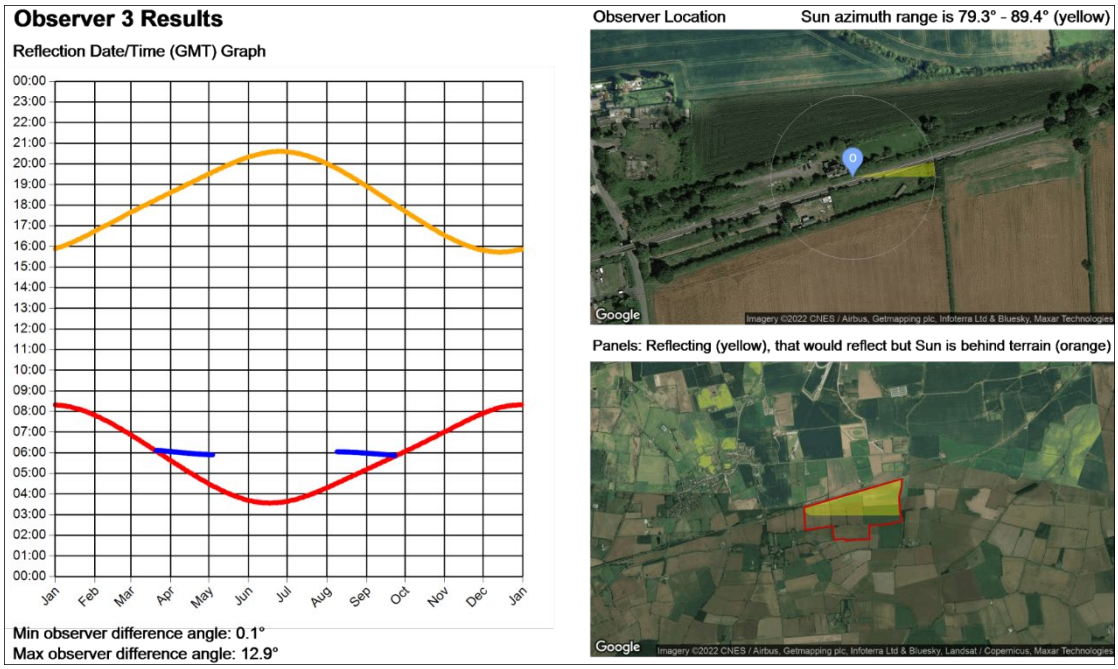
Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Railway Receptors

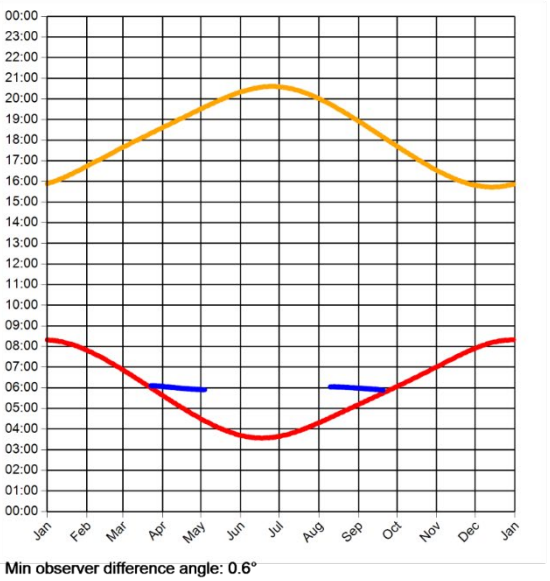
Fixed Systems





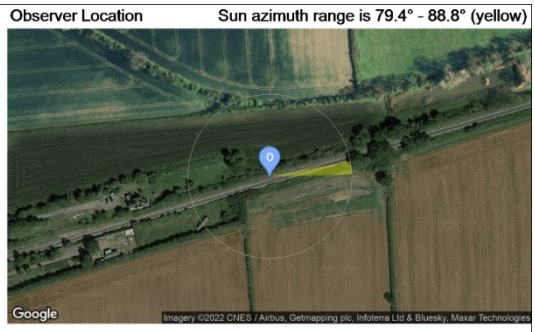
Observer 4 Results

Reflection Date/Time (GMT) Graph

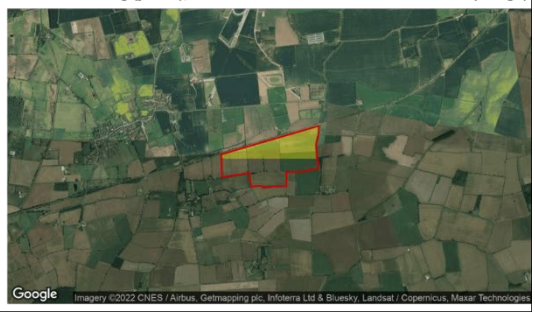


Min observer difference angle: 0.6°
Max observer difference angle: 12.9°

Observer Location — Sun azimuth range is 79.4° - 88.8° (yellow)

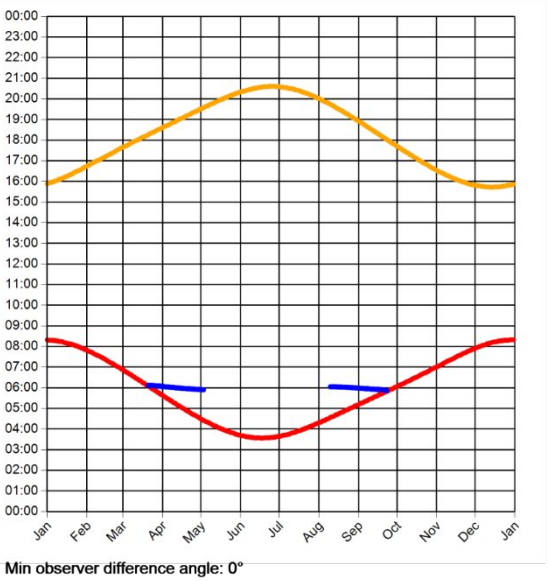


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



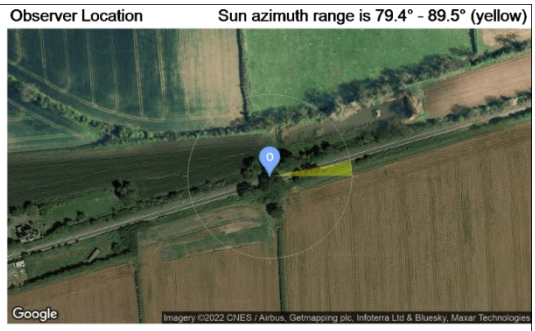
Observer 5 Results

Reflection Date/Time (GMT) Graph

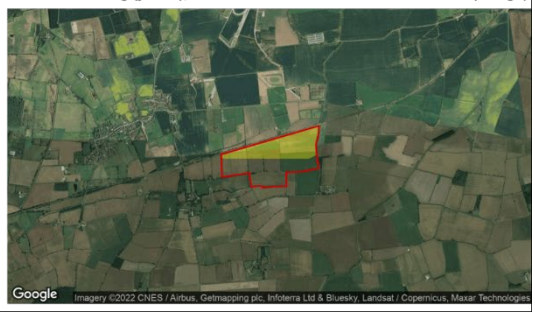


Min observer difference angle: 0°
Max observer difference angle: 12.7°

Observer Location — Sun azimuth range is 79.4° - 89.5° (yellow)

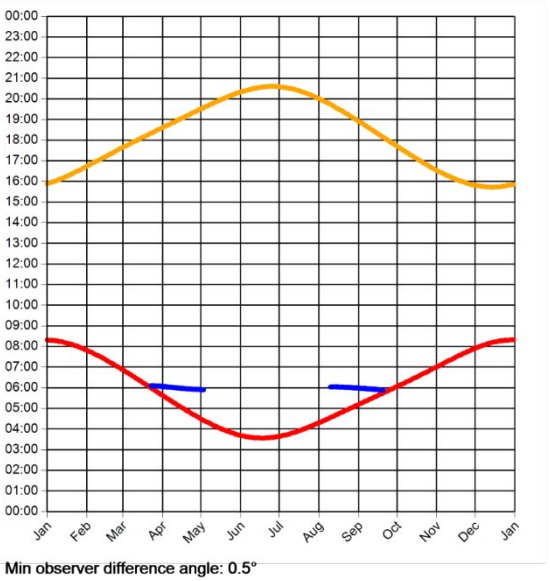


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



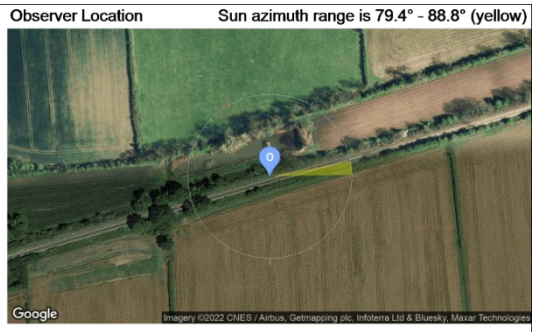
Observer 6 Results

Reflection Date/Time (GMT) Graph

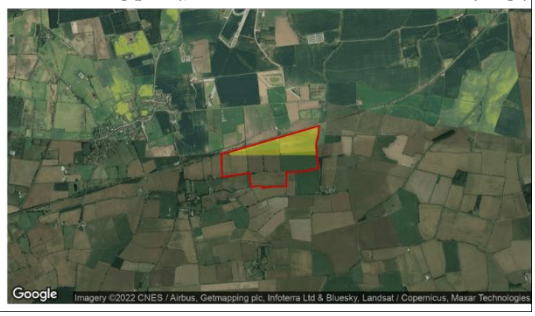


Min observer difference angle: 0.5°
Max observer difference angle: 12.6°

Observer Location — Sun azimuth range is 79.4° - 88.8° (yellow)

