

Gate Burton Energy Park Environmental Statement

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Glint and Glare Assessment

Gate Burton Energy Park

17/01/2023



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1. EXECUTIVE SUMMARY

- 1.1. This assessment considers the potential impacts of glint and glare associated with Gate Burton Energy Park (the Scheme) on ground-based receptors such as roads, rail and residential dwellings as well as aviation assets. A 1km survey area around the Order limits is considered adequate for the assessment of residential receptors and road receptors, whilst a 30km study area is chosen for aviation receptors. Within the respective study areas of the Order limits, there are 116 residential receptors, 109 road receptors and 27 rail receptors which were considered. As per the methodology section, where there are several residential receptors within close proximity, a representative dwelling or dwellings is/are chosen for full assessment as the impacts will not vary to any significant degree. Where small groups of receptors have been evident, the receptors on either end of the group have been assessed in detail. Nine residential, 14 road and three rail receptors were dismissed as they are located within the no reflection zones. 19 aerodromes are located within the 30km study area; however, only Gamston Airfield and Sturgate Airfield required a detailed assessment as the Scheme is located within their respective safeguarding buffer zones. The other 13 aerodromes did not require a detailed assessment due to their size and/or orientation in relation to the Scheme.
- 1.2. Geometric analysis was conducted at 107 individual residential receptors, 95 road receptors and 24 rail receptors. Also, geometric analysis was conducted at six runways and one Air Traffic Control Tower (ATCT) at Gamston Airfield and Sturgate Airfield.
- 1.3. The assessment concludes that:
- Solar reflections are possible at 79 of the 107 residential receptors assessed within the 1km study area. The initial bald-earth scenario without consideration of any existing or proposed vegetation identified potential impacts as **High** at 18 receptors, **Medium** at 10 receptors, **Low** at 51 receptors and **None** at the remaining 28 receptors. Upon reviewing the actual visibility of the receptors, glint and glare impacts remain **High** for one receptor, **Medium** for one receptor, **Low** for four receptors and reduce to **None** for all remaining receptors. Once mitigation planting was considered impacts remained **Low** for four receptors but reduced to **None** for all remaining receptors. Therefore, overall impacts on residential receptors are considered to be **not significant** and therefore **acceptable**.
 - Solar reflections are possible at 92 of the 95 road receptors assessed within the 1km study area. The initial bald-earth scenario identified potential impacts as **High** at 73 receptors, **Low** at 19 receptors and **None** at the remaining three receptors. Upon reviewing the actual visibility of the receptors, glint and glare impacts remain **High** for

16 receptors and reduce to **None** for the remaining receptors. Once mitigation planting was implemented, overall impacts at all road receptors reduce to **None**.

- Solar reflections are possible at 22 of the 24 rail receptors assessed within the 1km study area. The initial bald-earth scenario identified potential impacts as **High** at 20 receptors, **Low** at two receptors and **None** at the remaining two receptors. Upon reviewing the actual visibility of the receptors, glint and glare impacts reduce to **None** for all receptors. Therefore, overall impacts for rail receptors are **None**.
- Six runways and one ATCT were assessed in detailed at Gamston Airfield and Sturgate Airfield. Only Green Glare impacts were predicted for Runway 27 at Sturgate Airfield and the ATCT at Gamston Airfield, which is an **acceptable impact** upon runways but an **unacceptable impact** upon the ATCT according to FAA guidance. However, upon review of the ground elevation profile between the Scheme and Gamston Airfield, it was found that the Scheme would not be visible from the ATCT and the impact would therefore reduce to **None**. Overall aviation impacts are **Low** and **Not Significant**.

- 1.4. Mitigation measures in the form of vegetation planting are required to be put in place due to the **High** and **Medium** impacts that were found during the visibility analysis at Residential Receptor 14 and 97 and Road Receptors 9, 10, 11, 12, 13, 14, 15, 58, 67, 68, 76, 78, 83,84, 85 and 86. This includes hedgerows to be grown, infilled, gapped up and maintained to a height of at least 3m in those areas outlined in **paragraph 7.1**.
- 1.5. The effects of glint and glare and their impact on local receptors has been analysed in detail and there is predicted to be **Low** impacts at four Residential Receptors, whilst the remaining ground-based receptors are expected to have **No Impacts** once mitigation measures (in the form of hedgerows to be grown, infilled, gapped up and maintained to a height of at least 3m) have been considered. Impacts upon aviation receptors are predicted to be **Low**. Therefore, overall impacts are **Negligible**.

2. INTRODUCTION

BACKGROUND

- 2.1. Neo Environmental Ltd has been appointed by AECOM on behalf of Low Carbon (the “Applicant”) to undertake a Glint and Glare Assessment for a proposed solar farm development known as Gate Burton Energy Park (the “Scheme”) on lands approximately 5.2km southeast of the centre of Gainsborough (the “Order limits”).

SCHEME DESCRIPTION

- 2.2. The Scheme will consist of the construction of rows of south facing fixed solar photovoltaic (‘PV’) panels, Battery Energy Storage Systems (BESS), and associated development such as maintenance tracks, inverters, and transformers.

SITE DESCRIPTION

- 2.3. The area of the Scheme (the “Order limits”) comprises of approximately 652 ha] of land contained within approximately 55 fields. The field boundaries consist of hedgerows. Ground levels within the Order limits vary from approximately 10m AOD in the southern fields to 34m AOD in the western fields.
- 2.4. The Order limits is centred at approximate grid reference E 484924, N 383596. The wider landscape contains the village of Marton, which is located c. 0.5km to the southwest of the Order limits.
- 2.5. This assessment focuses on the Solar and Energy Storage Park area of the Scheme as this is where the PV panels will be located.

SCOPE OF REPORT

- 2.6. Although there may be small amounts of glint and glare from the metal structures associated with the solar farm, this is not likely to be significant and the main source of glint and glare will be from the panels themselves and this will be the focus of this assessment.

- 2.7. Solar panels are designed to absorb as much light as possible and not to reflect it. However, glint can be produced as a reflection of the sun from the surface of the solar PV panel. This can also be described as a momentary flash. This may be an issue due to visual impact and viewer distraction on ground-based receptors and on aviation.
- 2.8. Glare is significantly less intense in comparison to glint and can be described as a continuous source of bright light, relative to diffused lighting. This is not a direct reflection of the sun, but a reflection of the sky around the sun.
- 2.9. This report focusses on the effects of glint and glare and its impact on local receptors and is supported with the following Figures and Appendices:
- Annex A: Figures
 - Figure 1: Residential Receptor Map
 - Figure 2: Road Receptor Map
 - Figure 3: Rail Receptor Map
 - Figure 4: Gamston Aerodrome Chart
 - Figure 5: Mitigation Proposals
 - Figure 6: Panel Area Labels
 - Annex B: Residential Receptor Glare Results 5 Degrees (1 – 54)
 - Annex C: Residential Receptor Glare Results 45 Degrees (1 – 54)
 - Annex D: Residential Receptor Glare Results 5 Degrees (55 – 107)
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 - Annex K: Rail Receptor Glare Results 45 Degrees
 - Annex L: Aviation Receptor Glare Results 5 Degrees
 - Annex M: Aviation Receptor Glare Results 45 Degrees

- Annex N: Visibility Assessment Evidence
- Annex O: Ground Elevation Profile
- Annex P: Solar Module Glare and Reflectance Technical Memo

STATEMENT OF AUTHORITY

2.10. This Glint and Glare Assessment has been produced by Tom Saddington and Michael McGhee of Neo Environmental. Having completed a civil engineering degree in 2012, Michael has produced Glint and Glare assessments for over 1GW of solar farm developments across the UK and Ireland. Tom has an undergraduate degree in Bioengineering and graduated with an MSc in Environmental and Energy Engineering in January 2020. He has been working on various technical assessments including glint and glare reports for numerous solar farms in Ireland and the UK.

DEFINITIONS

2.11. This study examined the potential hazard and nuisance effects of glint and glare in relation to ground-based receptors, which includes the occupants of surrounding dwellings as well as road users. The US Federal Aviation Administration (FAA) in their *“Technical Guidance for Evaluating Selected Solar Technologies on Airports”*¹ have defined the terms ‘Glint’ and ‘Glare’ as meaning:

- Glint – *“A momentary flash of bright light”*; and
- Glare – *“A continuous source of bright light”*.

2.12. Glint and glare are essentially the unwanted reflection of sunlight from reflective surfaces. This study used a multi-step process of elimination to determine which receptors have the potential to experience the effects of glint and glare. It then examined, using a computer-generated geometric model, the times of the year and the times of the day such effects could occur. This is based on the relative angles between the sun, the panels, and the receptor throughout the year.

¹ Harris, Miller, Miller & Hanson Inc. (November 2010). Technical Guidance for Evaluating Selected Solar Technologies on Airports; 3.1.2 Reflectivity. Technical Guidance for Evaluating Selected Solar Technologies on Airports. Available at:

General Nature of Reflectance from Photovoltaic Panels

- 2.13. In terms of reflectance, photovoltaic solar panels are by no means a highly reflective surface. They are designed to absorb sunlight and not to reflect it. Nonetheless, photovoltaic panels have a flat polished surface, which omits 'specular' reflectance rather than a 'diffuse' reflectance, which would occur from a rough surface. Several studies have shown that photovoltaic panels (as opposed to Concentrated Solar Power) have similar reflectance characteristics to water, which is much lower than the likes of glass, steel, snow and white concrete by comparison (See Annex P). Similar levels of reflectance can be found in rural environments from the likes of shed roofs and the lines of plastic mulch used in cropping. In terms of the potential for reflectance from photovoltaic panels to cause hazard and/ or nuisance effects, there have been a number of studies undertaken in respect of schemes in close proximity to airports. The most recent of these was compiled by the Solar Trade Association (STA) in April 2016 and used a number of case studies and expert opinions, including that from Neo Environmental. The summary of this report states that "*the STA does not believe that there is cause for concern in relation to the impact of glint and glare from solar PV on aviation and airports...*"².

Time Zones / Datum's

- 2.14. Locations in this report are given in Eastings and Northings using the 'British National Grid' grid reference system unless otherwise stated.
- 2.15. England uses British Summer Time (BST, UTC + 01:00) in the summer months and Greenwich Mean Time (UTC+0) in the winter period. For the purposes of this report all time references are in GMT.

² Solar Trade Association. (April 2016). Summary of evidence compiled by the Solar Trade Association to help inform the debate around permitted development for non - domestic solar PV in Scotland. Impact of solar PV on aviation and airports. Available at: [REDACTED]

3. LEGISLATION AND GUIDANCE

NATIONAL PLANNING POLICY GUIDANCE (NPPG) ON RENEWABLE AND LOW CARBON ENERGY (UK) ³

3.1. Paragraph 013 (Reference ID: 5-013-20150327) sets out planning considerations that relate to large scale ground-mounted solar PV farms. This determines that the deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively. Considerations to be taken into account by local planning authorities are:

- *“the proposal’s visual impact, the effect on landscape of glint and glare and on neighbouring uses and aircraft safety;*
- *the extent to which there may be additional impacts if solar arrays follow the daily movement of the sun.”*

PLANNING GUIDANCE FOR THE DEVELOPMENT OF LARGE-SCALE GROUND MOUNTED SOLAR PV SYSTEMS

3.2. As outlined within the BRE document ‘Planning Guidance for the Development of Large-Scale Ground Mounted Solar PV Systems’:⁴

“Glint may be produced as a direct reflection of the sun in the surface of the solar PV panel. It may be the source of the visual issues regarding viewer distraction. Glare is a continuous source of brightness, relative to diffused lighting. This is not a direct reflection of the sun, but rather a reflection of the bright sky around the sun. Glare is significantly less intense than glint.

Solar PV panels are designed to absorb, not reflect, irradiation. However, the sensitivities associated with glint and glare, and the landscape/ visual impact and the potential impact on aircraft safety, should be a consideration. In some instances, it may be necessary to seek a glint and glare assessment as part of a planning application. This may be particularly

³ NPPG Renewable and Low Carbon Energy. Available at:
http://planningguidance.communities.gov.uk/blog/guidance/renewable-and-low-carbon-energy/particular-planning-considerations-for-hydropower-active-solar-technology-solar-farms-and-wind-turbines/#paragraph_012

⁴ BRE (2013) *Planning Guidance for the Development of Large Scale Ground Mounted Solar PV Systems*. Available at:

important if 'tracking' panels are proposed as these may cause differential diurnal and/or seasonal impacts.

The potential for solar PV panels, frames and supports to have a combined reflective quality should be assessed. This assessment needs to consider the likely reflective capacity of all of the materials used in the construction of the solar PV farm."

NATIONAL POLICY STATEMENT FOR RENEWABLE ENERGY INFRASTRUCTURE (EN-3), ADOPTED 2011

- 3.3. Section 2.4 of EN-3 provides policy on Criteria for "good design" for energy infrastructure. Paragraph 2.4.1 of this section refers back to the criteria for good design in NPS EN-1. Paragraph 2.4.2 of EN-3 goes on to state that: *"Proposals for renewable energy infrastructure should demonstrate good design in respect of landscape and visual amenity"*.

INTERIM CAA GUIDANCE – SOLAR PHOTOVOLTAIC SYSTEMS (2010)

- 3.4. There is little guidance on the assessment of glint and glare from solar farms with regards to aviation safety. The Civil Aviation Authority (CAA) has published interim guidance on 'Solar Photovoltaic Systems'⁵, they also intend to undertake a review of the potential impacts of solar PV developments upon aviation, however this is yet to be published.
- 3.5. The interim guidance identifies the key safety issues with regards to aviation, including *"glare, dazzling pilots leading them to confuse reflections with aeronautical lights."* It is outlined that solar farm developers should be aware of the requirements to comply with the Air Navigation Order (ANO), published in 2016 and amended in 2022. In particular, developers should be cognisant of the following articles of the ANO⁶, including:
- **Article 240** – *Endangering safety of an aircraft* – "A person must not recklessly or negligently act in a manner likely to endanger an aircraft, or any person in an aircraft."
 - **Article 224** - *Lights liable to endanger* – "A person must not exhibit in the United Kingdom any light which:

⁵ CAA (2010) Interim CAA Guidance – Solar Photovoltaic Systems. Available at: [REDACTED]

⁶ CAA (2016) Air Navigation: The Order and Regulations. Available at: [REDACTED]

- a) by reason of its glare is liable to endanger aircraft taking off or from landing at an aerodrome; or
 - b) by reason of its liability to be mistaken for an aeronautical ground light liable to endanger aircraft”
 - **Article 225** – Lights which dazzle or distract – “A person must not in the United Kingdom direct or shine any light at any aircraft in flight so as to dazzle or distract the pilot of the aircraft.”
- 3.6. Relevant studies generally agree that there is potential for glint and glare from photovoltaic panels to cause a hazard or nuisance for surrounding receptors, but that the intensity of such reflections is similar to that emanating from still water. This is considerably lower than for other manmade materials such as glass, steel or white concrete (SunPower – 2009).
- 3.7. These Articles are considered within the assessment of glint and glare of the Scheme.

CAA – CAP738: SAFEGUARDING OF AERODROMES 3RD EDITION⁷

- 3.8. In 2003 the CAA first introduced the CAP738 document to help provide advice and guidance to ensure aerodrome safeguarding. Subsequently, there have been two updates to this document in 2006 and 2020.
- 3.9. Within the latest edition of CAP738, it outlines that the purpose of the document is to protect an aerodrome and to ensure safe operation. Specifically stating:
- “Its purpose is to protect:*
- Aircraft from the risk of glint and glare e.g. solar panels.”*
- 3.10. Within the section named as “Appendix C – Solar Photovoltaic Cells”, the following is stated:

“Policy

1. In 2010 the CAA published interim guidance on Solar Photovoltaic Cells (SPCs). At that time, it was agreed that we would review our policy based on research carried out by the Federal Aviation Authorities (FAA) in the United States, in addition to reviewing guidance issued by other National Aviation Authorities. New information and field experience, particularly with respect to compatibility and glare, has resulted in the FAA reviewing its original document ‘Technical Guidance for Evaluating Selected Solar Technologies on Airports’, which is likely to be subject to change, see link;

⁷ Civil Aviation Authority (2020). CAP738 – Safeguarding of Aerodromes 3rd Edition. Available at: [\[REDACTED\]](#)

<https://www.federalregister.gov/documents/2013/10/23/2013-24729/interimpolicy-faa-review-of-solar-energy-system-projects-on-federally-obligated-airports>

2. In the United Kingdom there has been a further increase in SPV cells, including some located close to aerodrome boundaries; to date the CAA has not received any detrimental comments or issues of glare at these established sites. Whilst this early indication is encouraging, those responsible for safeguarding should remain vigilant to the possibility.”

- 3.11. The above is stating that to date, there has not been any complications on airfields due to glare originating from solar farms across the UK.

US FEDERAL AVIATION ADMINISTRATION POLICY

- 3.12. The US Federal Aviation Administration (FAA) in their Solar Guide (Federal Aviation Authority, 2010)⁸ incorporates a chapter on the impact and assessment of glint from solar panels. It concludes that (although subject to revision):

“...evidence suggests that either significant glare is not occurring during times of operation or if glare is occurring, it is not a negative effect and is a minor part of the landscape to which pilots and tower personnel are exposed.”

- 3.13. The interim policy (Federal Register, 2013)⁹ requires that an ocular impact assessment must be assessed at 1-minute intervals from when the sun rises above the horizon until the sun sets below the horizon. Specifically, the developer must use the ‘Solar Glare Hazard Analysis Tool’ (SGHAT) tool specifically and reference its results as this was developed by the FAA and Sandia National Laboratories as a standard and approved methodology for assessing potential impacts on aviation interests, although it notes other assessment methods may be considered. The SGHAT tool has since been licensed to a private organisation who were also involved in its development and it is the software model used in this assessment.
- 3.14. Crucially, the policy provides a quantitative threshold which is lacking in the English guidance. This outlines that a solar development will not automatically receive an objection on glint grounds if low intensity glint is visible to pilots on final approach. In other words, low intensity glint with a low potential to form a temporary after-image (Green Glare) would be considered acceptable under US guidance. Due to the lack of legislation and guidance within England, this US document has been utilised as guidance for this report.

⁸ FAA (2010), Technical Guidance for Evaluating Selected Solar Technologies on Airports. Available at [REDACTED]

⁹ FAA (2013), Interim Policy, FAA Review of Solar Energy System Projects on Federally Obligated Airports. Available at [REDACTED]

- 3.15. The FAA guidance states that for a solar PV development to obtain FAA approval or to receive no objection, the following two criteria must be met:
- No potential for glint or glare in the existing or planned Air Traffic Control Tower (ATCT); and
 - No potential for glare (glint) or “low potential for after-image” (Green Glare) along the final approach path for any existing or future runway landing thresholds (including planned or interim phases), as shown by the approved layout plan (ALP). The final approach path is defined as 2 miles from 50 feet above the landing threshold using a standard 3-degree glide path.
- 3.16. The geometric analysis included later in this report, which defines the extent and time at which glint may occur, is required by the FAA as the methodology to be used when assessing glint and glare impacts on aviation receptors. This report follows the methodology required by the FAA as it offers the most robust assessment method currently available.

FAA POLICY: REVIEW OF SOLAR ENERGY SYSTEMS PROJECTS ON FEDERALLY - OBLIGATED AIRPORTS¹⁰

- 3.17. The FAA updated their Interim Policy from 2013 as part of their commitment to “*update policies and procedures as part of an iterative process as new information and technologies become available.*” The main development regarding Glint and Glare since the Interim Policy is the following:

“Initially, FAA believed that solar energy systems could introduce a novel glint and glare effect to pilots on final approach. FAA has subsequently concluded that in most cases, the glint and glare from solar energy systems to pilots on final approach is similar to glint and glare pilots routinely experience from water bodies, glass-façade buildings, parking lots, and similar features. However, FAA has continued to receive reports of potential glint and glare from on-airport solar energy systems on personnel working in ATCT cabs.”

- 3.18. This is outlining that solar panels are similar to nuisances that are already caused by other existing infrastructure, such as; car parks, glass buildings and water bodies. Furthermore, the ATCT has been outlined as the key receptor to be assessed when determining Glint and Glare impacts from a solar farm.

¹⁰ FAA (2021). FAA Policy: Review of Solar Energy Systems Projects on Federally – Obligated Airports. Available at:



4. METHODOLOGY

- 4.1. A desk-based assessment was undertaken to identify when and where glint and glare may be visible at receptors within the vicinity of the Scheme, throughout the day and the year.

SUN POSITION AND REFLECTION MODEL

Sun Data Model

- 4.2. The calculations in the solar position calculator are based on equations from *Astronomical Algorithms*¹¹. The sunrise and sunset results are theoretically accurate to within a minute for locations between +/- 72° latitude, and within 10 minutes outside of those latitudes. However, due to variations in atmospheric composition, temperature, pressure and conditions, observed values may vary from calculations.

Solar Reflection Model

- 4.3. The position of the sun is calculated at one-minute intervals of a typical year, in this instance the year being assessed was 2022.
- 4.4. In order to determine if a solar reflection will reach a receptor the following variables are required:
- Sun position;
 - Observer location, and;
 - Tilt, orientation, and extent of the modules in the solar array.
- 4.5. The model assumes that the azimuth and horizontal angle of the sun is the same across the whole solar farm. This is considered acceptable due to the distance of the sun from the Scheme and the miniscule differences in location of the sun over the Scheme.
- 4.6. Once the position of the sun is known for each time interval, a vector reflection equation determines the reflected sun vector, based on the normal vector of the solar array panels. This assumes that the angle of reflection is equal to the angle of incidence reflected across a normal plane. In this instance, the plane being the vector which the solar panels are facing.
- 4.7. On knowing the vector of the solar reflection, the azimuth is calculated and the horizontal reflection from multiple points within the solar farm. These are then compared with the

¹¹ Jean Meeus, *Astronomical Algorithms* (Second Edition), 1999

azimuth and horizontal angle of the receptor from the solar farm to determine if it is within range to receive solar reflections.

- 4.8. The solar reflection in the model is considered to be specular as a worst-case scenario. In practice the light from the sun will not be fully reflected as solar panels are designed to absorb light rather than reflect it. The text above and **Annex P** outlines the reflective properties of solar glass and compares it to other reflective surfaces. Although the exact figures in this report could be argued, it is included as a visual guide and it agrees with most other reports, in that solar glass has less reflective properties than other types of glass, bodies of water, and snow, and that the amount of reflective energy drops as the angle of incidence decreases.
- 4.9. The panel reflectivity has been modelled to assume an anti-reflective coating (ARC) which is the industry standard for photo-voltaic panels and further reduces the reflective properties of the PV panels.

Determination of Ocular Impact

- 4.10. The software used for this assessment is based on the Sandia Laboratories Solar Glare Hazard Analysis Tool (SGHAT). This tool is specifically mentioned in the FAA guidance as the software which should be used in this type of assessment.
- 4.11. Determination of the ocular impact requires knowledge of the direct normal irradiance, PV module reflectance, size and orientation of the array, optical properties of the PV module, and ocular parameters. These values are used to determine the retinal irradiance and subtended source angle used in the ocular hazard plot.
- 4.12. The ocular impact¹² of viewed glare can be classified into three levels based on the retinal irradiance and subtended source angle: low potential for after-image (green), potential for after-image (yellow), and potential for permanent eye damage (red).
- 4.13. Green glare can be ignored when looking at residential and some aviation receptors. Green glare does not cause temporary flash blindness and happens at an instant with very slight disturbance. As per FAA guidelines mitigation is only required for green glare when affecting an Air Traffic Control Tower, but not for when affecting pilots. Therefore, it can be assumed that green glare is acceptable for residential receptors.
- 4.14. The subtended source angle represents the size of the glare viewed by an observer, while the retinal irradiance determines the amount of energy impacting the retina of the observer. Larger source angles can result in glare of high intensity, even if the retinal irradiance is low.
- 4.15. The modelling software outputs a hazard plot for each receptor predicted to be impacted by glare from the photovoltaic (PV) array. An orange dot is plotted for each minute of glare

¹² Ho, C.K., C.M. Ghanbari, and R.B. Diver, 2011, Methodology to Assess Potential Glint and Glare Hazards From Concentrating Solar Power Plants: Analytical Models and Experimental Validation, Journal of Solar Energy Engineering-Transactions of the Asme, 133(3).

indicating the irradiance (power density) of the reflected solar light. A yellow dot is plotted to show the irradiance of the Sun when it is viewed directly. The hazard plot shows that the irradiance of the Sun is approximately three orders of magnitude greater than the reflected irradiance, i.e., the power density of solar reflections from photovoltaic panels are approximately 0.1% that of viewing the Sun. Due to the disparity in irradiance, whenever the Sun is observed in the same frame as solar reflections from a PV array, the Sun will be main source of glare impacts upon the observer. In such a case, the impact is deemed to be **Low** as a worst-case scenario.

Relevant Parameters of the Scheme

- 4.16. The photovoltaic panels are oriented in a southwards direction to maximise solar gain and will remain in a fixed position throughout the day and during the year (i.e. they will not rotate to track the movement of the sun). The panels will face southwards and will be inclined at an angle of between 5 and 45 degrees.
- 4.17. The height of the panels above ground level is a maximum of 3.5m and points at the top of the panels are used to determine the potential for glint and glare generation.

IDENTIFICATION OF RECEPTORS

Ground Based Receptors

- 4.18. Glint is most likely to impact upon a ground-based receptor close to dusk and dawn, when the sun is at its lowest in the sky. Therefore, any effect would likely occur early in the day or late in the day, reflected to the west at dawn and east at dusk.
- 4.19. A 1km study area from the panels was deemed appropriate for the assessment of ground-based receptors as this seemed to contain a good spread of residential and road receptors in most directions from the Scheme. The further distance a receptor is from a solar farm, the less chance it has of being affected by glint and glare due to scattering of the reflected beam and atmospheric attenuation, in addition to obstructions from ground sources, such as any intervening vegetation or buildings.
- 4.20. An observer height of 2m was utilised for residential receptors, as this is a typical height for a ground-floor window. With regards to road and boat users, a receptor height of 1.5m was employed as this is typical of eye level. Rail driver's eye level was assumed to be 2.75m above the rail for signal signing purposes and therefore this is the height used for assessment purposes.
- 4.21. An assessment was undertaken to determine zones where solar reflections will never be directed near ground level.

- 4.22. Where there are several residential receptors within close proximity, a representative dwelling or dwellings is/are chosen for full assessment as the impacts will not vary to any significant degree. Where small groups of receptors have been evident, the receptors on either end of the group have been analysed in detail with the worst-case impacts attributed to that receptor.

Aviation

- 4.23. Glint is only considered to be an issue with regards to aviation safety when the solar farm lies within close proximity to a runway, particularly when the aircraft is descending to land. En-route activities are not considered an issue as the flight will most likely be at a higher altitude than the solar reflection.
- 4.24. Should a solar farm be proposed within the safeguarded zone of an aerodrome then a full geometric study may be required which would determine if there is potential for glint and glare at key locations, most likely on the descent to land.
- 4.25. Buffer zones to identify aviation assets vary depending on the safeguarding criteria of that asset. All aerodromes within 30km will be identified, however generally the detailed assessments are only required within: 20km for large international aerodromes, 10km for military aerodromes and 5km for small aerodromes.

MAGNITUDE OF IMPACT

Static Receptors

- 4.26. Although there is no specific guidance set out to identify the magnitude of impact from solar reflections, the following criteria has been set out for the purposes of this report:
- **High** - Solar reflections impacts of over 30 hours per year or over 30 minutes per day;
 - **Medium** - Solar reflections impacts between 20 and 30 hours per year or between 20 minutes and 30 minutes per day;
 - **Low** - Solar reflections impacts up to 20 hours per year or up to 20 minutes per day; and
 - **None** - Effects not geometrically possible or no visibility of reflective surfaces likely due to high levels of intervening screening.

Moving Receptors (Road and Rail)

- 4.27. Again, no specific guidance is available to identify the magnitude of impact from solar reflections on moving receptors except in aviation, however it is thought that a similar

approach should be applied to moving receptors as aviation, based on the ocular impact and the potential for after-image.

- 4.28. The FAA guidance states that for a solar PV development to obtain FAA approval or to receive no objection the following criteria must be met:
- No potential for glare (glint) or “*low potential for after-image*” along the final approach path for any existing or future runway landing thresholds (including planned or interim phases), as shown by the approved layout plan (ALP).

- 4.29. The FAA produced an evaluation of glare as a hazard and concluded in their report¹³ that:

“The more forward the glare is and the longer the glare duration, the greater the impairment to the pilots’ ability to see their instruments and to fly the aircraft. These results taken together suggest that any sources of glare at an airport may be potentially mitigated if the angle of the glare is greater than 25 deg from the direction that the pilot is looking in. We therefore recommend that the design of any solar installation at an airport consider the approach of pilots and ensure that any solar installation that is developed is placed such that they will not have to face glare that is straight ahead of them or within 25 deg of straight ahead during final approach.”

- 4.30. It is reasonable to assume that although this report was assessing pilots vision impairment that it can also be applied to drivers of other vehicles. Therefore, the driver’s field of view will also be analysed where required and if the glare is out with 25 degrees either side of their line of sight then any impacts will reduce to **None**.

Moving Receptors (Aviation)

Approach Paths

- 4.31. Each final approach path which has the potential to receive glint is assessed using the SGHAT model. The model assumes an approach bearing on the runway centreline, a 3-degree glide path with the origin 50ft (15.24m) above the runway threshold.
- 4.32. The computer model considers the pilots field of view. The azimuthal field of view (AFOV) or horizontal field of view (HFOV) as it is sometimes referred, refers to the extents of the pilot’s horizontal field of view measured in degrees left and right from directly in front of the cockpit. The vertical field of view (VFOV) refers to the extents of the pilot’s vertical field of view measured in degrees from directly in front of the cockpit. The HFOV is modelled at 50 degrees left and right from the front of the cockpit whilst the VFOV is modelled at 30 degrees.

¹³ Federal Aviation Authority, Evaluation of Glare as a Hazard for General Aviation Pilots on Final Approach (2015), Available at [REDACTED]

- 4.33. The FAA guidance states that there should be no potential for glare or ‘*low potential for after-image*’ at any existing or future planned runway landing thresholds for the Scheme to be acceptable.

Air Traffic Control Tower (ATCT)

- 4.34. An air traffic controller uses the visual control room to monitor and direct aircraft on the ground, approaching and departing the aerodrome. It is essential that air traffic controllers have a clear unobstructed view of the aviation activity. The key areas on an aerodrome are the views towards the runway thresholds, taxiways, and aircraft bays.
- 4.35. The FAA guidance states that no solar reflection towards the ATCT should be produced by a proposed solar development, however this should be assessed on a site by site case and will depend on the operations at a particular aerodrome.
- 4.36. In order to determine the impact on the ATCT, the location and height of the tower will need to be fed into the SGHAT model and where there is a potential for ‘*low potential for After-Image*’ or more, then mitigation measures will be required.

Assessment Limitations

- 4.37. Below is a list of assumptions and limitations of the model and methods used within this report:
- The model does not consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc;
 - The model does not rigorously represent the detailed geometry of a system; detailed features such as gaps between modules, variable height of the PV array, and support structures may impact actual glare results;
 - The model assumes that all components in a field have the same reflectivity of the PV array, as such they have been assessed as part of the model to represent a worst-case scenario. Should the actual footprint decrease of said components, then any additional arrays within that area will not have a material impact on this assessment.
 - Due to variations in atmospheric composition, temperature, pressure and conditions, observed values may vary slightly from calculated positions;
 - The model does not account for the effects of diffraction; however, buffers are applied as a factor of safety; and

- The model assumes clear skies at all times and does not account for meteorological effects such as cloud cover, fog, or any other weather event which may screen the sun.
- 4.38. Due to these assumptions and limitations the model overestimates the number of minutes of glint and glare which are possible at each receptor and presents the worst-case scenario. Where glint and glare are predicted a visibility assessment is carried out to determine a more accurate, real-world prediction of the impacts.

5. BASELINE CONDITIONS

GROUND BASED RECEPTORS REFLECTION ZONES

- 5.1. Based on the relatively flat topography in the area, solar reflections between five degrees below the horizontal plane to five degrees above it are described as near horizontal. Reflections from the Solar and Energy Storage Park within this arc have the potential to be seen by receptors at or near ground level.
- 5.2. Further analysis showed that this will only occur between the azimuth of 251.24 degrees and 290.92 degrees in the western direction (late day reflections) and 72.61 degrees and 111.57 degrees in the eastern direction (morning reflections) and therefore any ground-based receptor outside these arcs will not have any impact from solar reflections.
- 5.3. **Figure 1, 2 and 3 of Annex A** show the respective study areas whilst also subtracting from this the areas where solar reflections will not impact on ground-based receptors due to the reasons set out in **paragraphs 5.1 to 5.2**.

Residential Receptors

- 5.4. Residential receptors located within 1km of the Order limits have been identified (**Table 5-1**). Glint was assumed to be possible if the receptor is located within the ground-based receptor zones outlined previously.
- 5.5. There are nine residential receptors (Receptors 108 to 116) which are within the no-reflection zones and are clearly identifiable in **Figure 1: Annex A**. The process of how these are calculated is explained in **paragraphs 5.1 to 5.2** of this report.
- 5.6. As per the methodology section, where there are a number of residential receptors within close proximity, a representative dwelling or dwellings is/are chosen for detailed analysis as the impacts will not vary to any significant degree. Where small groups of receptors are evident, the receptors on either end of the group have been assessed in detail.

Table 5-1: Residential Receptors

Receptor	Easting	Northing	Glint and Glare Possible
1	483418	386413	Yes
2	483422	386350	Yes
3	483547	386326	Yes
4	483683	386349	Yes

Receptor	Easting	Northing	Glint and Glare Possible
5	483524	385953	Yes
6	483573	385977	Yes
7	483583	385933	Yes
8	483521	385892	Yes
9	483827	385820	Yes
10	483923	385850	Yes
11	484039	385810	Yes
12	484183	385760	Yes
13	484330	385687	Yes
14	484343	385620	Yes
15	484232	385623	Yes
16	484143	385593	Yes
17	484074	385536	Yes
18	484006	385651	Yes
19	483947	385617	Yes
20	484417	385570	Yes
21	484678	385411	Yes
22	484630	385306	Yes
23	483481	385151	Yes
24	482946	384828	Yes
25	483045	384800	Yes
26	483126	384824	Yes
27	483206	384818	Yes
28	483070	384714	Yes
29	482962	384709	Yes
30	482855	384673	Yes

Receptor	Easting	Northing	Glint and Glare Possible
31	482821	384618	Yes
32	483004	384514	Yes
33	483041	384474	Yes
34	483501	384568	Yes
35	483704	384532	Yes
36	482962	383523	Yes
37	483564	383344	Yes
38	483791	383142	Yes
39	483746	383099	Yes
40	483695	383048	Yes
41	483832	382861	Yes
42	483688	382635	Yes
43	483865	382649	Yes
44	483800	382637	Yes
45	483821	382588	Yes
46	483834	382516	Yes
47	484023	382414	Yes
48	483748	381740	Yes
49	483770	381866	Yes
50	483711	382044	Yes
51	483661	382155	Yes
52	483750	382215	Yes
53	483805	382109	Yes
54	483678	381629	Yes
55	483849	382204	Yes
56	483941	382240	Yes

Receptor	Easting	Northing	Glint and Glare Possible
57	483959	382132	Yes
58	483988	382048	Yes
59	484056	382032	Yes
60	484175	382041	Yes
61	484248	382113	Yes
62	484311	382070	Yes
63	484404	382093	Yes
64	484519	382122	Yes
65	485566	382504	Yes
66	485058	383047	Yes
67	486073	382971	Yes
68	486402	383023	Yes
69	486380	383284	Yes
70	487962	383435	Yes
71	487709	383850	Yes
72	487727	383777	Yes
73	487770	383809	Yes
74	487771	384255	Yes
75	487784	383790	Yes
76	487608	384127	Yes
77	487480	384117	Yes
78	487244	384070	Yes
79	487520	384189	Yes
80	487607	384265	Yes
81	487519	384337	Yes
82	487192	384311	Yes

Receptor	Easting	Northing	Glint and Glare Possible
83	487231	384442	Yes
84	487312	384478	Yes
85	487339	384554	Yes
86	487486	384617	Yes
87	487565	384656	Yes
88	487724	384696	Yes
89	486968	384771	Yes
90	487232	384830	Yes
91	487175	384876	Yes
92	487161	384934	Yes
93	487106	384966	Yes
94	487138	385038	Yes
95	487195	385099	Yes
96	487224	385202	Yes
97	485361	385637	Yes
98	485448	385635	Yes
99	485515	385583	Yes
100	485576	385627	Yes
101	485769	385628	Yes
102	485805	385606	Yes
103	485825	385605	Yes
104	485864	385615	Yes
105	485847	385567	Yes
106	486160	385610	Yes
107	486203	385758	Yes
108	484744	386507	No

Receptor	Easting	Northing	Glint and Glare Possible
109	485153	386500	No
110	485681	386534	No
111	484490	381839	No
112	484534	381711	No
113	485142	381702	No
114	485159	381666	No
115	484572	382001	No
116	484573	381862	No

Road / Rail Receptors

- 5.7. There are nine roads within the 1km study area that requires a detailed Glint and Glare Assessment: the A156, B1241, Willingham Road, Kexby Lane, Upton Road, Gainsborough Road, Marton Road, High Street and Stow Park Road. There are some minor roads which serve dwellings; however, these have been screened out as the traffic densities on these roads/access tracks will be very low and likely used to get to and from houses at the end of these tracks. Therefore, there is a negligible risk of safety impacts resulting from glint and glare of the Scheme.
- 5.8. The ground receptor no-reflection zones are clearly identifiable on **Figure 2: Annex A** and the process of how these are calculated is explained in **paragraphs 5.1 to 5.2** of this report.
- 5.9. **Table 5-2** shows a list of receptors points along the nine assessed roads within the study area, these points are 200m apart to ensure that each road is sufficiently covered within the assessment.

Table 5-2: Road Based Receptors

Receptor	Easting	Northing	Glint and Glare Possible
1	483352	386393	Yes
2	483548	386357	Yes
3	483666	386197	Yes
4	483757	386015	Yes
5	483855	385839	Yes

Receptor	Easting	Northing	Glint and Glare Possible
6	484042	385779	Yes
7	484228	385709	Yes
8	484401	385626	Yes
9	484543	385486	Yes
10	484734	385519	Yes
11	484919	385568	Yes
12	485107	385605	Yes
13	485303	385618	Yes
14	485501	385608	Yes
15	485714	385596	Yes
16	485920	385578	Yes
17	486121	385561	Yes
18	487295	385253	Yes
19	487228	385069	Yes
20	487215	384865	Yes
21	487228	384665	Yes
22	487305	384498	Yes
23	487475	384497	Yes
24	487554	384316	Yes
25	487633	384129	Yes
26	487701	383936	Yes
27	487780	383748	Yes
28	487873	383568	Yes
29	487962	383391	Yes
30	488064	383221	Yes
31	482780	385960	Yes
32	482753	385759	Yes

Receptor	Easting	Northing	Glint and Glare Possible
33	482729	385577	Yes
34	482713	385381	Yes
35	482726	385183	Yes
36	482770	384991	Yes
37	482894	384846	Yes
38	482929	384656	Yes
39	483015	384478	Yes
40	483077	384296	Yes
41	483040	384102	Yes
42	483031	383898	Yes
43	483068	383710	Yes
44	483133	383527	Yes
45	483218	383348	Yes
46	483331	383177	Yes
47	483449	383015	Yes
48	483577	382858	Yes
49	483689	382696	Yes
50	483796	382533	Yes
51	483839	382338	Yes
52	483910	382155	Yes
53	483986	381979	Yes
54	483989	381785	Yes
55	484139	381992	Yes
56	483028	384774	Yes
57	483223	384807	Yes
58	483416	384866	Yes
59	483503	384959	Yes

Receptor	Easting	Northing	Glint and Glare Possible
60	483425	385136	Yes
61	483425	385334	Yes
62	483567	385434	Yes
63	483755	385497	Yes
64	483933	385587	Yes
65	484108	385684	Yes
66	484406	385758	Yes
67	484560	385890	Yes
68	484740	385974	Yes
69	484908	386051	Yes
70	483967	382427	Yes
71	484162	382465	Yes
72	484360	382485	Yes
73	484560	382499	Yes
74	484762	382514	Yes
75	484965	382501	Yes
76	485159	382538	Yes
77	485338	382617	Yes
78	485523	382679	Yes
79	485715	382742	Yes
80	485898	382826	Yes
81	486084	382909	Yes
82	486260	382999	Yes
83	486459	383003	Yes
84	486658	383003	Yes
85	486863	383015	Yes
86	487048	383016	Yes

Receptor	Easting	Northing	Glint and Glare Possible
87	487231	383079	Yes
88	487229	383256	Yes
89	487235	383460	Yes
90	487241	383657	Yes
91	487236	383848	Yes
92	487201	384045	Yes
93	487306	384220	Yes
94	487281	384404	Yes
95	487572	384605	Yes
96	484034	381592	No
97	484325	381918	No
98	484514	381856	No
99	484704	381793	No
100	484885	381733	No
101	485069	381674	No
102	485252	381612	No
103	484862	386235	No
104	485042	386305	No
105	485237	386364	No
106	485425	386420	No
107	485611	386477	No
108	485803	386534	No
109	485996	386586	No

5.10. There is one railway line that dissects the Scheme which will require assessment.

5.11. **Table 5-3** shows a list of rail receptor points within the study area which are 200m apart.

Table 5-3: Rail Based Receptors

Receptor	Easting	Northing	Glint and Glare Possible
1	483508	386456	Yes
2	483632	386304	Yes
3	483749	386144	Yes
4	483840	385971	Yes
5	483917	385783	Yes
6	483997	385591	Yes
7	484064	385415	Yes
8	484136	385239	Yes
9	484212	385046	Yes
10	484284	384867	Yes
11	484363	384679	Yes
12	484441	384485	Yes
13	484514	384295	Yes
14	484589	384111	Yes
15	484666	383920	Yes
16	484736	383745	Yes
17	484815	383559	Yes
18	484887	383368	Yes
19	484960	383184	Yes
20	485034	382998	Yes
21	485108	382818	Yes

Receptor	Easting	Northing	Glint and Glare Possible
22	485184	382632	Yes
23	485256	382450	Yes
24	485329	382269	Yes
25	485403	382090	No
26	485474	381910	No
27	485544	381738	No

Aviation Receptors

5.12. Aerodromes within 30km of the Scheme can be found in **Table 5-4**.

Table 5-4: Airfields within close proximity

Airfield	Distance	Use
Sturgate Airfield	2.75km	Small Unlicensed Aerodrome
West Burton Airfield	5.68km	Small Unlicensed Aerodrome
Grove farm Airfield	9.38km	Small Unlicensed Aerodrome
RAF Scampton	10.68km	Military Aerodrome
Headon Airfield	11.95km	Small Unlicensed Aerodrome
Darlton Airfield	12.10km	Small Unlicensed Aerodrome
Kirkton-in-Lindsay Airfield	14.60km	Small Unlicensed Aerodrome
Grange Farm Airfield	16.07km	Small Unlicensed Aerodrome
Gamston Airfield	16.35km	Licensed Aerodrome
Little Farm Airfield	19.53km	Small Unlicensed Aerodrome
Hibaldstow Airfield	20.11km	Small Unlicensed Aerodrome
Doncaster-Sheffield Airport	22.26km	International Airport
RAF Waddington	23.55km	Military Aerodrome
Caunton Airfield	25.68km	Small Unlicensed Aerodrome

Airfield	Distance	Use
Wickenby Airfield	25.93km	Licensed Aerodrome

- 5.13. As shown in **Table 5-4**, there are 15 aerodromes within 30km of the Scheme. However, only Gamston Airfield and Sturgate Airfield will require a detailed assessment as the Scheme is located within their safeguarding buffer zones, outlined in **paragraph 4.24**.
- 5.14. The other 13 aerodromes do not require detailed assessments due to their location in relation to the Scheme falling outside of the buffer zones outlined in **paragraph** Error! Reference source not found..

Gamston Airfield

- 5.15. Gamston Airfield is designated as a Licensed Airfield. It is located approximately 2 nautical miles (NM) or 3.7km south of the town of Retford.
- 5.16. The elevation of the aerodrome at the Aerodrome Reference Point (ARP) is 87ft (26.52m). It has four asphalt strip runways, details of which are given in **Table 5-5**. See **Figure 4: Annex A** for the Aerodrome Chart.

Table 5-5: Runways at Gamston Airfield

Runway Designation	True Bearing (°)	Length (m)	Width (m)
Runway 03	024.94	1683	30
Runway 14	139.70	905	20
Runway 21	204.95	1683	30
Runway 32	319.60	905	20

- 5.17. The threshold locations and heights of the runways at Gamston Airfield are given in **Table 5-6**.

Table 5-6: Gamston Airfield Runway Threshold Locations and Heights

Runway Designation	Threshold Latitude	Threshold Longitude	Height AOD (m)
03	53° 16' 32.77" N	000° 57' 18.48" W	25.91
14	53° 16' 55.00" N	000° 58' 00.00" W	23.78
21	53° 17' 07.95" N	000° 56' 51.18" W	23.16
32	53° 16' 36.00" N	000° 57' 34.00" W	24.58

- 5.18. One ATCT at Gamston Airfield has been analysed, see **Table 5-7**.

Table 5-7: ATCT at Gamston Airfield

	Latitude	Longitude	Height AOD (m)	ATCT Height (m)
ATCT	53° 16' 45.00" N	000° 57' 00.00" W	26.47	5.00

Sturgate Airfield

- 5.19. Sturgate Airfield is designated as an unlicensed Airfield. It is located approximately 3.2 nautical miles (NM) or 5.97km southeast of the town of Gainsborough.
- 5.20. The elevation of the aerodrome at the Aerodrome Reference Point (ARP) is 57ft (17.37m). It has two paved strip runways, details of which are given in **Table 5-8**.

Table 5-8: Sturgate Airfield Runways

Runway Designation	Bearing (°)	Length (m)	Width (m)
09	085.11	820	46
27	085.11	820	46

- 5.21. The threshold locations and heights of the runways at Sturgate Airfield are given in **Table 5-9**.

Table 5-9: Sturgate Airfield Runway Threshold Locations and Heights

Runway Designation	Threshold Latitude	Threshold Longitude	Height AOD (m)
09	53° 22' 52.00" N	000° 41' 24.00" W	17.00
27	53° 22' 53.00" N	000° 40' 47.00" W	17.69

- 5.22. There are no ATCTs present at Sturgate Airfield.

6. IMPACT ASSESSMENT

- 6.1. Following the methodology outlined earlier in this report, geometrical analysis comparing the azimuth and horizontal angle of the receptors from the Scheme and the solar reflection was conducted. Although this assessment did not take into account obstructions such as vegetation and buildings, discussion on the potentially impacted receptors is provided where necessary.

GROUND BASED RECEPTORS

Residential Receptors

- 6.2. **Table 6-1** identifies the receptors that will experience solar reflections based on solar reflection modelling and whether the reflections will be experienced in the morning (AM), evening (PM), or both.
- 6.3. The Nine receptors which were within the no-reflection zones outlined previously have been excluded from the detailed modelling as they will never receive any glint and glare impacts from the Scheme.
- 6.4. **Annex B, C, D and E** shows the analysis with the solar panels at a tilt angle of 5 and 45 degrees. **Annex B and C** show the analysis for Receptors 1 – 54, whilst **Annex D and E** show the analysis for Receptors 55 – 107.
- 6.5. **Table 6-1** shows the worst-case impact at each receptor, based on a theoretical modelled impact without consideration of local vegetation or other obstacles and assuming no cloud at any point in the year. Therefore, these results are assuming an absolute worst-case scenario.

Table 6-1: Potential for Glint and Glare theoretical impact on Residential Receptors

Receptor	Glint Possible from Site		Potential Theoretical Glare Impact (per year)		Magnitude of Theoretical Impact	Worst Case Tilt
	AM	PM	Minutes	Hours		
1	No	No	0	0.00	None	N/A
2	No	No	0	0.00	None	N/A
3	No	No	0	0.00	None	N/A
4	No	No	0	0.00	None	N/A
5	No	No	0	0.00	None	N/A

Receptor	Glint Possible from Site		Potential Theoretical Glare Impact (per year)		Magnitude of Theoretical Impact	Worst Case Tilt
	AM	PM	Minutes	Hours		
6	No	No	0	0.00	None	N/A
7	No	No	0	0.00	None	N/A
8	No	No	0	0.00	None	N/A
9	No	No	0	0.00	None	N/A
10	Yes	No	35	0.58	Low	45
11	Yes	No	161	2.68	Low	45
12	Yes	No	486	8.10	Low	5
13	Yes	No	2143	35.72	High	5
14	Yes	No	1831	30.52	High	5
15	Yes	No	1041	17.35	Low	5
16	Yes	No	311	5.18	Low	5
17	Yes	No	154	2.57	Low	5
18	Yes	No	197	3.28	Low	5
19	Yes	No	72	1.20	Low	45
20	Yes	No	1351	22.52	Medium	5
21	Yes	No	577	9.62	Low	45
22	Yes	No	861	14.35	Low	5
23	Yes	No	2514	41.90	High	45
24	No	No	0	0.00	None	N/A
25	No	No	0	0.00	None	N/A
26	Yes	No	23	0.38	Low	5
27	Yes	No	174	2.90	Low	5
28	No	No	0	0.00	None	N/A
29	No	No	0	0.00	None	N/A
30	No	No	0	0.00	None	N/A

Receptor	Glint Possible from Site		Potential Theoretical Glare Impact (per year)		Magnitude of Theoretical Impact	Worst Case Tilt
	AM	PM	Minutes	Hours		
31	No	No	0	0.00	None	N/A
32	Yes	No	2	0.03	Low	45
33	Yes	No	16	0.27	Low	45
34	Yes	No	367	6.12	Low	45
35	Yes	No	1767	29.45	Medium	5
36	Yes	No	1687	28.12	Medium	45
37	Yes	No	2151	35.85	High	5
38	Yes	No	3957	65.95	High	5
39	Yes	No	3209	53.48	High	5
40	Yes	No	3012	50.20	High	5
41	Yes	No	1083	18.05	Low	5
42	Yes	No	1750	29.17	Medium	45
43	Yes	No	1664	27.73	Medium	45
44	Yes	No	1954	32.57	High	45
45	Yes	No	2170	36.17	High	45
46	Yes	No	2786	46.43	High	45
47	Yes	No	1809	30.15	High	5
48	Yes	No	82	1.37	Low	5
49	Yes	No	103	1.72	Low	5
50	Yes	No	285	4.75	Low	5
51	Yes	No	944	15.73	Low	5
52	Yes	No	1284	21.40	Medium	5
53	Yes	No	530	8.83	Low	5
54	Yes	No	67	1.12	Low	5
55	Yes	No	668	11.13	Low	5

Receptor	Glint Possible from Site		Potential Theoretical Glare Impact (per year)		Magnitude of Theoretical Impact	Worst Case Tilt
	AM	PM	Minutes	Hours		
56	Yes	No	625	10.42	Low	5
57	Yes	No	159	2.65	Low	5
58	Yes	No	26	0.43	Low	5
59	Yes	No	93	1.55	Low	5
60	Yes	No	329	5.48	Low	5
61	Yes	No	851	14.18	Low	5
62	Yes	No	365	6.08	Low	5
63	Yes	No	157	2.62	Low	5
64	Yes	No	188	3.13	Low	5
65	Yes	Yes	203	3.38	Low	5
66	Yes	Yes	8391	139.85	High	45
67	Yes	Yes	7727	128.78	High	45
68	Yes	Yes	8193	136.55	High	45
69	Yes	Yes	9609	160.15	High	45
70	No	Yes	1352	22.53	Medium	45
71	No	Yes	733	12.22	Low	45
72	No	Yes	815	13.58	Low	45
73	No	Yes	690	11.50	Low	45
74	No	Yes	23	0.38	Low	45
75	No	Yes	993	16.55	Low	45
76	No	Yes	393	6.55	Low	45
77	No	Yes	434	7.23	Low	45
78	No	Yes	1040	17.33	Low	45
79	No	Yes	272	4.53	Low	45
80	No	Yes	43	0.72	Low	45

Receptor	Glint Possible from Site		Potential Theoretical Glare Impact (per year)		Magnitude of Theoretical Impact	Worst Case Tilt
	AM	PM	Minutes	Hours		
81	No	Yes	2	0.03	Low	45
82	No	Yes	169	2.82	Low	45
83	No	Yes	6	0.10	Low	45
84	No	No	0	0.00	None	N/A
85	No	No	0	0.00	None	N/A
86	No	No	0	0.00	None	N/A
87	No	No	0	0.00	None	N/A
88	No	No	0	0.00	None	N/A
89	No	No	0	0.00	None	N/A
90	No	No	0	0.00	None	N/A
91	No	No	0	0.00	None	N/A
92	No	No	0	0.00	None	N/A
93	No	No	0	0.00	None	N/A
94	No	No	0	0.00	None	N/A
95	No	No	0	0.00	None	N/A
96	No	No	0	0.00	None	N/A
97	No	Yes	2671	44.52	High	5
98	No	Yes	2400	40.00	High	5
99	No	Yes	1766	29.43	Medium	5
100	No	Yes	2278	37.97	High	5
101	No	Yes	1412	23.53	Medium	5
102	No	Yes	1175	19.58	Low	5
103	No	Yes	936	15.60	Low	5
104	No	Yes	784	13.07	Low	45
105	No	Yes	1353	22.55	Medium	5

Receptor	Glint Possible from Site		Potential Theoretical Glare Impact (per year)		Magnitude of Theoretical Impact	Worst Case Tilt
	AM	PM	Minutes	Hours		
106	No	Yes	407	6.78	Low	45
107	No	Yes	312	5.20	Low	45

- 6.6. As can be seen in **Table 6-1**, there is a **High** impact at 18 receptors, **Medium** at 10 receptors, **Low** at 51 receptors and **None** at the remaining 28 receptors. **Annex B, C, D and E** show detailed analysis of when the glare impacts are possible, whilst also showing which parts of the solar farm the solar glint is reflected from.
- 6.7. **Annex N** shows 2021 Google Earth images that give an insight into how each receptor will be impacted by the glint and glare from the Scheme. There is a mixture of images used, which include aerial, ground level and street level. The aerial images show the location of the receptor with the solar farm drawn as a white polygon and can be seen on the images when the solar farm is theoretically visible. The area of the solar farm from where reflections may be possible has been drawn as a yellow polygon. The ground level terrain is based on the height data of the surrounding land showing no intervening vegetation or buildings. The white and yellow polygons can be seen in this view also. The street view gives a good indication as to whether the area of the solar farm where reflections are theoretically possible will be visible from the receptor point.
- 6.8. When an array number is referred to, please see **Figure 6: Annex A** for reference.

Receptors 10 - 13

- 6.9. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B and C**, shows that all, except a southern section, of Array 4 in the Scheme can potentially impact on the receptors.
- 6.10. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the vegetation that is located to the east of the receptors. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 14 - 17

- 6.11. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that all, except a northern and southern section, of Array 4 in the Scheme can potentially impact on the receptors.

- 6.12. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings and vegetation east of the receptors to screen views of the Scheme where glint and glare is possible for receptors 15 - 17. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image confirms that there are sufficient buildings to screen all views of the Scheme where glint and glare is possible for receptors 15 - 17. However, receptor 14 still has view into the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None** for receptors 15 – 17, but remain **Medium** for receptor 14.

Receptors 18 - 19

- 6.13. The 'Glare Reflections on the PV Footprint' chart shown in **Annex C**, shows that all, except a southern and northwest section, of Array 4 in the Scheme can potentially impact on the receptors.
- 6.14. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there are sufficient buildings to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 20

- 6.15. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that all, except a southern section and northwest, of Array 4 in the Scheme can potentially impact on the receptor.
- 6.16. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image shows that there will only be filtering views to the top floor windows of the receptor. Therefore, the impact is reduced to **Low**.

Receptor 21

- 6.17. The 'Glare Reflections on the PV Footprint' chart shown in **Annex C**, shows that a northern section of Array 3 in the Scheme can potentially impact on the receptor.
- 6.18. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image shows that there will only be filtering views to the gable end of the receptor. Therefore, the impact remains **Low**.

Receptor 22

- 6.19. The 'Glint Reflections on the PV Footprint' chart shown in **Annex B**, shows that a northern section of Array 3 in the Scheme can potentially impact on the receptor.
- 6.20. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image confirms that there are sufficient buildings to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 23

- 6.21. The 'Glint Reflections on the PV Footprint' chart shown in **Annex C**, shows that a northern section of Array 1 in the Scheme can potentially impact on the receptor.
- 6.22. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 26 - 27

- 6.23. The 'Glint Reflections on the PV Footprint' chart shown in **Annex B**, shows that a northern section of Array 1 in the Scheme can potentially impact on the receptors.
- 6.24. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 32 - 34

- 6.25. The 'Glint Reflections on the PV Footprint' chart shown in **Annex C**, shows that a northern section of Array 2 in the Scheme can potentially impact on the receptors.
- 6.26. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view of the vegetation located to the

east of the receptors. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 35

- 6.27. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that a northern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.28. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is an extensive woodland directly east of the receptor and so, there is sufficient vegetation to screen views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 36

- 6.29. The 'Glare Reflections on the PV Footprint' chart shown in **Annex C**, shows that a central section of Array 1 in the Scheme can potentially impact on the receptor.
- 6.30. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 37

- 6.31. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that a central section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.32. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is mature trees directly east of the receptor so, there is sufficient vegetation to screen views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 38 - 40

- 6.33. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptors.
- 6.34. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image

confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 41

- 6.35. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.36. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 42 - 44

- 6.37. The 'Glare Reflections on the PV Footprint' chart shown in **Annex C**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptors.
- 6.38. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 45 - 46

- 6.39. The 'Glare Reflections on the PV Footprint' chart shown in **Annex C**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptors.
- 6.40. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image confirms that the topography and vegetation is sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 47

- 6.41. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.

- 6.42. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 48, 49 and 54

- 6.43. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B**, shows that a southern section of Array 2 in the Scheme can potentially impact on the receptors.
- 6.44. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings and vegetation northeast of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image confirms that the intervening buildings are sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 50 – 52

- 6.45. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B and C**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptors.
- 6.46. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that the topography and vegetation is sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 53, 55 and 56

- 6.47. The 'Glare Reflections on the PV Footprint' chart shown in **Annex B and D**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptors.
- 6.48. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image confirms that the topography and vegetation is sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 57

- 6.49. The 'Glint Reflections on the PV Footprint' chart shown in **Annex D**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.50. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 58 - 59

- 6.51. The 'Glint Reflections on the PV Footprint' chart shown in **Annex D**, shows that a southern section of Array 2 in the Scheme can potentially impact on the receptors.
- 6.52. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image confirms that the topography is sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 60 - 64

- 6.53. The 'Glint Reflections on the PV Footprint' chart shown in **Annex D**, shows that a southern section of Array 2 in the Scheme can potentially impact on the receptors.
- 6.54. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that the topography and vegetation is sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 65

- 6.55. The 'Glint Reflections on the PV Footprint' chart shown in **Annex D**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.56. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the blue dot is located on the aerial image, with a view towards the receptor. Whilst the third

image is taken where the red dot is located, with a view along the southern boundary of the Scheme. These images confirm that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**

Receptor 66

- 6.57. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.58. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the blue dot is located on the aerial image, with a view towards the receptor. Whilst the third image is taken where the red dot is located, with a view along the southern boundary of the Scheme. These images confirm that there are sufficient buildings and vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**

Receptor 67

- 6.59. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.60. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation east of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the blue dot is located on the aerial image, with a view of the vegetation to the east of the receptor. Whilst the third image is taken where the red dot is located, with a view of the vegetation to the west of the receptor. These images confirm that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**

Receptor 68

- 6.61. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a southern and central sections of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.62. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings and vegetation east and west of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the blue dot is located on the aerial image, with a view of the buildings and vegetation to the east of the receptor. Whilst the third image is taken where the red dot is located, with a view of the vegetation to the west of the receptor. These images confirm that there are sufficient buildings and vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 69

- 6.63. The 'Glint Reflections on the PV Footprint' chart shown in **Annex E**, shows that a southern and central sections of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.64. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings and vegetation east and west of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the blue dot is located on the aerial image, with a view of the buildings and vegetation to the east of the receptor. Whilst the third image is taken where the red dot is located, with a view of the vegetation to the west of the receptor. These images confirm that there will only be filtering views from the receptor into the Scheme where glint and glare. Therefore, the impact is reduced to **Low**.

Receptor 70

- 6.65. The 'Glint Reflections on the PV Footprint' chart shown in **Annex E**, shows that a central section of Array 2 in the Scheme can potentially impact on the receptor.
- 6.66. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there is sufficient topography and vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 71 – 73 and 75

- 6.67. The 'Glint Reflections on the PV Footprint' chart shown in **Annex E**, shows that the northern half of Array 2 in the Scheme can potentially impact on the receptors.
- 6.68. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation west of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that the topography and vegetation is sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 74

- 6.69. The 'Glint Reflections on the PV Footprint' chart shown in **Annex E**, shows that a northern section of Array 2 in the Scheme can potentially impact on the receptor.
- 6.70. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings west of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where

the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there are sufficient buildings to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 76

- 6.71. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a northern section of Array 2 in the Scheme can potentially impact on the receptor.
- 6.72. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation and buildings west of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there are sufficient buildings and vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 77 - 79

- 6.73. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a northern section of Array 2 in the Scheme can potentially impact on the receptors.
- 6.74. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation west of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view of the vegetation that is located to the west of the receptors. This image confirms that the topography and vegetation is sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 80 - 81

- 6.75. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a northern section of Array 2 in the Scheme can potentially impact on the receptors.
- 6.76. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings and vegetation west of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that the buildings and vegetation are sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 82

- 6.77. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a northern section of Array 2 in the Scheme can potentially impact on the receptor.

- 6.78. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image shows that there will be top floor views from the receptor into the Scheme where glint and glare is possible. Therefore, the impact remains **Low**.

Receptor 83

- 6.79. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a northern section of Array 2 in the Scheme can potentially impact on the receptor.
- 6.80. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation and buildings west of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view of the vegetation along the western boundary of the receptor. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptors 97 - 100

- 6.81. The 'Glare Reflections on the PV Footprint' chart shown in **Annex D**, shows that a central section of Array 4 in the Scheme can potentially impact on the receptors.
- 6.82. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. The second image is taken where the red dot is located on the aerial image, with a view towards the receptors. This image shows that only the gable end of Receptor 97 will have views into the Scheme where glint and glare is possible. Therefore, impacts at Receptors 98, 99 and 100 reduce to **None**, whilst Receptor 97 remains **High**.

Receptors 101 - 103

- 6.83. The 'Glare Reflections on the PV Footprint' chart shown in **Annex D**, shows that a central section of Array 4 in the Scheme can potentially impact on the receptors.
- 6.84. The first image in **Annex N** is an aerial image which shows the receptors' location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation west of the receptors to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 104

- 6.85. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a central section of Array 4 in the Scheme can potentially impact on the receptor.

- 6.86. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings and vegetation west of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there are sufficient buildings and vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 105

- 6.87. The 'Glare Reflections on the PV Footprint' chart shown in **Annex D**, shows that a central section of Array 4 in the Scheme can potentially impact on the receptor.
- 6.88. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient buildings and vegetation west of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the Scheme. This image confirms that there are sufficient buildings and vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 106

- 6.89. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a central section of Array 4 in the Scheme can potentially impact on the receptor.
- 6.90. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation west of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view towards the receptor. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 107

- 6.91. The 'Glare Reflections on the PV Footprint' chart shown in **Annex E**, shows that a northern section of Array 4 in the Scheme can potentially impact on the receptor.
- 6.92. The first image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. Also, it shows that there is likely to be sufficient vegetation west of the receptor to screen views of the Scheme where glint and glare is possible. The second image is taken where the red dot is located on the aerial image, with a view of the vegetation along the eastern boundary of Array 4. This image confirms that there is sufficient vegetation to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Road Receptors

- 6.93. **Table 6-2** shows a summary of the modelling results for each of the Road Receptor Points whilst the detailed results and ocular impact charts can be viewed in **Annex F, G, H, and I**.
- 6.94. **Annex F and G** show the analysis for Receptors 1 – 48, whilst **Annex H and I** show the analysis for Receptors 49 – 95.
- 6.95. The 14 receptors (96 – 109) within the no-reflection zones outlined previously have been excluded from the detailed modelling as they will never receive glint and glare impacts from the Scheme.
- 6.96. **Table 6-2** shows the worst-case impact at each receptor, based on a theoretical modelled impact without consideration of local vegetation or other obstacles and assuming no cloud at any point in the year. Therefore, these results are assuming an absolute worst-case scenario.

Table 6-2: Potential for Glint and Glare theoretical impact on Road Based Receptors

Receptor	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Magnitude of Theoretical Impact	Worst Case Tilt
1	0	0	0	None	N/A
2	0	0	0	None	N/A
3	0	0	0	None	N/A
4	70	0	0	Low	5
5	315	0	0	Low	5
6	1923	161	0	High	5
7	3968	791	0	High	5
8	3550	1312	0	High	5
9	2389	802	0	High	45
10	2077	992	0	High	45
11	1445	3029	0	High	45
12	1746	1117	0	High	45
13	2531	2184	0	High	5
14	2868	2361	0	High	5
15	3342	1314	0	High	5

Receptor	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Magnitude of Theoretical Impact	Worst Case Tilt
16	4331	512	0	High	45
17	4285	279	0	High	45
18	3359	0	0	Low	45
19	4918	0	0	Low	45
20	6031	0	0	Low	45
21	7061	0	0	Low	45
22	6879	0	0	Low	45
23	6919	0	0	Low	45
24	7148	11	0	High	45
25	7156	387	0	High	45
26	8011	782	0	High	45
27	7815	673	0	High	45
28	6620	1316	0	High	45
29	6979	1530	0	High	45
30	6524	1448	0	High	45
31	185	0	0	Low	5
32	377	0	0	Low	5
33	956	0	0	Low	45
34	2487	0	0	Low	45
35	4073	260	0	High	45
36	7435	287	0	Low	45
37	7536	0	0	Low	45
38	7446	0	0	Low	45
39	7267	25	0	High	45
40	7307	670	0	High	45

Receptor	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Magnitude of Theoretical Impact	Worst Case Tilt
41	7516	1533	0	High	45
42	6271	2176	0	High	45
43	5224	2627	0	High	45
44	4425	2506	0	High	45
45	4544	2735	0	High	45
46	4180	2125	0	High	45
47	3667	405	0	High	5
48	5401	405	0	High	45
49	2262	1496	0	High	45
50	4234	2708	0	High	45
51	3947	3241	0	High	45
52	4607	461	0	High	5
53	3373	103	0	High	5
54	2064	68	0	High	5
55	2555	61	0	High	5
56	7260	0	0	Low	45
57	6877	187	0	High	5
58	7105	517	0	High	5
59	5348	967	0	High	5
60	3598	2303	0	High	45
61	1958	1666	0	High	45
62	3050	1096	0	High	45
63	2074	2089	0	High	45
64	2222	107	0	High	45
65	2823	448	0	High	5

Receptor	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Magnitude of Theoretical Impact	Worst Case Tilt
66	2667	2769	0	High	5
67	1722	754	0	High	45
68	434	246	0	High	45
69	56	0	0	Low	45
70	4231	2591	0	High	45
71	11144	7833	0	High	5
72	10433	7977	0	High	5
73	9867	7291	0	High	5
74	5754	5685	0	High	45
75	6029	3191	0	High	45
76	6537	4099	0	High	5
77	5819	6395	0	High	45
78	7138	7437	0	High	45
79	8023	3888	0	High	45
80	6584	9169	0	High	45
81	6432	7585	0	High	45
82	5299	7019	0	High	45
83	6329	9032	0	High	45
84	7849	12037	0	High	45
85	8063	11561	0	High	45
86	6275	3872	0	High	45
87	5373	2715	0	High	45
88	5031	2927	0	High	45
89	5648	7135	0	High	45
90	6183	2140	0	High	45

Receptor	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Magnitude of Theoretical Impact	Worst Case Tilt
91	6212	1637	0	High	45
92	7433	1276	0	High	45
93	7123	184	0	High	45
94	6834	0	0	Low	45
95	6679	0	0	Low	45

- 6.97. As can be seen in **Table 6-2**, there are 73 receptor points which have potential glare impacts with the “potential for after-image” (yellow glare), which is a **High** impact. Whilst 19 receptor points have potential glare impacts with the “low potential for after-image” (green glare, which is a **Low** impact **Annex F, G, H, and I** show detailed analysis of when the glint and glare impacts are possible, whilst also showing from which parts of the solar farm the solar glint is reflected from.
- 6.98. **Annex N** shows two 2021 Google Earth images taken towards the Scheme location at each of the receptor points where an impact is anticipated. The first image is a ground level terrain view and is based on the height data of the surrounding land showing no intervening vegetation or buildings. The solar farm has been drawn as a white polygon and can be seen on the images when the solar farm is theoretically visible. The area of the solar farm from where reflections may be possible has been drawn as a yellow polygon. The second image is a street view image pointing in the same direction as the terrain image. This gives a good indication as to whether the area of the solar farm where reflections are theoretically possible will be visible from the receptor point. For some receptors a field of view (FOV) has been drawn between two red lines, where the glare is situated outside this FOV, the impact is reduced to **None**.
- 6.99. As can be seen in **Annex J**, views of the Scheme from all receptors, with exception of receptors 9, 10, 11, 12, 13, 14, 15, 58, 67, 68, 76, 78, 83,84, 85 and 86, are blocked by a mixture of intervening vegetation, buildings, topography or outside the field of view of the driver. Therefore, impacts upon these receptors reduce to **None**. Impacts upon receptors 9, 10, 11, 12, 13, 14, 15, 58, 67, 68, 76, 78, 83,84, 85 and 86, remain **High**.

River Trent

- 6.100. The impacts along the A156 (Road Receptors 31 – 54) have been classified as **None** once a visibility assessment has been undertaken. Therefore, it can be concluded that there will be no impacts upon the users of the River Trent, as the same vegetation and topography screening the A156 will screen views from the River Trent into the Scheme where glint and glare is possible.

Rail Receptors

- 6.101. **Table 6-3** shows a summary of the modelling results for each of the Rail Receptor Points whilst the detailed results and ocular impact charts can be viewed in **Annex J and K**.
- 6.102. The three receptors within the no-reflection zones outlined previously have been excluded from the detailed modelling as they will never receive glint and glare impacts from the Scheme.
- 6.103. **Table 6-3** shows the worst-case impact at each receptor, based on a theoretical modelled impact without consideration of local vegetation or other obstacles and assuming no cloud at any point in the year. Therefore, these results are assuming an absolute worst-case scenario.

Table 6-3: Potential for Glint and Glare impact on Rail Based Receptors

Receptor	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Magnitude of Impact	Worst Case Tilt
1	0	0	0	None	N/A
2	0	0	0	None	N/A
3	1	0	0	Low	5
4	1144	0	0	Low	5
5	1660	99	0	High	45
6	3200	421	0	High	45
7	4562	1602	0	High	45
8	5207	1484	0	High	45
9	5749	2786	0	High	45
10	7718	3607	0	High	45
11	18539	28442	0	High	5
12	17915	28749	0	High	5
13	11630	19084	0	High	5
14	9586	9563	0	High	5
15	4453	5056	0	High	45
16	5078	2862	0	High	45
17	12659	15522	0	High	5

Receptor	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Magnitude of Impact	Worst Case Tilt
18	3748	9236	0	High	45
19	3944	12368	0	High	45
20	4038	8845	0	High	45
21	3892	13500	0	High	45
22	6571	4518	0	High	45
23	3323	2329	0	High	5
24	2168	27	0	High	5

- 6.104. As can be seen in **Table 6-3**, there are 20 receptor points which have potential glare impacts with the “potential for after-image” (yellow glare), which is a **High** impact, whilst two receptor points have “low potential for after-image” (Green Glare), which is a **Low** impact. **Annex J and K** shows detailed analysis of when the glint and glare impacts are possible, whilst also showing from which parts of the solar farm the solar glint is reflected from.
- 6.105. **Annex N** shows 2021 Google Earth images that give an insight into how each receptor will be impacted by the glint and glare from the Scheme. There is a mixture of images taken, which include aerial, ground level and street level. The aerial images show the location of the receptor with the solar farm drawn as a white polygon and can be seen on the images when the solar farm is theoretically visible. The area of the solar farm from where reflections may be possible has been drawn as a yellow polygon. The ground level terrain is based on the height data of the surrounding land showing no intervening vegetation or buildings. The white and yellow polygons can be seen in this view also. The street view gives a good indication as to whether the area of the solar farm where reflections are theoretically possible will be visible from the receptor point.

Receptor 3

- 6.106. The ‘Glare Reflections on the PV Footprint’ chart shown in **Annex J**, shows that a northern section of Array 3 in the Scheme can potentially impact on the receptor.
- 6.107. The image in **Annex N** is an aerial image which shows the receptor’s location in relation to the Scheme. The second image has been taken where the red point is located on the aerial image with a view towards the receptor. This second image confirms that the vegetation to the east of the receptor will be sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 4

- 6.108. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a northern section of Array 3 and all, except a southern section, of Array 4 in the Scheme can potentially impact on the receptor.
- 6.109. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The second image has been taken where the red point is located on the aerial image with a view towards the receptor. This second image confirms that the vegetation to the east of the receptor will be sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 5

- 6.110. The 'Glare Reflections on the PV Footprint' chart shown in **Annex K**, shows that a northern section of Array 3 and all of Array 4 in the Scheme can potentially impact on the receptor.
- 6.111. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The second image has been taken where the red point is located on the aerial image with a view towards the receptor. This second image confirms that the vegetation to the east of the receptor will be sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 6

- 6.112. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a northern section of Array 1, northern half of Array 3 and all of Array 4 in the Scheme can potentially impact on the receptor.
- 6.113. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The second image has been taken where the red point is located on the aerial image with a view towards the receptor. This second image confirms that the vegetation to the east and west of the receptor will be sufficient to screen all views of the Scheme where glint and glare is possible. Therefore, the impact is reduced to **None**.

Receptor 7

- 6.114. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a northern section of Array 1, all of Array 3 and all, except a northern section, of Array 4 in the Scheme can potentially impact on the receptor.
- 6.115. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 8

- 6.116. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a northern section of Array 1, all of Array 3 and the southern half Array 4 in the Scheme can potentially impact on the receptor.
- 6.117. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 9

- 6.118. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a northern section of Array 1 and all of Array 3 in the Scheme can potentially impact on the receptor.
- 6.119. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 10

- 6.120. The 'Glare Reflections on the PV Footprint' chart shown in **Annex F**, shows that a northern section of Array 1 and 2 and all of Array 3 in the Scheme can potentially impact on the receptor.
- 6.121. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 11

- 6.122. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a northern section of Array 1 and 2 and a southern section of Array 3 in the Scheme can potentially impact on the receptor.
- 6.123. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 12

- 6.124. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a northern section of Array 1 and 2 and a southern section of Array 3 in the Scheme can potentially impact on the receptor.
- 6.125. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 13

- 6.126. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a central section of Array 1 and a northern section of Array 2 in the Scheme can potentially impact on the receptor.
- 6.127. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 14

- 6.128. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a central section of Array 1 and a northern section of Array 2 in the Scheme can potentially impact on the receptor.
- 6.129. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 15

- 6.130. The 'Glare Reflections on the PV Footprint' chart shown in **Annex K**, shows that a central section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.131. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare

that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 16

- 6.132. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a central section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.133. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 17

- 6.134. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows that a central section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.135. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 18

- 6.136. The 'Glare Reflections on the PV Footprint' chart shown in **Annex K**, shows that a central section of Array 1 and 2 in the Scheme can potentially impact on the receptor.
- 6.137. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 19

- 6.138. The 'Glare Reflections on the PV Footprint' chart shown in **Annex K**, shows that a central section of Array 1 and 2 in the Scheme can potentially impact on the receptor.

6.139. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 20

6.140. The 'Glare Reflections on the PV Footprint' chart shown in **Annex K**, shows that a central section of Array 1 and 2 in the Scheme can potentially impact on the receptor.

6.141. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 21

6.142. The 'Glare Reflections on the PV Footprint' chart shown in **Annex K**, shows that a central section of Array 1 and southern section of Array 2 in the Scheme can potentially impact on the receptor.

6.143. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 22

6.144. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.

6.145. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 23

6.146. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.

6.147. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Receptor 24

6.148. The 'Glare Reflections on the PV Footprint' chart shown in **Annex J**, shows a southern section of Array 1 and 2 in the Scheme can potentially impact on the receptor.

6.149. The image in **Annex N** is an aerial image which shows the receptor's location in relation to the Scheme. The image is an aerial image which shows the receptor with the driver's field of view (50-degrees) shown between the two red lines for each direction. This image shows the glare that could potentially impact upon the receptor is outside the field of view for the train driver. Therefore, the impact is reduced to **None**.

Aviation Receptors

6.150. **Table 6-4** shows a summary of the modelling results for each of the runway approach paths and the ATCT's, whilst the detailed results and ocular impact charts can be viewed in **Annex L and M**.

6.151. **Table 6-4** shows the worst-case impact at each receptor, based on a theoretical modelled impact without consideration of local vegetation or other obstacles and assuming no cloud at any point in the year. Therefore, these results are assuming an absolute worst-case scenario.

Table 6-4: Summary of Gamston Airfield and Sturgate Airfield Glare Results

Component	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Worst Case Tilt
Gamston Airfield				
Runway 03	0	0	0	N/A
Runway 14	0	0	0	N/A
Runway 21	0	0	0	N/A
Runway 32	0	0	0	N/A
ATCT	4774	0	0	45
Sturgate Airfield				
Runway 09	0	0	0	N/A

Component	Green Glare (mins)	Yellow Glare (mins)	Red Glare (mins)	Worst Case Tilt
Runway 27	734	0	0	5

- 6.152. As can be seen in **Table 6-4**, there are no Glare impacts for the receptors at Gamston Airfield runways or runway 09 at Sturgate Airfield. There is Green Glare potential for runway 27 at Sturgate and the ATCT at Gamston Airfield, which is an **acceptable impact** upon runways but an **unacceptable impact** upon the ATCT according to FAA guidance.
- 6.153. The impact on the Gamston ATCT has also been assessed and it shows that there will be 4838 minutes of green glare impacts predicted per year on the ATCT. However, upon review of the ground elevation between the Scheme and the ATCT, there is a high point circa 2.87km away from the ATCT which is circa 29m higher than the ATCT (See **Annex O**). As the ATCT will not be able to see the Scheme, where the solar panels are located, the impacts can be reduced to **None** and **Not Significant**.
- 6.154. Overall impacts on Aviation receptors is **Low** and **Not Significant**.

7. GROUND BASED RECEPTOR MITIGATION

7.1. It is proposed that mitigation measures are put in place due to the **High** and **Medium** impacts that were found during the visibility analysis at Residential Receptor 14 and 97 and Road Receptors 9, 10, 11, 12, 13, 14, 15, 58, 67, 68, 76, 78, 83, 84, 85 and 86. These measures include:

- Hedgerows to be implemented along the following boundaries (See **Figure 5: Annex A** for A/B/C reference): Western border of A2, B1, B2 and C11, northwest border of B3, northern border of B1 and southern border of A22, B2, B3, B25, C11 and C12. These hedgerows will be infilled and maintained to a height of at least 3m and will screen all views of the Scheme where glint and glare is possible from Residential Receptor 14 and 97 and Road Receptors 9, 10, 11, 12, 13, 14, 15, 58, 67, 68, 76, 78, 83,84, 85 and 86.

7.2. **Tables 7-1, 7-2 and 7-3** show the impacts at each stage of the glint and glare analysis, with the final residual impacts considered once the mitigation is in place.

Table 7-1: Residual Glint and Glare Impacts on Residential Receptors

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
1	None	None	None
2	None	None	None
3	None	None	None
4	None	None	None
5	None	None	None
6	None	None	None
7	None	None	None
8	None	None	None
9	None	None	None
10	Low	None	None
11	Low	None	None
12	Low	None	None

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
13	High	None	None
14	Medium	Medium	None
15	Low	None	None
16	Low	None	None
17	Low	None	None
18	Low	None	None
19	Low	None	None
20	Medium	Low	Low
21	Low	Low	Low
22	Low	None	None
23	High	None	None
24	None	None	None
25	None	None	None
26	Low	None	None
27	Low	None	None
28	None	None	None
29	None	None	None
30	None	None	None
31	None	None	None
32	Low	None	None
33	Low	None	None
34	Low	None	None
35	High	None	None
36	Medium	None	None
37	High	None	None

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
38	High	None	None
39	High	None	None
40	High	None	None
41	Medium	None	None
42	High	None	None
43	Medium	None	None
44	High	None	None
45	High	None	None
46	High	None	None
47	High	None	None
48	Low	None	None
49	Low	None	None
50	Low	None	None
51	Low	None	None
52	Medium	None	None
53	Low	None	None
54	Low	None	None
55	Low	None	None
56	Low	None	None
57	Low	None	None
58	Low	None	None
59	Low	None	None
60	Low	None	None
61	Low	None	None
62	Low	None	None

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
63	Low	None	None
64	Low	None	None
65	Low	None	None
66	High	None	None
67	High	None	None
68	High	None	None
69	High	Low	Low
70	Medium	None	None
71	Low	None	None
72	Low	None	None
73	Low	None	None
74	Low	None	None
75	Low	None	None
76	Low	None	None
77	Low	None	None
78	Low	None	None
79	Low	None	None
80	Low	None	None
81	Low	None	None
82	Low	Low	Low
83	Low	None	None
84	None	None	None
85	None	None	None
86	None	None	None
87	None	None	None

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
88	None	None	None
89	None	None	None
90	None	None	None
91	None	None	None
92	None	None	None
93	None	None	None
94	None	None	None
95	None	None	None
96	None	None	None
97	High	High	None
98	High	None	None
99	Medium	None	None
100	High	None	None
101	Medium	None	None
102	Low	None	None
103	Low	None	None
104	Low	None	None
105	Medium	None	None
106	Low	None	None
107	Low	None	None

Table 7-2: Residual Glint and Glare Impacts on Road Receptors

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
1	None	None	None
2	None	None	None
3	None	None	None
4	Low	None	None
5	Low	None	None
6	High	None	None
7	High	None	None
8	High	None	None
9	High	High	None
10	High	High	None
11	High	High	None
12	High	High	None
13	High	High	None
14	High	High	None
15	High	High	None
16	High	None	None
17	High	None	None
18	Low	None	None
19	Low	None	None
20	Low	None	None
21	Low	None	None
22	Low	None	None
23	Low	None	None

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
24	High	None	None
25	High	None	None
26	High	None	None
27	High	None	None
28	High	None	None
29	High	None	None
30	High	None	None
31	Low	None	None
32	Low	None	None
33	Low	None	None
34	Low	None	None
35	High	None	None
36	Low	None	None
37	Low	None	None
38	Low	None	None
39	High	None	None
40	High	None	None
41	High	None	None
42	High	None	None
43	High	None	None
44	High	None	None
45	High	None	None
46	High	None	None
47	High	None	None
48	High	None	None

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
49	High	None	None
50	High	None	None
51	High	None	None
52	High	None	None
53	High	None	None
54	High	None	None
55	High	None	None
56	Low	None	None
57	High	None	None
58	High	High	None
59	High	None	None
60	High	None	None
61	High	None	None
62	High	None	None
63	High	None	None
64	High	None	None
65	High	None	None
66	High	None	None
67	High	High	None
68	High	High	None
69	Low	None	None
70	High	None	None
71	High	None	None
72	High	None	None
73	High	None	None

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
74	High	None	None
75	High	None	None
76	High	High	None
77	High	None	None
78	High	High	None
79	High	None	None
80	High	None	None
81	High	None	None
82	High	None	None
83	High	High	None
84	High	High	None
85	High	High	None
86	High	High	None
87	High	None	None
88	High	None	None
89	High	None	None
90	High	None	None
91	High	None	None
92	High	None	None
93	High	None	None
94	Low	None	None
95	Low	None	None

Table 7-3: Residual Glint and Glare Impacts on Rail Receptors

Receptor	Magnitude of Impact		
	After Geometric Analysis	After Visibility Analysis	Residual Impacts
1	None	None	None
2	None	None	None
3	Low	None	None
4	Low	None	None
5	High	None	None
6	High	None	None
7	High	None	None
8	High	None	None
9	High	None	None
10	High	None	None
11	High	None	None
12	High	None	None
13	High	None	None
14	High	None	None
15	High	None	None
16	High	None	None
17	High	None	None
18	High	None	None
19	High	None	None
20	High	None	None
21	High	None	None
22	High	None	None
23	High	None	None
24	High	None	None

7.3. Table 7 – 4, 7 – 5 and 7 - 6 show the overall impacts for all residential, road and rail receptors.

Table 7-4: Solar Reflection: Residential Receptors

Magnitude	Theoretical Visibility	Actual Visibility (No Mitigation)	Actual Visibility with Mitigation
High	19	1	0
Medium	10	1	0
Low	50	4	4
None	28	101	105

- **High** – Solar reflections impacts of over 30 hours per year or over 30 minutes per day
- **Medium** - Solar reflections impacts between 20 and 30 hours per year or between 20 minutes and 30 minutes per day
- **Low** - Solar reflections impacts between 0 and 20 hours per year or between 0 minutes and 20 minutes per day
- **None** - Effects not geometrically possible or no visibility of reflective surfaces likely due to high levels of intervening screening

Table 7-5: Solar Reflections: Road Receptors

Magnitude	Theoretical Visibility	Actual Visibility (No Mitigation)	Actual Visibility with Mitigation
High	73	16	0
Medium	0	0	0
Low	19	0	0
None	3	79	95

- **High** - Solar reflections impacts of over 30 hours per year or over 30 minutes per day
- **Medium** - Solar reflections impacts between 20 and 30 hours per year or between 20 minutes and 30 minutes per day
- **Low** - Solar reflections impacts between 0 and 20 hours per year or between 0 minutes and 20 minutes per day
- **None** - Effects not geometrically possible or no visibility of reflective surfaces likely due to high levels of intervening screening

Table 7-6: Solar Reflections: Rail Receptors

Magnitude	Theoretical Visibility	Actual Visibility (No Mitigation)	Actual Visibility with Mitigation
High	20	0	0
Medium	0	0	0
Low	2	0	0
None	2	24	24

- **High** - Solar reflections impacts of over 30 hours per year or over 30 minutes per day
- **Medium** - Solar reflections impacts between 20 and 30 hours per year or between 20 minutes and 30 minutes per day
- **Low** - Solar reflections impacts between 0 and 20 hours per year or between 0 minutes and 20 minutes per day
- **None** - Effects not geometrically possible or no visibility of reflective surfaces likely due to high levels of intervening screening

8. SUMMARY

- 8.1. There is little guidance or policy available in the UK at present in relation to the assessment of glint and glare from Scheme developments. However, it is recognised as a potential impact which needs to be considered for a Scheme, therefore this assessment considers the potential impacts on ground-based receptors such as roads, rail, and residential dwellings as well as aviation assets.
- 8.2. This assessment considers the potential impacts on ground-based receptors such as roads, rail and residential dwellings as well as aviation assets. A 1km survey area around the Order limits is considered adequate for the assessment of residential receptors and road receptors, whilst a 30km study area is chosen for aviation receptors. Within the respective study areas of the Order limits, there are 116 residential receptors, 109 road receptors and 27 rail receptors which were considered. As per the methodology section, where there are several residential receptors within close proximity, a representative dwelling or dwellings is/are chosen for full assessment as the impacts will not vary to any significant degree. Where small groups of receptors have been evident, the receptors on either end of the group have been assessed in detail. Nine residential, 14 road and three rail receptors were dismissed as they are located within the no reflection zones. 19 aerodromes are located within the 30km study area; however, only Gamston Airfield and Sturgate Airfield required a detailed assessment as the Scheme is located within their respective safeguarding buffer zones. The other 13 aerodromes did not require a detailed assessment due to their size and/or orientation in relation to the Scheme.
- 8.3. Geometric analysis was conducted at 107 individual residential receptors, 95 road receptors and 24 rail receptors. Also, geometric analysis was conducted at six runways and one Air Traffic Control Tower (ATCT) at Gamston Airfield and Sturgate Airfield.
- 8.4. The assessment concludes that:
- Solar reflections are theoretically possible at 79 of the 107 residential receptors assessed within the 1km study area. The initial bald-earth scenario (without existing vegetation or proposed planting) identified potential impacts as **High** at 19 receptors, **Medium** at 10 receptors, **Low** at 50 receptors and **None** at the remaining 28 receptors. Upon reviewing the actual visibility of the receptors, glint and glare impacts remain **High** for one receptor, **Medium** for one receptor, **Low** for four receptors and reduce to **None** for all remaining receptors. Once mitigation was considered impacts remained **Low** for four receptors but reduced to **None** for all remaining receptors. Therefore, overall impacts on residential receptors are considered to be **not significant** and therefore **acceptable**.
 - Solar reflections are possible at 92 of the 95 road receptors assessed within the 1km study area. Upon reviewing the actual visibility of the receptors, glint and glare impacts

remain **High** for 16 receptors and reduce to **None** for the remaining receptors. Once mitigation impacts in the form of new hedgerow planting were implemented, overall impacts at all road receptors reduce to **None**.

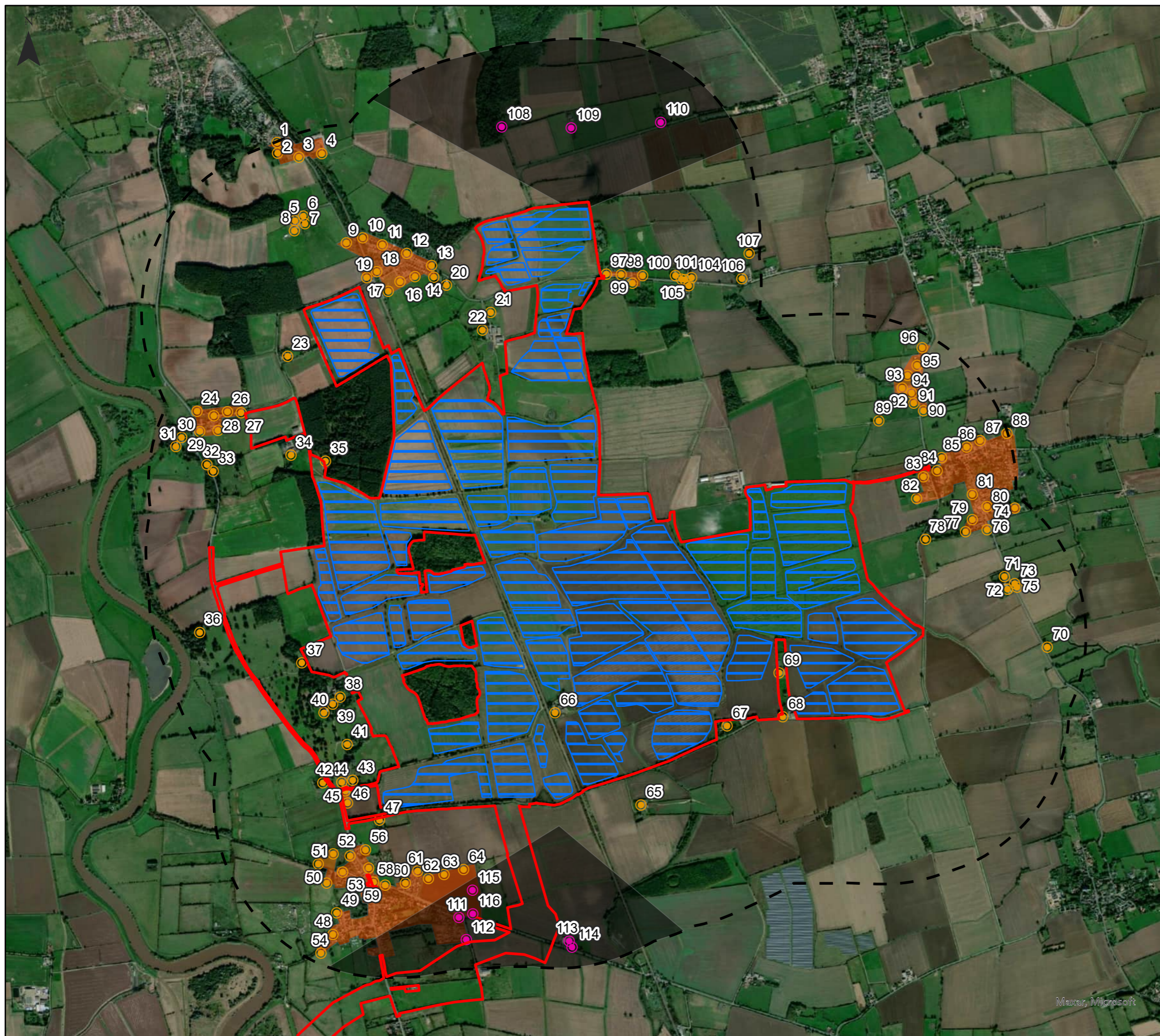
- Solar reflections are possible at 22 of the 24 rail receptors assessed within the 1km study area. Upon reviewing the actual visibility of the receptors, glint and glare impacts reduce to **None** for all receptors. Therefore, overall impacts for rail receptors are **None**. Mitigation is therefore not required for the rail receptor points
 - Six runways and one ATCT were assessed in detailed at Gamston Airfield and Sturgate Airfield. Only Green Glare impacts were predicted for Runway 27 at Sturgate Airfield and the ATCT at Gamston Airfield, which is an **acceptable impact** upon runways but an **unacceptable impact** upon the ATCT according to Federal Aviation Authority (FAA) guidance. However, upon review of the ground elevation profile between the Scheme and Gamston Airfield, it was found that the Scheme would not be visible from the ATCT and the impact would therefore reduce to **None**. Overall aviation impacts are **Low** and **Not Significant**.
- 8.5. Mitigation measures in the form of hedgerow planting are required to be put in place due to the **High** and **Medium** impacts that were found during the visibility analysis at Residential Receptor 14 and 97 and Road Receptors 9, 10, 11, 12, 13, 14, 15, 58, 67, 68, 76, 78, 83,84, 85 and 86. This includes hedgerows to be grown, infilled, gapped up and maintained to a height of at least 3m in those areas outlined in **paragraph 7.1**.
- 8.6. The effects of glint and glare and their impact on local receptors has been analysed in detail and there is predicted to be **Low** impacts at four Residential Receptors, whilst the remaining ground-based receptors are expected to have **No Impacts** once mitigation measures have been considered. Impacts upon aviation receptors are predicted to be **Low**. Therefore, overall impacts are **Negligible**.