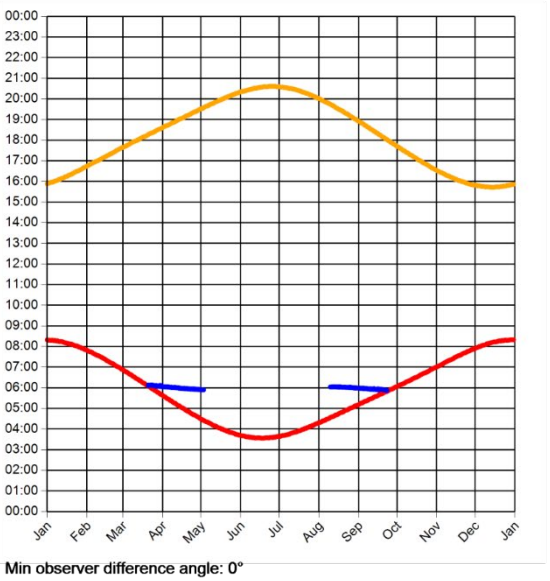


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



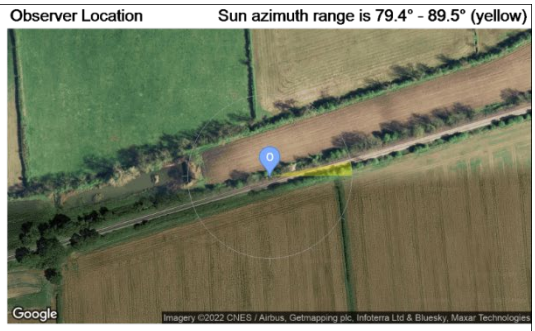
Observer 7 Results

Reflection Date/Time (GMT) Graph

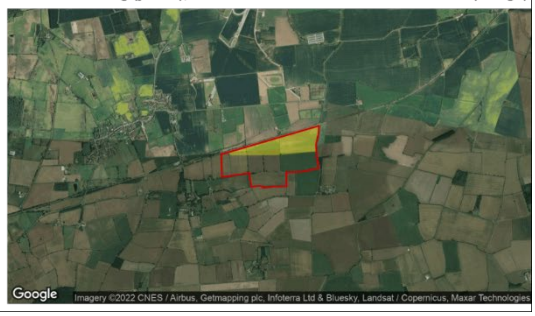


Min observer difference angle: 0°
Max observer difference angle: 12.6°

Observer Location — Sun azimuth range is 79.4° - 89.5° (yellow)

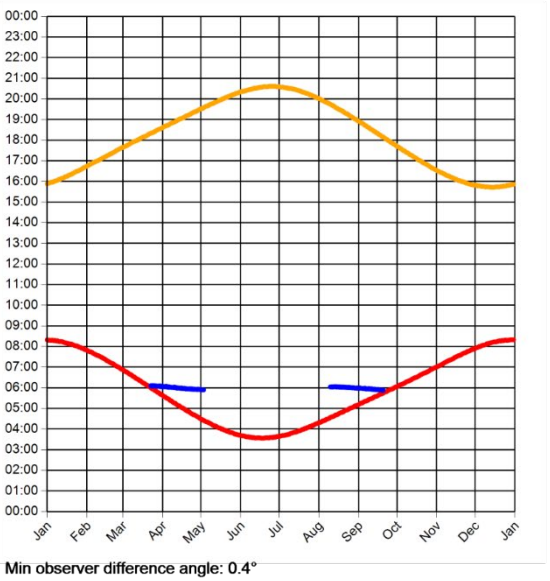


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



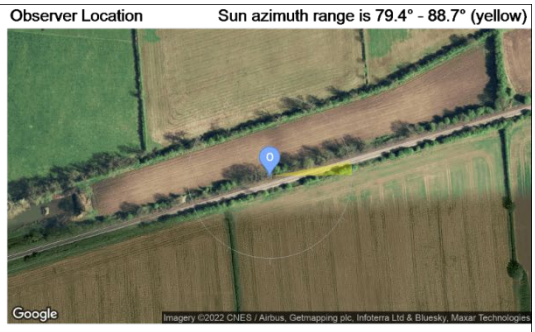
Observer 8 Results

Reflection Date/Time (GMT) Graph

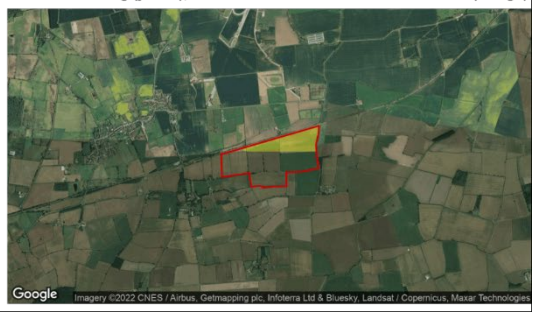


Min observer difference angle: 0.4°
Max observer difference angle: 12.6°

Observer Location — Sun azimuth range is 79.4° - 88.7° (yellow)

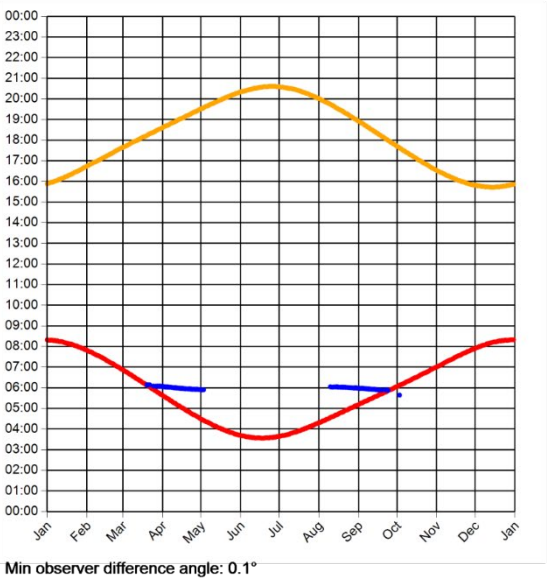


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



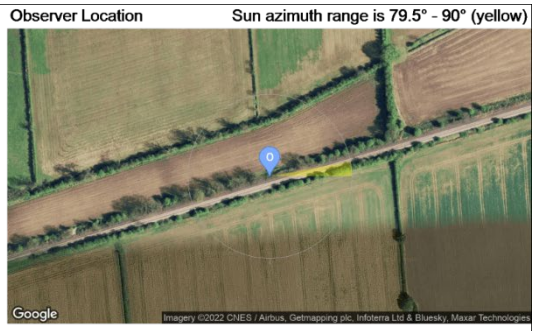
Observer 9 Results

Reflection Date/Time (GMT) Graph

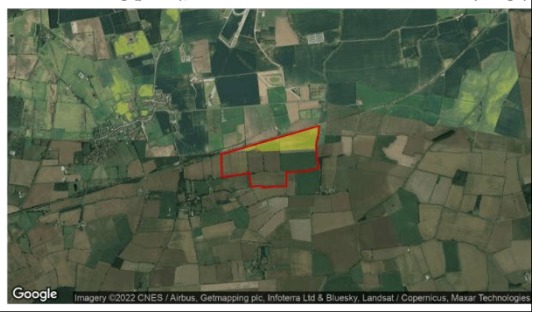


Min observer difference angle: 0.1°
Max observer difference angle: 12.6°

Observer Location — Sun azimuth range is 79.5° - 90° (yellow)

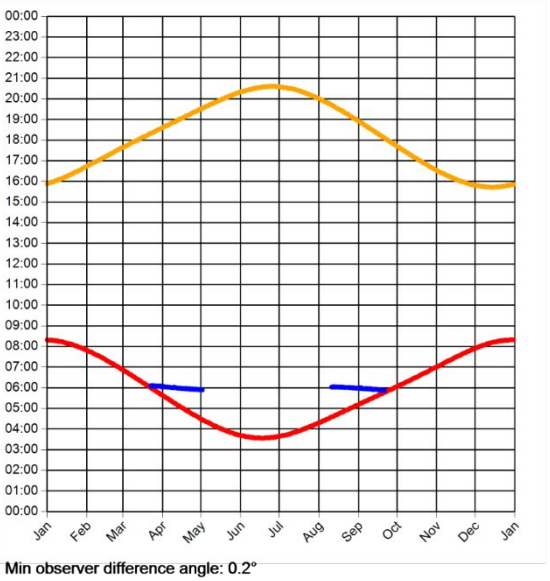


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



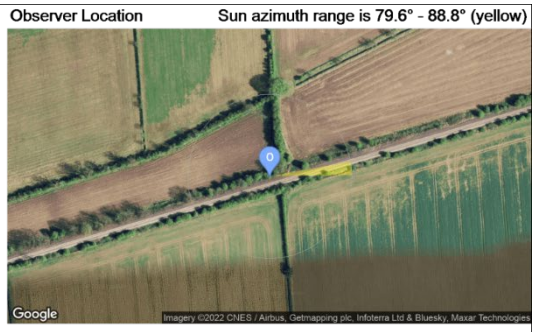
Observer 10 Results

Reflection Date/Time (GMT) Graph

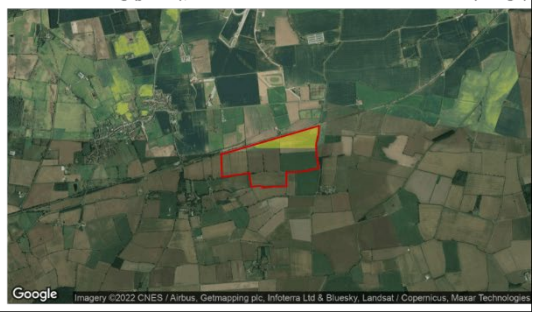


Min observer difference angle: 0.2°
Max observer difference angle: 12.3°

Observer Location — Sun azimuth range is 79.6° - 88.8° (yellow)