9. APPENDICES








ANNEX A: FIGURES

- Figure 1: Residential Receptor Map
- Figure 2: Road Receptor Map
- Figure 3: Rail Receptor Map
- Figure 4: Gamston Airfield Aerodrome Chart
- Figure 5: Mitigation Proposals
- Figure 6: Panel Area Labels

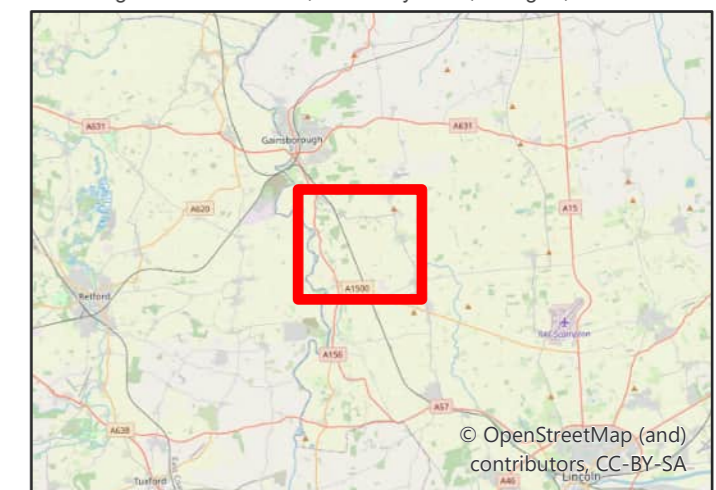
Gate Burton Solar Farm Residential Based Receptors Figure 1



Key

-  Development Boundary
-  Panel Boundary
-  1km Study Area
-  Glare Not Possible at Receptor
-  Glare Possible at Receptor
-  Non-Reflection Zones
-  Residential Area

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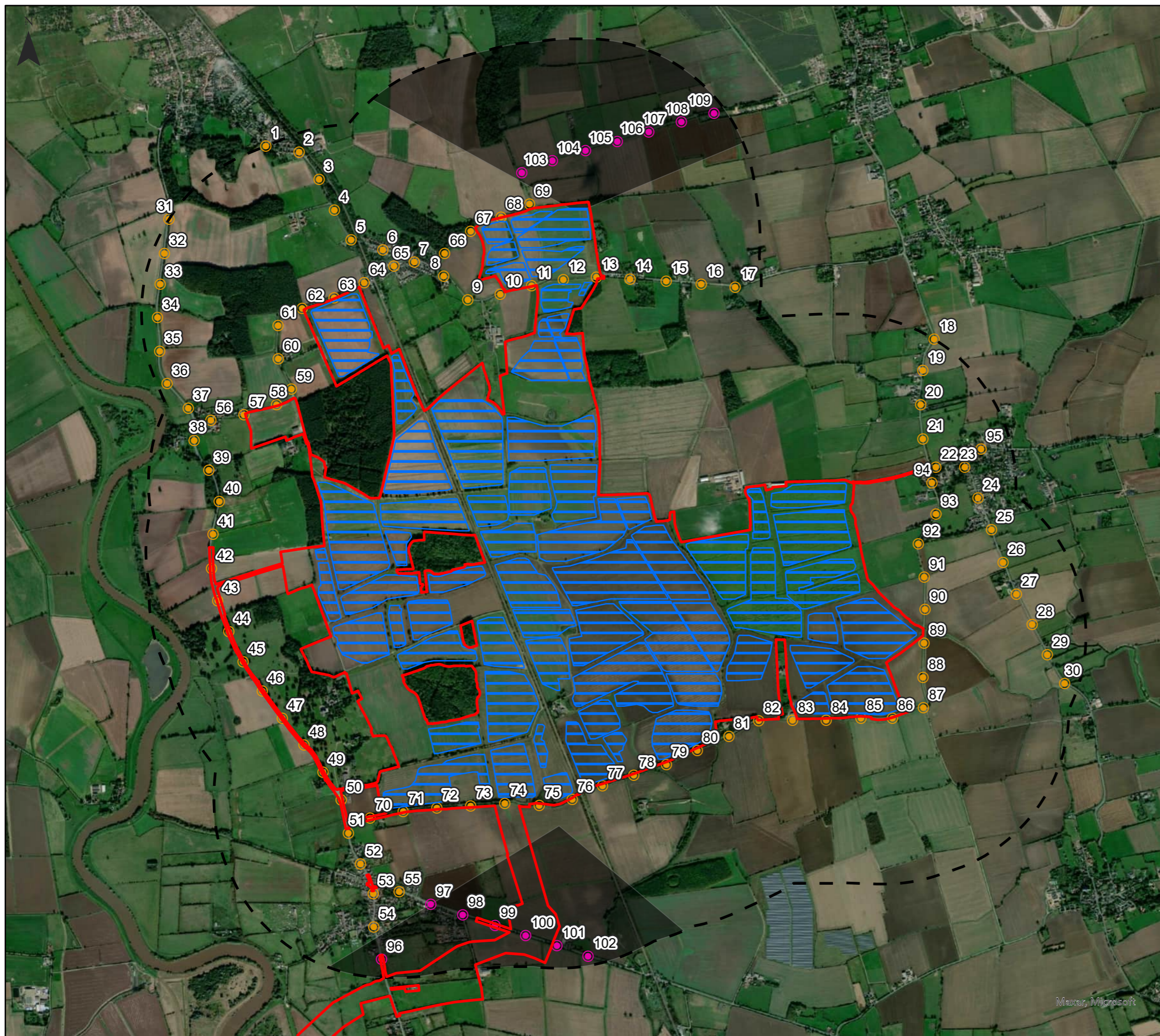
0 0.5 1 2 Kilometers

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Date: 12/01/2023
 Drawn By: David Thomson
 Scale (A3): 1:22,500
 Drawing No: NEO01107/0011/B



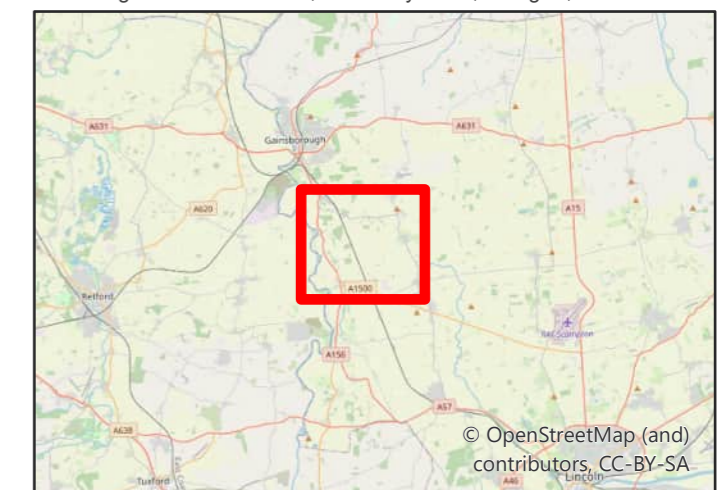
Gate Burton Solar Farm Road Based Receptors Figure 2



Key

- Development Boundary
- Panel Boundary
- 1km Study Area
- Glare Not Possible at Receptor
- Glare Possible at Receptor
- Non-Reflection Zones

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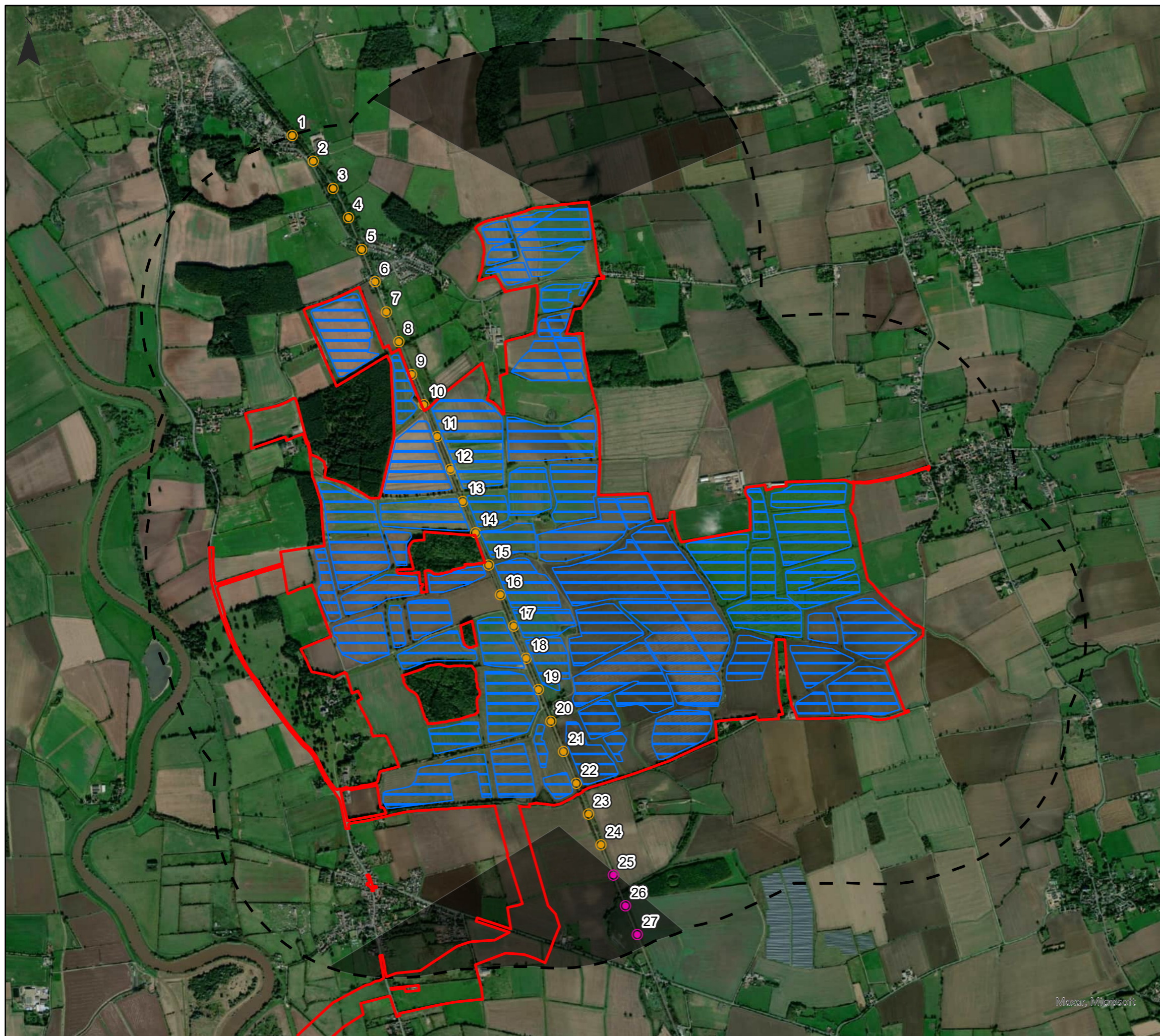
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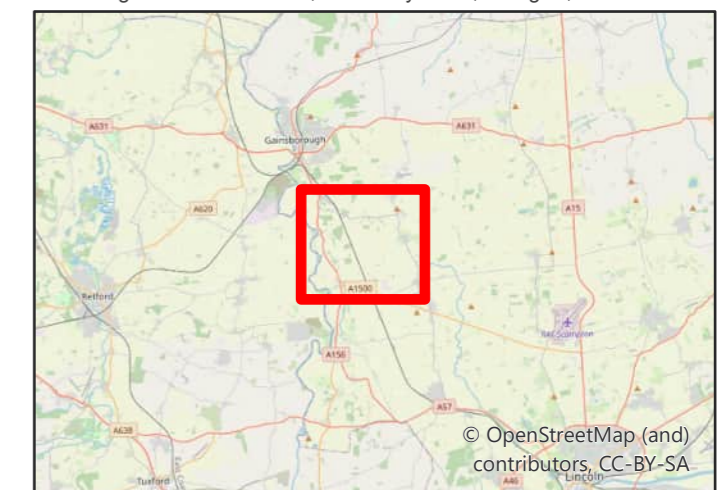
Gate Burton Solar Farm Rail Based Receptors Figure 3



Key

-  Development Boundary
-  Panel Boundary
-  1km Study Area
-  Glare Not Possible at Receptor
-  Glare Possible at Receptor
-  Non-Reflection Zones

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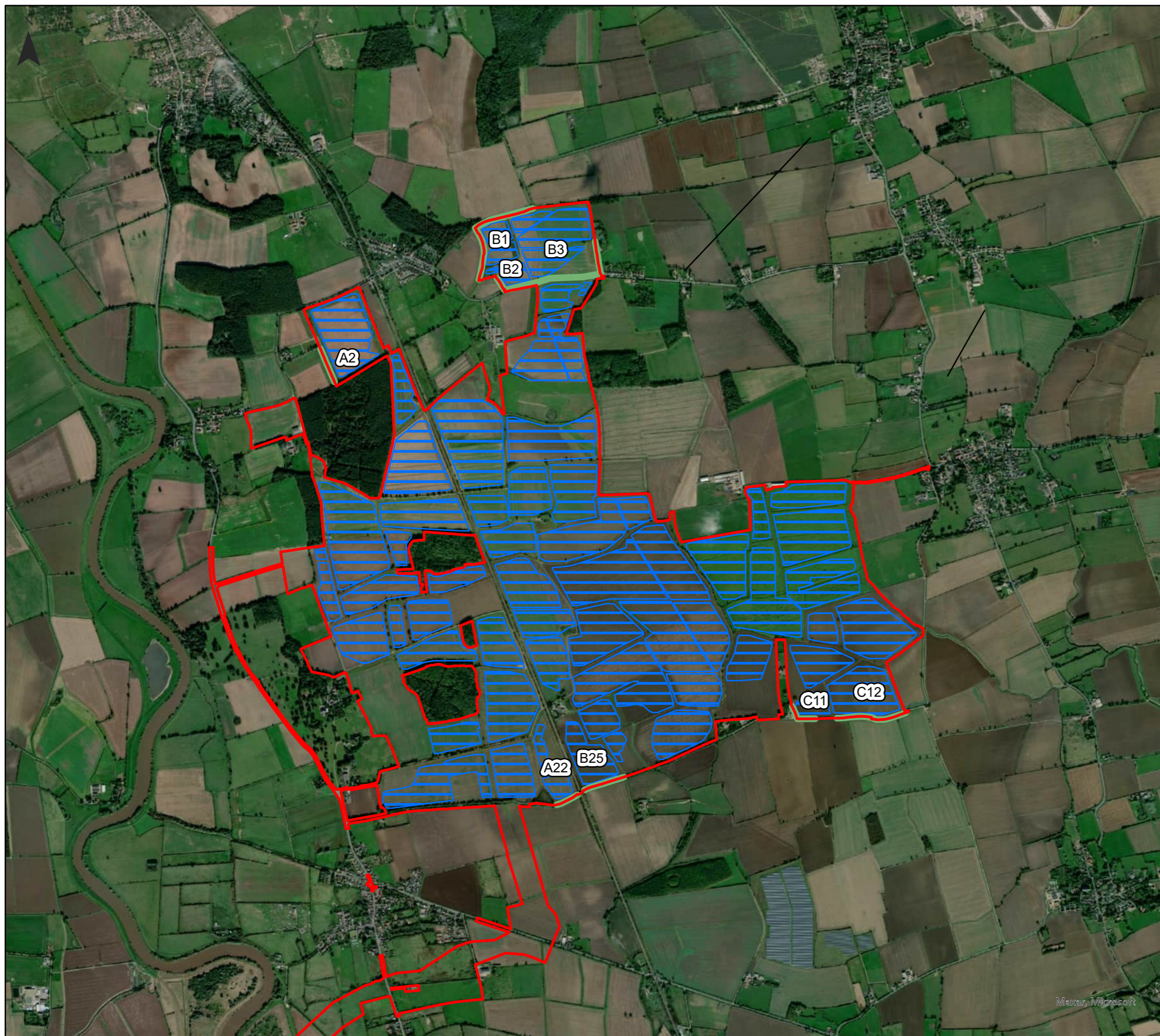
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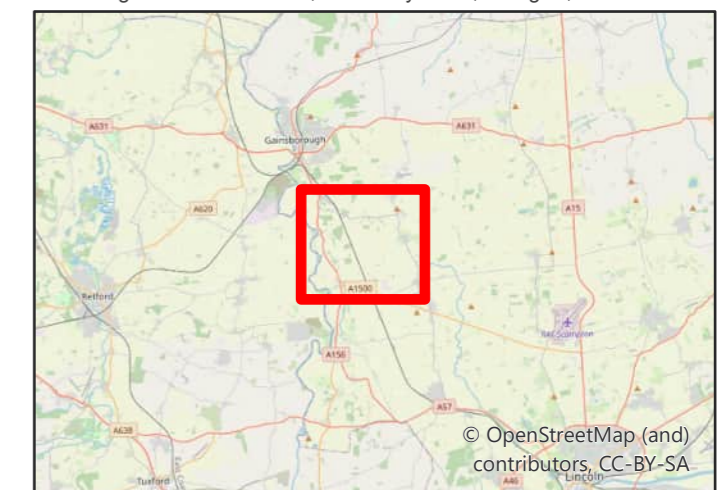
Gate Burton Solar Farm Mitigation Measures Figure 5

Key

-  Development Boundary
-  Mitigation Measures
-  Panel Boundary



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0 0.5 1 2 Kilometers

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Annex A- Figure 6: Panel Area Labels



ANNEX B: RESIDENTIAL RECEPTOR GLARE RESULTS 5 DEGREES (1 – 54)



Gate Burton Solar Farm

Gate Burton Residential 5 Deg Receptors 1 - 54

Created Oct. 11, 2022
Updated Jan. 16, 2023
Time-step 1 minute
Timezone offset UTC0
Site ID 77371.13697

Project type Advanced
Project status: active
Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
Ocular transmission coefficient: 0.5
Pupil diameter: 0.002 m
Eye focal length: 0.017 m
Sun subtended angle: 9.3 mrad

PV Analysis Methodology: Version 2
Enhanced subtended angle calculation: On

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

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV array 1	5.0	180.0	59,708	10,685	-
PV array 2	5.0	180.0	32,251	15,055	-
PV array 3	5.0	180.0	42,507	1,132	-
PV array 4	5.0	180.0	32,589	7,683	-

Component Data

PV Array(s)

Total PV footprint area: 5,139,318 m²

Name: PV array 1
Footprint area: 1,571,937 m²
Axis tracking: Fixed (no rotation)
Tilt: 5.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.360147	-0.740953	25.35	3.50	28.85
2	53.359084	-0.745266	26.77	3.50	30.27
3	53.355319	-0.742820	26.81	3.50	30.31
4	53.356663	-0.738743	24.46	3.50	27.96
5	53.356561	-0.738142	24.75	3.50	28.25
6	53.355985	-0.737949	25.96	3.50	29.46
7	53.352569	-0.737634	28.44	3.50	31.94
8	53.348967	-0.739265	30.87	3.50	34.37
9	53.348980	-0.740166	32.28	3.50	35.78
10	53.349851	-0.742806	34.70	3.50	38.20
11	53.350209	-0.744994	33.15	3.50	36.65
12	53.349364	-0.744479	34.45	3.50	37.95
13	53.346584	-0.744007	28.50	3.50	32.00
14	53.346456	-0.745338	28.76	3.50	32.26
15	53.344496	-0.744522	24.56	3.50	28.06
16	53.344394	-0.745059	24.44	3.50	27.94
17	53.340820	-0.743042	25.80	3.50	29.30
18	53.340166	-0.741411	27.56	3.50	31.06
19	53.340794	-0.738235	28.98	3.50	32.48
20	53.339705	-0.737398	30.42	3.50	33.92
21	53.340358	-0.734845	29.92	3.50	33.42
22	53.340166	-0.730811	22.88	3.50	26.38
23	53.338514	-0.730446	22.02	3.50	25.52
24	53.338232	-0.730682	23.00	3.50	26.50
25	53.337489	-0.730639	20.94	3.50	24.44
26	53.336899	-0.735360	27.47	3.50	30.97
27	53.335067	-0.734845	26.33	3.50	29.83
28	53.334836	-0.736540	27.83	3.50	31.33
29	53.333850	-0.737184	27.62	3.50	31.12
30	53.333414	-0.739651	29.81	3.50	33.31
31	53.332812	-0.739437	29.53	3.50	33.03
32	53.332632	-0.738879	29.27	3.50	32.77
33	53.332786	-0.737248	27.89	3.50	31.39
34	53.332940	-0.732570	26.24	3.50	29.74
35	53.333901	-0.732849	25.91	3.50	29.41
36	53.334183	-0.730940	21.72	3.50	25.22
37	53.332978	-0.730360	21.55	3.50	25.05
38	53.333017	-0.727871	16.36	3.50	19.86
39	53.332889	-0.727056	15.65	3.50	19.15
40	53.332966	-0.725918	16.04	3.50	19.54
41	53.333645	-0.725232	15.32	3.50	18.82
42	53.332812	-0.724052	18.46	3.50	21.96
43	53.333273	-0.722356	17.39	3.50	20.89
44	53.334132	-0.722957	14.09	3.50	17.59
45	53.334196	-0.724524	13.88	3.50	17.38
46	53.335336	-0.724459	12.00	3.50	15.50
47	53.336271	-0.725082	12.57	3.50	16.07
48	53.337040	-0.724738	13.00	3.50	16.50
49	53.342882	-0.728429	22.80	3.50	26.30
50	53.342447	-0.731025	25.49	3.50	28.99
51	53.340973	-0.730682	23.51	3.50	27.01
52	53.340948	-0.731691	25.53	3.50	29.03
53	53.341230	-0.732291	26.22	3.50	29.72
54	53.342293	-0.732613	24.42	3.50	27.92
55	53.343997	-0.733600	20.64	3.50	24.14
56	53.344791	-0.729588	20.02	3.50	23.52
57	53.345508	-0.730060	21.26	3.50	24.76
58	53.344906	-0.734416	24.49	3.50	27.99
59	53.345047	-0.735102	24.64	3.50	28.14
60	53.343702	-0.734995	21.04	3.50	24.54
61	53.343741	-0.735832	21.80	3.50	25.30
62	53.344945	-0.736132	23.95	3.50	27.45
63	53.344958	-0.737956	22.50	3.50	26.00
64	53.345419	-0.738149	22.90	3.50	26.40

65	53.345432	-0.736712	23.92	3.50	27.42
66	53.346494	-0.737248	22.39	3.50	25.89
67	53.346968	-0.736712	22.24	3.50	25.74
68	53.347429	-0.736712	22.91	3.50	26.41
69	53.347122	-0.731004	24.82	3.50	28.32
70	53.353949	-0.735574	22.75	3.50	26.25
71	53.354128	-0.736325	22.15	3.50	25.65
72	53.355306	-0.736411	22.00	3.50	25.50
73	53.356856	-0.737398	23.40	3.50	26.90
74	53.356689	-0.738128	24.36	3.50	27.86
75	53.356805	-0.738707	24.06	3.50	27.56

Name: PV array 2
Footprint area: 3,187,939 m²
Axis tracking: Fixed (no rotation)
Tilt: 5.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.353754	-0.734662	23.97	3.50	27.47
2	53.338935	-0.725169	13.57	3.50	17.07
3	53.338615	-0.723559	12.00	3.50	15.50
4	53.339140	-0.723624	12.00	3.50	15.50
5	53.339294	-0.722401	12.00	3.50	15.50
6	53.338666	-0.722207	11.79	3.50	15.29
7	53.338269	-0.722744	12.00	3.50	15.50
8	53.337500	-0.722165	11.72	3.50	15.22
9	53.337064	-0.723066	12.31	3.50	15.81
10	53.336155	-0.723452	13.00	3.50	16.50
11	53.333515	-0.721671	15.87	3.50	19.37
12	53.334143	-0.718045	11.00	3.50	14.50
13	53.334745	-0.718538	11.00	3.50	14.50
14	53.334950	-0.718152	11.00	3.50	14.50
15	53.335783	-0.717959	10.14	3.50	13.64
16	53.336616	-0.718345	9.24	3.50	12.74
17	53.336975	-0.718216	9.59	3.50	13.09
18	53.337667	-0.718688	10.61	3.50	14.11
19	53.337897	-0.717723	10.95	3.50	14.45
20	53.337859	-0.716392	9.89	3.50	13.39
21	53.337269	-0.715341	9.24	3.50	12.74
22	53.336116	-0.715856	9.81	3.50	13.31
23	53.334809	-0.714955	10.90	3.50	14.40
24	53.335732	-0.710949	11.21	3.50	14.71
25	53.336244	-0.710563	11.08	3.50	14.58
26	53.336552	-0.709983	11.04	3.50	14.54
27	53.337564	-0.710155	12.22	3.50	15.72
28	53.337603	-0.709511	12.51	3.50	16.01
29	53.338410	-0.709061	13.25	3.50	16.75
30	53.339153	-0.709211	13.80	3.50	17.30
31	53.339178	-0.705520	14.81	3.50	18.31
32	53.341318	-0.704426	14.16	3.50	17.66
33	53.341254	-0.703460	15.00	3.50	18.50
34	53.338320	-0.701636	14.00	3.50	17.50
35	53.337731	-0.702967	14.70	3.50	18.20
36	53.337052	-0.702516	14.29	3.50	17.79
37	53.337039	-0.698825	16.56	3.50	20.06
38	53.337128	-0.696336	19.06	3.50	22.56
39	53.336962	-0.695049	20.32	3.50	23.82
40	53.337295	-0.693182	19.41	3.50	22.91
41	53.339883	-0.694727	14.00	3.50	17.50
42	53.341087	-0.692023	13.00	3.50	16.50
43	53.341664	-0.692109	13.00	3.50	16.50
44	53.344277	-0.696465	12.00	3.50	15.50
45	53.348287	-0.697817	13.08	3.50	16.58
46	53.349350	-0.697602	14.02	3.50	17.52
47	53.349516	-0.698224	14.00	3.50	17.50
48	53.349427	-0.702924	17.52	3.50	21.02
49	53.348914	-0.705091	17.98	3.50	21.48
50	53.349222	-0.705305	18.00	3.50	21.50
51	53.349183	-0.706464	18.00	3.50	21.50
52	53.346980	-0.706421	17.00	3.50	20.50
53	53.346378	-0.713138	13.88	3.50	17.38
54	53.347505	-0.713910	14.28	3.50	17.78
55	53.347505	-0.714983	14.25	3.50	17.75
56	53.349030	-0.715498	16.00	3.50	19.50
57	53.349004	-0.720004	22.46	3.50	25.96
58	53.350848	-0.719789	21.00	3.50	24.50
59	53.352872	-0.719747	19.04	3.50	22.54
60	53.353564	-0.719918	18.54	3.50	22.04
61	53.352898	-0.721678	18.21	3.50	21.71
62	53.352782	-0.724574	17.76	3.50	21.26
63	53.353359	-0.728244	19.54	3.50	23.04
64	53.353961	-0.728887	19.19	3.50	22.69

65	53.354166	-0.729746	19.36	3.50	22.86
66	53.354179	-0.734016	22.69	3.50	26.19

Name: PV array 3

Footprint area: 162,584 m²

Axis tracking: Fixed (no rotation)

Tilt: 5.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.355703	-0.727643	18.87	3.50	22.37
2	53.355177	-0.725669	17.24	3.50	20.74
3	53.355088	-0.721935	18.98	3.50	22.48
4	53.355101	-0.720734	21.71	3.50	25.21
5	53.356125	-0.721034	21.89	3.50	25.39
6	53.357483	-0.721120	19.10	3.50	22.60
7	53.357534	-0.722836	18.29	3.50	21.79
8	53.359083	-0.721849	18.14	3.50	21.64
9	53.359544	-0.722107	16.73	3.50	20.23
10	53.359762	-0.721485	16.64	3.50	20.14
11	53.359583	-0.720734	17.67	3.50	21.17
12	53.360402	-0.719875	17.29	3.50	20.79
13	53.360313	-0.723673	16.00	3.50	19.50
14	53.360044	-0.724832	16.19	3.50	19.69
15	53.357585	-0.725175	17.45	3.50	20.95

Name: PV array 4

Footprint area: 216,857 m²

Axis tracking: Fixed (no rotation)

Tilt: 5.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.360082	-0.727836	17.00	3.50	20.50
2	53.360851	-0.728501	17.37	3.50	20.87
3	53.360710	-0.729596	18.17	3.50	21.67
4	53.361107	-0.729660	18.75	3.50	22.25
5	53.361952	-0.729424	19.00	3.50	22.50
6	53.362874	-0.729510	19.31	3.50	22.81
7	53.363335	-0.730003	20.12	3.50	23.62
8	53.363591	-0.729209	19.64	3.50	23.14
9	53.364052	-0.725733	17.95	3.50	21.45
10	53.364410	-0.720433	15.80	3.50	19.30
11	53.362554	-0.719918	16.00	3.50	19.50
12	53.360671	-0.724210	16.71	3.50	20.21

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	m	m	m
OP 1	53.367945	-0.748074	24.58	2.00	26.58
OP 2	53.367458	-0.747774	23.97	2.00	25.97
OP 3	53.367196	-0.746078	25.30	2.00	27.30
OP 4	53.367401	-0.743847	26.25	2.00	28.25
OP 5	53.363873	-0.746540	19.95	2.00	21.95
OP 6	53.364078	-0.745553	21.21	2.00	23.21
OP 7	53.363553	-0.745585	21.29	2.00	23.29
OP 8	53.363432	-0.746357	20.03	2.00	22.03
OP 9	53.362542	-0.741957	26.44	2.00	28.44
OP 10	53.362853	-0.740310	27.04	2.00	29.04
OP 11	53.362596	-0.738819	26.90	2.00	28.90
OP 12	53.362206	-0.736941	27.37	2.00	29.37
OP 13	53.361386	-0.734345	24.70	2.00	26.70
OP 14	53.360900	-0.734570	24.35	2.00	26.35
OP 15	53.360772	-0.735761	24.25	2.00	26.25
OP 16	53.360420	-0.736930	23.98	2.00	25.98
OP 17	53.360042	-0.738153	24.19	2.00	26.19
OP 18	53.361073	-0.739001	26.00	2.00	28.00
OP 19	53.360731	-0.740285	26.02	2.00	28.02
OP 20	53.360279	-0.732992	22.53	2.00	24.53
OP 21	53.358807	-0.729141	20.53	2.00	22.53
OP 22	53.357880	-0.729774	21.00	2.00	23.00
OP 23	53.356689	-0.747580	23.77	2.00	25.77
OP 24	53.353852	-0.755355	19.03	2.00	21.03
OP 25	53.353615	-0.753885	21.91	2.00	23.91
OP 26	53.353769	-0.752158	26.23	2.00	28.23
OP 27	53.353929	-0.751128	28.35	2.00	30.35
OP 28	53.352956	-0.753446	21.71	2.00	23.71
OP 29	53.352839	-0.755052	18.38	2.00	20.38
OP 30	53.352455	-0.756672	14.90	2.00	16.90
OP 31	53.351936	-0.757165	13.76	2.00	15.76
OP 32	53.350962	-0.754376	21.00	2.00	23.00
OP 33	53.350667	-0.753850	21.13	2.00	23.13
OP 34	53.351538	-0.747039	32.19	2.00	34.19
OP 35	53.350988	-0.744024	35.45	2.00	37.45
OP 36	53.342105	-0.755453	22.39	2.00	24.39
OP 37	53.340393	-0.746416	32.78	2.00	34.78
OP 38	53.338570	-0.743074	32.11	2.00	34.11
OP 39	53.338224	-0.743686	33.08	2.00	35.08
OP 40	53.337670	-0.744491	33.32	2.00	35.32
OP 41	53.336108	-0.742351	25.77	2.00	27.77
OP 42	53.334000	-0.744798	18.11	2.00	20.11
OP 43	53.334141	-0.742019	23.01	2.00	25.01
OP 44	53.334006	-0.743028	20.36	2.00	22.36
OP 45	53.333494	-0.742684	19.55	2.00	21.55
OP 46	53.332949	-0.742545	17.81	2.00	19.81
OP 47	53.331943	-0.739745	27.86	2.00	29.86
OP 48	53.326202	-0.743908	8.55	2.00	10.55
OP 49	53.327151	-0.743586	8.71	2.00	10.71
OP 50	53.328775	-0.744515	9.33	2.00	11.33
OP 51	53.329685	-0.745373	8.53	2.00	10.53
OP 52	53.330351	-0.743850	8.69	2.00	10.69
OP 53	53.329390	-0.743249	9.76	2.00	11.76
OP 54	53.325072	-0.745073	8.09	2.00	10.09

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
PV array 1	5.0	180.0	59,708	10,685	-	-
PV array 2	5.0	180.0	32,251	15,055	-	-
PV array 3	5.0	180.0	42,507	1,132	-	-
PV array 4	5.0	180.0	32,589	7,683	-	-

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
pv-array-1 (green)	0	173	966	1280	908	674	810	1251	1108	439	5	0
pv-array-1 (yellow)	0	0	0	7	128	244	206	26	2	0	0	0
pv-array-2 (green)	0	77	545	686	592	535	582	664	625	227	0	0
pv-array-2 (yellow)	0	0	0	63	450	558	503	212	4	0	0	0
pv-array-3 (green)	0	54	459	672	807	823	837	734	557	178	0	0
pv-array-3 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
pv-array-4 (green)	0	81	550	447	777	1049	929	501	564	237	0	0
pv-array-4 (yellow)	0	0	0	200	156	24	60	274	38	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

PV array 1 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	7	0
OP: OP 14	106	0
OP: OP 15	107	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0

OP: OP 20	456	0
OP: OP 21	899	0
OP: OP 22	1430	0
OP: OP 23	920	1157
OP: OP 24	2035	0
OP: OP 25	2068	0
OP: OP 26	2057	23
OP: OP 27	1918	174
OP: OP 28	2068	0
OP: OP 29	2059	0
OP: OP 30	2055	0
OP: OP 31	2052	0
OP: OP 32	2065	0
OP: OP 33	2065	0
OP: OP 34	0	0
OP: OP 35	4482	982
OP: OP 36	1175	892
OP: OP 37	0	0
OP: OP 38	2858	1108
OP: OP 39	3259	683
OP: OP 40	3203	444
OP: OP 41	2028	0
OP: OP 42	1963	96
OP: OP 43	1671	405
OP: OP 44	1764	303
OP: OP 45	1359	704
OP: OP 46	897	1162
OP: OP 47	1262	114
OP: OP 48	1393	0
OP: OP 49	1566	0
OP: OP 50	1634	215
OP: OP 51	1099	855
OP: OP 52	967	1015
OP: OP 53	1543	353
OP: OP 54	1218	0

PV array 1 - OP Receptor (OP 1)

No glare found

PV array 1 - OP Receptor (OP 2)

No glare found

PV array 1 - OP Receptor (OP 3)

No glare found

PV array 1 - OP Receptor (OP 4)

No glare found

PV array 1 - OP Receptor (OP 5)

No glare found

PV array 1 - OP Receptor (OP 6)

No glare found

PV array 1 - OP Receptor (OP 7)

No glare found

PV array 1 - OP Receptor (OP 8)

No glare found

PV array 1 - OP Receptor (OP 9)

No glare found

PV array 1 - OP Receptor (OP 10)

No glare found

PV array 1 - OP Receptor (OP 11)

No glare found

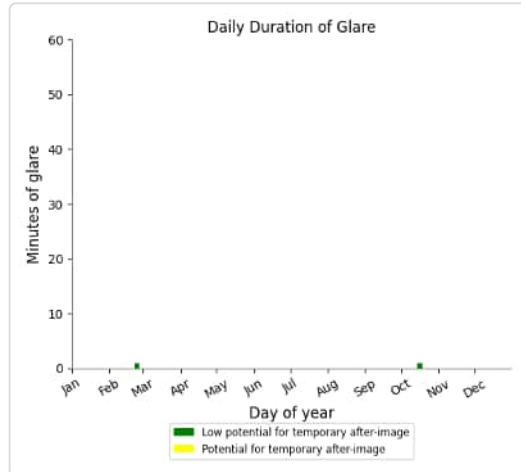
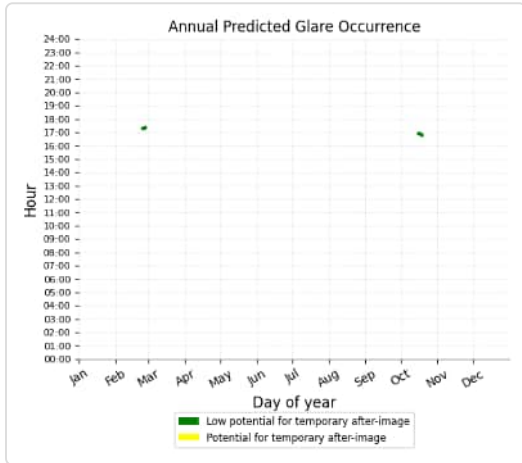
PV array 1 - OP Receptor (OP 12)

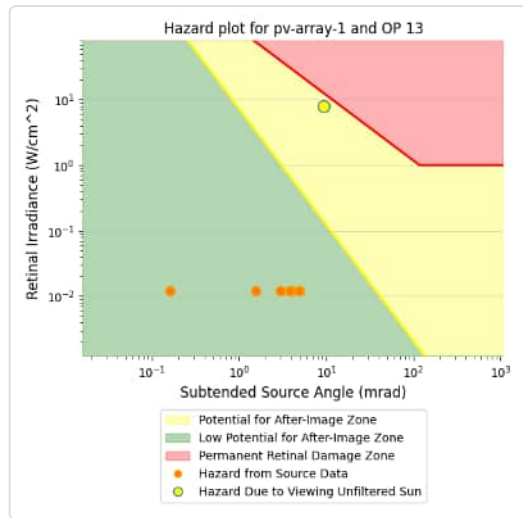
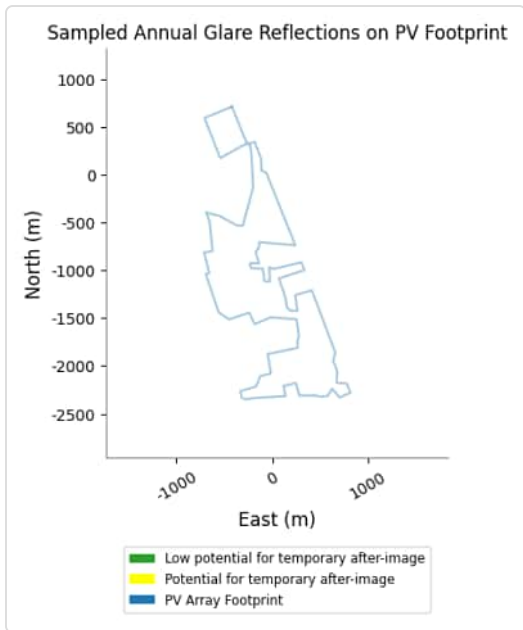
No glare found

PV array 1 - OP Receptor (OP 13)

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

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

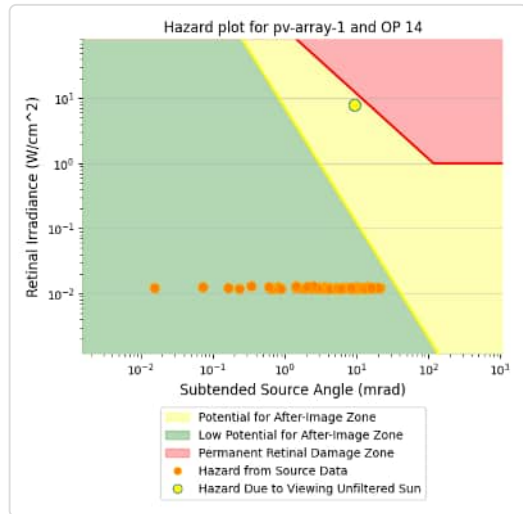
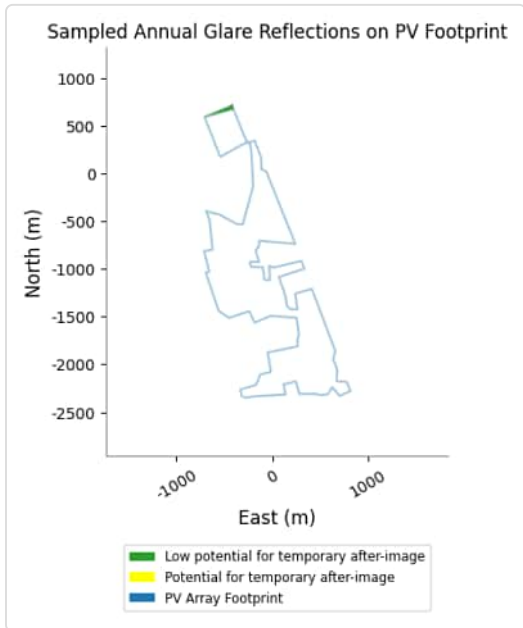
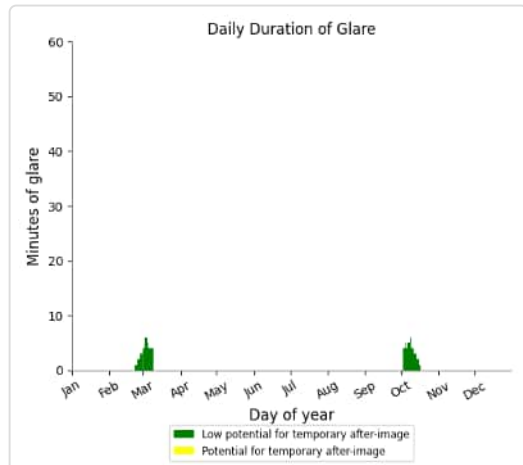
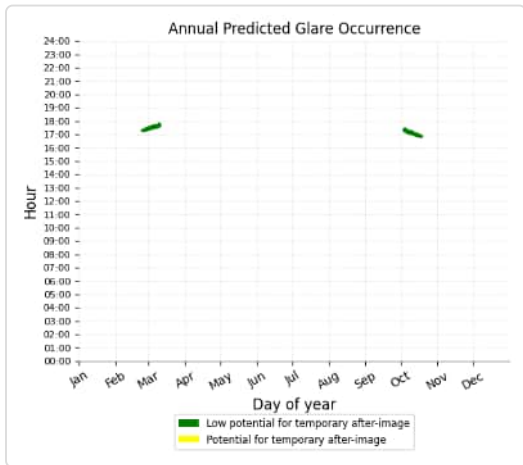




PV array 1 - OP Receptor (OP 14)

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

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

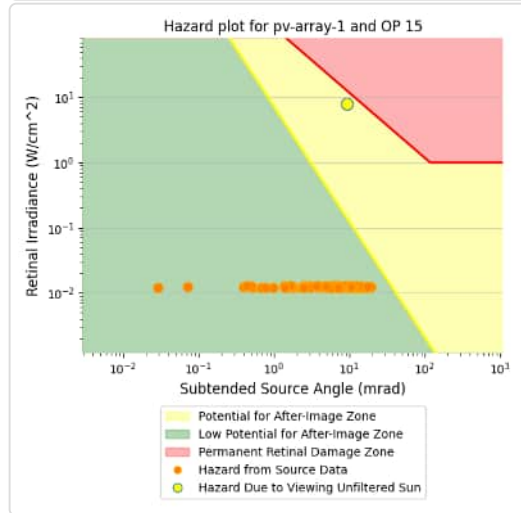
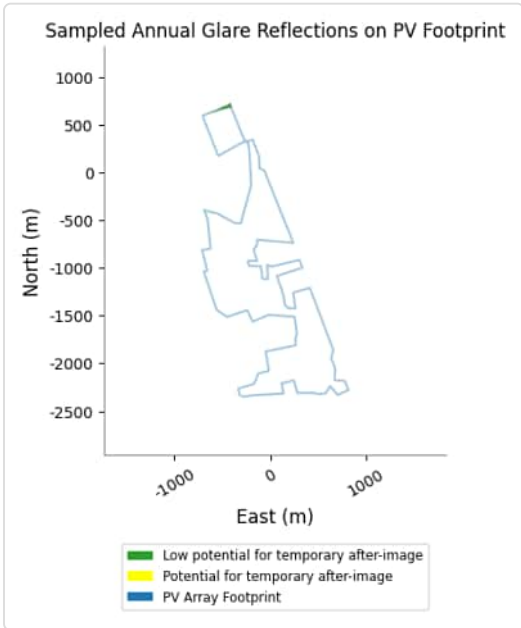
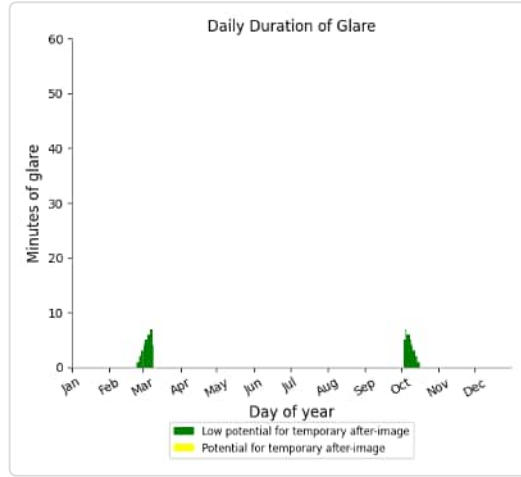
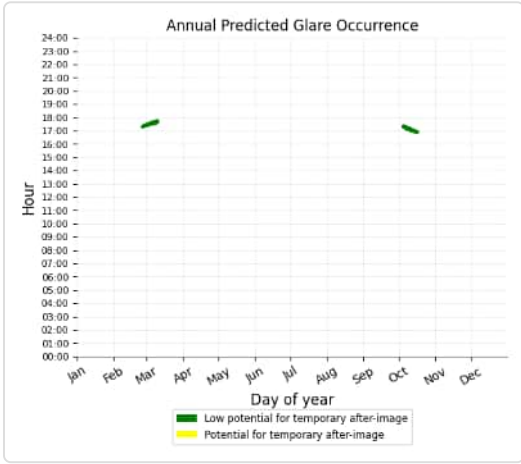


PV array 1 - OP Receptor (OP 15)

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

- 107 minutes of "green" glare with low potential to cause temporary after-image.

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



PV array 1 - OP Receptor (OP 16)

No glare found

PV array 1 - OP Receptor (OP 17)

No glare found

PV array 1 - OP Receptor (OP 18)

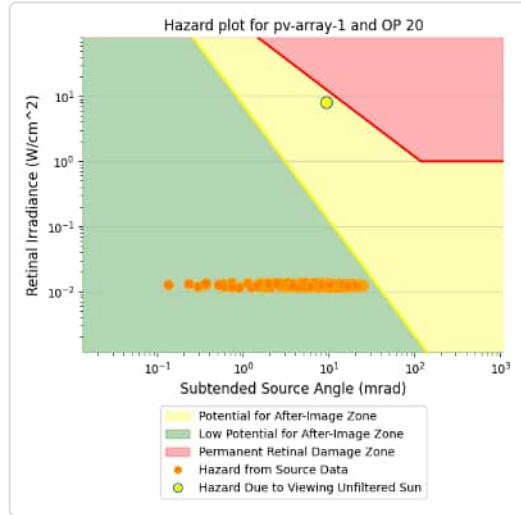
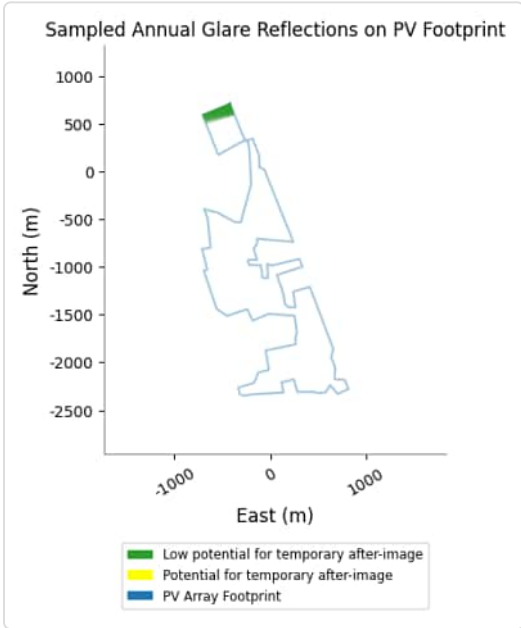
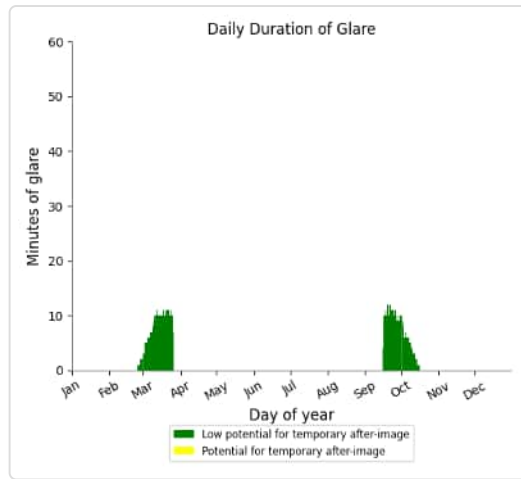
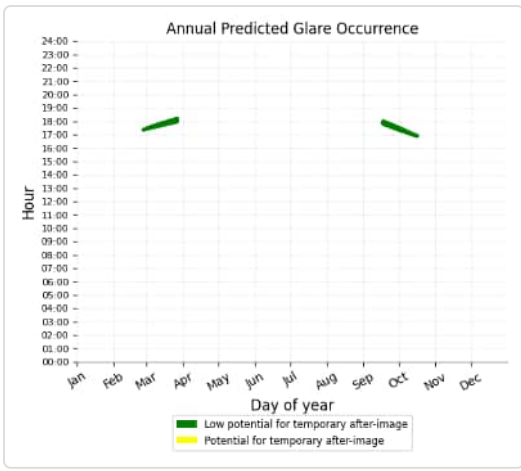
No glare found

PV array 1 - OP Receptor (OP 19)

No glare found

PV array 1 - OP Receptor (OP 20)

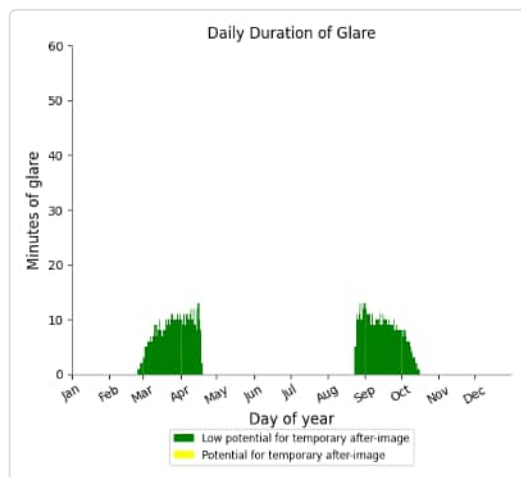
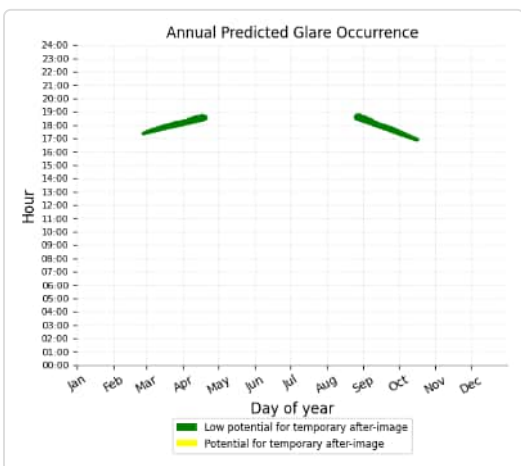
- PV array is expected to produce the following glare for receptors at this location:
- 456 minutes of "green" glare with low potential to cause temporary after-image.
 - 0 minutes of "yellow" glare with potential to cause temporary after-image.

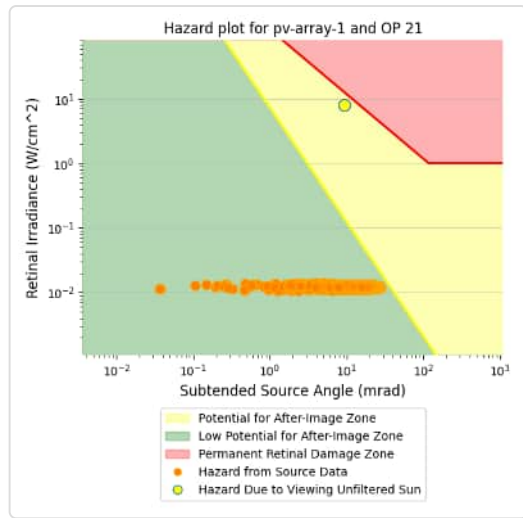
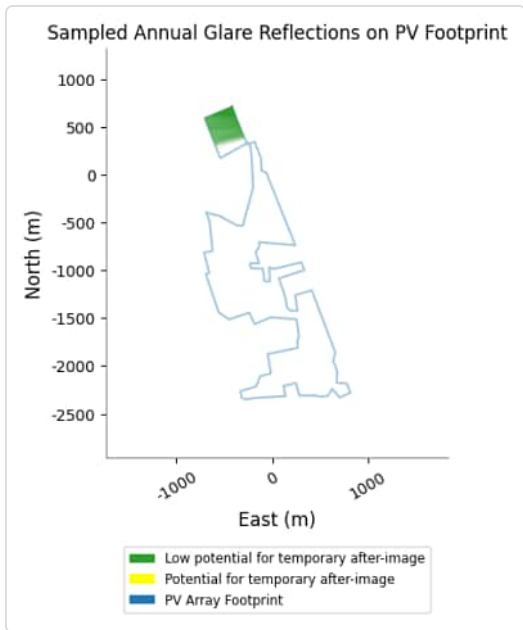


PV array 1 - OP Receptor (OP 21)

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

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

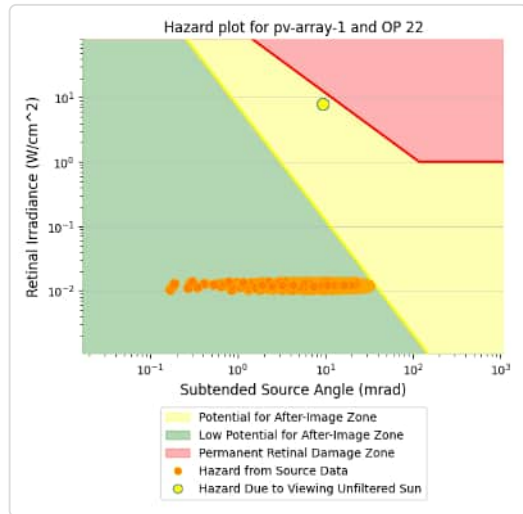
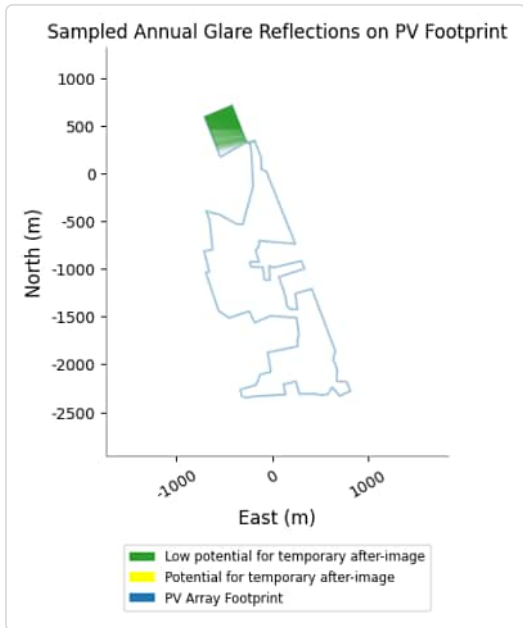
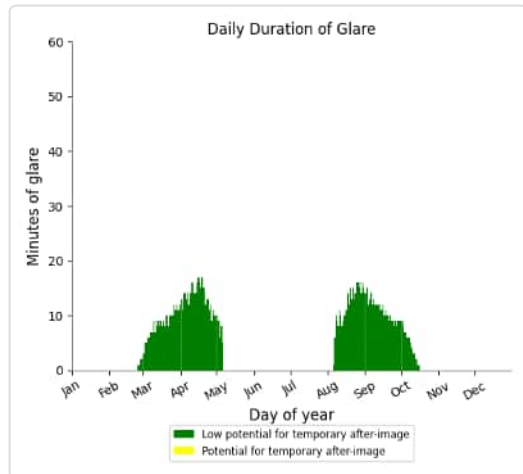
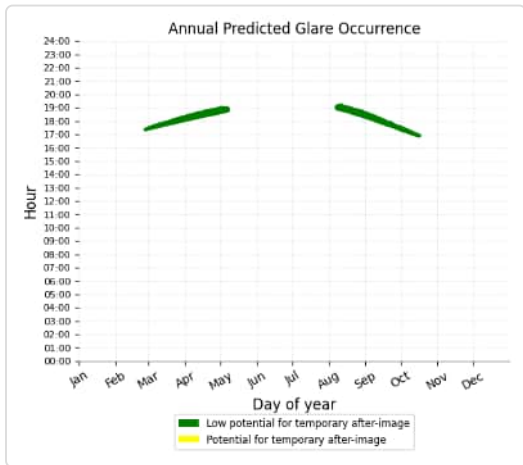




PV array 1 - OP Receptor (OP 22)

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

- 1,430 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

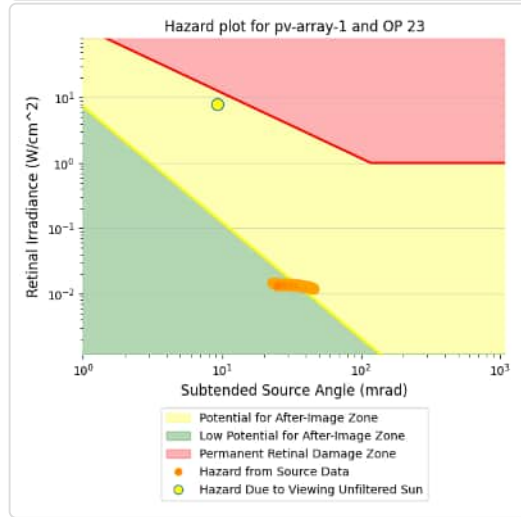
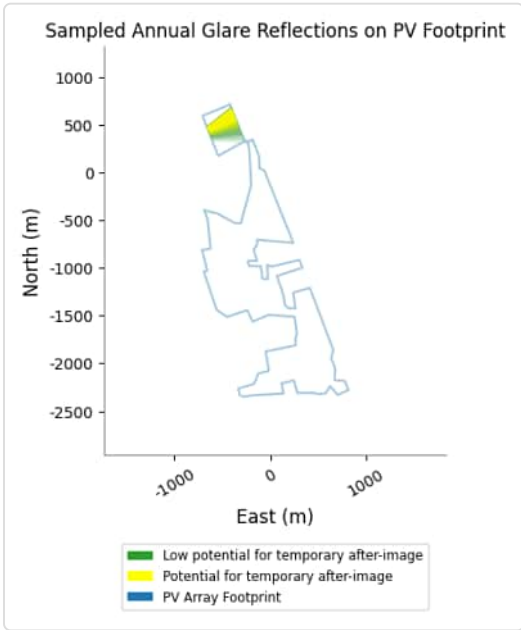
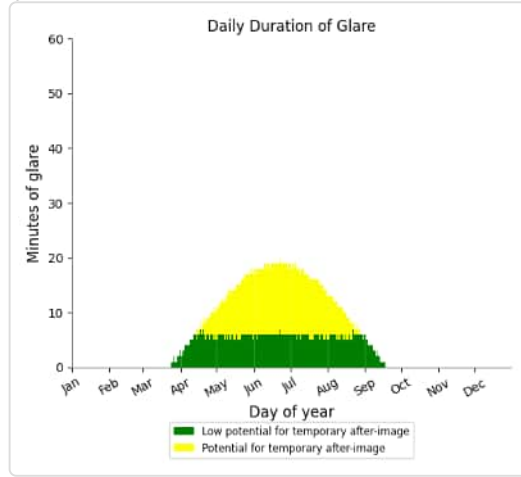
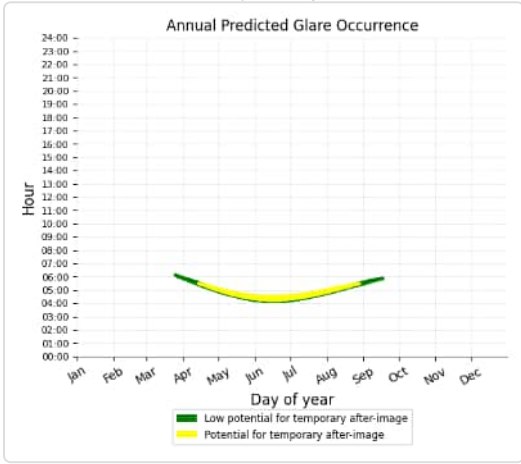


PV array 1 - OP Receptor (OP 23)

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

- 920 minutes of "green" glare with low potential to cause temporary after-image.

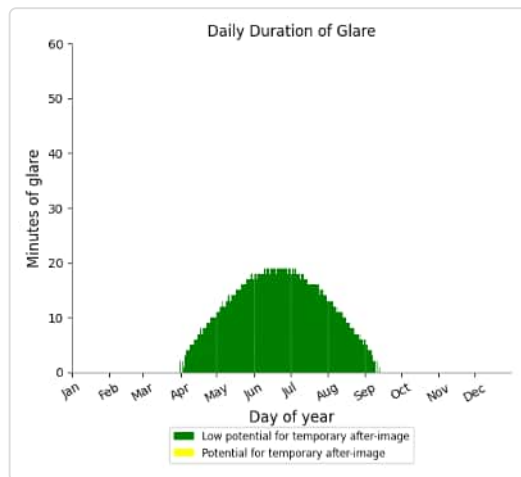
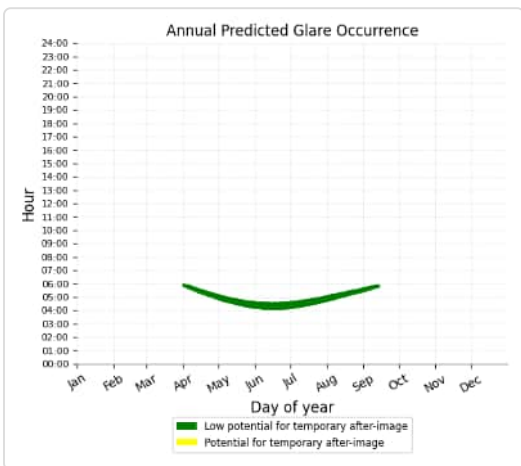
- 1,157 minutes of "yellow" glare with potential to cause temporary after-image.

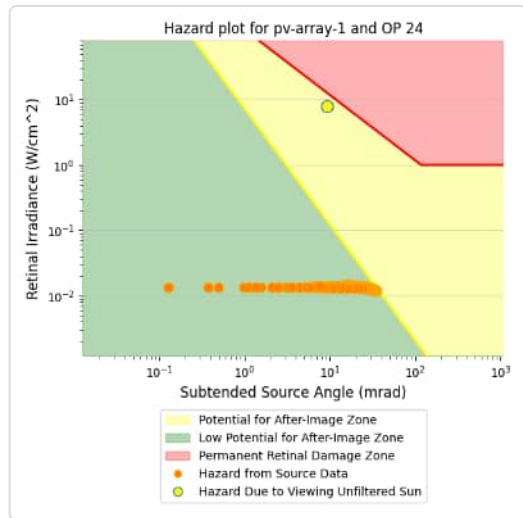
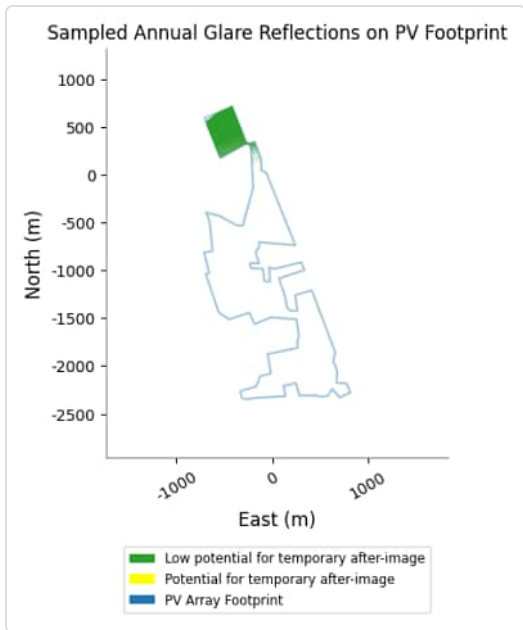


PV array 1 - OP Receptor (OP 24)

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

- 2,035 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

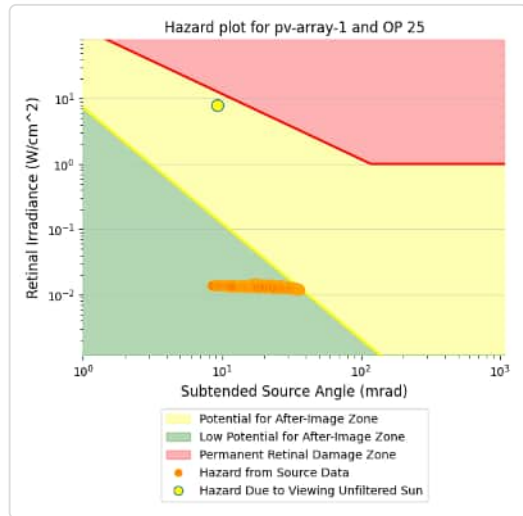
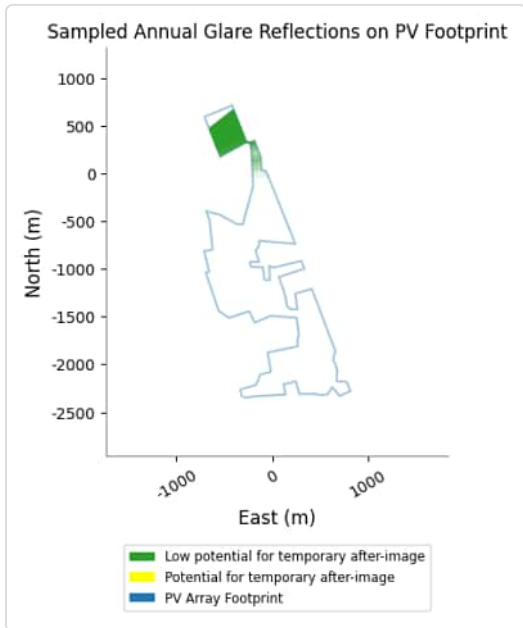
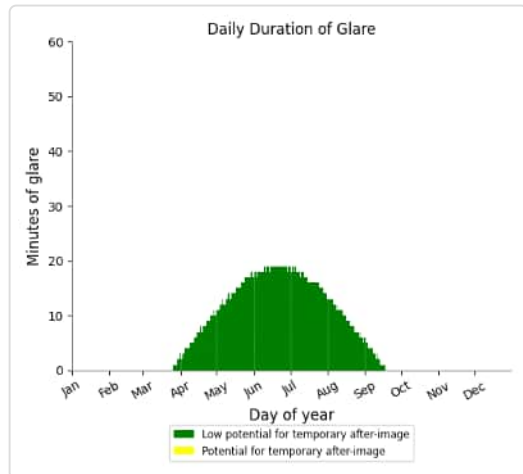
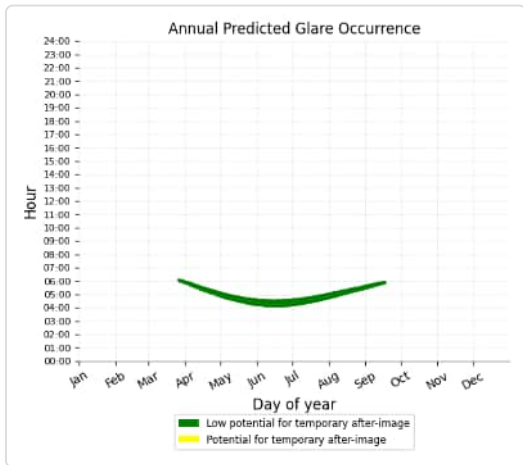




PV array 1 - OP Receptor (OP 25)

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

- 2,068 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

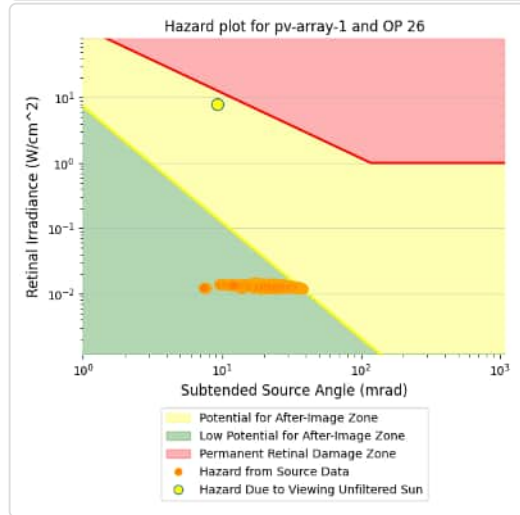
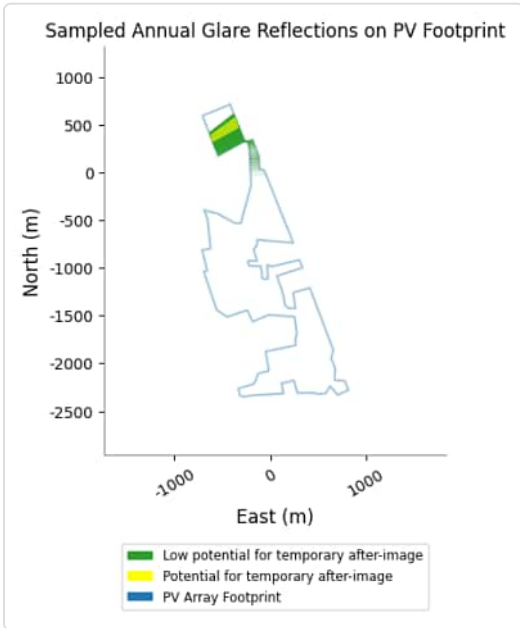
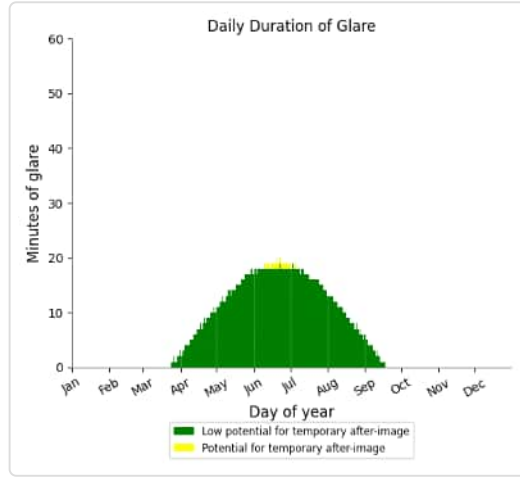
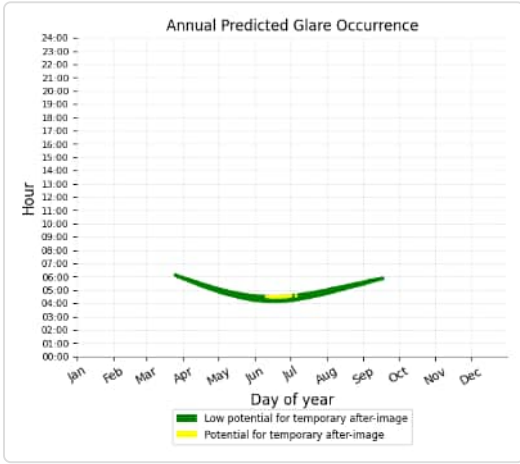


PV array 1 - OP Receptor (OP 26)

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

- 2,057 minutes of "green" glare with low potential to cause temporary after-image.

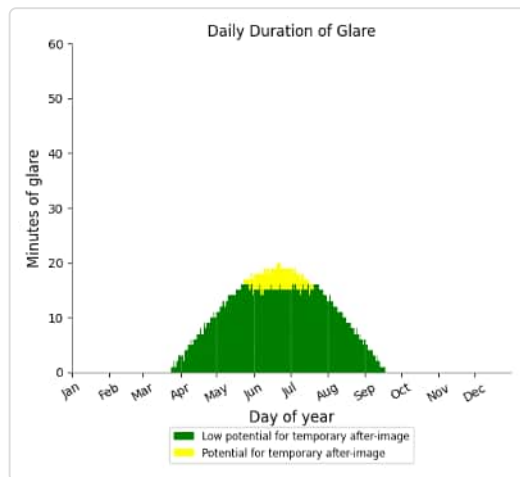
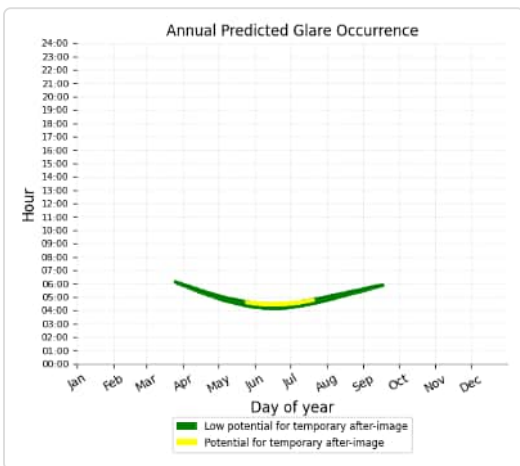
- 23 minutes of "yellow" glare with potential to cause temporary after-image.

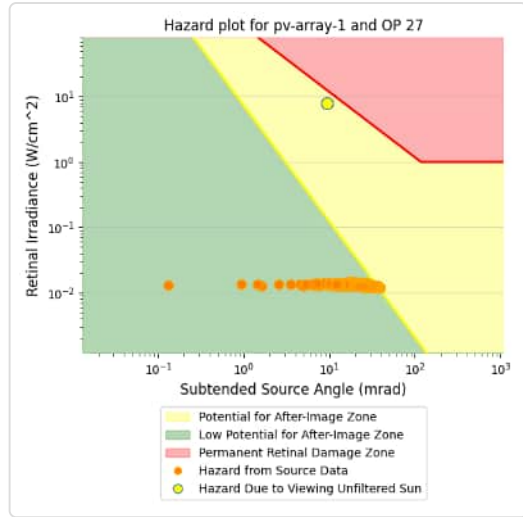
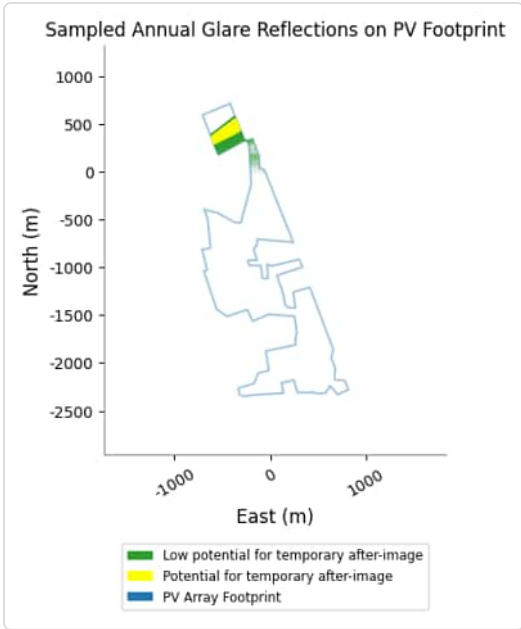


PV array 1 - OP Receptor (OP 27)

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

- 1,918 minutes of "green" glare with low potential to cause temporary after-image.
- 174 minutes of "yellow" glare with potential to cause temporary after-image.

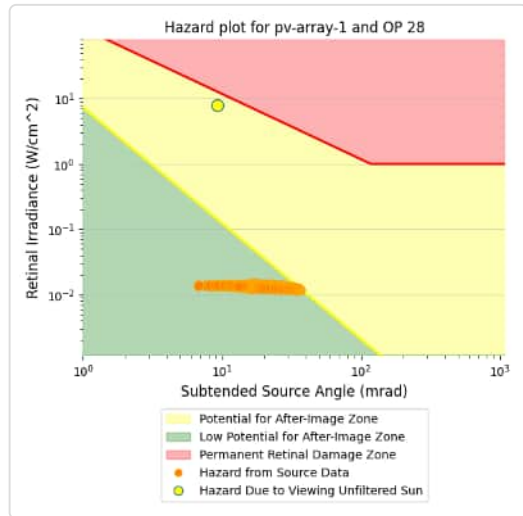
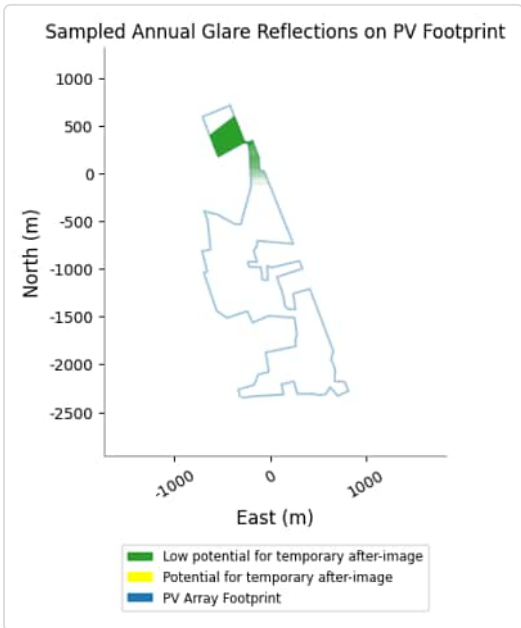
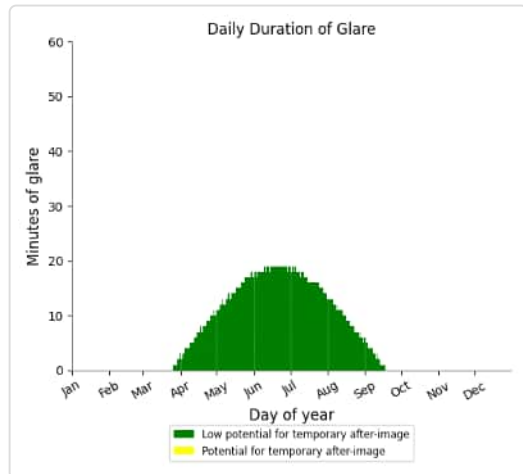
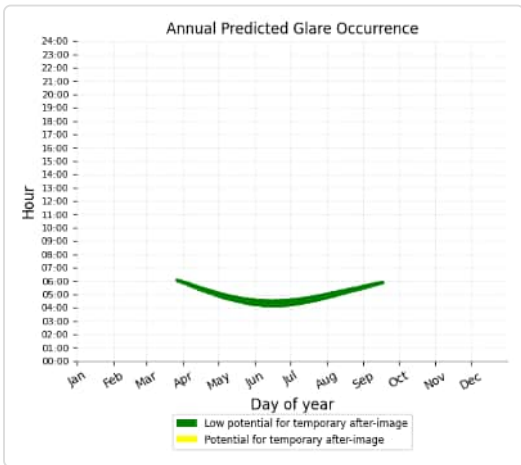




PV array 1 - OP Receptor (OP 28)

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

- 2,068 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

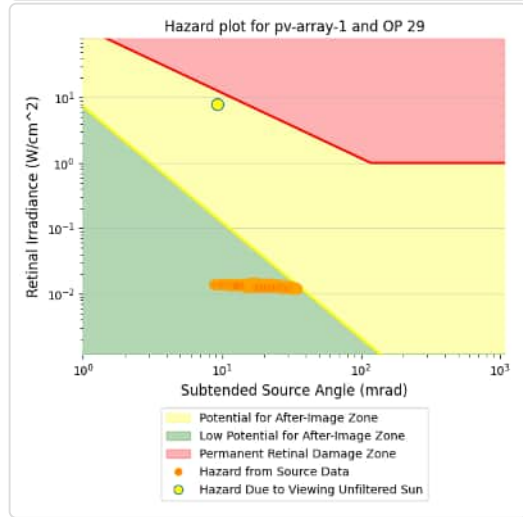
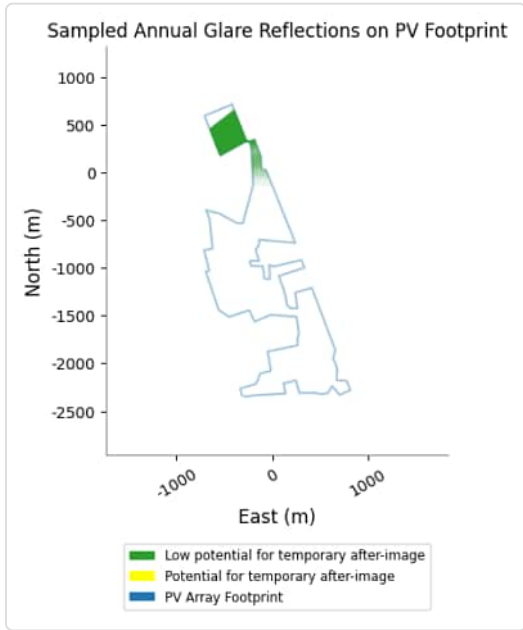
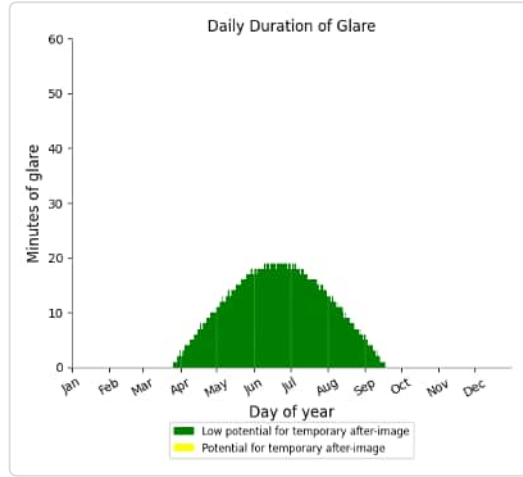
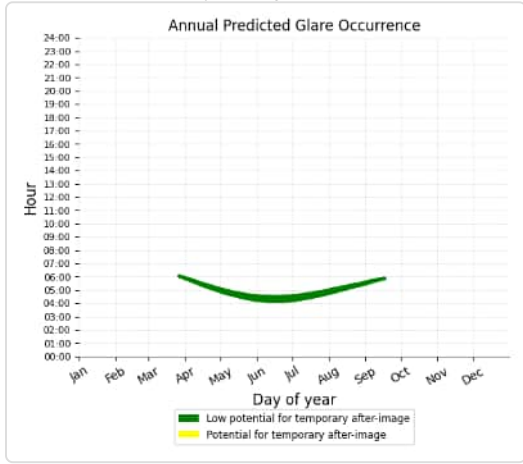


PV array 1 - OP Receptor (OP 29)

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

- 2,059 minutes of "green" glare with low potential to cause temporary after-image.

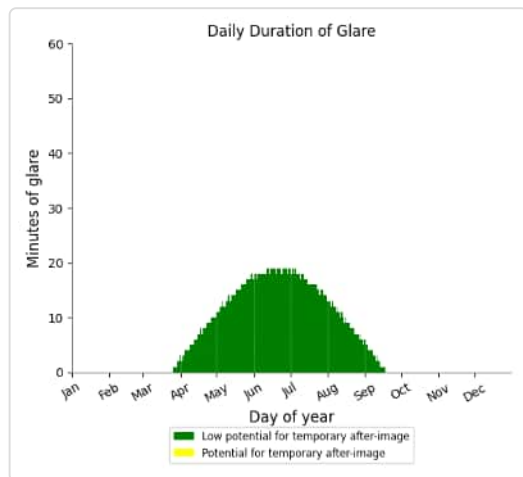
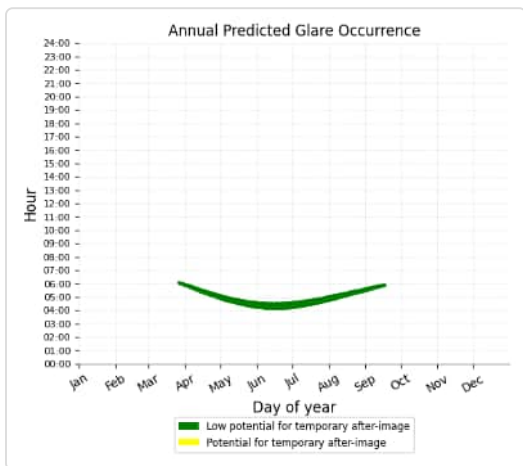
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

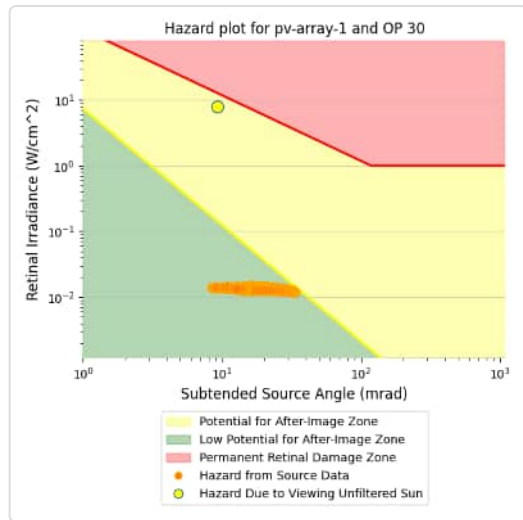
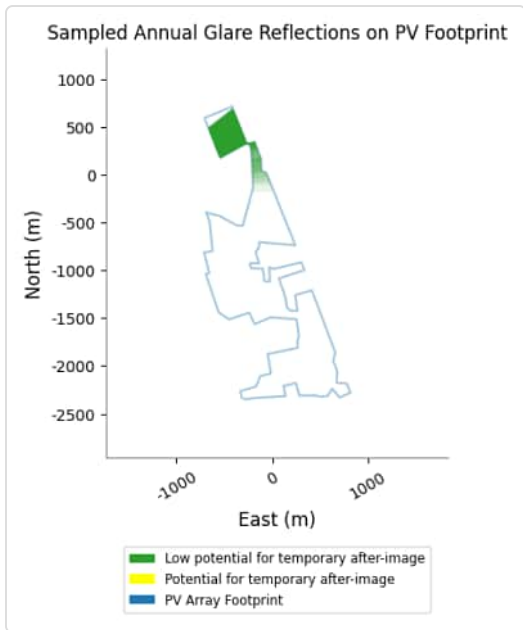


PV array 1 - OP Receptor (OP 30)

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

- 2,055 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

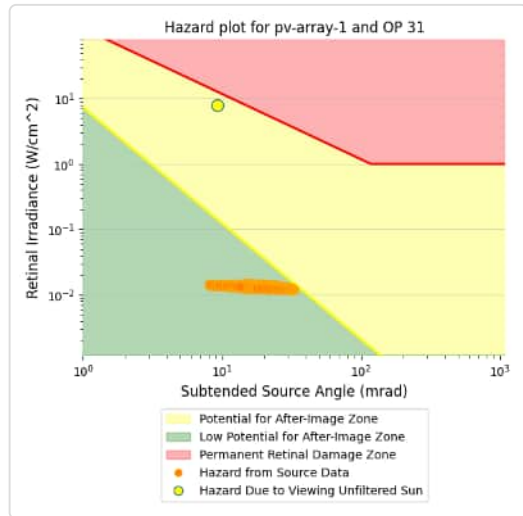
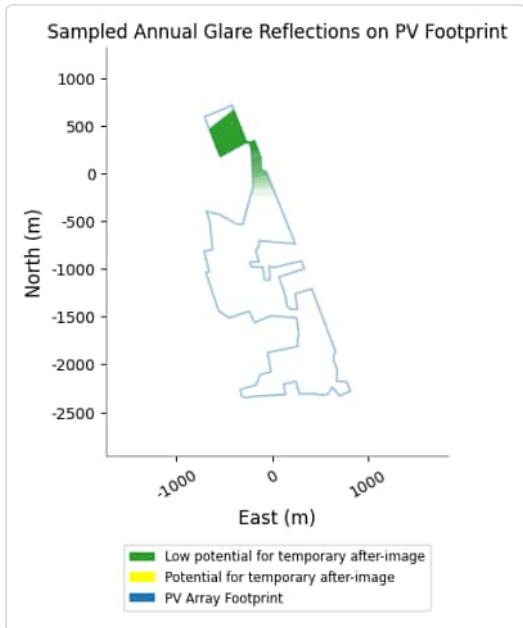
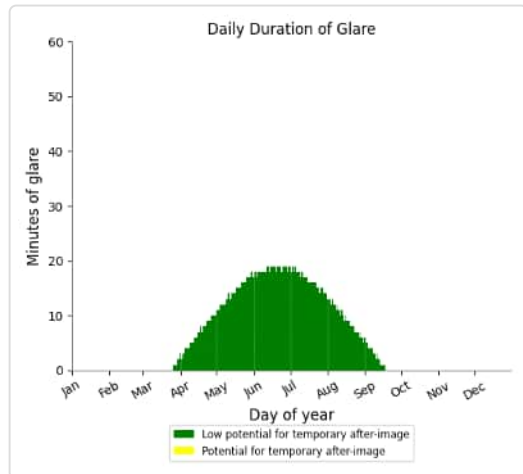
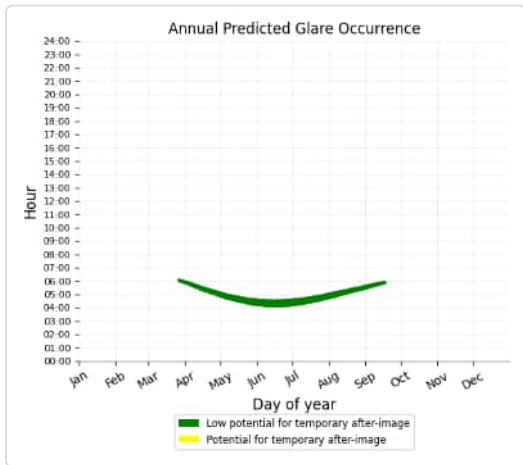




PV array 1 - OP Receptor (OP 31)

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

- 2,052 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

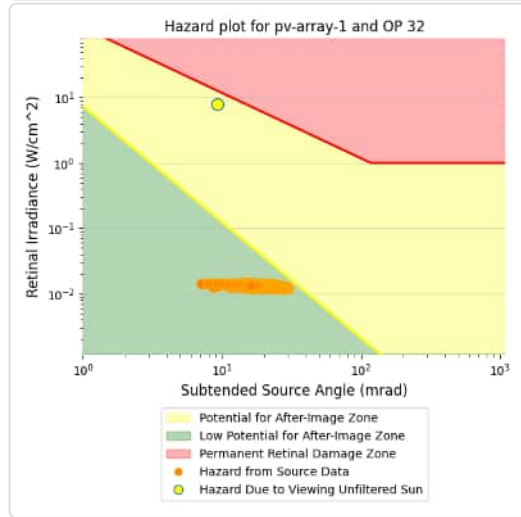
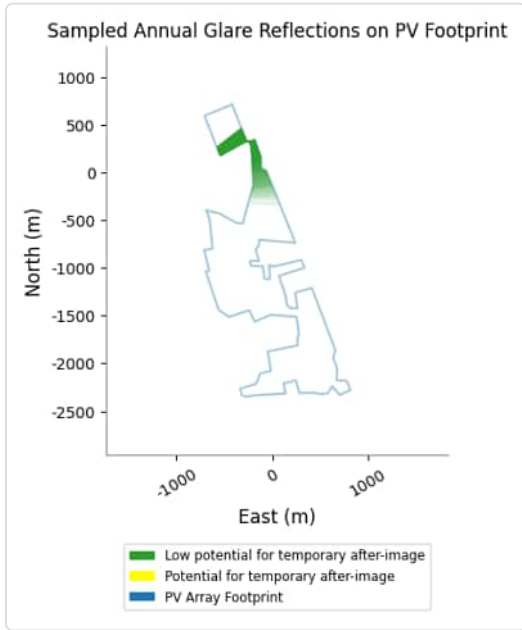
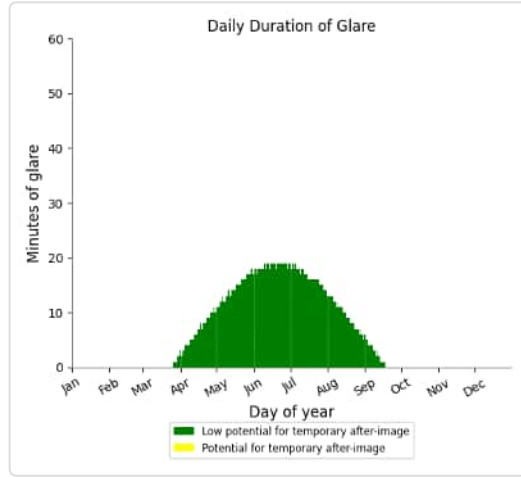
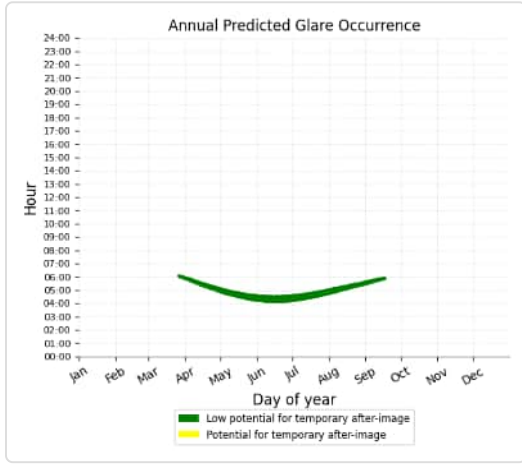


PV array 1 - OP Receptor (OP 32)

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

- 2,065 minutes of "green" glare with low potential to cause temporary after-image.

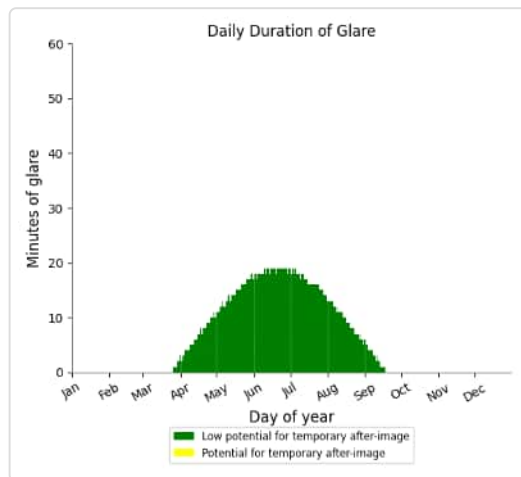
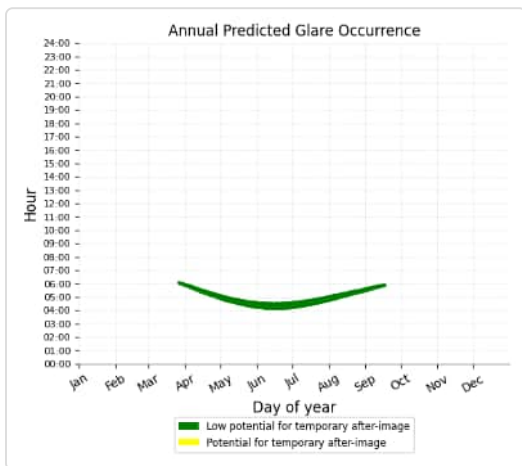
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

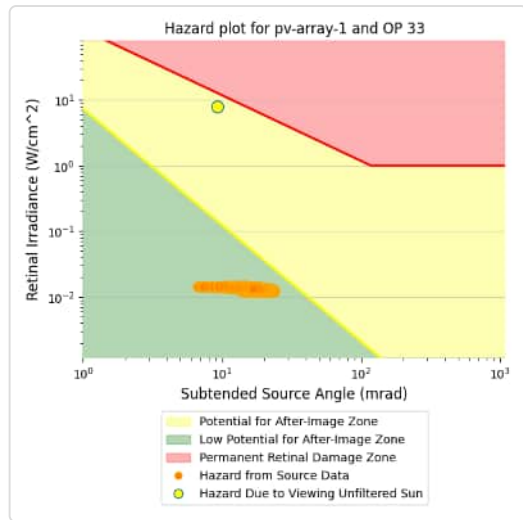
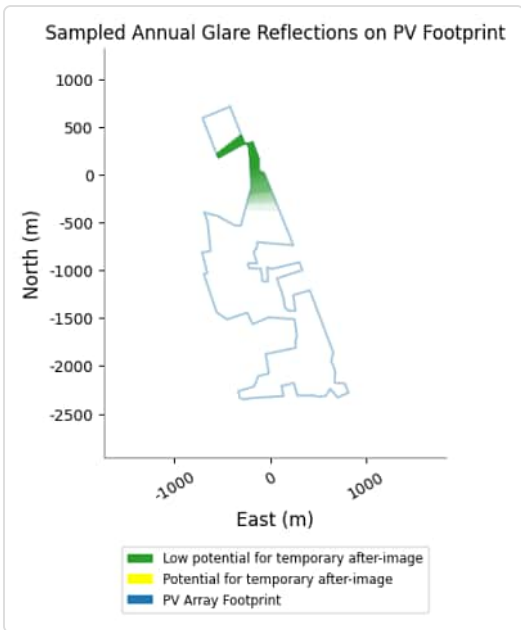


PV array 1 - OP Receptor (OP 33)

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

- 2,065 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.





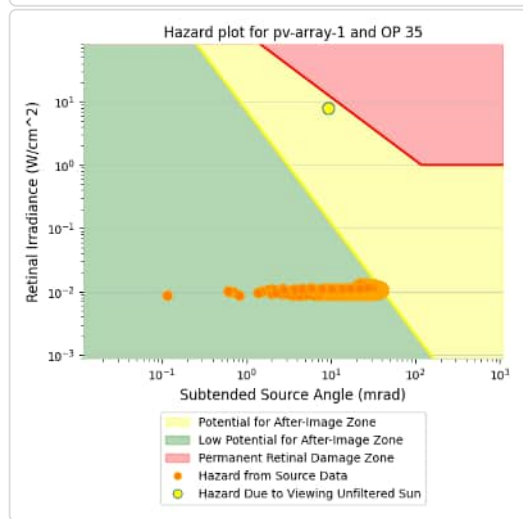
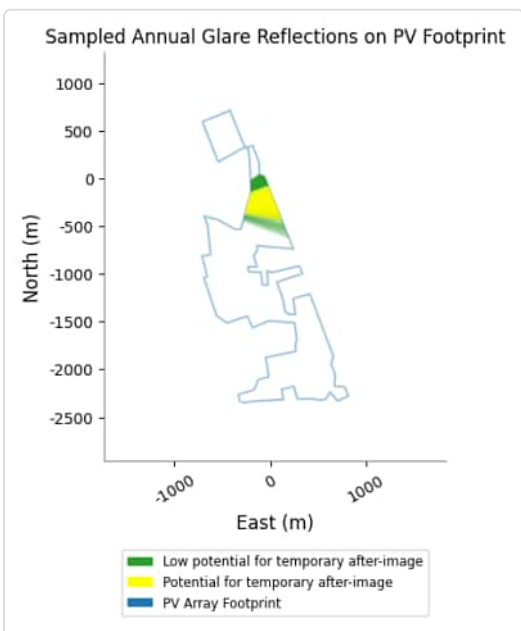
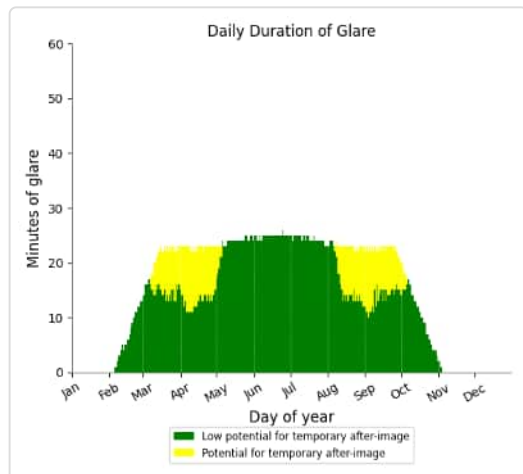
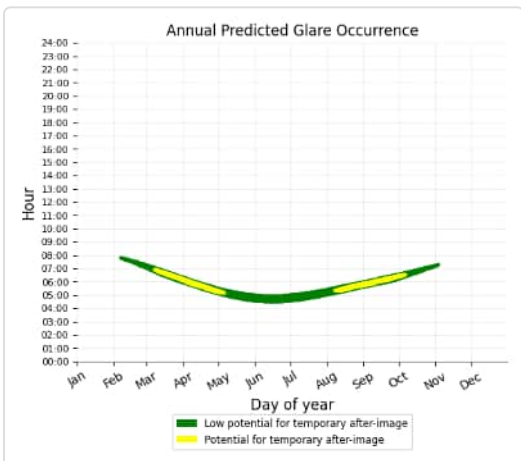
PV array 1 - OP Receptor (OP 34)

No glare found

PV array 1 - OP Receptor (OP 35)

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

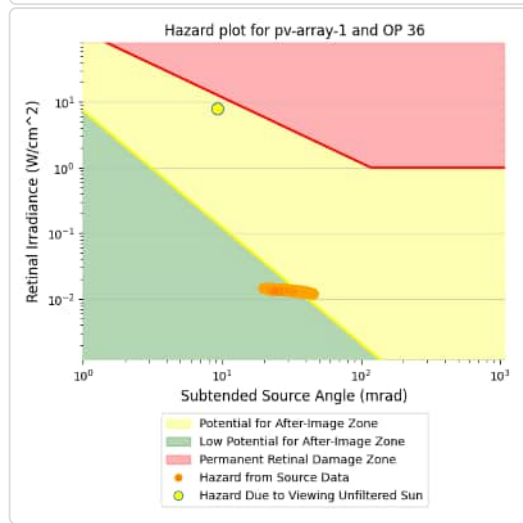
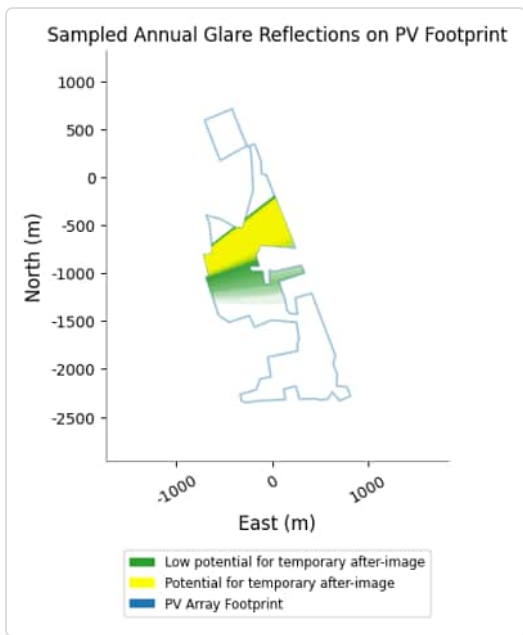
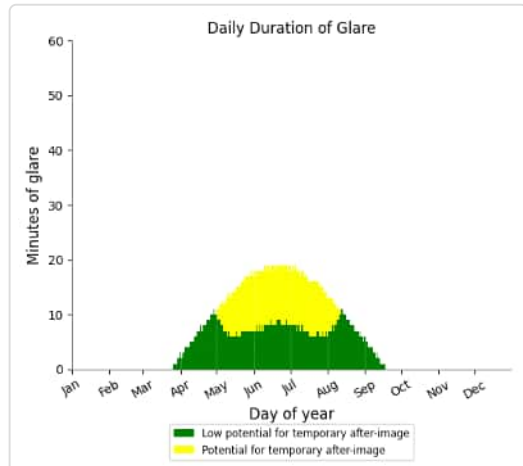
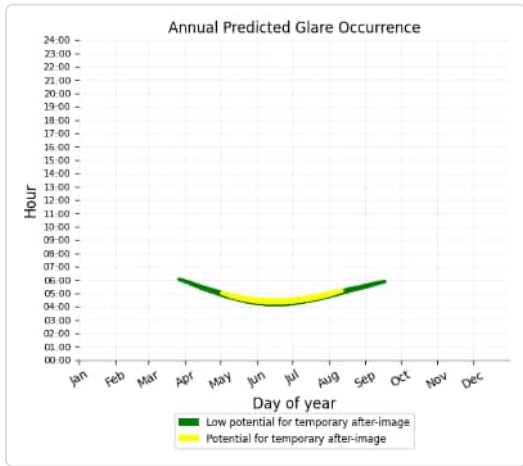
- 4,482 minutes of "green" glare with low potential to cause temporary after-image.
- 982 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 1 - OP Receptor (OP 36)

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

- 1,175 minutes of "green" glare with low potential to cause temporary after-image.
- 892 minutes of "yellow" glare with potential to cause temporary after-image.