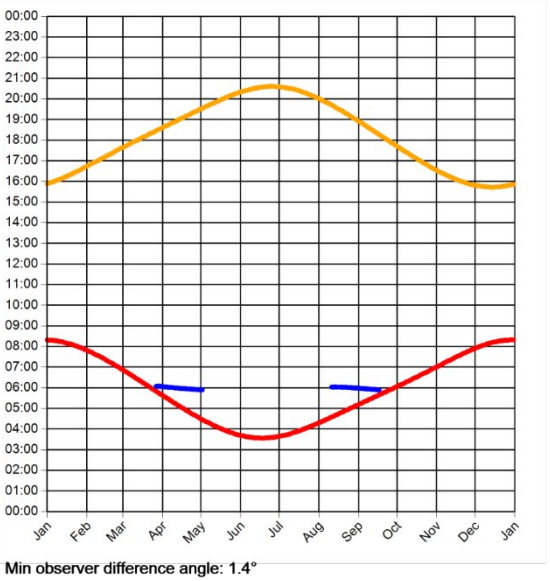


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



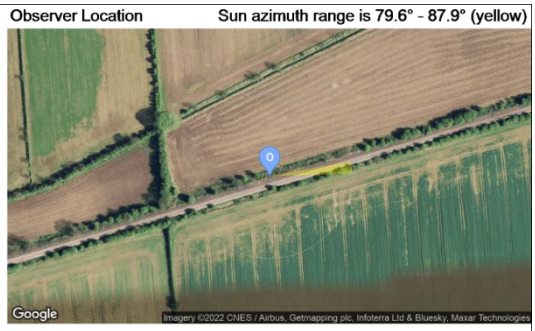
Observer 11 Results

Reflection Date/Time (GMT) Graph

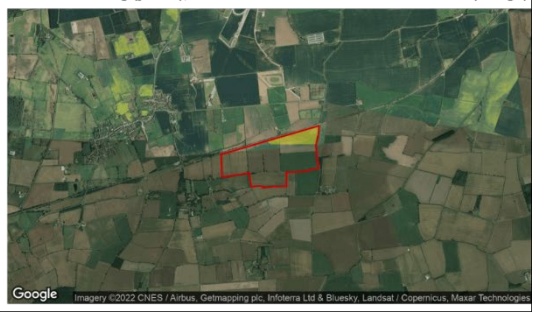


Min observer difference angle: 1.4°
Max observer difference angle: 12.2°

Observer Location — Sun azimuth range is 79.6° - 87.9° (yellow)

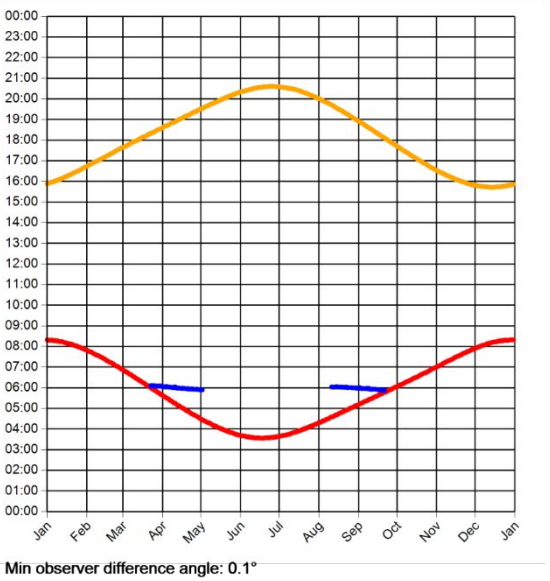


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



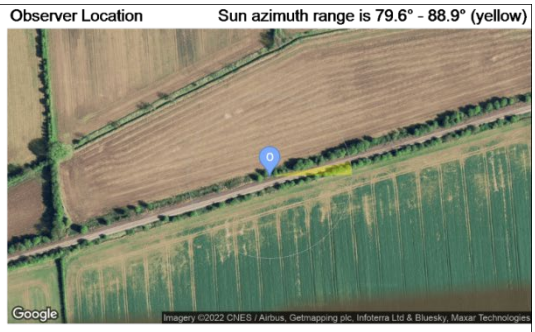
Observer 12 Results

Reflection Date/Time (GMT) Graph

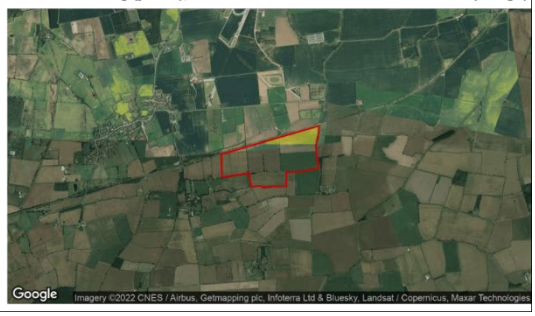


Min observer difference angle: 0.1°
Max observer difference angle: 12.3°

Observer Location — Sun azimuth range is 79.6° - 88.9° (yellow)

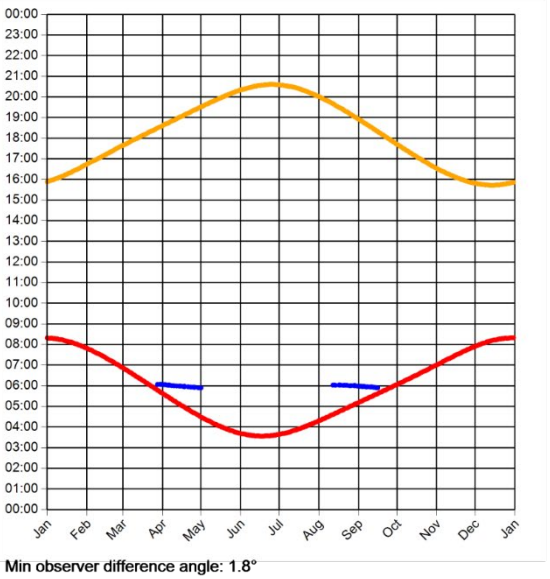


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



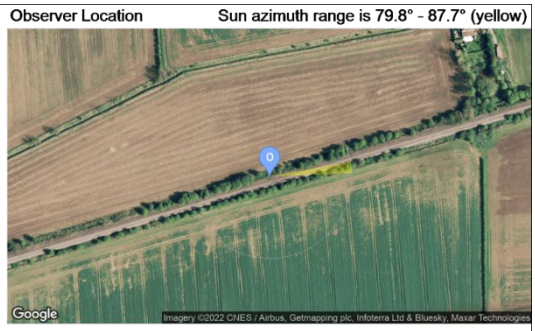
Observer 13 Results

Reflection Date/Time (GMT) Graph

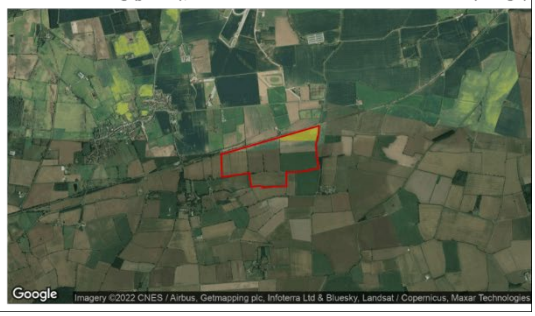


Min observer difference angle: 1.8°
Max observer difference angle: 12°

Observer Location — Sun azimuth range is 79.8° - 87.7° (yellow)

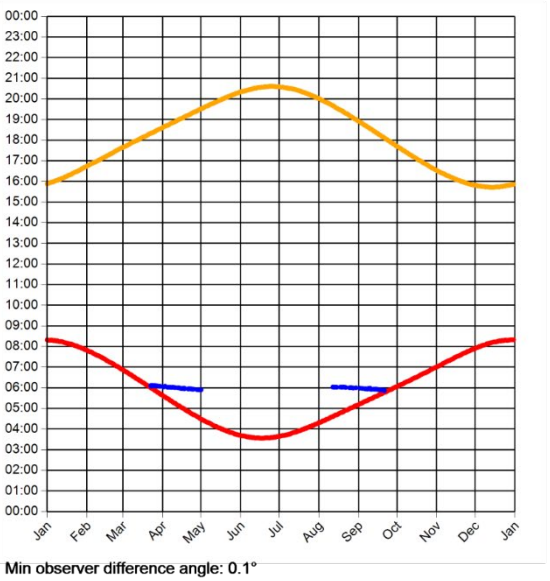


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



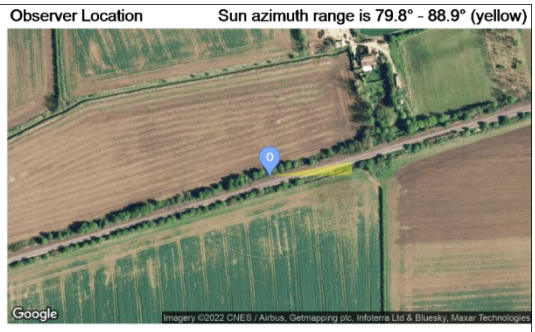
Observer 14 Results

Reflection Date/Time (GMT) Graph

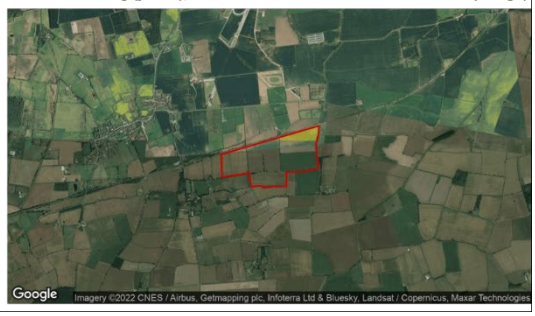


Min observer difference angle: 0.1°
Max observer difference angle: 12°

Observer Location — Sun azimuth range is 79.8° - 88.9° (yellow)

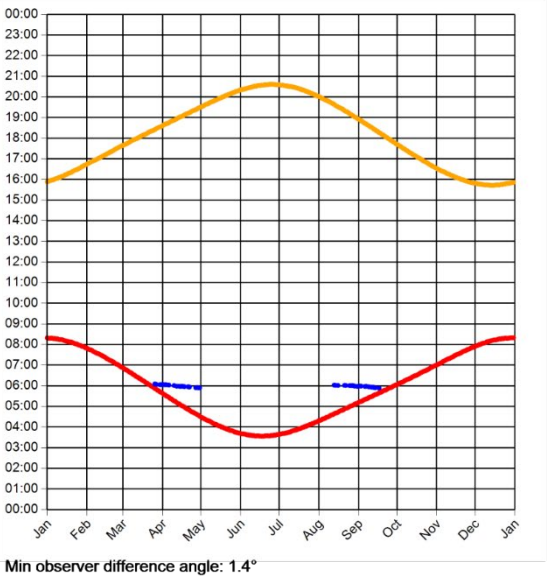


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



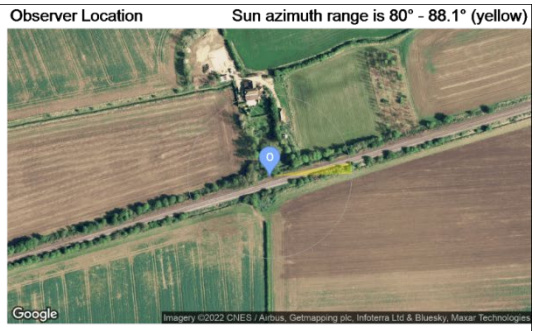
Observer 15 Results

Reflection Date/Time (GMT) Graph

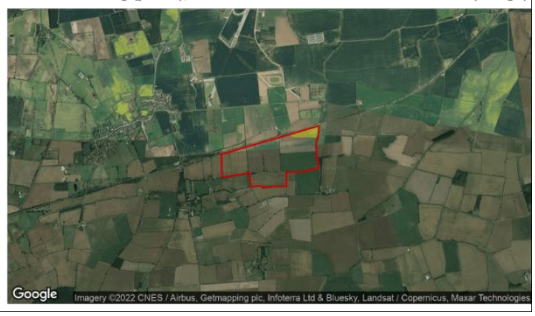


Min observer difference angle: 1.4°
Max observer difference angle: 11.7°

Observer Location — Sun azimuth range is 80° - 88.1° (yellow)

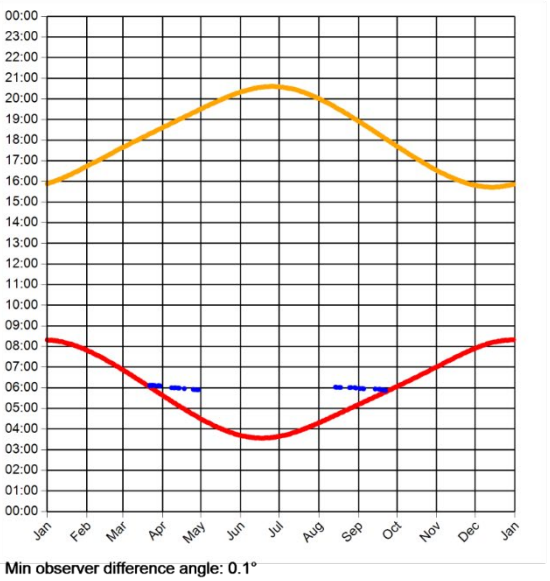


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



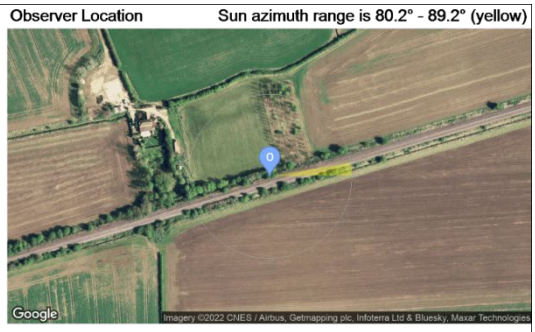
Observer 16 Results

Reflection Date/Time (GMT) Graph

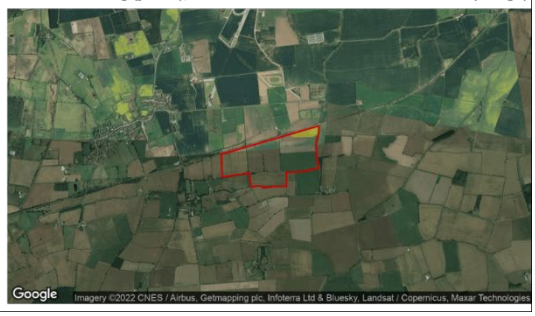


Min observer difference angle: 0.1°
Max observer difference angle: 11.4°

Observer Location — Sun azimuth range is 80.2° - 89.2° (yellow)

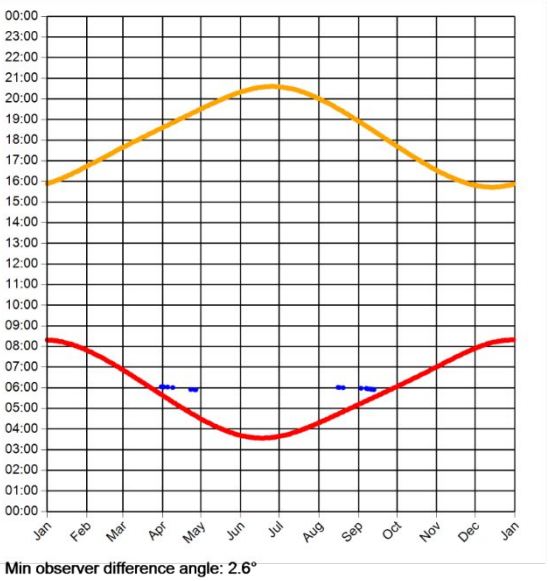


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



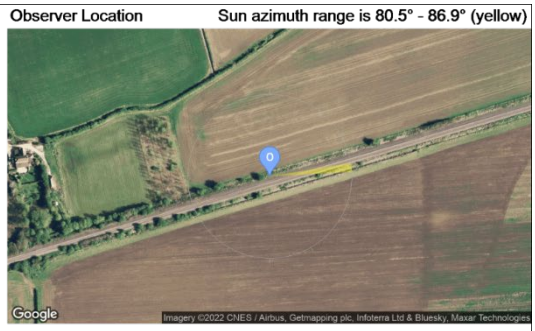
Observer 17 Results

Reflection Date/Time (GMT) Graph

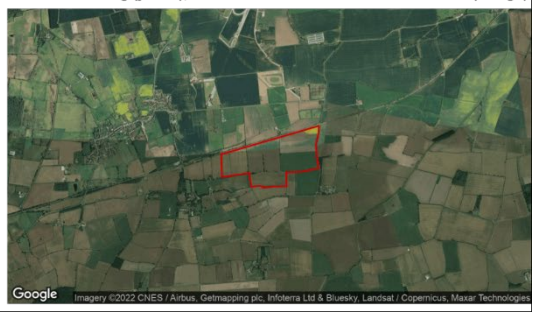


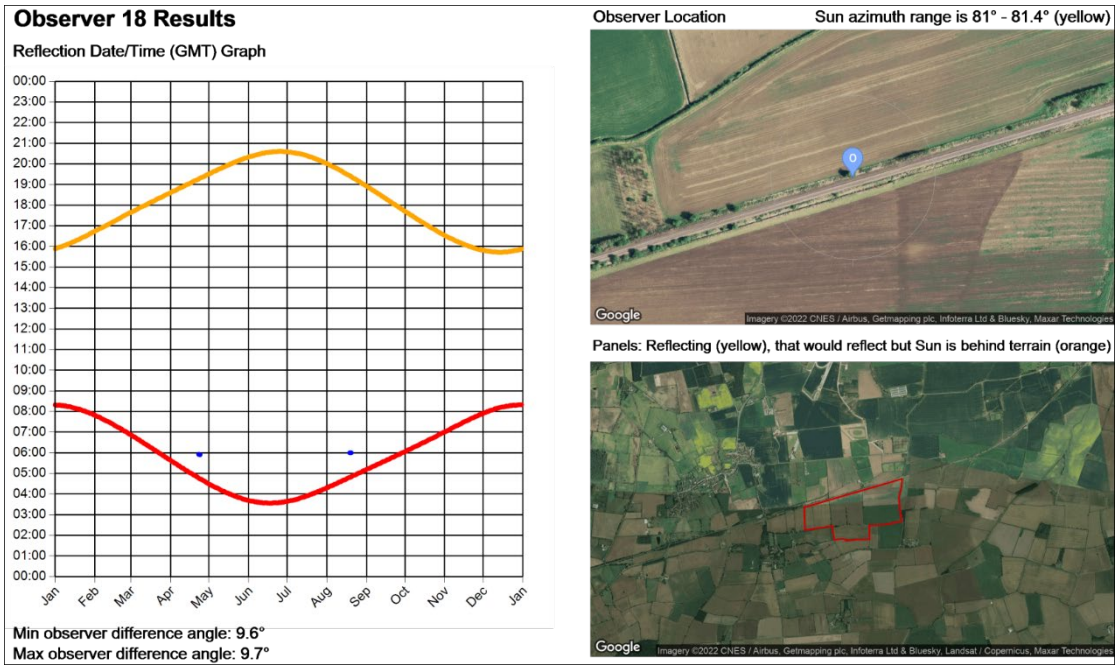
Min observer difference angle: 2.6°
Max observer difference angle: 10.8°

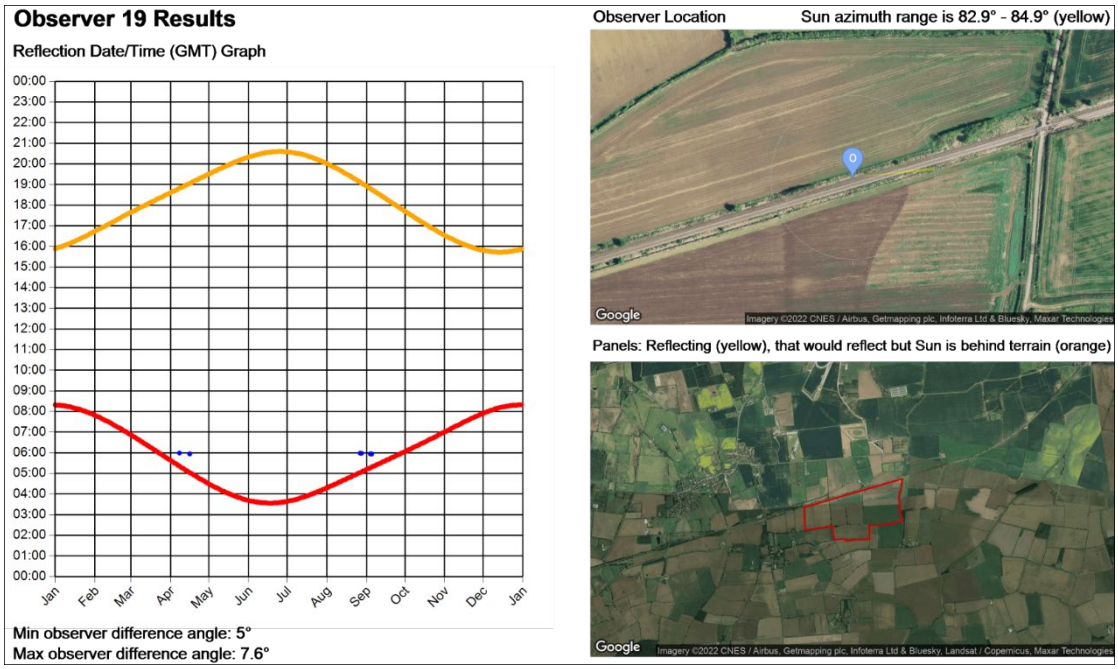
Observer Location — Sun azimuth range is 80.5° - 86.9° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