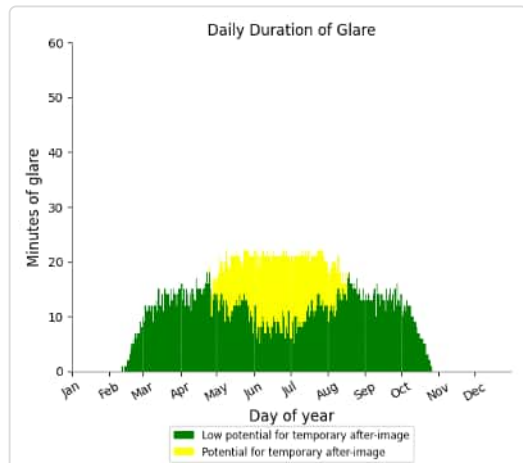
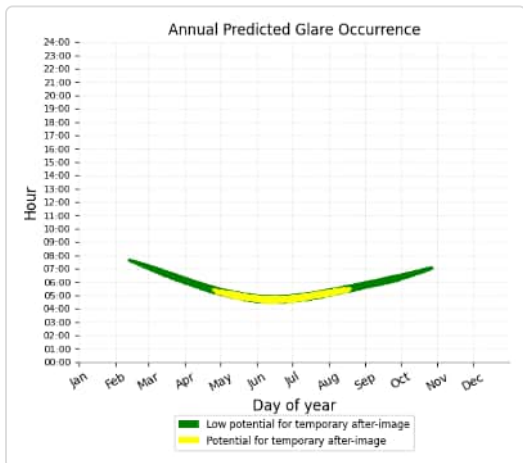
PV array 1 - OP Receptor (OP 37)

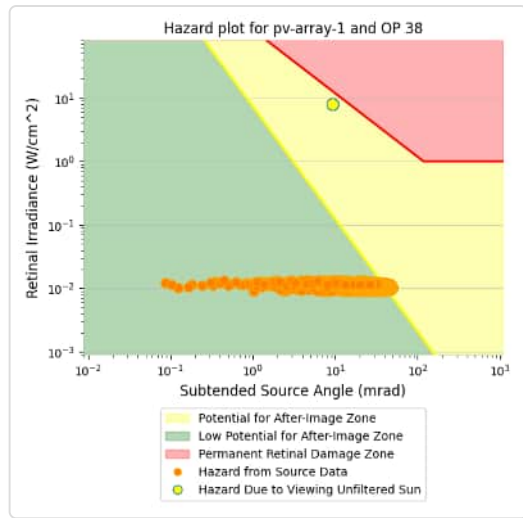
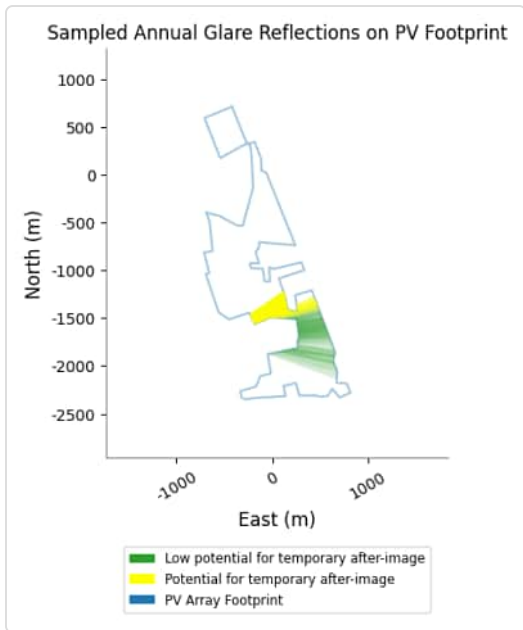
No glare found

PV array 1 - OP Receptor (OP 38)

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

- 2,858 minutes of "green" glare with low potential to cause temporary after-image.
- 1,108 minutes of "yellow" glare with potential to cause temporary after-image.

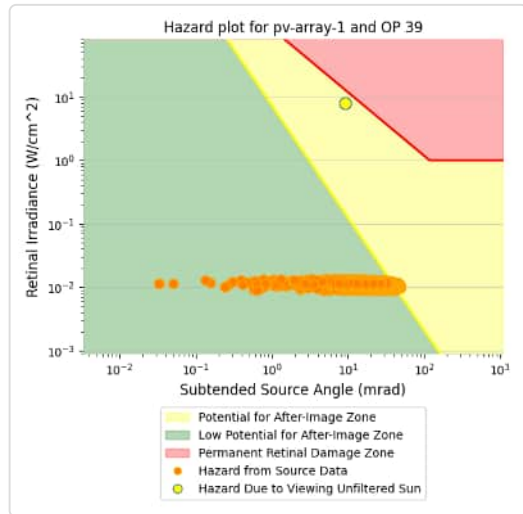
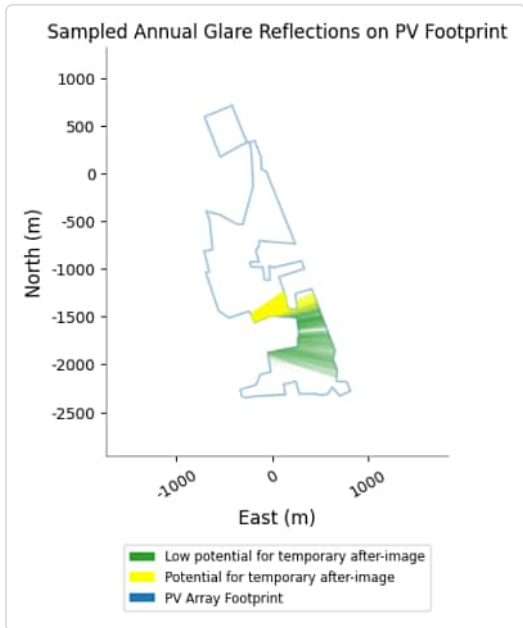
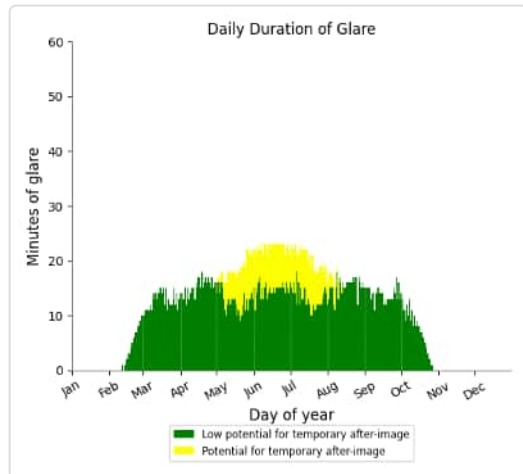
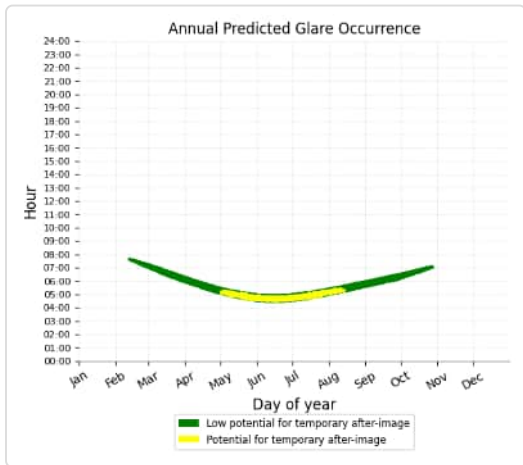




PV array 1 - OP Receptor (OP 39)

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

- 3,259 minutes of "green" glare with low potential to cause temporary after-image.
- 683 minutes of "yellow" glare with potential to cause temporary after-image.

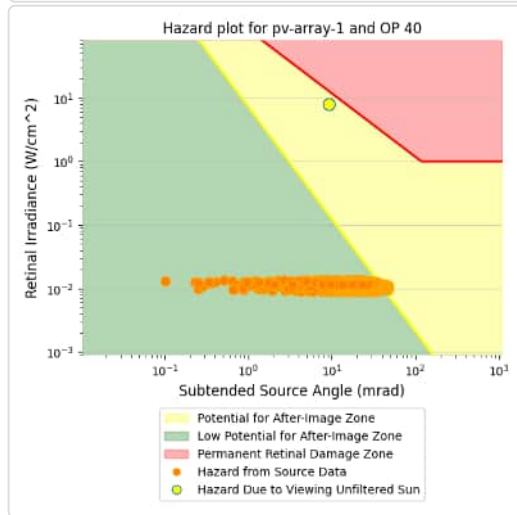
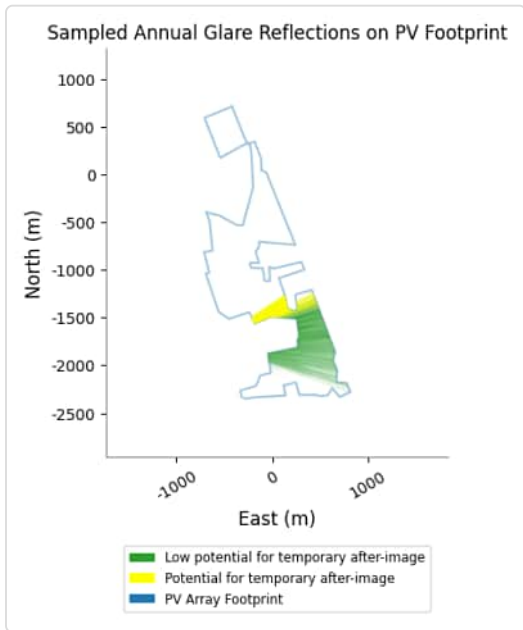
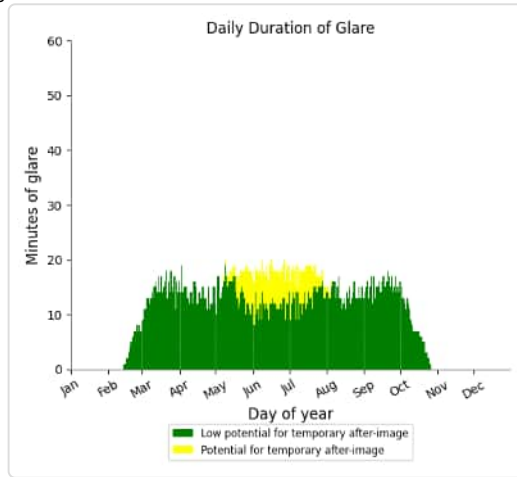
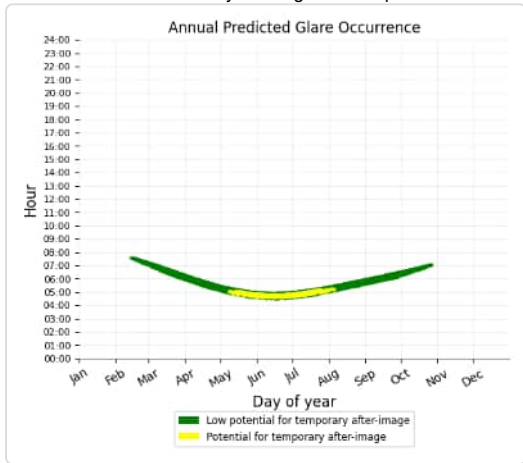


PV array 1 - OP Receptor (OP 40)

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

- 3,203 minutes of "green" glare with low potential to cause temporary after-image.

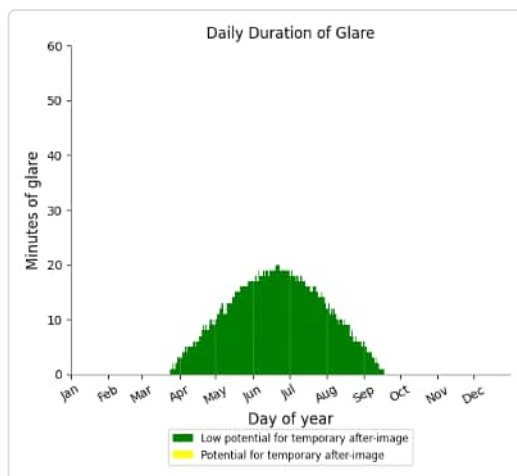
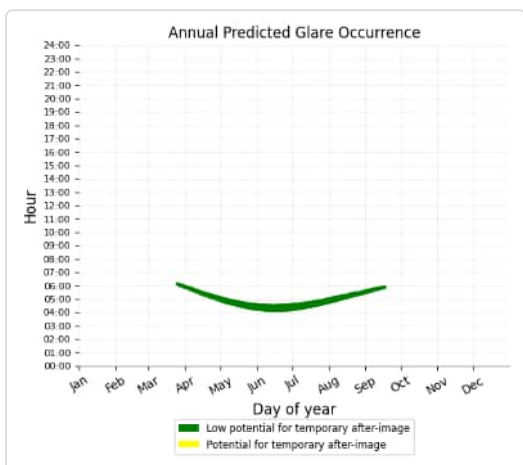
- 444 minutes of "yellow" glare with potential to cause temporary after-image.

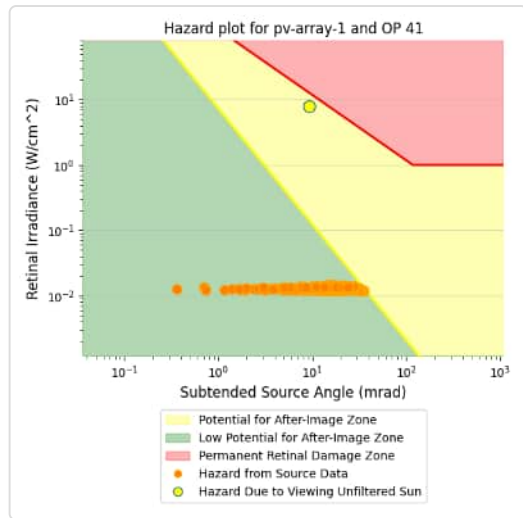
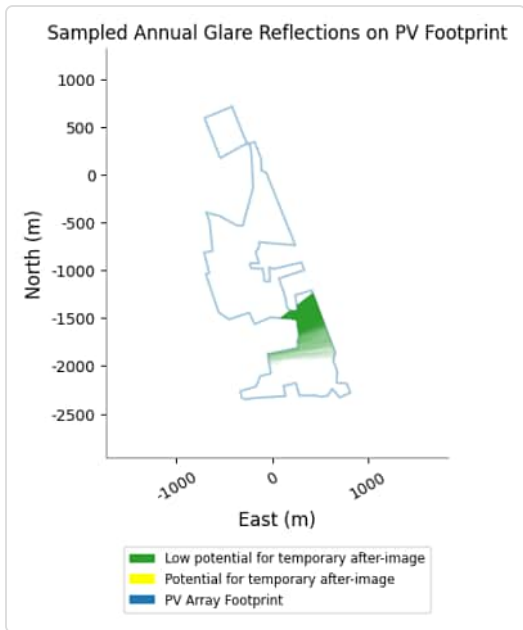


PV array 1 - OP Receptor (OP 41)

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

- 2,028 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

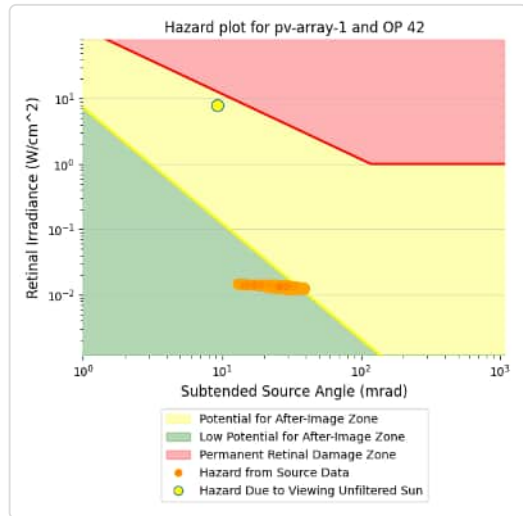
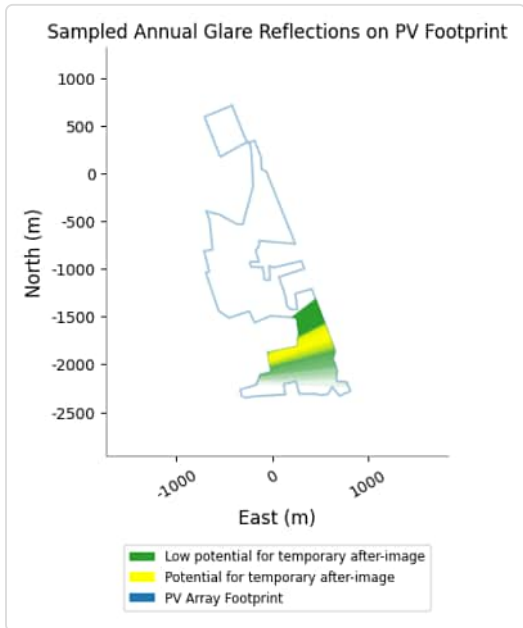
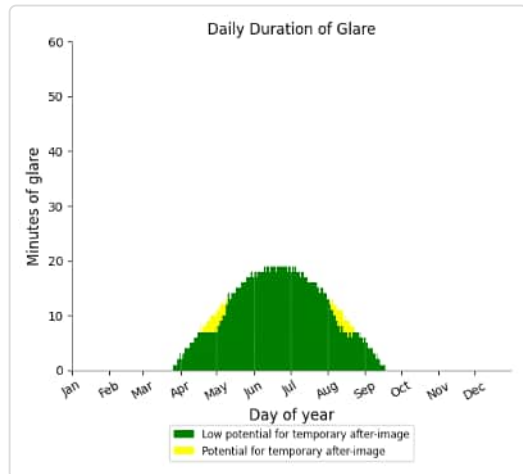
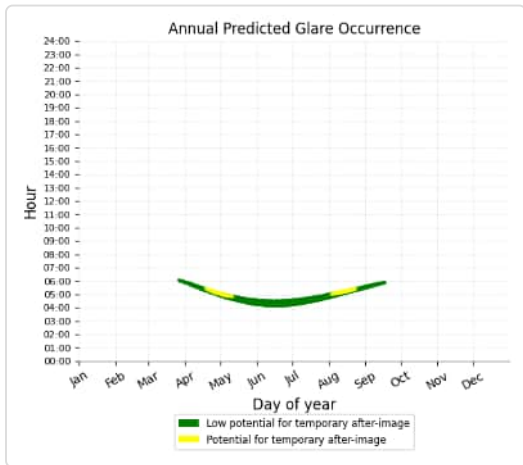




PV array 1 - OP Receptor (OP 42)

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

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

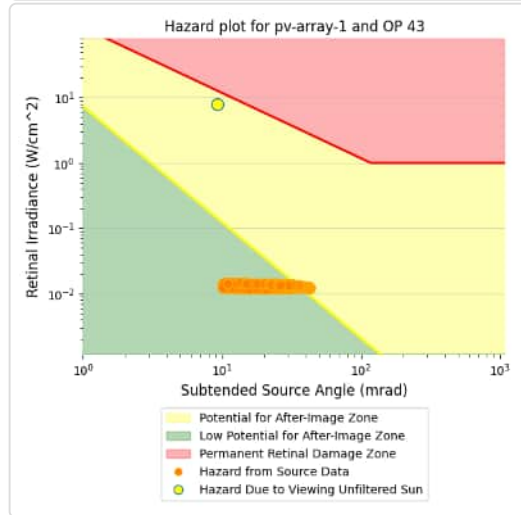
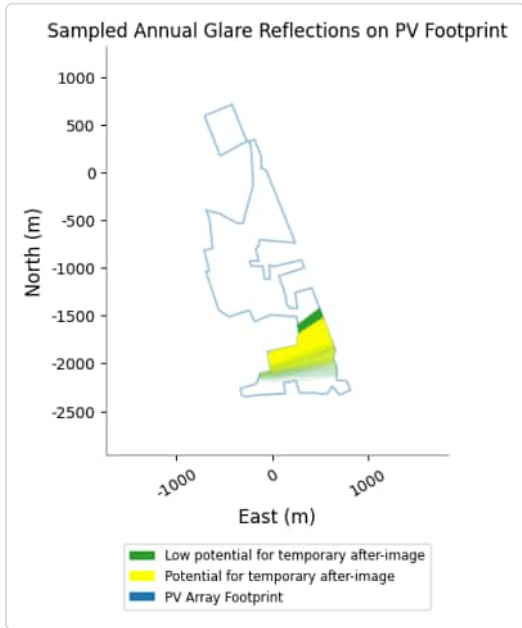
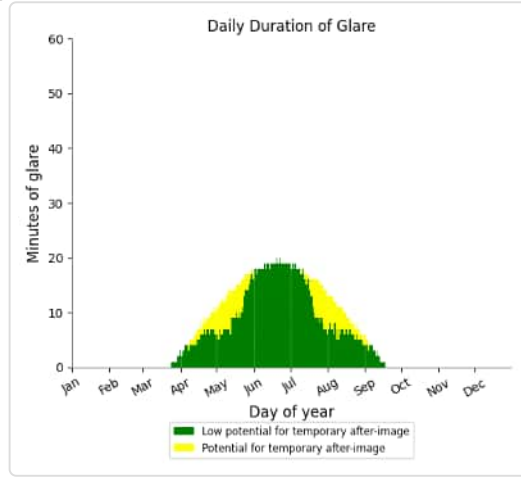
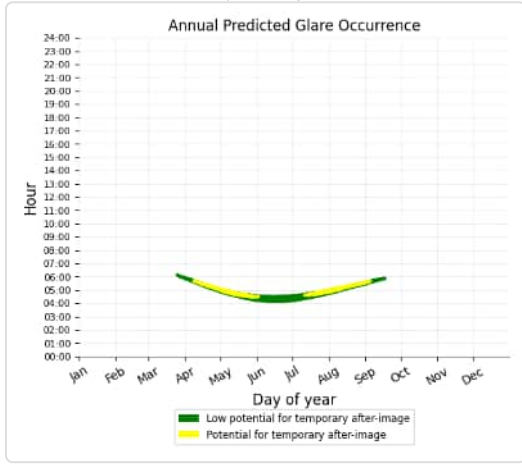


PV array 1 - OP Receptor (OP 43)

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

- 1,671 minutes of "green" glare with low potential to cause temporary after-image.

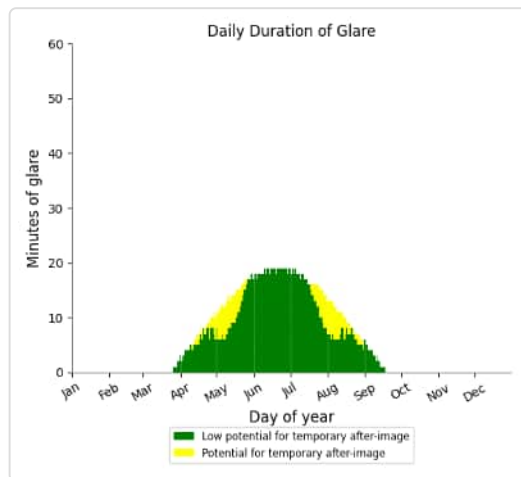
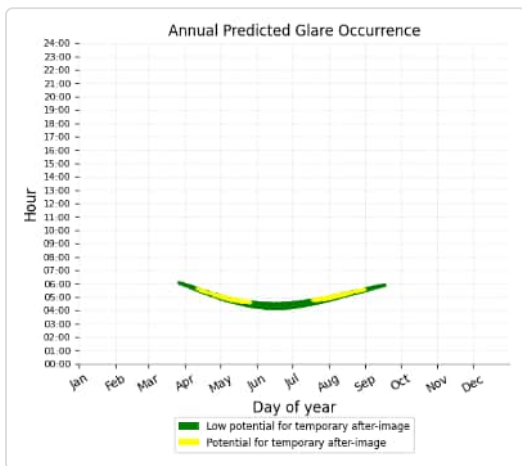
- 405 minutes of "yellow" glare with potential to cause temporary after-image.

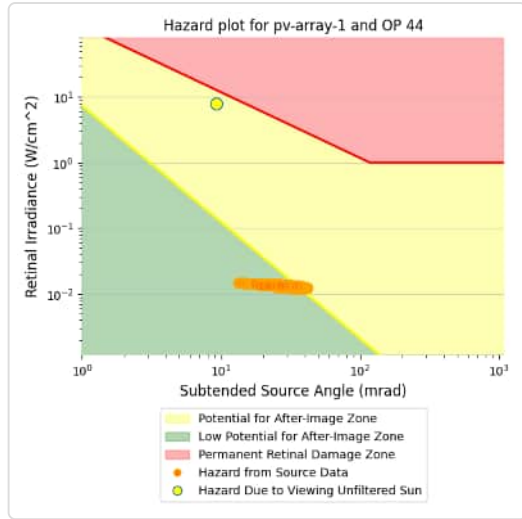
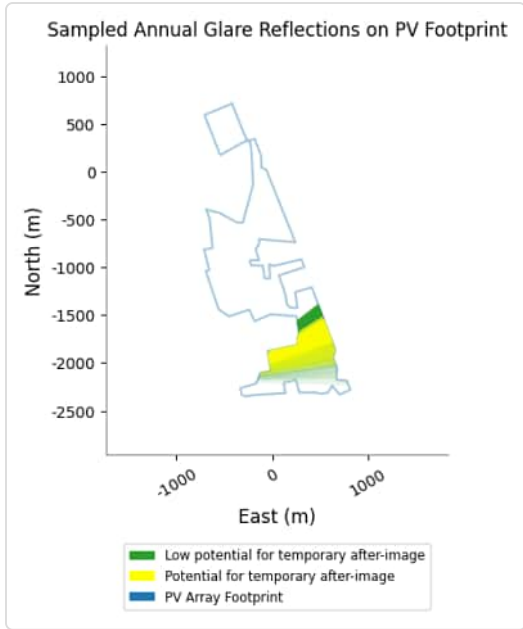


PV array 1 - OP Receptor (OP 44)

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

- 1,764 minutes of "green" glare with low potential to cause temporary after-image.
- 303 minutes of "yellow" glare with potential to cause temporary after-image.

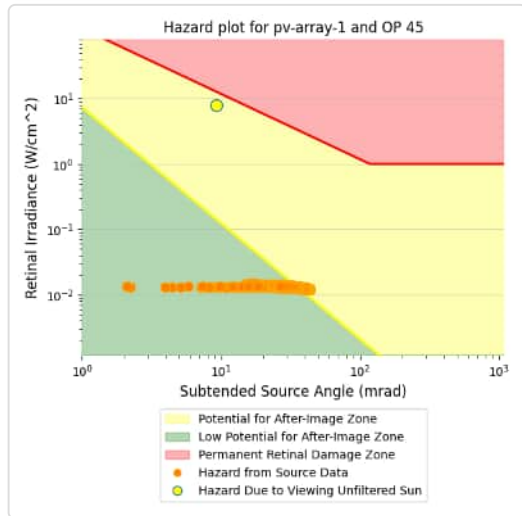
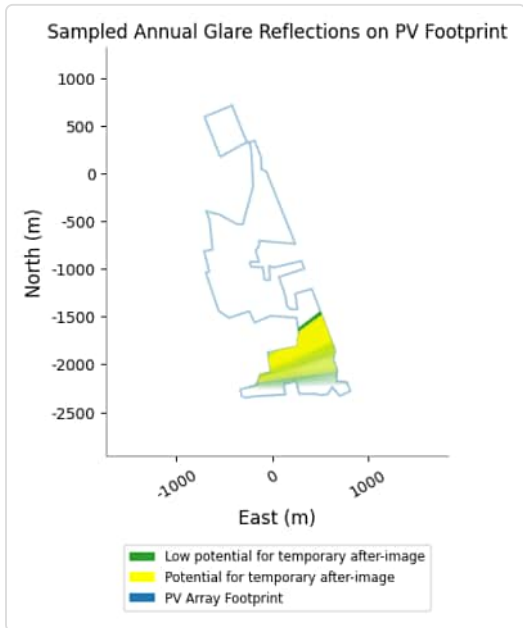
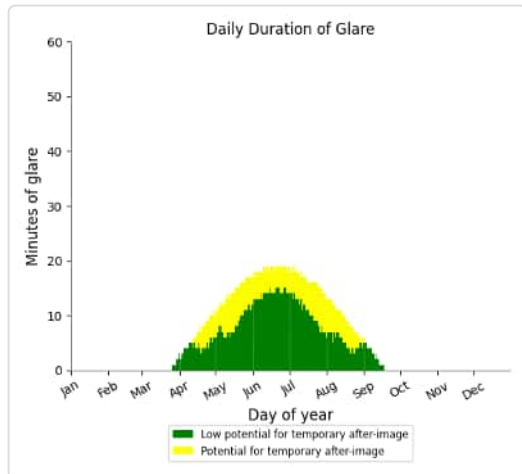
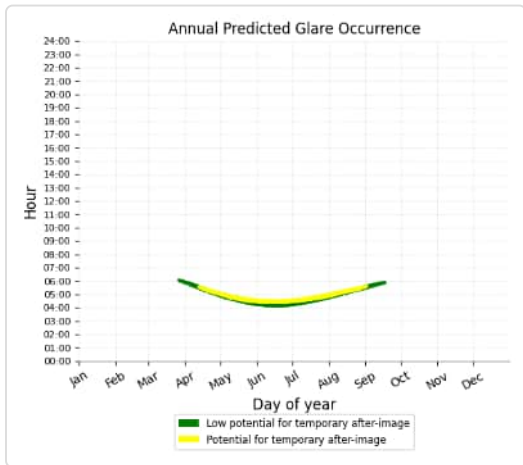




PV array 1 - OP Receptor (OP 45)

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

- 1,359 minutes of "green" glare with low potential to cause temporary after-image.
- 704 minutes of "yellow" glare with potential to cause temporary after-image.

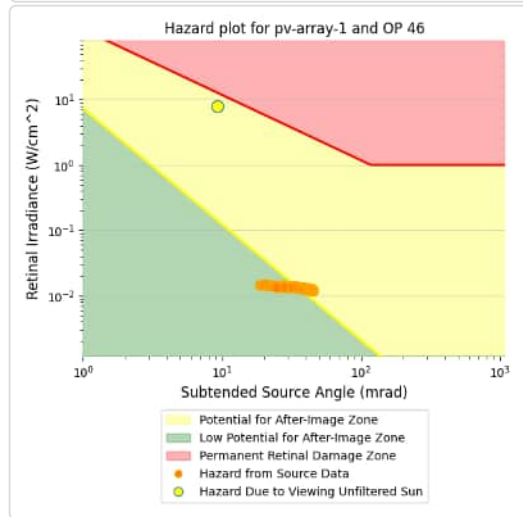
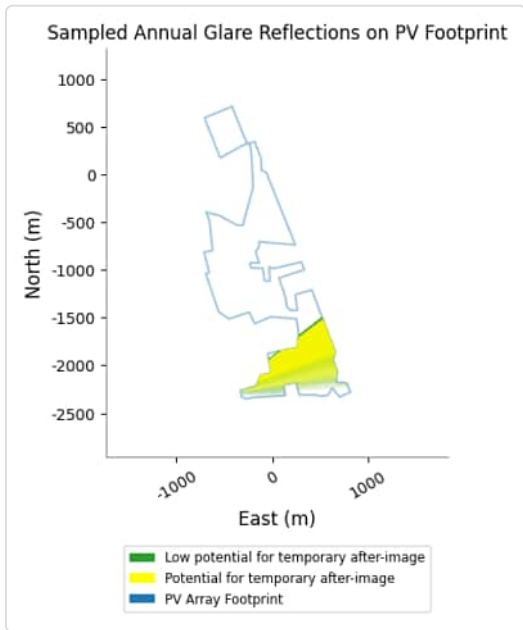
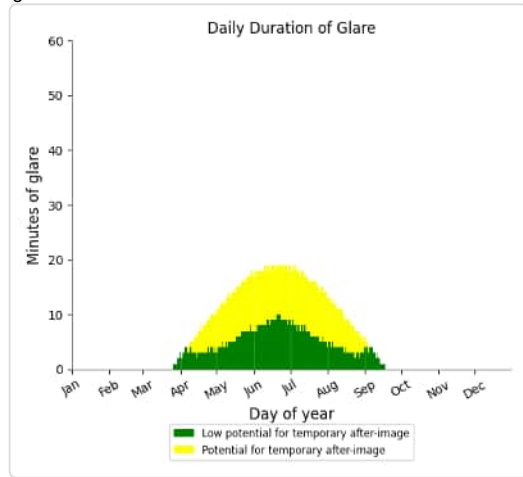
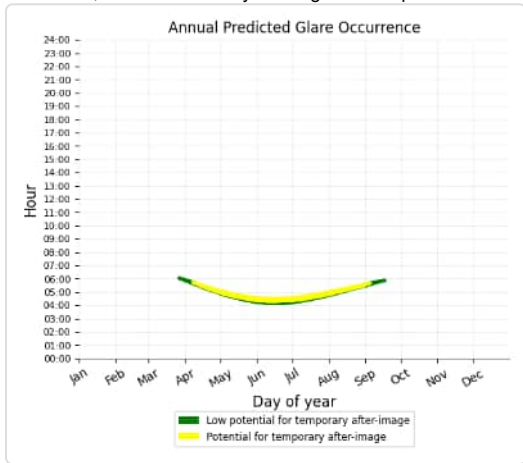


PV array 1 - OP Receptor (OP 46)

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

- 897 minutes of "green" glare with low potential to cause temporary after-image.

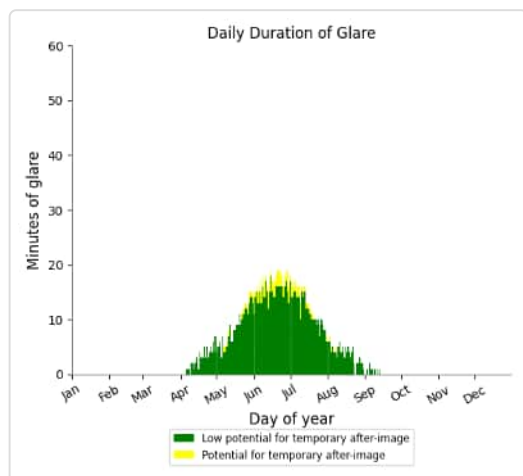
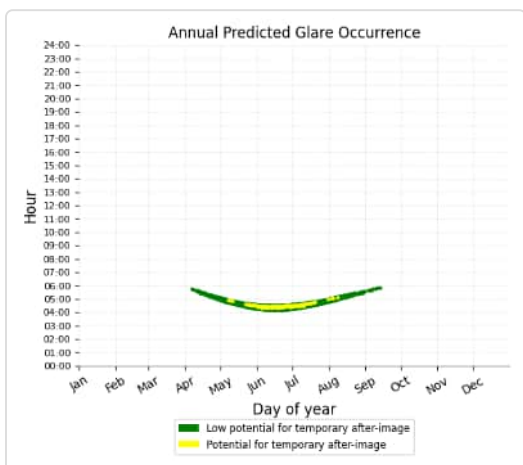
- 1,162 minutes of "yellow" glare with potential to cause temporary after-image.

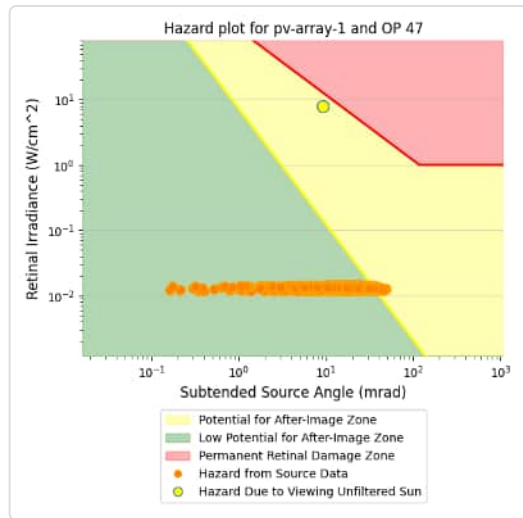
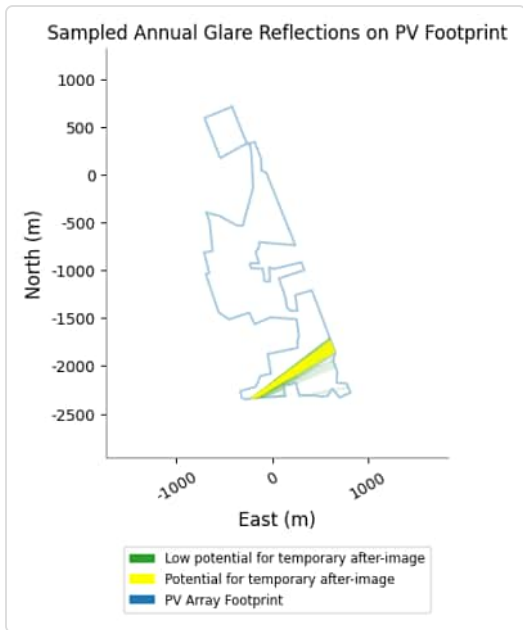


PV array 1 - OP Receptor (OP 47)

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

- 1,262 minutes of "green" glare with low potential to cause temporary after-image.
- 114 minutes of "yellow" glare with potential to cause temporary after-image.

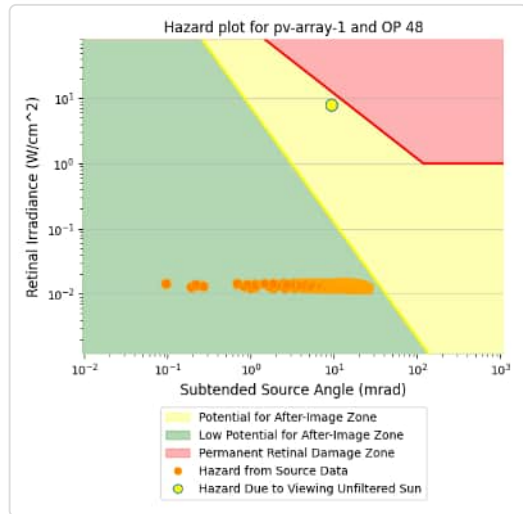
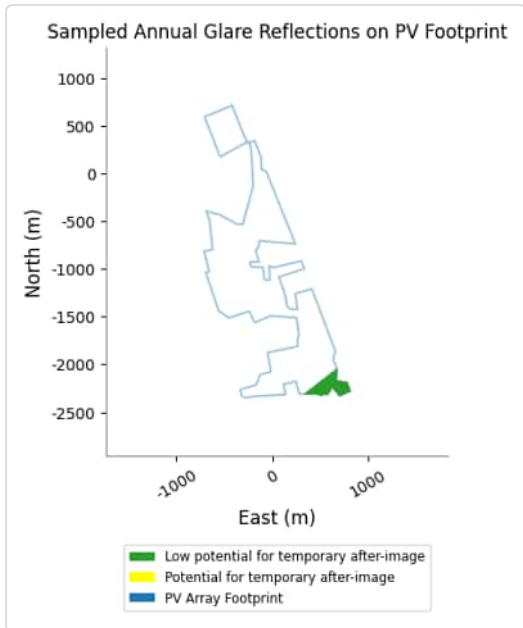
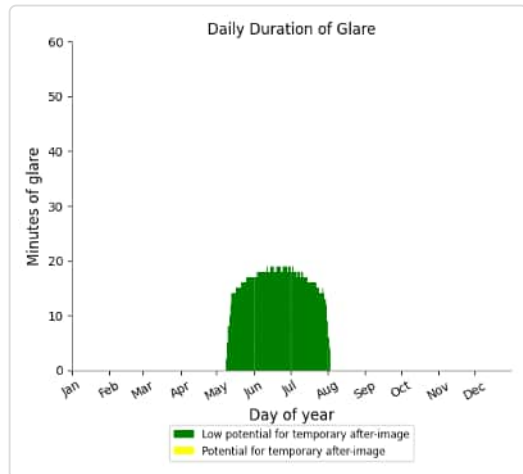
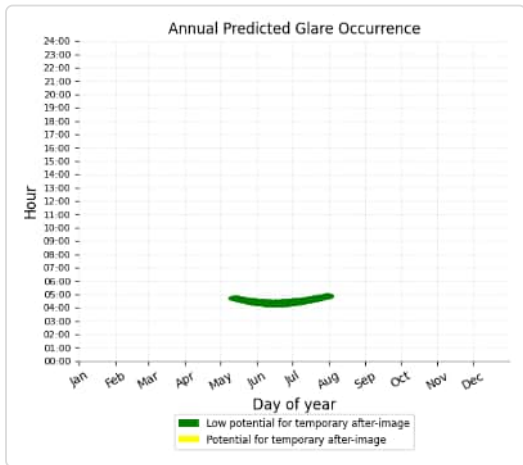




PV array 1 - OP Receptor (OP 48)

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

- 1,393 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

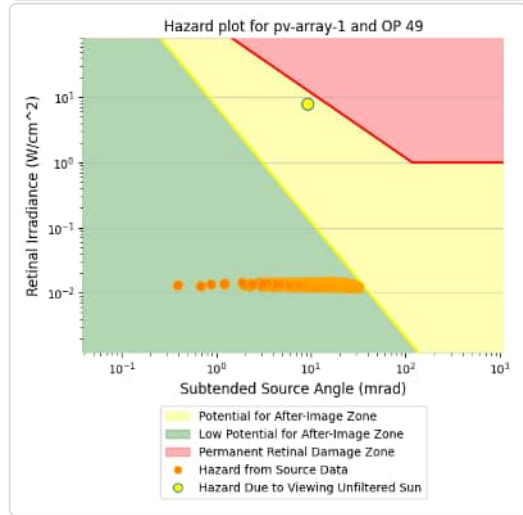
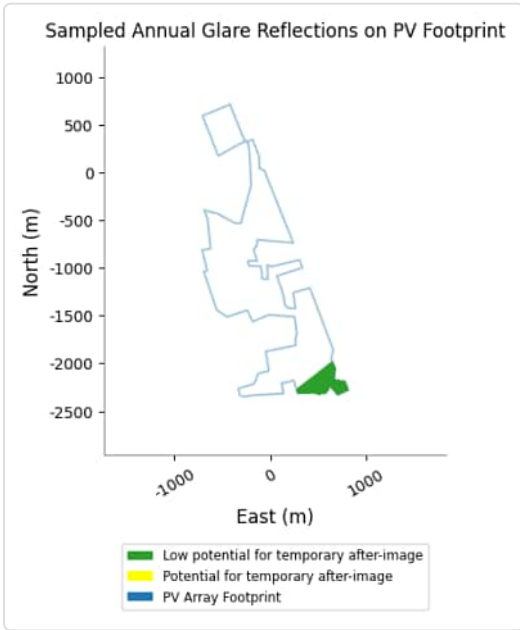
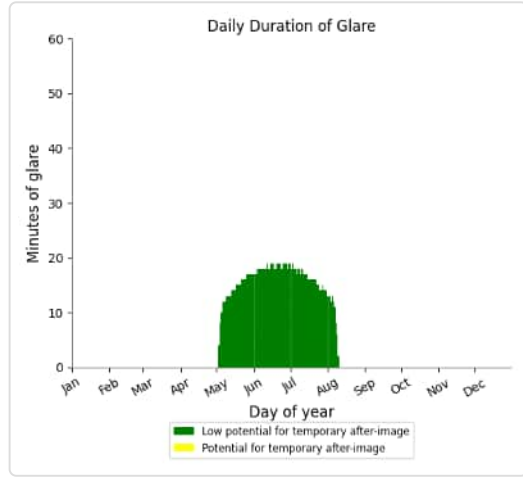
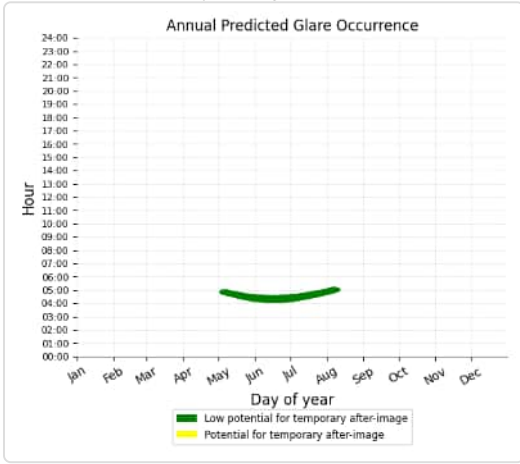


PV array 1 - OP Receptor (OP 49)

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

- 1,566 minutes of "green" glare with low potential to cause temporary after-image.

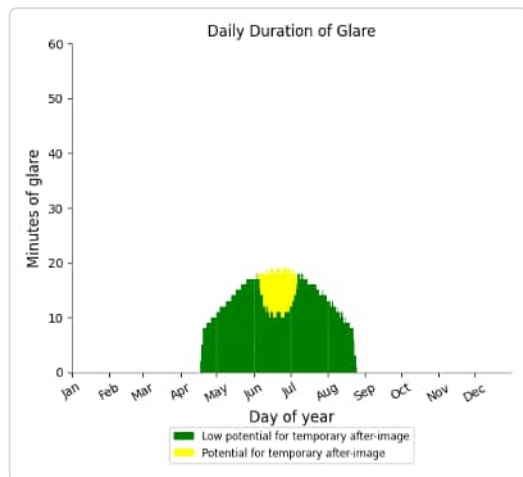
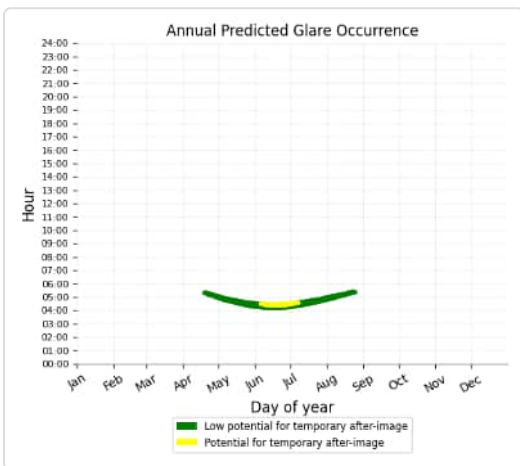
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

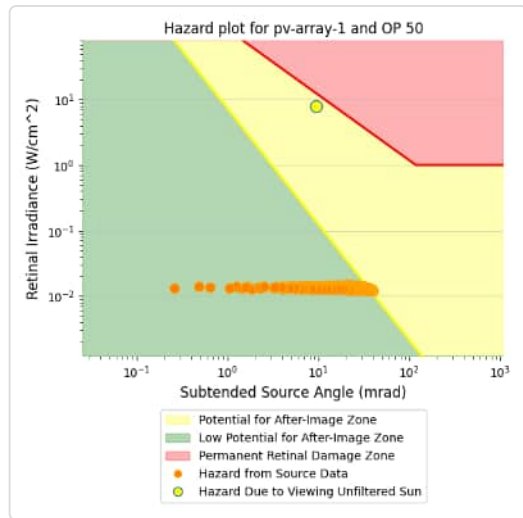
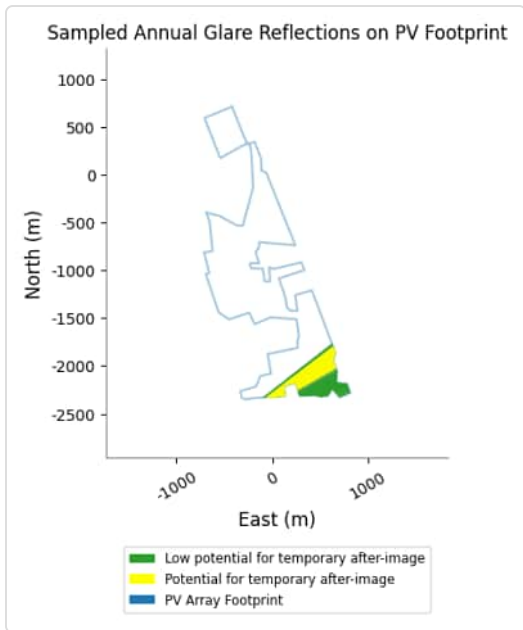


PV array 1 - OP Receptor (OP 50)

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

- 1,634 minutes of "green" glare with low potential to cause temporary after-image.
- 215 minutes of "yellow" glare with potential to cause temporary after-image.

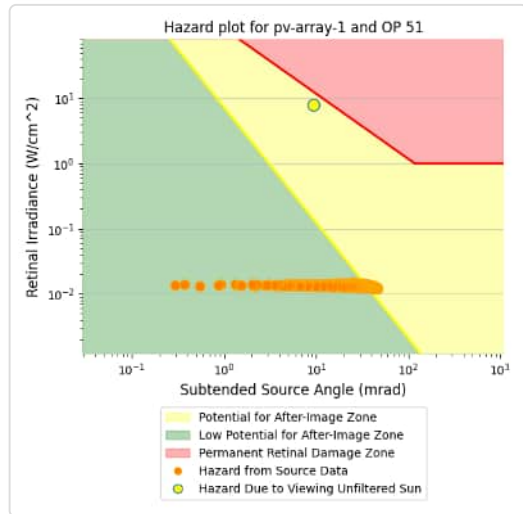
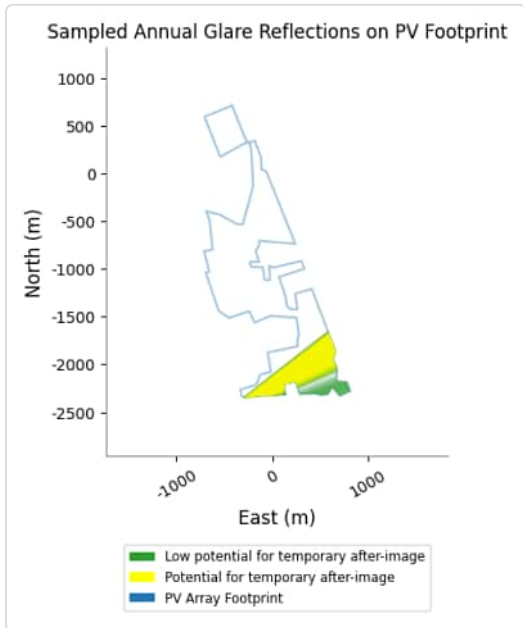
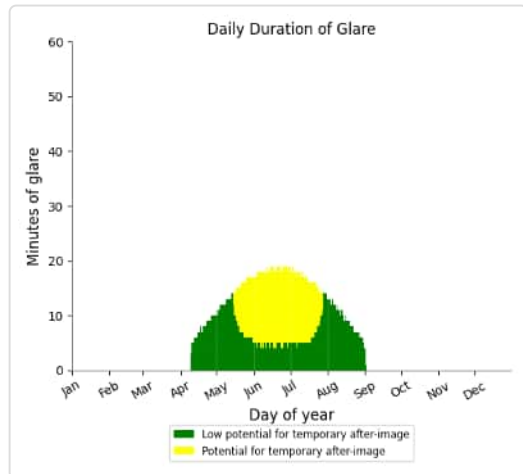
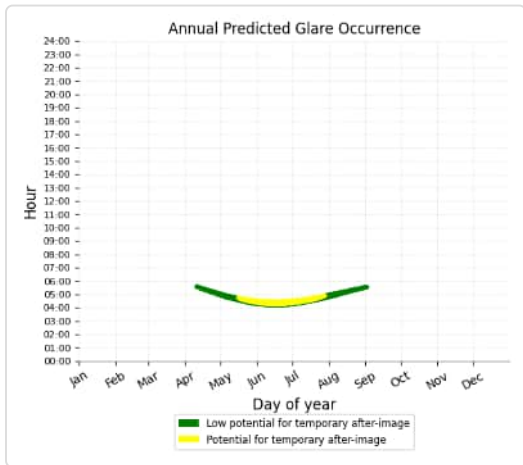




PV array 1 - OP Receptor (OP 51)

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

- 1,099 minutes of "green" glare with low potential to cause temporary after-image.
- 855 minutes of "yellow" glare with potential to cause temporary after-image.

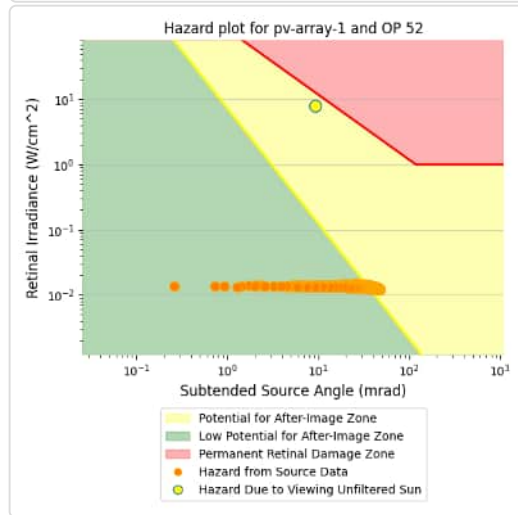
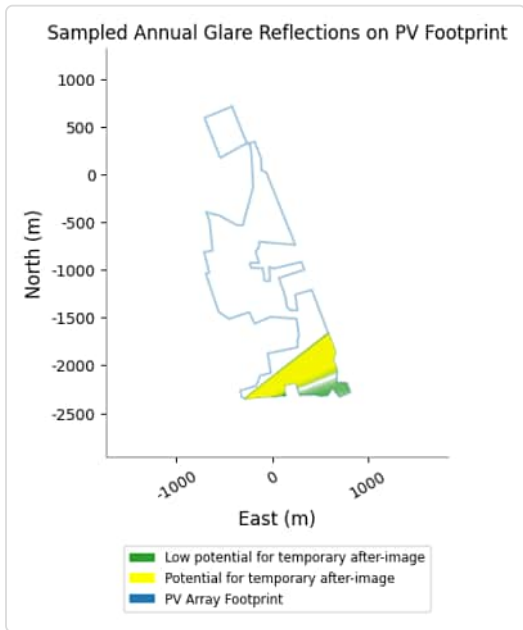
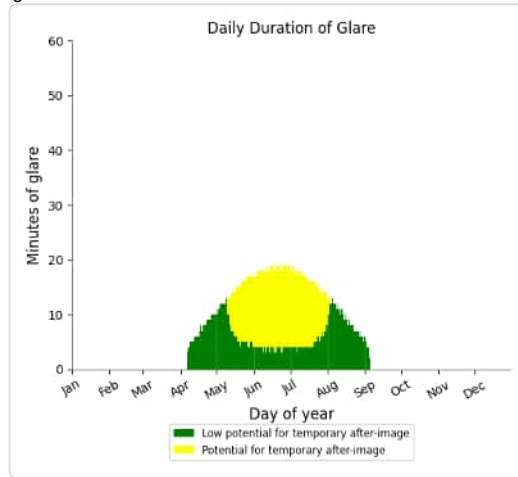
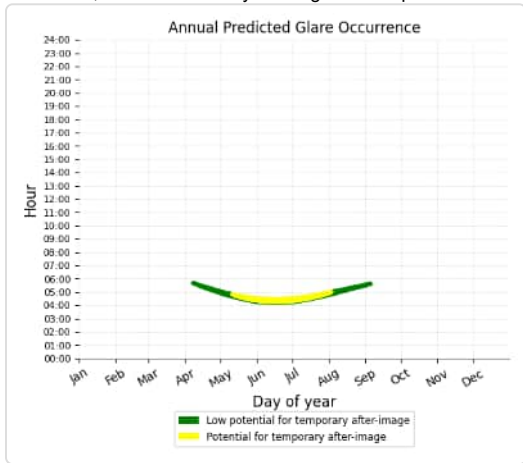


PV array 1 - OP Receptor (OP 52)

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

- 967 minutes of "green" glare with low potential to cause temporary after-image.

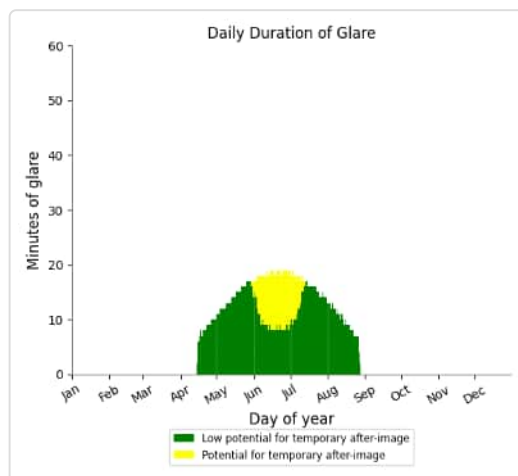
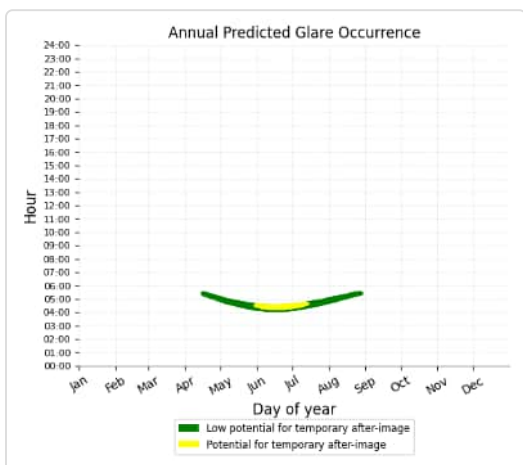
- 1,015 minutes of "yellow" glare with potential to cause temporary after-image.

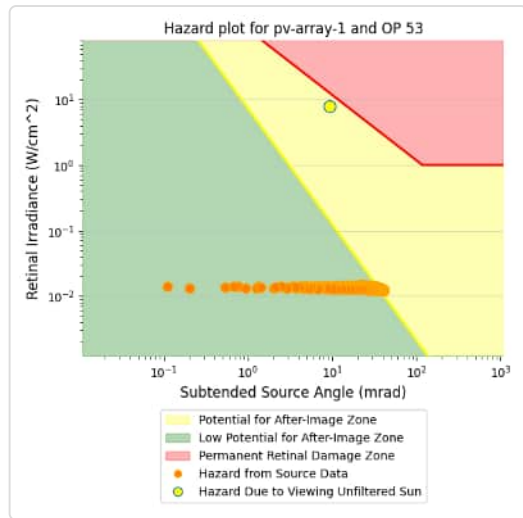
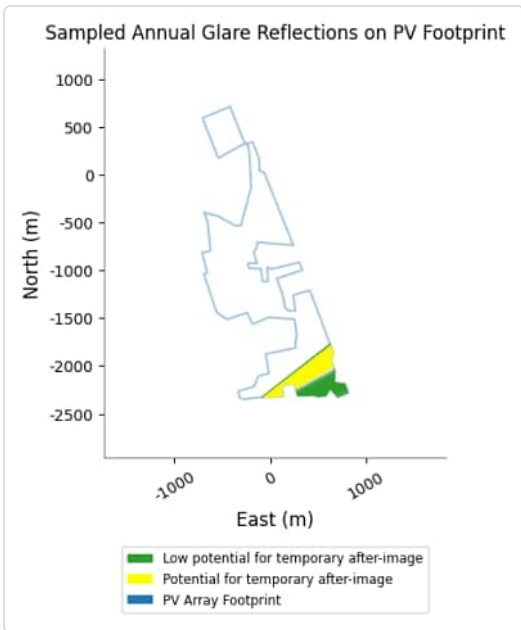


PV array 1 - OP Receptor (OP 53)

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

- 1,543 minutes of "green" glare with low potential to cause temporary after-image.
- 353 minutes of "yellow" glare with potential to cause temporary after-image.

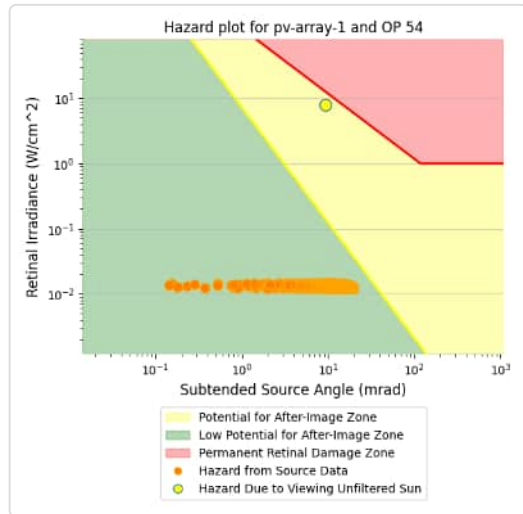
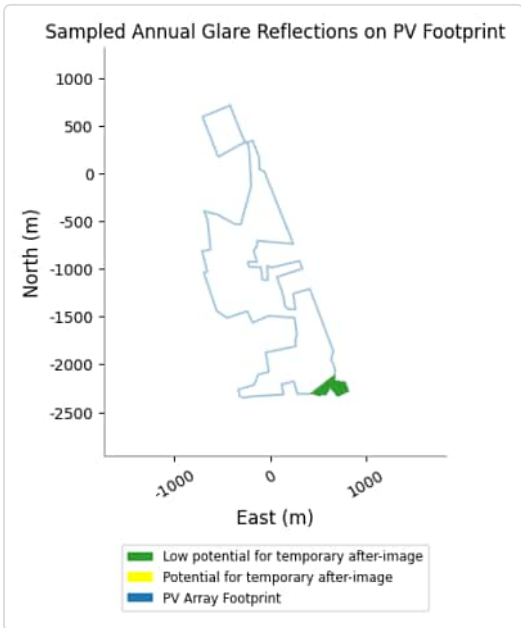
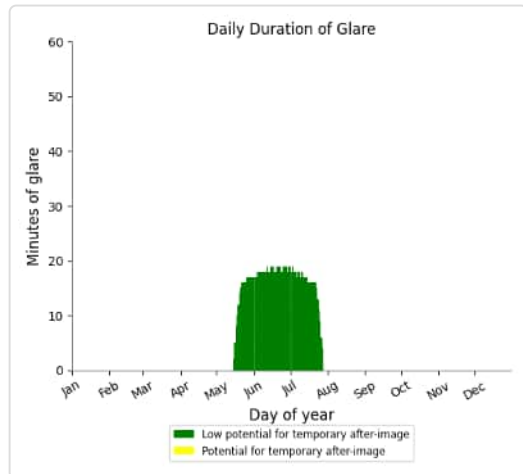
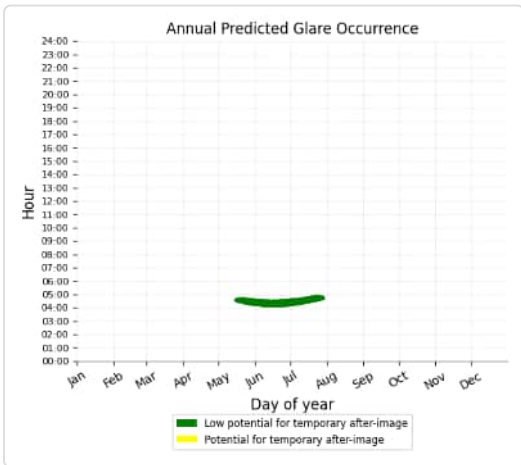




PV array 1 - OP Receptor (OP 54)

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

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



PV array 2 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0
OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	0	0
OP: OP 25	0	0
OP: OP 26	25	0
OP: OP 27	730	0
OP: OP 28	3	0
OP: OP 29	2	0
OP: OP 30	4	0
OP: OP 31	21	0
OP: OP 32	54	0
OP: OP 33	52	0
OP: OP 34	2404	110
OP: OP 35	4260	785
OP: OP 36	20	0
OP: OP 37	2421	2151
OP: OP 38	1996	2849
OP: OP 39	2278	2526
OP: OP 40	2257	2568
OP: OP 41	2800	1083
OP: OP 42	473	11
OP: OP 43	2285	400
OP: OP 44	13	0
OP: OP 45	0	0
OP: OP 46	606	20
OP: OP 47	1654	1695
OP: OP 48	1076	82
OP: OP 49	1177	103
OP: OP 50	1098	70
OP: OP 51	1251	89
OP: OP 52	1154	269

OP: OP 53	1081	177
OP: OP 54	1056	67

PV array 2 - OP Receptor (OP 1)

No glare found

PV array 2 - OP Receptor (OP 2)

No glare found

PV array 2 - OP Receptor (OP 3)

No glare found

PV array 2 - OP Receptor (OP 4)

No glare found

PV array 2 - OP Receptor (OP 5)

No glare found

PV array 2 - OP Receptor (OP 6)

No glare found

PV array 2 - OP Receptor (OP 7)

No glare found

PV array 2 - OP Receptor (OP 8)

No glare found

PV array 2 - OP Receptor (OP 9)

No glare found

PV array 2 - OP Receptor (OP 10)

No glare found

PV array 2 - OP Receptor (OP 11)

No glare found

PV array 2 - OP Receptor (OP 12)

No glare found

PV array 2 - OP Receptor (OP 13)

No glare found

PV array 2 - OP Receptor (OP 14)

No glare found

PV array 2 - OP Receptor (OP 15)

No glare found

PV array 2 - OP Receptor (OP 16)

No glare found

PV array 2 - OP Receptor (OP 17)

No glare found

PV array 2 - OP Receptor (OP 18)

No glare found

PV array 2 - OP Receptor (OP 19)

No glare found

PV array 2 - OP Receptor (OP 20)

No glare found

PV array 2 - OP Receptor (OP 21)

No glare found

PV array 2 - OP Receptor (OP 22)

No glare found

PV array 2 - OP Receptor (OP 23)

No glare found

PV array 2 - OP Receptor (OP 24)

No glare found

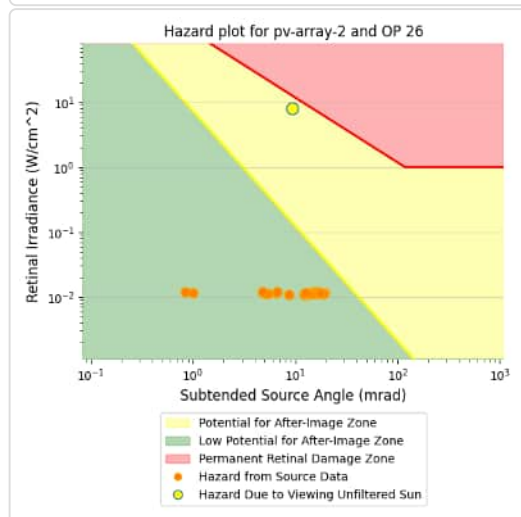
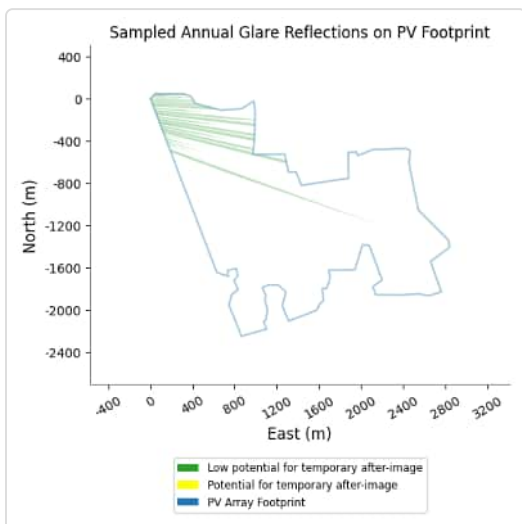
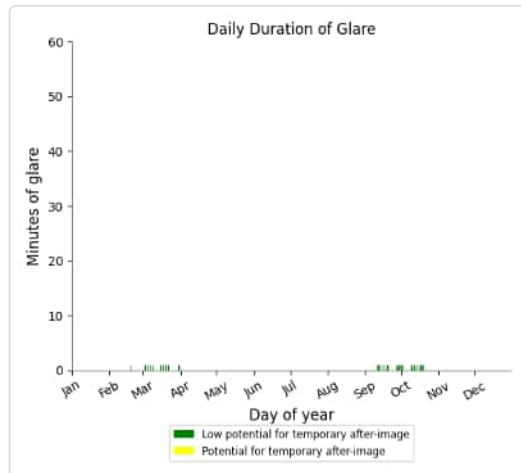
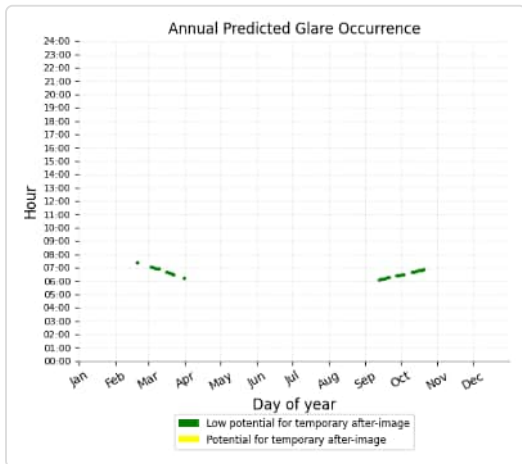
PV array 2 - OP Receptor (OP 25)

No glare found

PV array 2 - OP Receptor (OP 26)

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

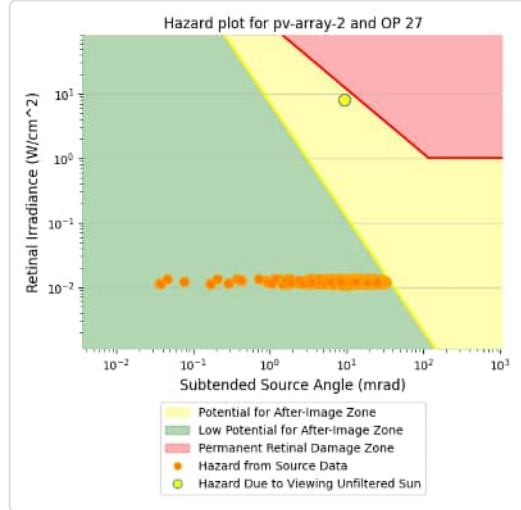
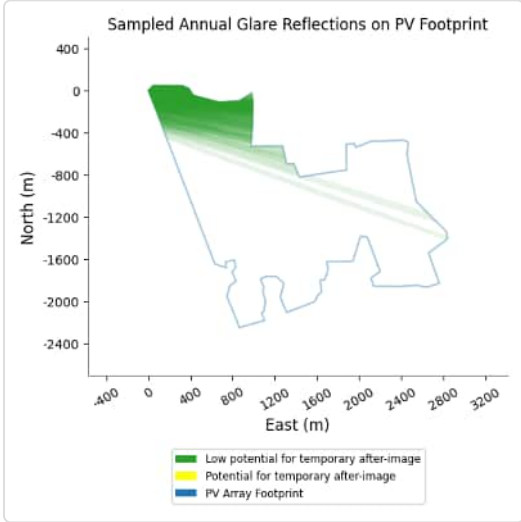
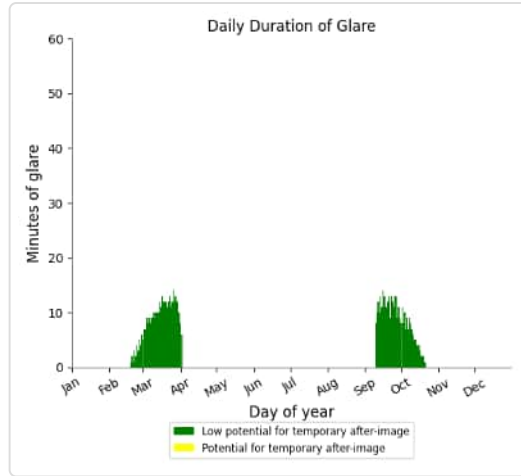
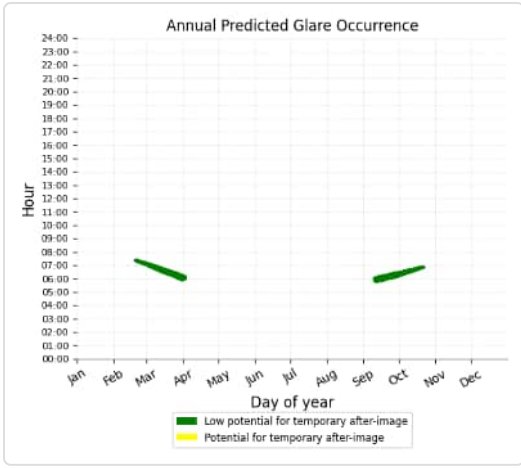
- 25 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 27)

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

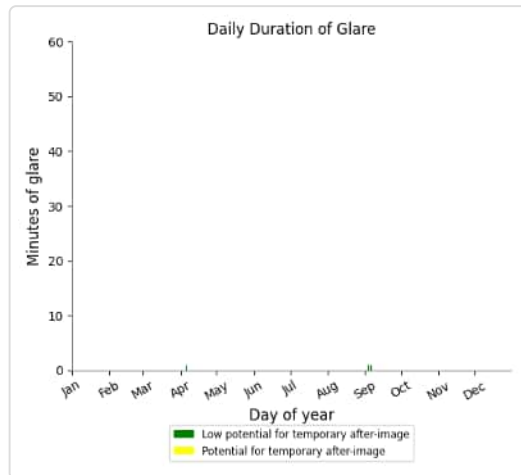
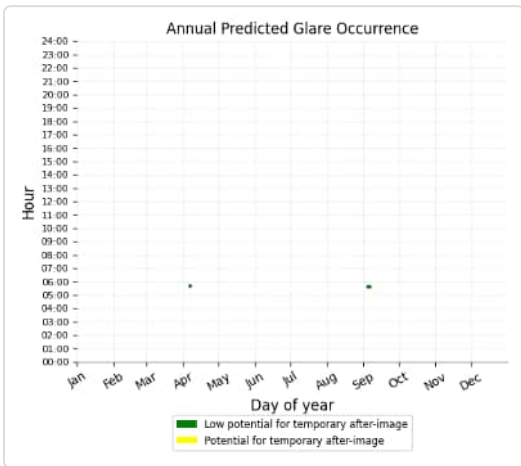
- 730 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

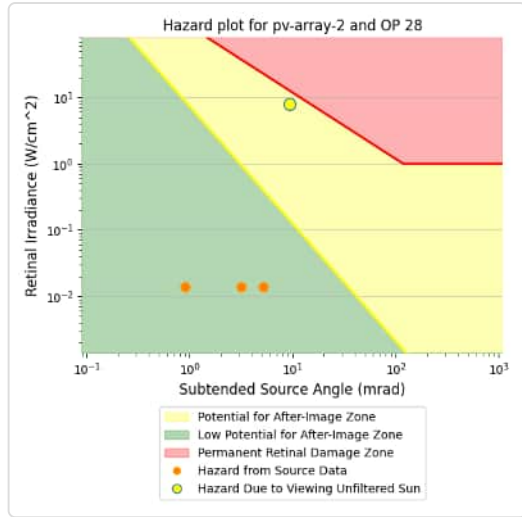
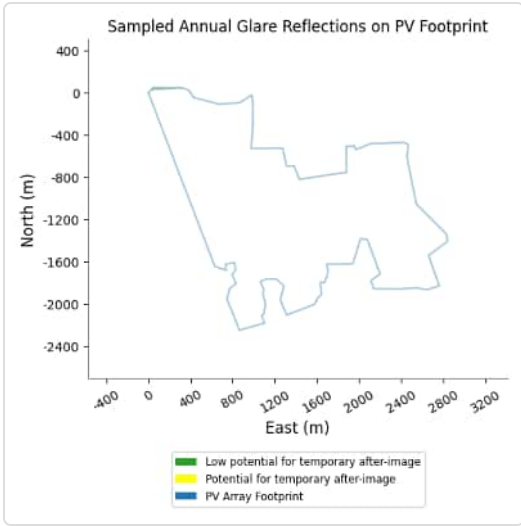


PV array 2 - OP Receptor (OP 28)

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

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

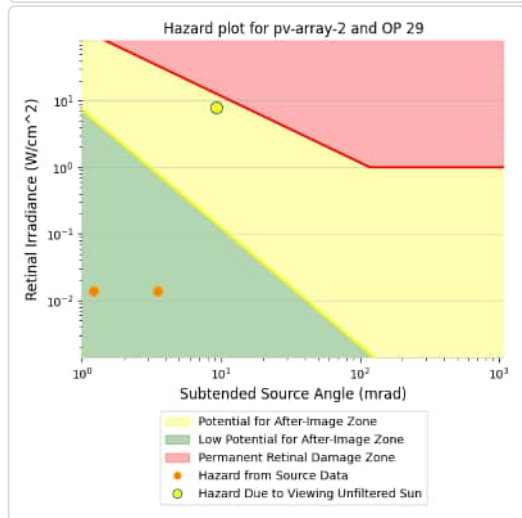
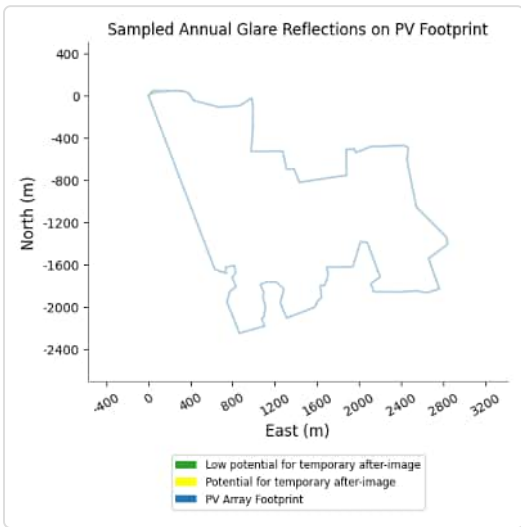
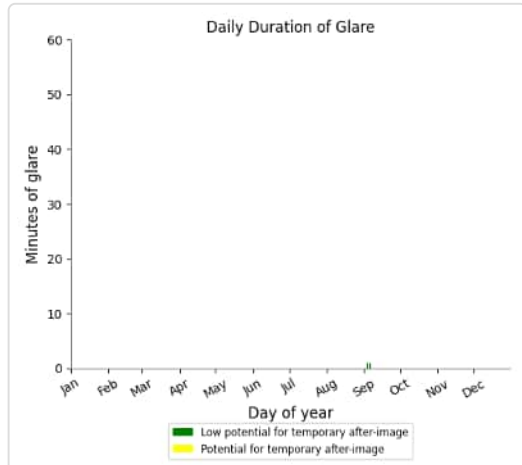
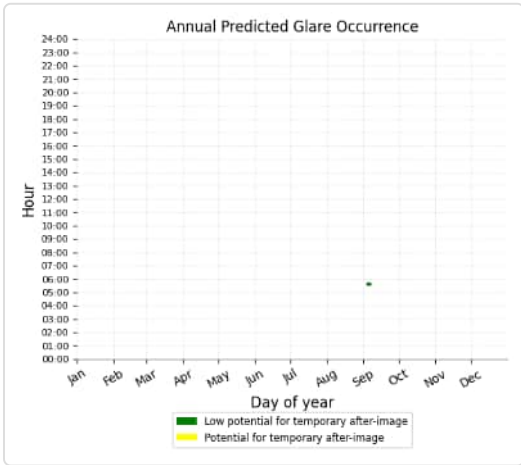




PV array 2 - OP Receptor (OP 29)

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

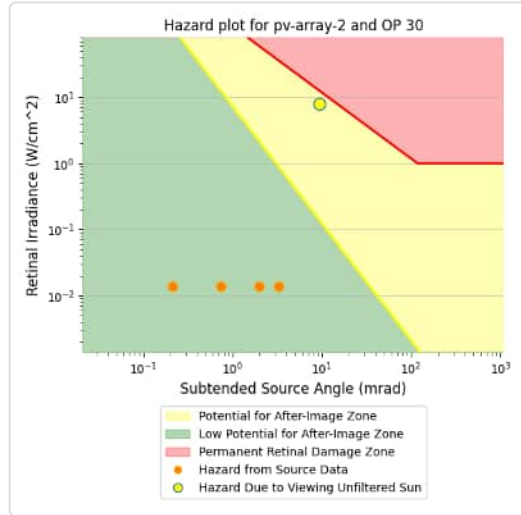
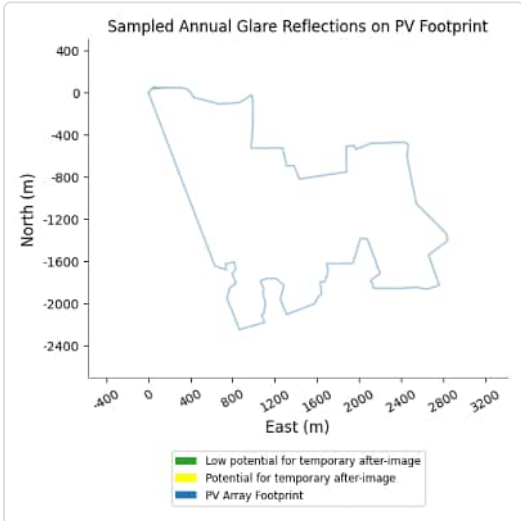
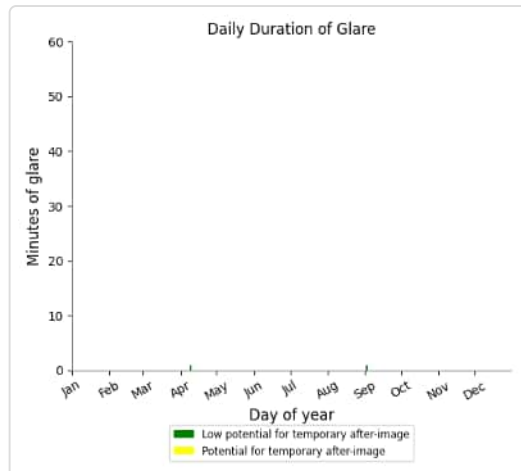
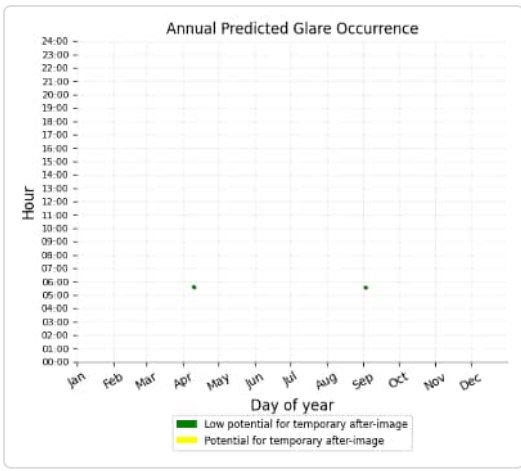
- 2 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 30)

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

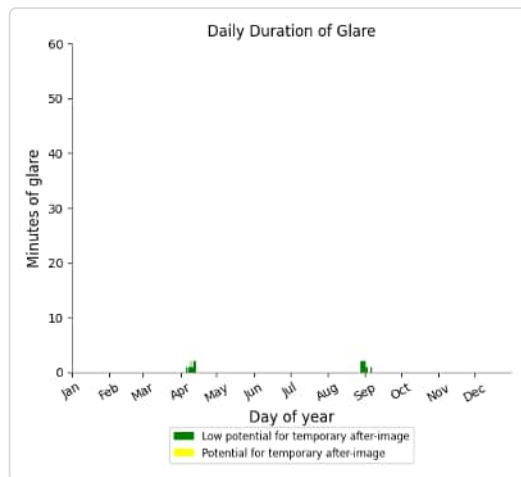
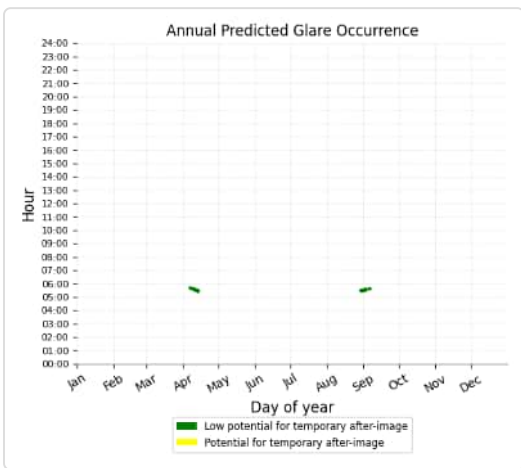
- 4 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

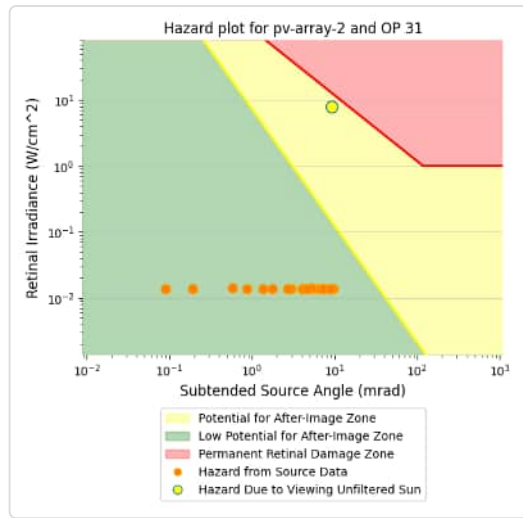
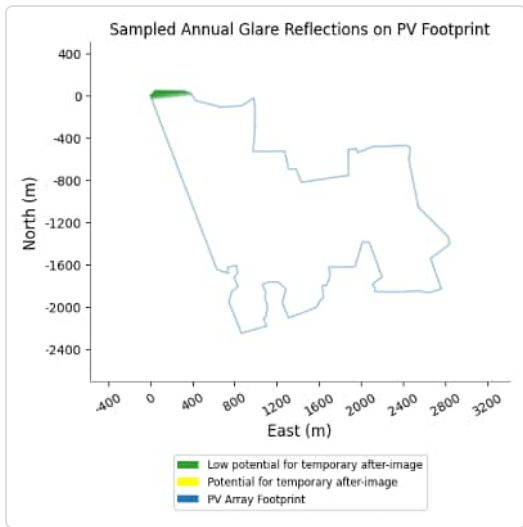


PV array 2 - OP Receptor (OP 31)

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

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

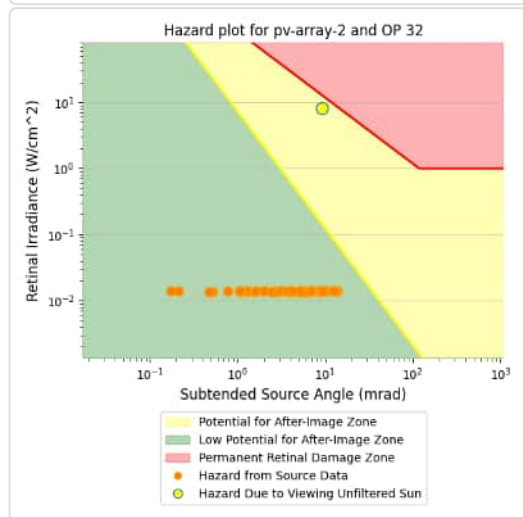
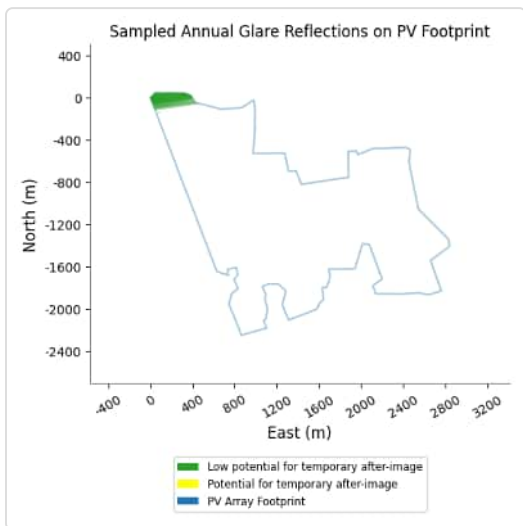
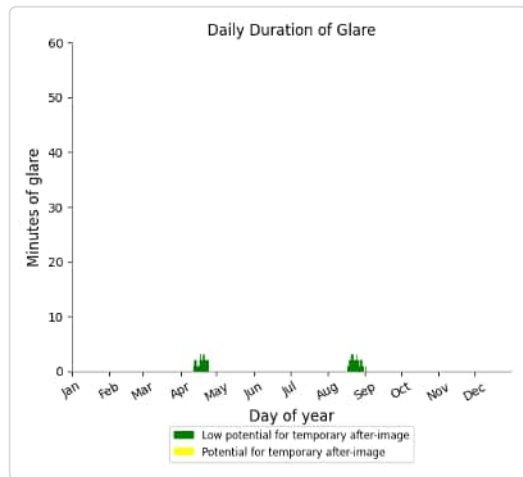
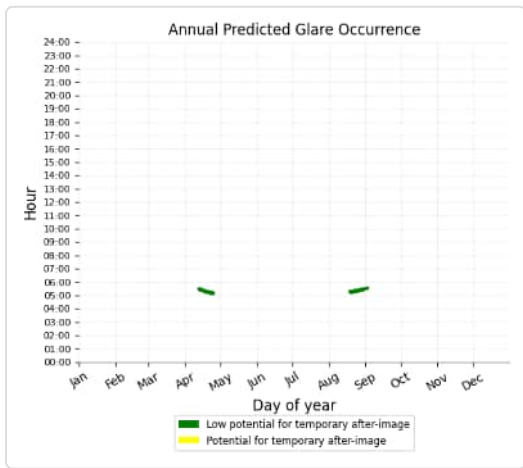




PV array 2 - OP Receptor (OP 32)

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

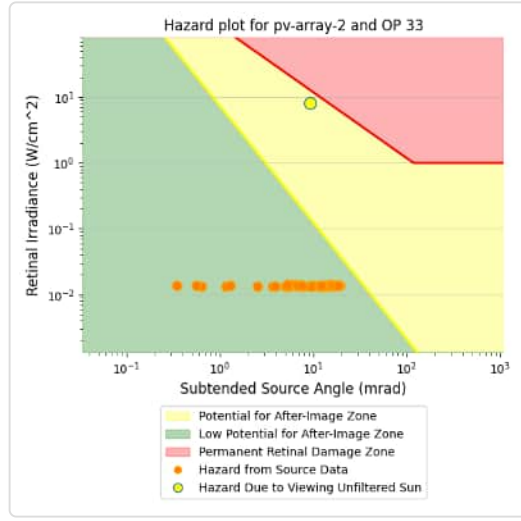
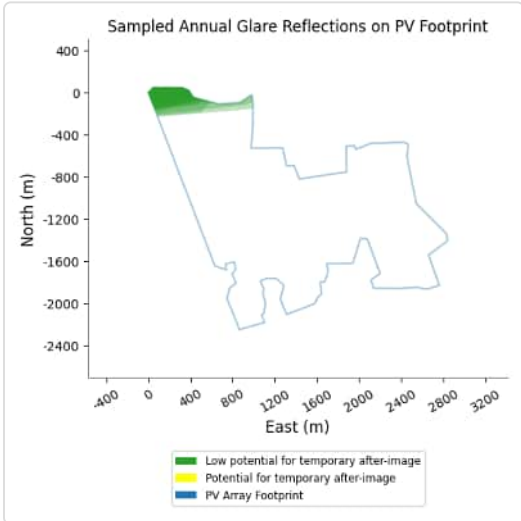
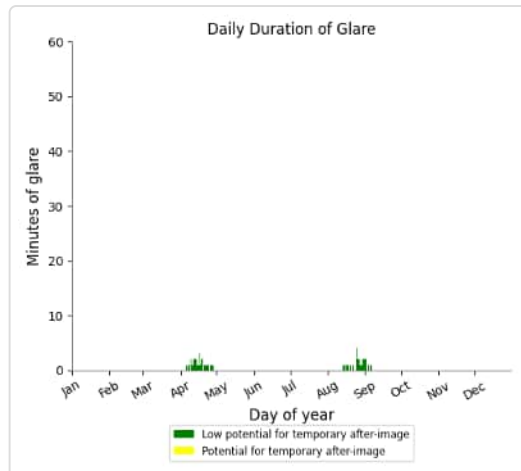
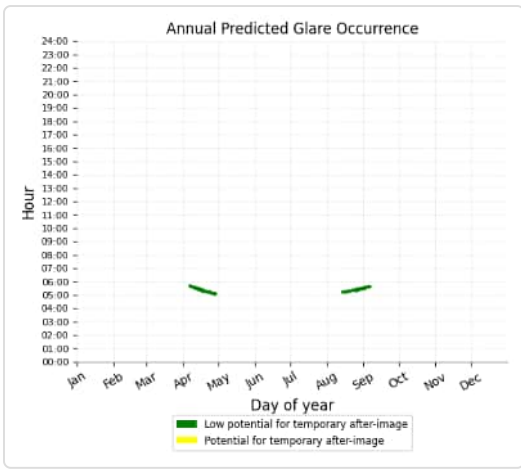
- 54 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 33)

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

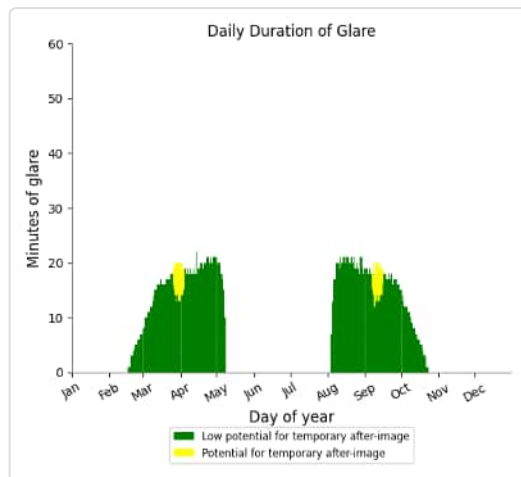
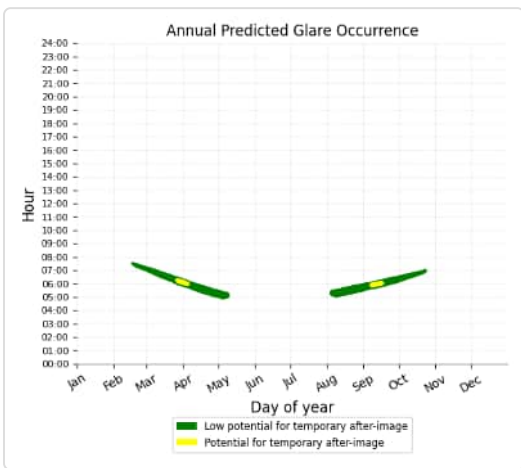
- 52 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

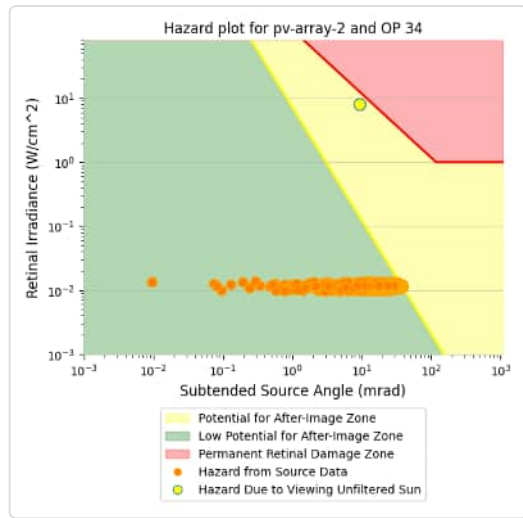
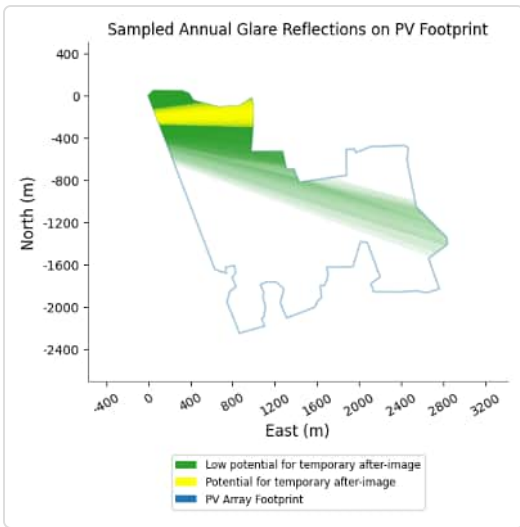


PV array 2 - OP Receptor (OP 34)

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

- 2,404 minutes of "green" glare with low potential to cause temporary after-image.
- 110 minutes of "yellow" glare with potential to cause temporary after-image.