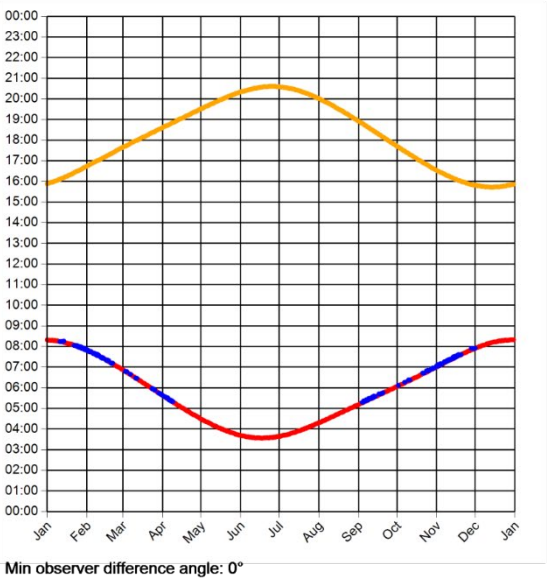




Tracking System

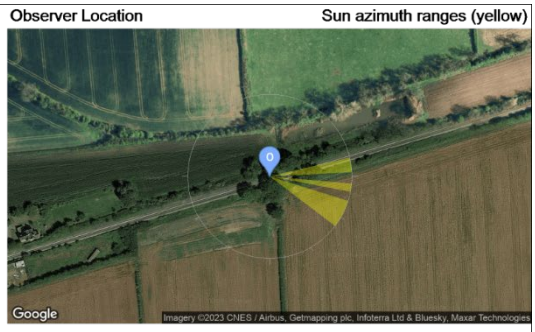
Observer 5 Results

Reflection Date/Time (GMT) Graph



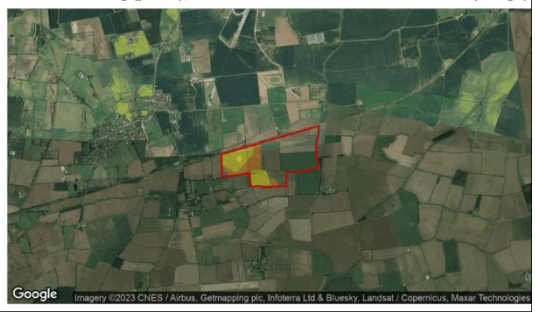
Min observer difference angle: 0°
Max observer difference angle: 0.5°

Observer Location



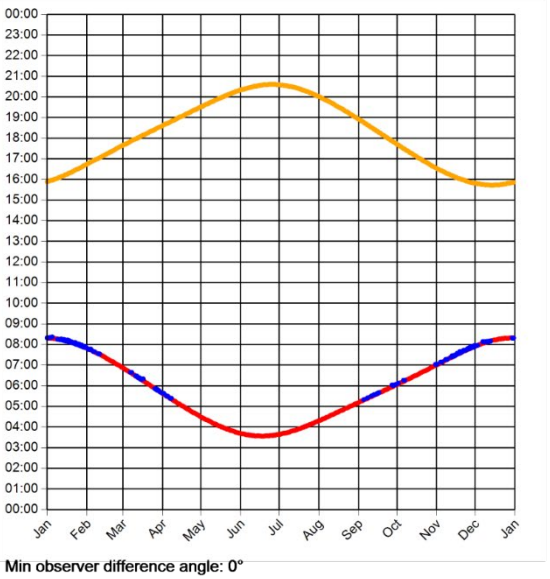
Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



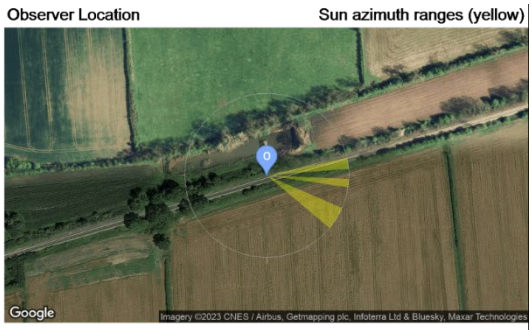
Observer 6 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0°
Max observer difference angle: 1.2°

Observer Location

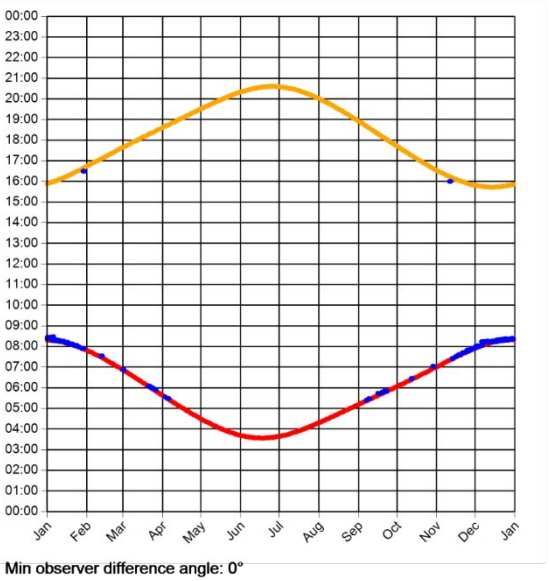


Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

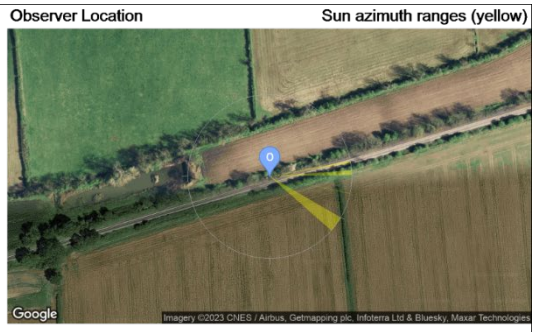
Observer 7 Results

Reflection Date/Time (GMT) Graph

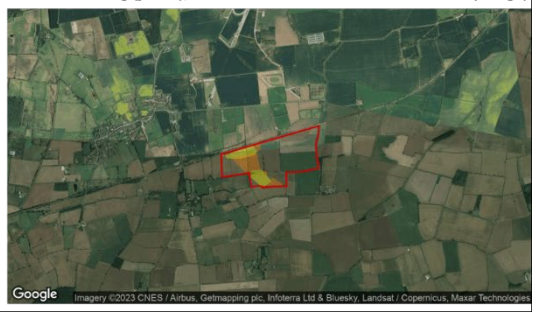


Min observer difference angle: 0°
Max observer difference angle: 2.1°

Observer Location — Sun azimuth ranges (yellow)

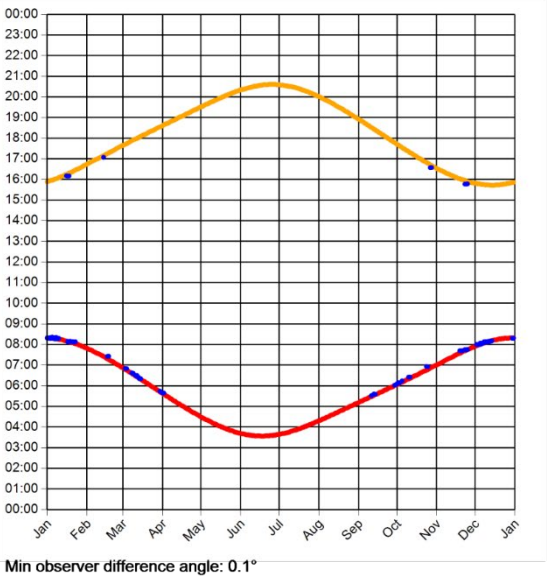


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



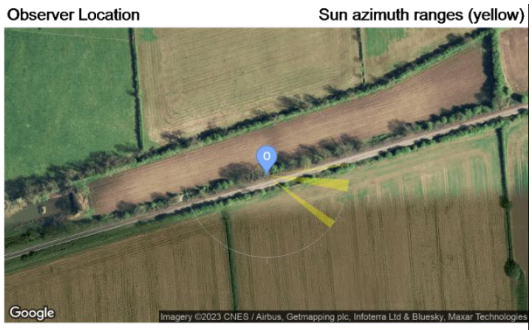
Observer 8 Results

Reflection Date/Time (GMT) Graph

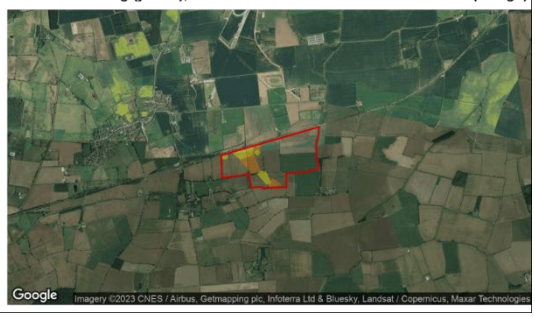


Min observer difference angle: 0.1°
Max observer difference angle: 2°

Observer Location — Sun azimuth ranges (yellow)

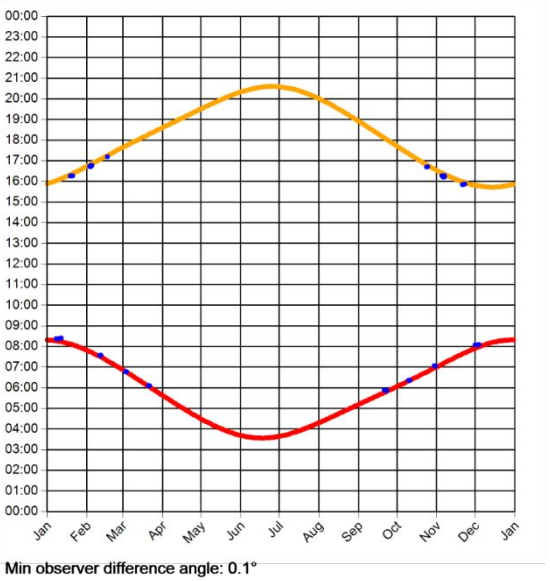


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



Observer 9 Results

Reflection Date/Time (GMT) Graph

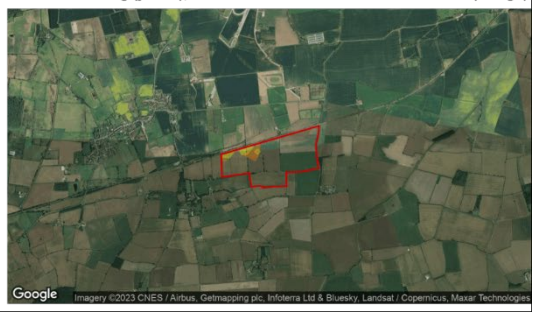


Min observer difference angle: 0.1°
Max observer difference angle: 1.6°

Observer Location

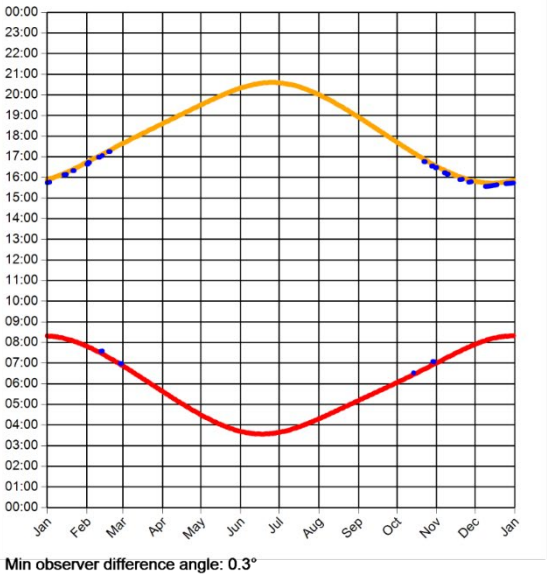
Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



Observer 10 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.3°
Max observer difference angle: 1.7°

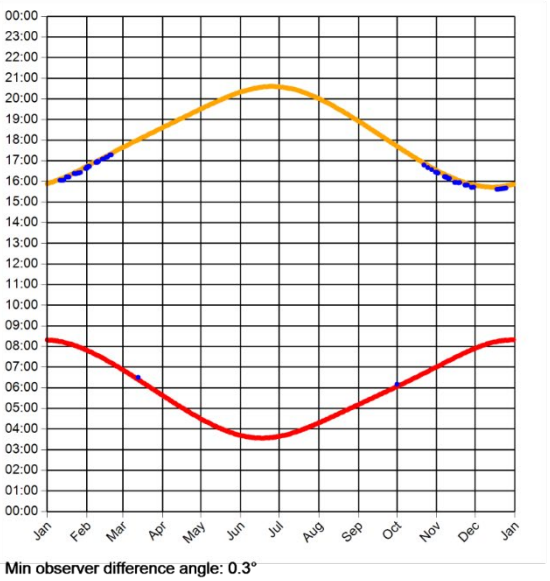
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 11 Results

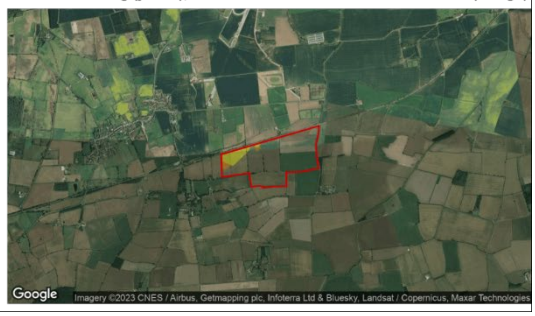
Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.3°
Max observer difference angle: 1.6°

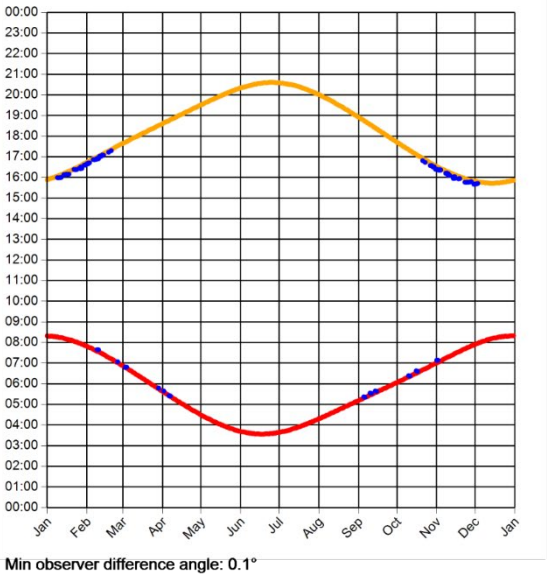
Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



Observer 12 Results

Reflection Date/Time (GMT) Graph



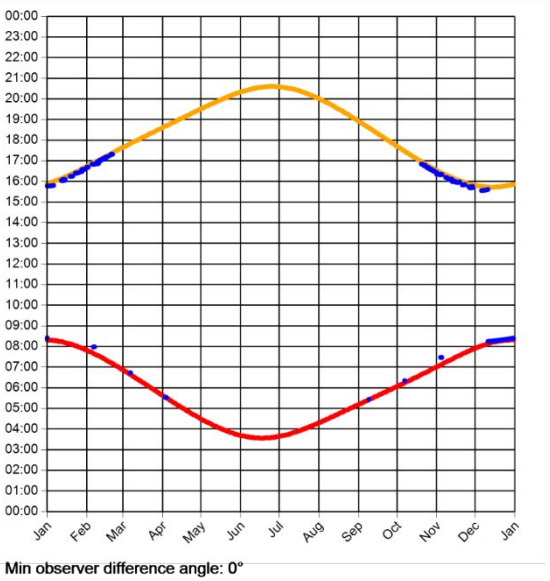
Min observer difference angle: 0.1°
Max observer difference angle: 1.7°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

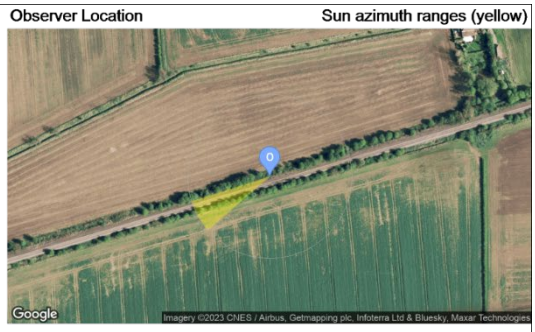
Observer 13 Results

Reflection Date/Time (GMT) Graph



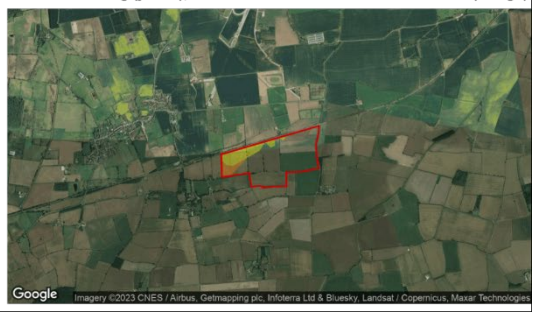
Min observer difference angle: 0°
Max observer difference angle: 4.6°

Observer Location



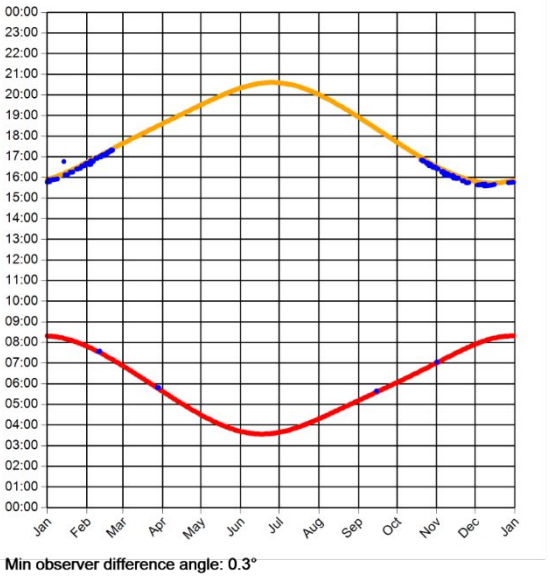
Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



Observer 14 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.3°
Max observer difference angle: 2.2°

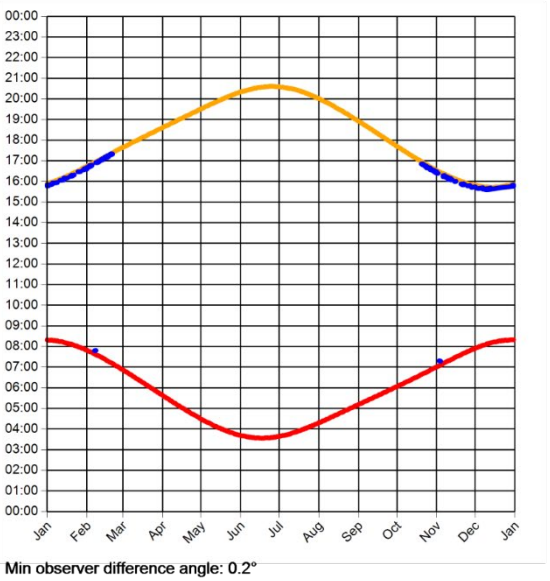
Observer Location

Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

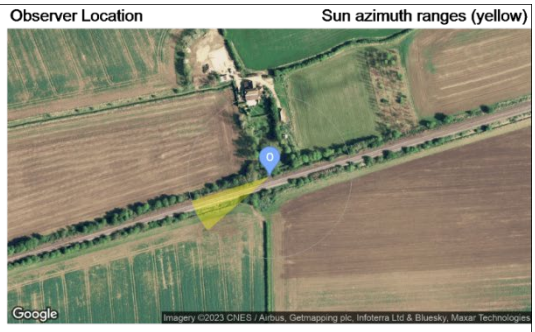
Observer 15 Results

Reflection Date/Time (GMT) Graph

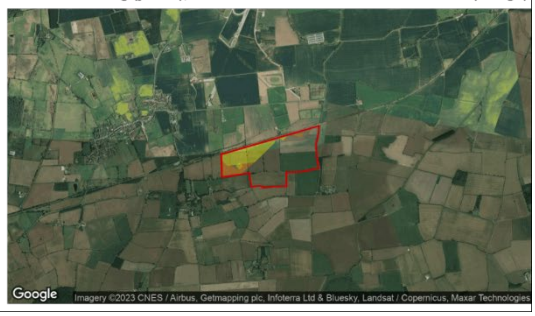


Min observer difference angle: 0.2°
Max observer difference angle: 2.5°

Observer Location — Sun azimuth ranges (yellow)