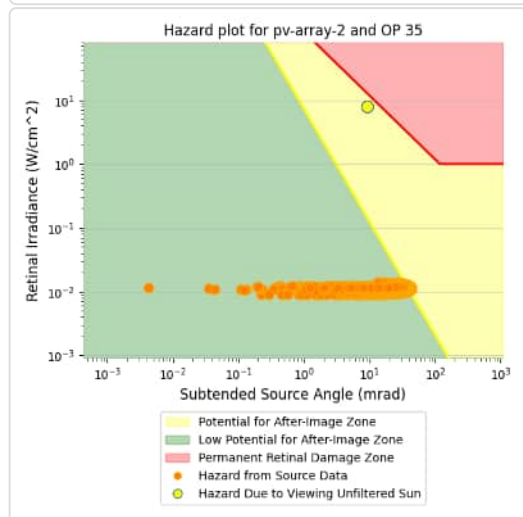
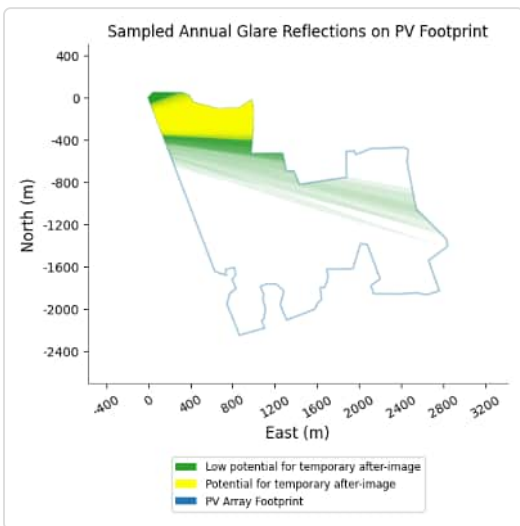
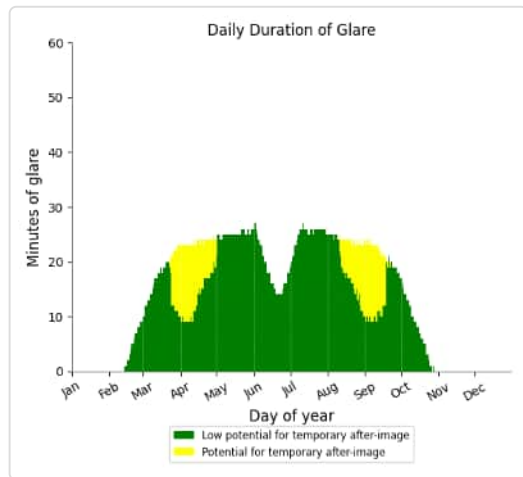
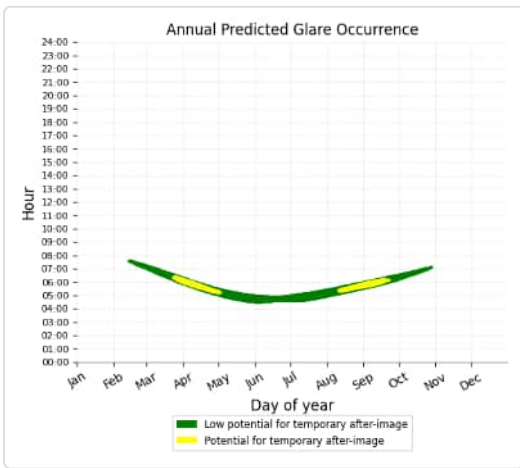




PV array 2 - OP Receptor (OP 35)

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

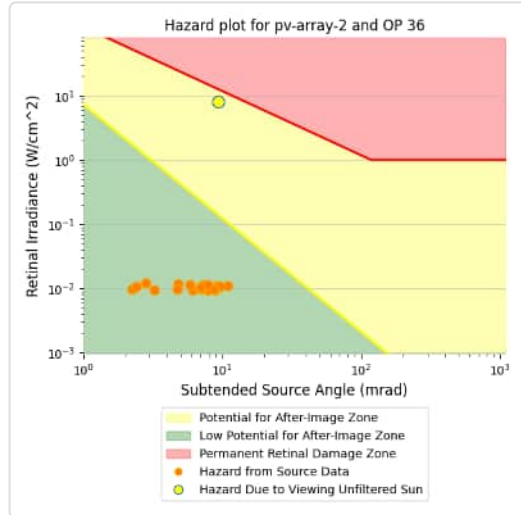
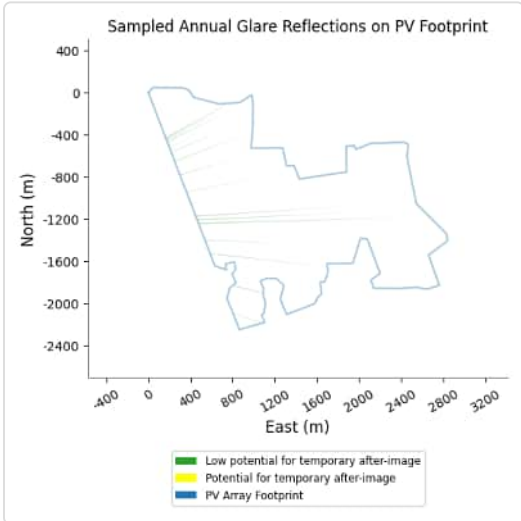
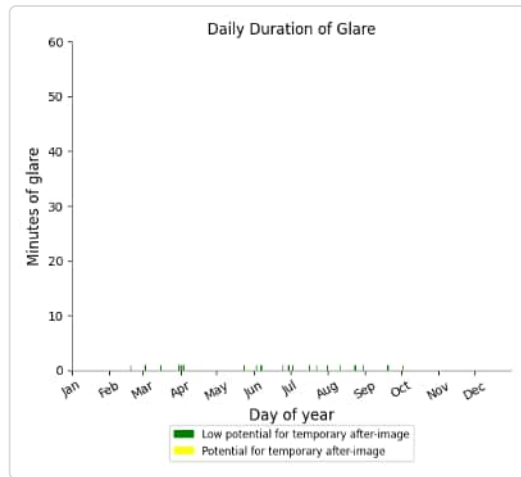
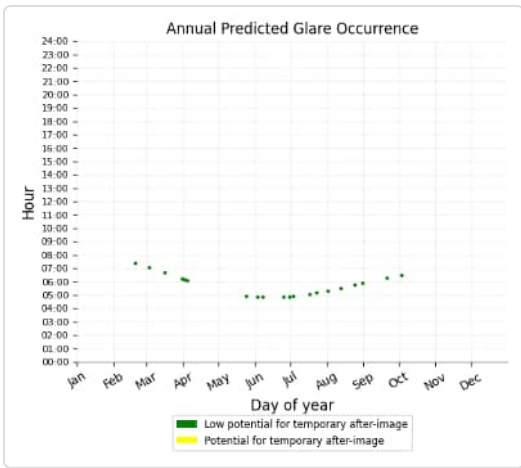
- 4,260 minutes of "green" glare with low potential to cause temporary after-image.
- 785 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 36)

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

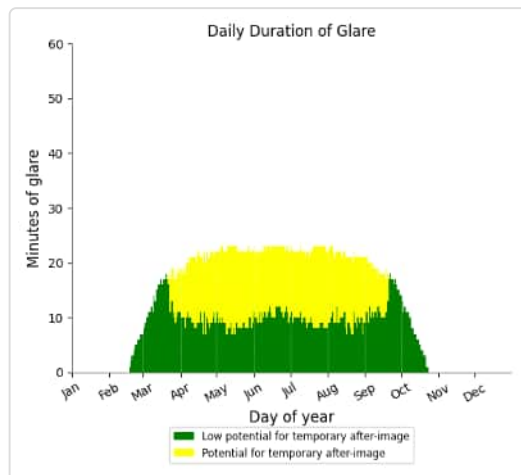
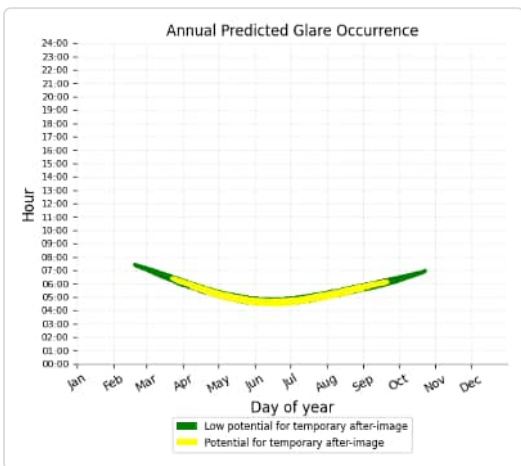
- 20 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

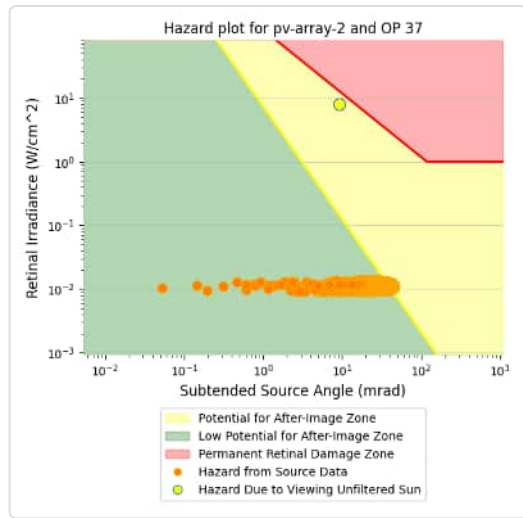
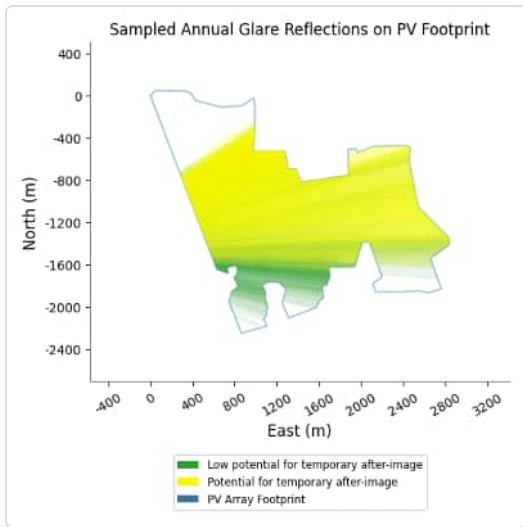


PV array 2 - OP Receptor (OP 37)

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

- 2,421 minutes of "green" glare with low potential to cause temporary after-image.
- 2,151 minutes of "yellow" glare with potential to cause temporary after-image.

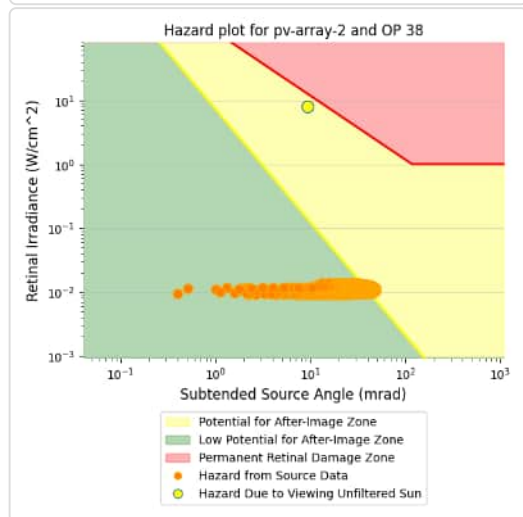
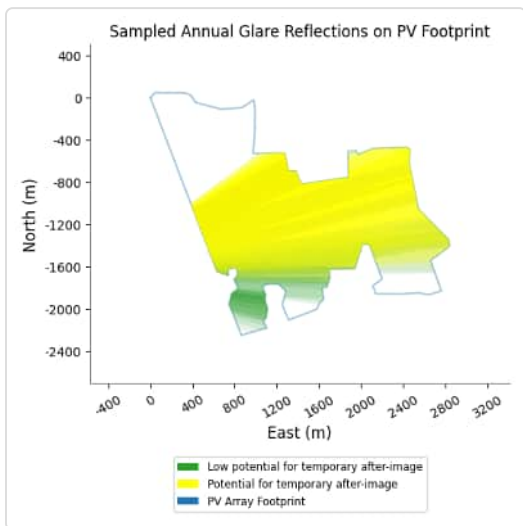
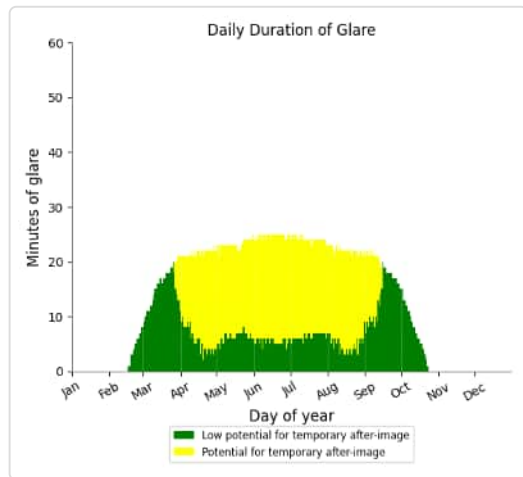
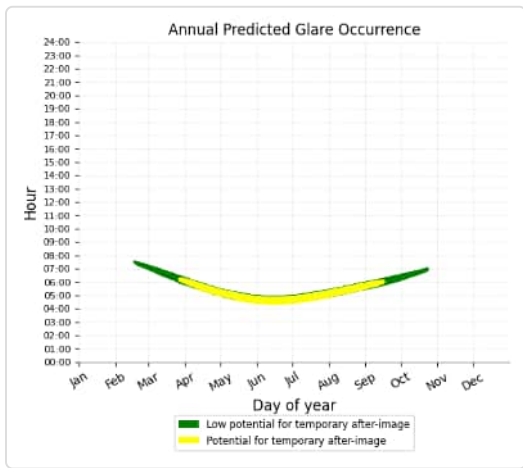




PV array 2 - OP Receptor (OP 38)

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

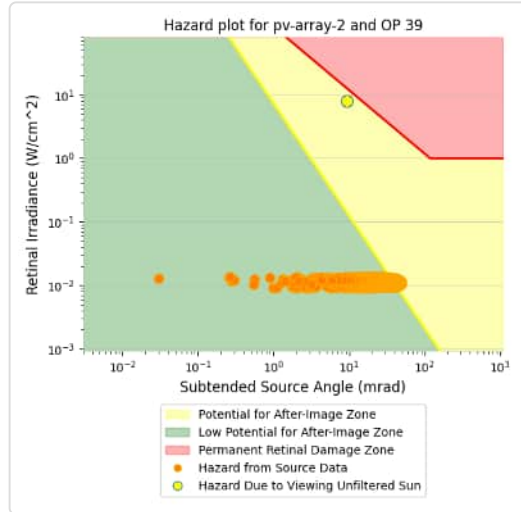
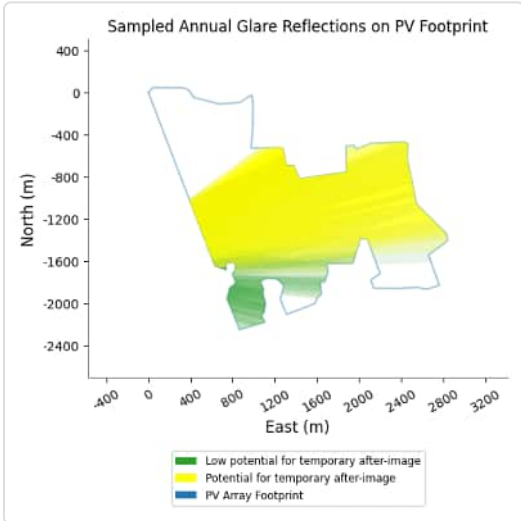
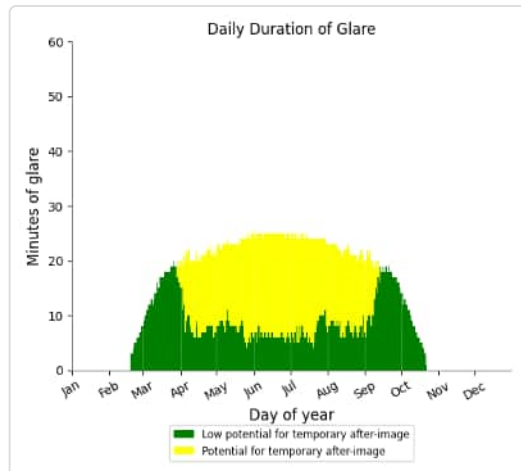
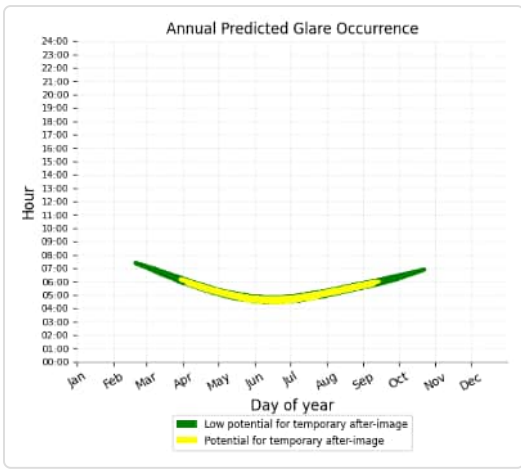
- 1,996 minutes of "green" glare with low potential to cause temporary after-image.
- 2,849 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 39)

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

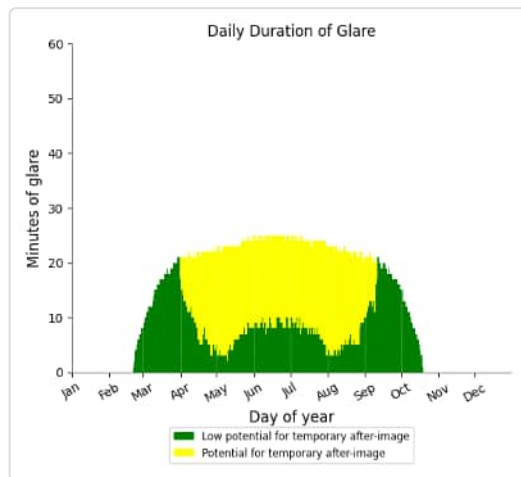
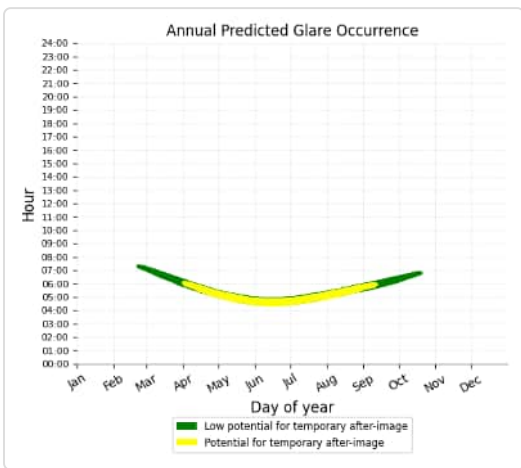
- 2,278 minutes of "green" glare with low potential to cause temporary after-image.
- 2,526 minutes of "yellow" glare with potential to cause temporary after-image.

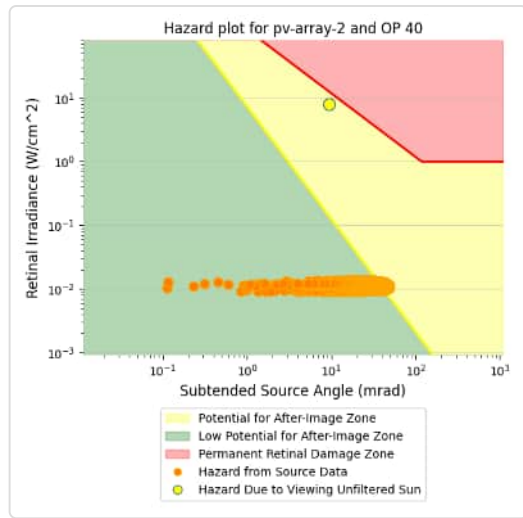
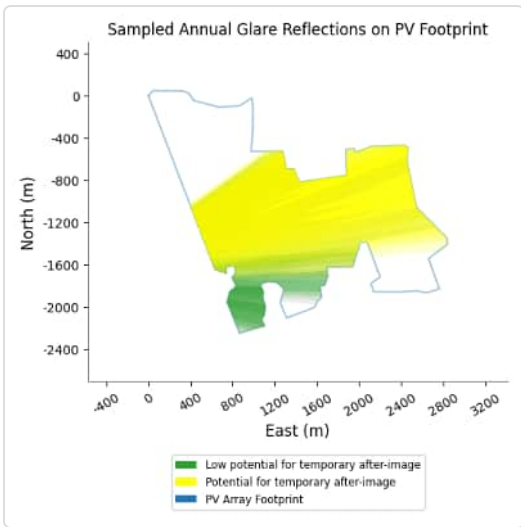


PV array 2 - OP Receptor (OP 40)

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

- 2,257 minutes of "green" glare with low potential to cause temporary after-image.
- 2,568 minutes of "yellow" glare with potential to cause temporary after-image.

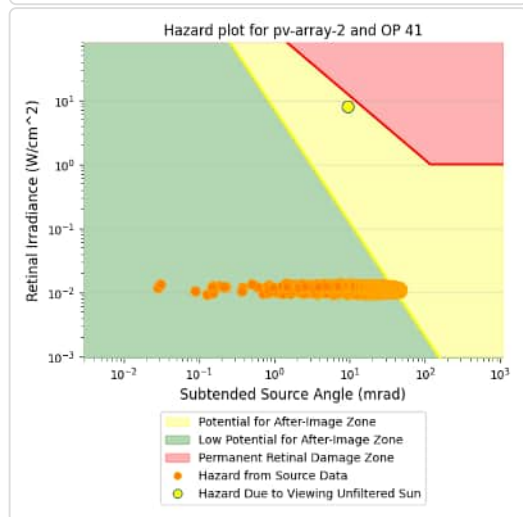
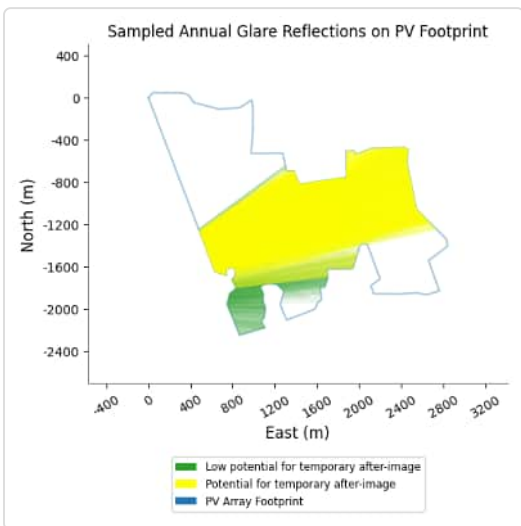
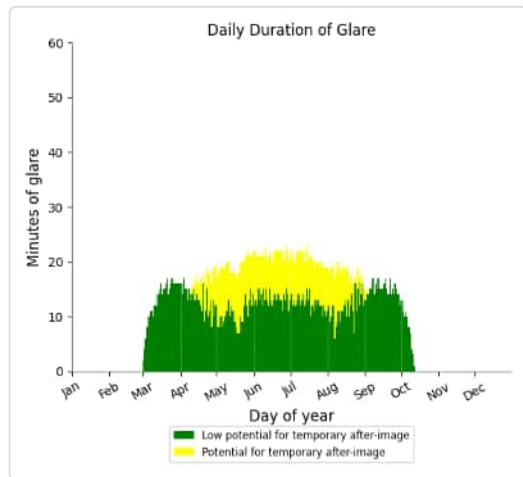
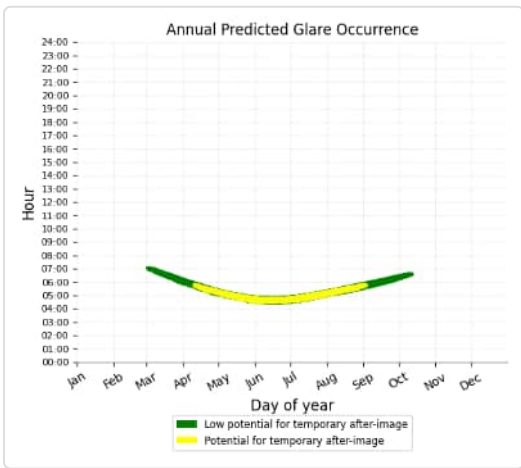




PV array 2 - OP Receptor (OP 41)

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

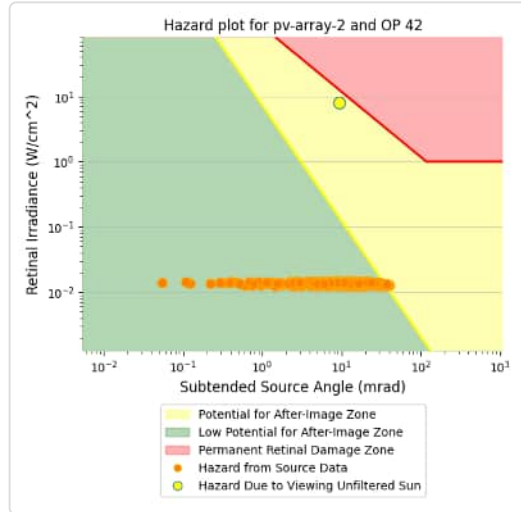
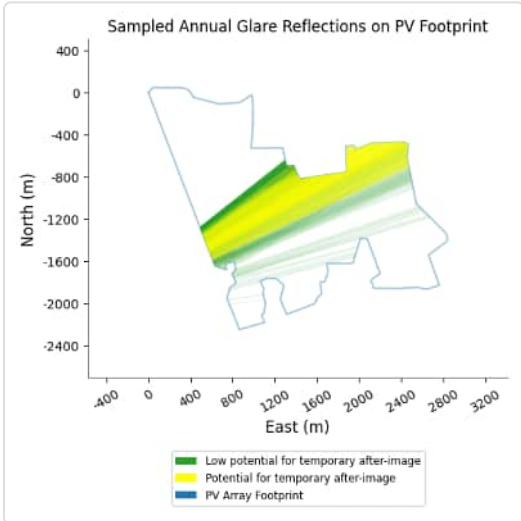
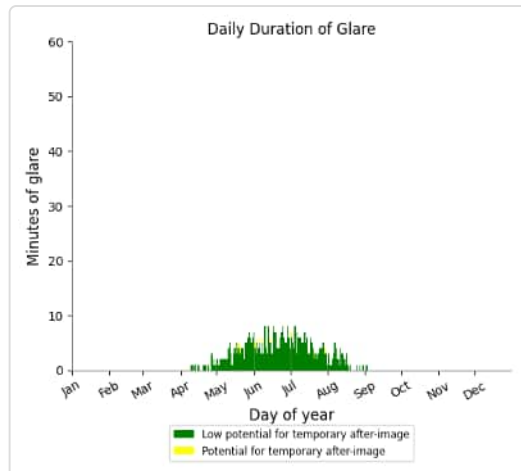
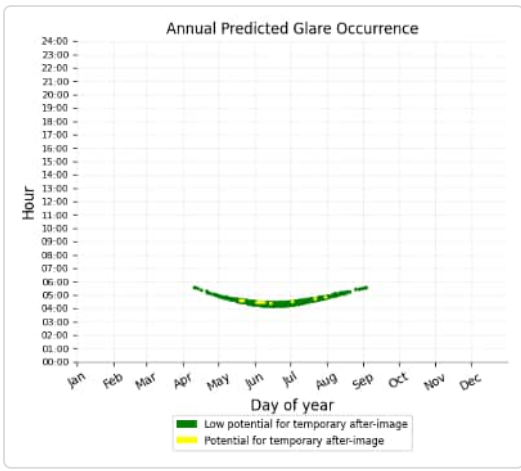
- 2,800 minutes of "green" glare with low potential to cause temporary after-image.
- 1,083 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 42)

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

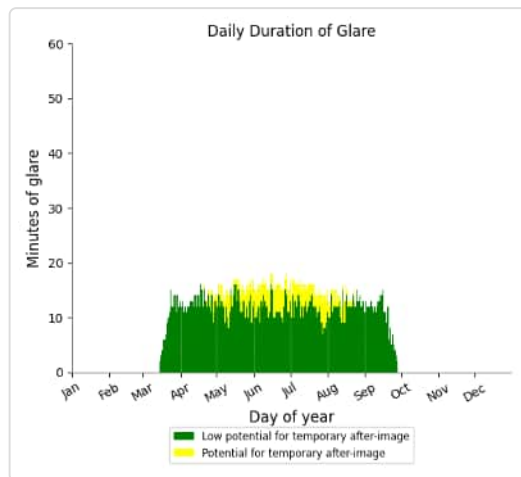
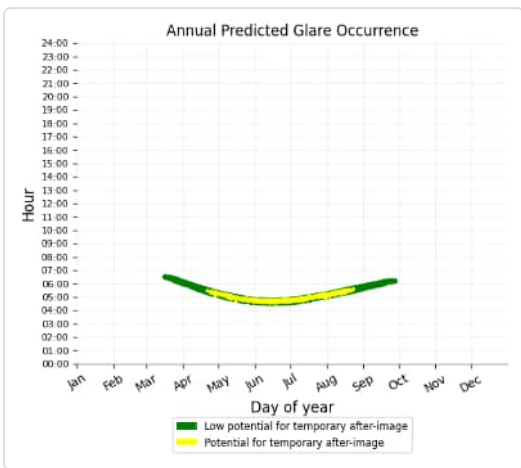
- 473 minutes of "green" glare with low potential to cause temporary after-image.
- 11 minutes of "yellow" glare with potential to cause temporary after-image.

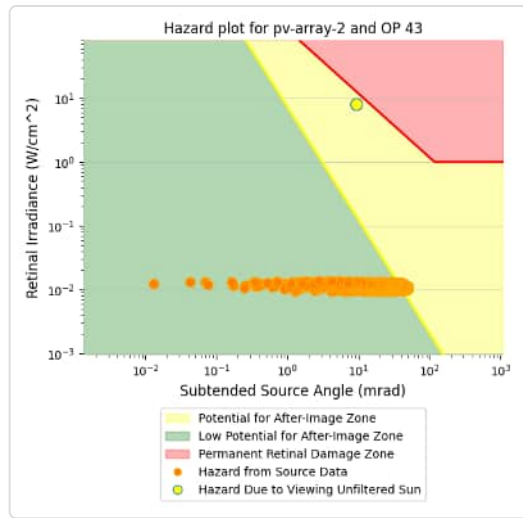
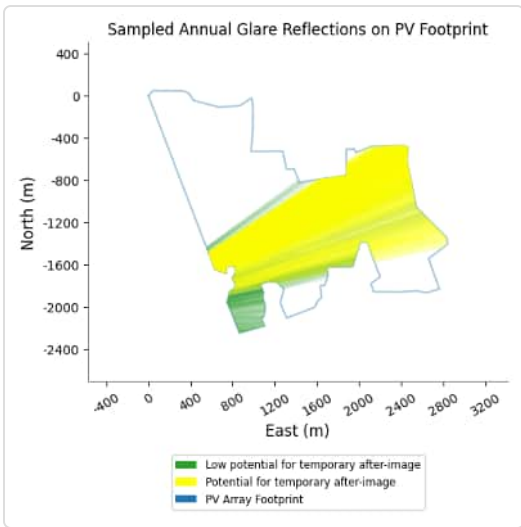


PV array 2 - OP Receptor (OP 43)

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

- 2,285 minutes of "green" glare with low potential to cause temporary after-image.
- 400 minutes of "yellow" glare with potential to cause temporary after-image.

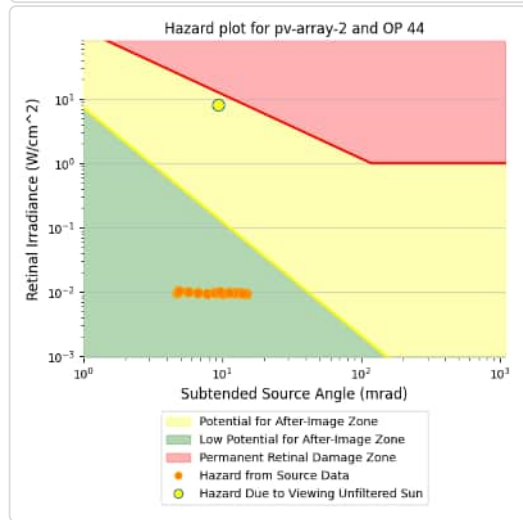
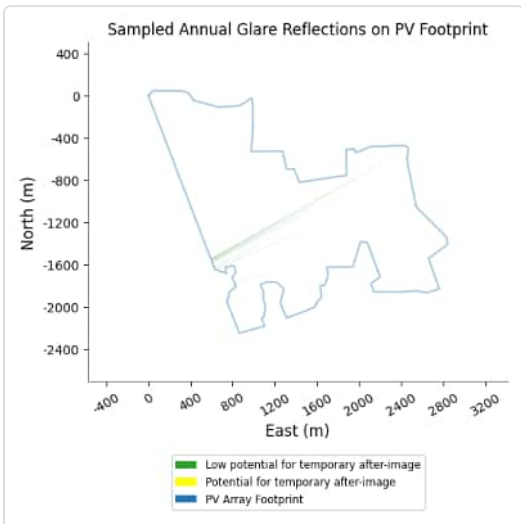
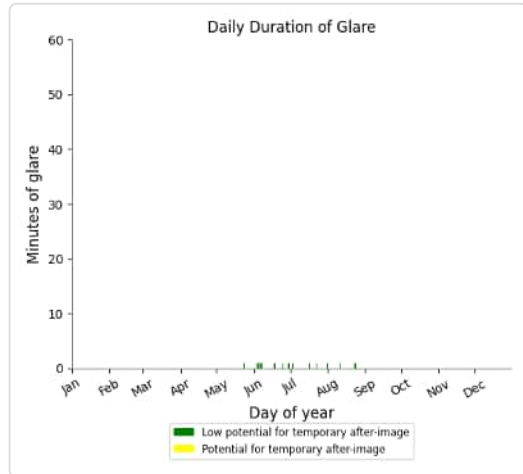
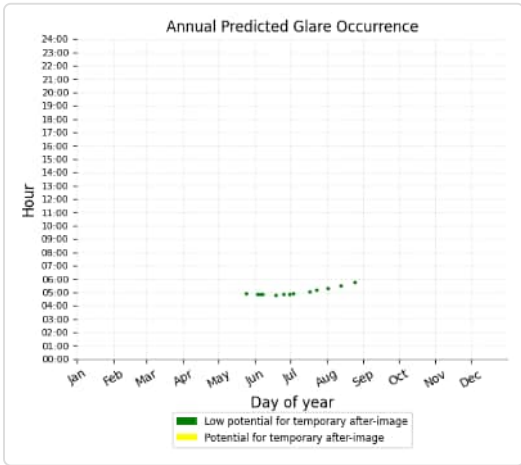




PV array 2 - OP Receptor (OP 44)

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

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



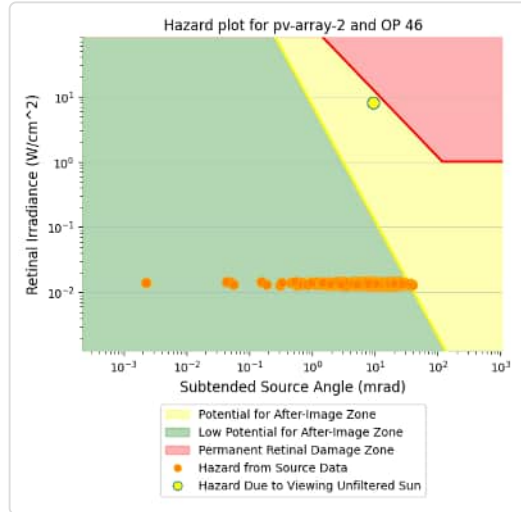
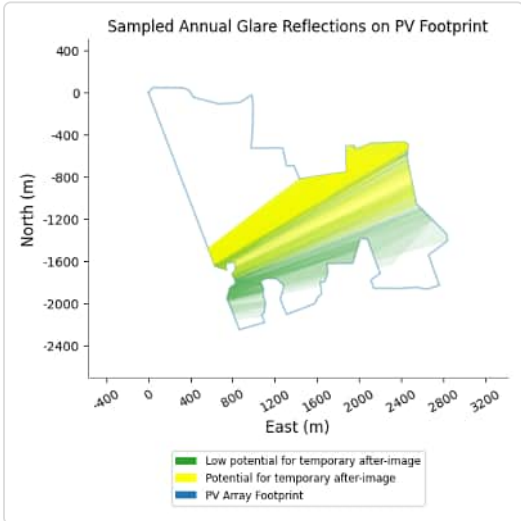
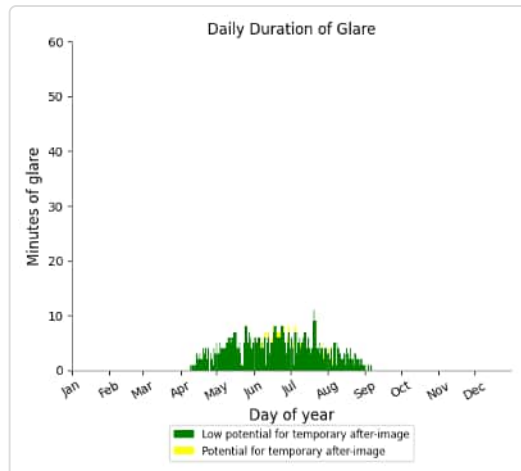
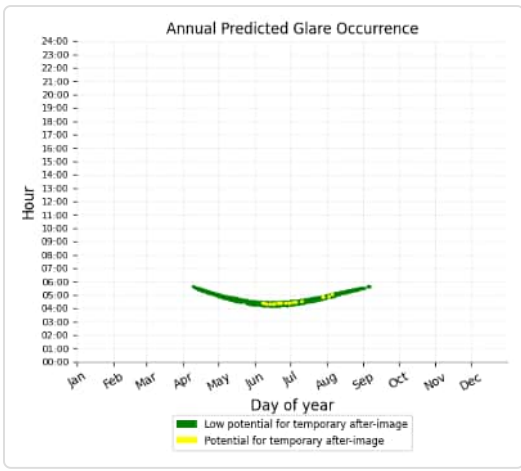
PV array 2 - OP Receptor (OP 45)

No glare found

PV array 2 - OP Receptor (OP 46)

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

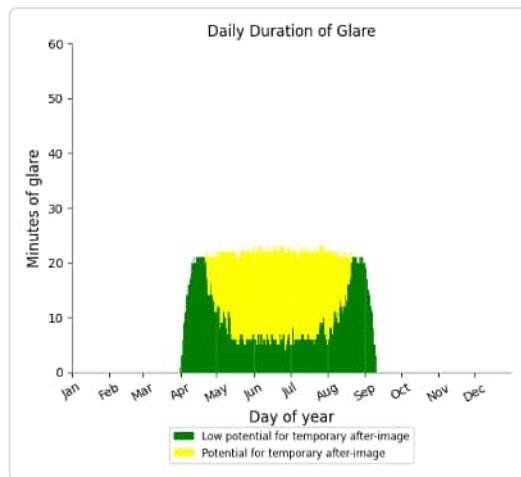
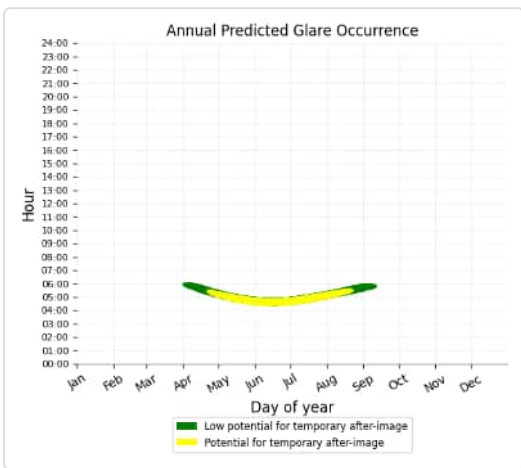
- 606 minutes of "green" glare with low potential to cause temporary after-image.
- 20 minutes of "yellow" glare with potential to cause temporary after-image.

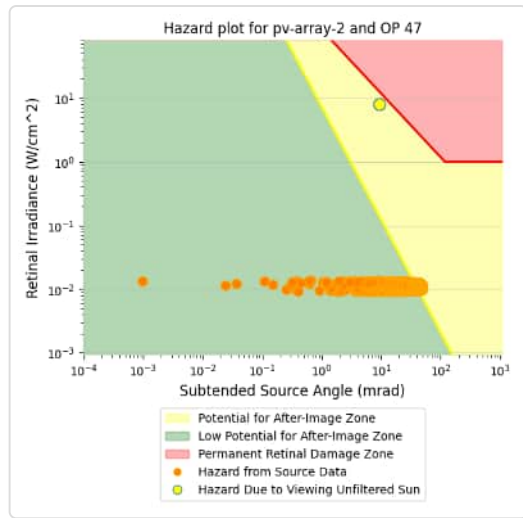
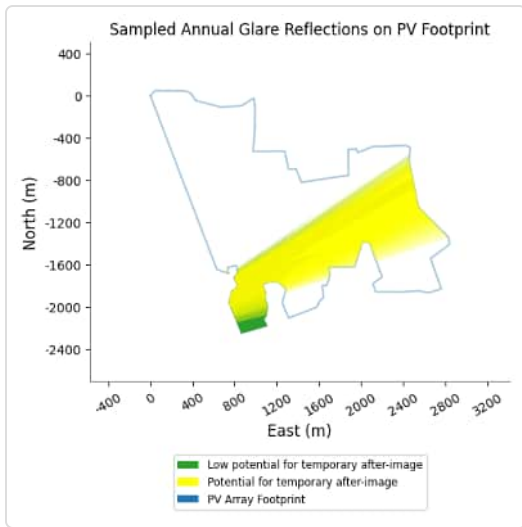


PV array 2 - OP Receptor (OP 47)

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

- 1,654 minutes of "green" glare with low potential to cause temporary after-image.
- 1,695 minutes of "yellow" glare with potential to cause temporary after-image.

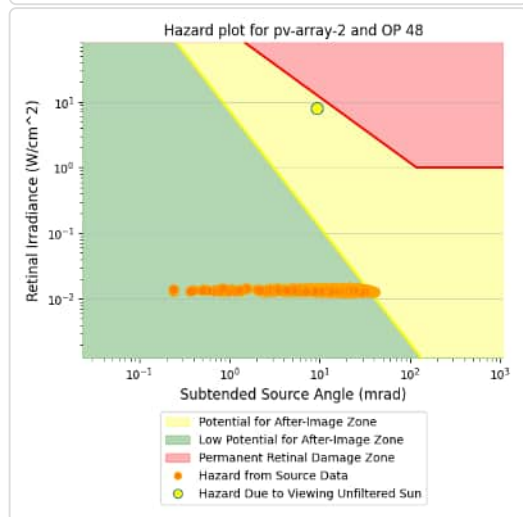
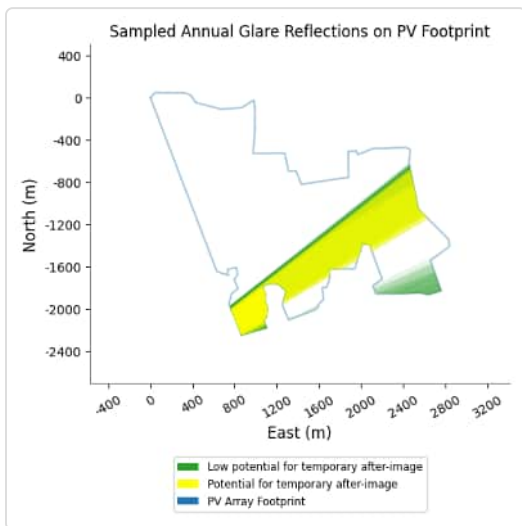
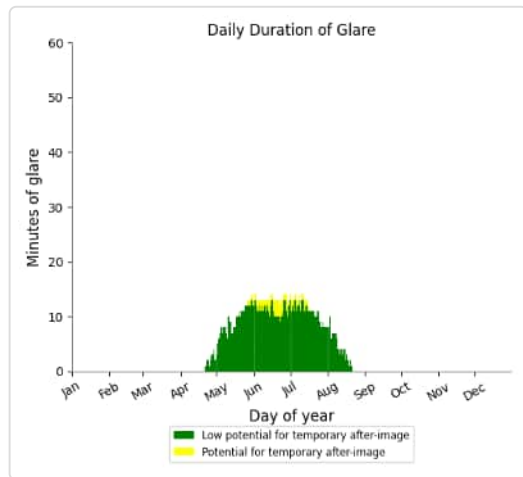
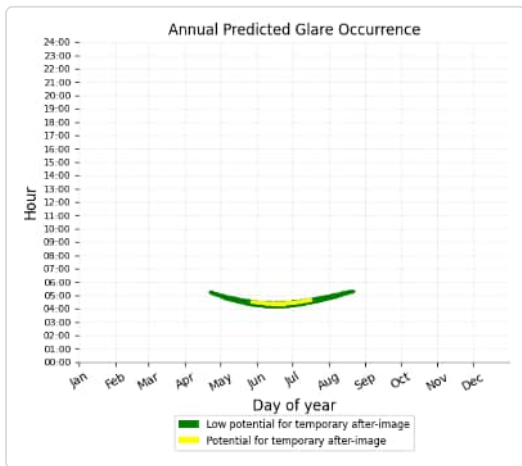




PV array 2 - OP Receptor (OP 48)

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

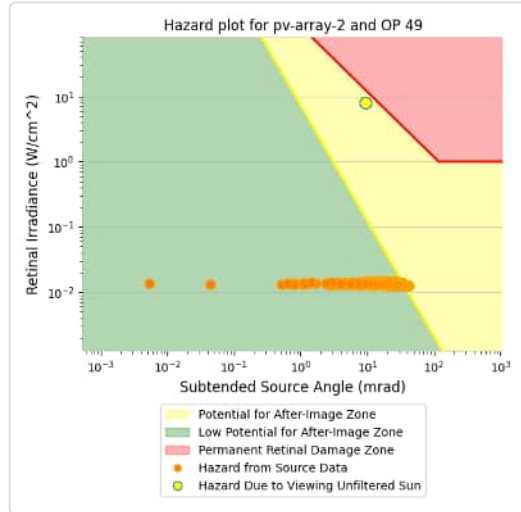
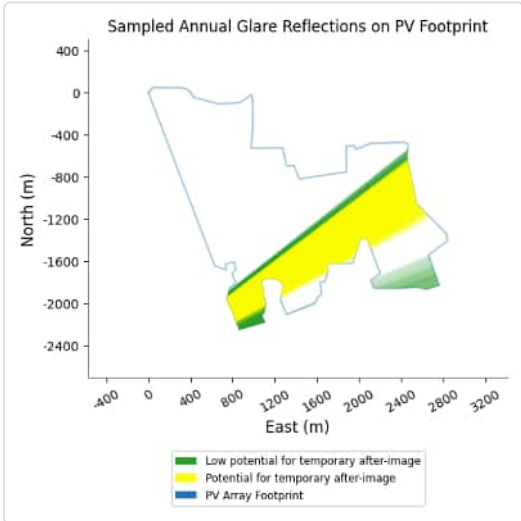
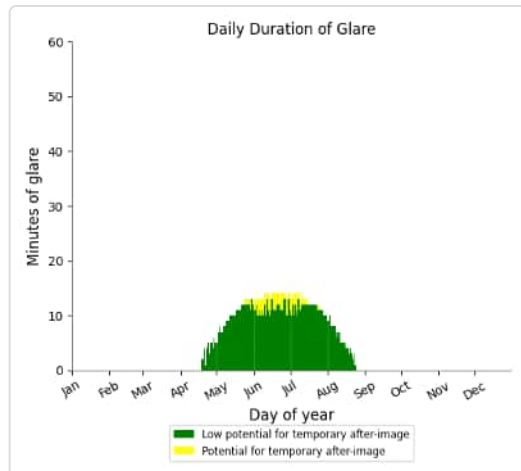
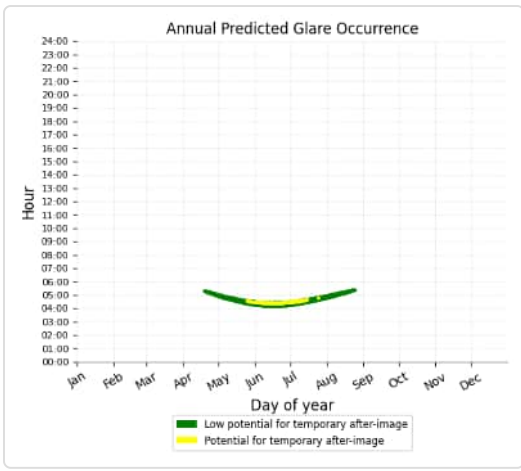
- 1,076 minutes of "green" glare with low potential to cause temporary after-image.
- 82 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 49)

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

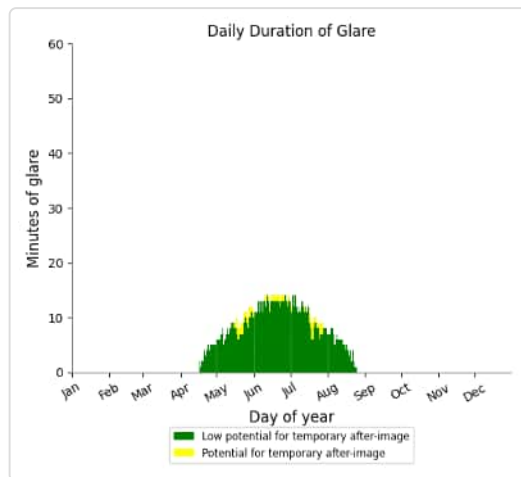
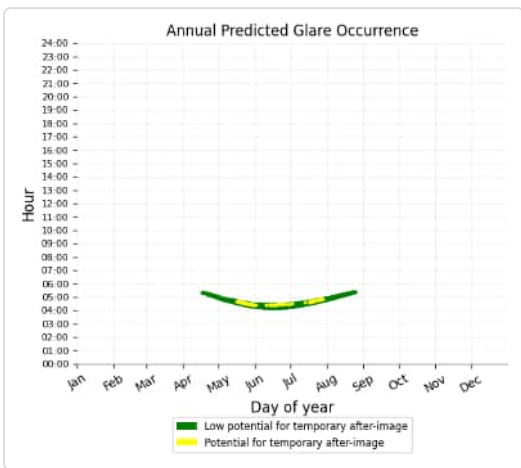
- 1,177 minutes of "green" glare with low potential to cause temporary after-image.
- 103 minutes of "yellow" glare with potential to cause temporary after-image.

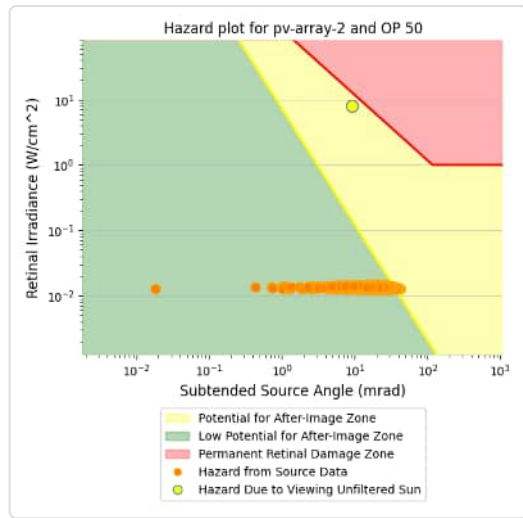
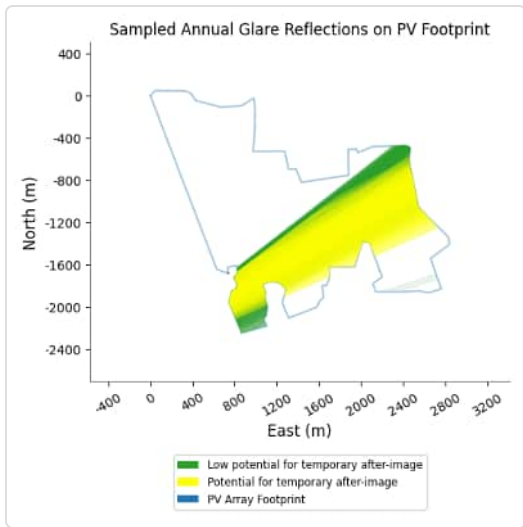


PV array 2 - OP Receptor (OP 50)

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

- 1,098 minutes of "green" glare with low potential to cause temporary after-image.
- 70 minutes of "yellow" glare with potential to cause temporary after-image.

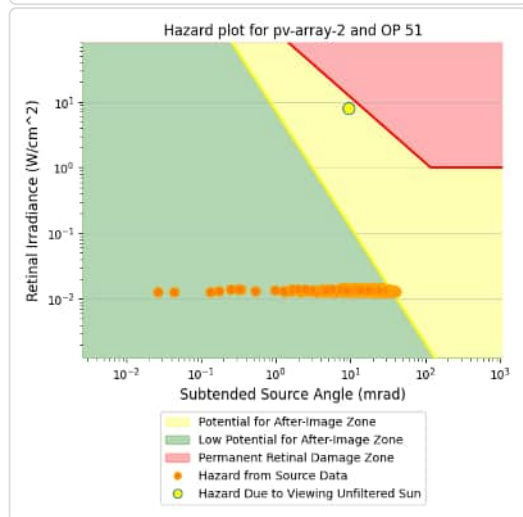
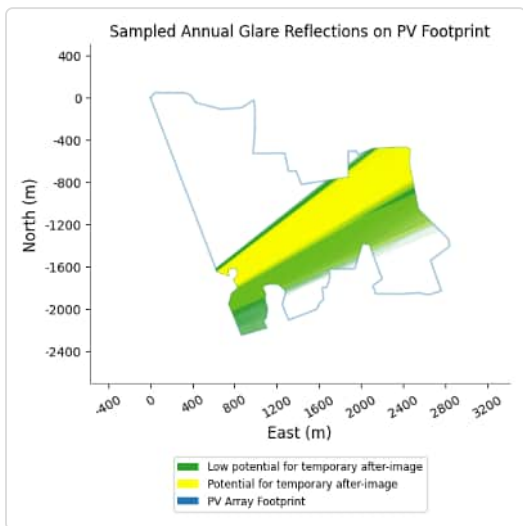
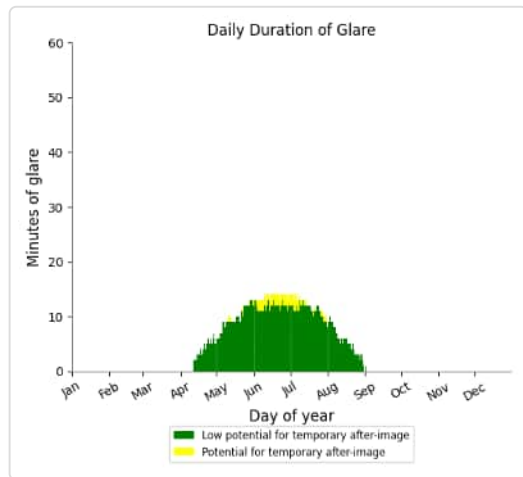
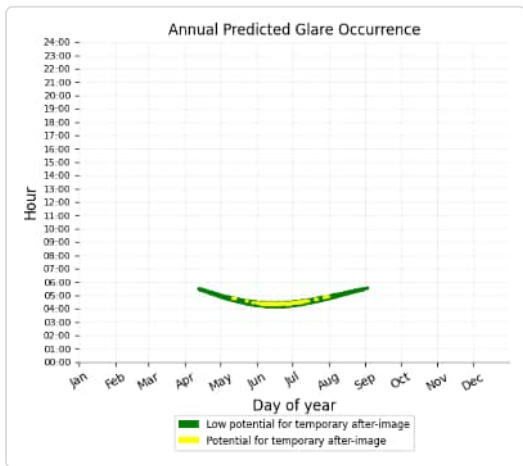




PV array 2 - OP Receptor (OP 51)

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

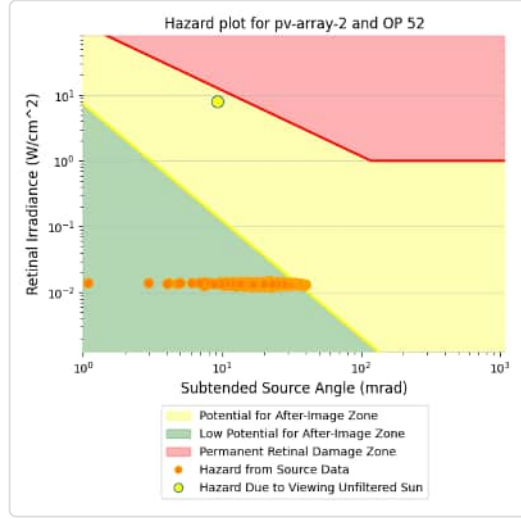
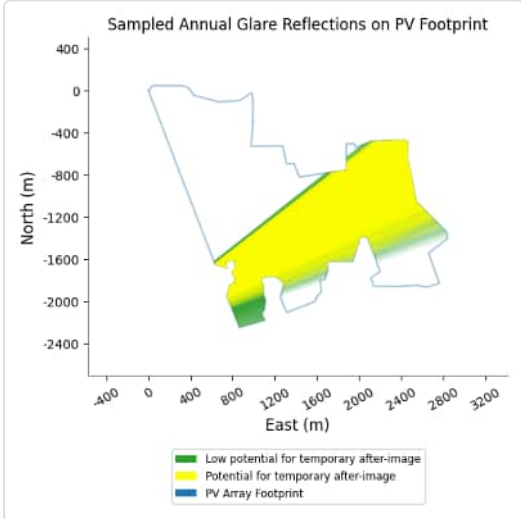
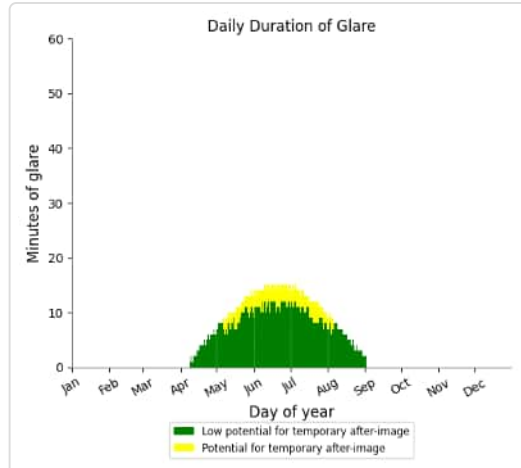
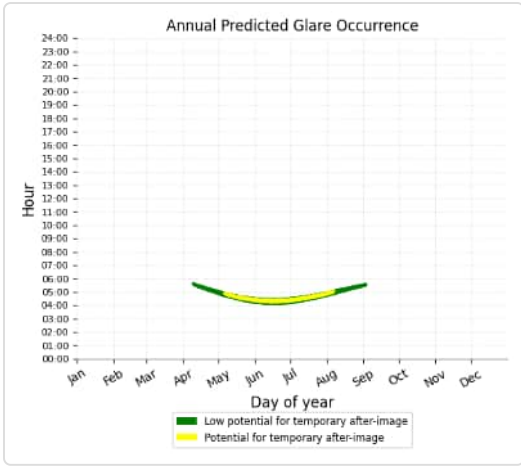
- 1,251 minutes of "green" glare with low potential to cause temporary after-image.
- 89 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 52)

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

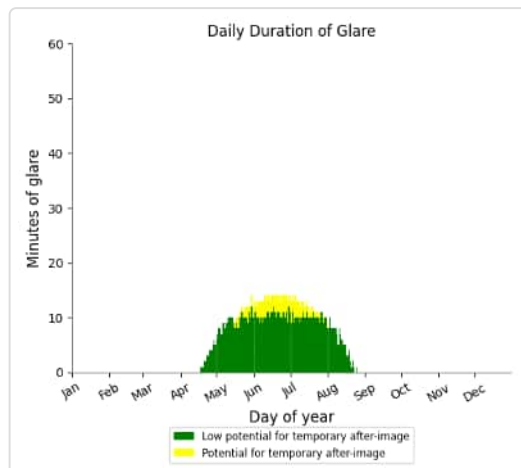
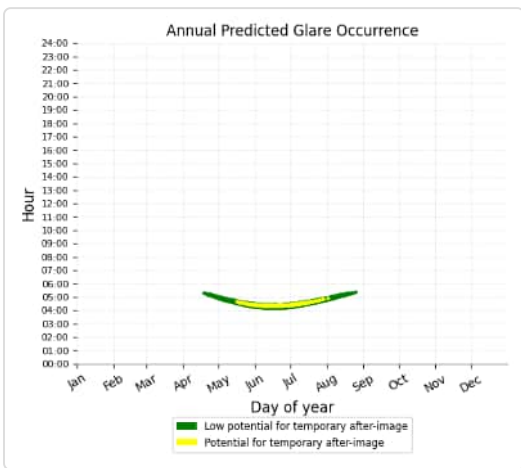
- 1,154 minutes of "green" glare with low potential to cause temporary after-image.
- 269 minutes of "yellow" glare with potential to cause temporary after-image.

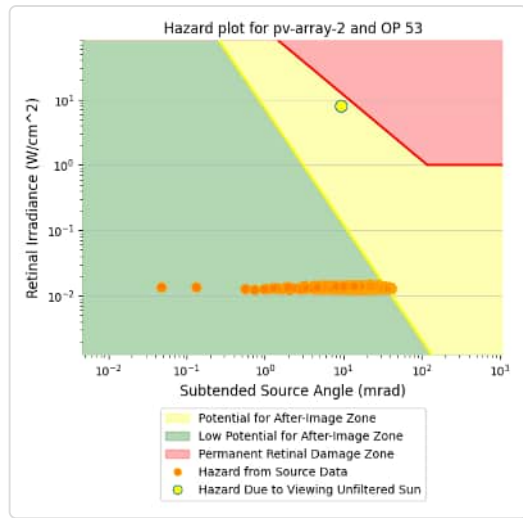
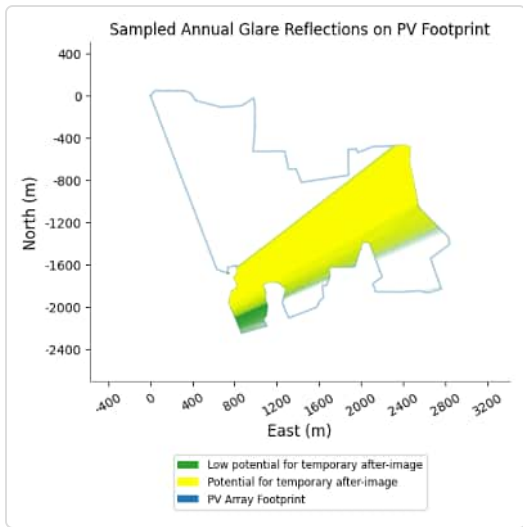


PV array 2 - OP Receptor (OP 53)

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

- 1,081 minutes of "green" glare with low potential to cause temporary after-image.
- 177 minutes of "yellow" glare with potential to cause temporary after-image.

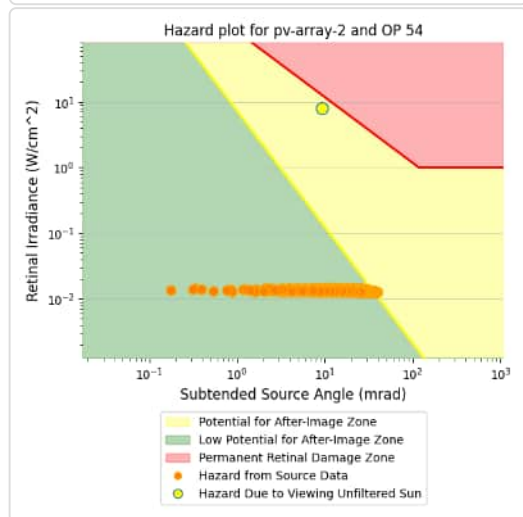
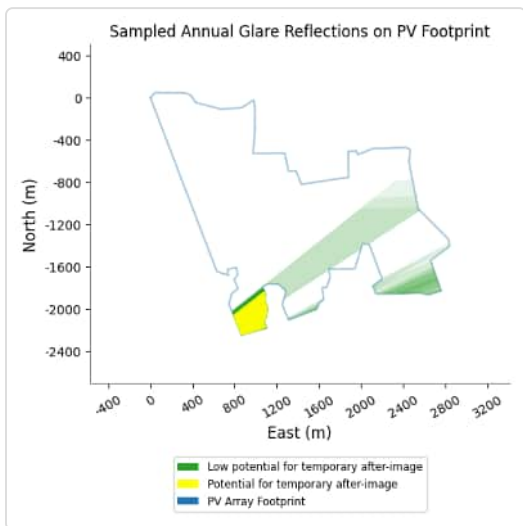
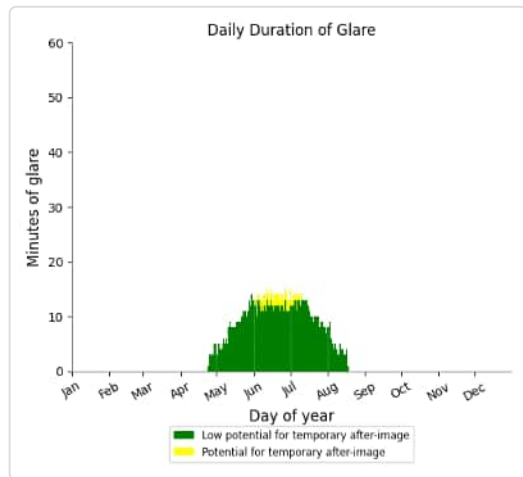
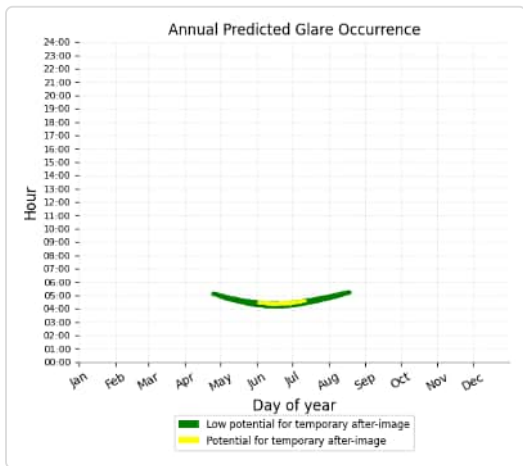




PV array 2 - OP Receptor (OP 54)

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

- 1,056 minutes of "green" glare with low potential to cause temporary after-image.
- 67 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0

OP: OP 5	148	0
OP: OP 6	118	0
OP: OP 7	189	0
OP: OP 8	205	0
OP: OP 9	360	0
OP: OP 10	267	0
OP: OP 11	292	0
OP: OP 12	360	0
OP: OP 13	494	0
OP: OP 14	711	0
OP: OP 15	763	0
OP: OP 16	887	0
OP: OP 17	990	0
OP: OP 18	719	0
OP: OP 19	817	0
OP: OP 20	935	0
OP: OP 21	2848	271
OP: OP 22	3584	861
OP: OP 23	1759	0
OP: OP 24	1629	0
OP: OP 25	1705	0
OP: OP 26	1925	0
OP: OP 27	2070	0
OP: OP 28	1886	0
OP: OP 29	1715	0
OP: OP 30	1459	0
OP: OP 31	1356	0
OP: OP 32	2159	0
OP: OP 33	2740	0
OP: OP 34	3391	0
OP: OP 35	3216	0
OP: OP 36	810	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
OP: OP 41	0	0
OP: OP 42	0	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0

PV array 3 - OP Receptor (OP 1)

No glare found

PV array 3 - OP Receptor (OP 2)

No glare found

PV array 3 - OP Receptor (OP 3)

No glare found

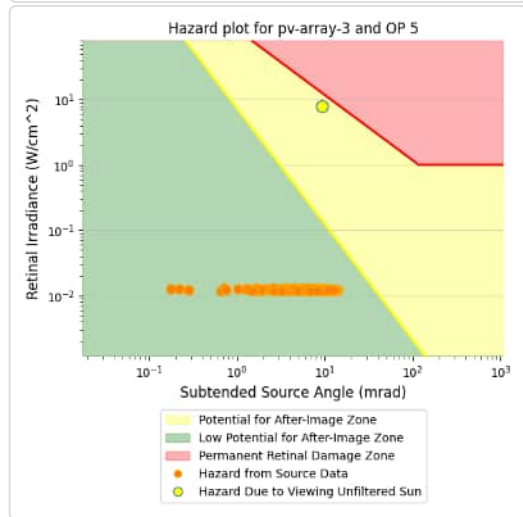
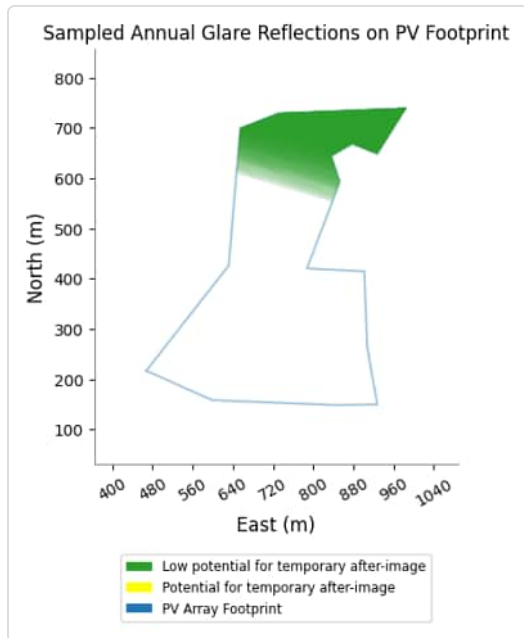
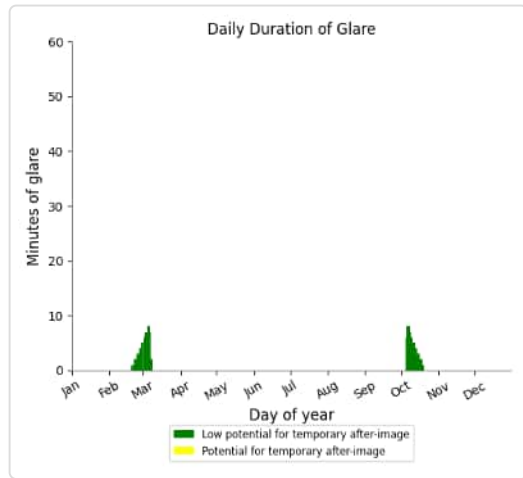
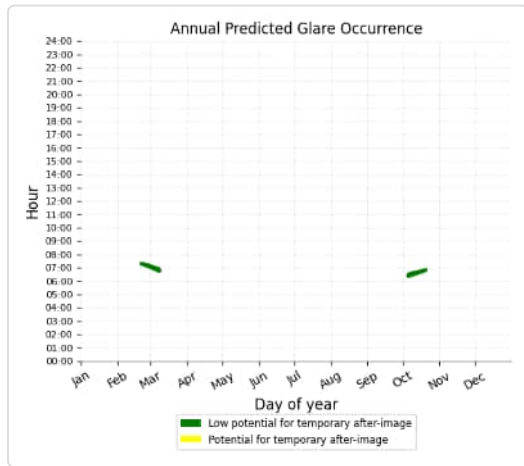
PV array 3 - OP Receptor (OP 4)

No glare found

PV array 3 - OP Receptor (OP 5)

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

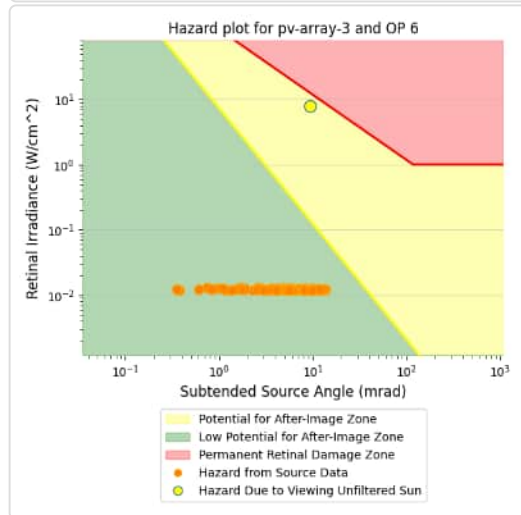
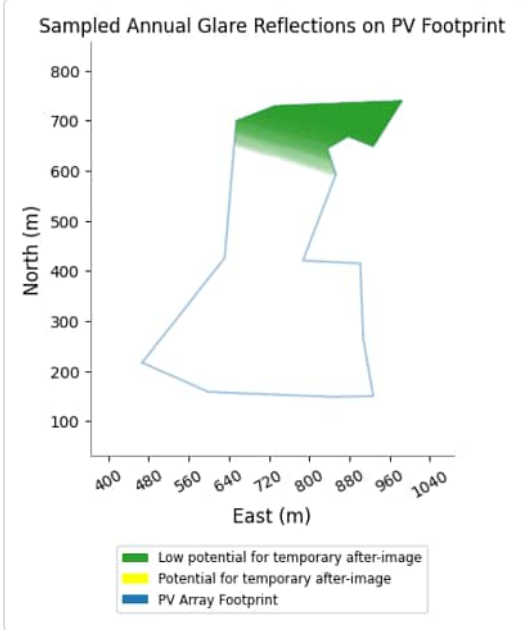
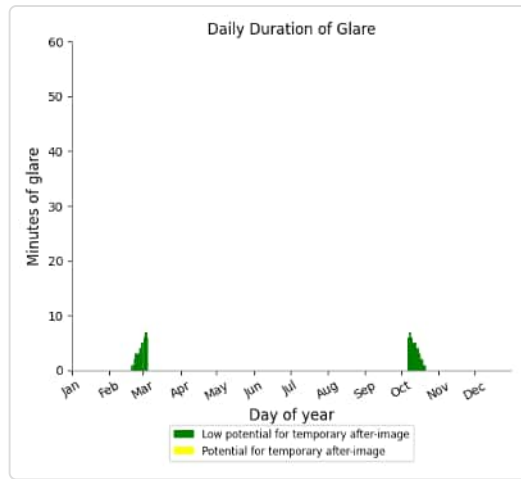
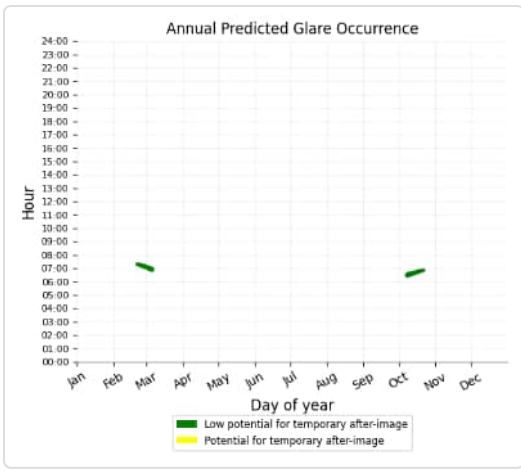
- 148 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 6)

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

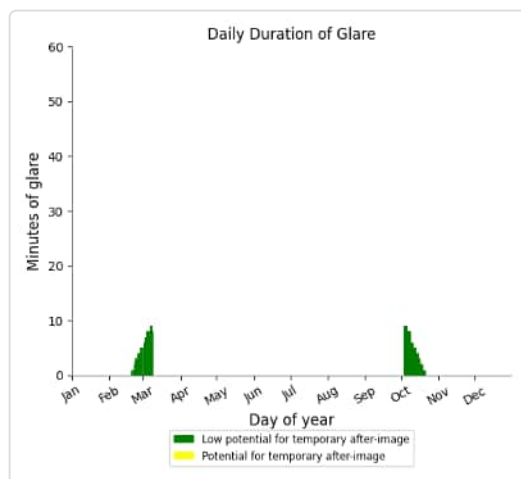
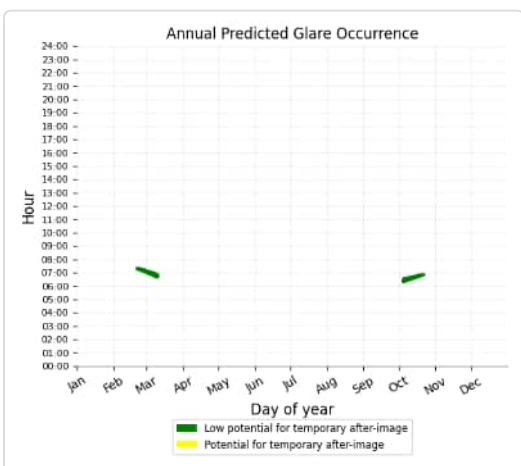
- 118 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

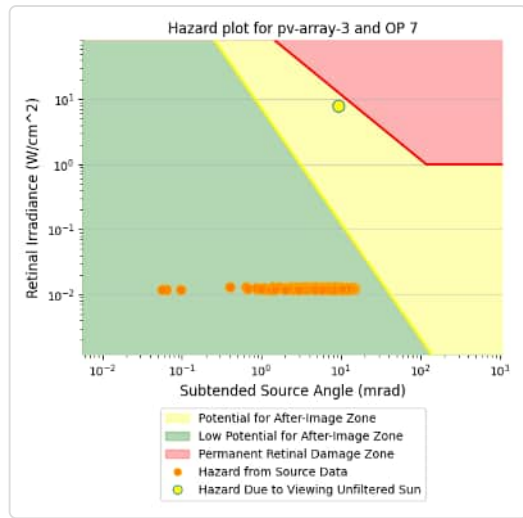
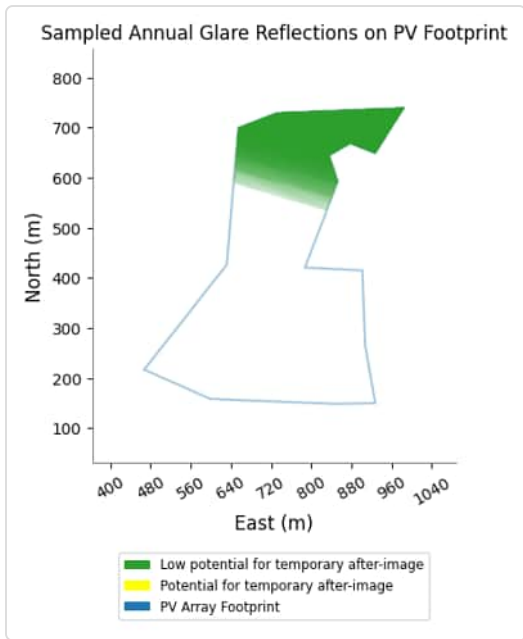


PV array 3 - OP Receptor (OP 7)

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

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

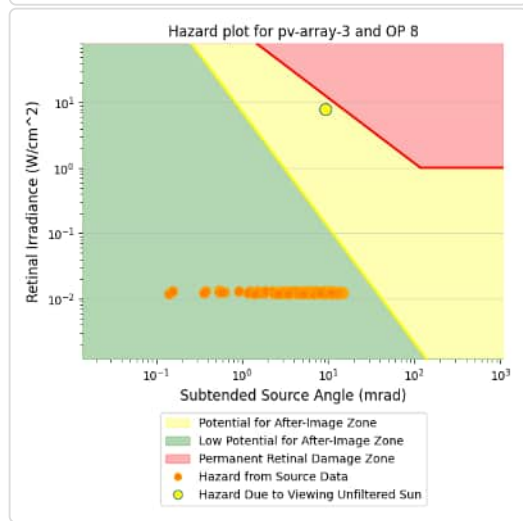
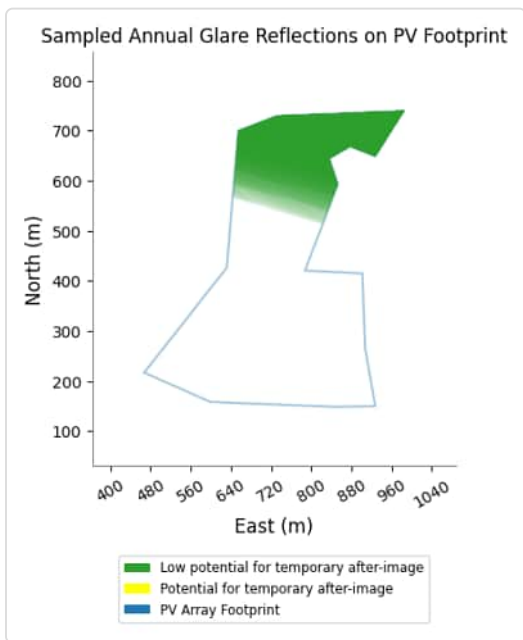
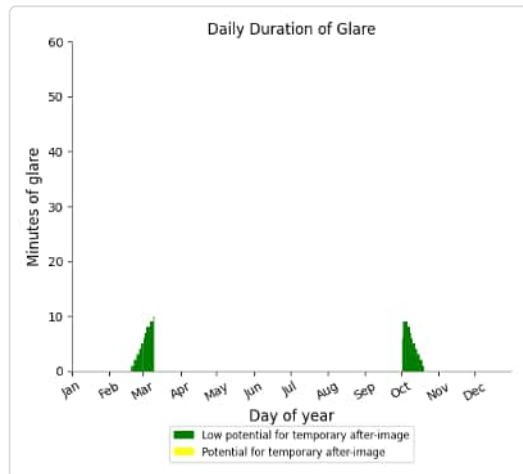
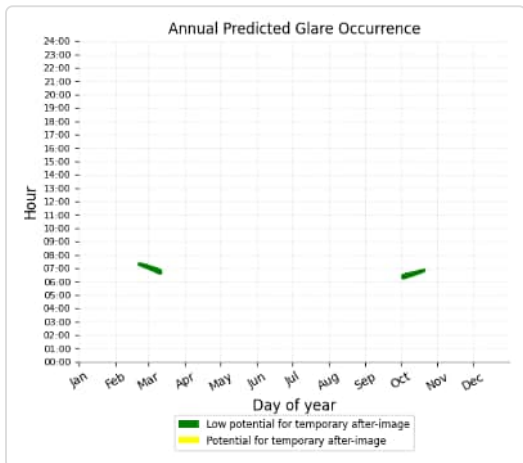




PV array 3 - OP Receptor (OP 8)

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

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

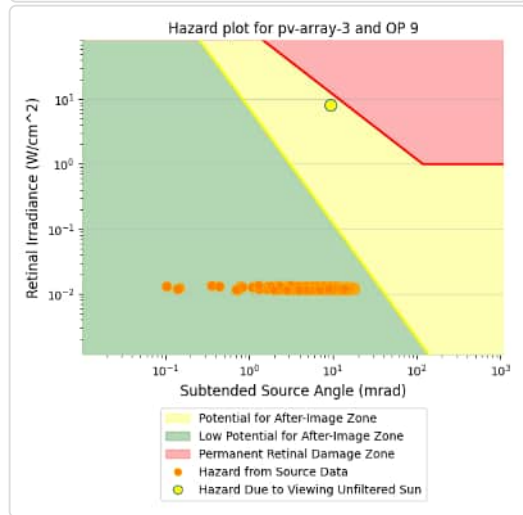
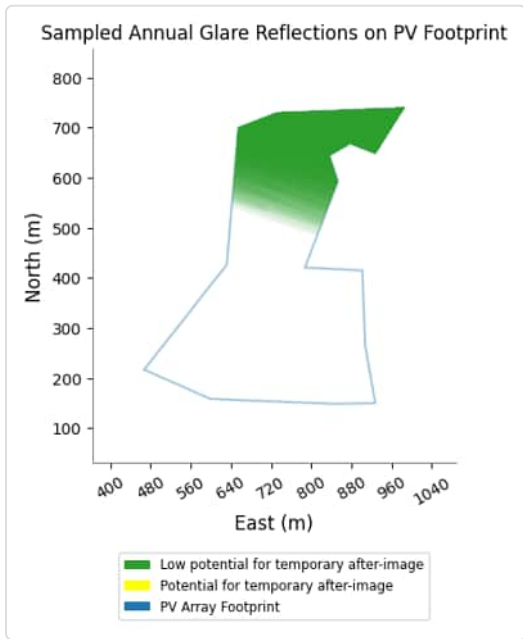
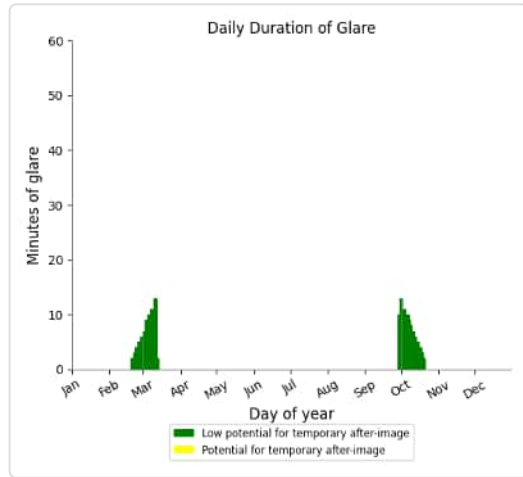
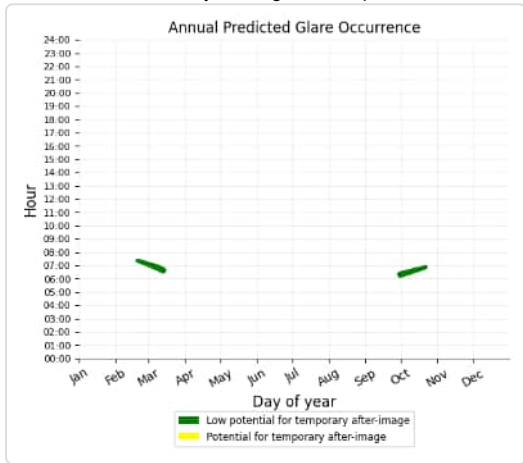


PV array 3 - OP Receptor (OP 9)

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

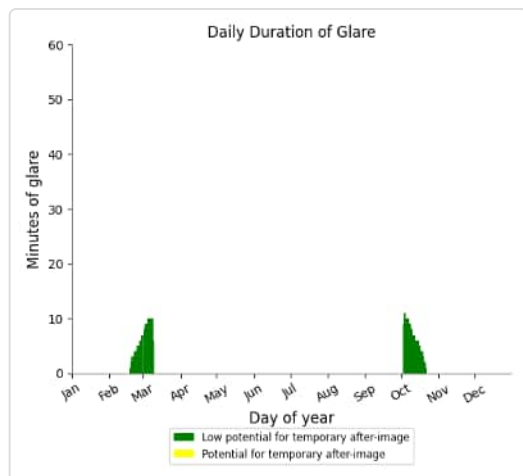
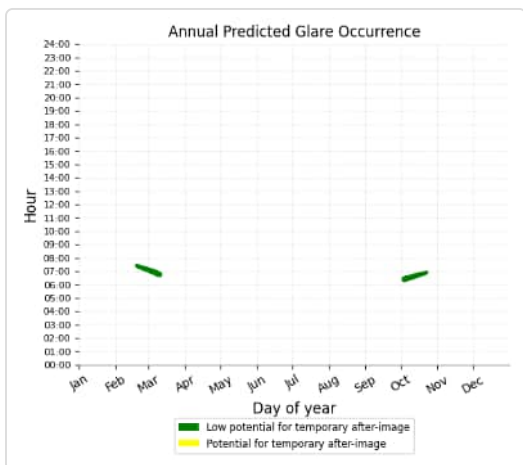
- 360 minutes of "green" glare with low potential to cause temporary after-image.

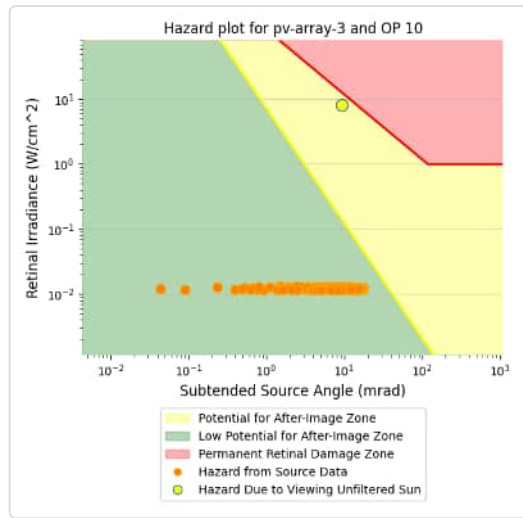
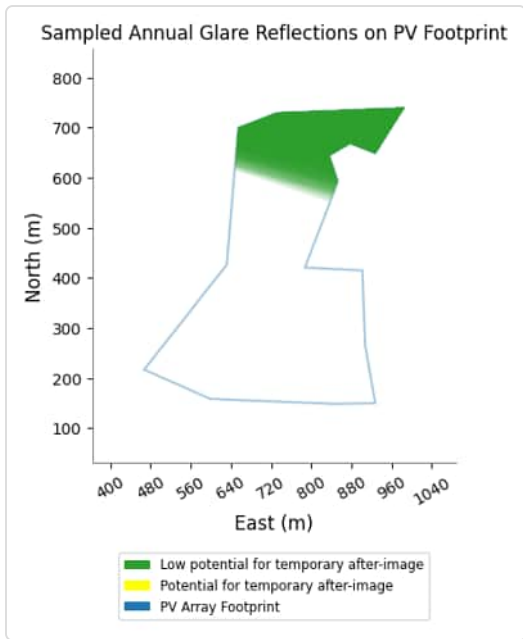
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 10)

- PV array is expected to produce the following glare for receptors at this location:
- 267 minutes of "green" glare with low potential to cause temporary after-image.
 - 0 minutes of "yellow" glare with potential to cause temporary after-image.

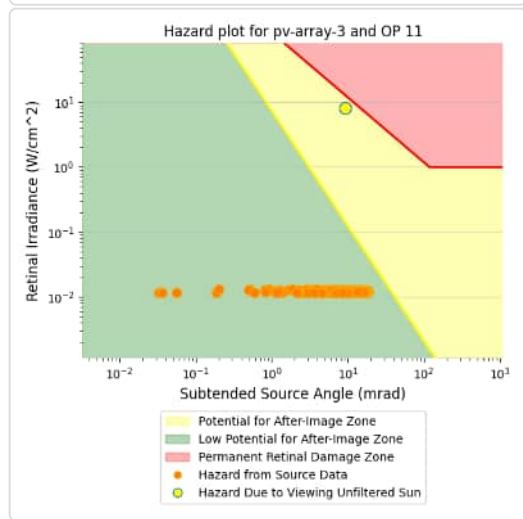
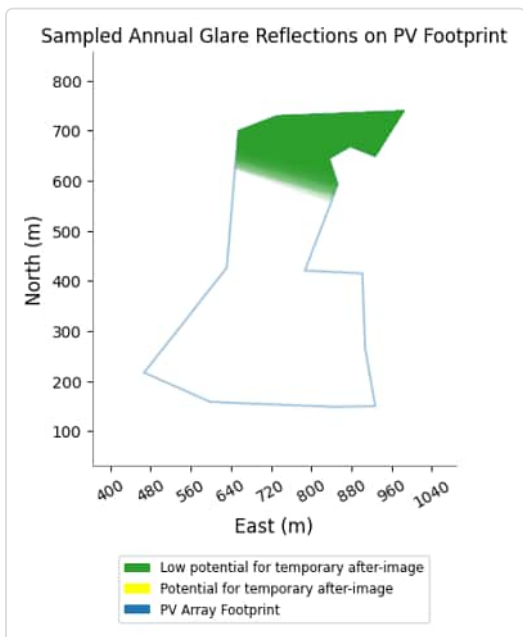
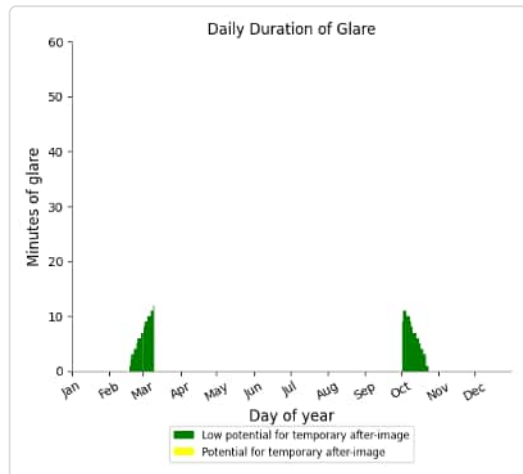
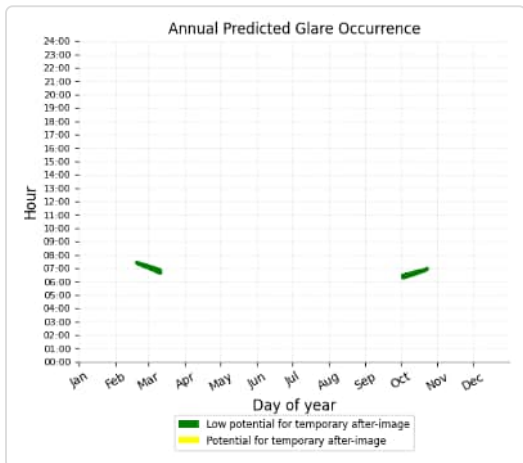




PV array 3 - OP Receptor (OP 11)

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

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

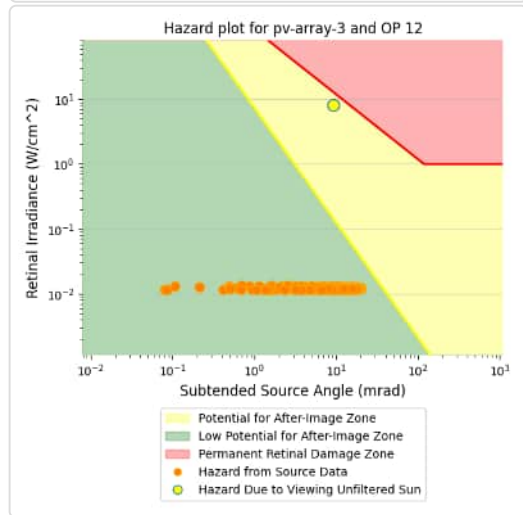
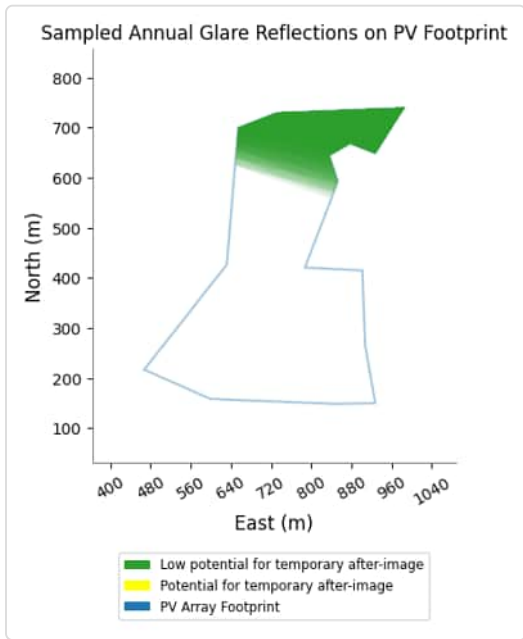
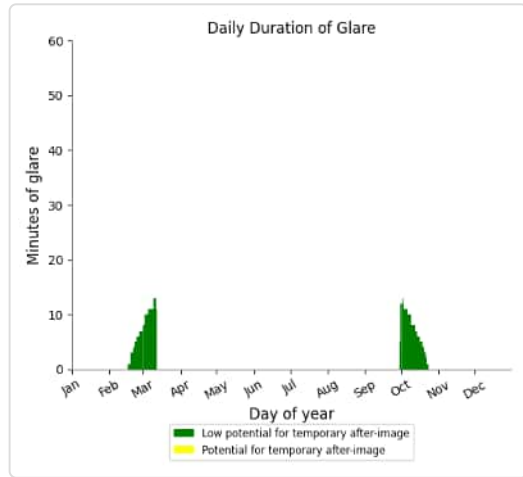
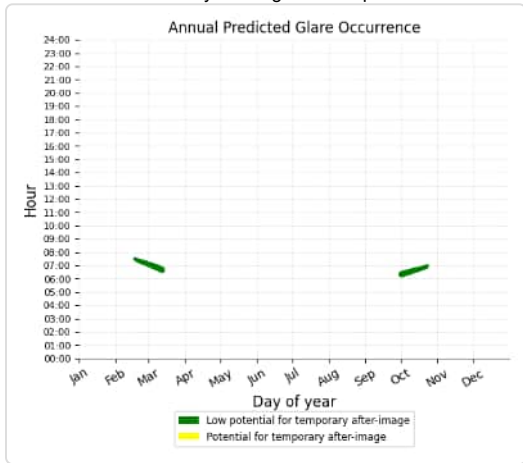


PV array 3 - OP Receptor (OP 12)

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

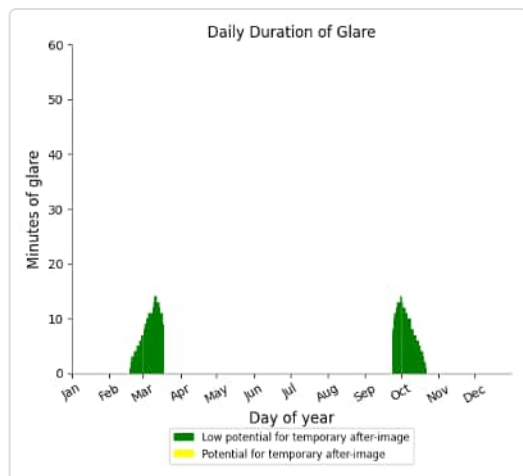
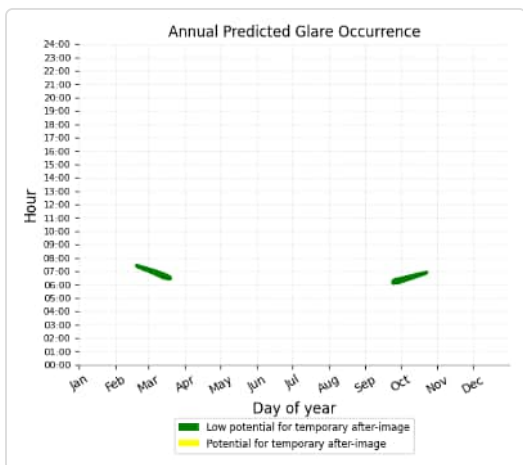
- 360 minutes of "green" glare with low potential to cause temporary after-image.

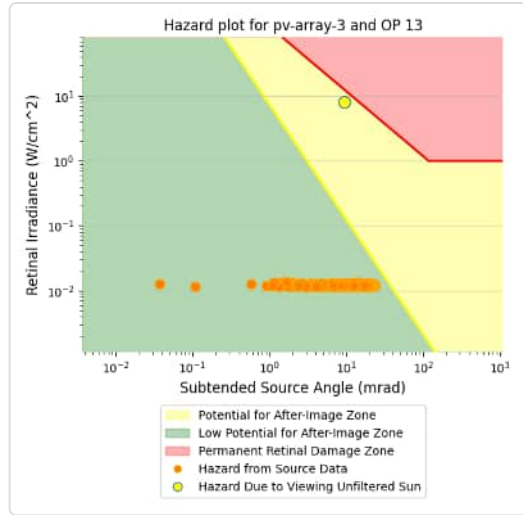
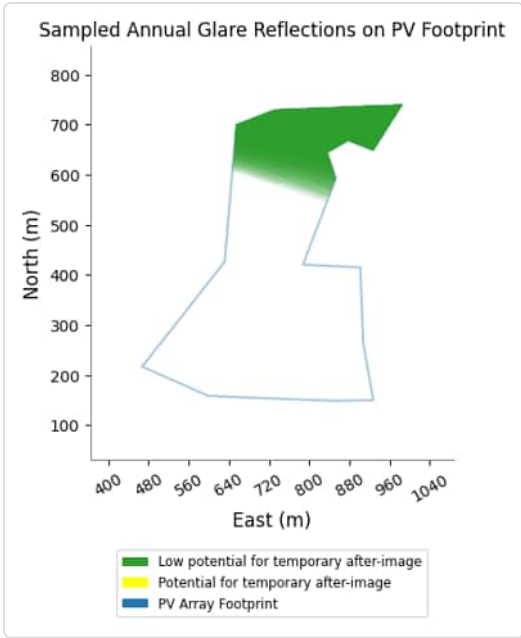
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 13)

- PV array is expected to produce the following glare for receptors at this location:
- 494 minutes of "green" glare with low potential to cause temporary after-image.
 - 0 minutes of "yellow" glare with potential to cause temporary after-image.

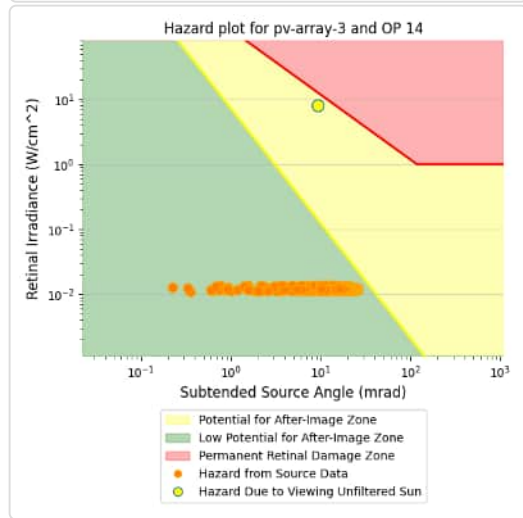
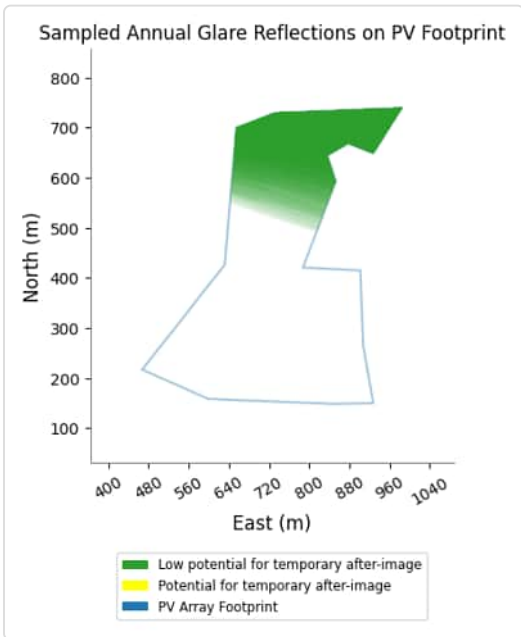
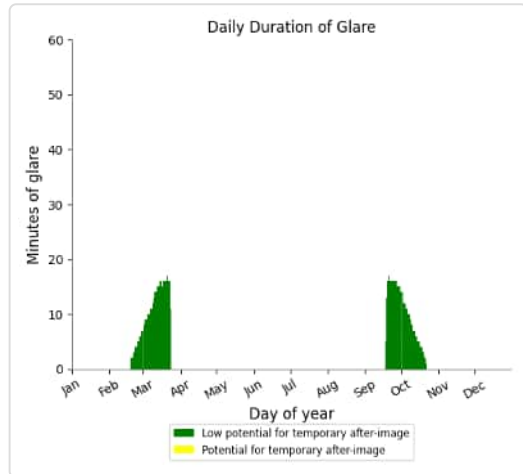
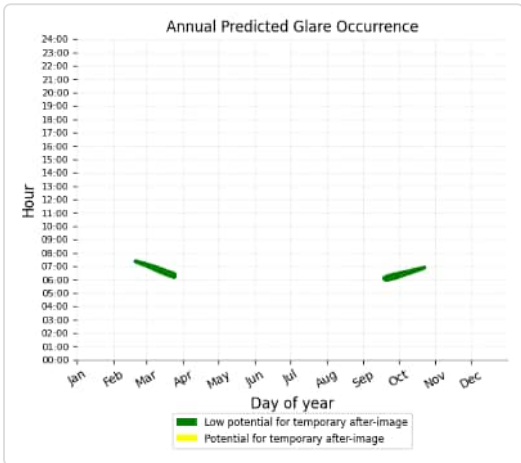




PV array 3 - OP Receptor (OP 14)

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

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

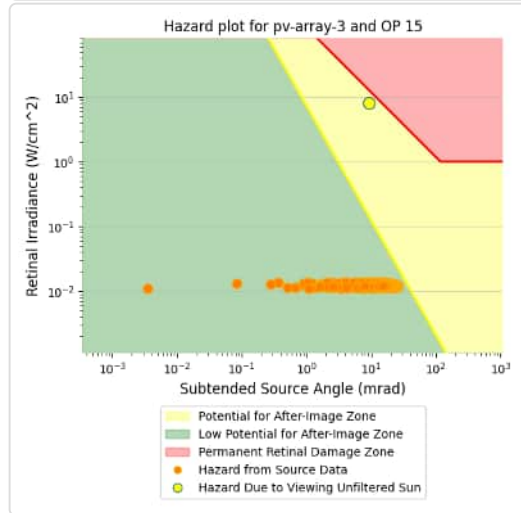
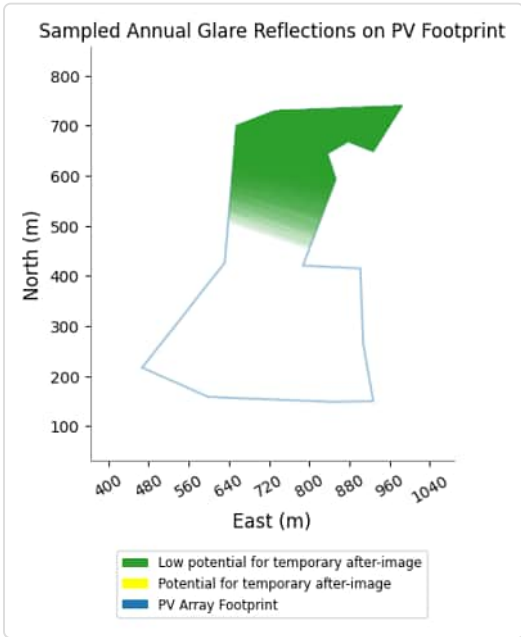
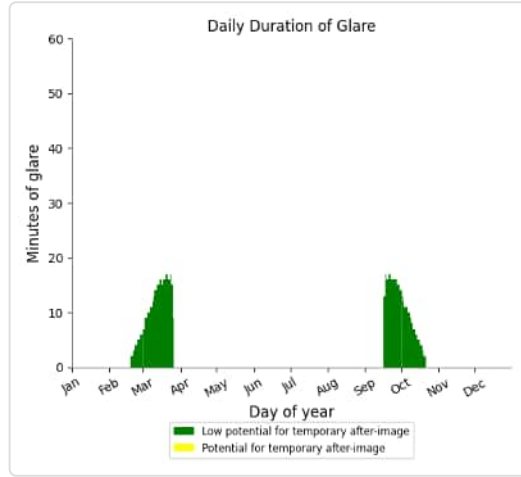
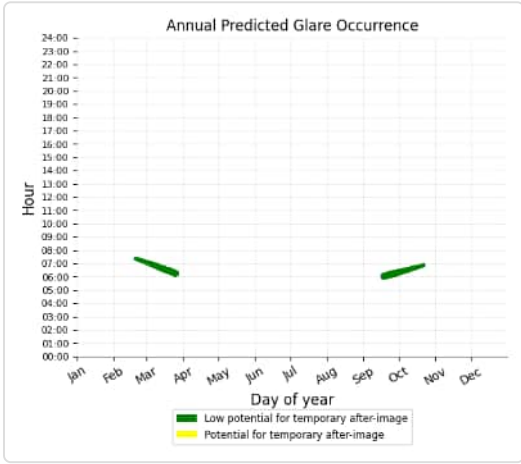


PV array 3 - OP Receptor (OP 15)

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

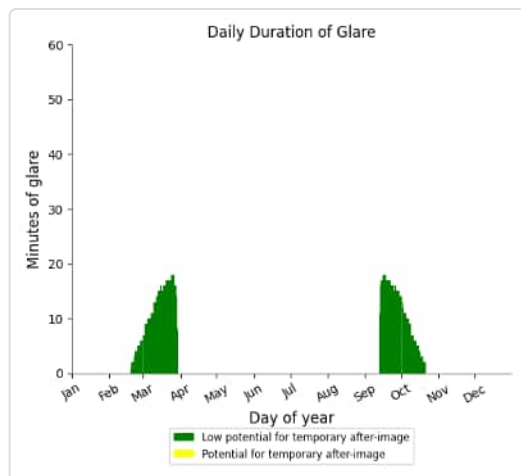
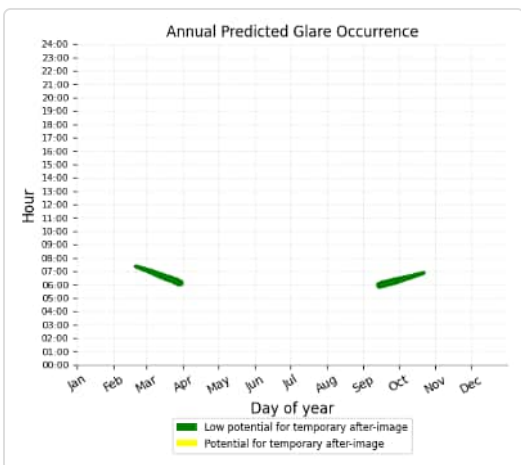
- 763 minutes of "green" glare with low potential to cause temporary after-image.

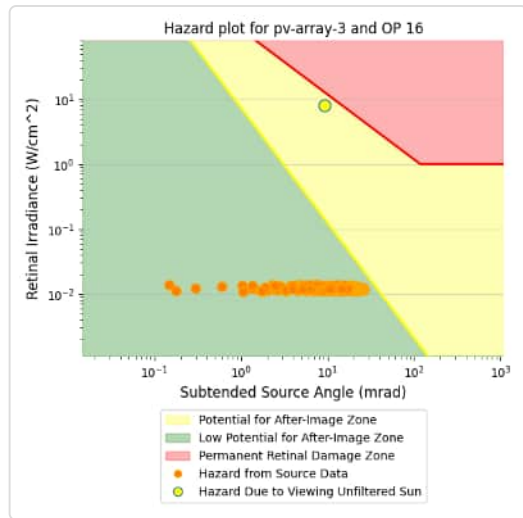
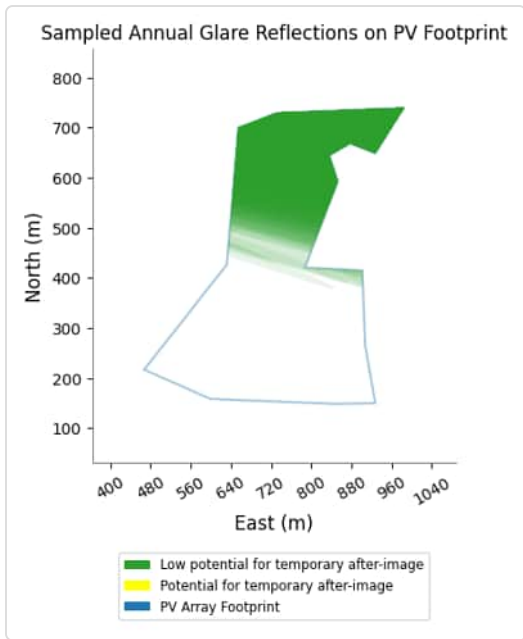
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 16)

- PV array is expected to produce the following glare for receptors at this location:
- 887 minutes of "green" glare with low potential to cause temporary after-image.
 - 0 minutes of "yellow" glare with potential to cause temporary after-image.

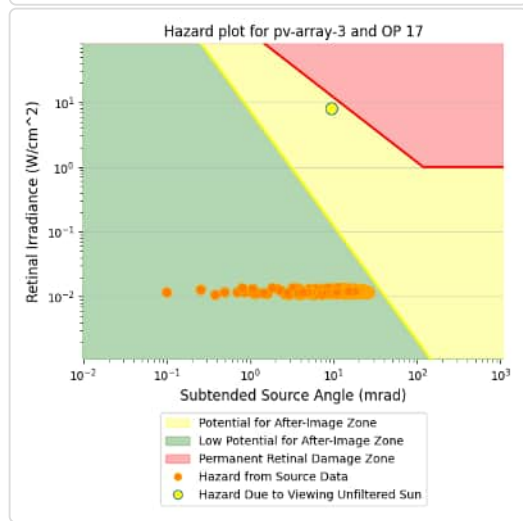
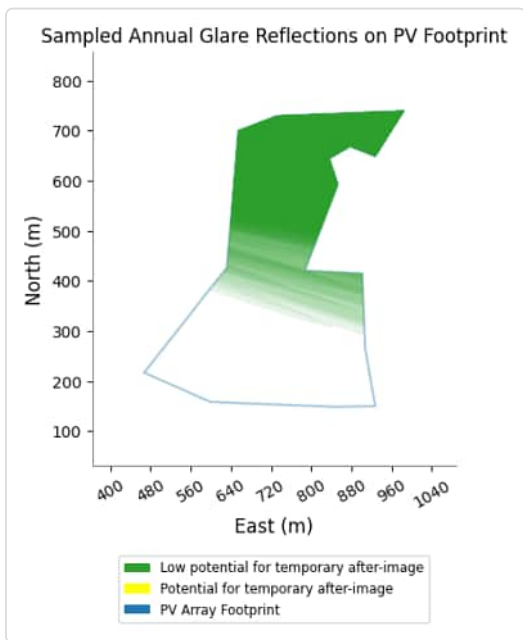
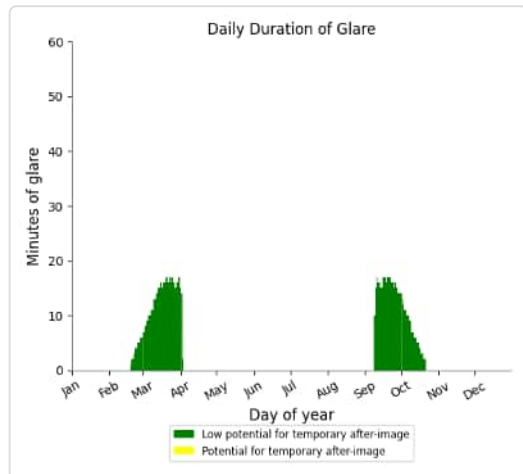
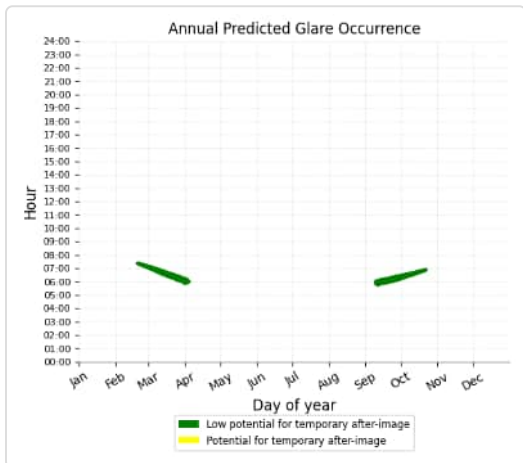




PV array 3 - OP Receptor (OP 17)

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

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

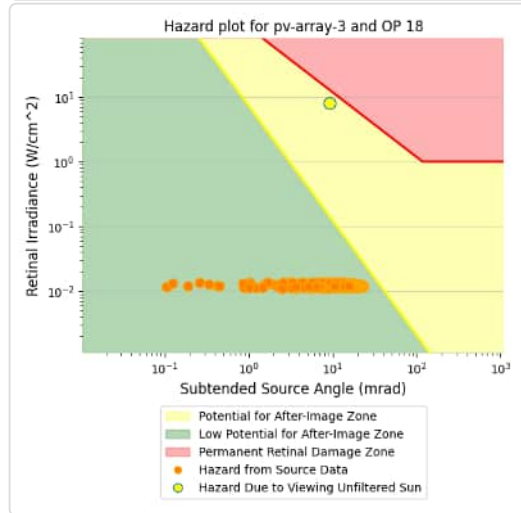
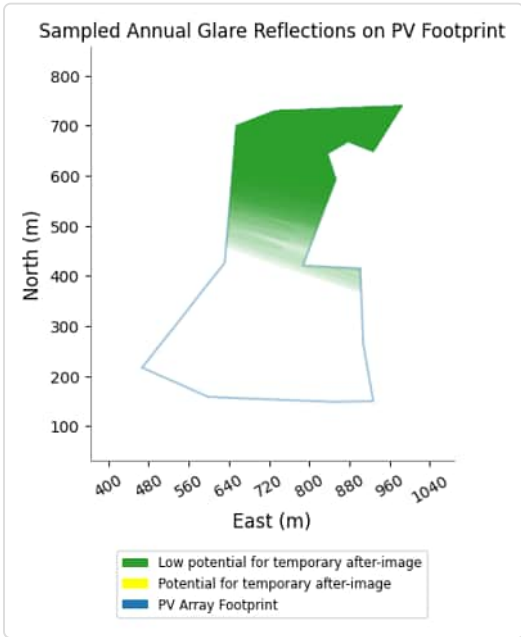
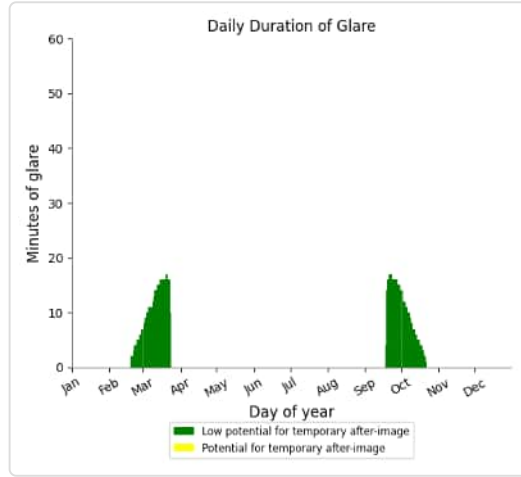
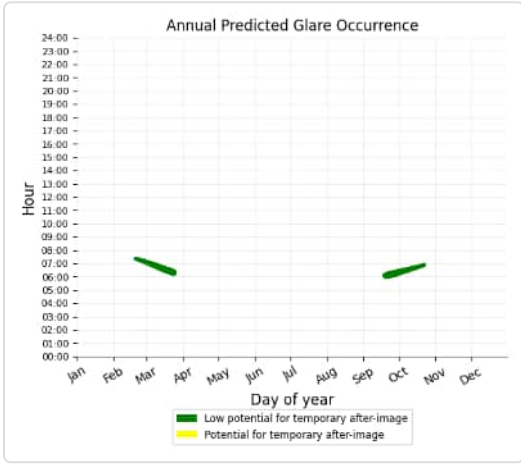


PV array 3 - OP Receptor (OP 18)

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

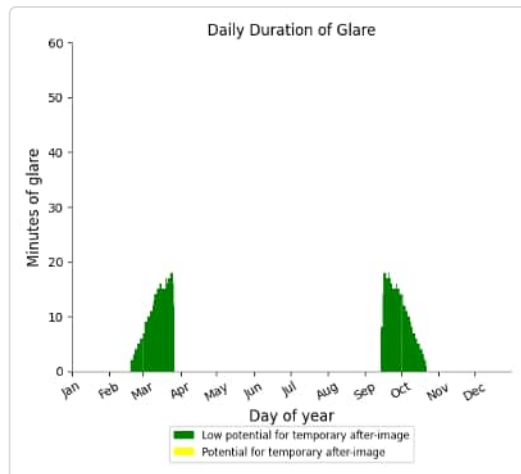
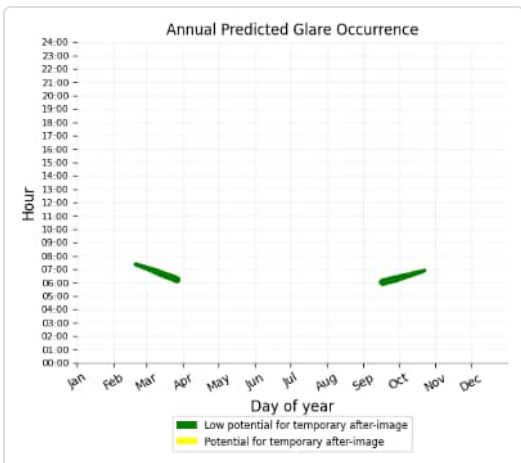
- 719 minutes of "green" glare with low potential to cause temporary after-image.

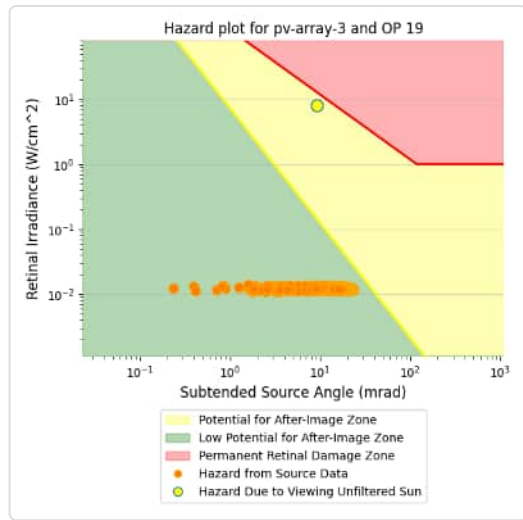
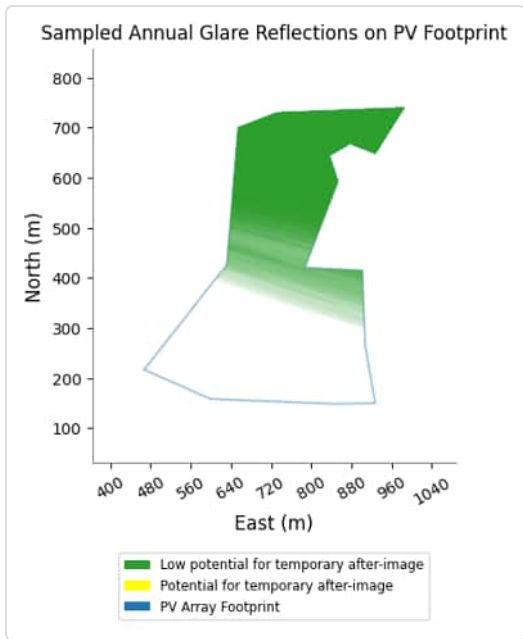
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 19)

- PV array is expected to produce the following glare for receptors at this location:
- 817 minutes of "green" glare with low potential to cause temporary after-image.
 - 0 minutes of "yellow" glare with potential to cause temporary after-image.

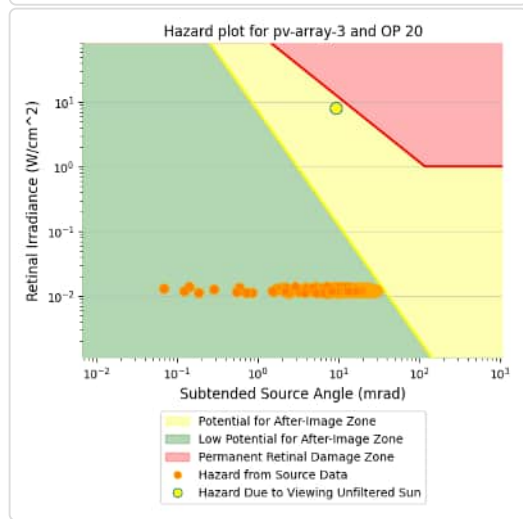
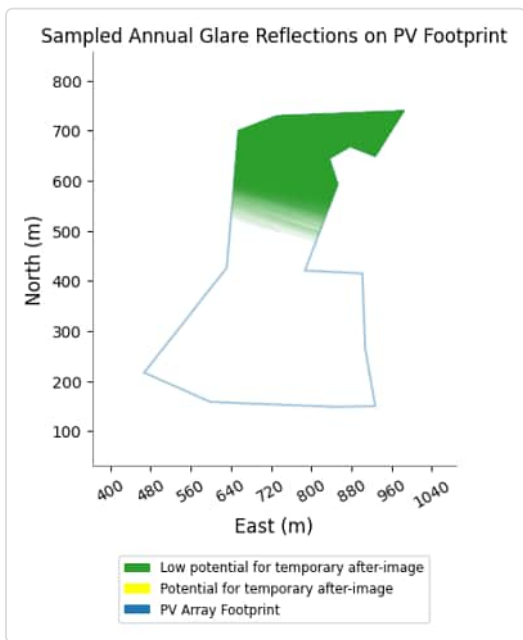
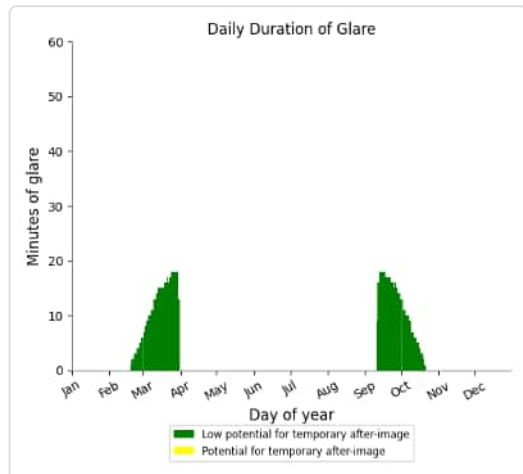
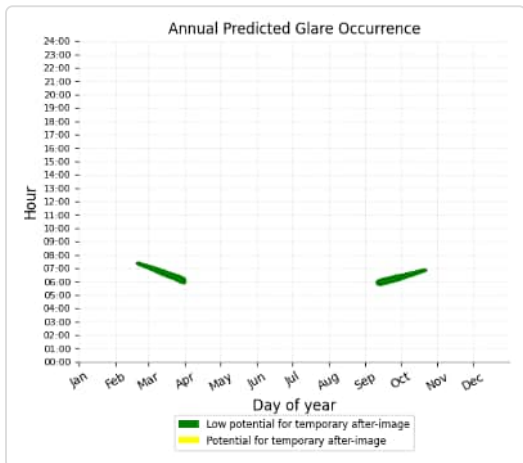




PV array 3 - OP Receptor (OP 20)

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

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

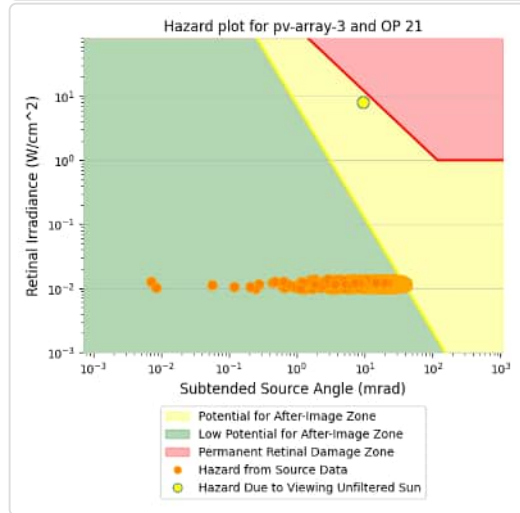
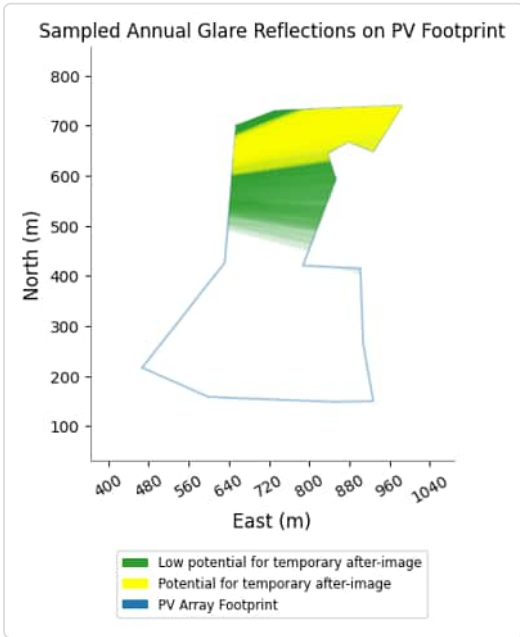
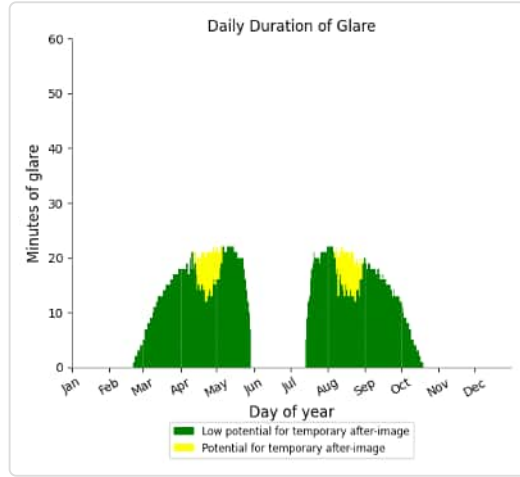
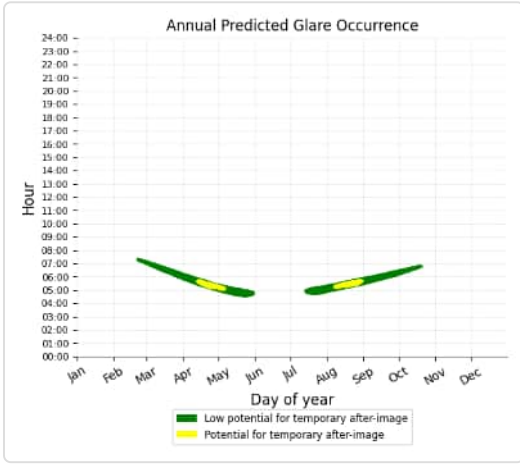


PV array 3 - OP Receptor (OP 21)

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

- 2,848 minutes of "green" glare with low potential to cause temporary after-image.

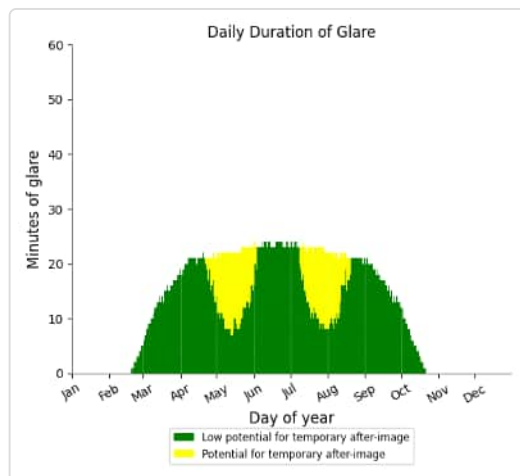
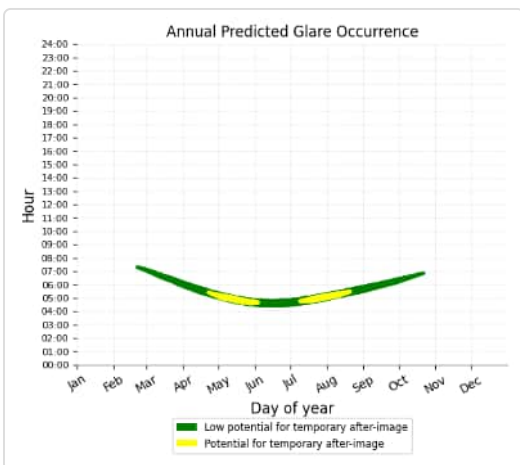
- 271 minutes of "yellow" glare with potential to cause temporary after-image.

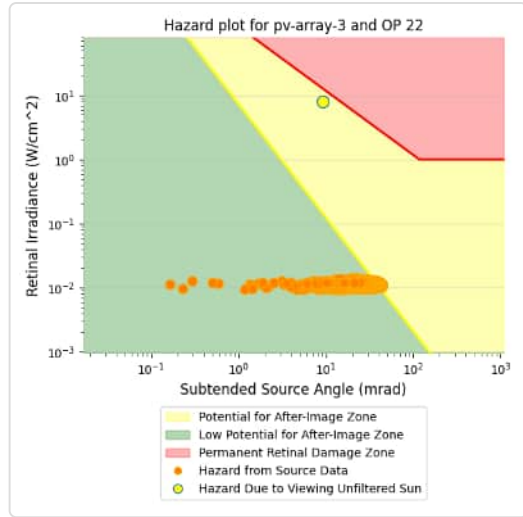
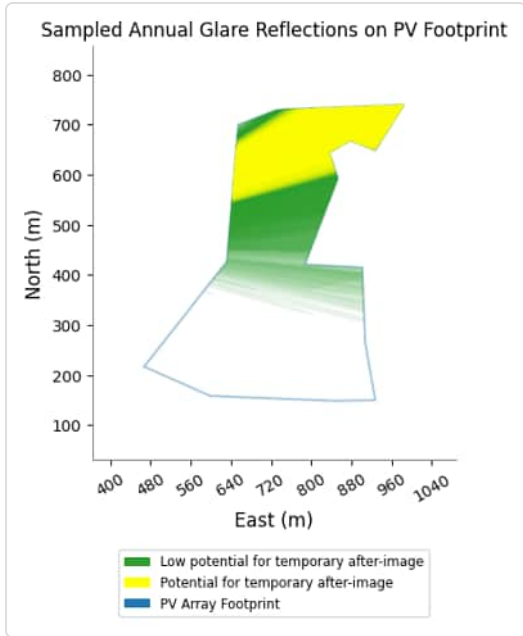


PV array 3 - OP Receptor (OP 22)

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

- 3,584 minutes of "green" glare with low potential to cause temporary after-image.
- 861 minutes of "yellow" glare with potential to cause temporary after-image.

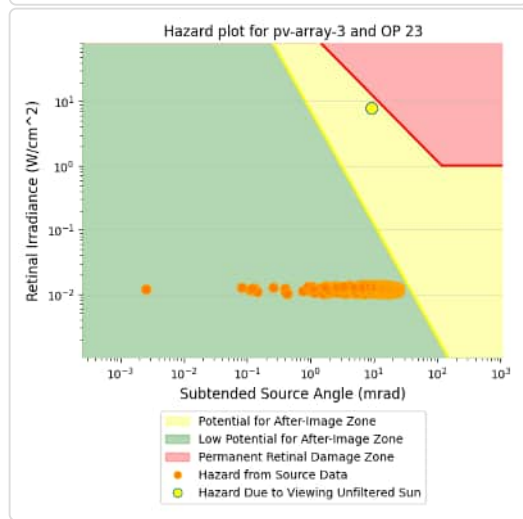
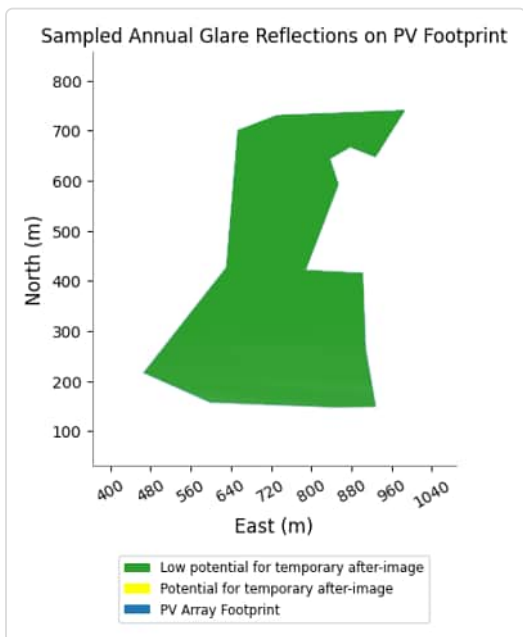
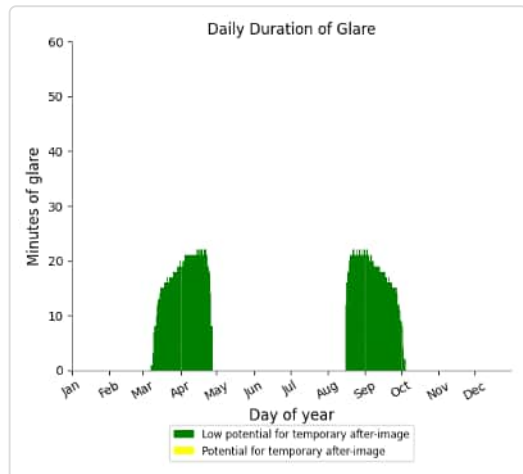
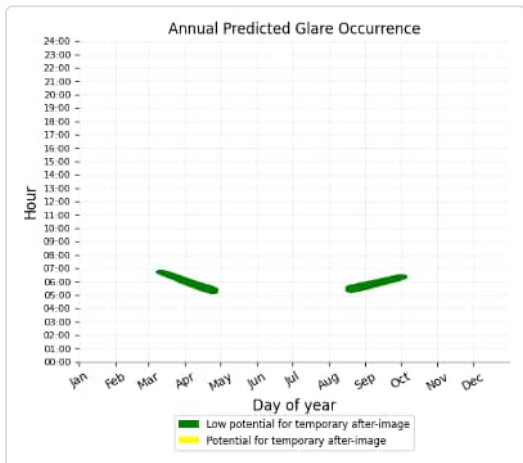




PV array 3 - OP Receptor (OP 23)

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

- 1,759 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

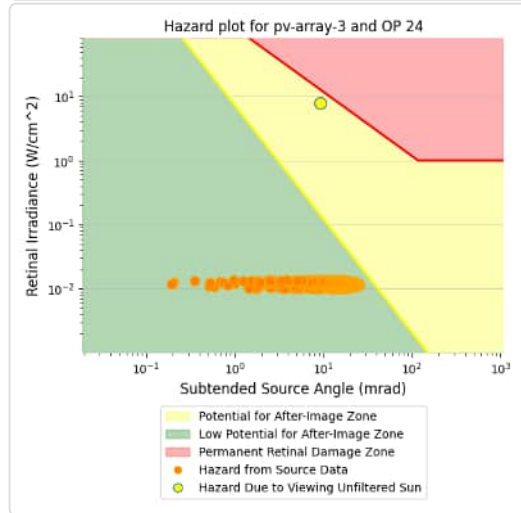
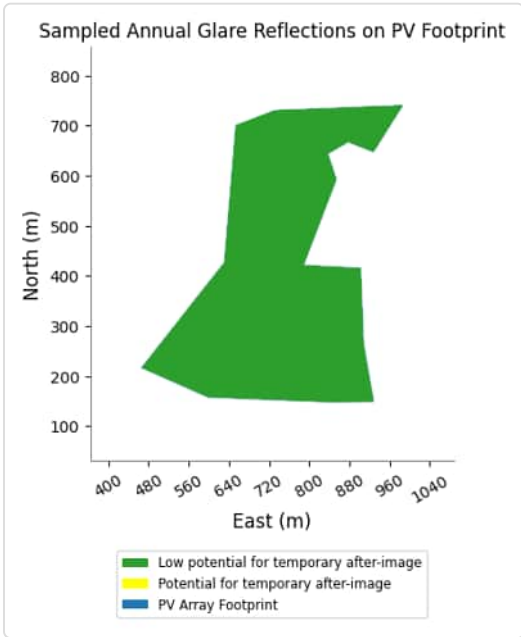
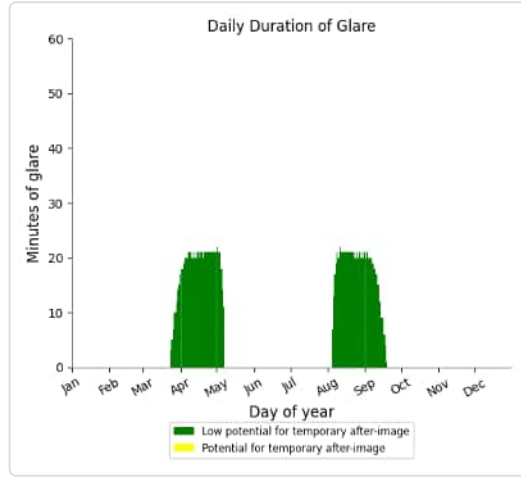
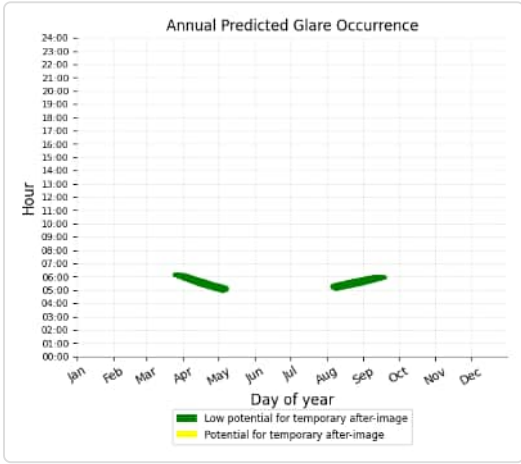


PV array 3 - OP Receptor (OP 24)

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

- 1,629 minutes of "green" glare with low potential to cause temporary after-image.

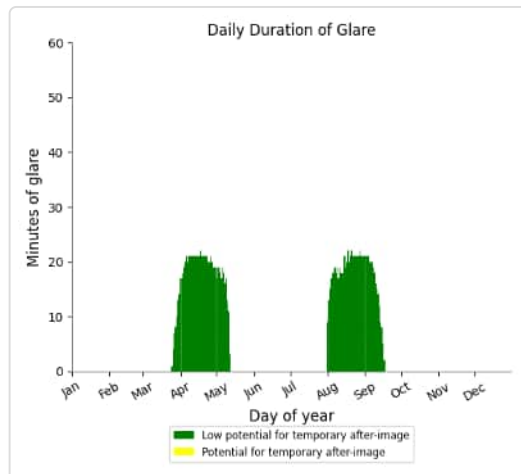
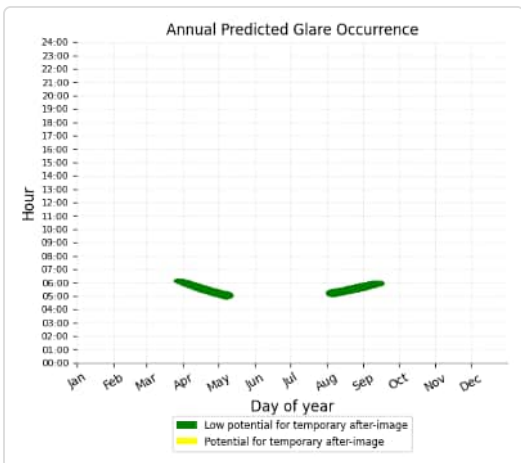
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

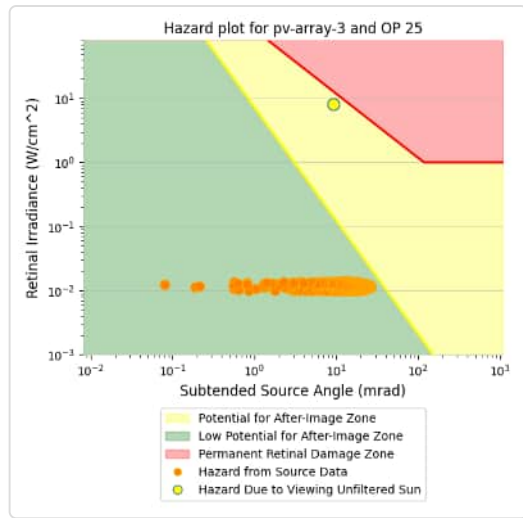
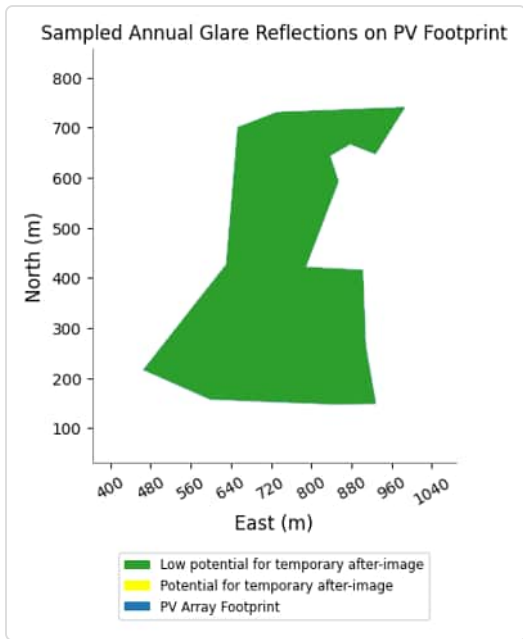


PV array 3 - OP Receptor (OP 25)

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

- 1,705 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

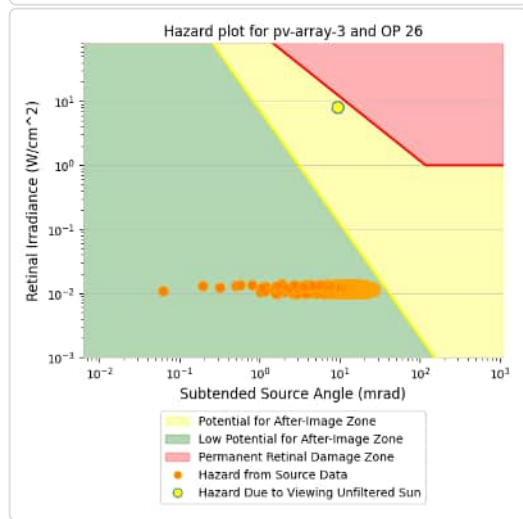
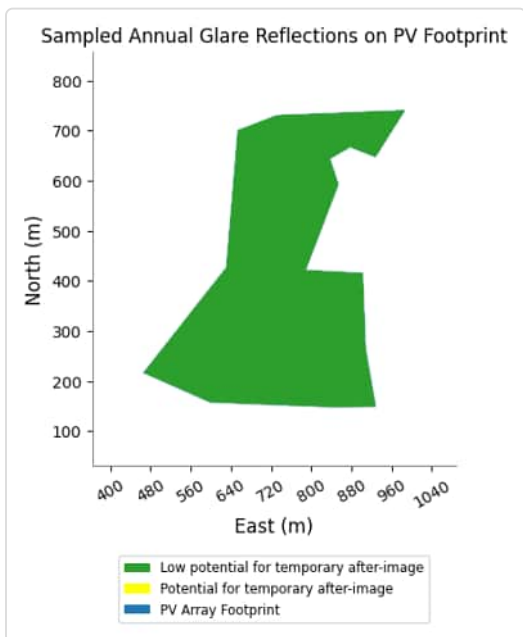
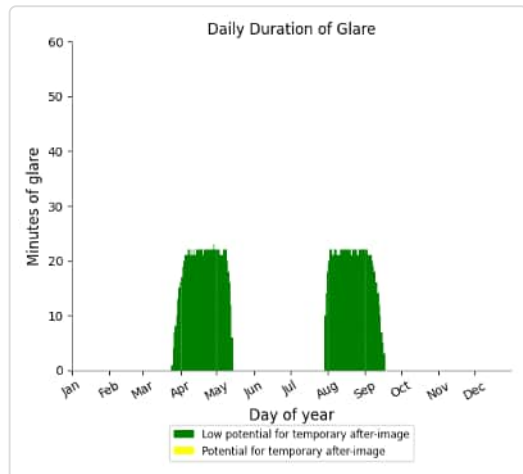
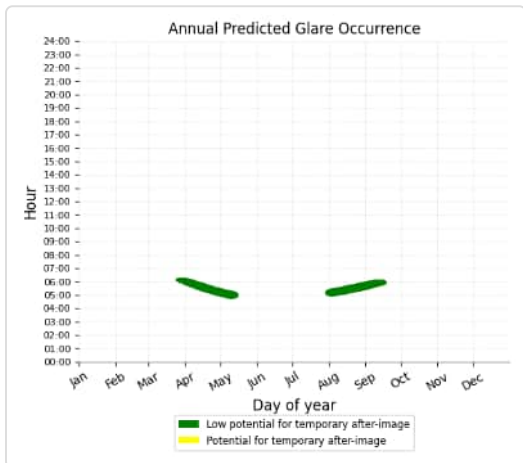




PV array 3 - OP Receptor (OP 26)

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

- 1,925 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

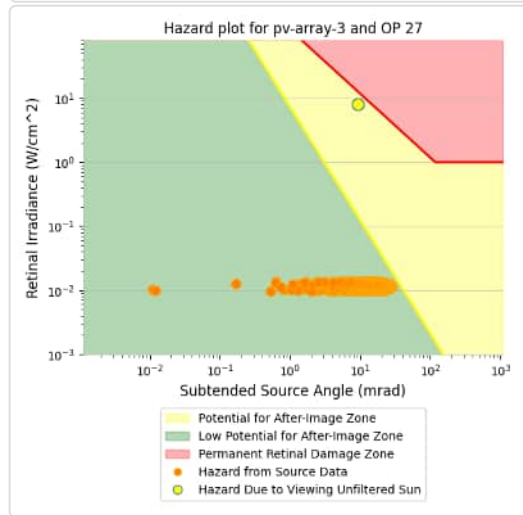
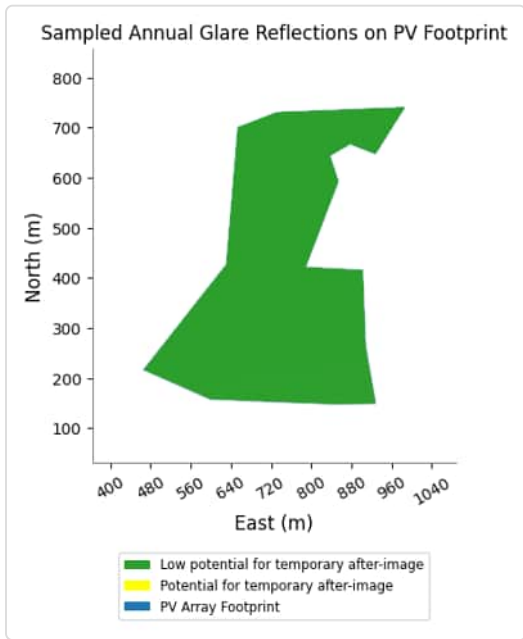
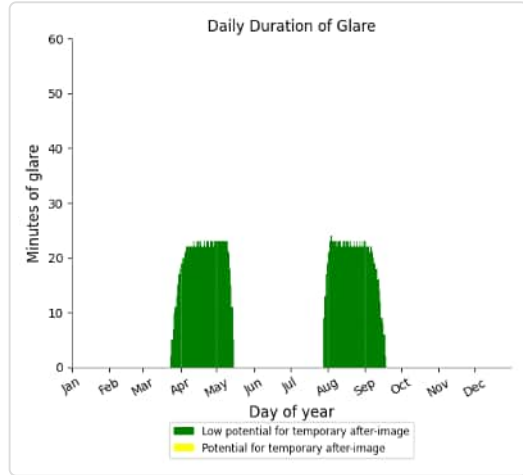
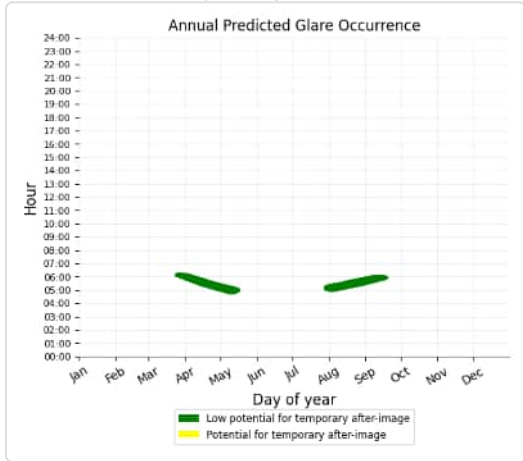


PV array 3 - OP Receptor (OP 27)

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

- 2,070 minutes of "green" glare with low potential to cause temporary after-image.

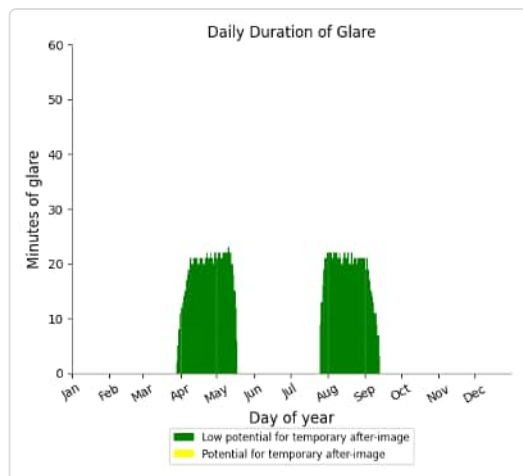
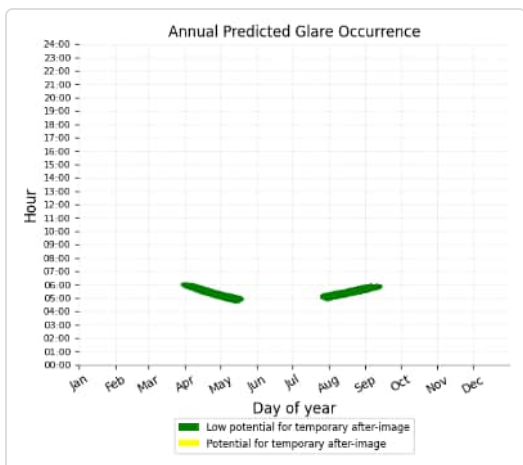
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

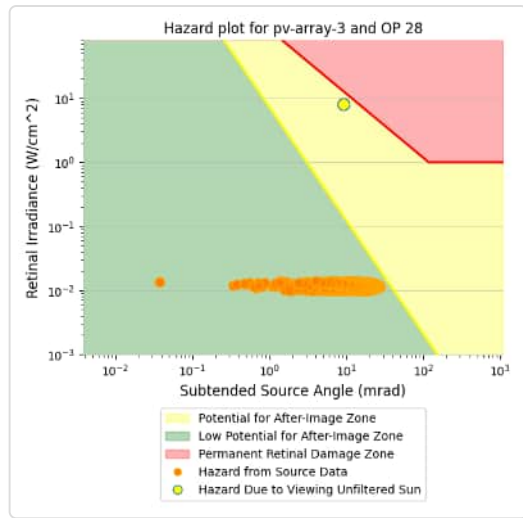
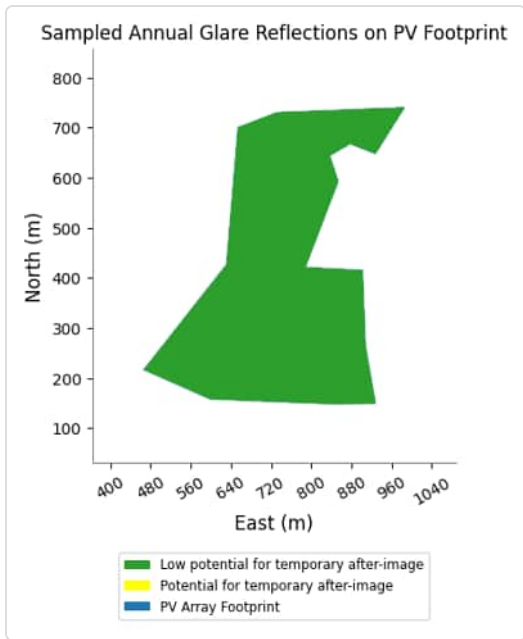


PV array 3 - OP Receptor (OP 28)

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

- 1,886 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

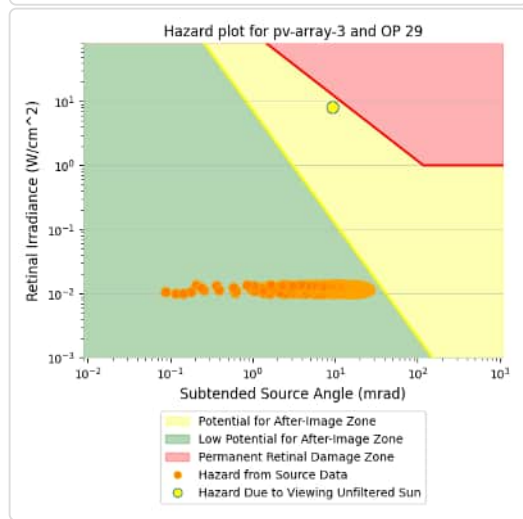
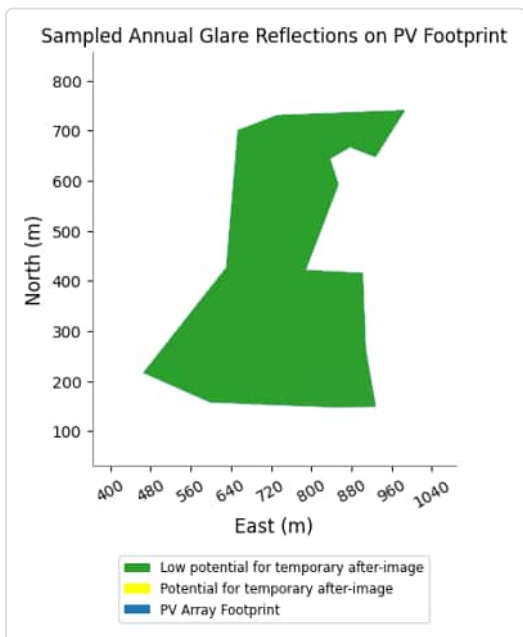
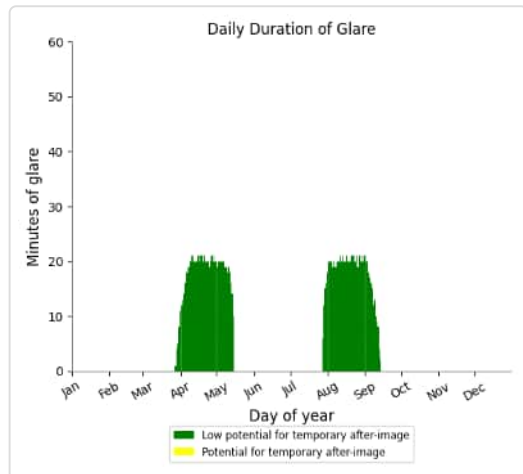
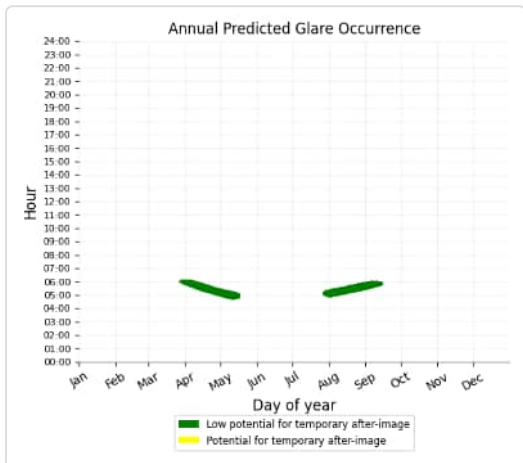




PV array 3 - OP Receptor (OP 29)

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

- 1,715 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

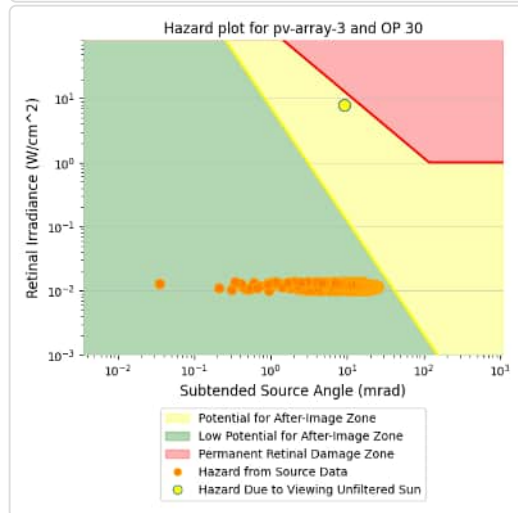
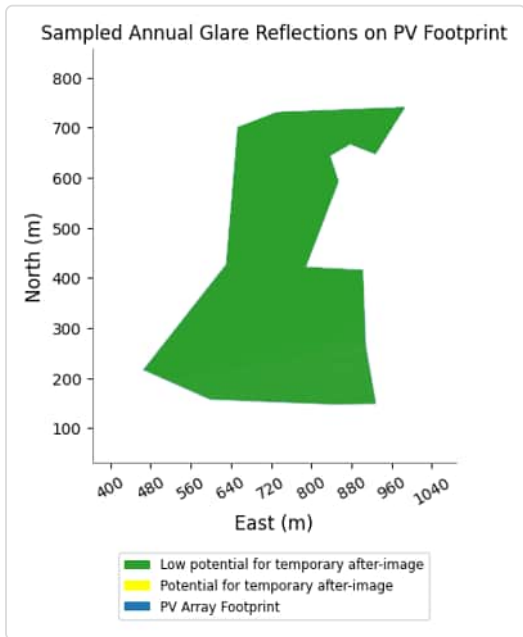
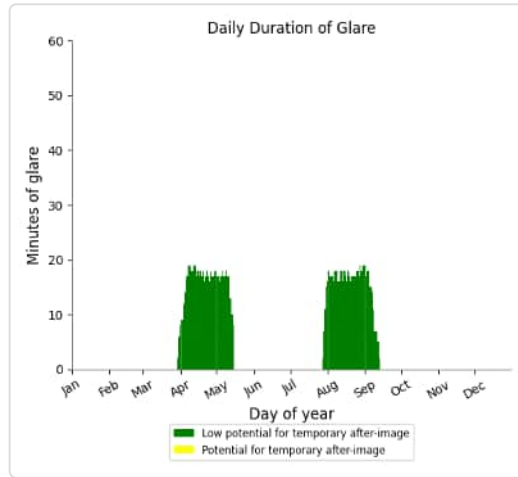
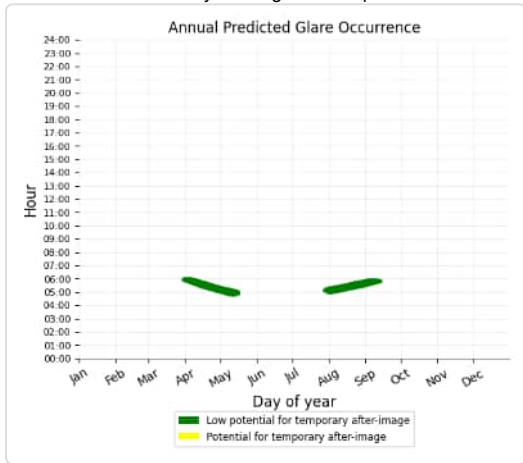


PV array 3 - OP Receptor (OP 30)

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

- 1,459 minutes of "green" glare with low potential to cause temporary after-image.

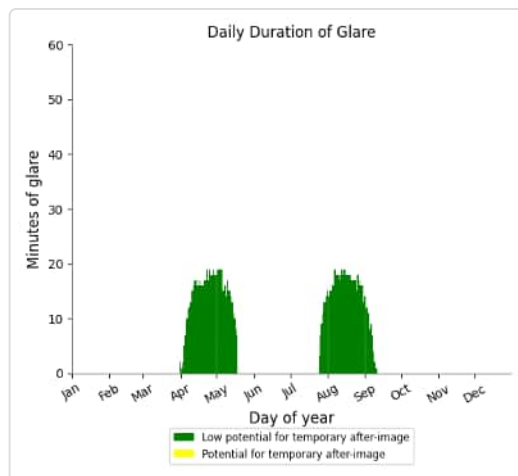
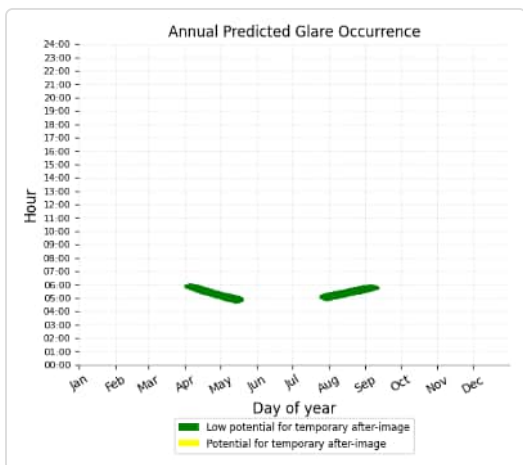
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

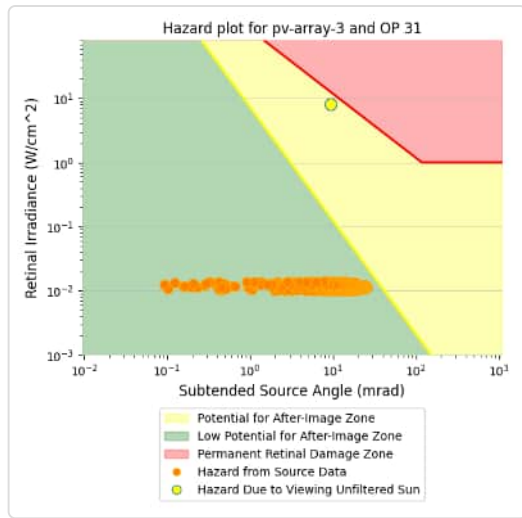
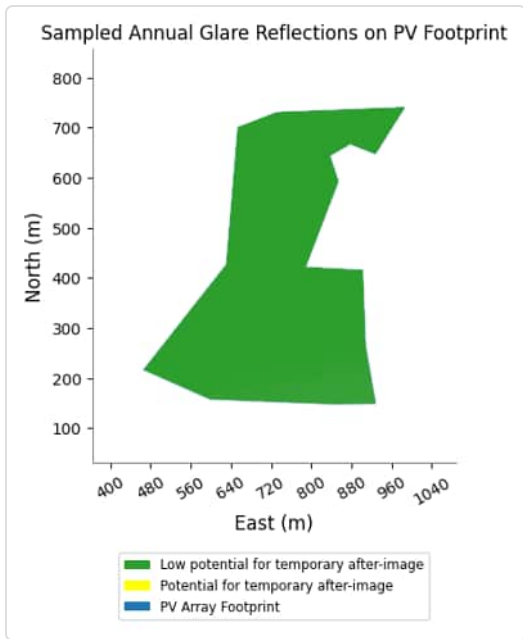


PV array 3 - OP Receptor (OP 31)

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

- 1,356 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

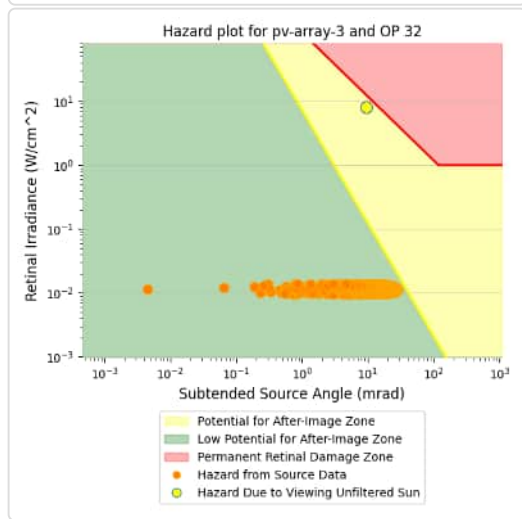
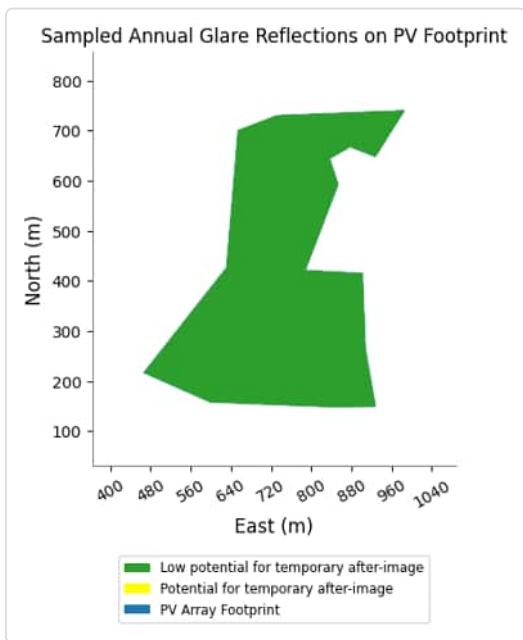
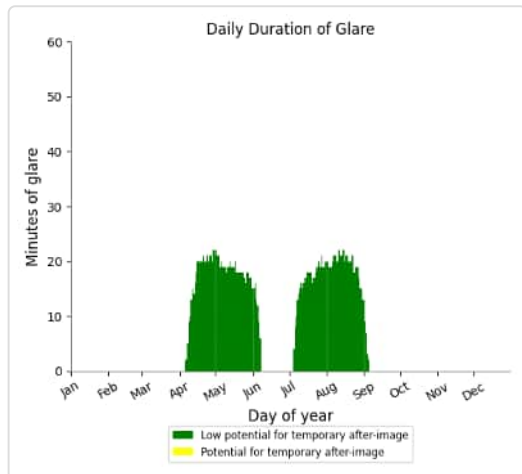
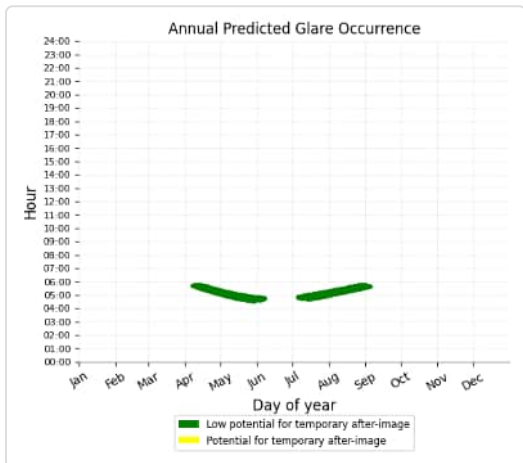




PV array 3 - OP Receptor (OP 32)

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

- 2,159 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

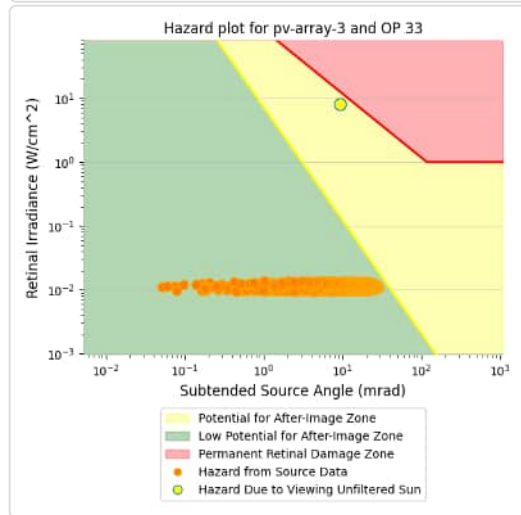
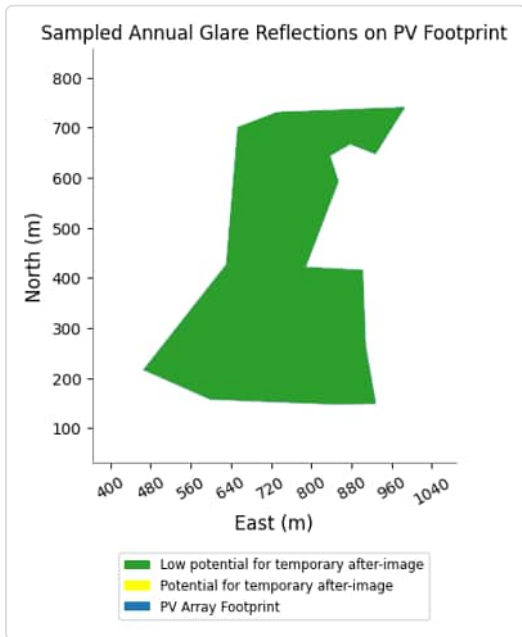
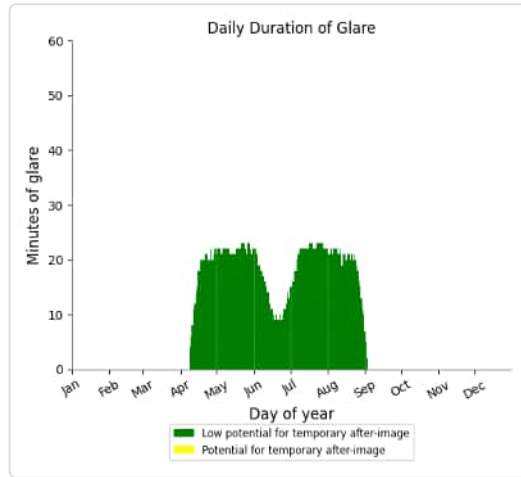
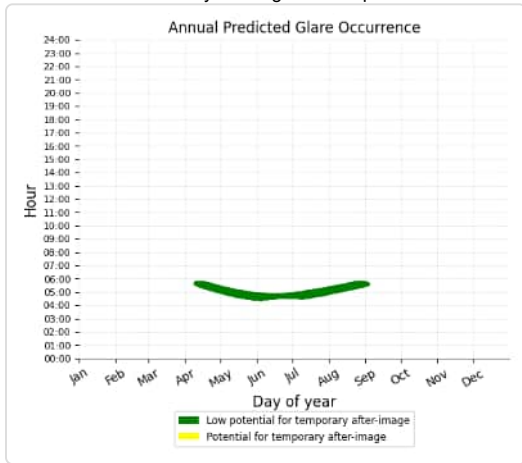


PV array 3 - OP Receptor (OP 33)

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

- 2,740 minutes of "green" glare with low potential to cause temporary after-image.

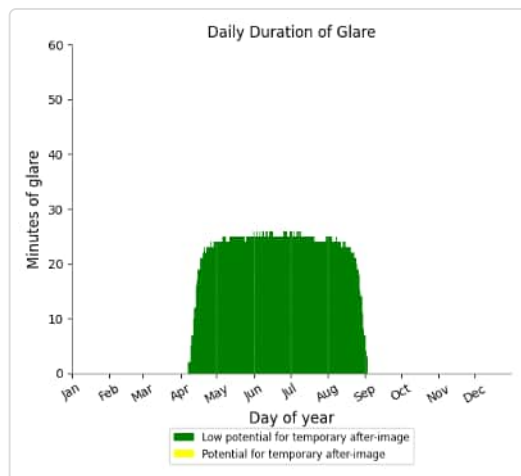
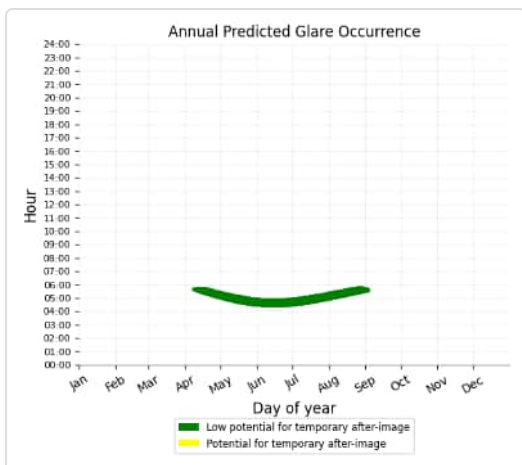
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

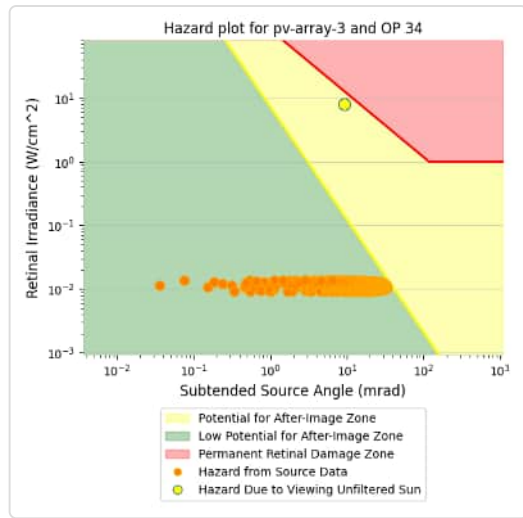
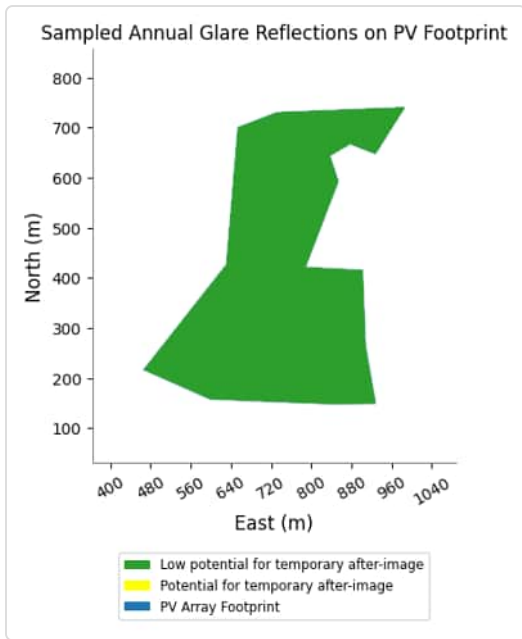


PV array 3 - OP Receptor (OP 34)

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

- 3,391 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

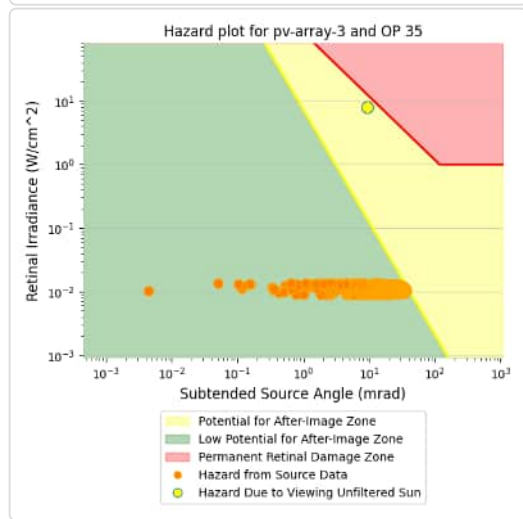
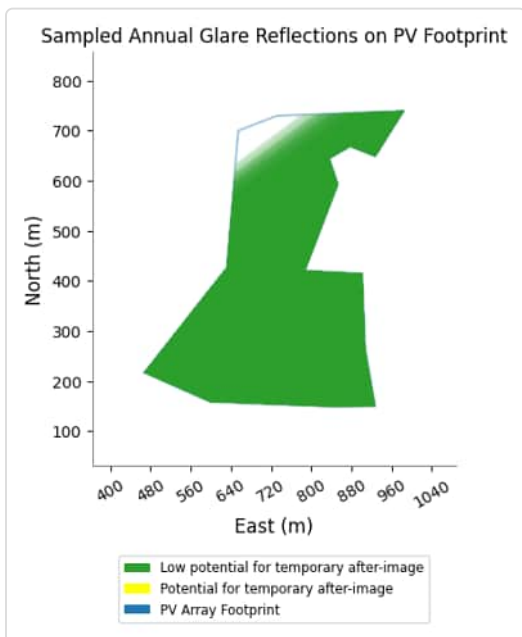
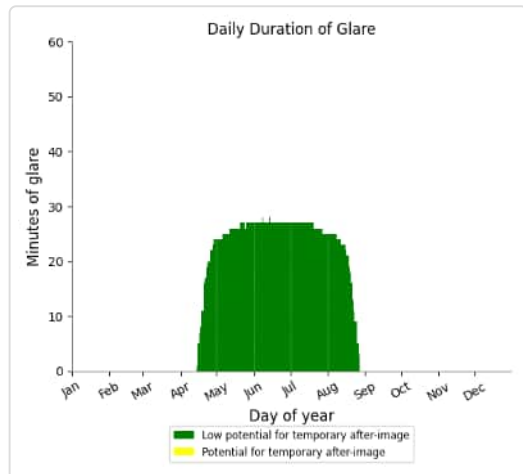
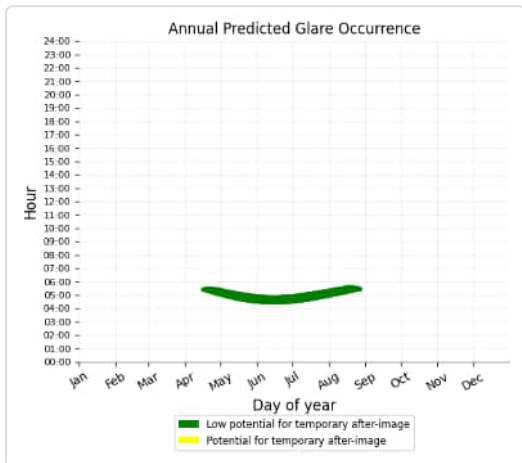




PV array 3 - OP Receptor (OP 35)

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

- 3,216 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

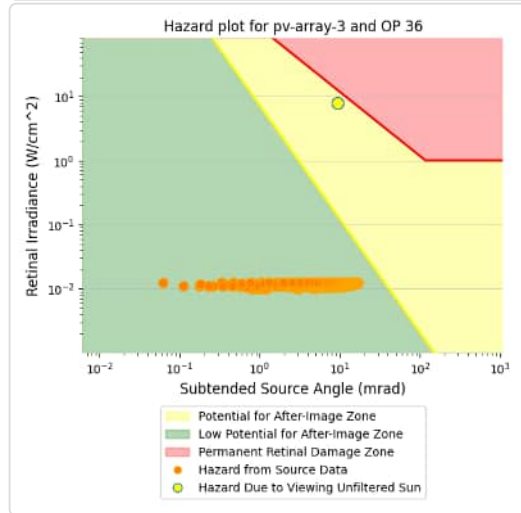
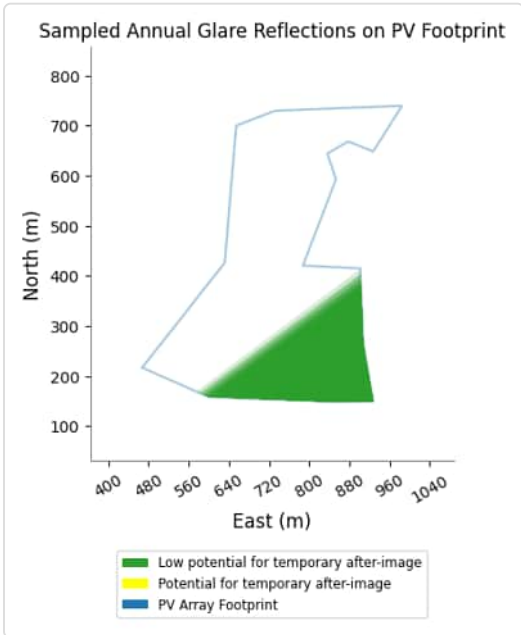
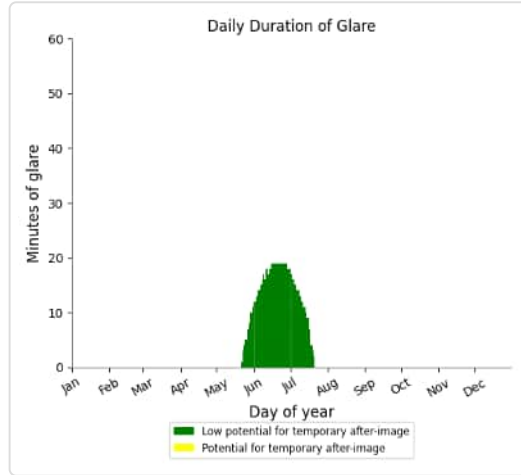
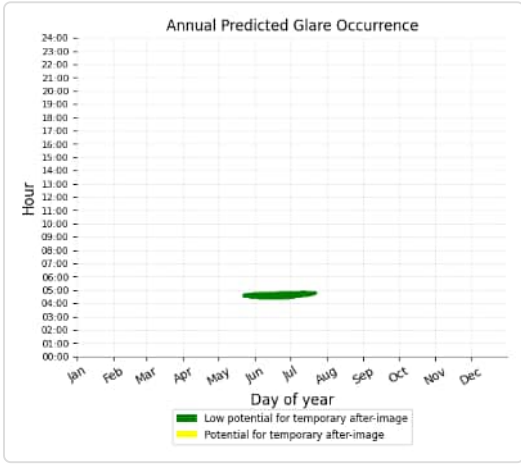


PV array 3 - OP Receptor (OP 36)

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

- 810 minutes of "green" glare with low potential to cause temporary after-image.

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



PV array 3 - OP Receptor (OP 37)

No glare found

PV array 3 - OP Receptor (OP 38)

No glare found

PV array 3 - OP Receptor (OP 39)

No glare found

PV array 3 - OP Receptor (OP 40)

No glare found

PV array 3 - OP Receptor (OP 41)

No glare found

PV array 3 - OP Receptor (OP 42)

No glare found

PV array 3 - OP Receptor (OP 43)

No glare found

PV array 3 - OP Receptor (OP 44)

No glare found

PV array 3 - OP Receptor (OP 45)

No glare found

PV array 3 - OP Receptor (OP 46)

No glare found

PV array 3 - OP Receptor (OP 47)

No glare found

PV array 3 - OP Receptor (OP 48)

No glare found

PV array 3 - OP Receptor (OP 49)

No glare found

PV array 3 - OP Receptor (OP 50)

No glare found

PV array 3 - OP Receptor (OP 51)

No glare found

PV array 3 - OP Receptor (OP 52)

No glare found

PV array 3 - OP Receptor (OP 53)

No glare found

PV array 3 - OP Receptor (OP 54)

No glare found

PV array 4 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	3	0
OP: OP 6	2	0
OP: OP 7	8	0
OP: OP 8	10	0
OP: OP 9	0	0
OP: OP 10	966	10
OP: OP 11	1262	92
OP: OP 12	2015	486
OP: OP 13	2618	2143
OP: OP 14	2480	1831
OP: OP 15	2883	1041
OP: OP 16	2552	311
OP: OP 17	2152	154
OP: OP 18	1950	197
OP: OP 19	1809	67
OP: OP 20	2495	1351
OP: OP 21	501	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	1000	0

OP: OP 25	823	0
OP: OP 26	7	0
OP: OP 27	1256	0
OP: OP 28	885	0
OP: OP 29	1137	0
OP: OP 30	1087	0
OP: OP 31	1267	0
OP: OP 32	652	0
OP: OP 33	585	0
OP: OP 34	184	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
OP: OP 41	0	0
OP: OP 42	0	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0

PV array 4 - OP Receptor (OP 1)

No glare found

PV array 4 - OP Receptor (OP 2)

No glare found

PV array 4 - OP Receptor (OP 3)

No glare found

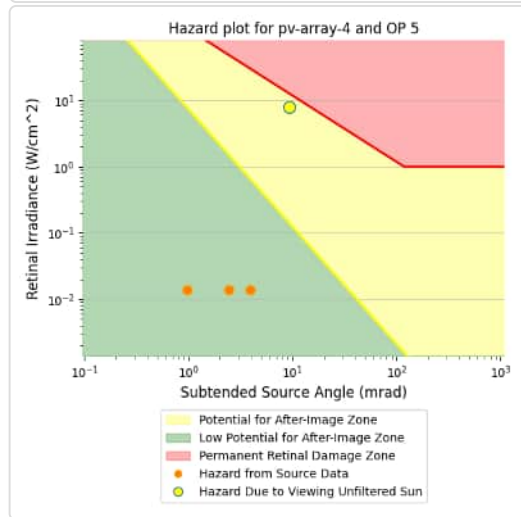
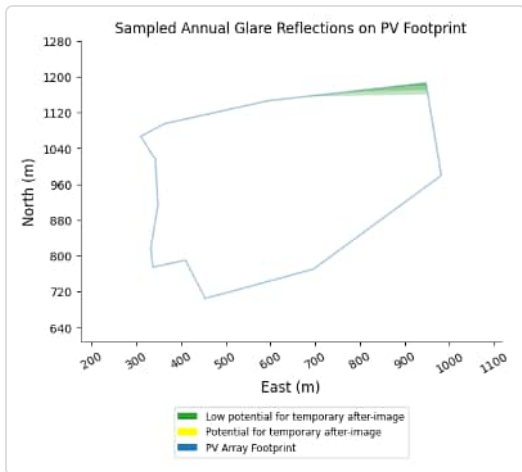
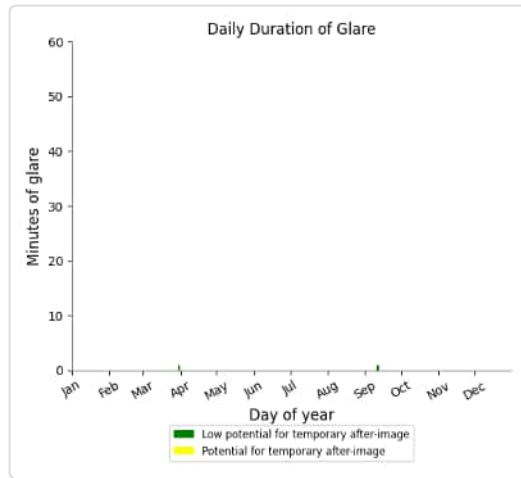
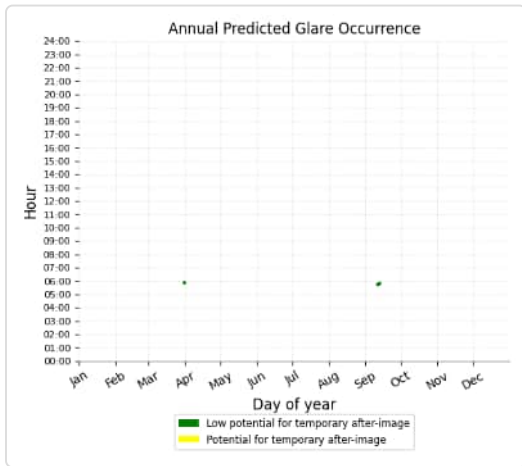
PV array 4 - OP Receptor (OP 4)

No glare found

PV array 4 - OP Receptor (OP 5)

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

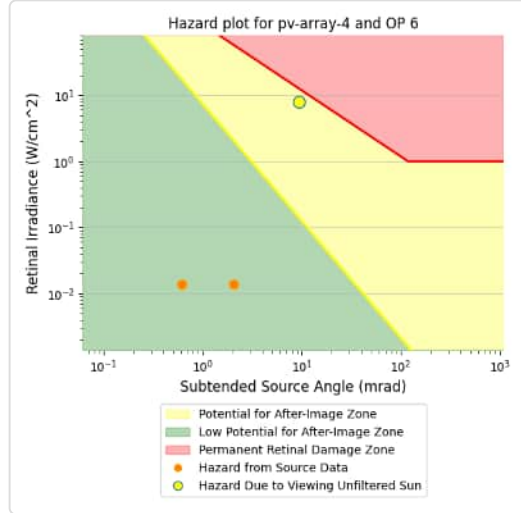
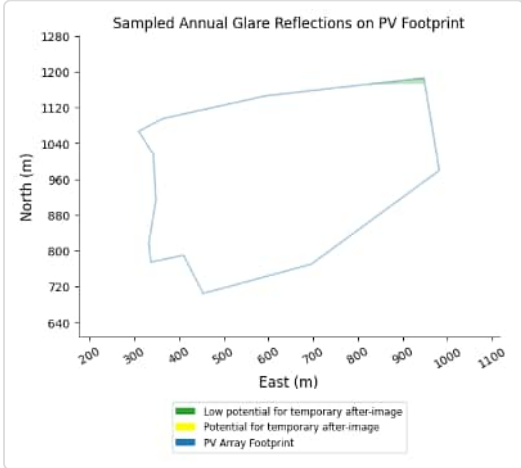
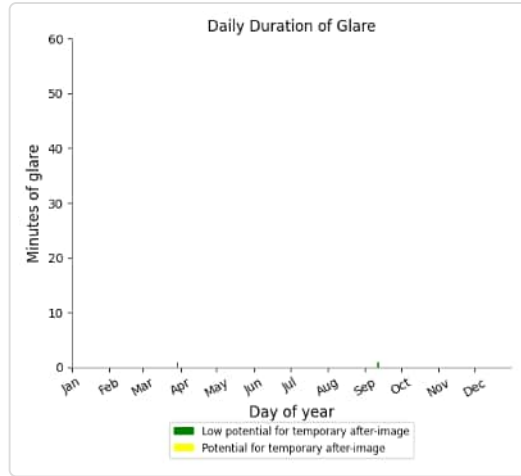
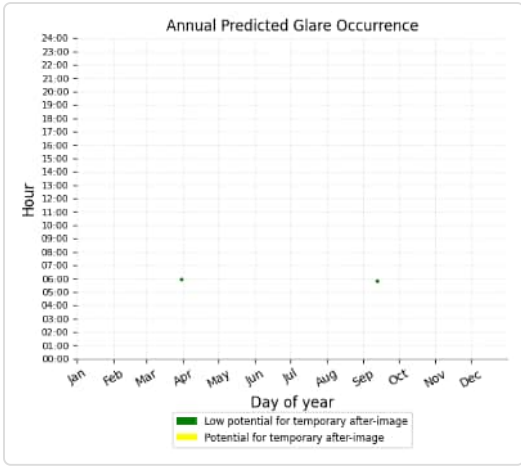
- 3 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 6)

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

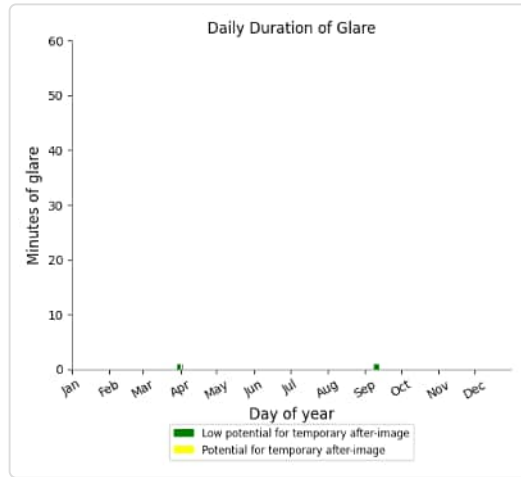
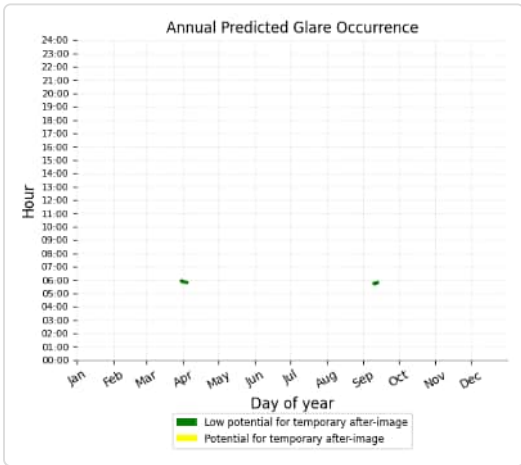
- 2 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

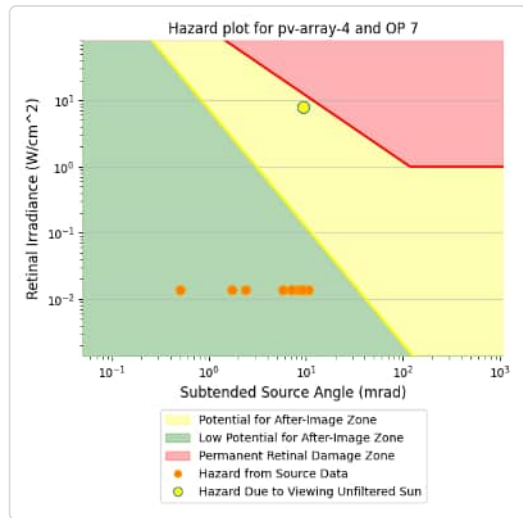
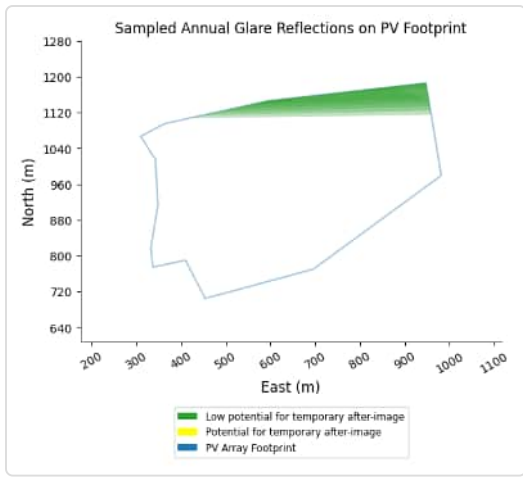


PV array 4 - OP Receptor (OP 7)

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

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

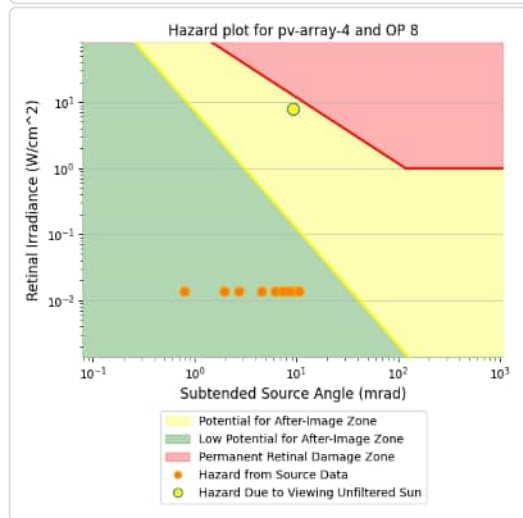
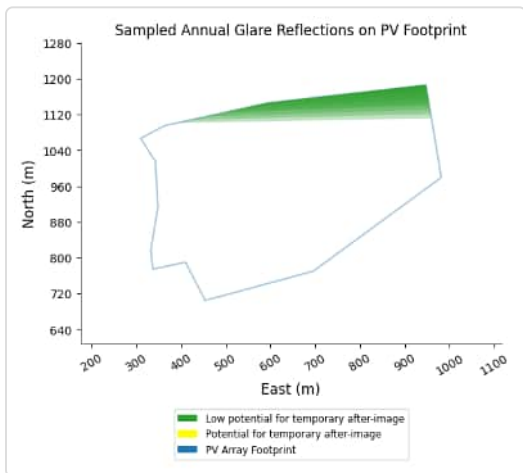
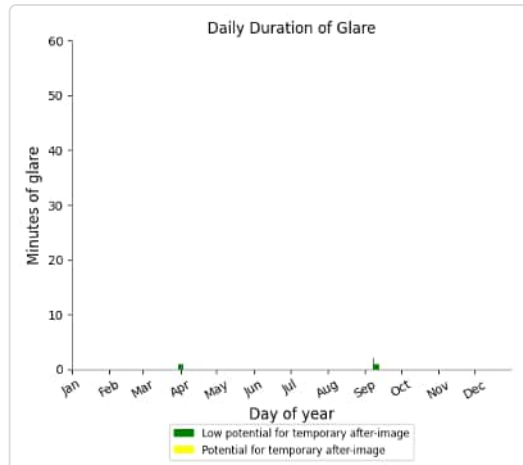
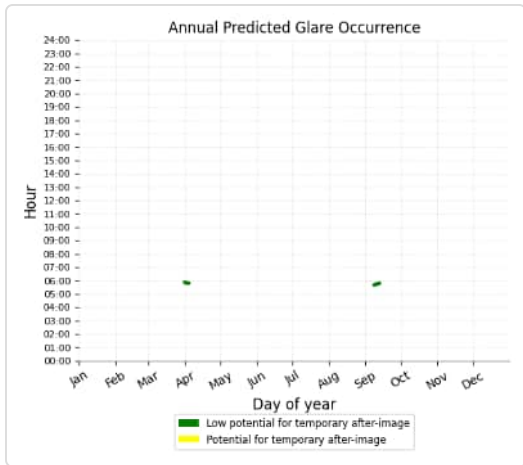




PV array 4 - OP Receptor (OP 8)

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

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



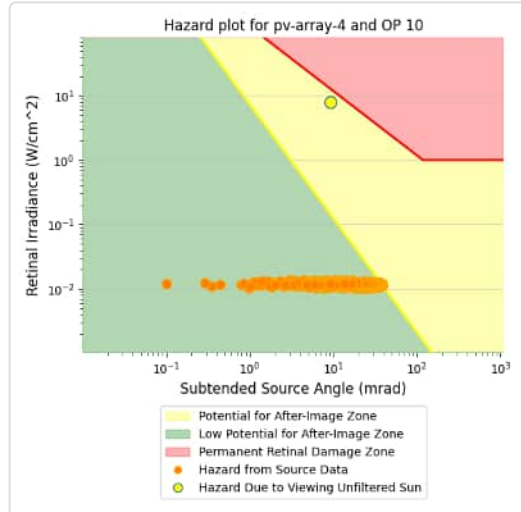
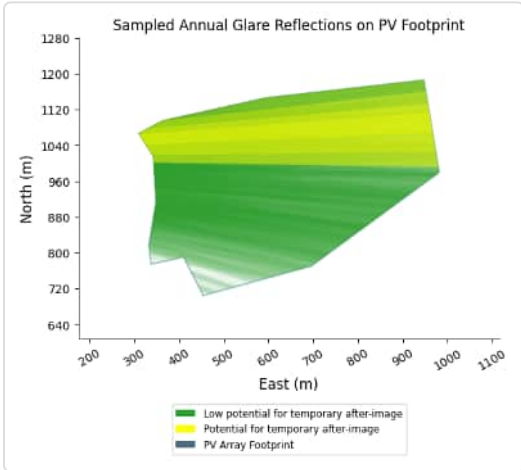
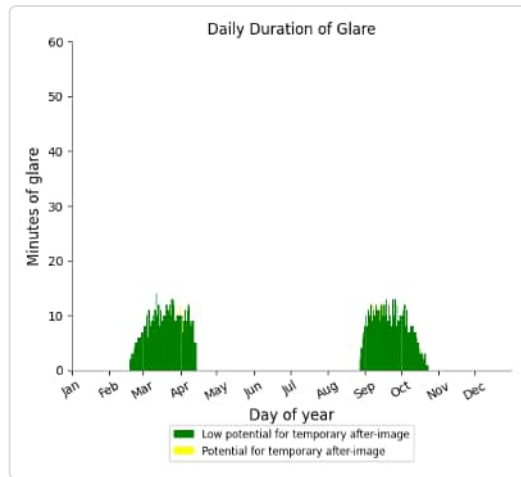
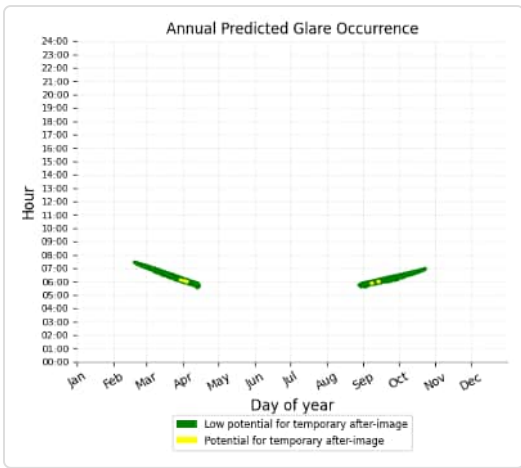
PV array 4 - OP Receptor (OP 9)

No glare found

PV array 4 - OP Receptor (OP 10)

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

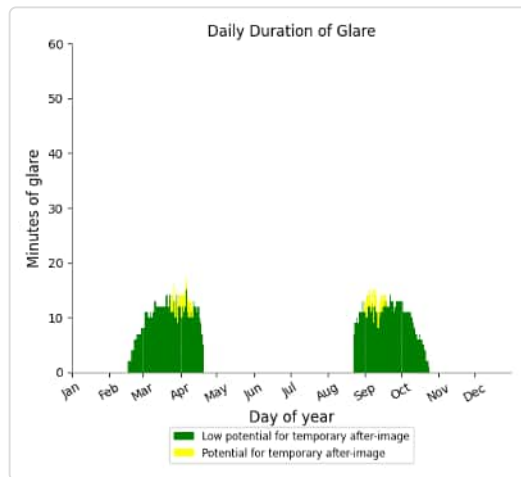
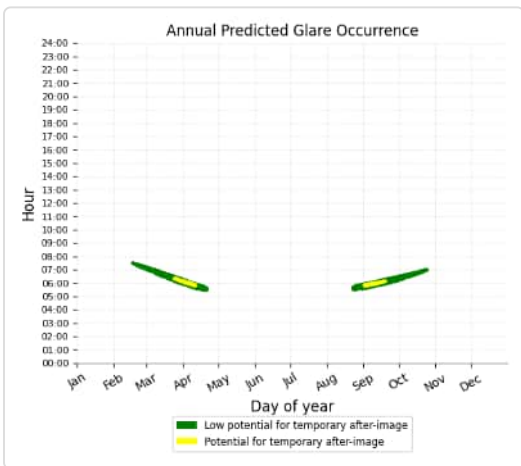
- 966 minutes of "green" glare with low potential to cause temporary after-image.
- 10 minutes of "yellow" glare with potential to cause temporary after-image.