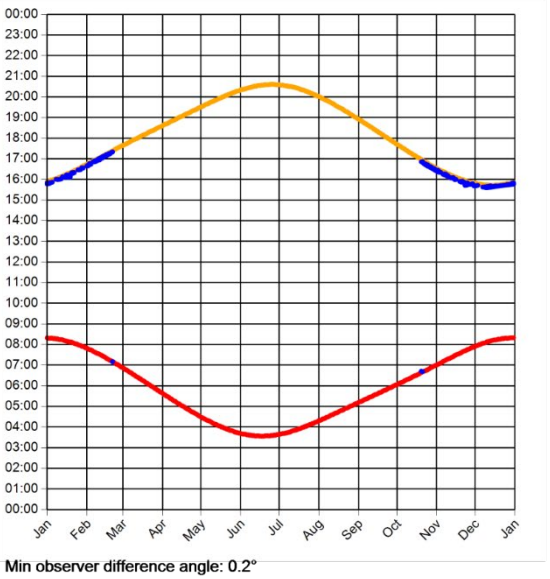


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



Observer 16 Results

Reflection Date/Time (GMT) Graph



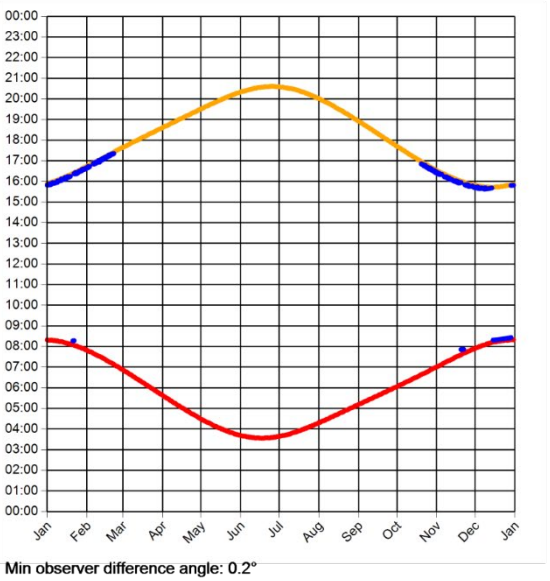
Min observer difference angle: 0.2°
Max observer difference angle: 2°

Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 17 Results

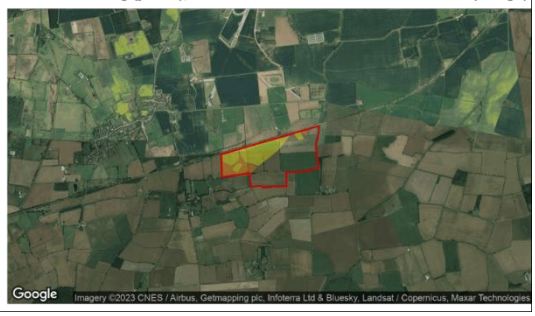
Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 2.6°

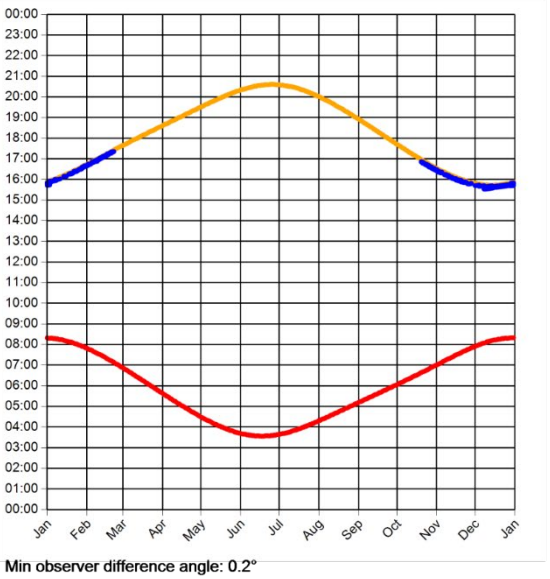
Observer Location — Sun azimuth ranges (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



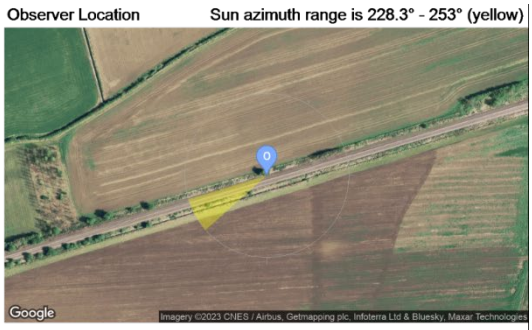
Observer 18 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 1.7°

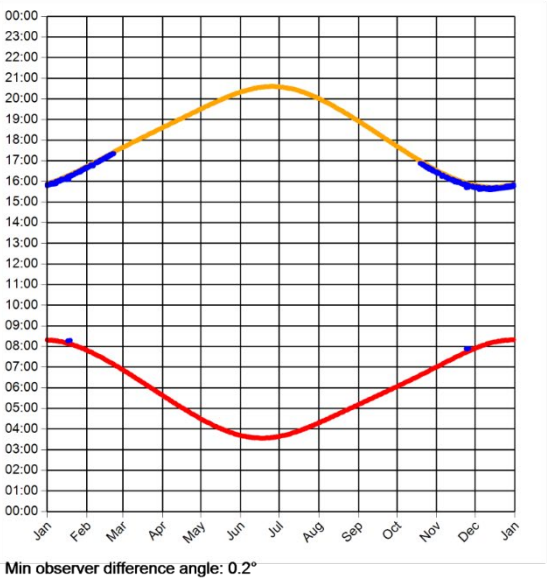
Observer Location — Sun azimuth range is 228.3° - 253° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

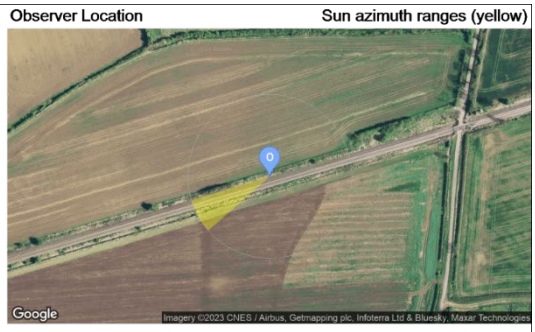
Observer 19 Results

Reflection Date/Time (GMT) Graph

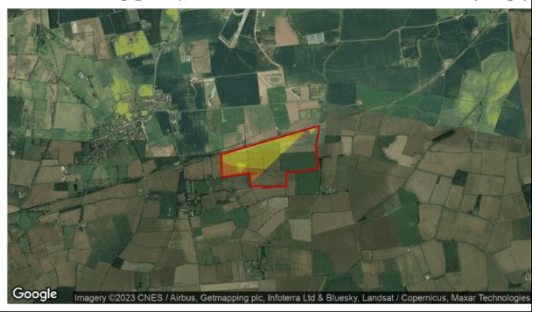


Min observer difference angle: 0.2°
Max observer difference angle: 1.9°

Observer Location — Sun azimuth ranges (yellow)

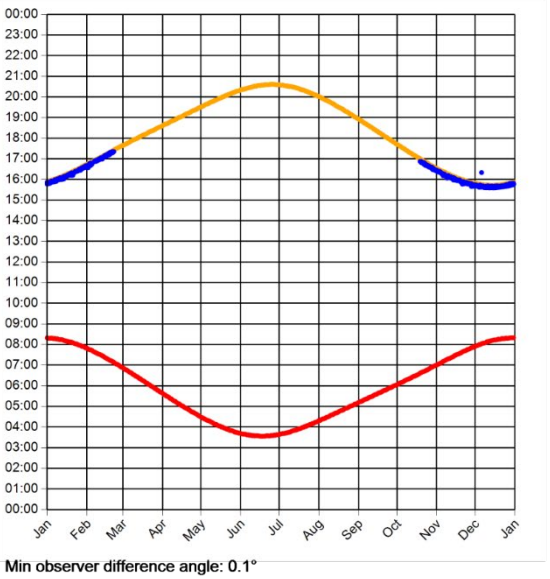


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



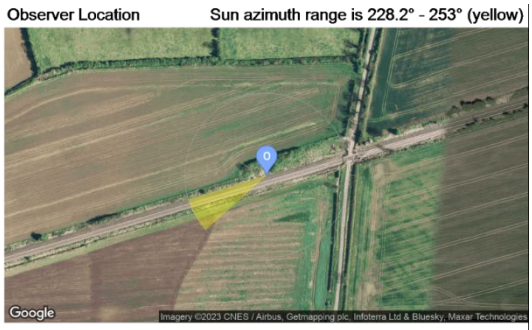
Observer 20 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.1°
Max observer difference angle: 2.2°