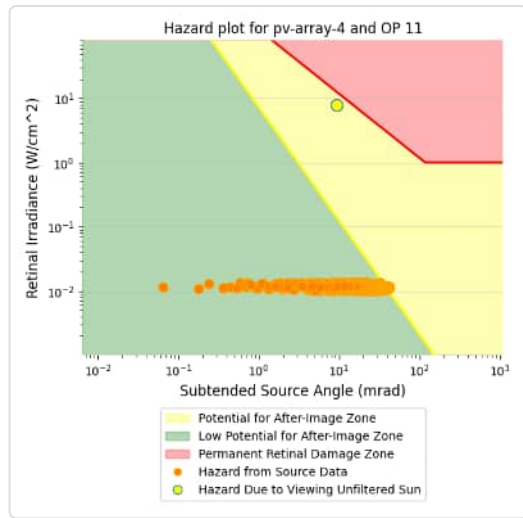
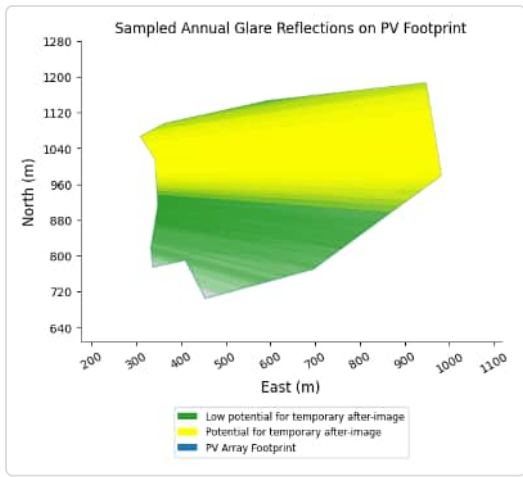


PV array 4 - OP Receptor (OP 11)

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

- 1,262 minutes of "green" glare with low potential to cause temporary after-image.
- 92 minutes of "yellow" glare with potential to cause temporary after-image.

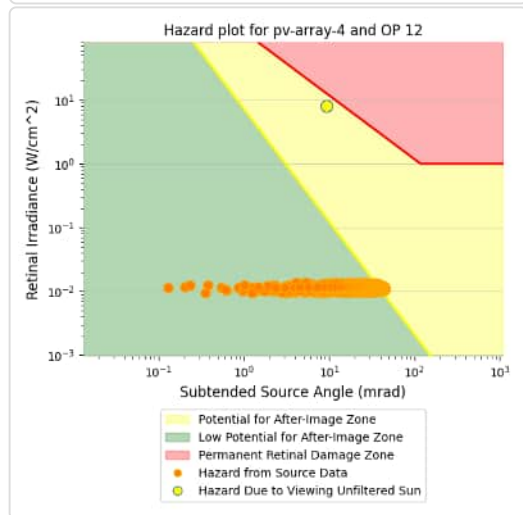
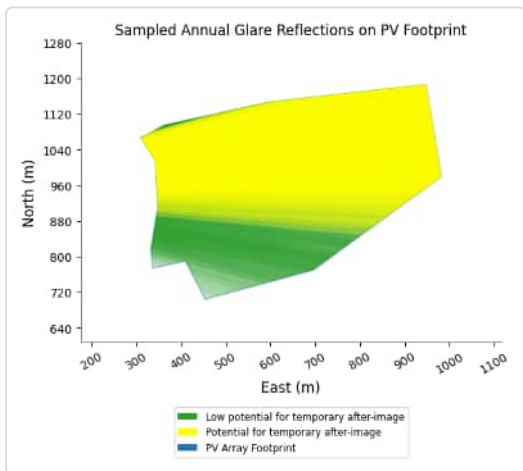
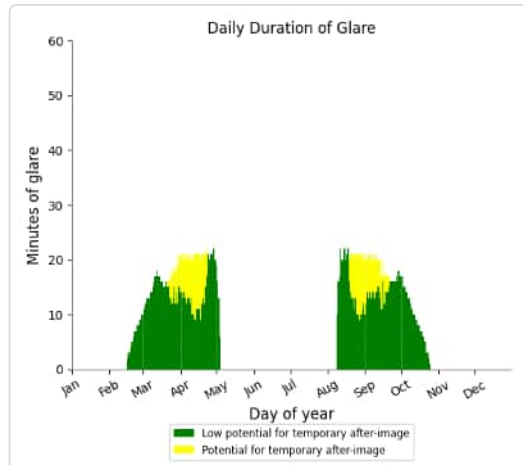
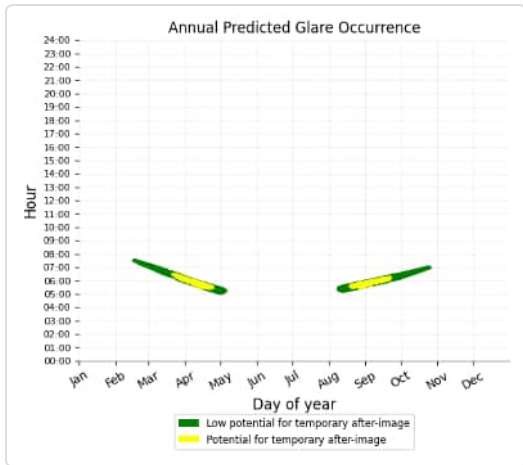




PV array 4 - OP Receptor (OP 12)

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

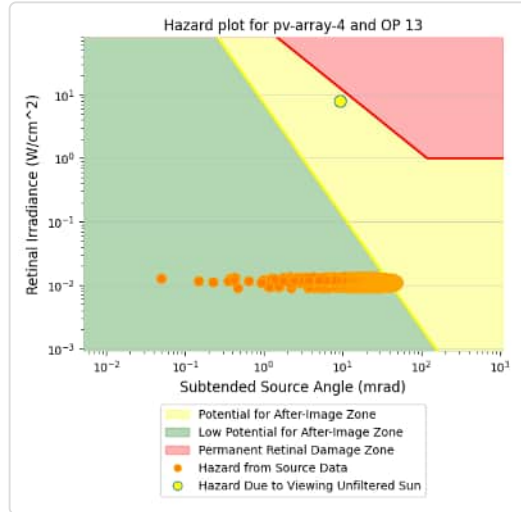
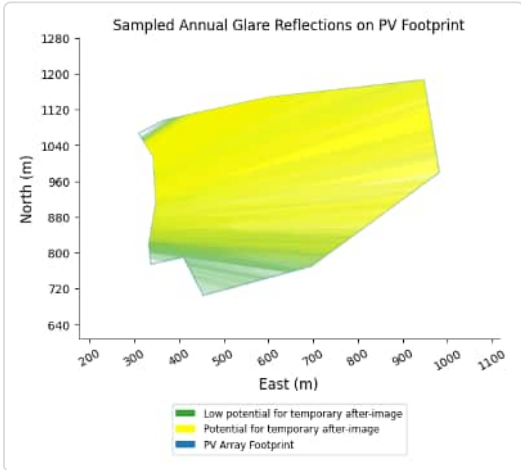
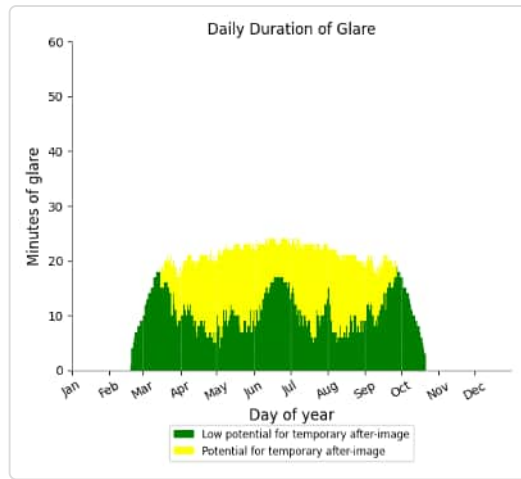
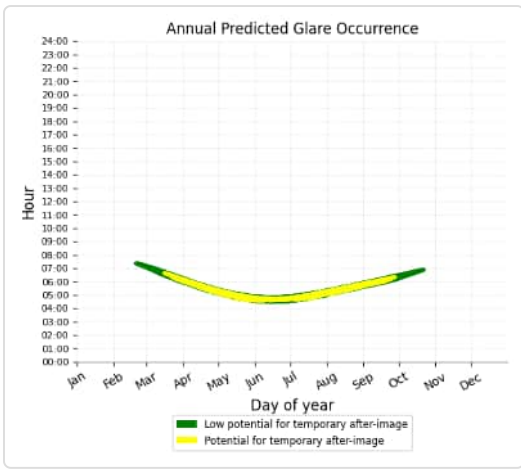
- 2,015 minutes of "green" glare with low potential to cause temporary after-image.
- 486 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 13)

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

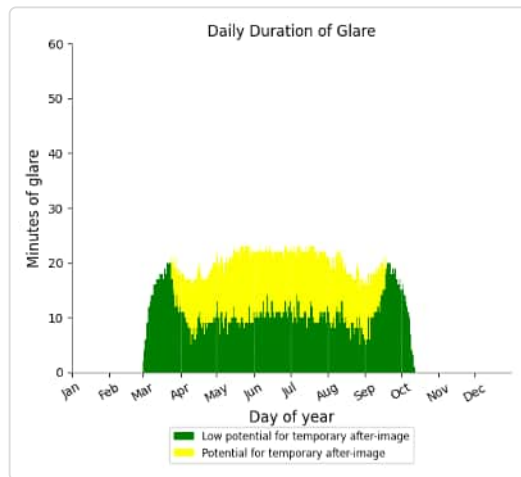
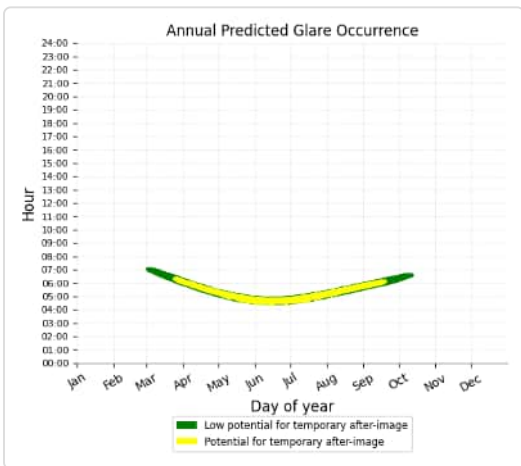
- 2,618 minutes of "green" glare with low potential to cause temporary after-image.
- 2,143 minutes of "yellow" glare with potential to cause temporary after-image.

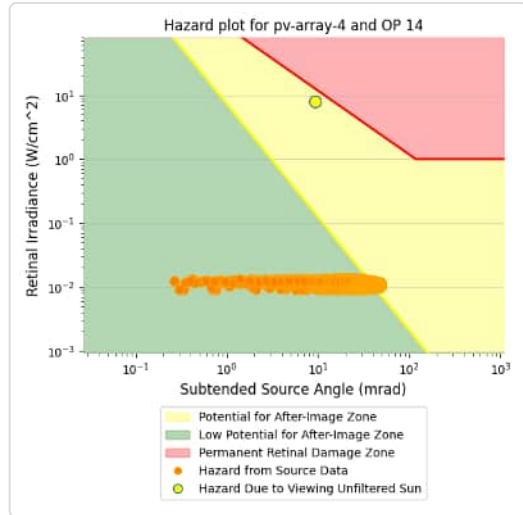
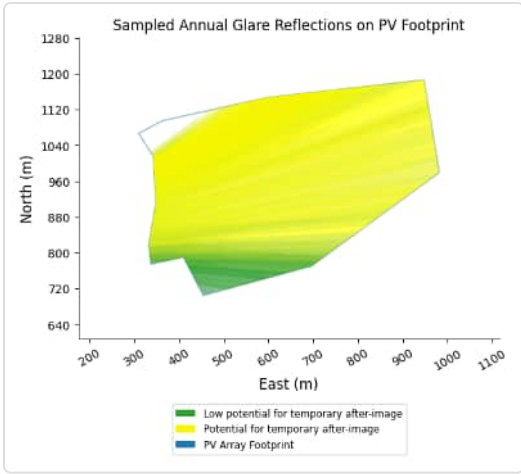


PV array 4 - OP Receptor (OP 14)

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

- 2,480 minutes of "green" glare with low potential to cause temporary after-image.
- 1,831 minutes of "yellow" glare with potential to cause temporary after-image.

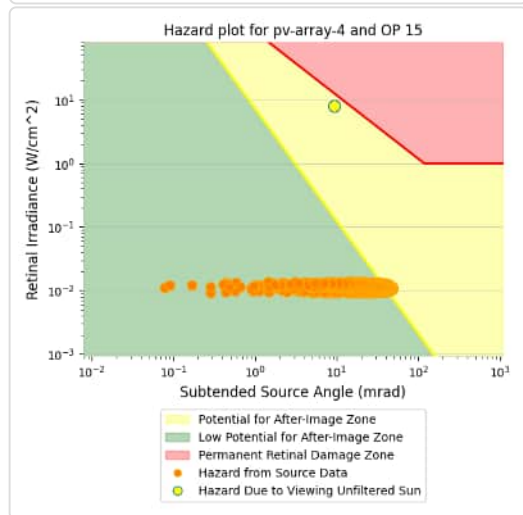
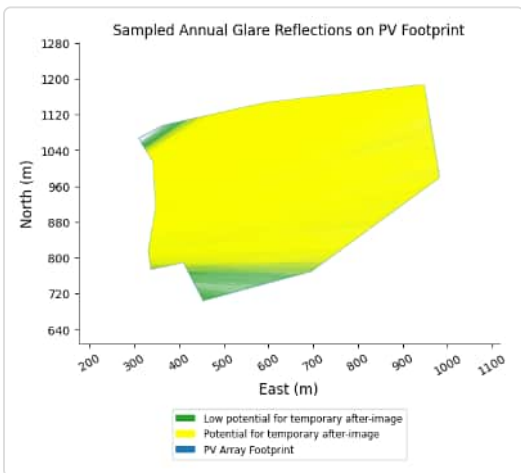
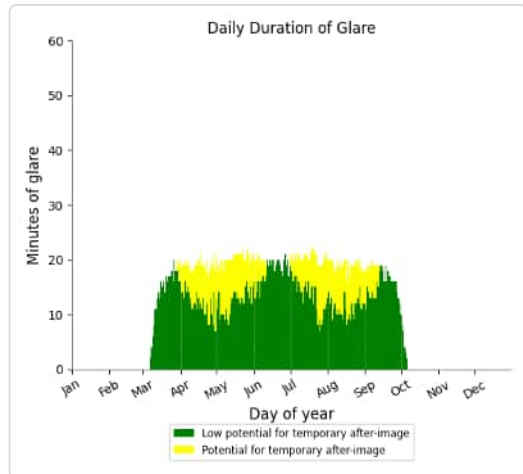
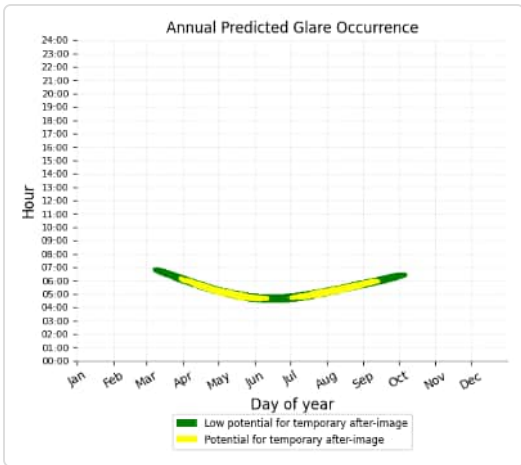




PV array 4 - OP Receptor (OP 15)

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

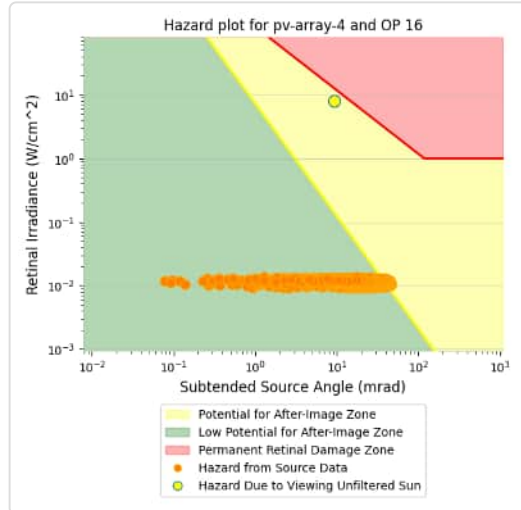
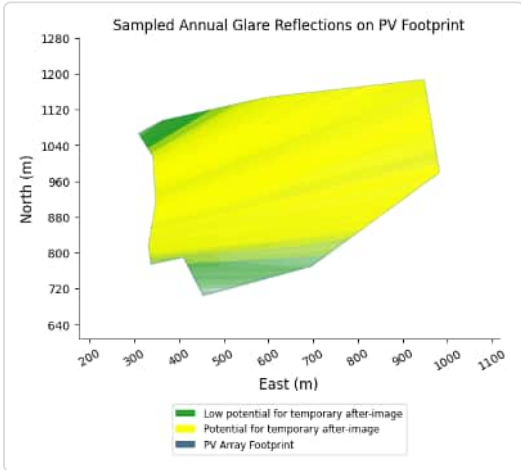
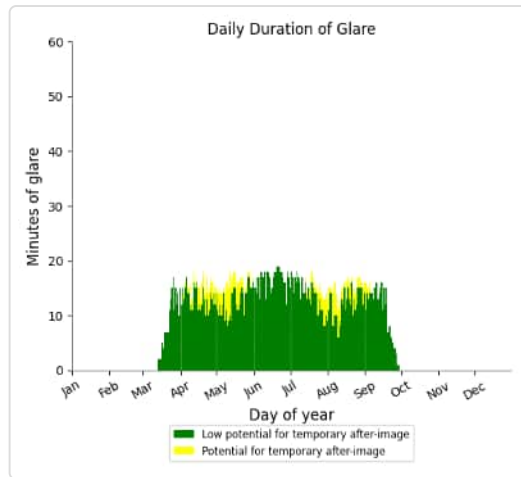
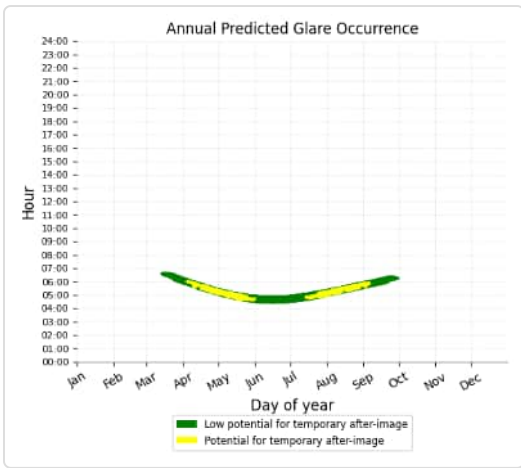
- 2,883 minutes of "green" glare with low potential to cause temporary after-image.
- 1,041 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 16)

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

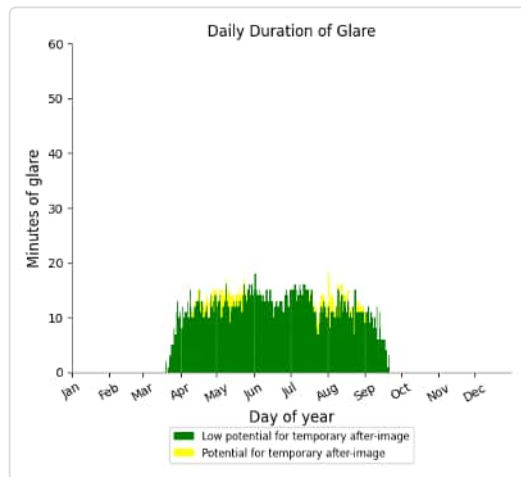
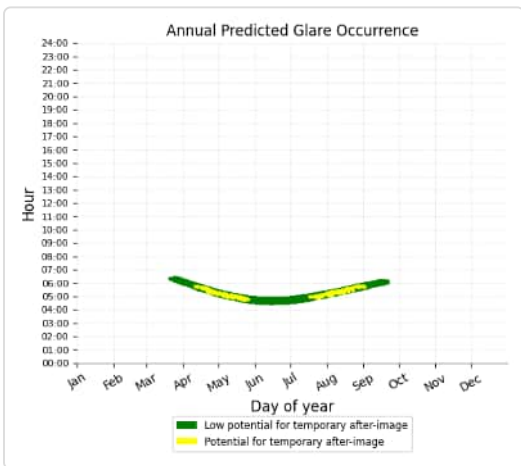
- 2,552 minutes of "green" glare with low potential to cause temporary after-image.
- 311 minutes of "yellow" glare with potential to cause temporary after-image.

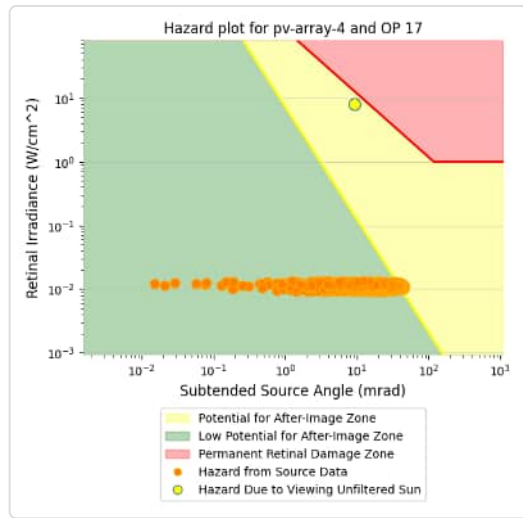
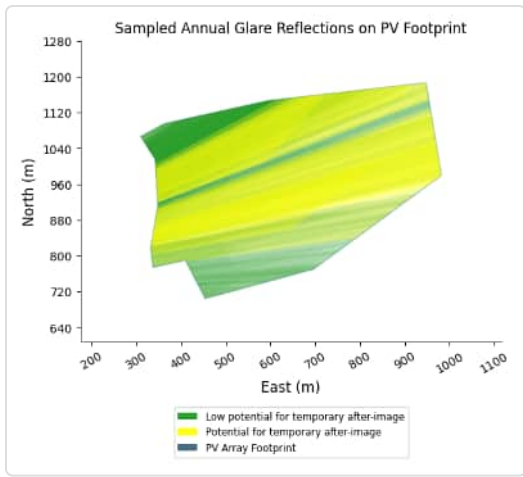


PV array 4 - OP Receptor (OP 17)

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

- 2,152 minutes of "green" glare with low potential to cause temporary after-image.
- 154 minutes of "yellow" glare with potential to cause temporary after-image.

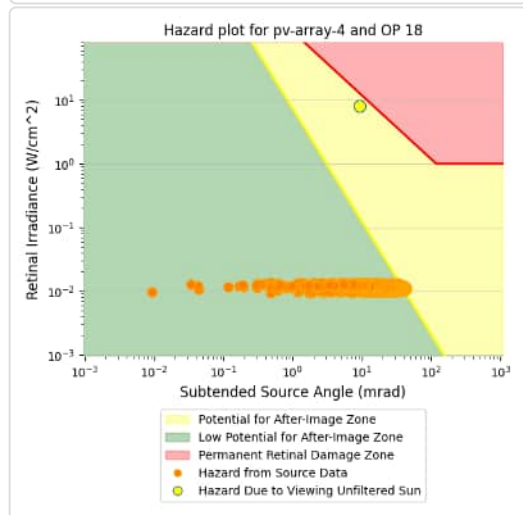
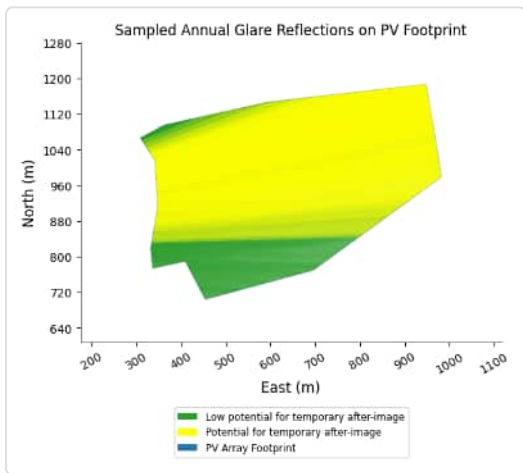
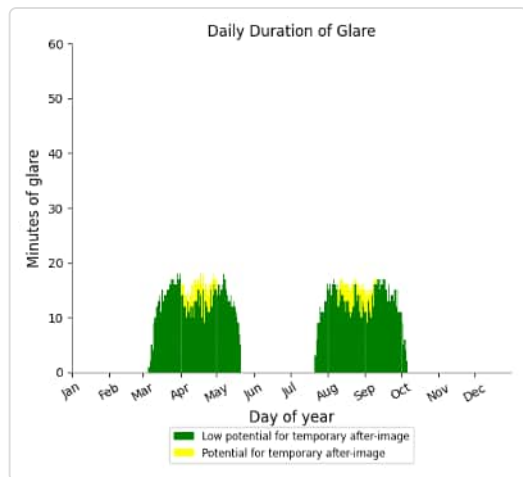
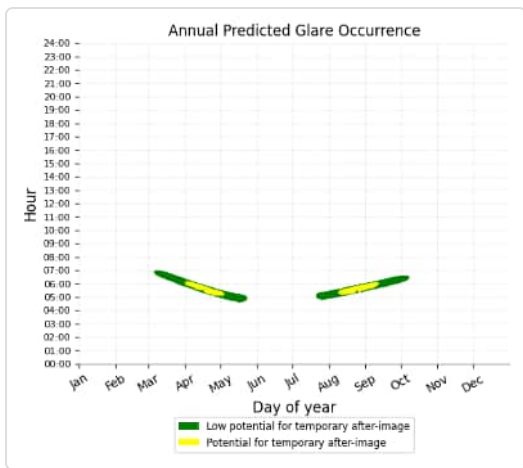




PV array 4 - OP Receptor (OP 18)

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

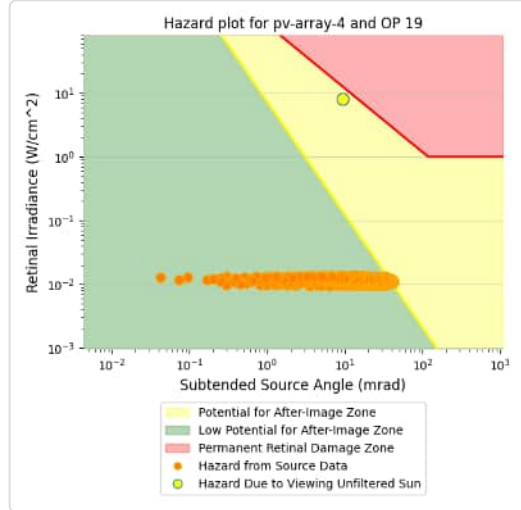
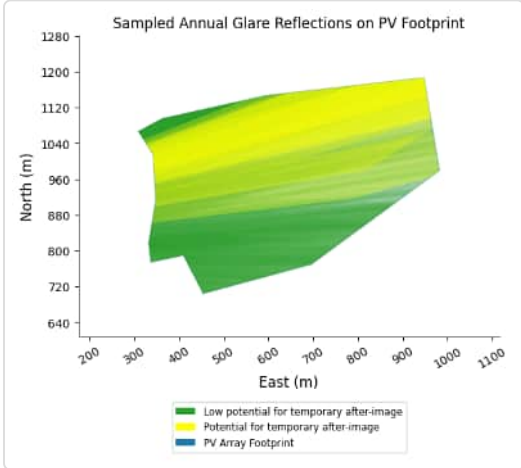
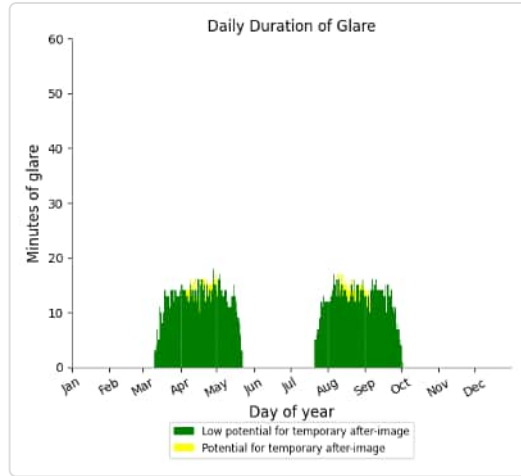
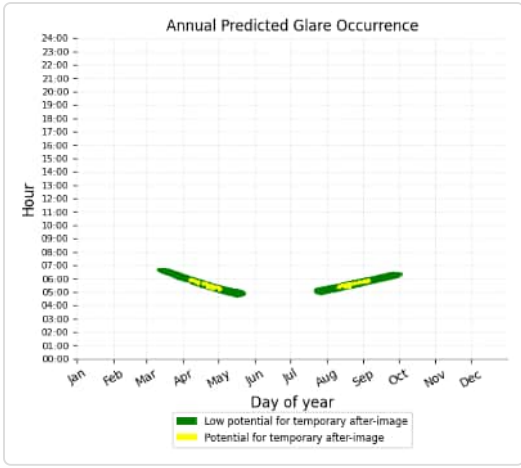
- 1,950 minutes of "green" glare with low potential to cause temporary after-image.
- 197 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 19)

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

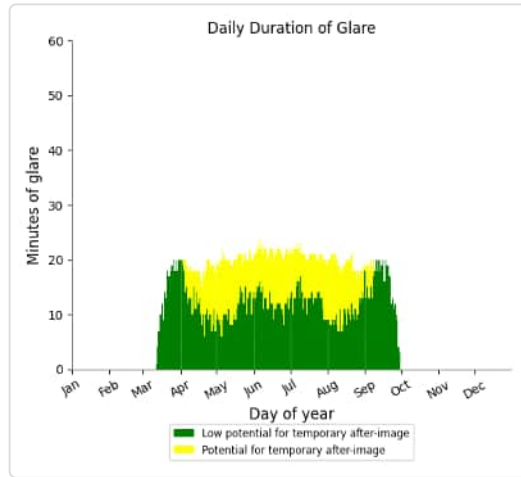
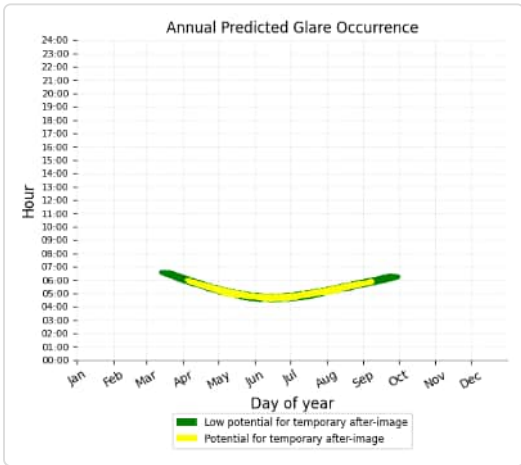
- 1,809 minutes of "green" glare with low potential to cause temporary after-image.
- 67 minutes of "yellow" glare with potential to cause temporary after-image.

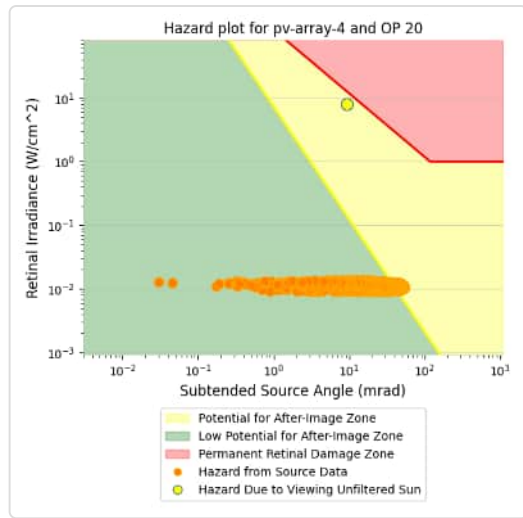
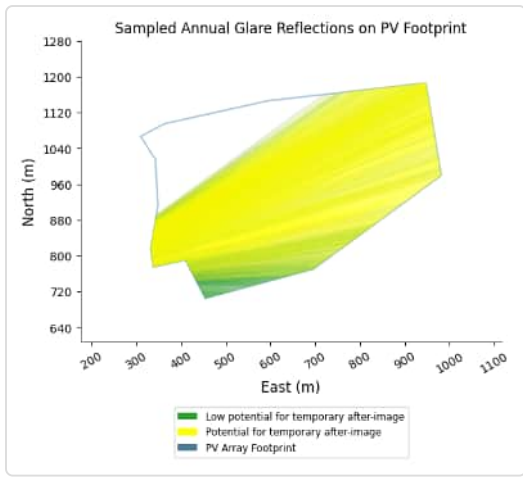


PV array 4 - OP Receptor (OP 20)

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

- 2,495 minutes of "green" glare with low potential to cause temporary after-image.
- 1,351 minutes of "yellow" glare with potential to cause temporary after-image.

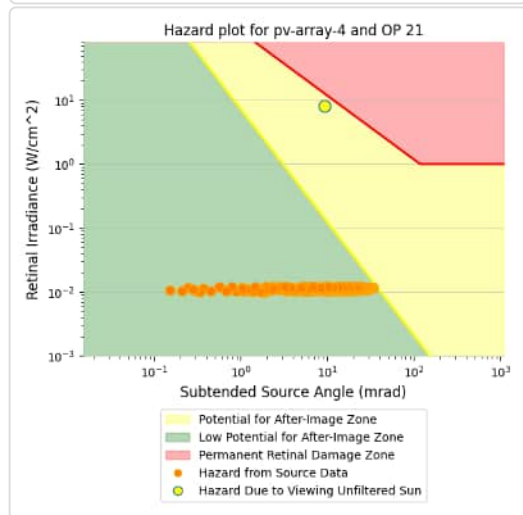
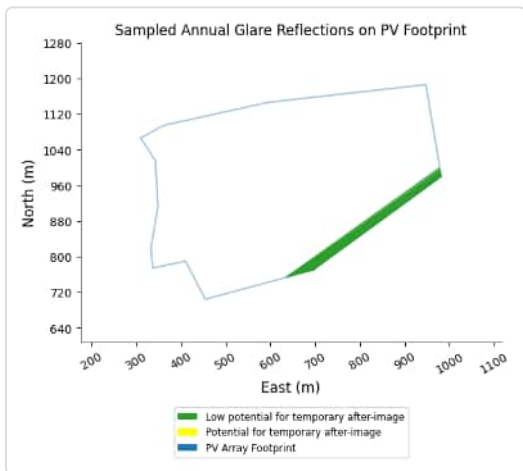
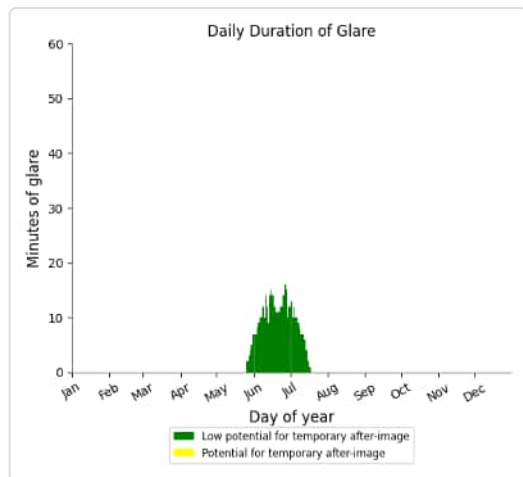
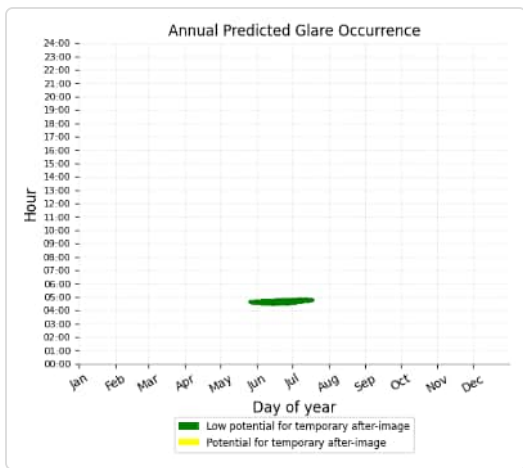




PV array 4 - OP Receptor (OP 21)

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

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



PV array 4 - OP Receptor (OP 22)

No glare found

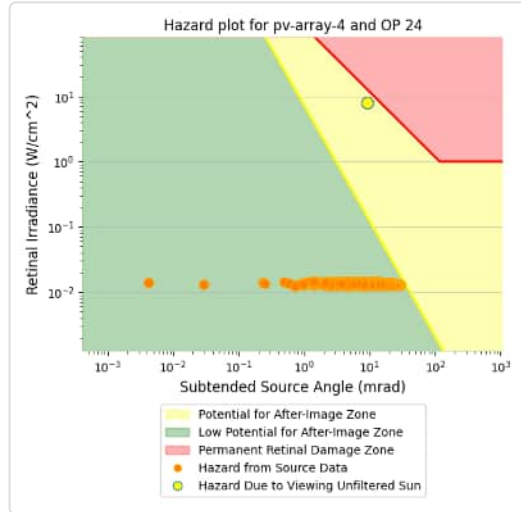
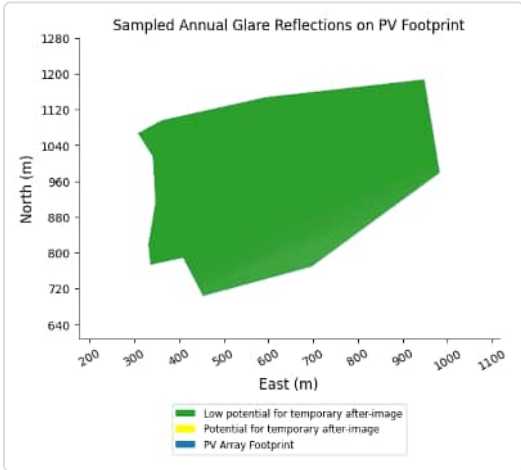
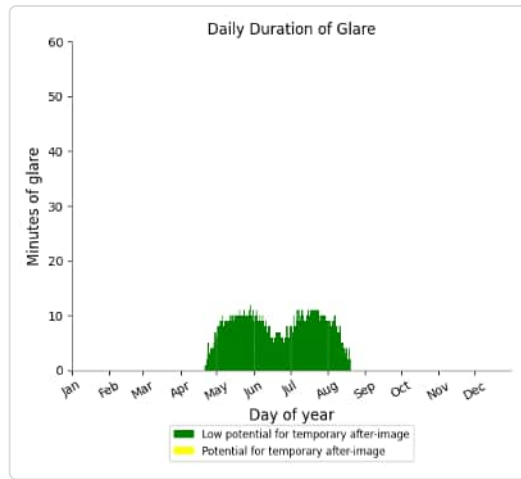
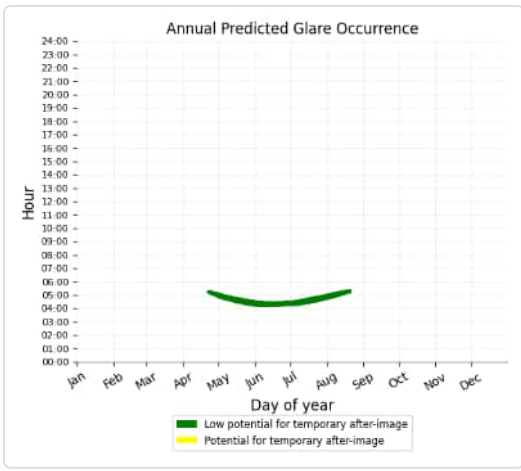
PV array 4 - OP Receptor (OP 23)

No glare found

PV array 4 - OP Receptor (OP 24)

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

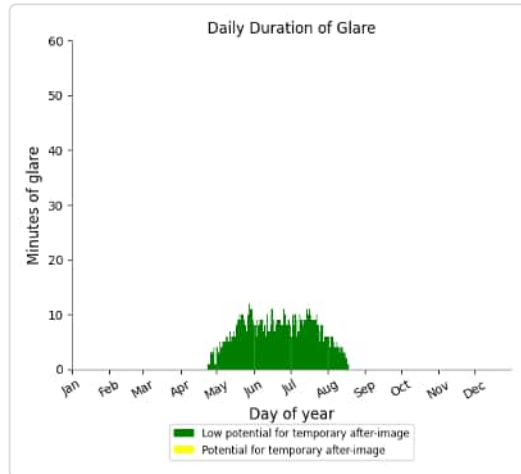
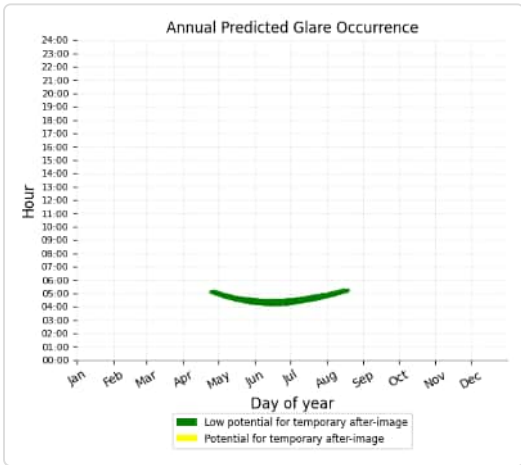
- 1,000 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

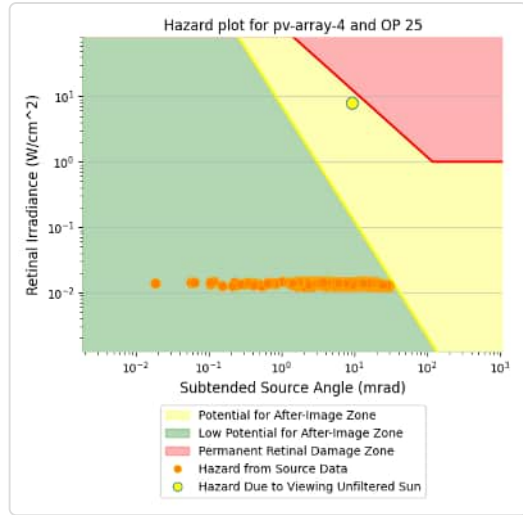
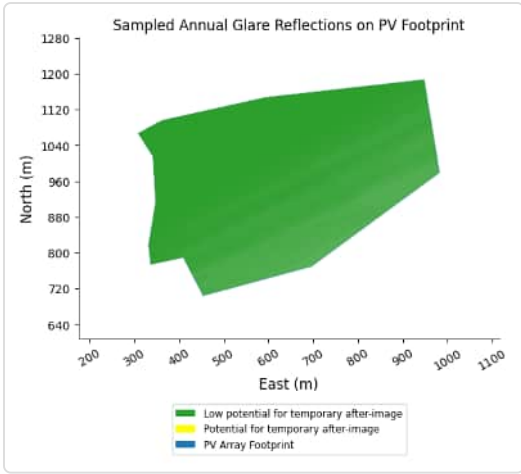


PV array 4 - OP Receptor (OP 25)

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

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

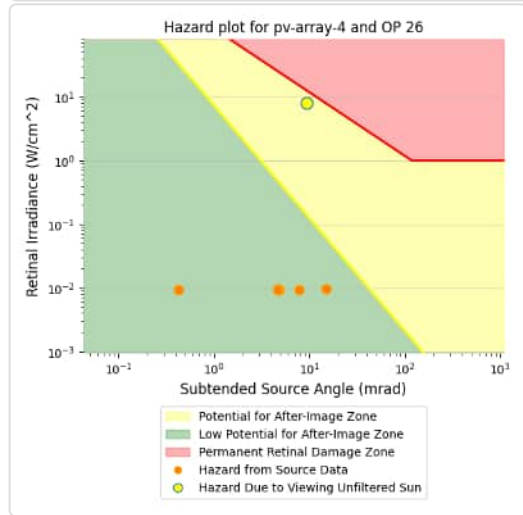
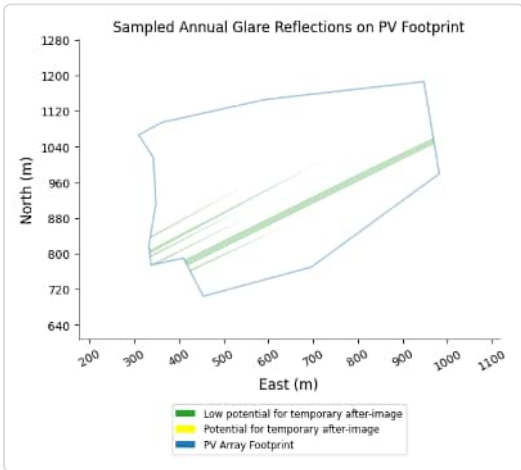
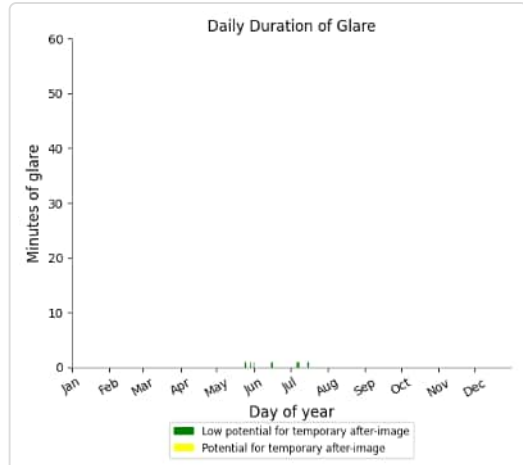
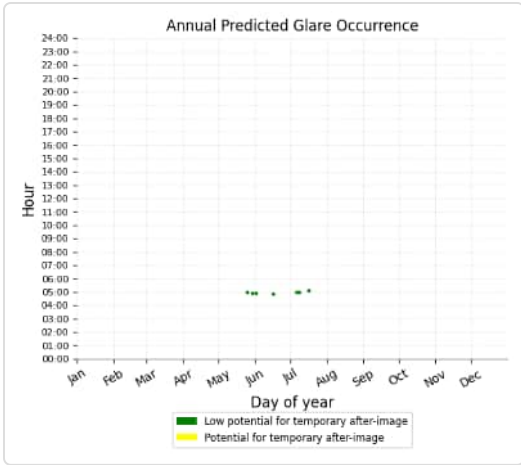




PV array 4 - OP Receptor (OP 26)

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

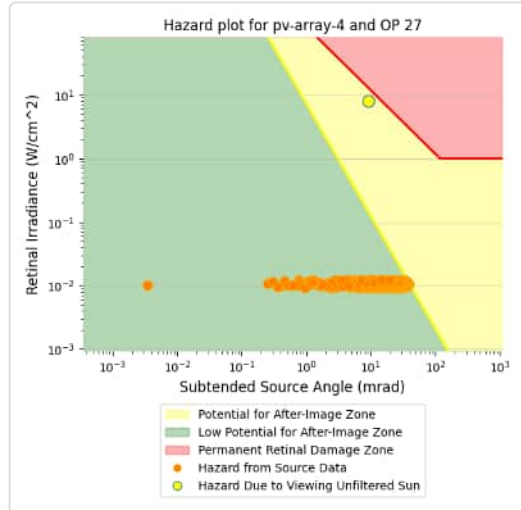
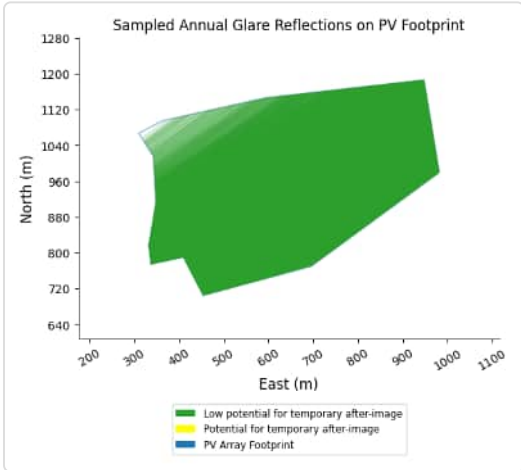
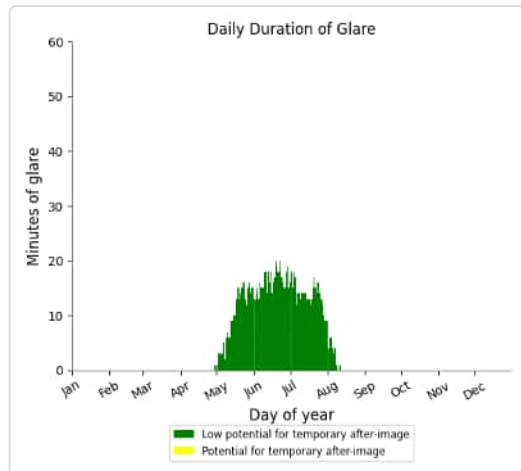
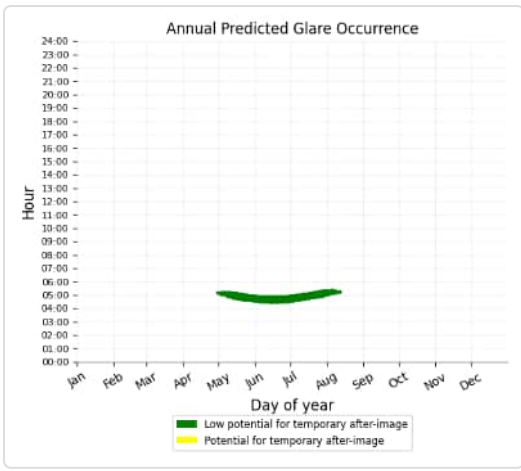
- 7 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 27)

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

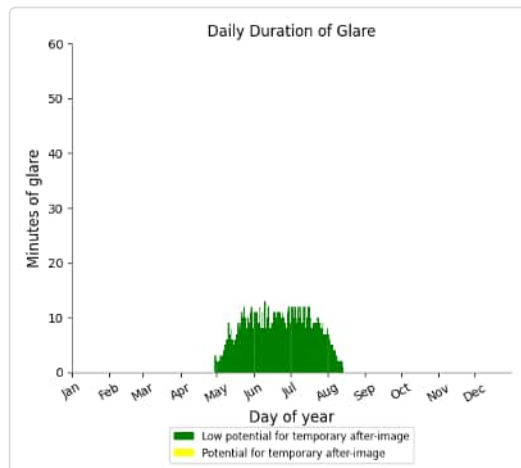
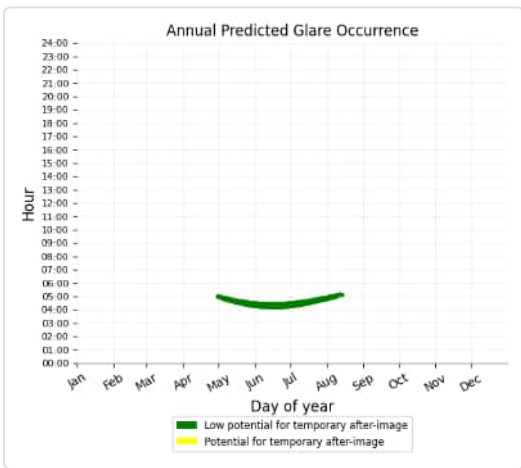
- 1,256 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

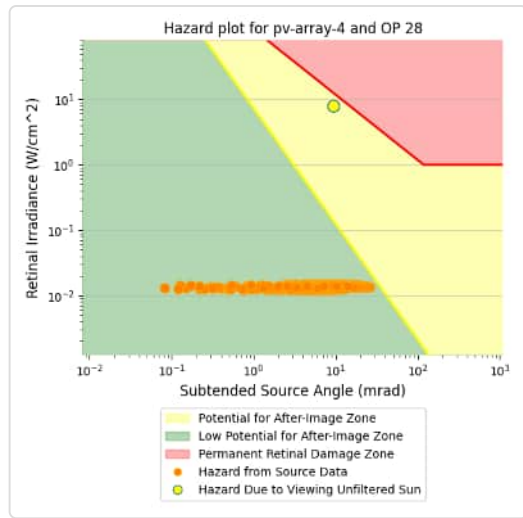
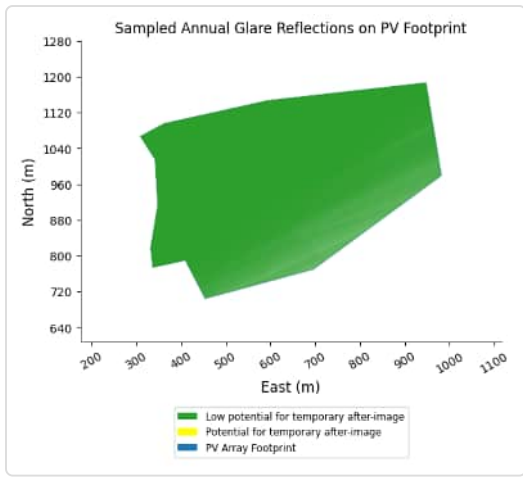


PV array 4 - OP Receptor (OP 28)

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

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

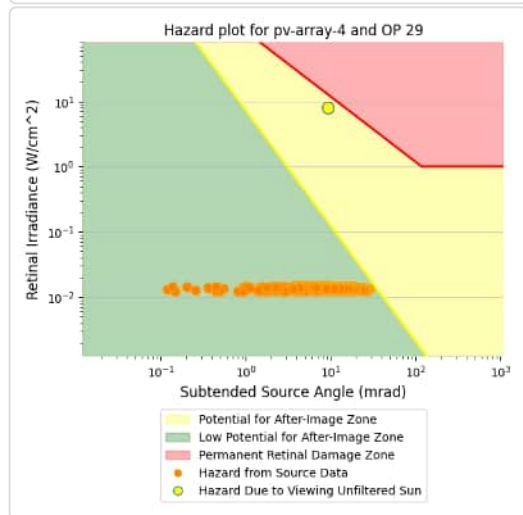
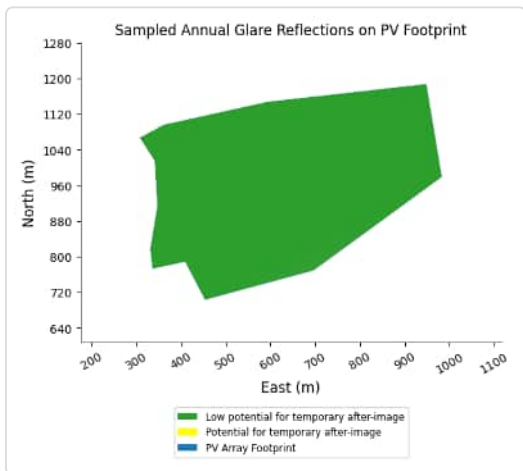
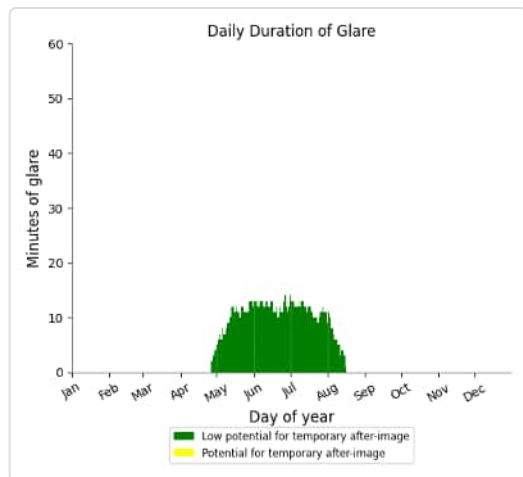
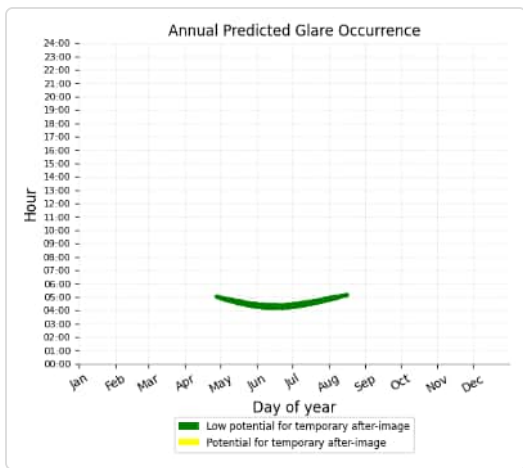




PV array 4 - OP Receptor (OP 29)

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

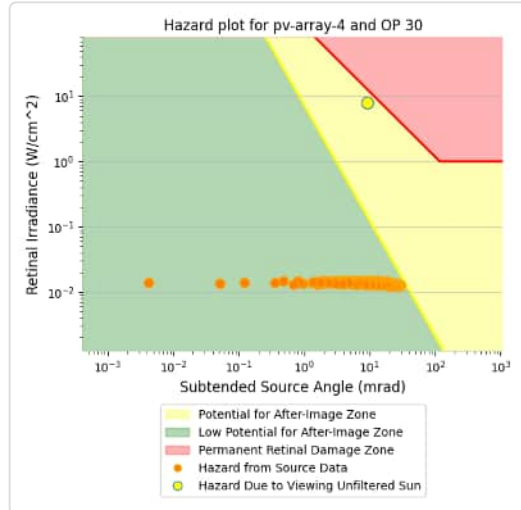
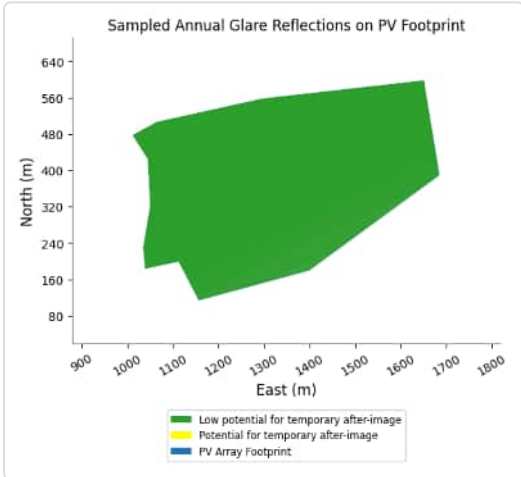
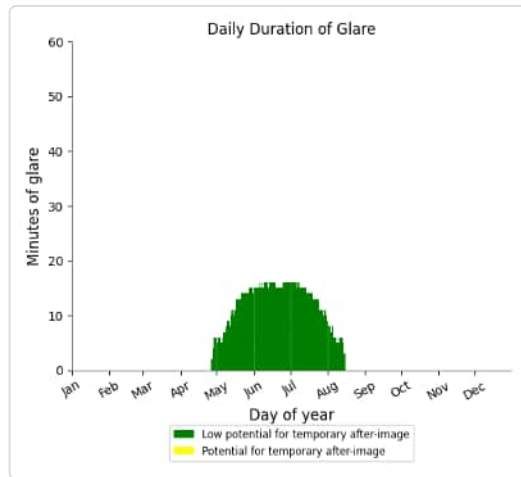
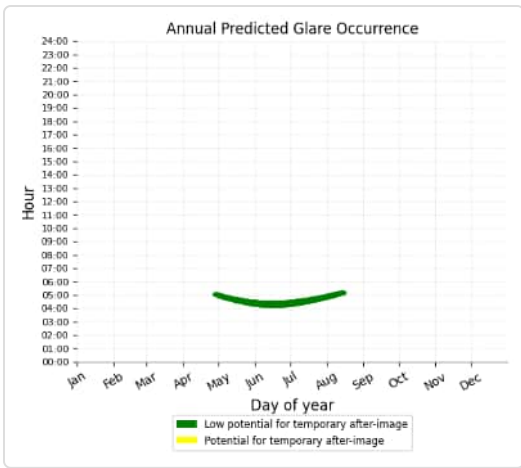
- 1,137 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 30)

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

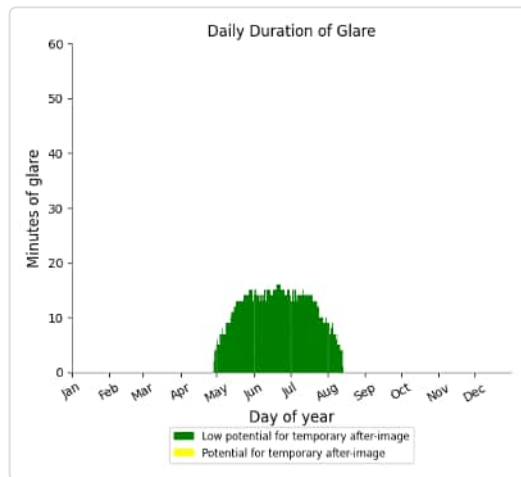
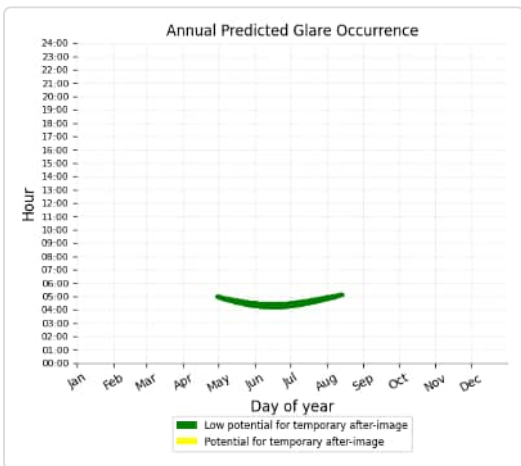
- 1,087 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

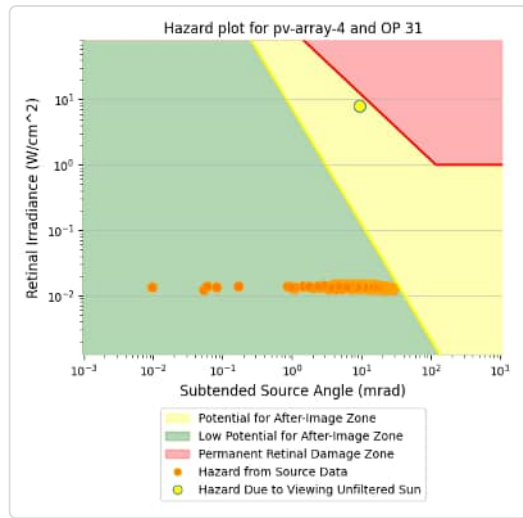
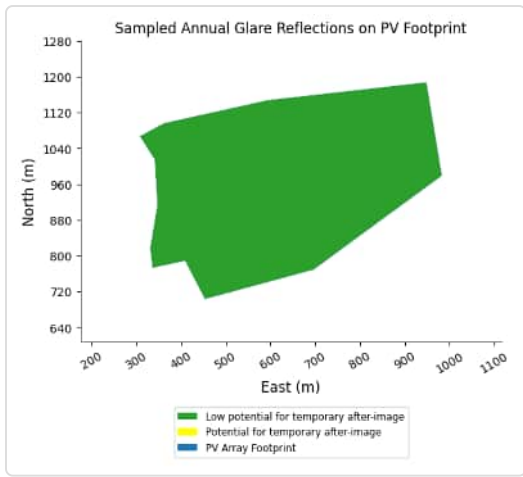


PV array 4 - OP Receptor (OP 31)

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

- 1,267 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

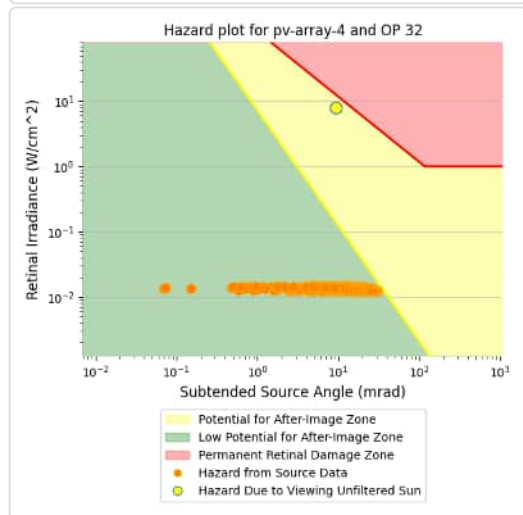
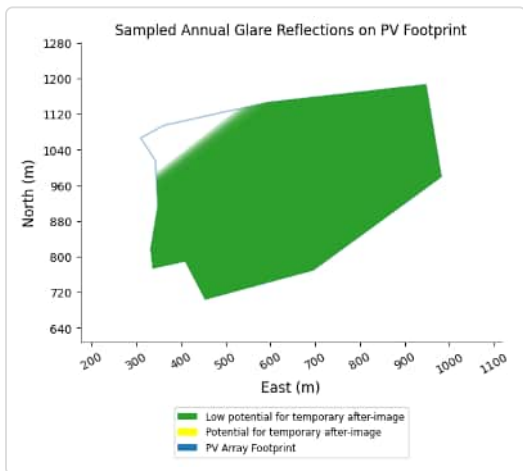
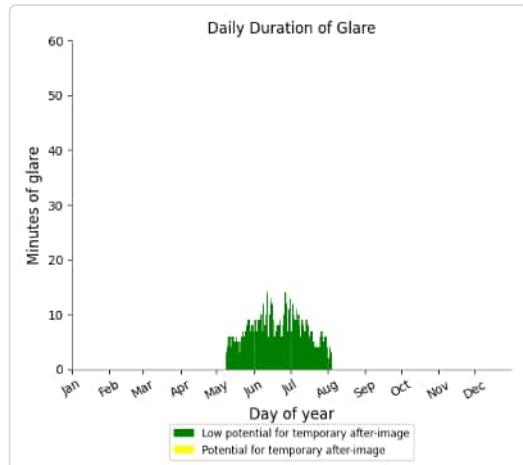
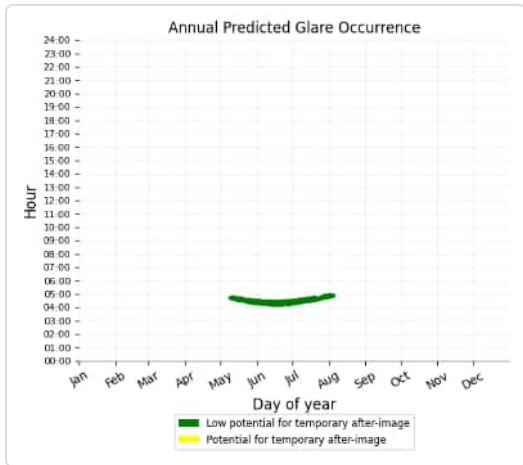




PV array 4 - OP Receptor (OP 32)

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

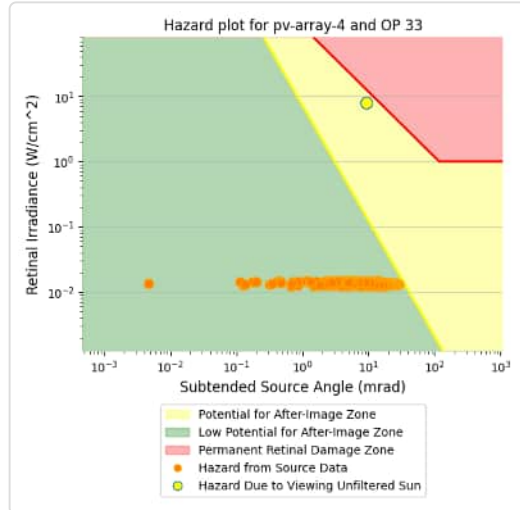
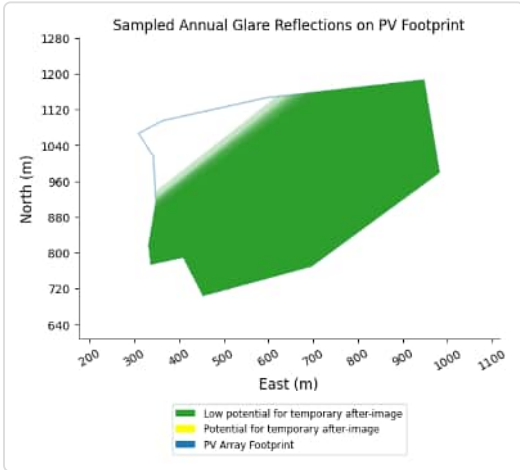
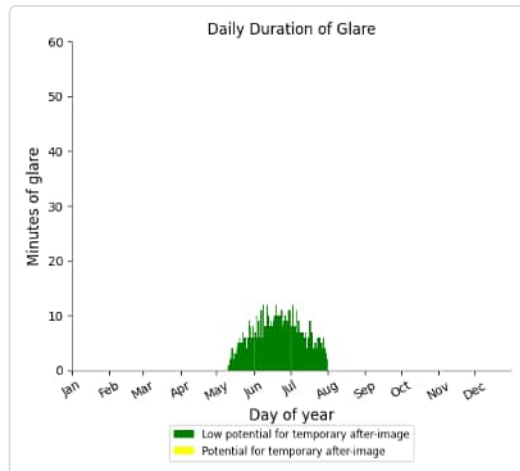
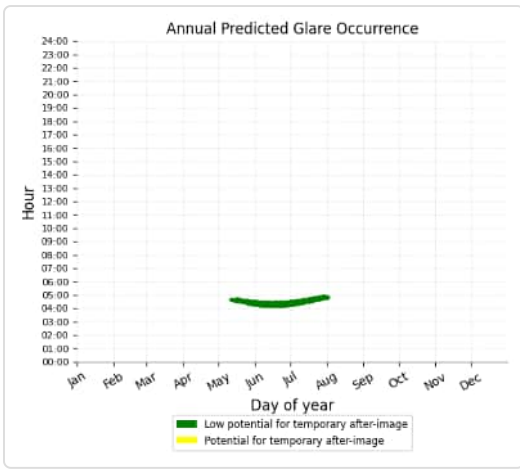
- 652 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 33)

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

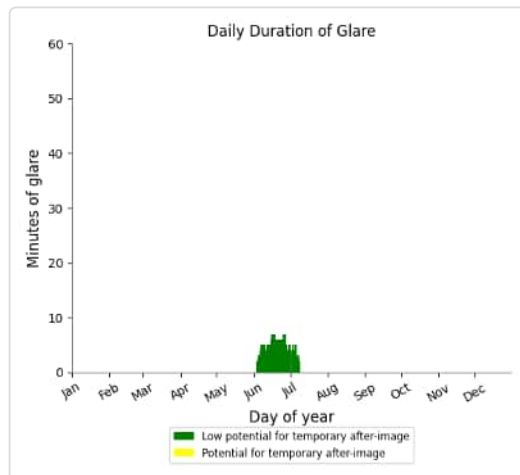
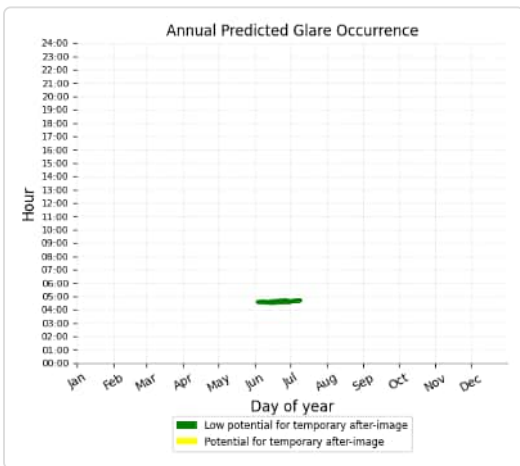
- 585 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

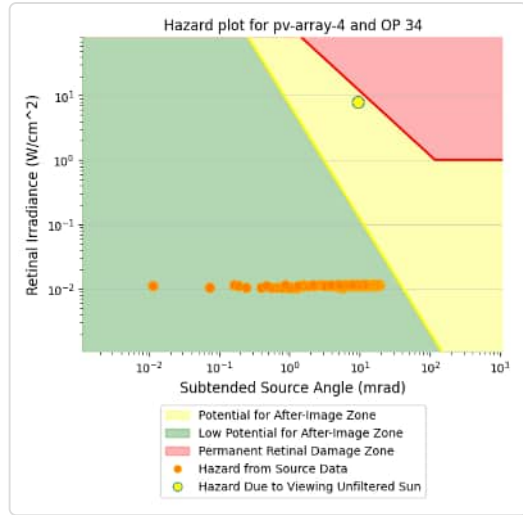
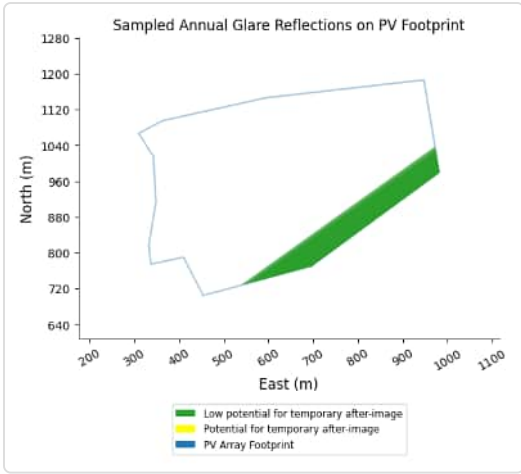


PV array 4 - OP Receptor (OP 34)

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

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





PV array 4 - OP Receptor (OP 35)

No glare found

PV array 4 - OP Receptor (OP 36)

No glare found

PV array 4 - OP Receptor (OP 37)

No glare found

PV array 4 - OP Receptor (OP 38)

No glare found

PV array 4 - OP Receptor (OP 39)

No glare found

PV array 4 - OP Receptor (OP 40)

No glare found

PV array 4 - OP Receptor (OP 41)

No glare found

PV array 4 - OP Receptor (OP 42)

No glare found

PV array 4 - OP Receptor (OP 43)

No glare found

PV array 4 - OP Receptor (OP 44)

No glare found

PV array 4 - OP Receptor (OP 45)

No glare found

PV array 4 - OP Receptor (OP 46)

No glare found

PV array 4 - OP Receptor (OP 47)

No glare found

PV array 4 - OP Receptor (OP 48)

No glare found

PV array 4 - OP Receptor (OP 49)

No glare found

PV array 4 - OP Receptor (OP 50)

No glare found

PV array 4 - OP Receptor (OP 51)

No glare found

PV array 4 - OP Receptor (OP 52)

No glare found

PV array 4 - OP Receptor (OP 53)

No glare found

PV array 4 - OP Receptor (OP 54)

No glare found

Assumptions

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

ANNEX C: RESIDENTIAL RECEPTOR GLARE RESULTS 45 DEGREES (1 – 54)





Gate Burton Solar Farm

Gate Burton Residential 45 Deg Receptors 1 - 54

Created Jan. 16, 2023
Updated Jan. 16, 2023
Time-step 1 minute
Timezone offset UTC0
Site ID 82488.13697

Project type Advanced
Project status: active
Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: varies (1,000.0 W/m² peak)
 Ocular transmission coefficient: **0.5**
 Pupil diameter: **0.002 m**
 Eye focal length: **0.017 m**
 Sun subtended angle: **9.3 mrad**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV array 1	45.0	180.0	87,096	15,855	-
PV array 2	45.0	180.0	42,901	7,042	-
PV array 3	45.0	180.0	32,467	916	-
PV array 4	45.0	180.0	32,078	4,010	-

Component Data



PV Array(s)

Total PV footprint area: 5,138,547 m²

Name: PV array 1
Footprint area: 1,571,700 m²
Axis tracking: Fixed (no rotation)
Tilt: 45.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.360147	-0.740953	25.35	3.50	28.85
2	53.359084	-0.745266	26.77	3.50	30.27
3	53.355319	-0.742820	26.81	3.50	30.31
4	53.356663	-0.738743	24.46	3.50	27.96
5	53.356561	-0.738142	24.75	3.50	28.25
6	53.355985	-0.737949	25.96	3.50	29.46
7	53.352569	-0.737634	28.44	3.50	31.94
8	53.348967	-0.739265	30.87	3.50	34.37
9	53.348980	-0.740166	32.28	3.50	35.78
10	53.349851	-0.742806	34.70	3.50	38.20
11	53.350209	-0.744994	33.15	3.50	36.65
12	53.349364	-0.744479	34.45	3.50	37.95
13	53.346584	-0.744007	28.50	3.50	32.00
14	53.346456	-0.745338	28.76	3.50	32.26
15	53.344496	-0.744522	24.56	3.50	28.06
16	53.344394	-0.745059	24.44	3.50	27.94
17	53.340820	-0.743042	25.80	3.50	29.30
18	53.340166	-0.741411	27.56	3.50	31.06
19	53.340794	-0.738235	28.98	3.50	32.48
20	53.339705	-0.737398	30.42	3.50	33.92
21	53.340358	-0.734845	29.92	3.50	33.42
22	53.340166	-0.730811	22.88	3.50	26.38
23	53.338514	-0.730446	22.02	3.50	25.52
24	53.338232	-0.730682	23.00	3.50	26.50
25	53.337489	-0.730639	20.94	3.50	24.44
26	53.336899	-0.735360	27.47	3.50	30.97
27	53.335067	-0.734845	26.33	3.50	29.83
28	53.334836	-0.736540	27.83	3.50	31.33
29	53.333850	-0.737184	27.62	3.50	31.12
30	53.333414	-0.739651	29.81	3.50	33.31
31	53.332812	-0.739437	29.53	3.50	33.03
32	53.332632	-0.738879	29.27	3.50	32.77
33	53.332786	-0.737248	27.89	3.50	31.39
34	53.332940	-0.732570	26.24	3.50	29.74
35	53.333901	-0.732849	25.91	3.50	29.41
36	53.334183	-0.730940	21.72	3.50	25.22
37	53.332978	-0.730360	21.55	3.50	25.05
38	53.333017	-0.727871	16.36	3.50	19.86
39	53.332889	-0.727056	15.65	3.50	19.15
40	53.332966	-0.725918	16.04	3.50	19.54
41	53.333645	-0.725232	15.32	3.50	18.82
42	53.332812	-0.724052	18.46	3.50	21.96
43	53.333273	-0.722356	17.39	3.50	20.89
44	53.334132	-0.722957	14.09	3.50	17.59
45	53.334196	-0.724524	13.88	3.50	17.38
46	53.335336	-0.724459	12.00	3.50	15.50
47	53.336271	-0.725082	12.57	3.50	16.07
48	53.337040	-0.724738	13.00	3.50	16.50
49	53.342882	-0.728429	22.80	3.50	26.30
50	53.342447	-0.731025	25.49	3.50	28.99
51	53.340973	-0.730682	23.51	3.50	27.01
52	53.340948	-0.731691	25.53	3.50	29.03
53	53.341230	-0.732291	26.22	3.50	29.72
54	53.342293	-0.732613	24.42	3.50	27.92
55	53.343997	-0.733600	20.64	3.50	24.14
56	53.344791	-0.729588	20.02	3.50	23.52
57	53.345508	-0.730060	21.26	3.50	24.76
58	53.344906	-0.734416	24.49	3.50	27.99
59	53.345047	-0.735102	24.64	3.50	28.14
60	53.343702	-0.734995	21.04	3.50	24.54
61	53.343741	-0.735832	21.80	3.50	25.30
62	53.344945	-0.736132	23.95	3.50	27.45
63	53.344958	-0.737956	22.50	3.50	26.00
64	53.345419	-0.738149	22.90	3.50	26.40

65	53.345432	-0.736712	23.92	3.50	27.42
66	53.346494	-0.737248	22.39	3.50	25.89
67	53.346968	-0.736712	22.24	3.50	25.74
68	53.347429	-0.736712	22.91	3.50	26.41
69	53.347122	-0.731004	24.82	3.50	28.32
70	53.353949	-0.735574	22.75	3.50	26.25
71	53.354128	-0.736325	22.15	3.50	25.65
72	53.355306	-0.736411	22.00	3.50	25.50
73	53.356856	-0.737398	23.40	3.50	26.90
74	53.356689	-0.738128	24.36	3.50	27.86
75	53.356805	-0.738707	24.06	3.50	27.56

Name: PV array 2
Footprint area: 3,187,462 m²
Axis tracking: Fixed (no rotation)
Tilt: 45.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.353754	-0.734662	23.97	3.50	27.47
2	53.338935	-0.725169	13.57	3.50	17.07
3	53.338615	-0.723559	12.00	3.50	15.50
4	53.339140	-0.723624	12.00	3.50	15.50
5	53.339294	-0.722401	12.00	3.50	15.50
6	53.338666	-0.722207	11.79	3.50	15.29
7	53.338269	-0.722744	12.00	3.50	15.50
8	53.337500	-0.722165	11.72	3.50	15.22
9	53.337064	-0.723066	12.31	3.50	15.81
10	53.336155	-0.723452	13.00	3.50	16.50
11	53.333515	-0.721671	15.87	3.50	19.37
12	53.334143	-0.718045	11.00	3.50	14.50
13	53.334745	-0.718538	11.00	3.50	14.50
14	53.334950	-0.718152	11.00	3.50	14.50
15	53.335783	-0.717959	10.14	3.50	13.64
16	53.336616	-0.718345	9.24	3.50	12.74
17	53.336975	-0.718216	9.59	3.50	13.09
18	53.337667	-0.718688	10.61	3.50	14.11
19	53.337897	-0.717723	10.95	3.50	14.45
20	53.337859	-0.716392	9.89	3.50	13.39
21	53.337269	-0.715341	9.24	3.50	12.74
22	53.336116	-0.715856	9.81	3.50	13.31
23	53.334809	-0.714955	10.90	3.50	14.40
24	53.335732	-0.710949	11.21	3.50	14.71
25	53.336244	-0.710563	11.08	3.50	14.58
26	53.336552	-0.709983	11.04	3.50	14.54
27	53.337564	-0.710155	12.22	3.50	15.72
28	53.337603	-0.709511	12.51	3.50	16.01
29	53.338410	-0.709061	13.25	3.50	16.75
30	53.339153	-0.709211	13.80	3.50	17.30
31	53.339178	-0.705520	14.81	3.50	18.31
32	53.341318	-0.704426	14.16	3.50	17.66
33	53.341254	-0.703460	15.00	3.50	18.50
34	53.338320	-0.701636	14.00	3.50	17.50
35	53.337731	-0.702967	14.70	3.50	18.20
36	53.337052	-0.702516	14.29	3.50	17.79
37	53.337039	-0.698825	16.56	3.50	20.06
38	53.337128	-0.696336	19.06	3.50	22.56
39	53.336962	-0.695049	20.32	3.50	23.82
40	53.337295	-0.693182	19.41	3.50	22.91
41	53.339883	-0.694727	14.00	3.50	17.50
42	53.341087	-0.692023	13.00	3.50	16.50
43	53.341664	-0.692109	13.00	3.50	16.50
44	53.344277	-0.696465	12.00	3.50	15.50
45	53.348287	-0.697817	13.08	3.50	16.58
46	53.349350	-0.697602	14.02	3.50	17.52
47	53.349516	-0.698224	14.00	3.50	17.50
48	53.349427	-0.702924	17.52	3.50	21.02
49	53.348914	-0.705091	17.98	3.50	21.48
50	53.349222	-0.705305	18.00	3.50	21.50
51	53.349183	-0.706464	18.00	3.50	21.50
52	53.346980	-0.706421	17.00	3.50	20.50
53	53.346378	-0.713138	13.88	3.50	17.38
54	53.347505	-0.713910	14.28	3.50	17.78
55	53.347505	-0.714983	14.25	3.50	17.75
56	53.349030	-0.715498	16.00	3.50	19.50
57	53.349004	-0.720004	22.46	3.50	25.96
58	53.350848	-0.719789	21.00	3.50	24.50
59	53.352872	-0.719747	19.04	3.50	22.54
60	53.353564	-0.719918	18.54	3.50	22.04
61	53.352898	-0.721678	18.21	3.50	21.71
62	53.352782	-0.724574	17.76	3.50	21.26
63	53.353359	-0.728244	19.54	3.50	23.04
64	53.353961	-0.728887	19.19	3.50	22.69

65	53.354166	-0.729746	19.36	3.50	22.86
66	53.354179	-0.734016	22.69	3.50	26.19

Name: PV array 3

Footprint area: 162,560 m²

Axis tracking: Fixed (no rotation)

Tilt: 45.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.355703	-0.727643	18.87	3.50	22.37
2	53.355177	-0.725669	17.24	3.50	20.74
3	53.355088	-0.721935	18.98	3.50	22.48
4	53.355101	-0.720734	21.71	3.50	25.21
5	53.356125	-0.721034	21.89	3.50	25.39
6	53.357483	-0.721120	19.10	3.50	22.60
7	53.357534	-0.722836	18.29	3.50	21.79
8	53.359083	-0.721849	18.14	3.50	21.64
9	53.359544	-0.722107	16.73	3.50	20.23
10	53.359762	-0.721485	16.64	3.50	20.14
11	53.359583	-0.720734	17.67	3.50	21.17
12	53.360402	-0.719875	17.29	3.50	20.79
13	53.360313	-0.723673	16.00	3.50	19.50
14	53.360044	-0.724832	16.19	3.50	19.69
15	53.357585	-0.725175	17.45	3.50	20.95

Name: PV array 4

Footprint area: 216,825 m²

Axis tracking: Fixed (no rotation)

Tilt: 45.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.360082	-0.727836	17.00	3.50	20.50
2	53.360851	-0.728501	17.37	3.50	20.87
3	53.360710	-0.729596	18.17	3.50	21.67
4	53.361107	-0.729660	18.75	3.50	22.25
5	53.361952	-0.729424	19.00	3.50	22.50
6	53.362874	-0.729510	19.31	3.50	22.81
7	53.363335	-0.730003	20.12	3.50	23.62
8	53.363591	-0.729209	19.64	3.50	23.14
9	53.364052	-0.725733	17.95	3.50	21.45
10	53.364410	-0.720433	15.80	3.50	19.30
11	53.362554	-0.719918	16.00	3.50	19.50
12	53.360671	-0.724210	16.71	3.50	20.21

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	m	m	m
OP 1	53.367945	-0.748074	24.58	2.00	26.58
OP 2	53.367458	-0.747774	23.97	2.00	25.97
OP 3	53.367196	-0.746078	25.30	2.00	27.30
OP 4	53.367401	-0.743847	26.25	2.00	28.25
OP 5	53.363873	-0.746540	19.95	2.00	21.95
OP 6	53.364078	-0.745553	21.21	2.00	23.21
OP 7	53.363553	-0.745585	21.29	2.00	23.29
OP 8	53.363432	-0.746357	20.03	2.00	22.03
OP 9	53.362542	-0.741957	26.44	2.00	28.44
OP 10	53.362853	-0.740310	27.04	2.00	29.04
OP 11	53.362596	-0.738819	26.90	2.00	28.90
OP 12	53.362206	-0.736941	27.37	2.00	29.37
OP 13	53.361386	-0.734345	24.70	2.00	26.70
OP 14	53.360900	-0.734570	24.35	2.00	26.35
OP 15	53.360772	-0.735761	24.25	2.00	26.25
OP 16	53.360420	-0.736930	23.98	2.00	25.98
OP 17	53.360042	-0.738153	24.19	2.00	26.19
OP 18	53.361073	-0.739001	26.00	2.00	28.00
OP 19	53.360731	-0.740285	26.02	2.00	28.02
OP 20	53.360279	-0.732992	22.53	2.00	24.53
OP 21	53.358807	-0.729141	20.53	2.00	22.53
OP 22	53.357880	-0.729774	21.00	2.00	23.00
OP 23	53.356689	-0.747580	23.77	2.00	25.77
OP 24	53.353852	-0.755355	19.03	2.00	21.03
OP 25	53.353615	-0.753885	21.91	2.00	23.91
OP 26	53.353769	-0.752158	26.23	2.00	28.23
OP 27	53.353929	-0.751128	28.35	2.00	30.35
OP 28	53.352956	-0.753446	21.71	2.00	23.71
OP 29	53.352839	-0.755052	18.38	2.00	20.38
OP 30	53.352455	-0.756672	14.90	2.00	16.90
OP 31	53.351936	-0.757165	13.76	2.00	15.76
OP 32	53.350962	-0.754376	21.00	2.00	23.00
OP 33	53.350667	-0.753850	21.13	2.00	23.13
OP 34	53.351538	-0.747039	32.19	2.00	34.19
OP 35	53.350988	-0.744024	35.45	2.00	37.45
OP 36	53.342105	-0.755453	22.39	2.00	24.39
OP 37	53.340393	-0.746416	32.78	2.00	34.78
OP 38	53.338570	-0.743074	32.11	2.00	34.11
OP 39	53.338224	-0.743686	33.08	2.00	35.08
OP 40	53.337670	-0.744491	33.32	2.00	35.32
OP 41	53.336108	-0.742351	25.77	2.00	27.77
OP 42	53.334000	-0.744798	18.11	2.00	20.11
OP 43	53.334141	-0.742019	23.01	2.00	25.01
OP 44	53.334006	-0.743028	20.36	2.00	22.36
OP 45	53.333494	-0.742684	19.55	2.00	21.55
OP 46	53.332949	-0.742545	17.81	2.00	19.81
OP 47	53.331943	-0.739745	27.86	2.00	29.86
OP 48	53.326202	-0.743908	8.55	2.00	10.55
OP 49	53.327151	-0.743586	8.71	2.00	10.71
OP 50	53.328775	-0.744515	9.33	2.00	11.33
OP 51	53.329685	-0.745373	8.53	2.00	10.53
OP 52	53.330351	-0.743850	8.69	2.00	10.69
OP 53	53.329390	-0.743249	9.76	2.00	11.76
OP 54	53.325072	-0.745073	8.09	2.00	10.09

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
PV array 1	45.0	180.0	87,096	15,855	-	-
PV array 2	45.0	180.0	42,901	7,042	-	-
PV array 3	45.0	180.0	32,467	916	-	-
PV array 4	45.0	180.0	32,078	4,010	-	-

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
pv-array-1 (green)	0	0	465	1606	1683	1600	1603	1860	897	0	0	0
pv-array-1 (yellow)	0	0	42	281	4	0	0	148	177	0	0	0
pv-array-2 (green)	0	0	275	1011	1183	1305	1290	1049	614	0	0	0
pv-array-2 (yellow)	0	0	7	70	29	0	3	96	7	0	0	0
pv-array-3 (green)	0	0	232	639	745	737	751	696	440	0	0	0
pv-array-3 (yellow)	0	0	0	1	0	0	0	0	1	0	0	0
pv-array-4 (green)	0	0	246	373	1127	1258	1255	542	423	0	0	0
pv-array-4 (yellow)	0	0	44	273	44	0	7	214	135	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

PV array 1 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	94	0
OP: OP 18	0	0
OP: OP 19	0	0

OP: OP 20	32	0
OP: OP 21	736	0
OP: OP 22	1327	39
OP: OP 23	2058	2514
OP: OP 24	3988	0
OP: OP 25	3847	0
OP: OP 26	3612	0
OP: OP 27	3471	0
OP: OP 28	3798	0
OP: OP 29	3926	0
OP: OP 30	4017	0
OP: OP 31	4008	0
OP: OP 32	3648	0
OP: OP 33	3621	0
OP: OP 34	0	0
OP: OP 35	3325	743
OP: OP 36	2320	1687
OP: OP 37	0	0
OP: OP 38	3099	48
OP: OP 39	3048	0
OP: OP 40	2965	0
OP: OP 41	2564	579
OP: OP 42	2251	1713
OP: OP 43	2173	1532
OP: OP 44	1944	1954
OP: OP 45	1913	2170
OP: OP 46	2158	2727
OP: OP 47	1765	149
OP: OP 48	985	0
OP: OP 49	1602	0
OP: OP 50	2632	0
OP: OP 51	3273	0
OP: OP 52	3638	0
OP: OP 53	2835	0
OP: OP 54	423	0

PV array 1 - OP Receptor (OP 1)

No glare found

PV array 1 - OP Receptor (OP 2)

No glare found

PV array 1 - OP Receptor (OP 3)

No glare found

PV array 1 - OP Receptor (OP 4)

No glare found

PV array 1 - OP Receptor (OP 5)

No glare found

PV array 1 - OP Receptor (OP 6)

No glare found

PV array 1 - OP Receptor (OP 7)

No glare found

PV array 1 - OP Receptor (OP 8)

No glare found

PV array 1 - OP Receptor (OP 9)

No glare found

PV array 1 - OP Receptor (OP 10)

No glare found

PV array 1 - OP Receptor (OP 11)

No glare found

PV array 1 - OP Receptor (OP 12)

No glare found

PV array 1 - OP Receptor (OP 13)

No glare found

PV array 1 - OP Receptor (OP 14)

No glare found

PV array 1 - OP Receptor (OP 15)

No glare found

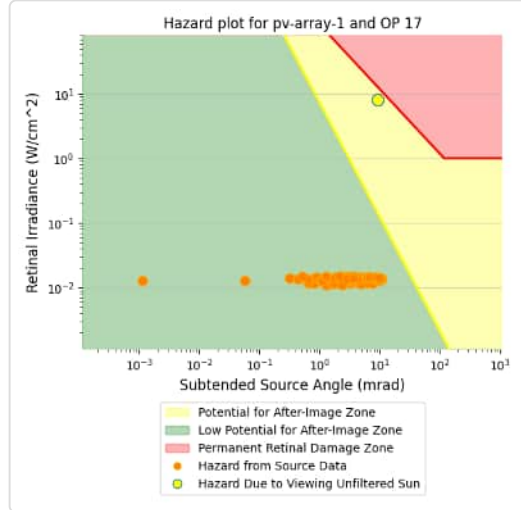
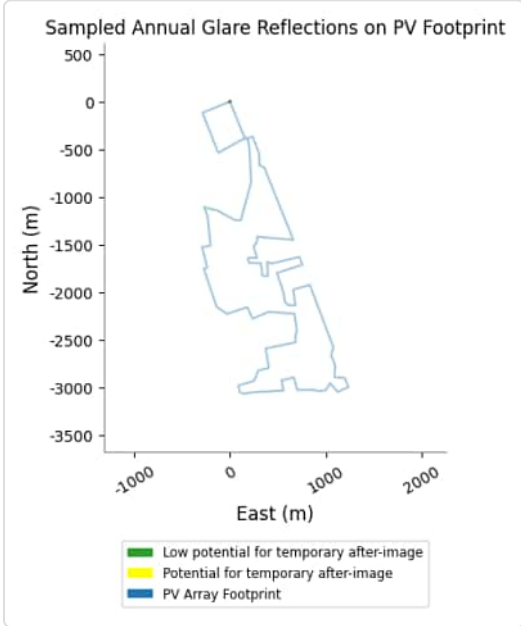
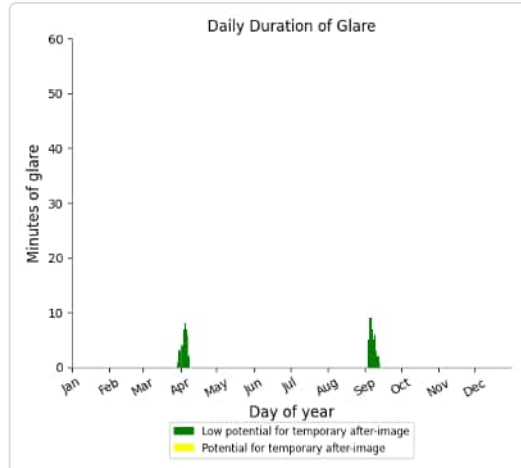
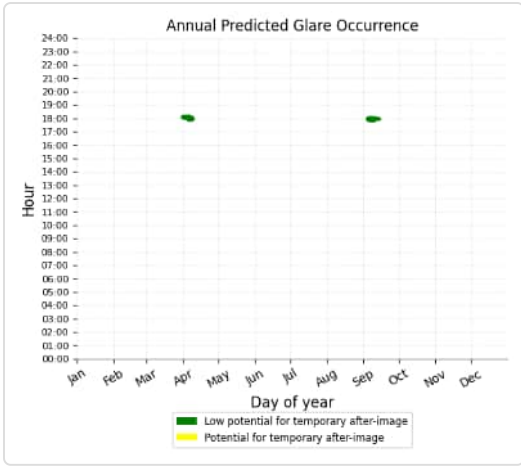
PV array 1 - OP Receptor (OP 16)

No glare found

PV array 1 - OP Receptor (OP 17)

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

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



PV array 1 - OP Receptor (OP 18)

No glare found

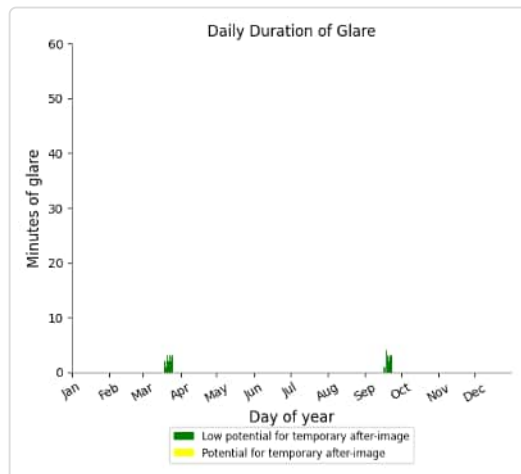
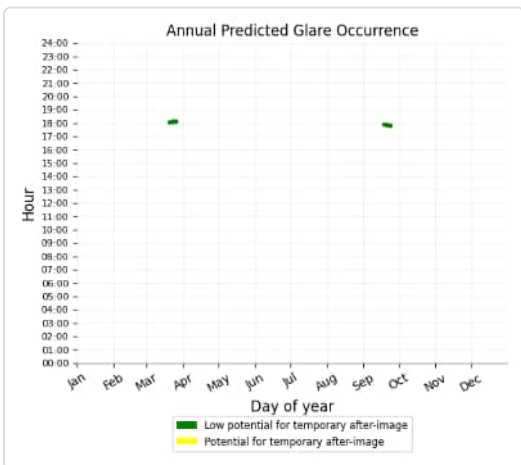
PV array 1 - OP Receptor (OP 19)

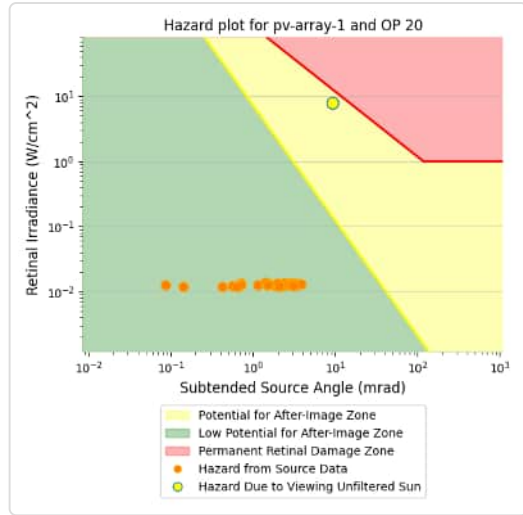
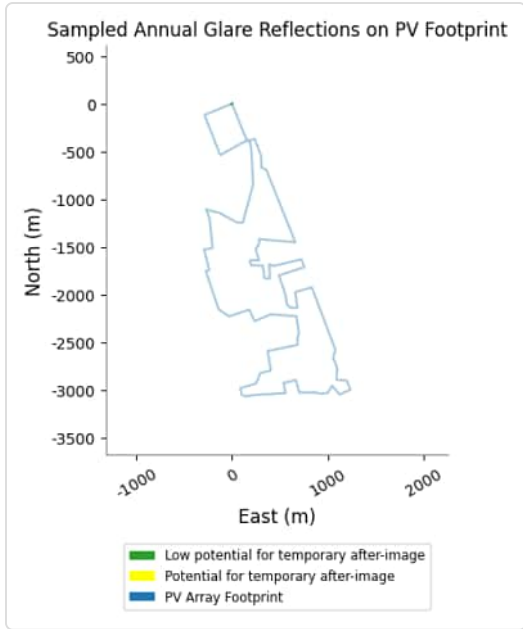
No glare found

PV array 1 - OP Receptor (OP 20)

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

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

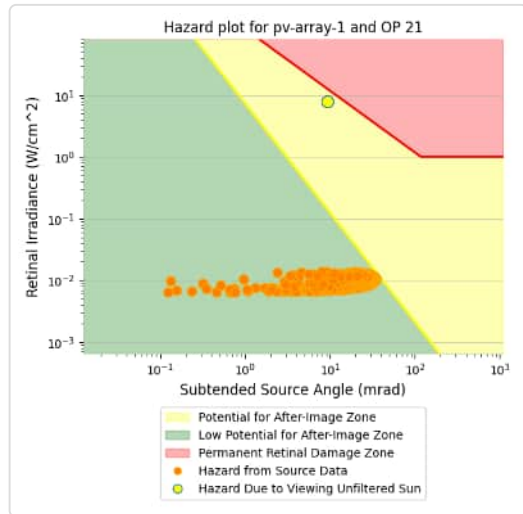
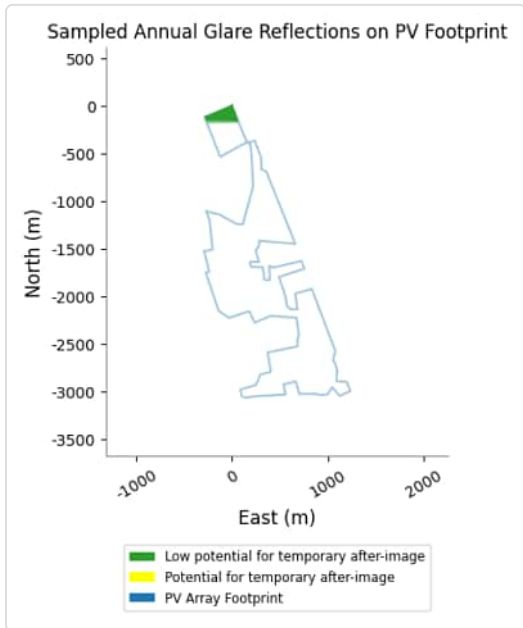
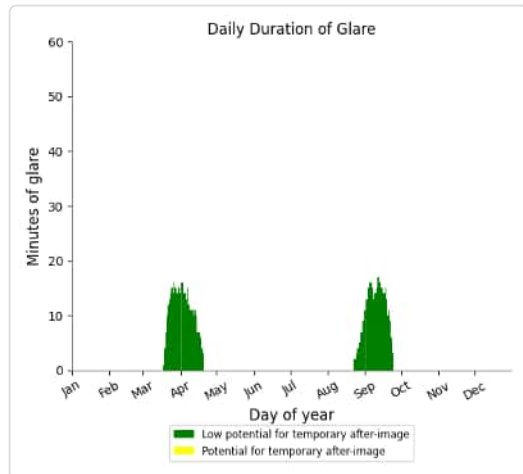
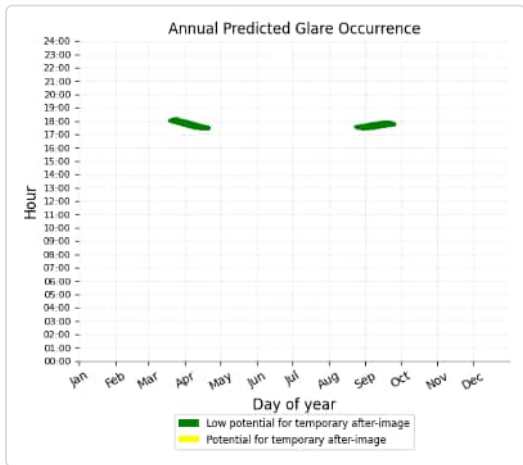




PV array 1 - OP Receptor (OP 21)

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

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

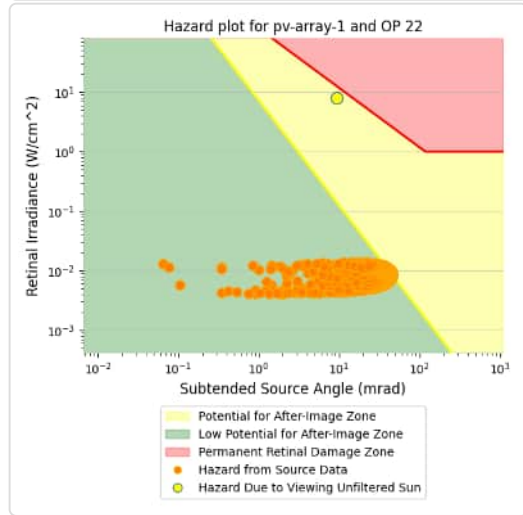
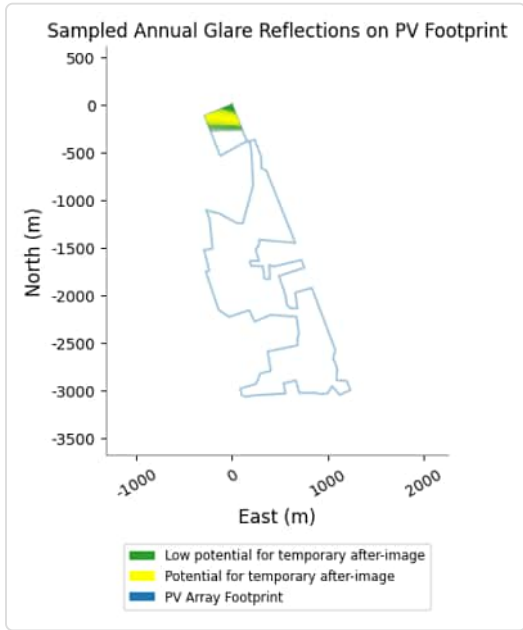
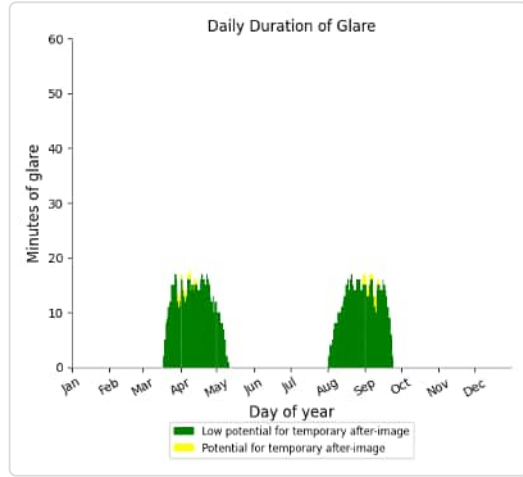
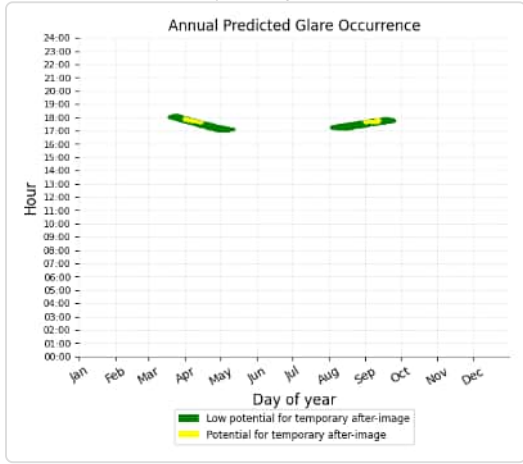


PV array 1 - OP Receptor (OP 22)

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

- 1,327 minutes of "green" glare with low potential to cause temporary after-image.

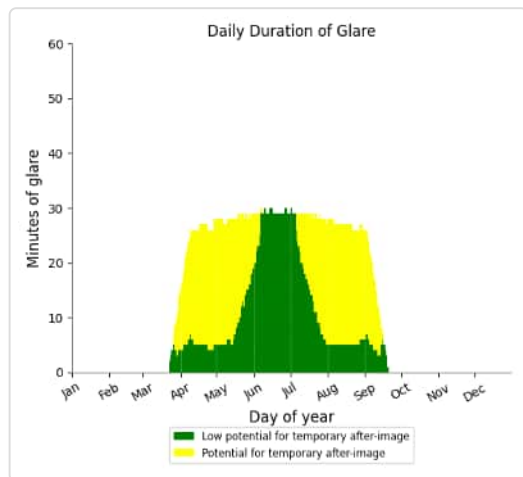
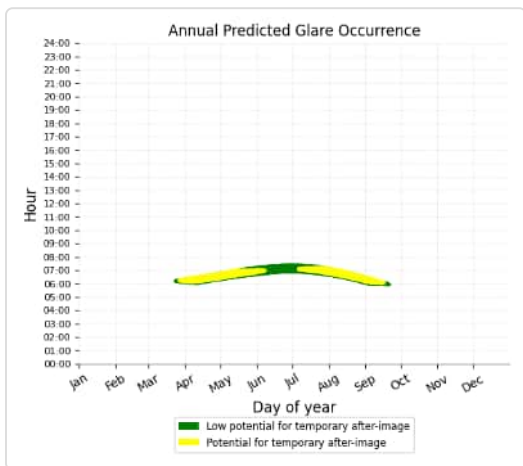
- 39 minutes of "yellow" glare with potential to cause temporary after-image.

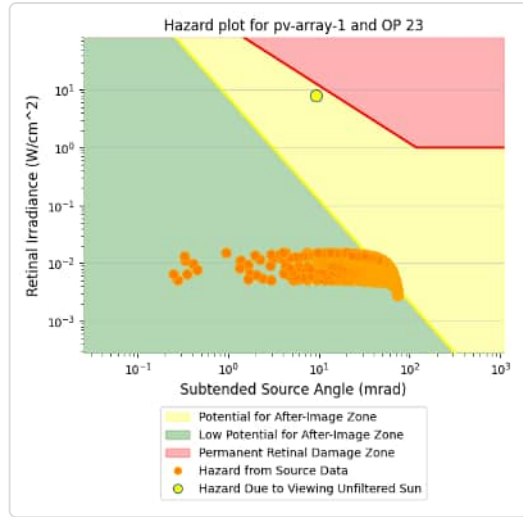
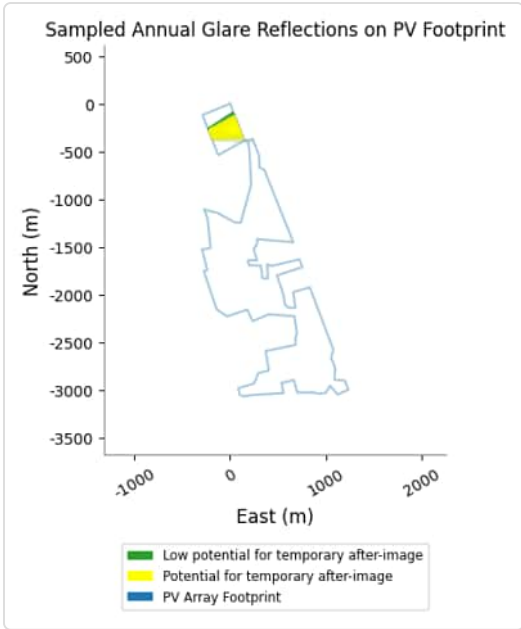


PV array 1 - OP Receptor (OP 23)

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

- 2,058 minutes of "green" glare with low potential to cause temporary after-image.
- 2,514 minutes of "yellow" glare with potential to cause temporary after-image.

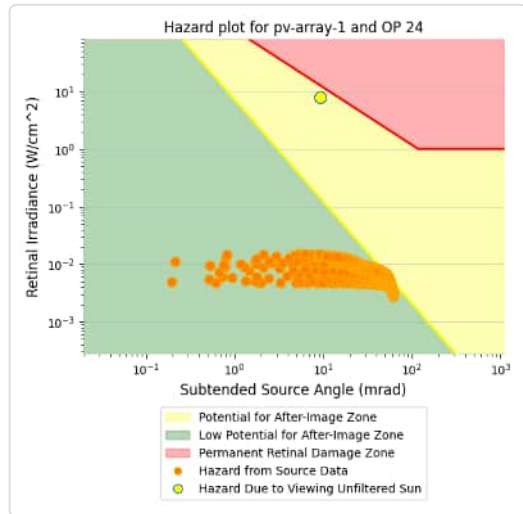
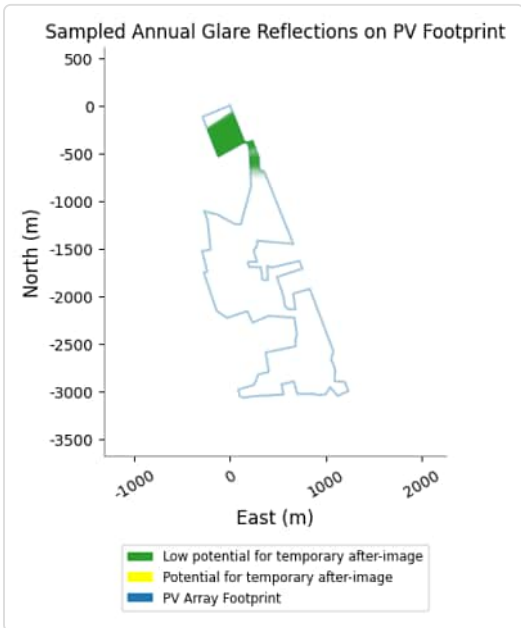
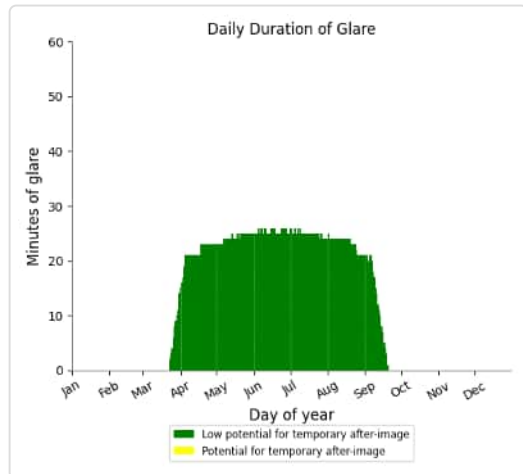
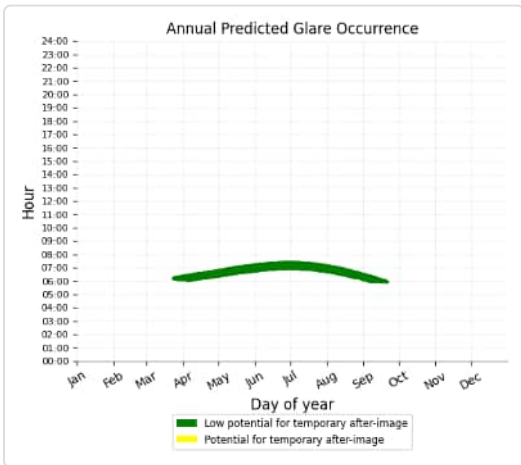




PV array 1 - OP Receptor (OP 24)

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

- 3,988 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

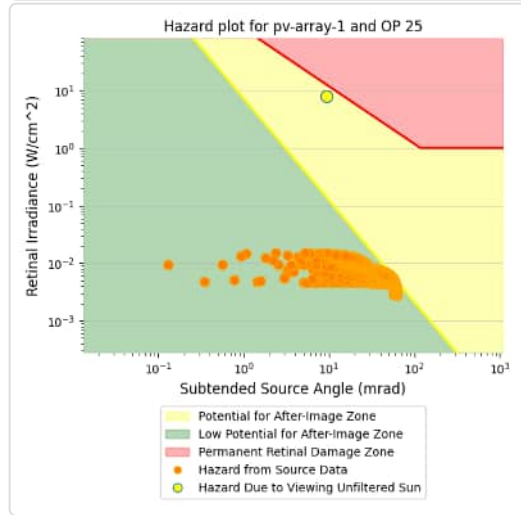
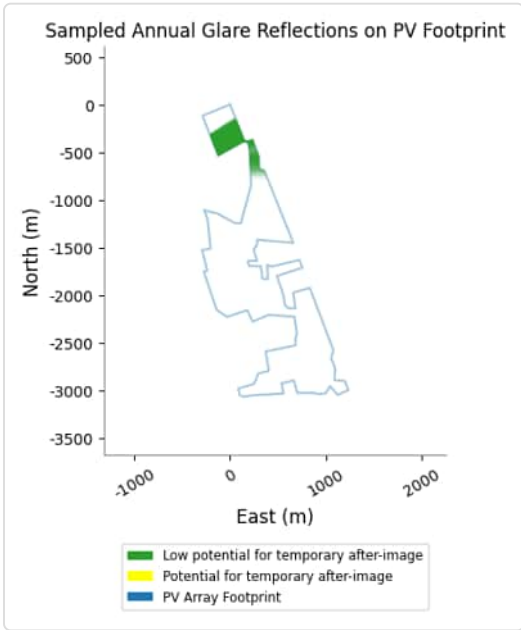
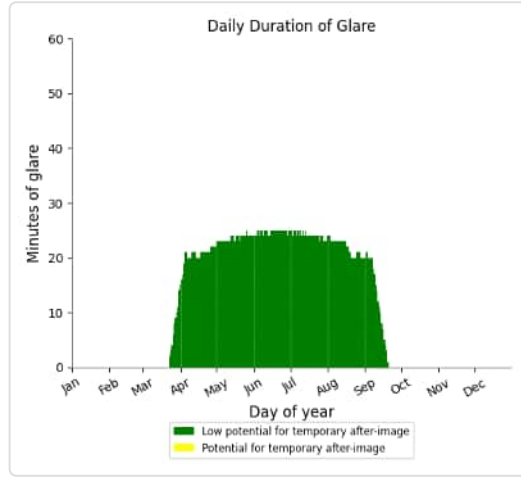
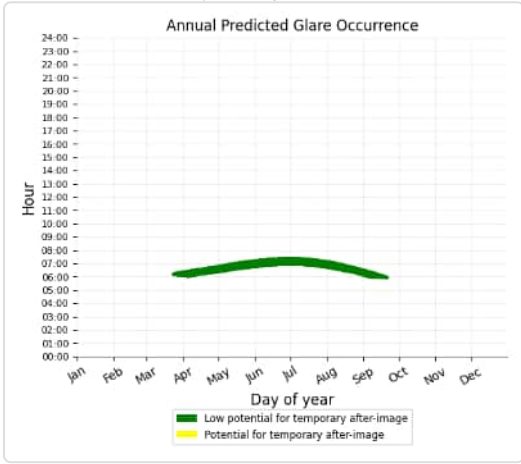


PV array 1 - OP Receptor (OP 25)

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

- 3,847 minutes of "green" glare with low potential to cause temporary after-image.

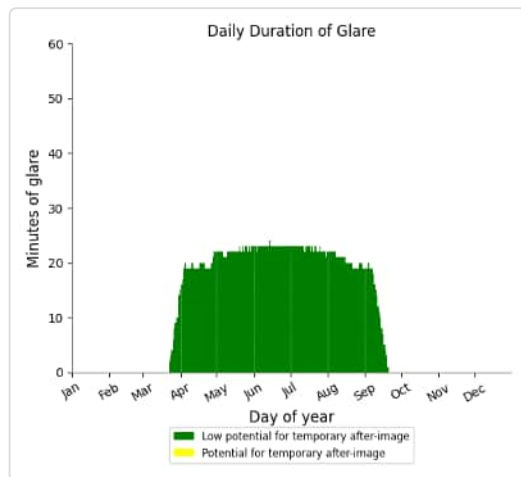
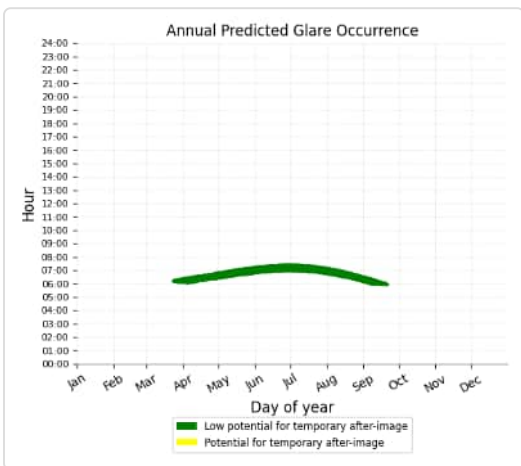
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

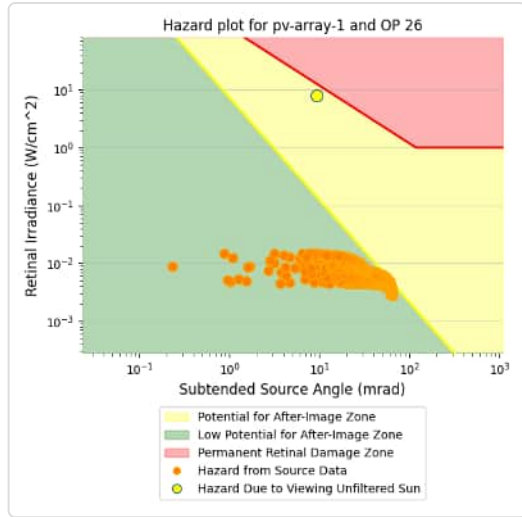
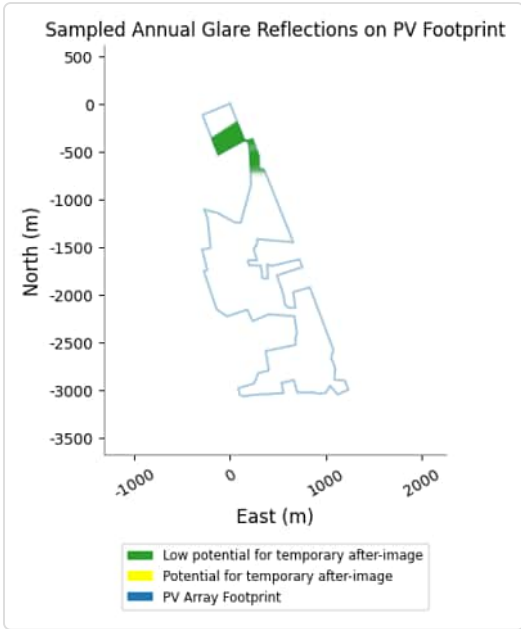


PV array 1 - OP Receptor (OP 26)

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

- 3,612 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

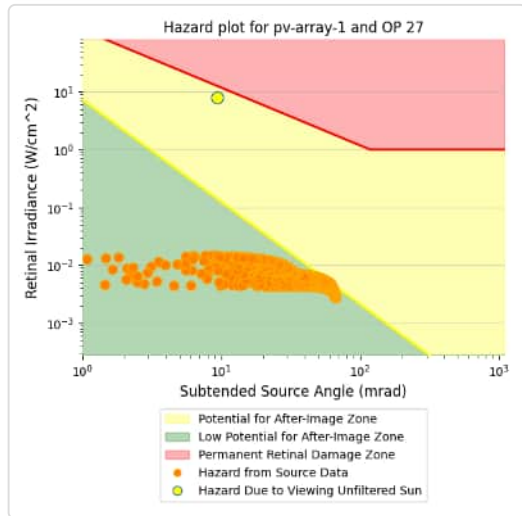
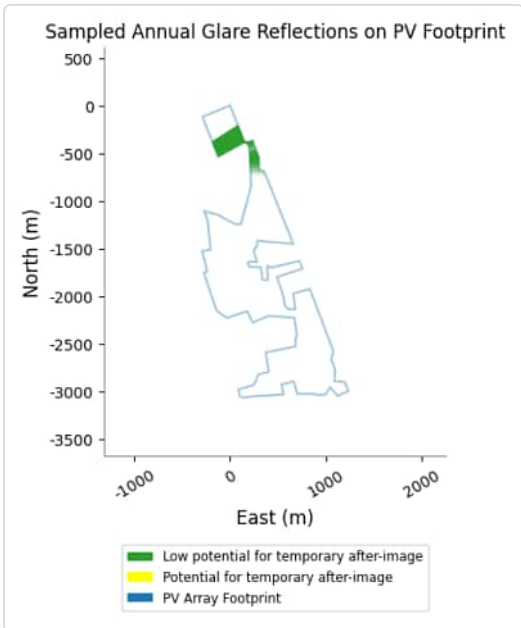
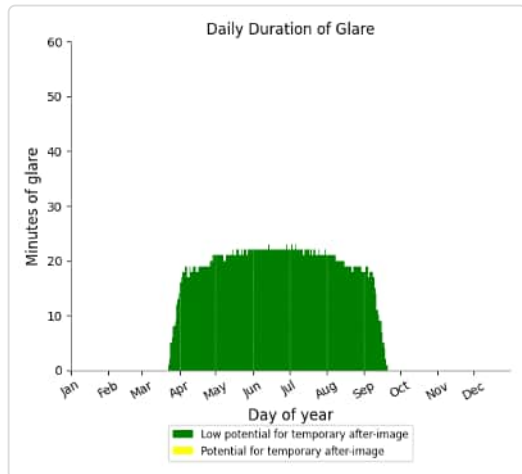
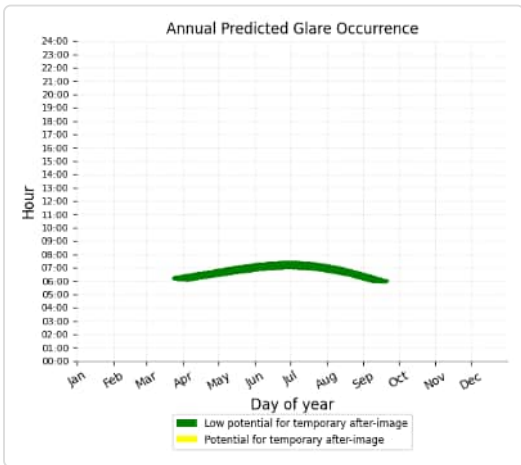




PV array 1 - OP Receptor (OP 27)

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

- 3,471 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

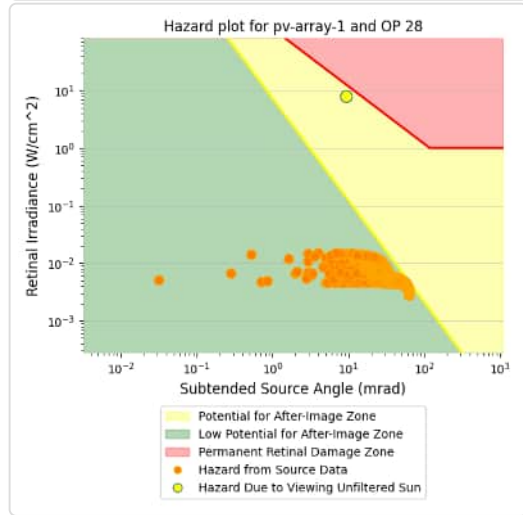
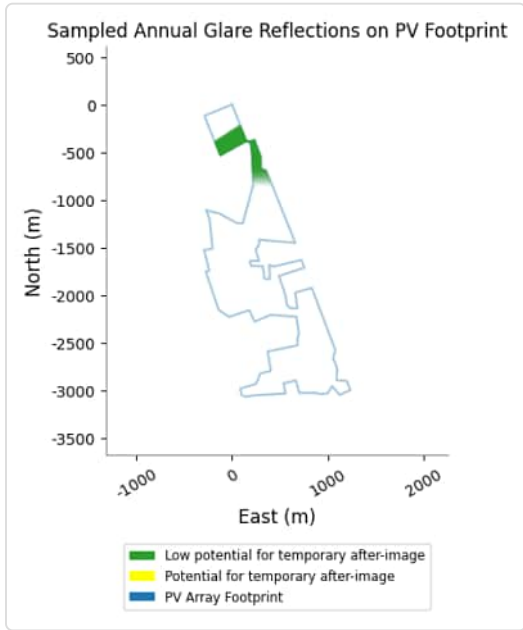
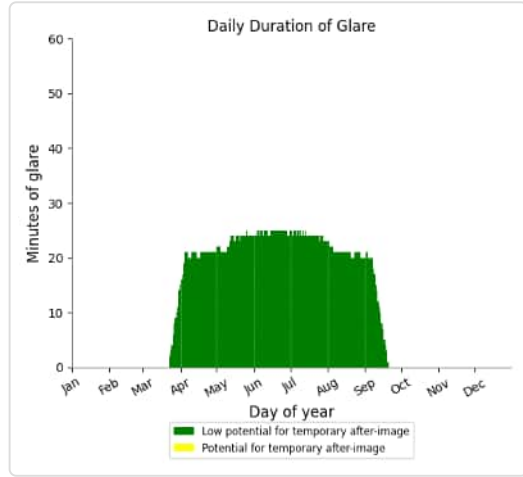
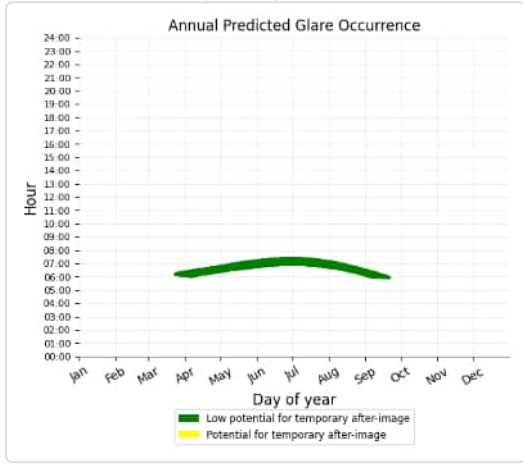


PV array 1 - OP Receptor (OP 28)

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

- 3,798 minutes of "green" glare with low potential to cause temporary after-image.

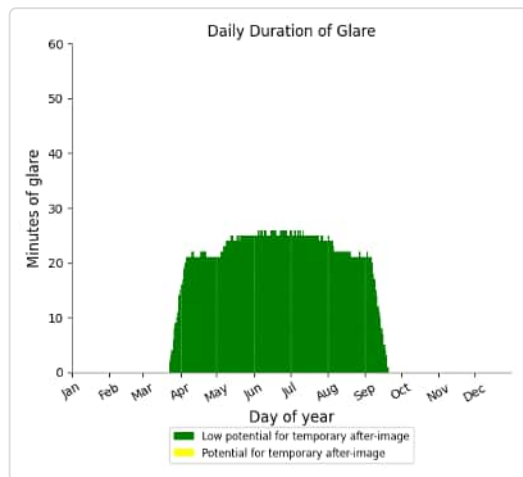
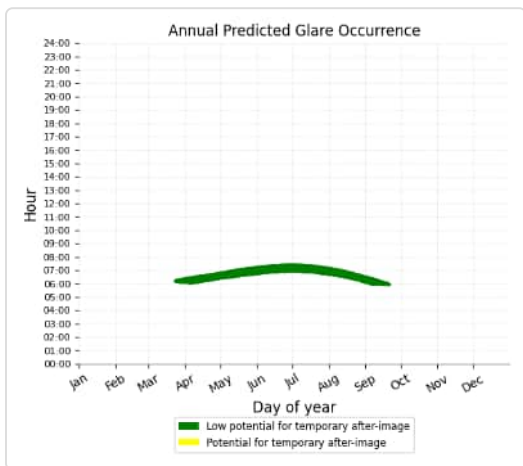
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

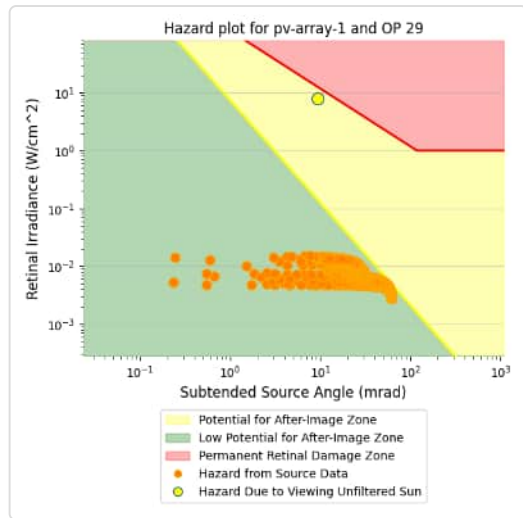
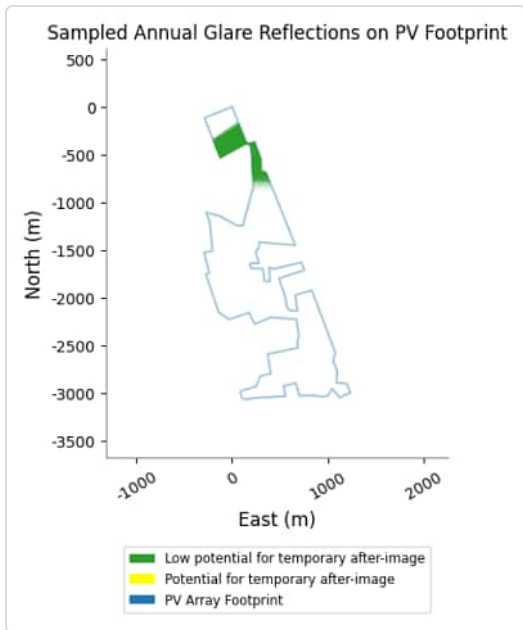


PV array 1 - OP Receptor (OP 29)

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

- 3,926 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

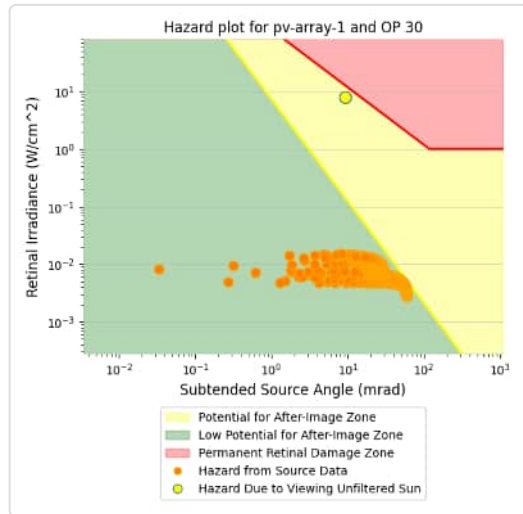
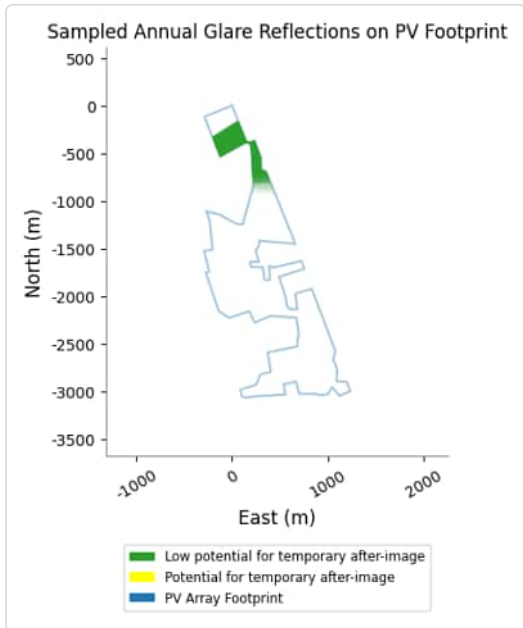
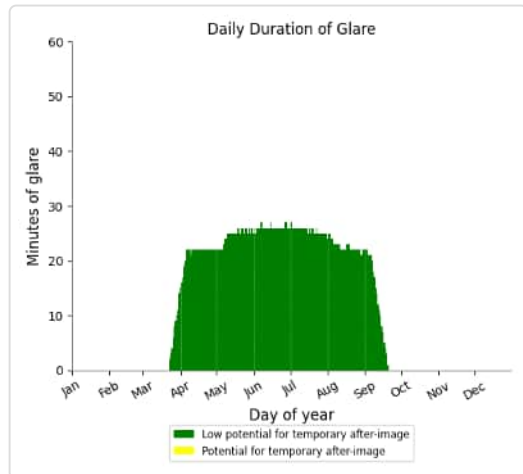
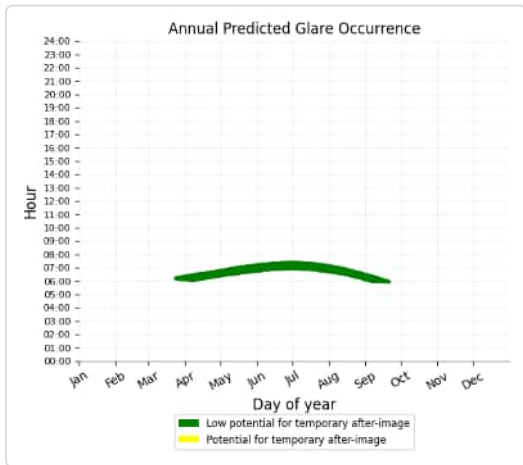




PV array 1 - OP Receptor (OP 30)

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

- 4,017 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

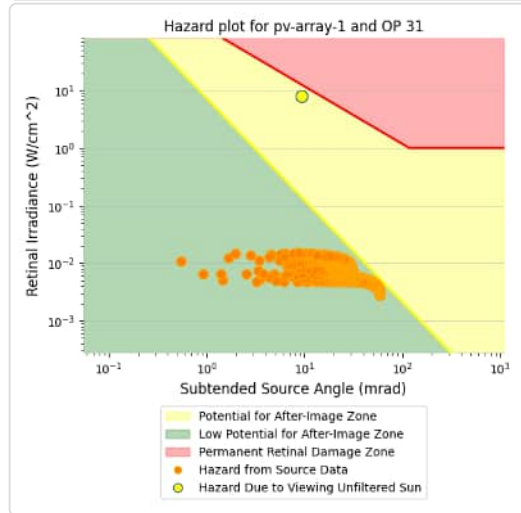
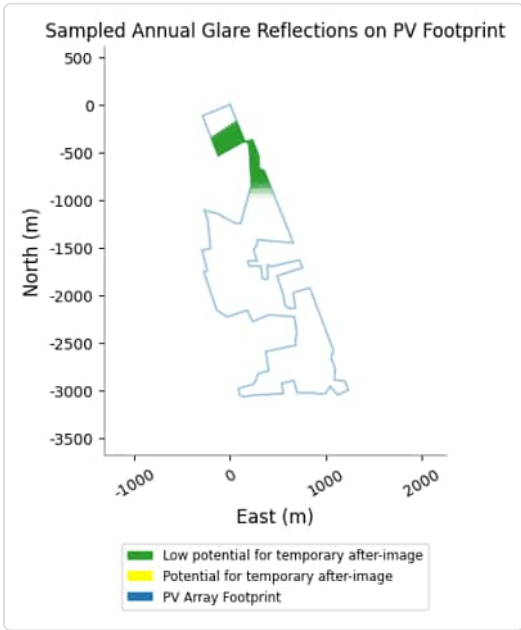
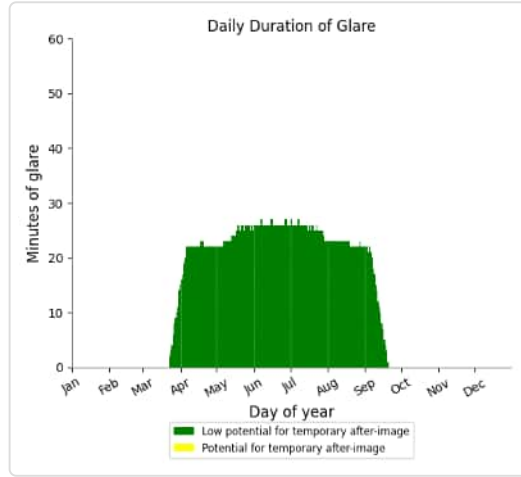
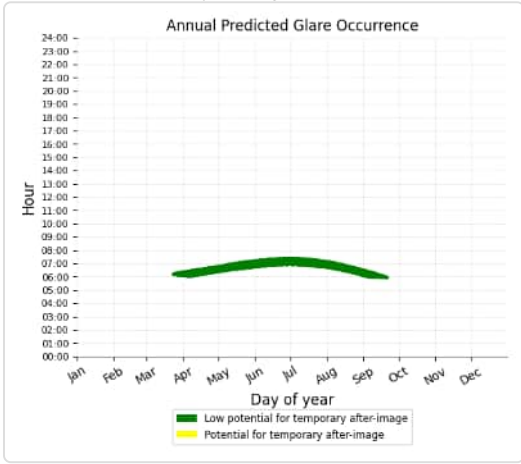


PV array 1 - OP Receptor (OP 31)

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

- 4,008 minutes of "green" glare with low potential to cause temporary after-image.

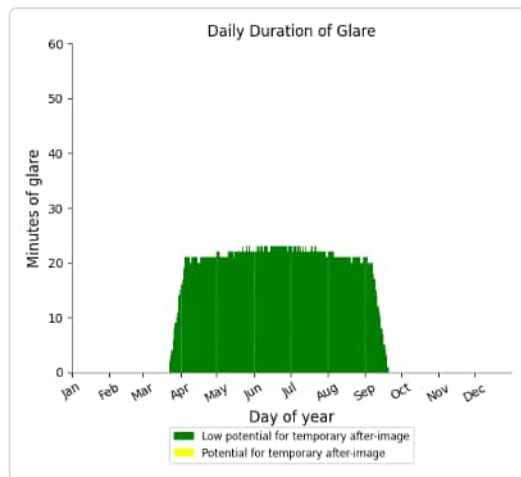
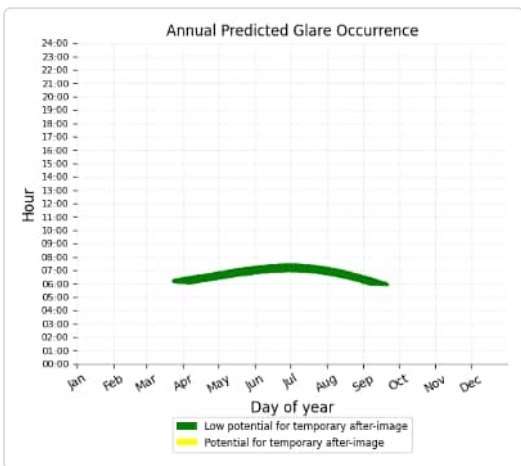
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

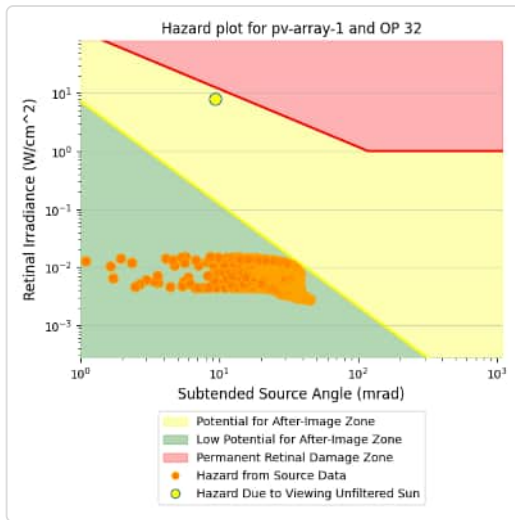
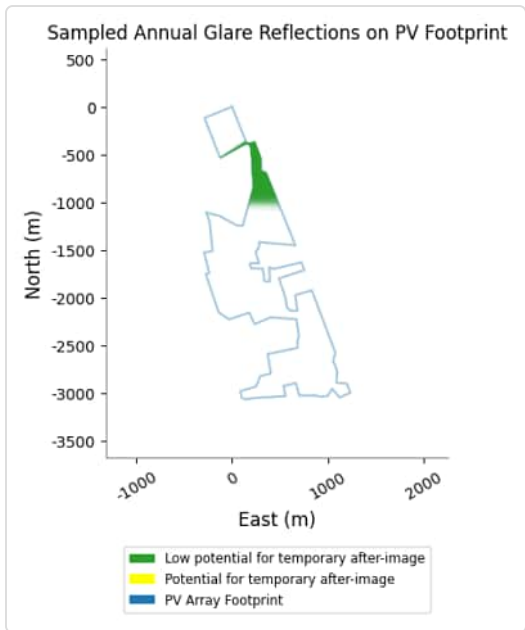


PV array 1 - OP Receptor (OP 32)

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

- 3,648 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

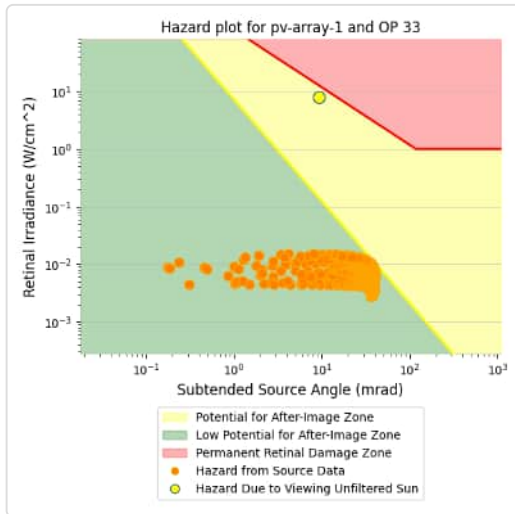
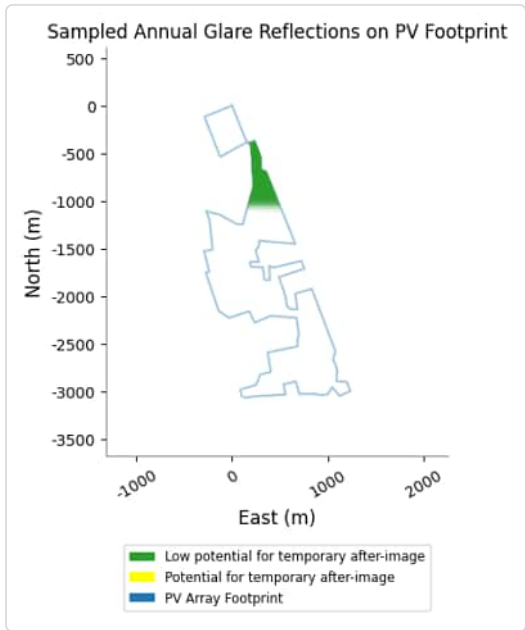
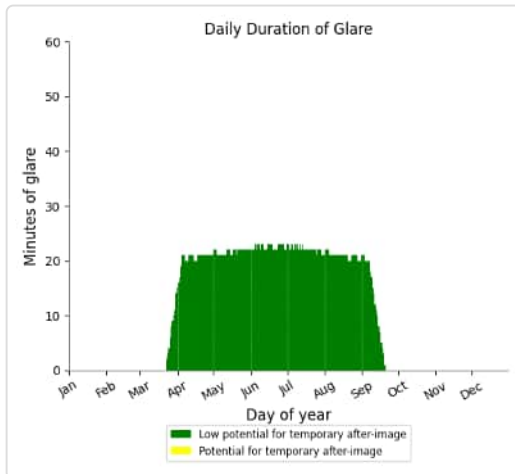
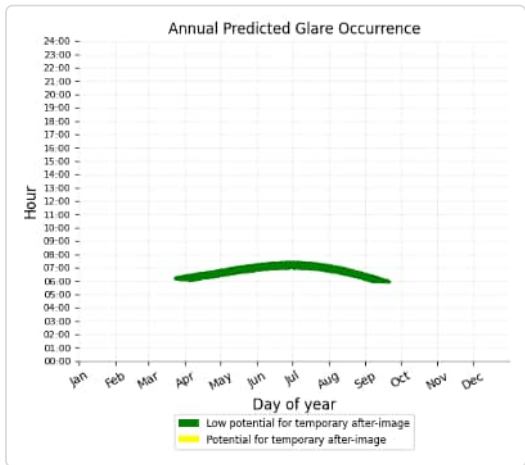




PV array 1 - OP Receptor (OP 33)

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

- 3,621 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



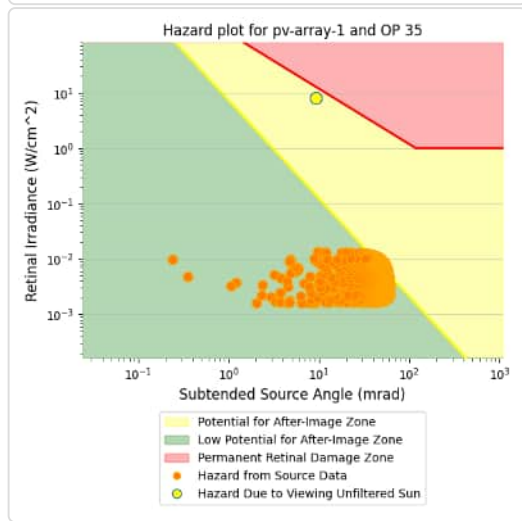
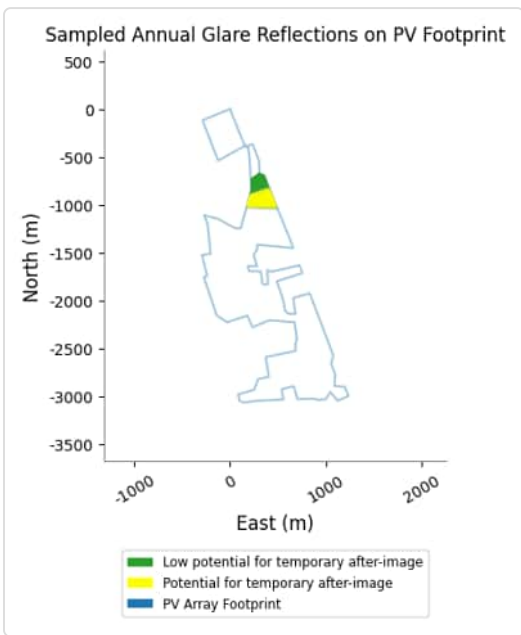
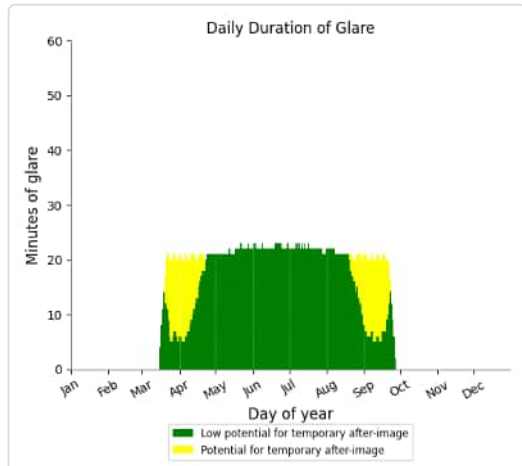
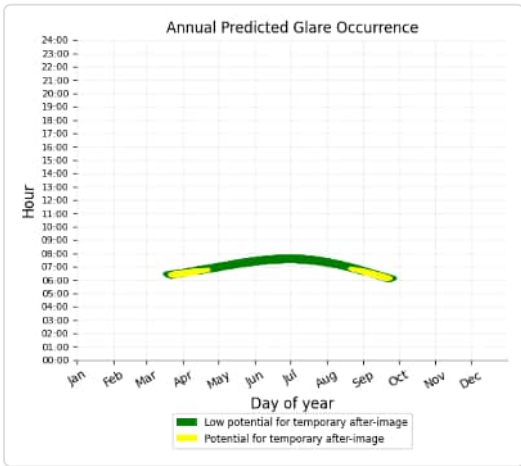
PV array 1 - OP Receptor (OP 34)

No glare found

PV array 1 - OP Receptor (OP 35)

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

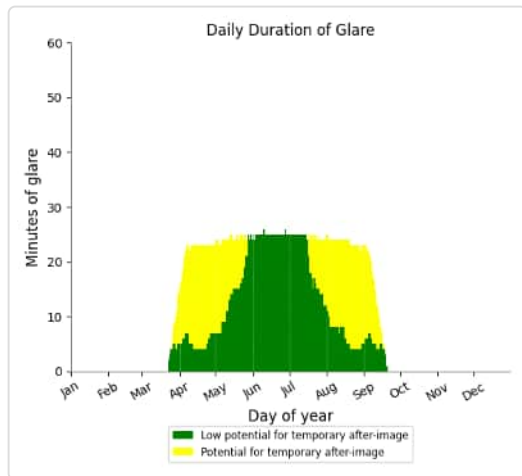
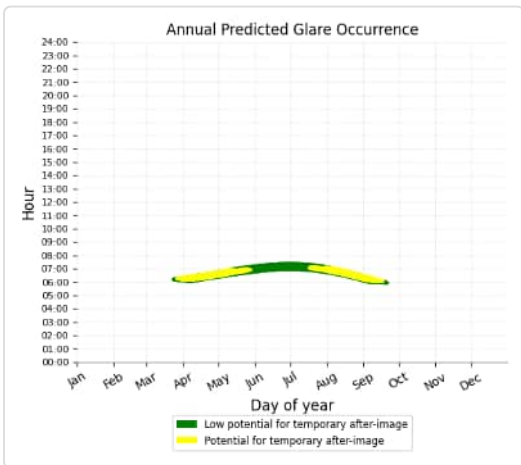
- 3,325 minutes of "green" glare with low potential to cause temporary after-image.
- 743 minutes of "yellow" glare with potential to cause temporary after-image.

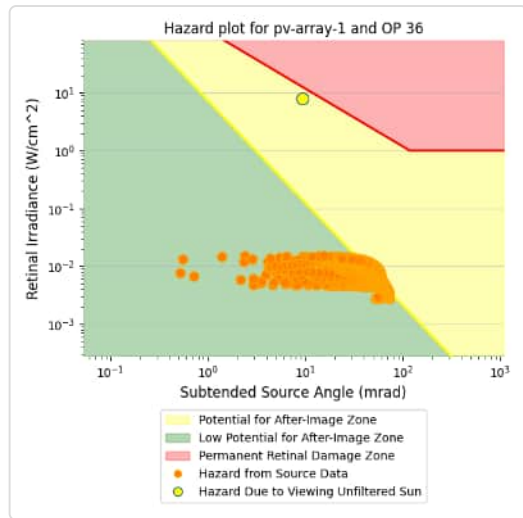
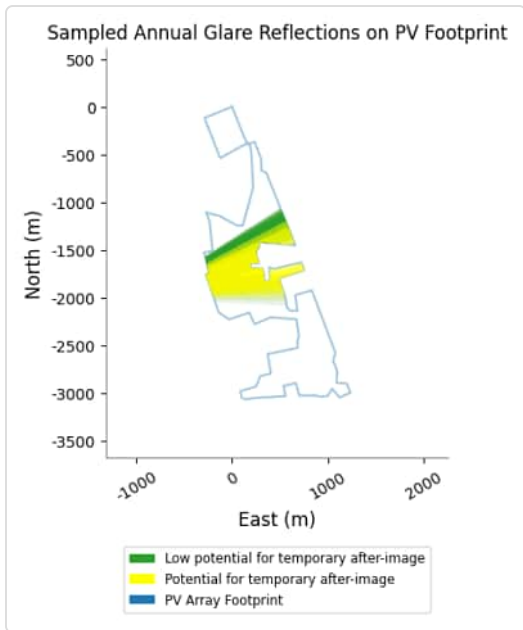


PV array 1 - OP Receptor (OP 36)

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

- 2,320 minutes of "green" glare with low potential to cause temporary after-image.
- 1,687 minutes of "yellow" glare with potential to cause temporary after-image.





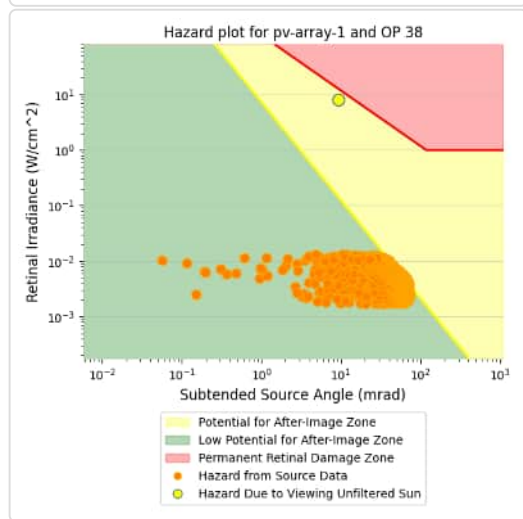
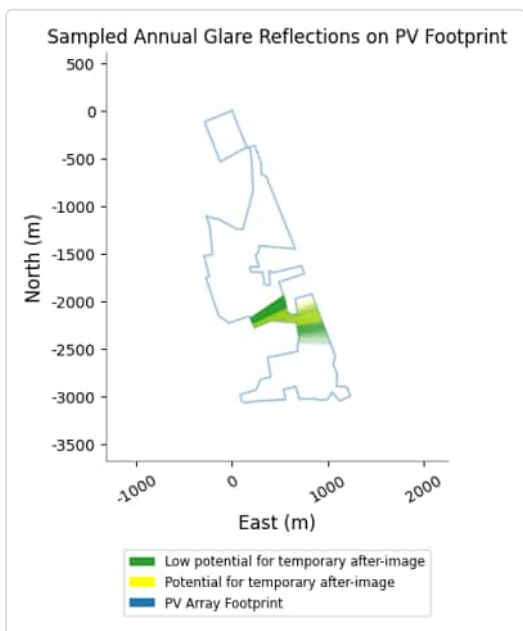
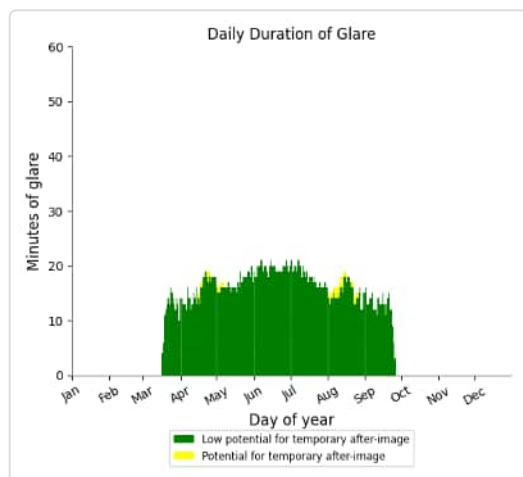
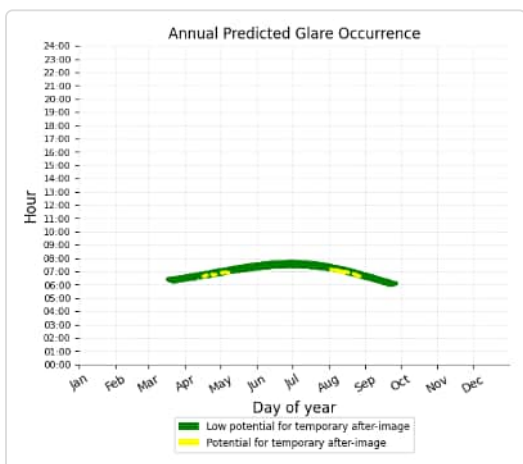
PV array 1 - OP Receptor (OP 37)

No glare found

PV array 1 - OP Receptor (OP 38)

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

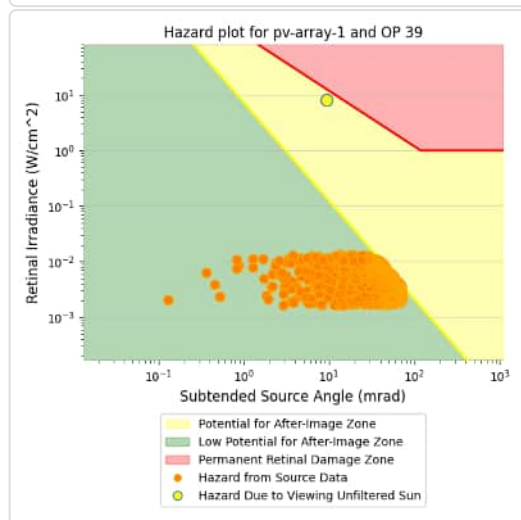
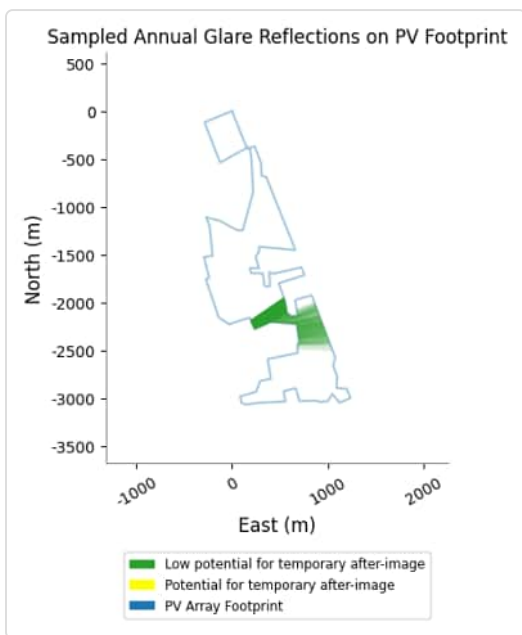
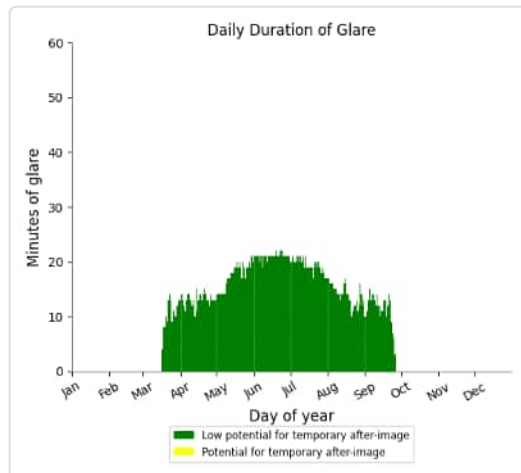
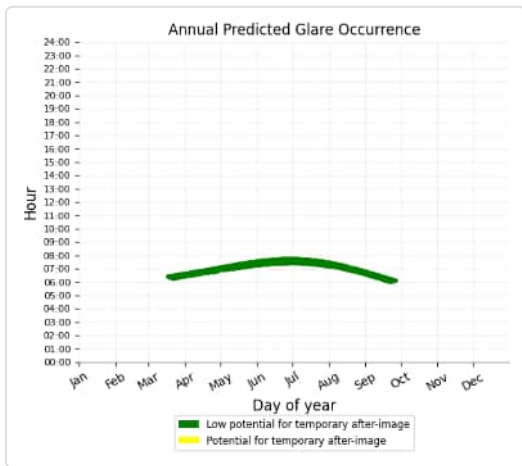
- 3,099 minutes of "green" glare with low potential to cause temporary after-image.
- 48 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 1 - OP Receptor (OP 39)

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

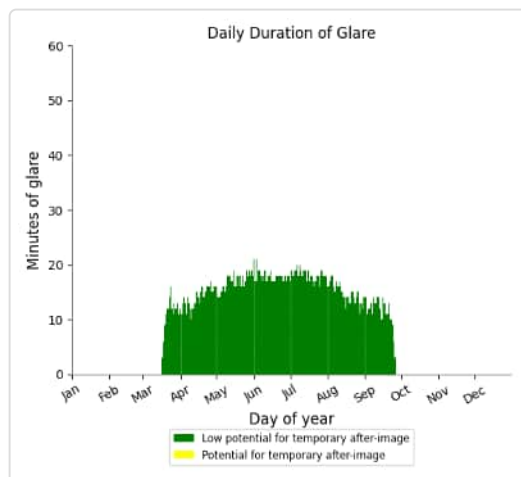
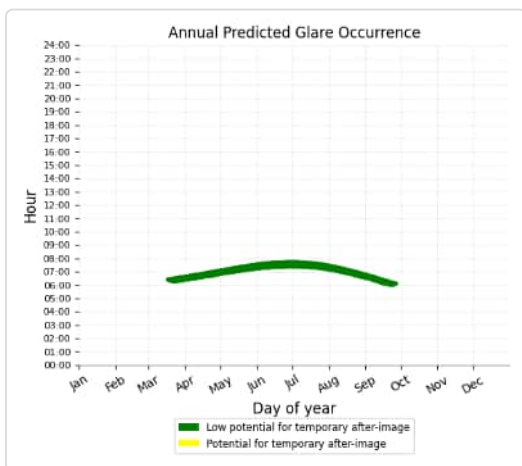
- 3,048 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

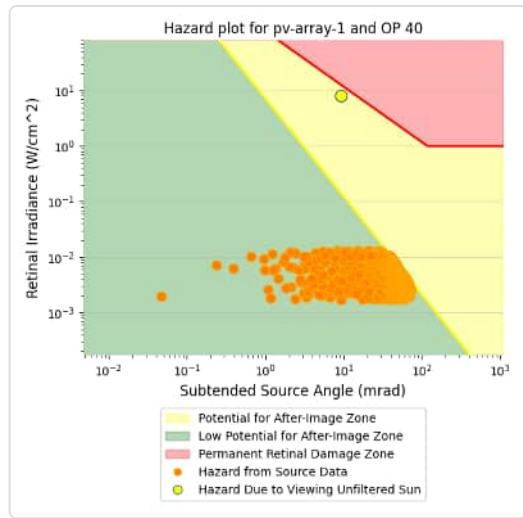
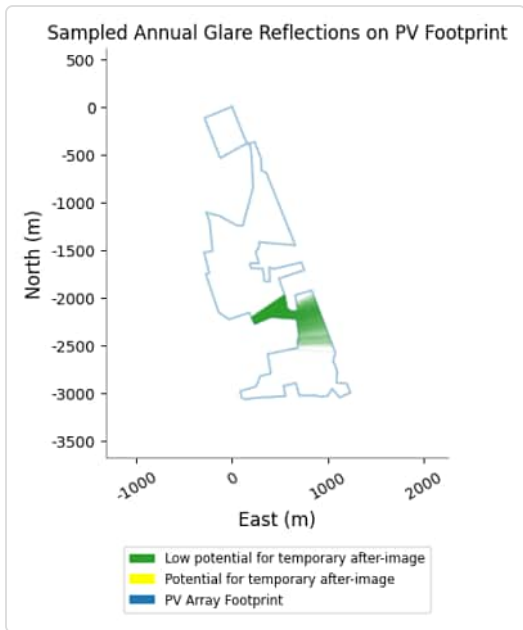


PV array 1 - OP Receptor (OP 40)

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

- 2,965 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

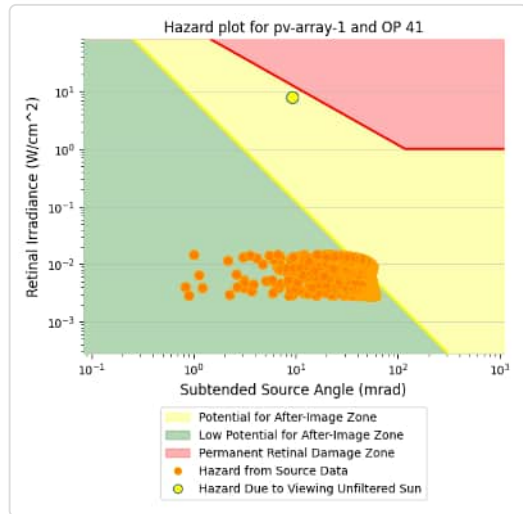
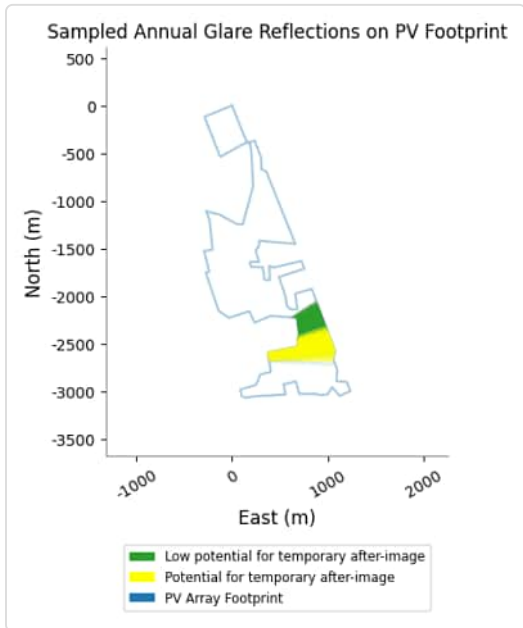
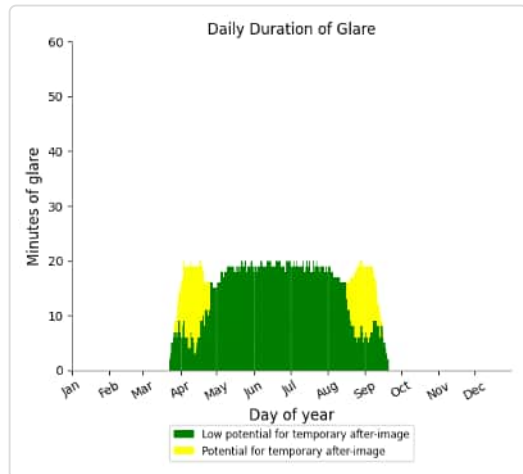
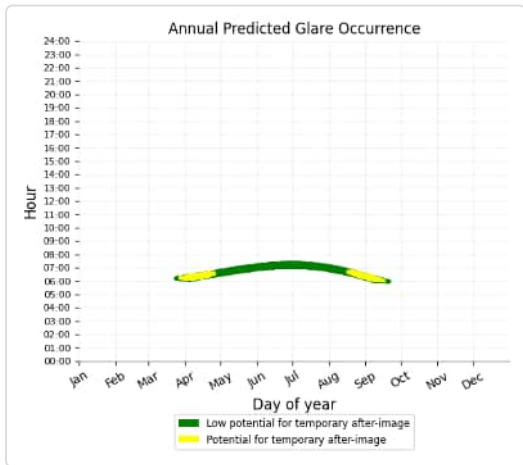




PV array 1 - OP Receptor (OP 41)

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

- 2,564 minutes of "green" glare with low potential to cause temporary after-image.
- 579 minutes of "yellow" glare with potential to cause temporary after-image.

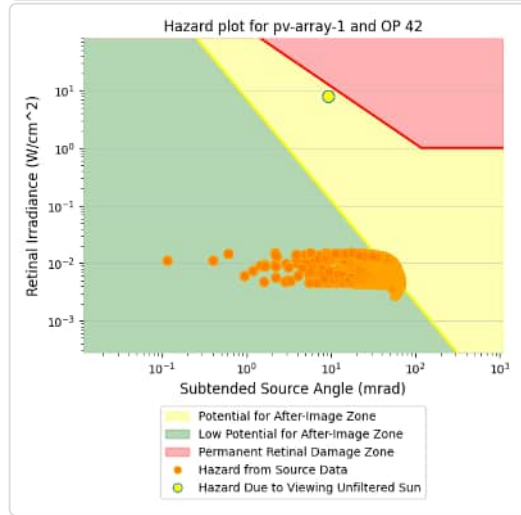
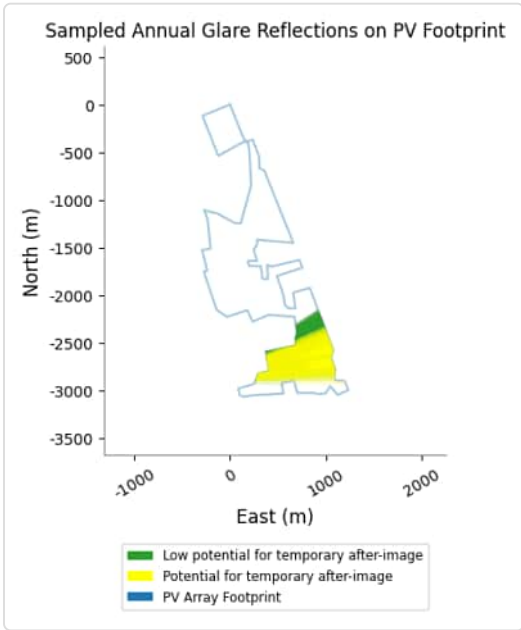
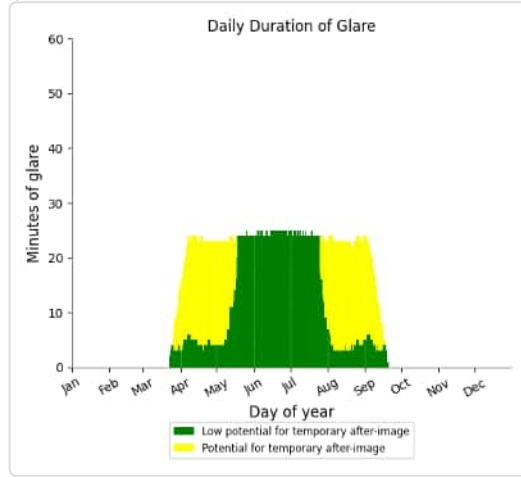
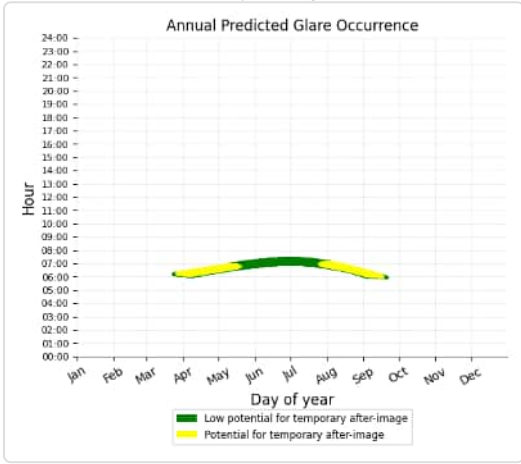


PV array 1 - OP Receptor (OP 42)

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

- 2,251 minutes of "green" glare with low potential to cause temporary after-image.

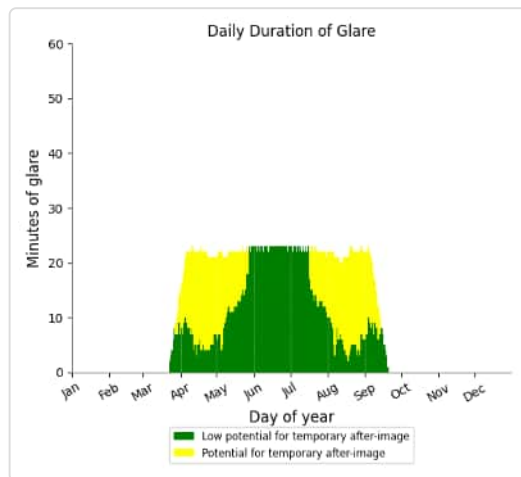
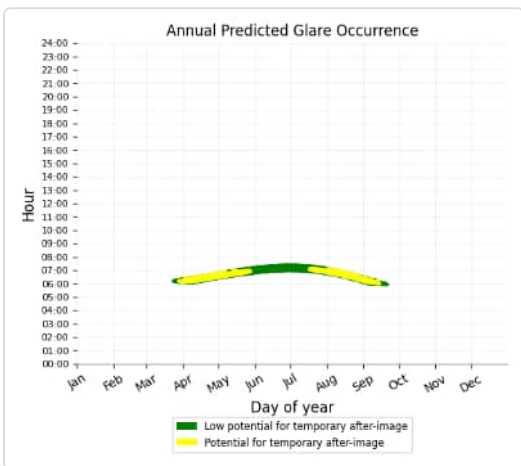
- 1,713 minutes of "yellow" glare with potential to cause temporary after-image.

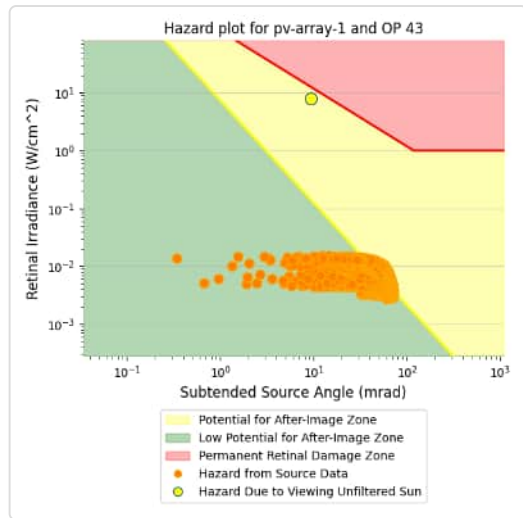
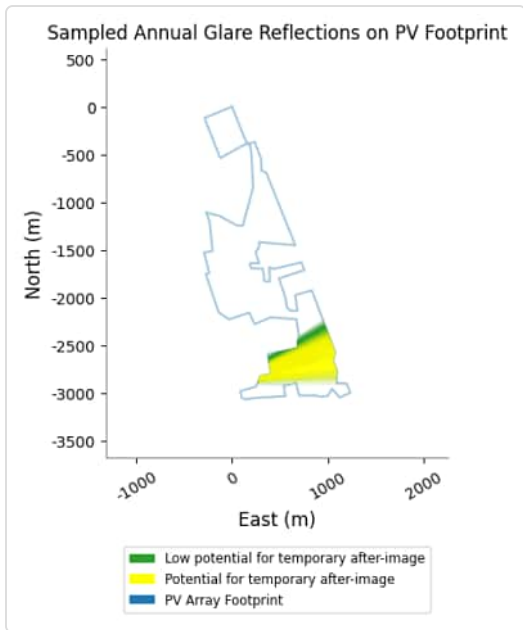


PV array 1 - OP Receptor (OP 43)

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

- 2,173 minutes of "green" glare with low potential to cause temporary after-image.
- 1,532 minutes of "yellow" glare with potential to cause temporary after-image.

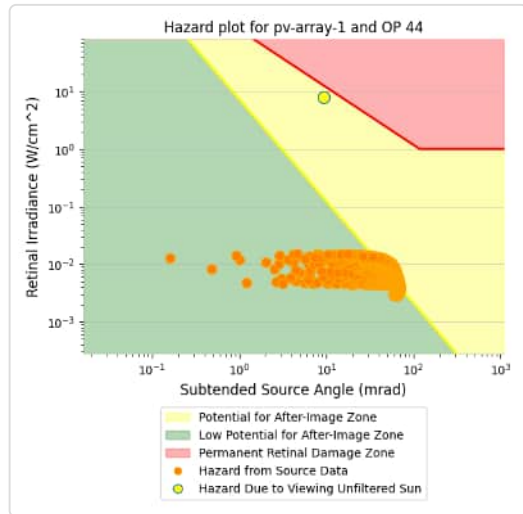
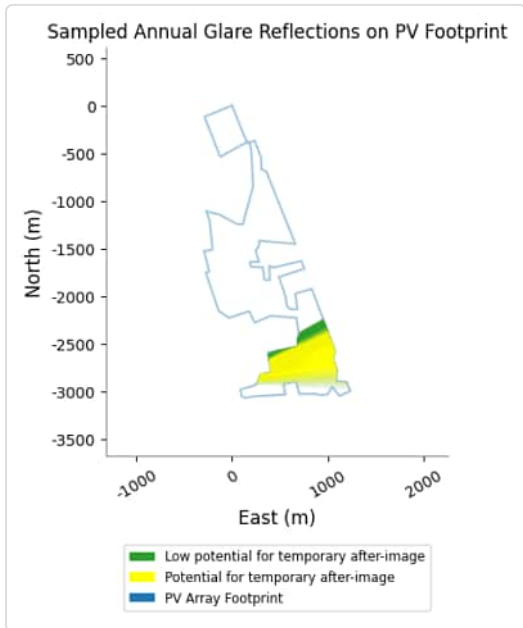
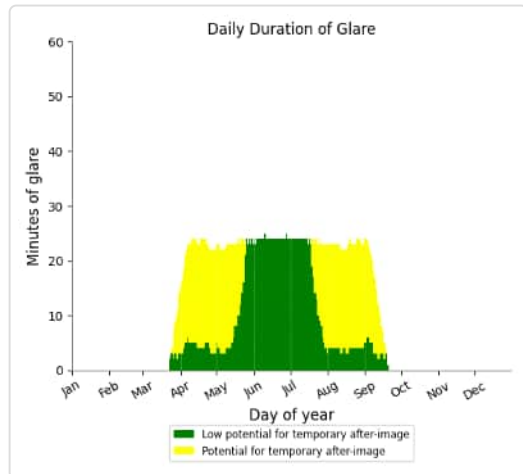
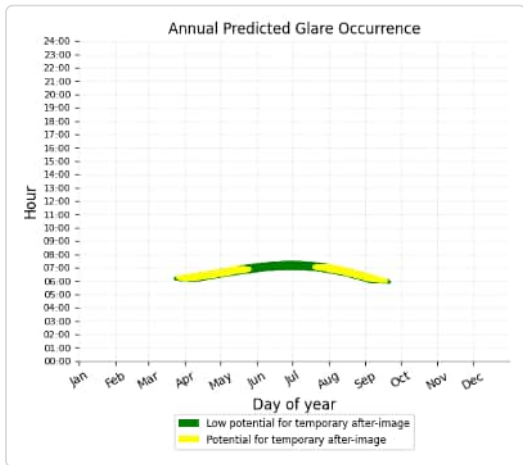




PV array 1 - OP Receptor (OP 44)

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

- 1,944 minutes of "green" glare with low potential to cause temporary after-image.
- 1,954 minutes of "yellow" glare with potential to cause temporary after-image.

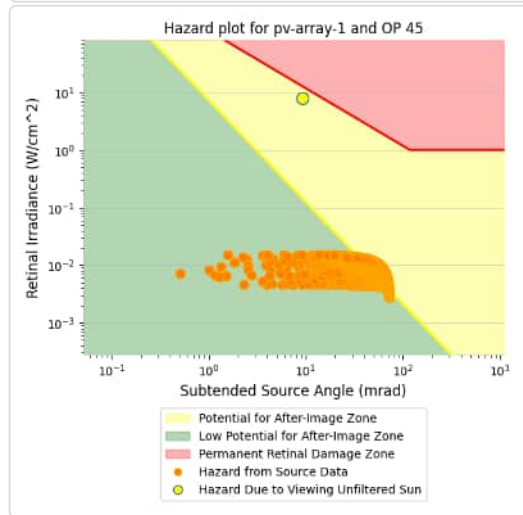
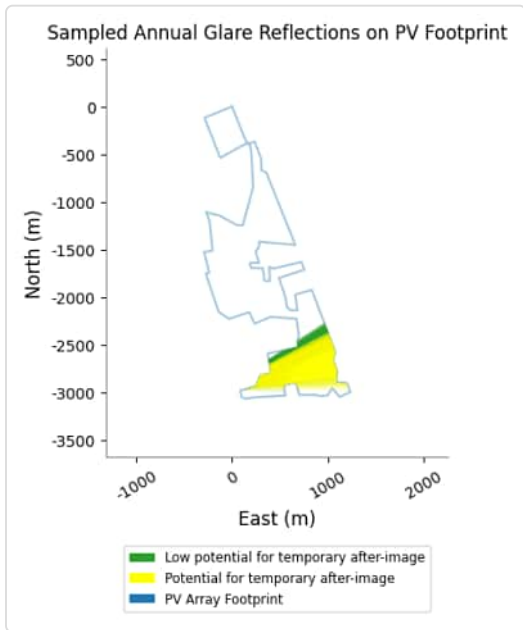
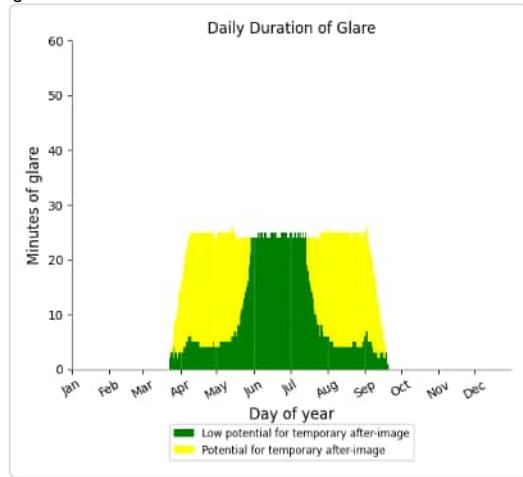
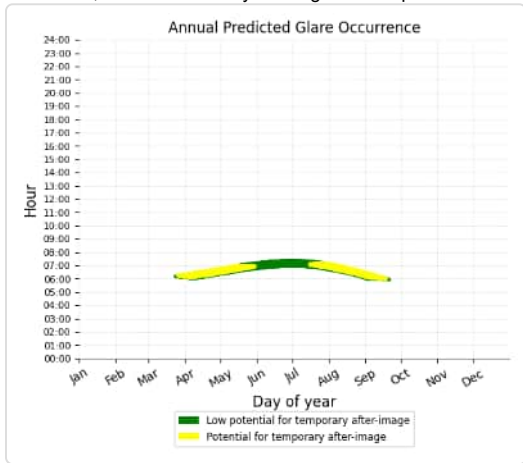


PV array 1 - OP Receptor (OP 45)

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

- 1,913 minutes of "green" glare with low potential to cause temporary after-image.

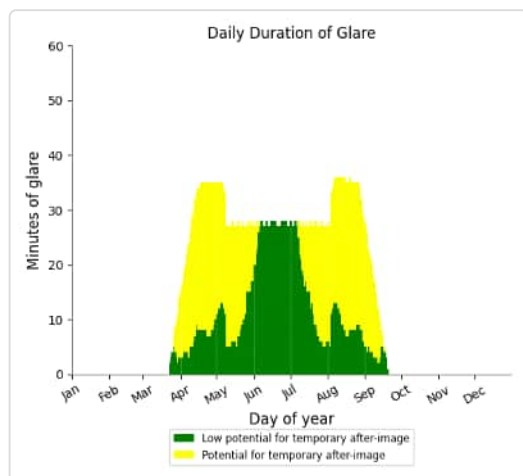
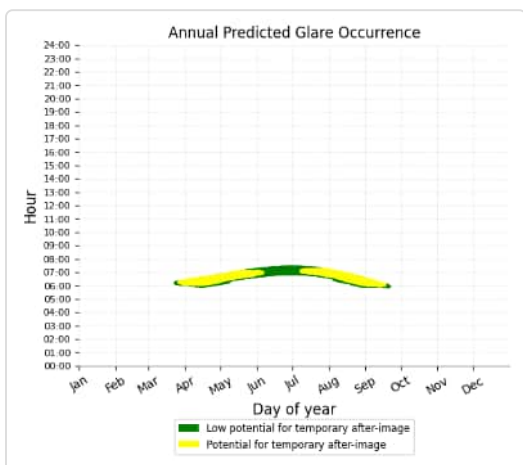
- 2,170 minutes of "yellow" glare with potential to cause temporary after-image.

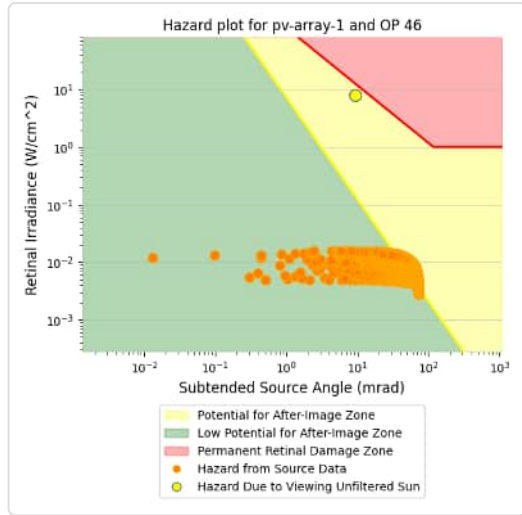
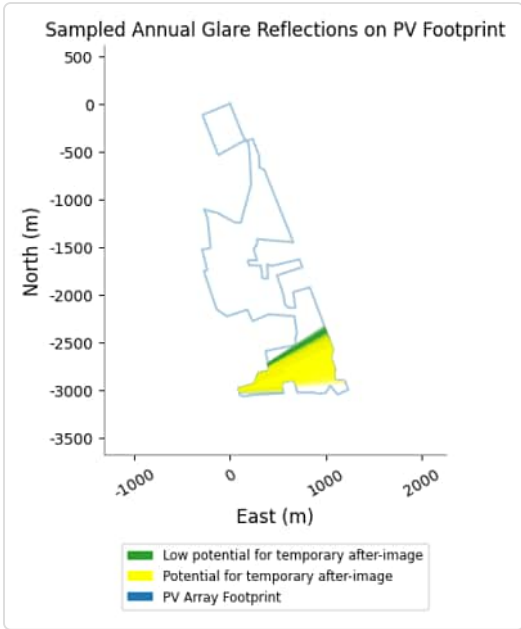


PV array 1 - OP Receptor (OP 46)

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

- 2,158 minutes of "green" glare with low potential to cause temporary after-image.
- 2,727 minutes of "yellow" glare with potential to cause temporary after-image.