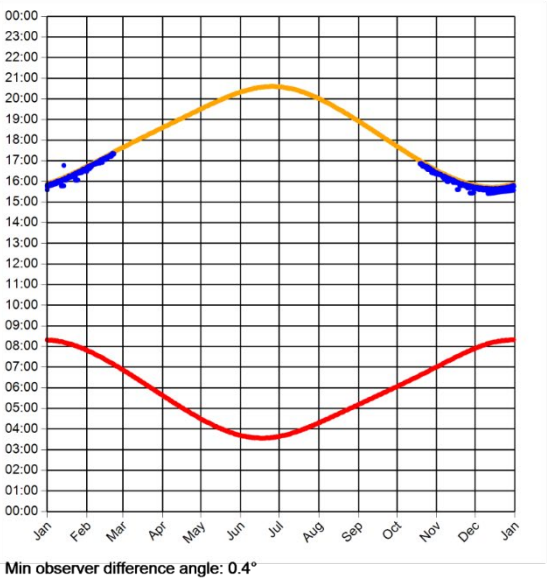
Observer Location — Sun azimuth range is 228.2° - 253° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

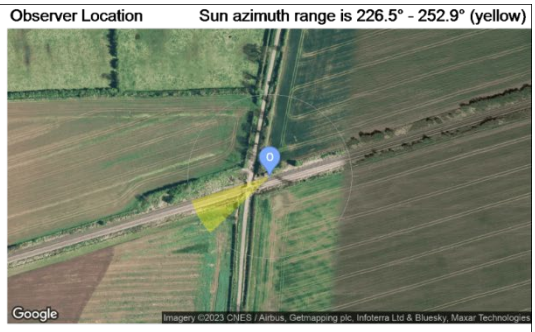
Observer 21 Results

Reflection Date/Time (GMT) Graph

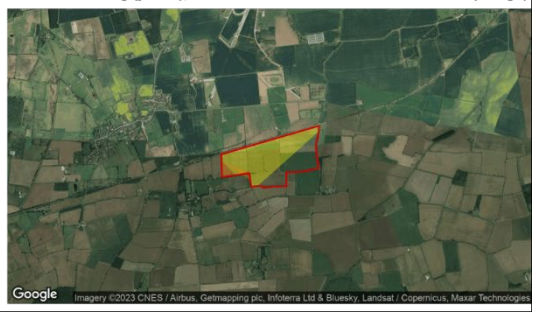


Min observer difference angle: 0.4°
Max observer difference angle: 5.3°

Observer Location — Sun azimuth range is 226.5° - 252.9° (yellow)

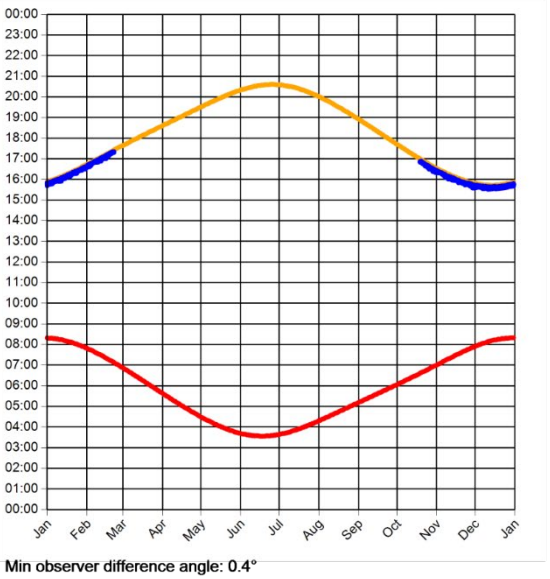


Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)



Observer 22 Results

Reflection Date/Time (GMT) Graph



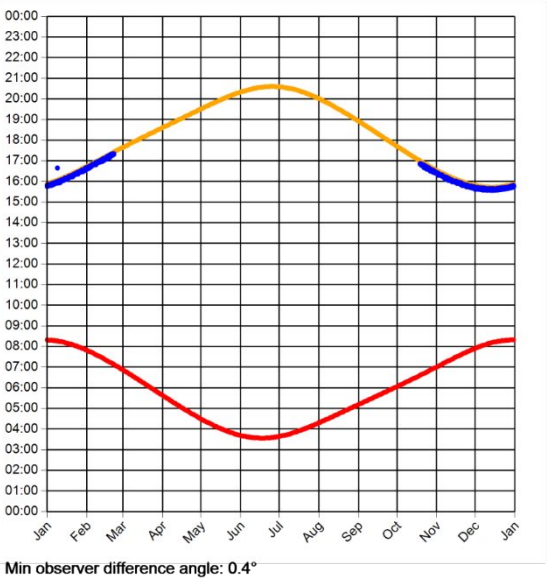
Min observer difference angle: 0.4°
Max observer difference angle: 2.6°

Observer Location — Sun azimuth range is 227.5° - 253° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

Observer 23 Results

Reflection Date/Time (GMT) Graph



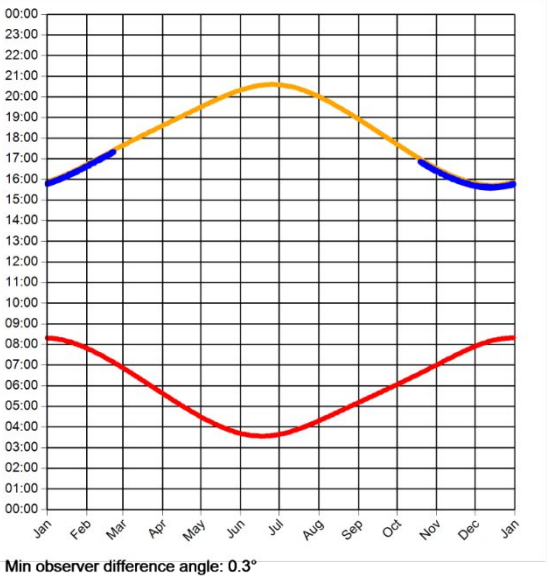
Min observer difference angle: 0.4°
Max observer difference angle: 2°

Observer Location — Sun azimuth range is 227.9° - 253° (yellow)

Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

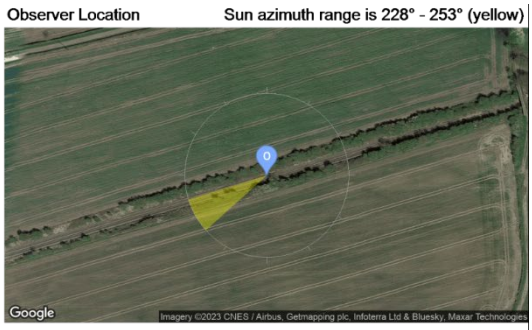
Observer 24 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.3°
Max observer difference angle: 1.7°

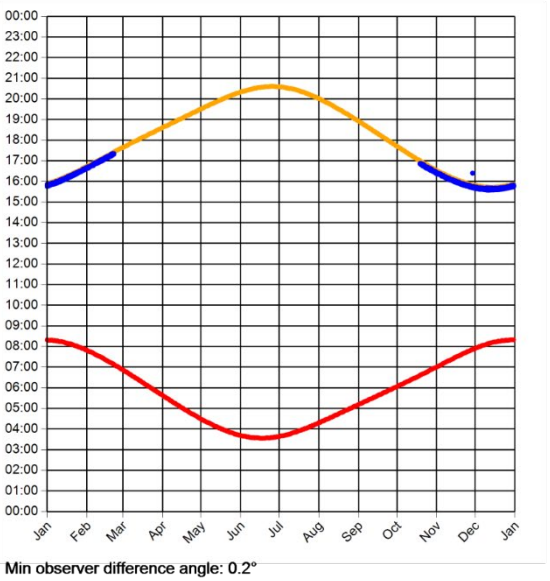
Observer Location — Sun azimuth range is 228° - 253° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

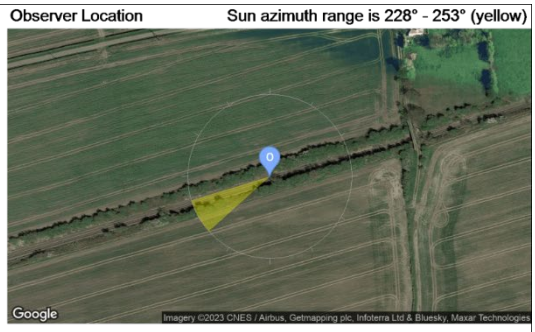
Observer 25 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 1.4°

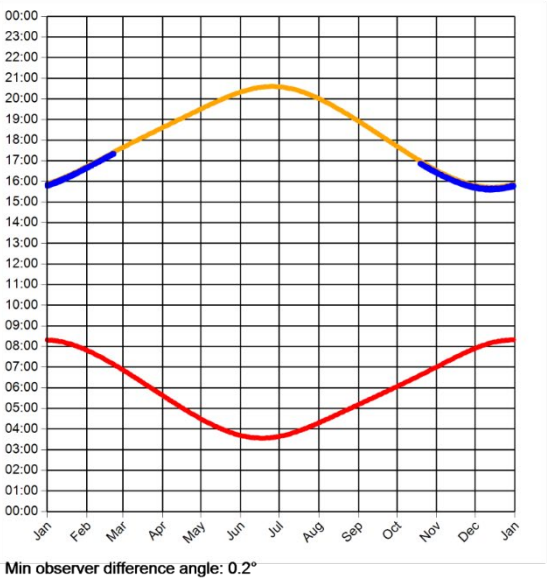
Observer Location — Sun azimuth range is 228° - 253° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)

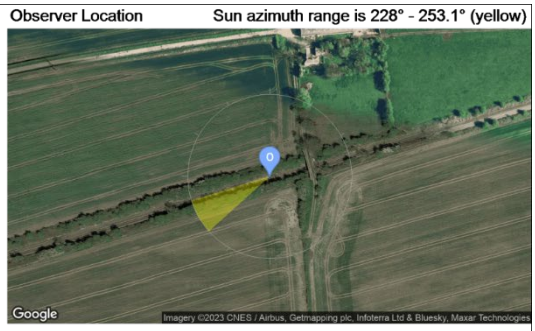
Observer 26 Results

Reflection Date/Time (GMT) Graph



Min observer difference angle: 0.2°
Max observer difference angle: 1.3°

Observer Location — Sun azimuth range is 228° - 253.1° (yellow)



Panels: Reflecting (yellow), that would reflect but Sun is behind terrain (orange)