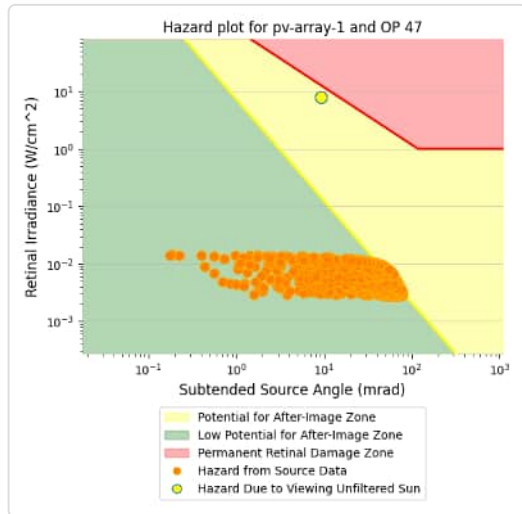
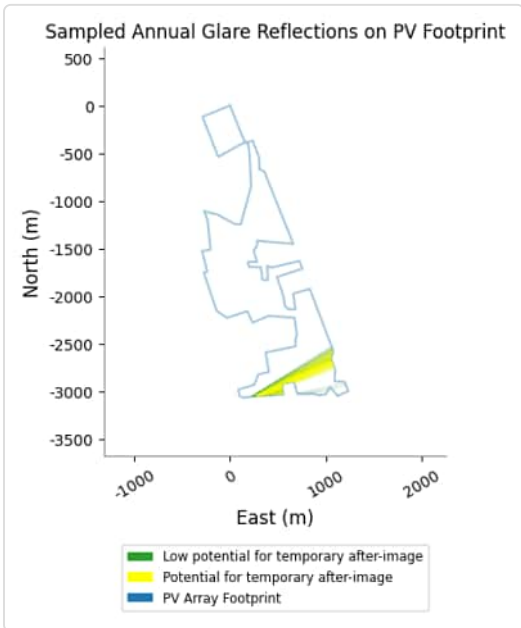
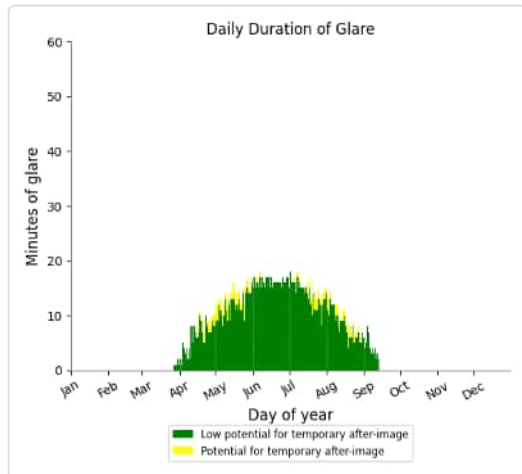
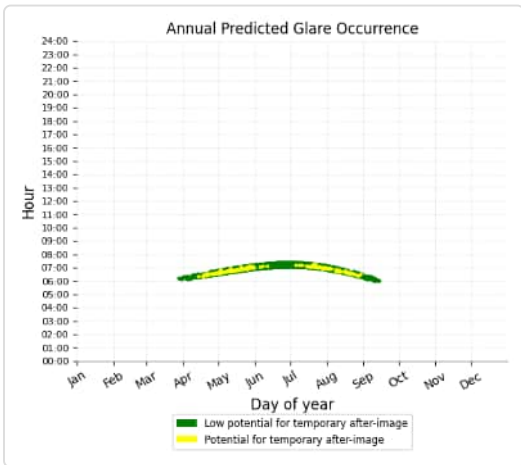




PV array 1 - OP Receptor (OP 47)

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

- 1,765 minutes of "green" glare with low potential to cause temporary after-image.
- 149 minutes of "yellow" glare with potential to cause temporary after-image.

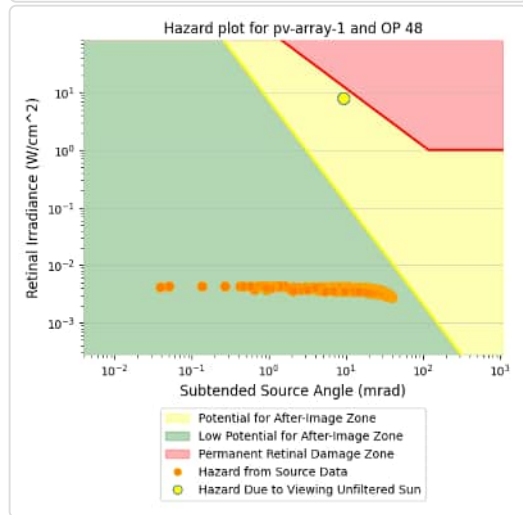
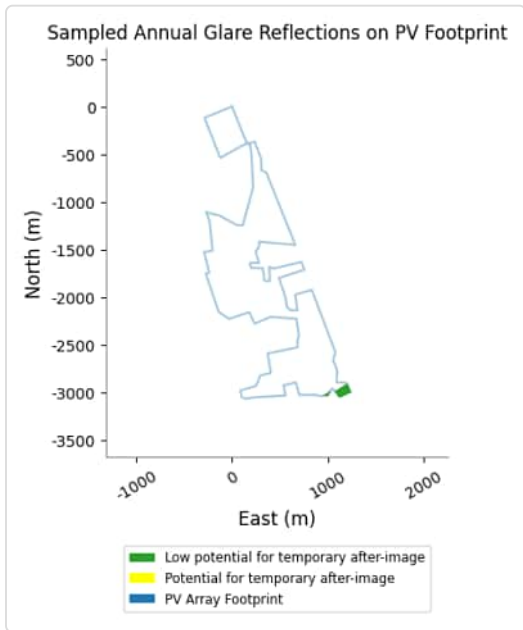
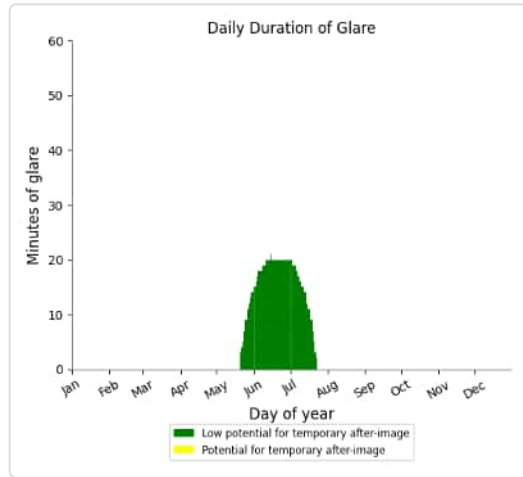
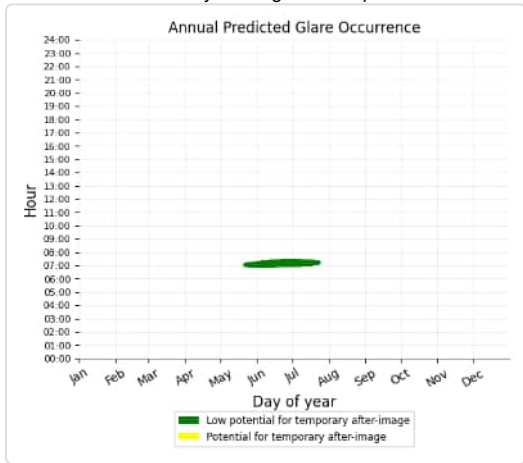


PV array 1 - OP Receptor (OP 48)

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

- 985 minutes of "green" glare with low potential to cause temporary after-image.

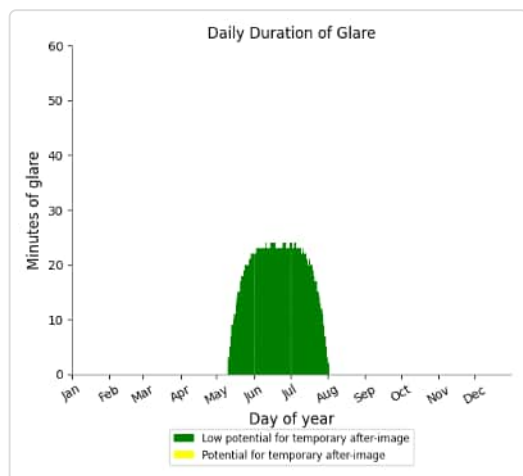
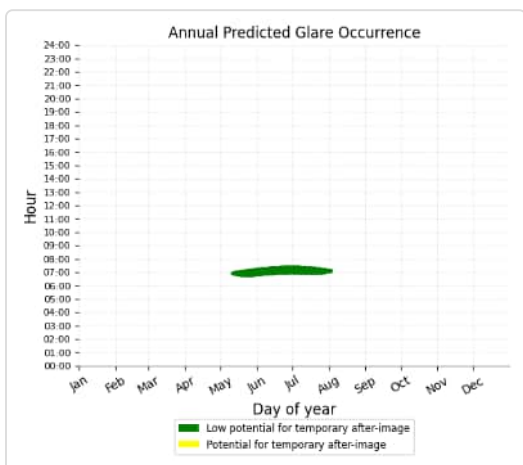
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

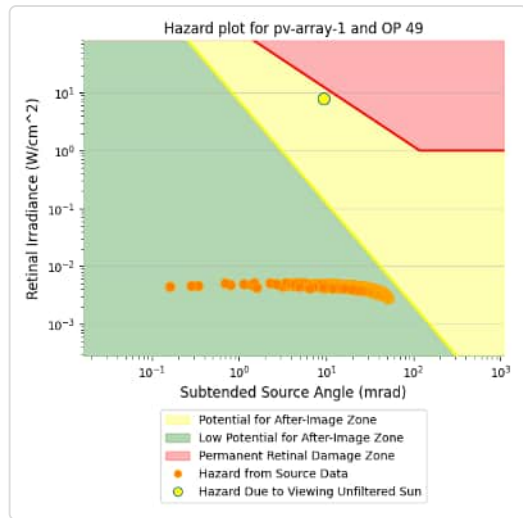
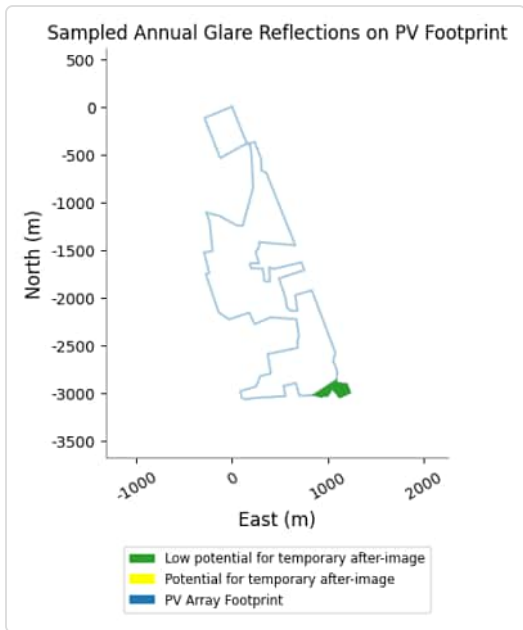


PV array 1 - OP Receptor (OP 49)

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

- 1,602 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

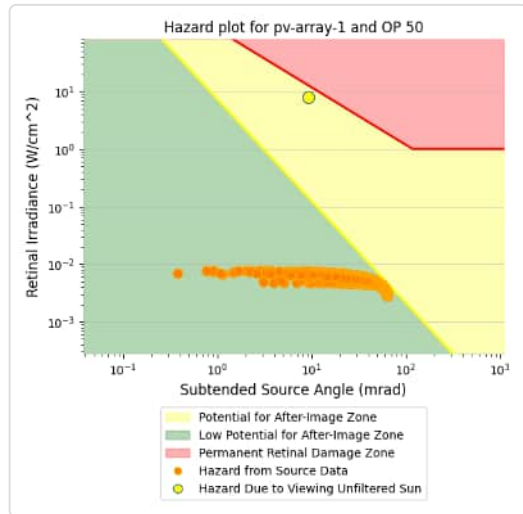
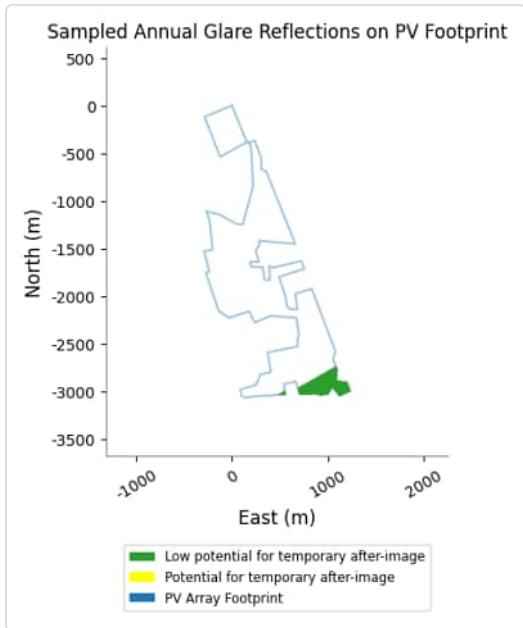
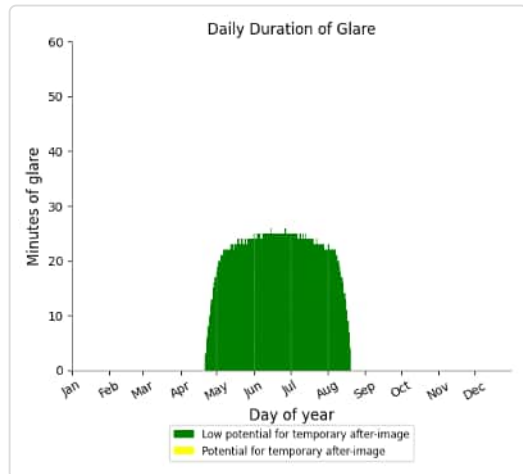
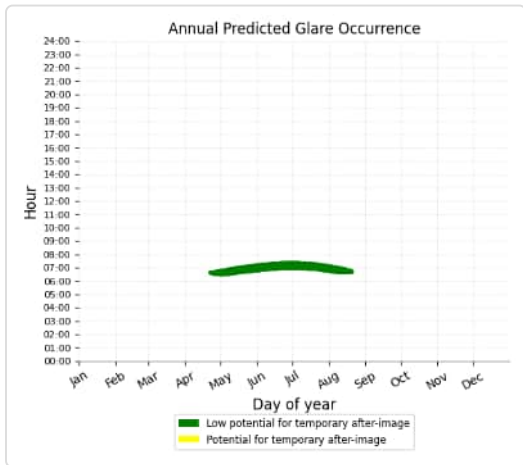




PV array 1 - OP Receptor (OP 50)

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

- 2,632 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

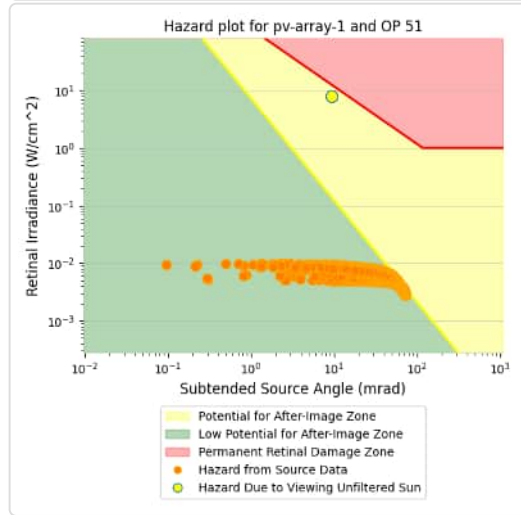
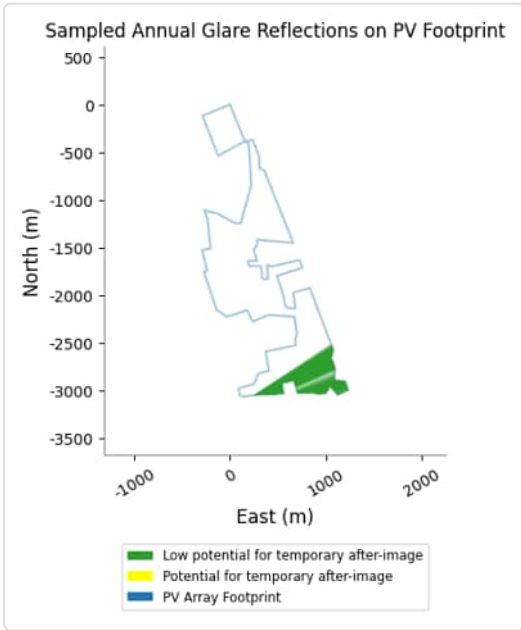
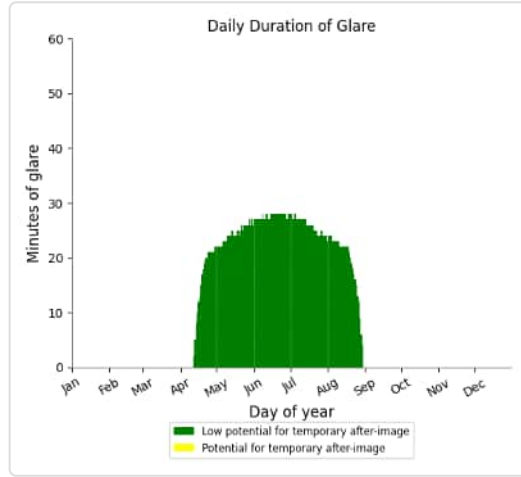
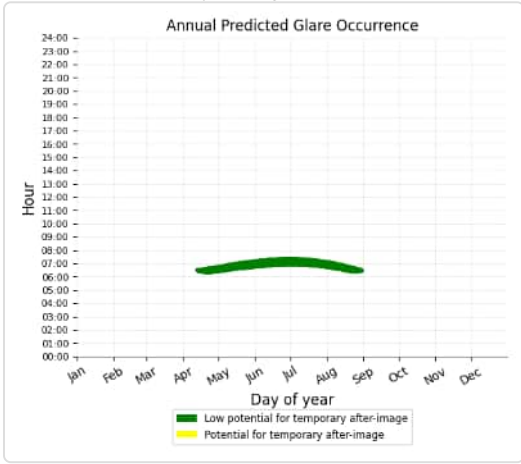


PV array 1 - OP Receptor (OP 51)

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

- 3,273 minutes of "green" glare with low potential to cause temporary after-image.

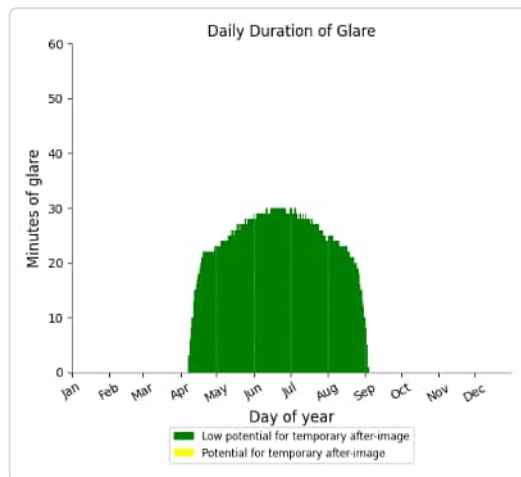
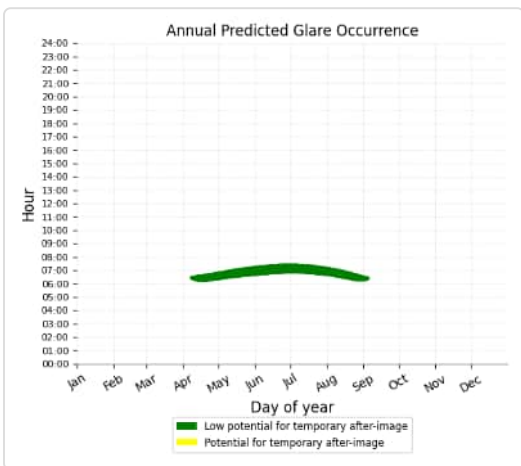
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

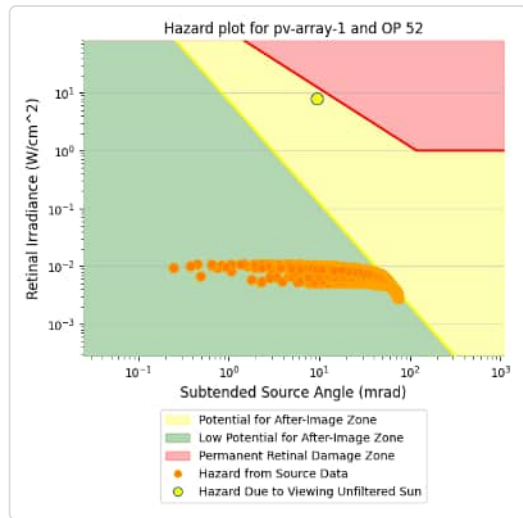
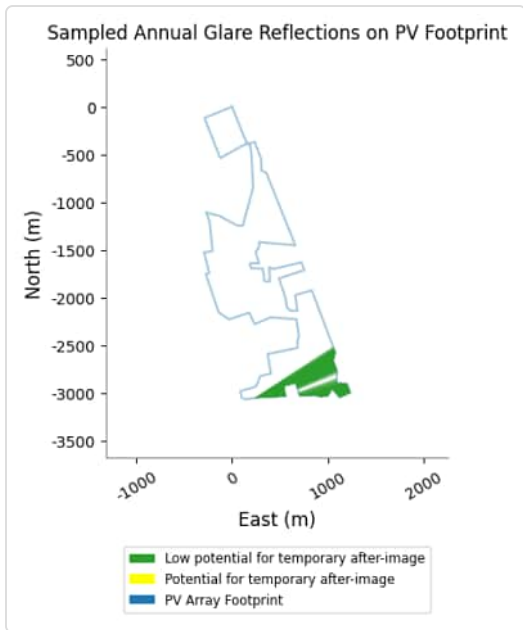


PV array 1 - OP Receptor (OP 52)

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

- 3,638 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

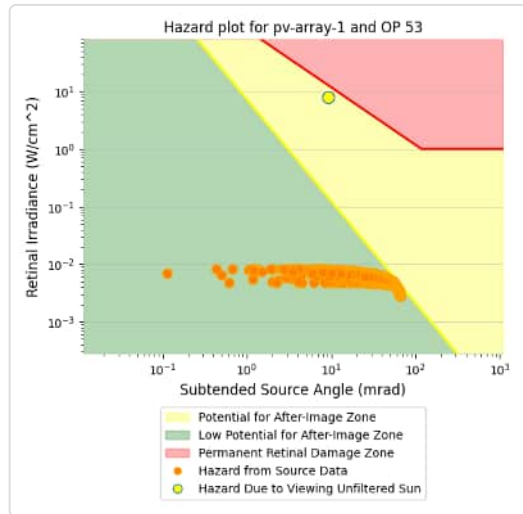
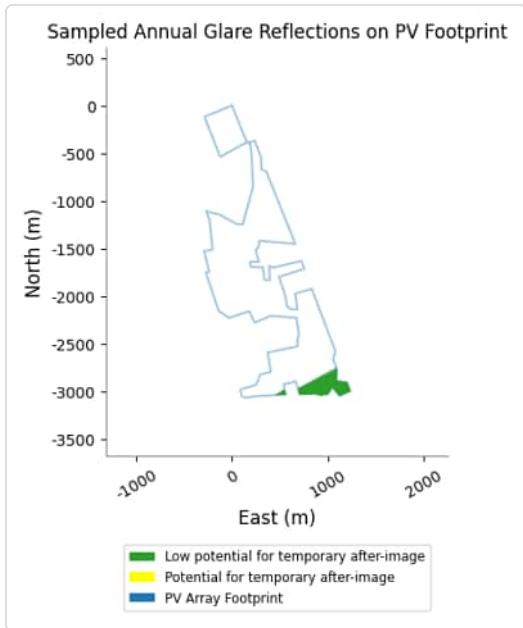
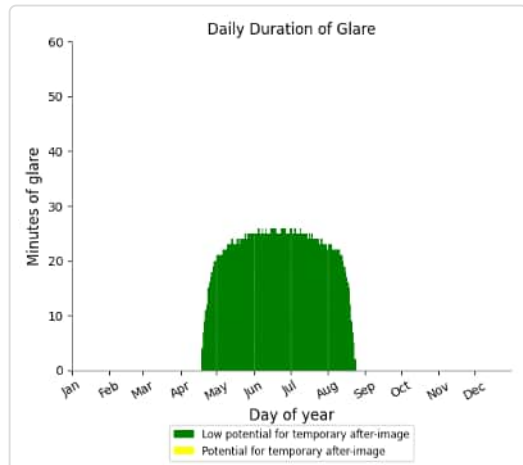
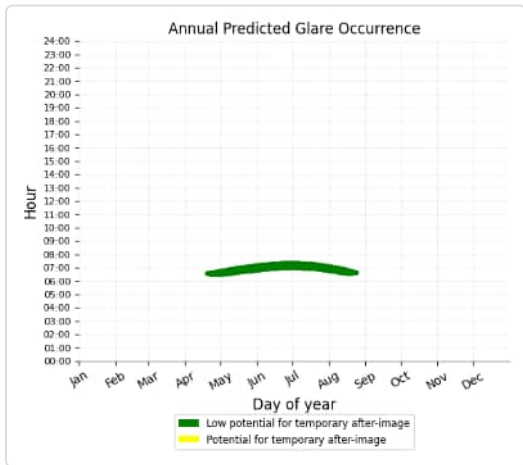




PV array 1 - OP Receptor (OP 53)

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

- 2,835 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

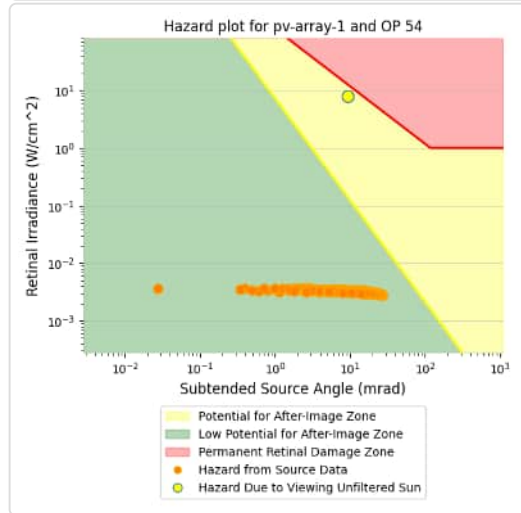
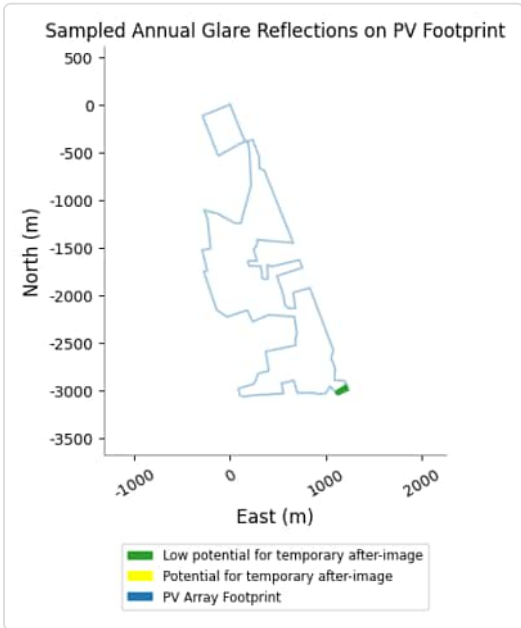
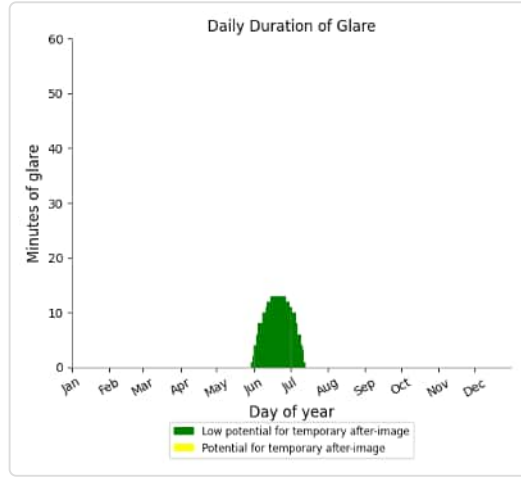
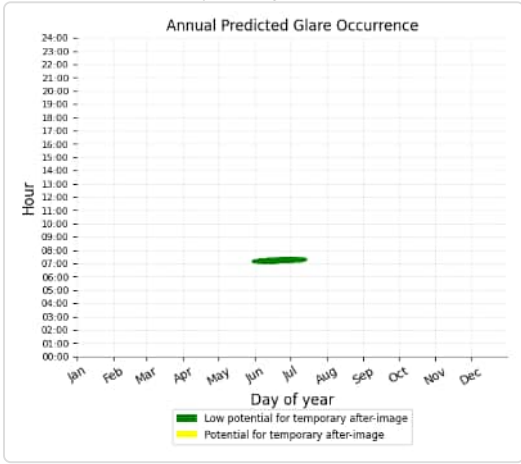


PV array 1 - OP Receptor (OP 54)

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

- 423 minutes of "green" glare with low potential to cause temporary after-image.

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



PV array 2 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	0	0
OP: OP 18	0	0
OP: OP 19	0	0

OP: OP 20	0	0
OP: OP 21	0	0
OP: OP 22	0	0
OP: OP 23	0	0
OP: OP 24	74	0
OP: OP 25	56	0
OP: OP 26	3	0
OP: OP 27	202	0
OP: OP 28	300	0
OP: OP 29	325	0
OP: OP 30	488	0
OP: OP 31	603	0
OP: OP 32	759	2
OP: OP 33	799	16
OP: OP 34	1313	367
OP: OP 35	2752	949
OP: OP 36	12	0
OP: OP 37	2653	1191
OP: OP 38	2875	1010
OP: OP 39	2822	1096
OP: OP 40	2818	1061
OP: OP 41	2834	357
OP: OP 42	1202	37
OP: OP 43	2544	132
OP: OP 44	11	0
OP: OP 45	0	0
OP: OP 46	1266	59
OP: OP 47	3076	136
OP: OP 48	1546	0
OP: OP 49	1761	0
OP: OP 50	2136	0
OP: OP 51	2206	195
OP: OP 52	2029	415
OP: OP 53	2260	19
OP: OP 54	1176	0

PV array 2 - OP Receptor (OP 1)

No glare found

PV array 2 - OP Receptor (OP 2)

No glare found

PV array 2 - OP Receptor (OP 3)

No glare found

PV array 2 - OP Receptor (OP 4)

No glare found

PV array 2 - OP Receptor (OP 5)

No glare found

PV array 2 - OP Receptor (OP 6)

No glare found

PV array 2 - OP Receptor (OP 7)

No glare found

PV array 2 - OP Receptor (OP 8)

No glare found

PV array 2 - OP Receptor (OP 9)

No glare found

PV array 2 - OP Receptor (OP 10)

No glare found

PV array 2 - OP Receptor (OP 11)

No glare found

PV array 2 - OP Receptor (OP 12)

No glare found

PV array 2 - OP Receptor (OP 13)

No glare found

PV array 2 - OP Receptor (OP 14)

No glare found

PV array 2 - OP Receptor (OP 15)

No glare found

PV array 2 - OP Receptor (OP 16)

No glare found

PV array 2 - OP Receptor (OP 17)

No glare found

PV array 2 - OP Receptor (OP 18)

No glare found

PV array 2 - OP Receptor (OP 19)

No glare found

PV array 2 - OP Receptor (OP 20)

No glare found

PV array 2 - OP Receptor (OP 21)

No glare found

PV array 2 - OP Receptor (OP 22)

No glare found

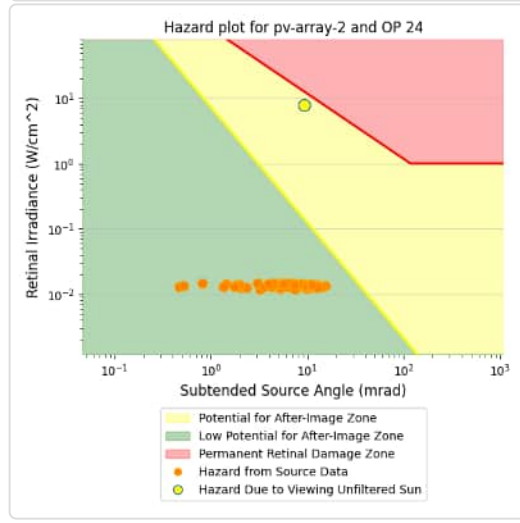
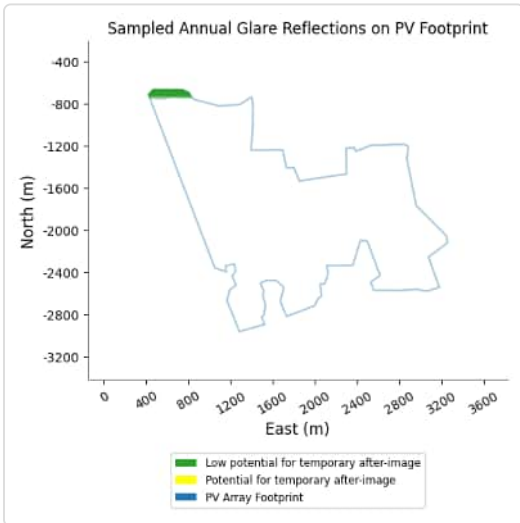
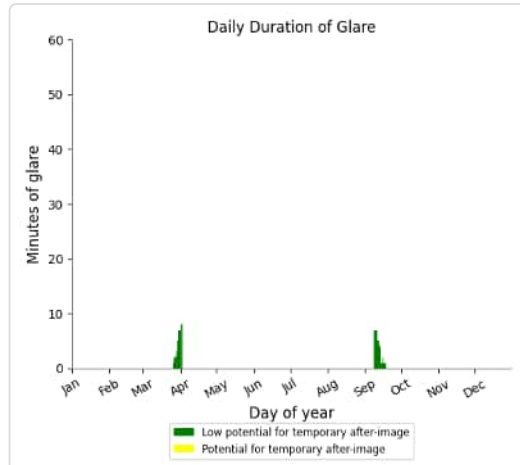
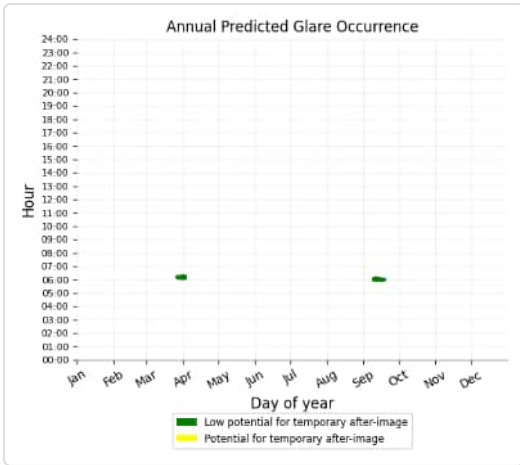
PV array 2 - OP Receptor (OP 23)

No glare found

PV array 2 - OP Receptor (OP 24)

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

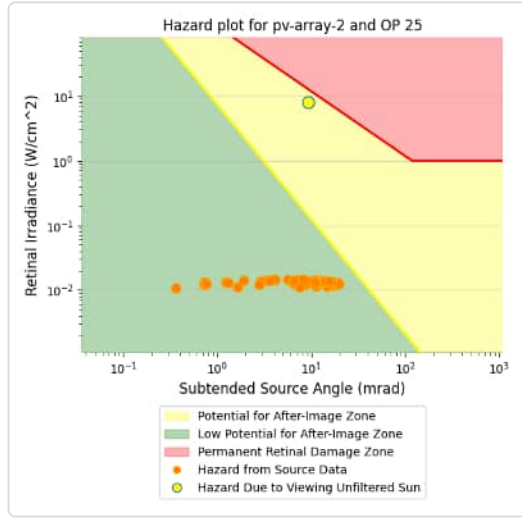
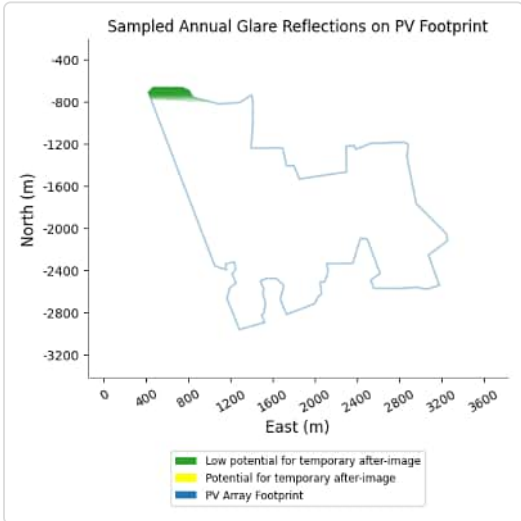
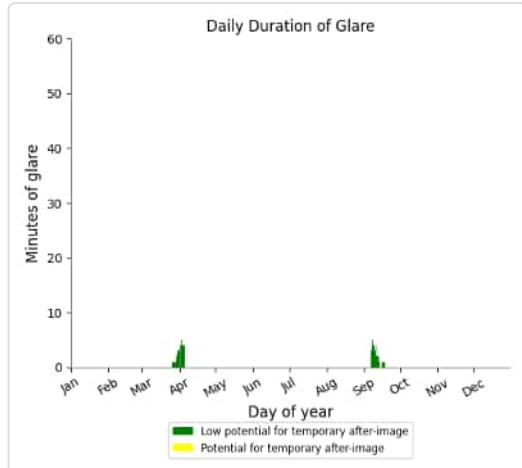
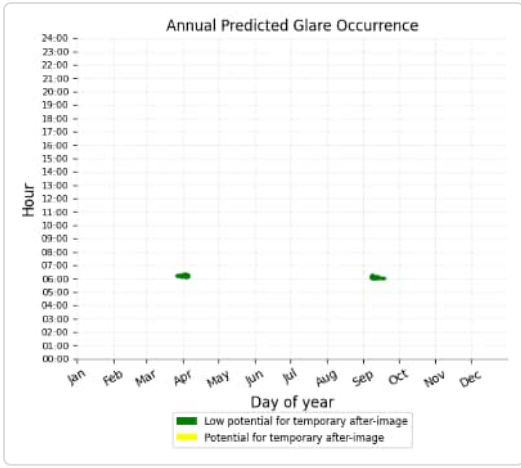
- 74 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 25)

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

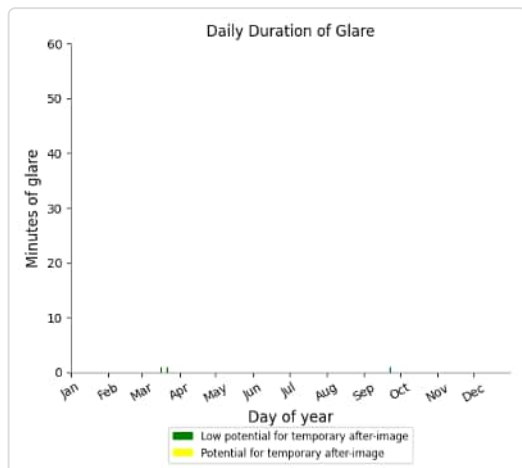
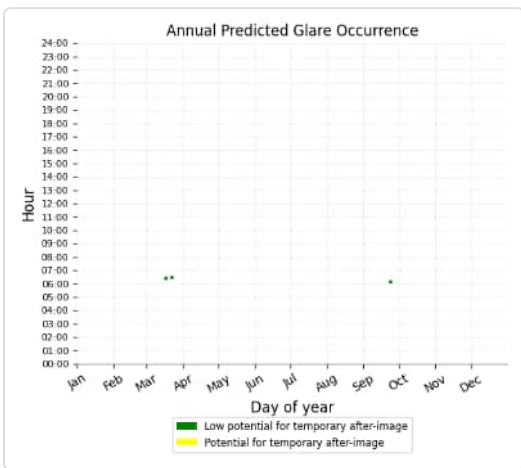
- 56 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

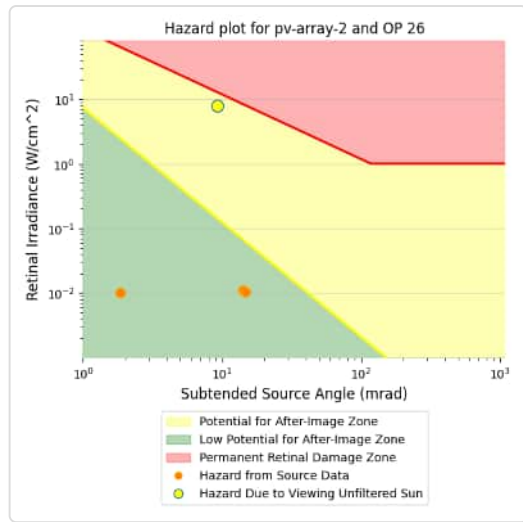
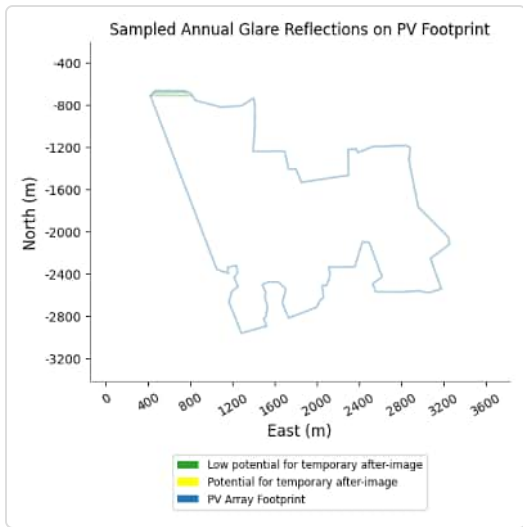


PV array 2 - OP Receptor (OP 26)

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

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

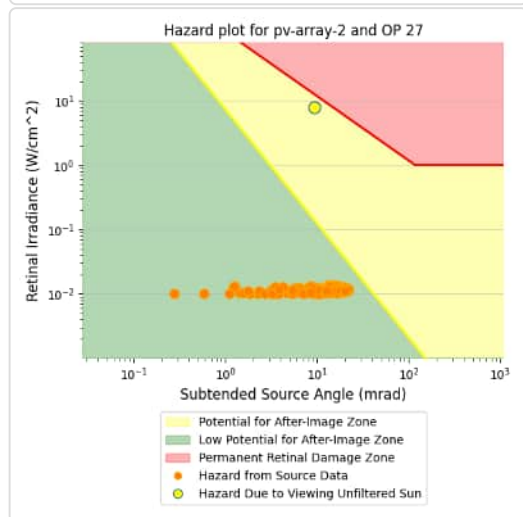
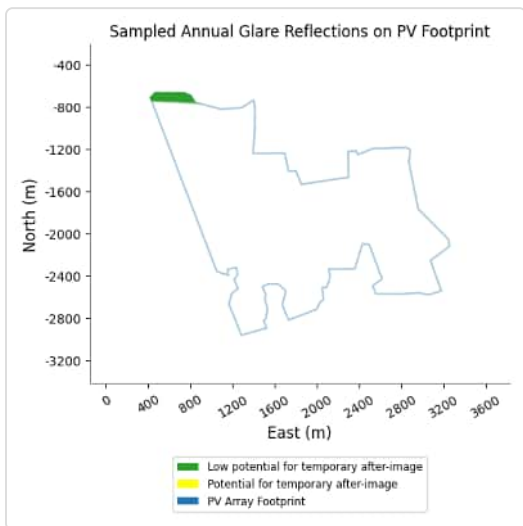
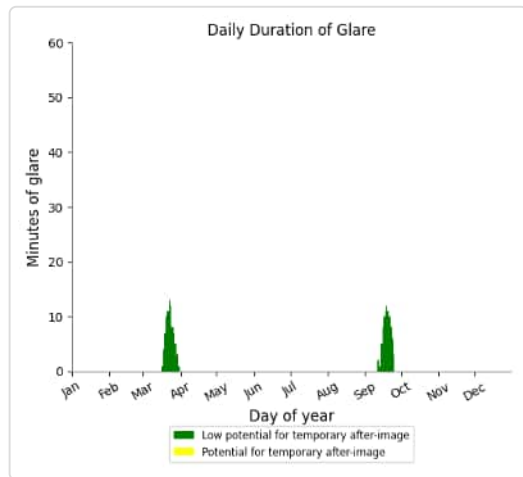
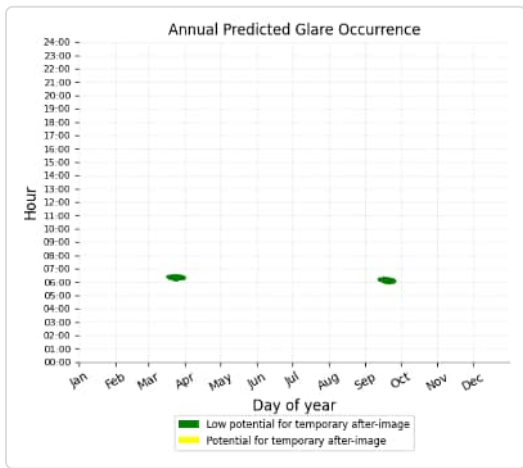




PV array 2 - OP Receptor (OP 27)

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

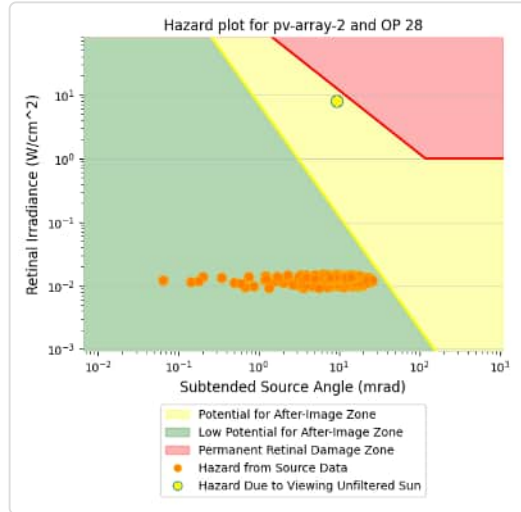
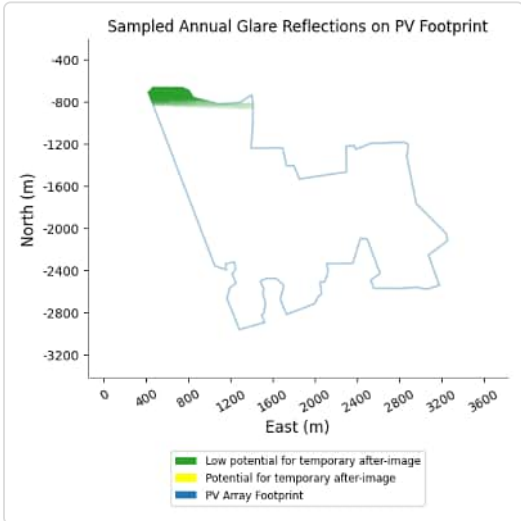
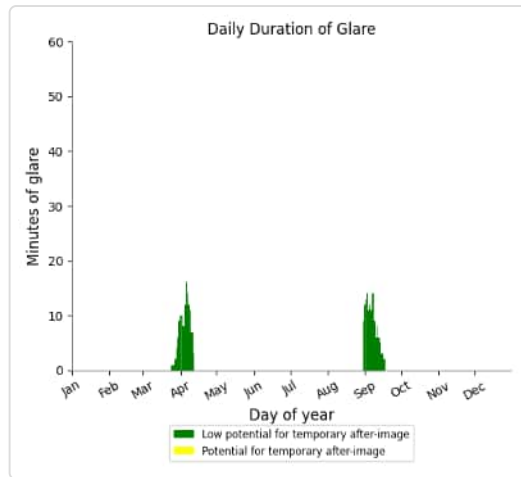
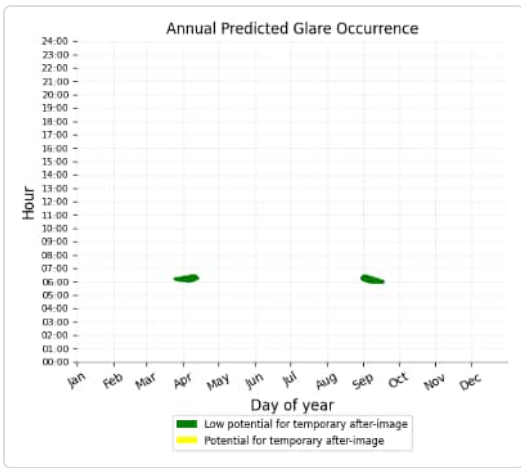
- 202 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 28)

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

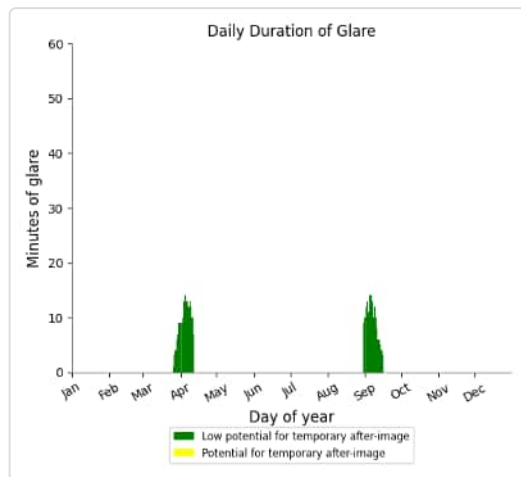
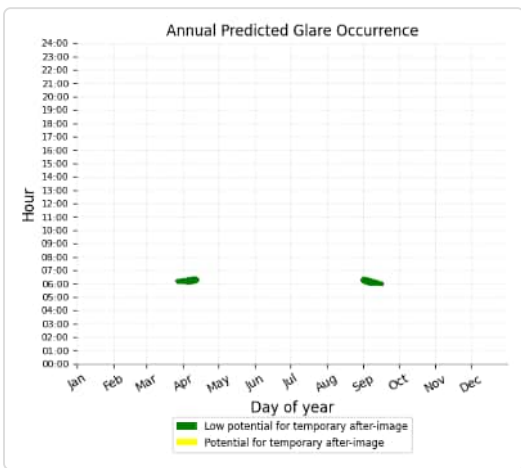
- 300 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

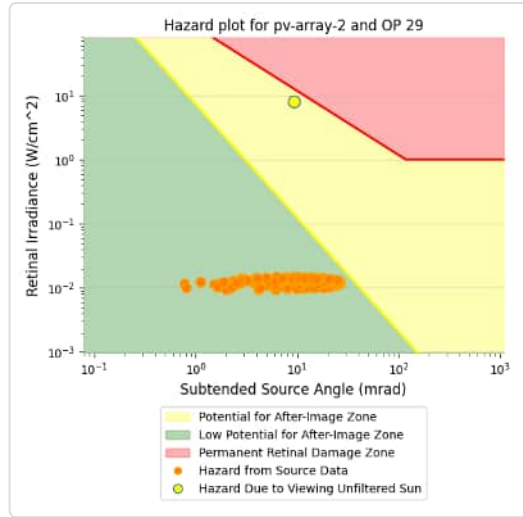
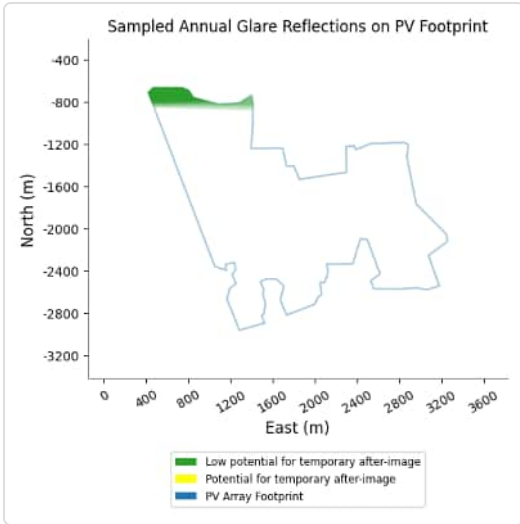


PV array 2 - OP Receptor (OP 29)

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

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

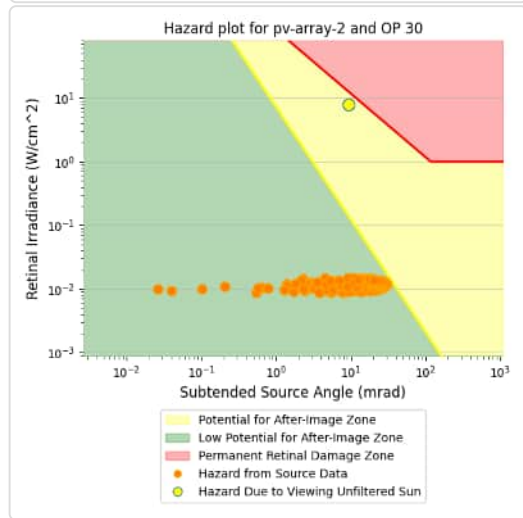
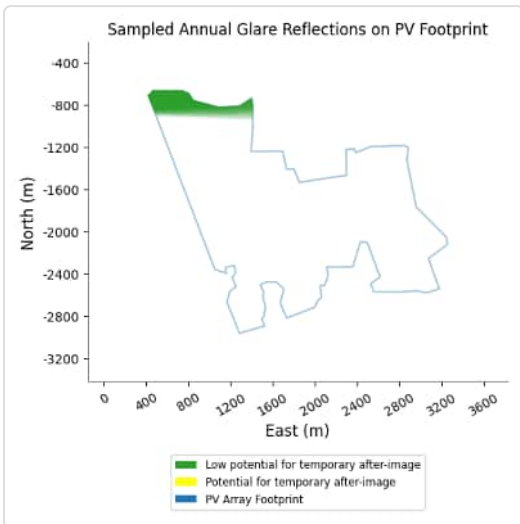
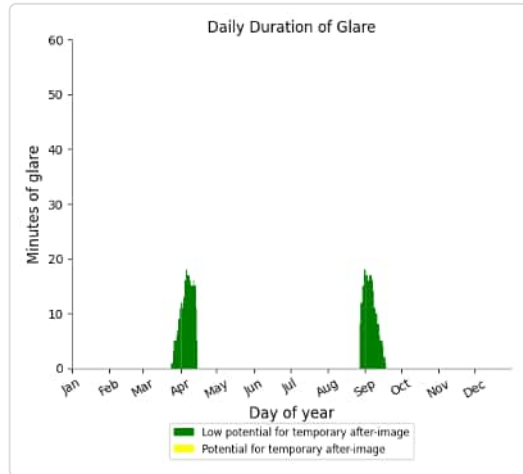
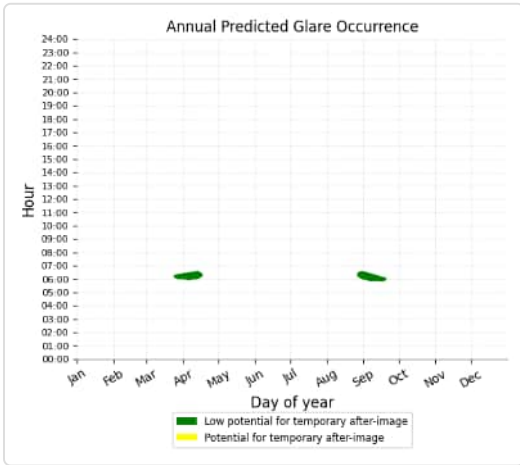




PV array 2 - OP Receptor (OP 30)

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

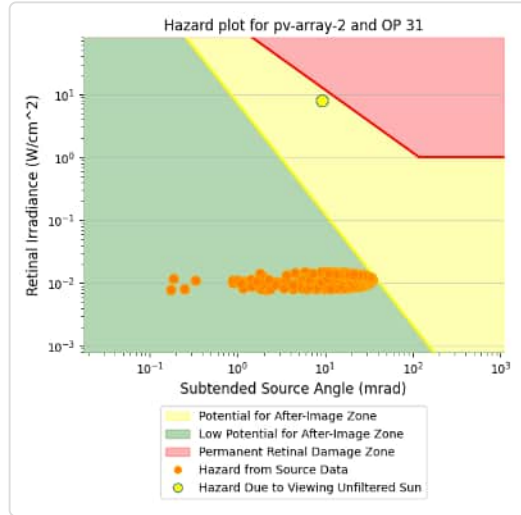
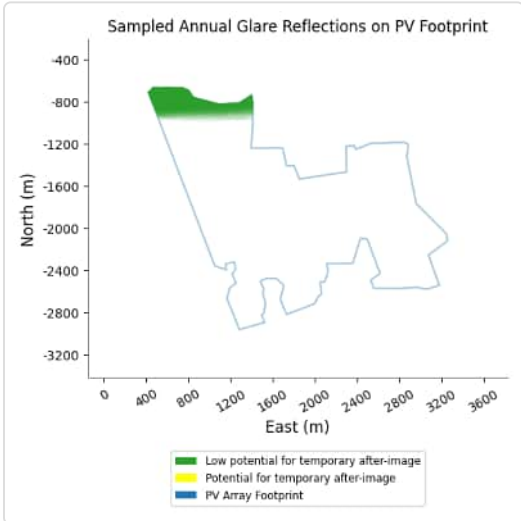
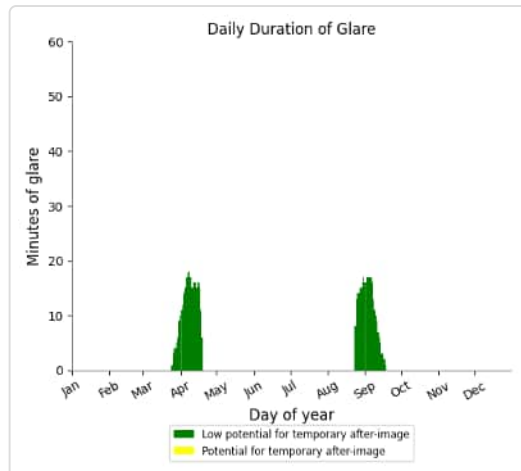
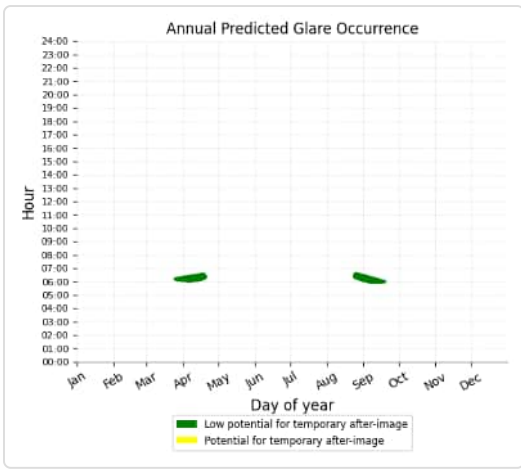
- 488 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 31)

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

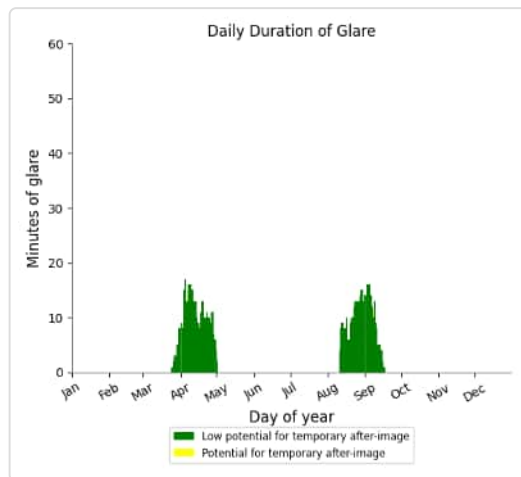
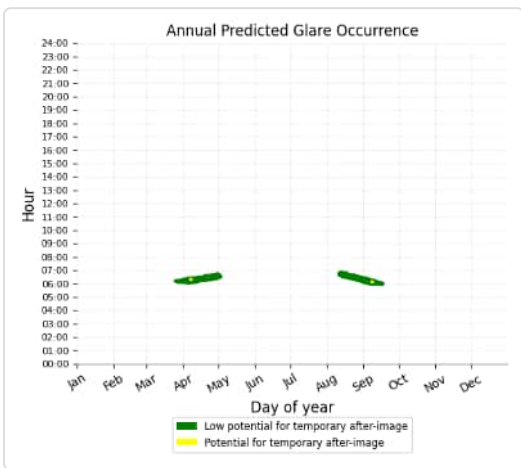
- 603 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

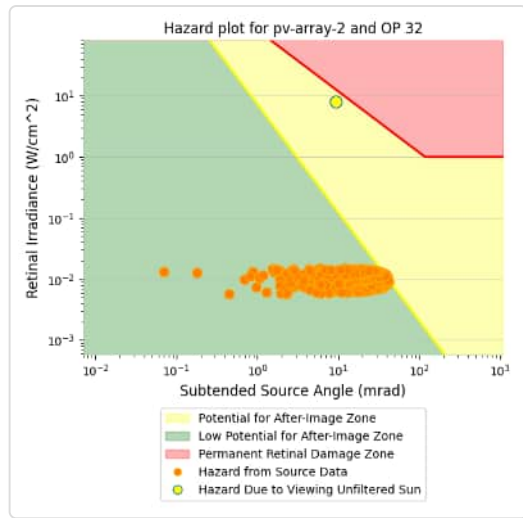
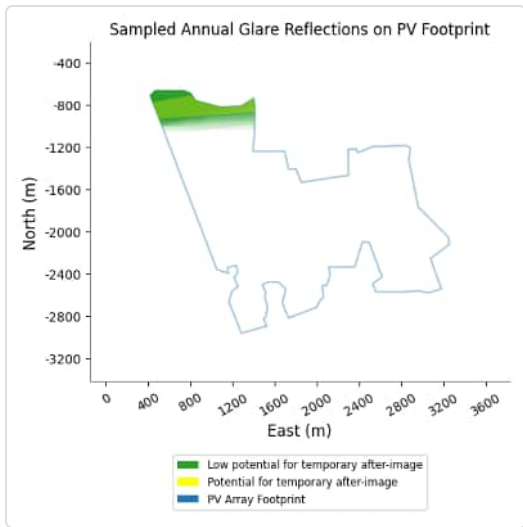


PV array 2 - OP Receptor (OP 32)

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

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

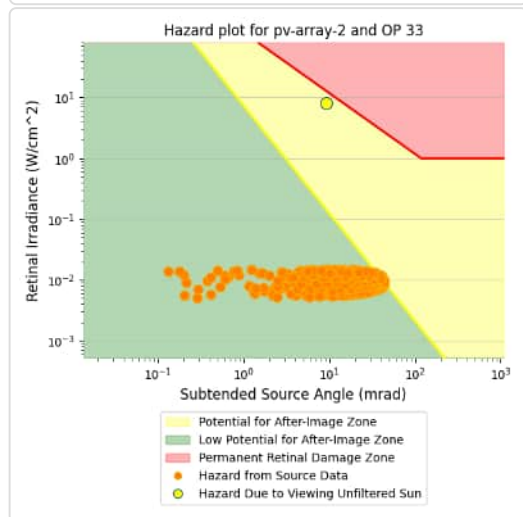
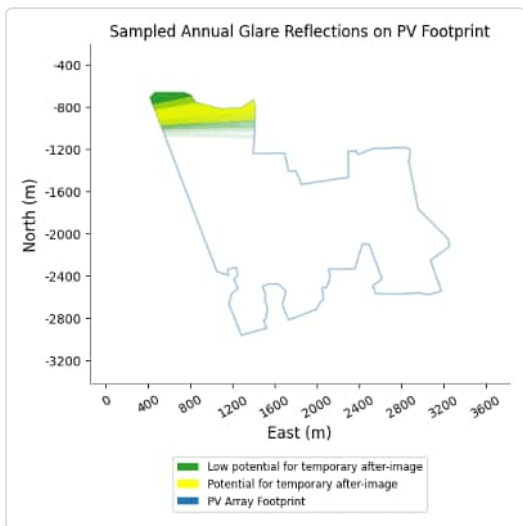
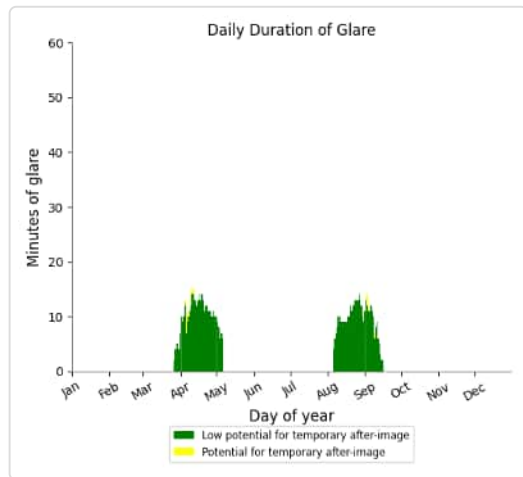
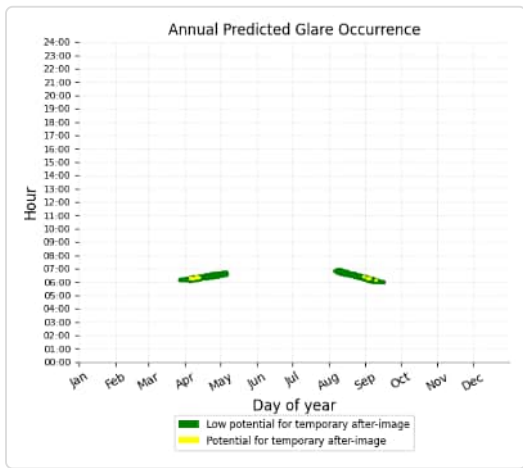




PV array 2 - OP Receptor (OP 33)

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

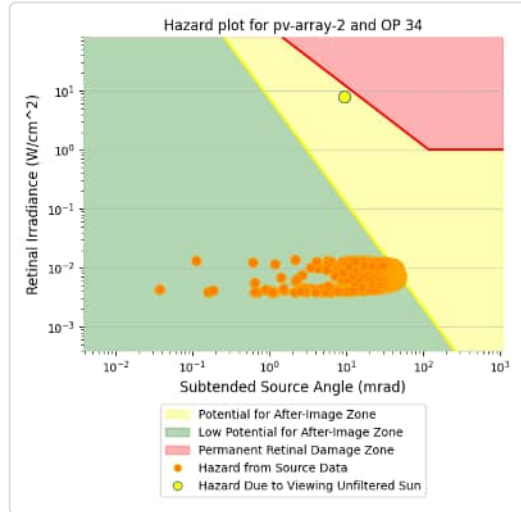
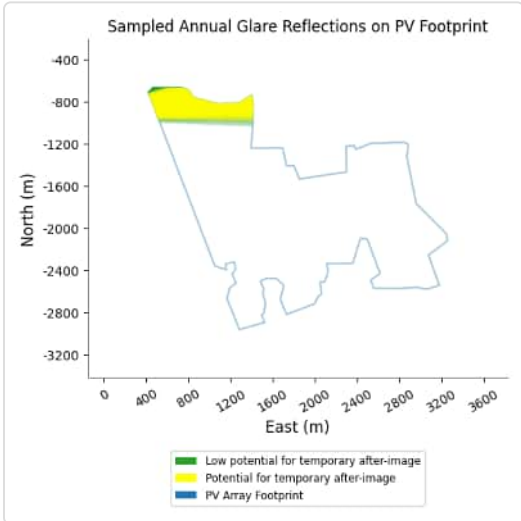
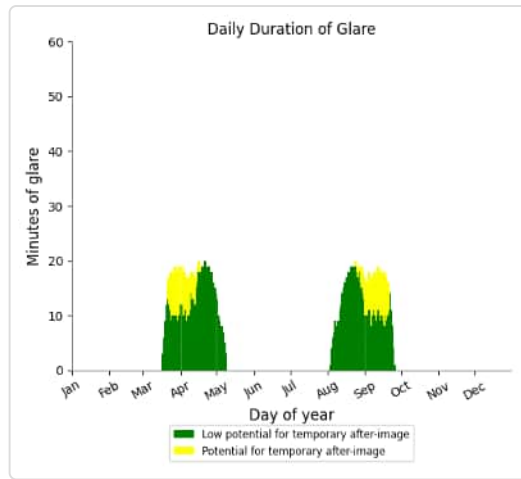
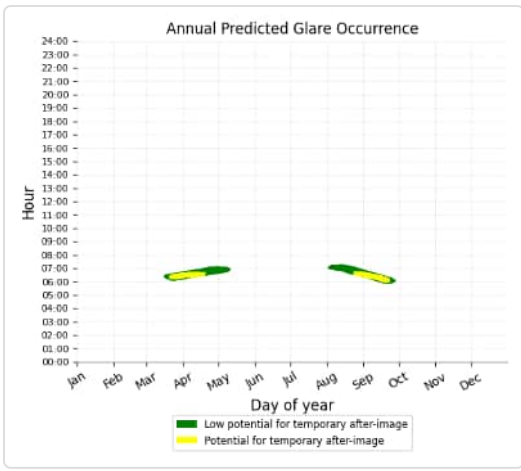
- 799 minutes of "green" glare with low potential to cause temporary after-image.
- 16 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 34)

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

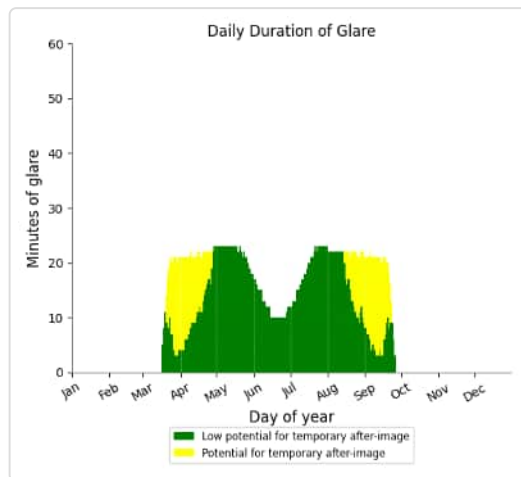
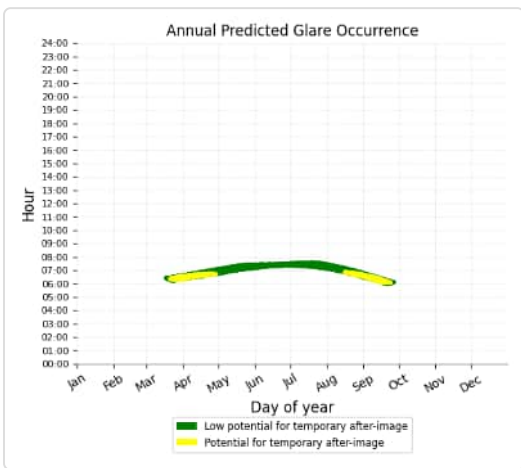
- 1,313 minutes of "green" glare with low potential to cause temporary after-image.
- 367 minutes of "yellow" glare with potential to cause temporary after-image.

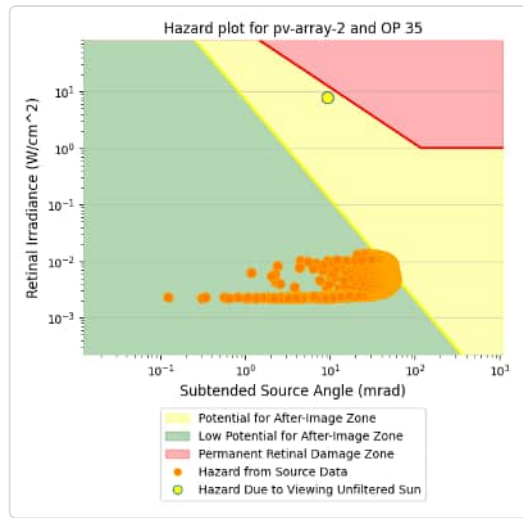
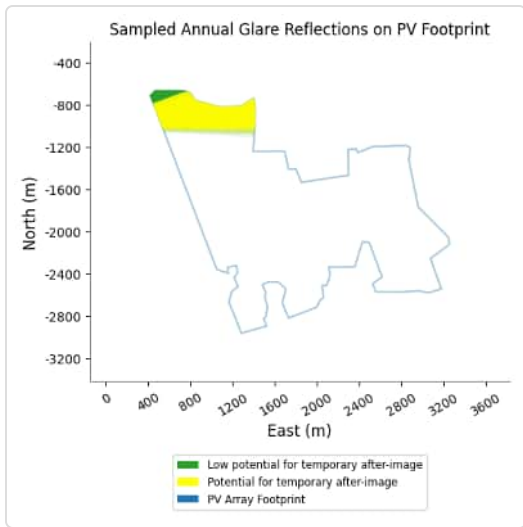


PV array 2 - OP Receptor (OP 35)

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

- 2,752 minutes of "green" glare with low potential to cause temporary after-image.
- 949 minutes of "yellow" glare with potential to cause temporary after-image.

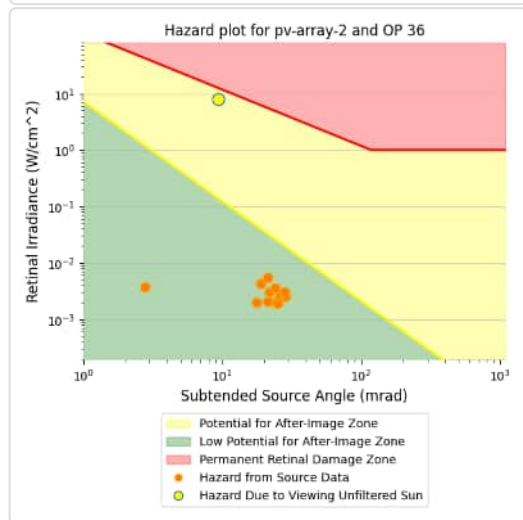
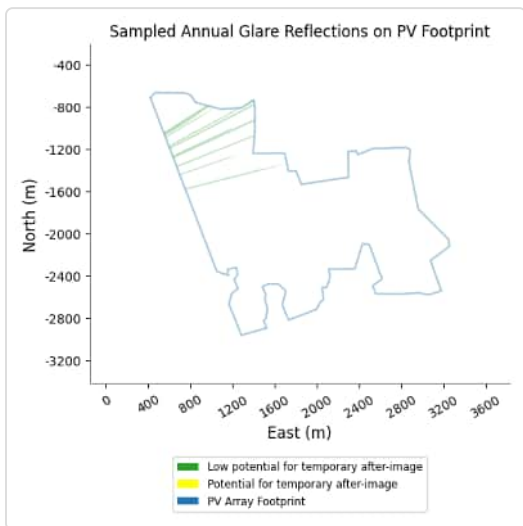
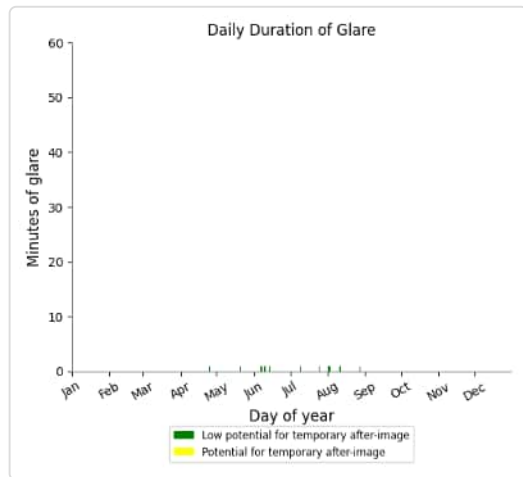
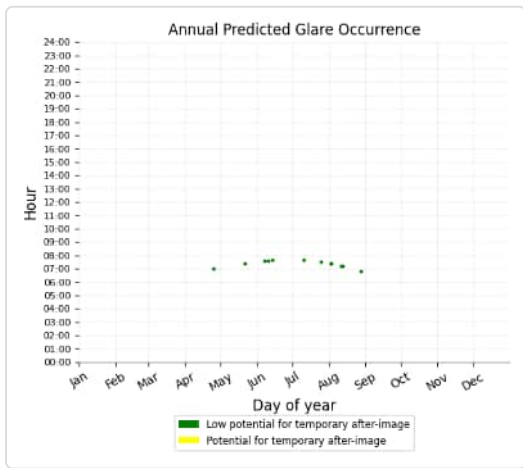




PV array 2 - OP Receptor (OP 36)

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

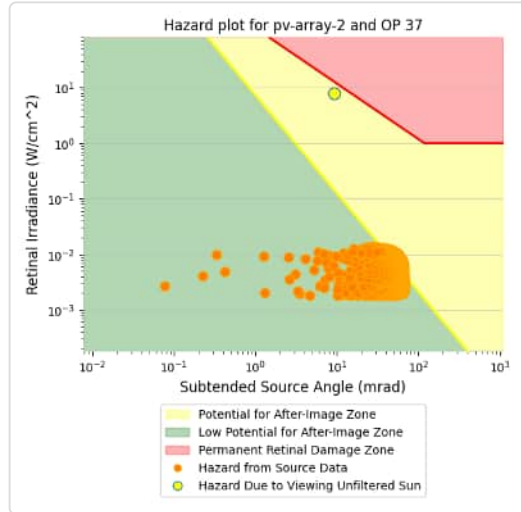
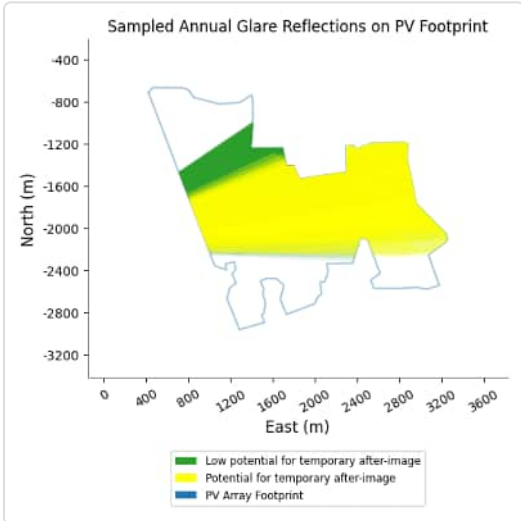
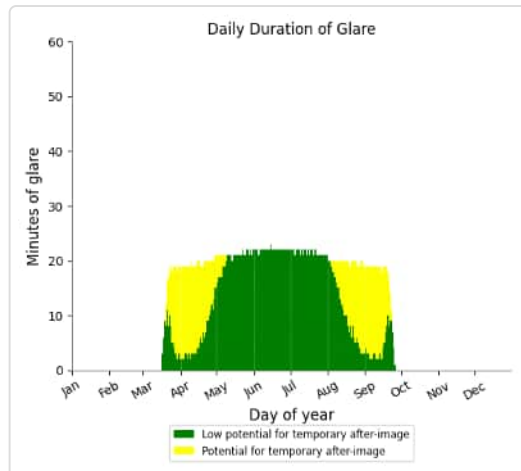
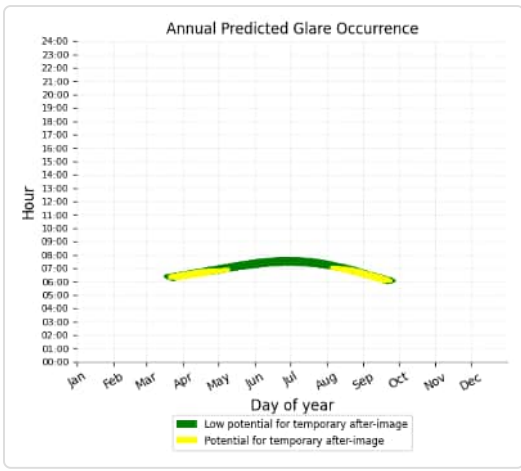
- 12 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 37)

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

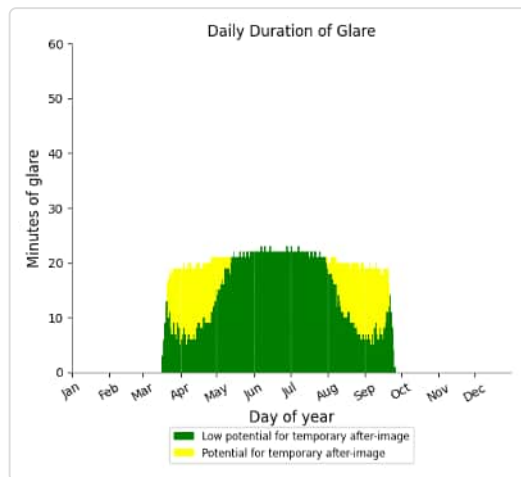
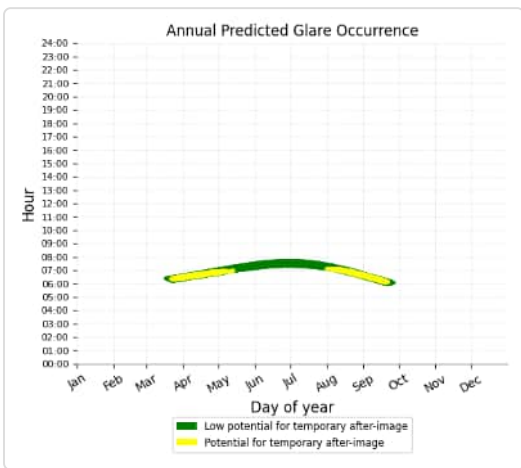
- 2,653 minutes of "green" glare with low potential to cause temporary after-image.
- 1,191 minutes of "yellow" glare with potential to cause temporary after-image.

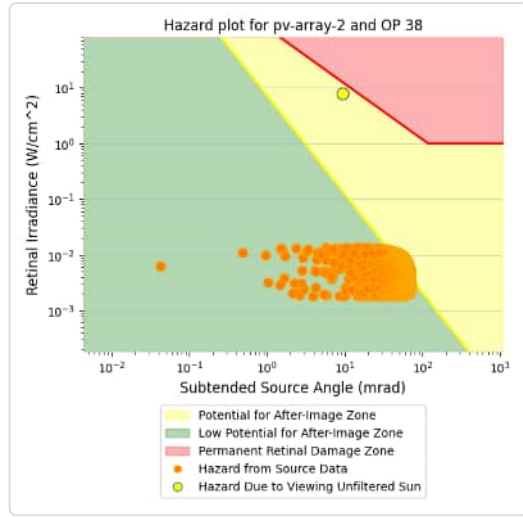
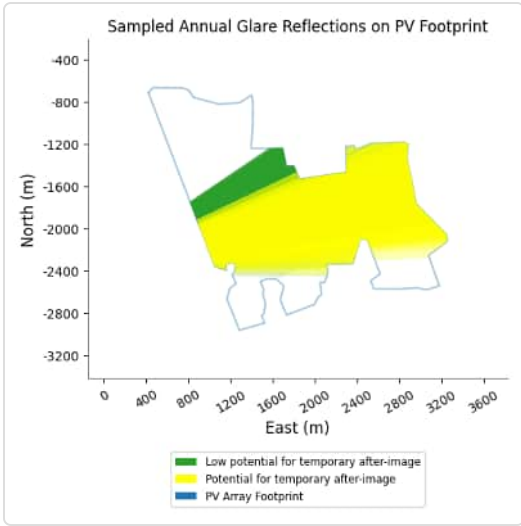


PV array 2 - OP Receptor (OP 38)

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

- 2,875 minutes of "green" glare with low potential to cause temporary after-image.
- 1,010 minutes of "yellow" glare with potential to cause temporary after-image.

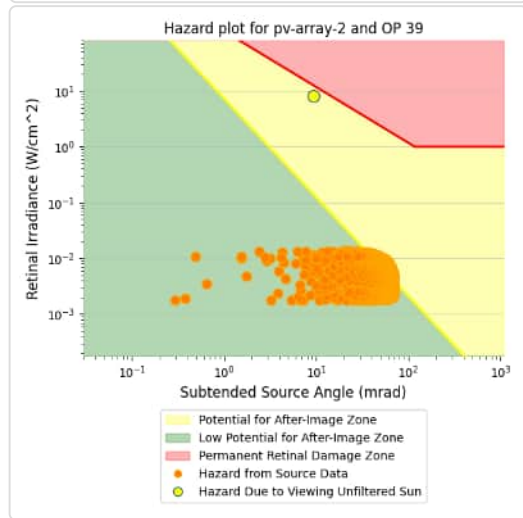
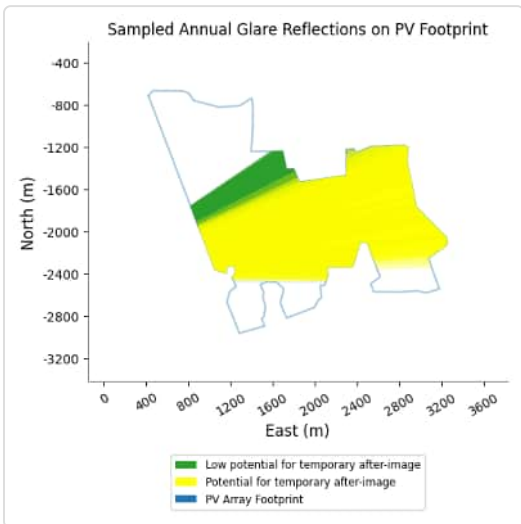
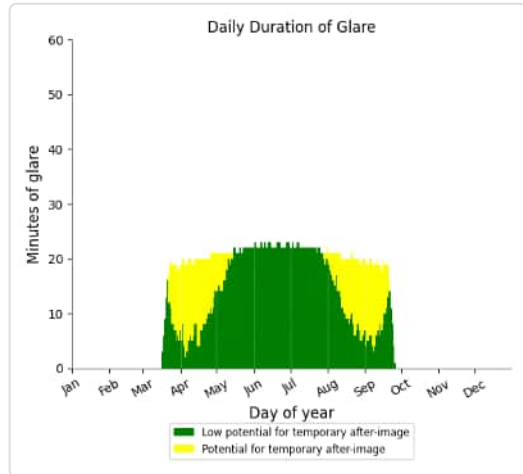
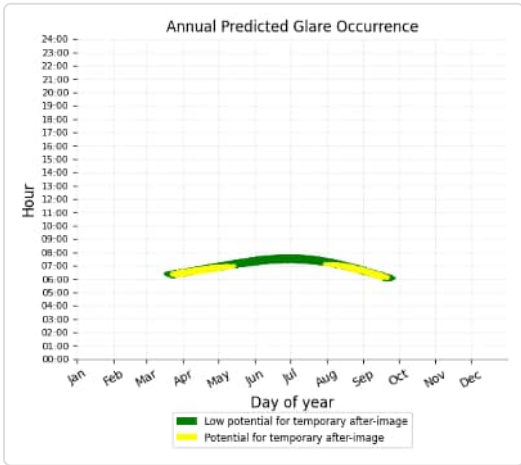




PV array 2 - OP Receptor (OP 39)

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

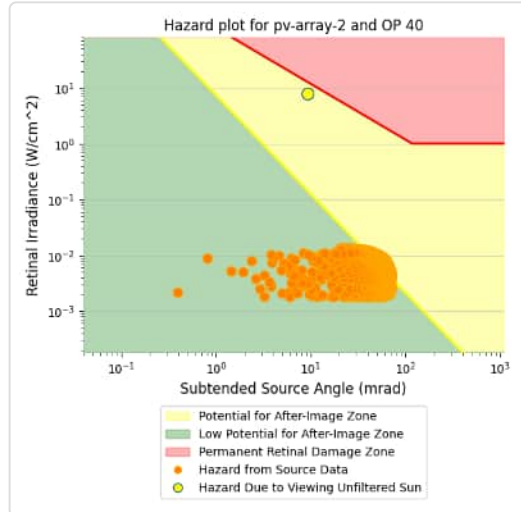
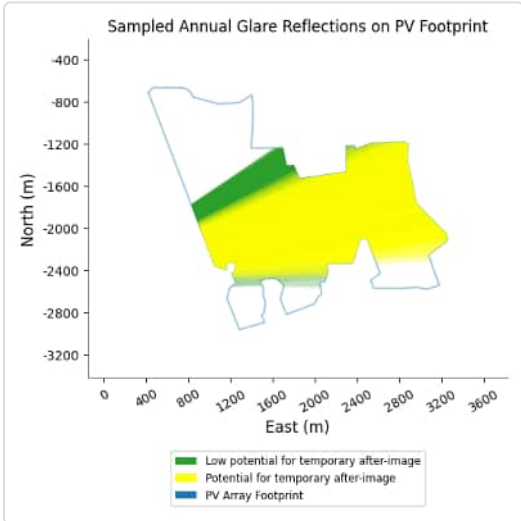
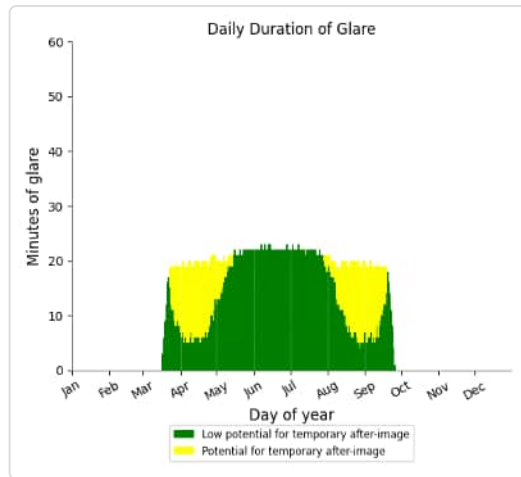
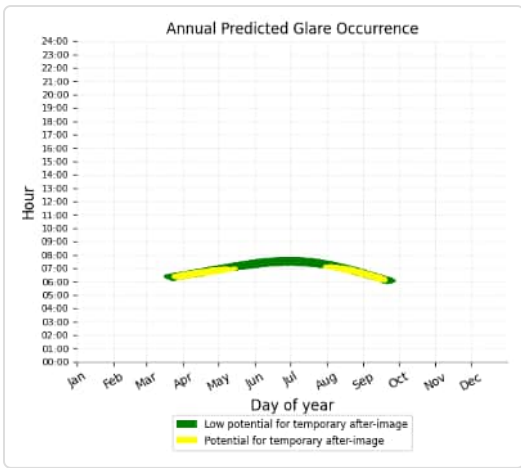
- 2,822 minutes of "green" glare with low potential to cause temporary after-image.
- 1,096 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 40)

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

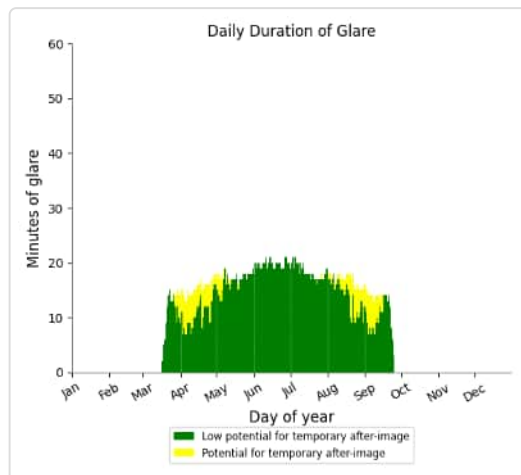
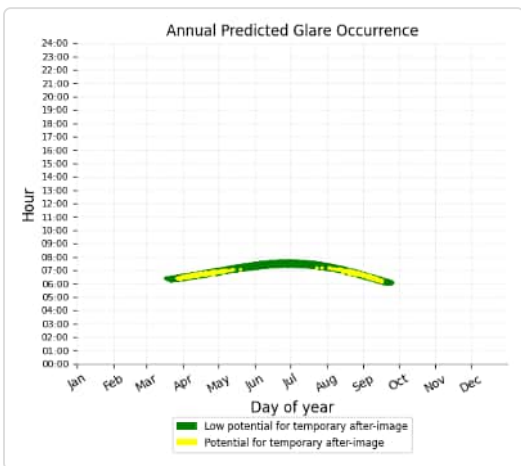
- 2,818 minutes of "green" glare with low potential to cause temporary after-image.
- 1,061 minutes of "yellow" glare with potential to cause temporary after-image.

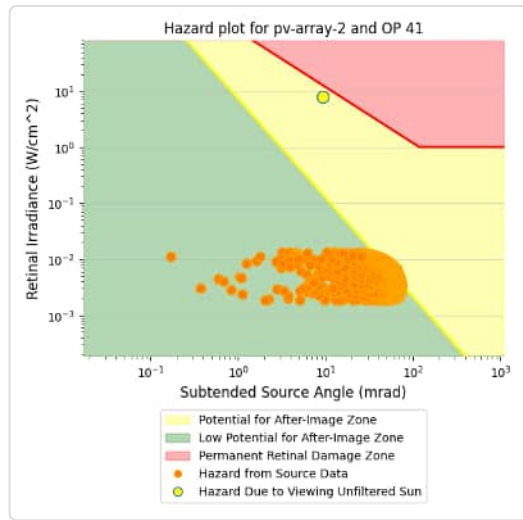
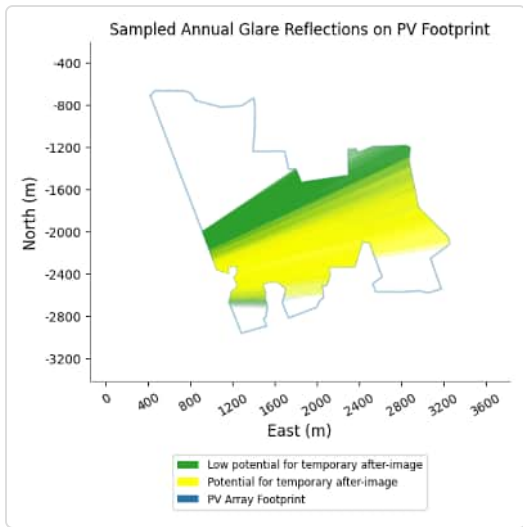


PV array 2 - OP Receptor (OP 41)

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

- 2,834 minutes of "green" glare with low potential to cause temporary after-image.
- 357 minutes of "yellow" glare with potential to cause temporary after-image.

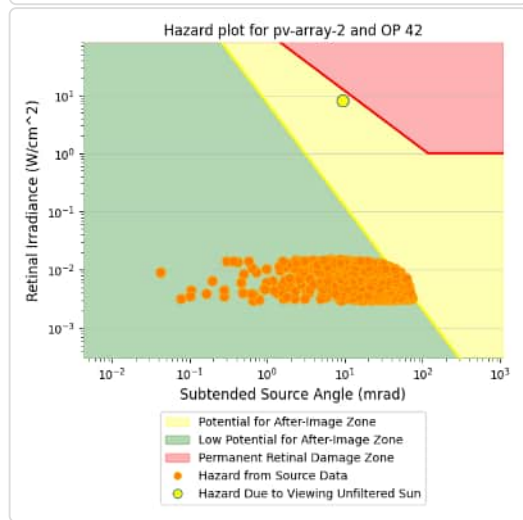
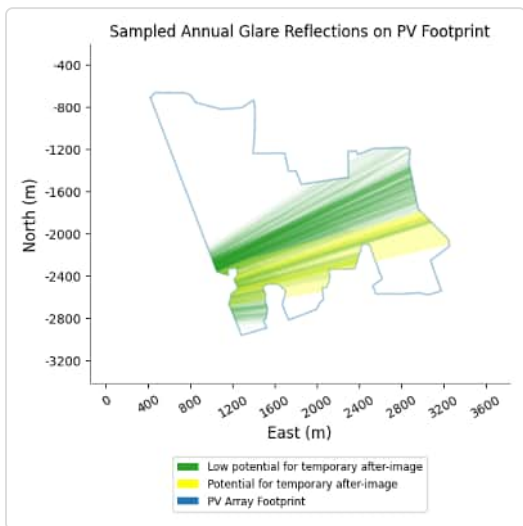
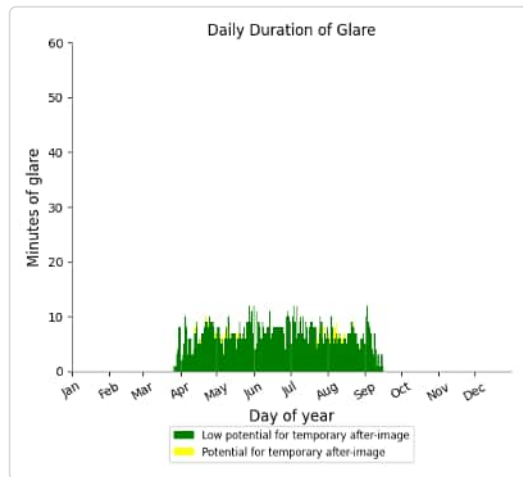
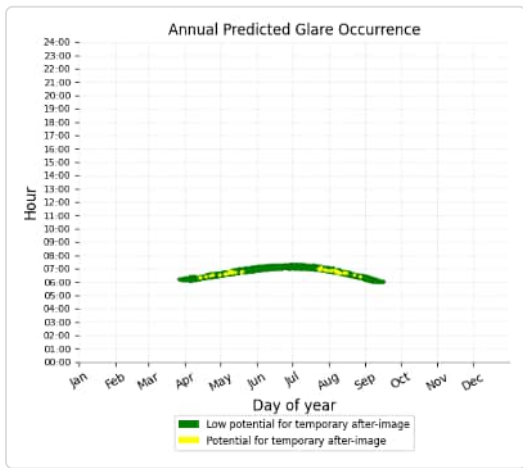




PV array 2 - OP Receptor (OP 42)

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

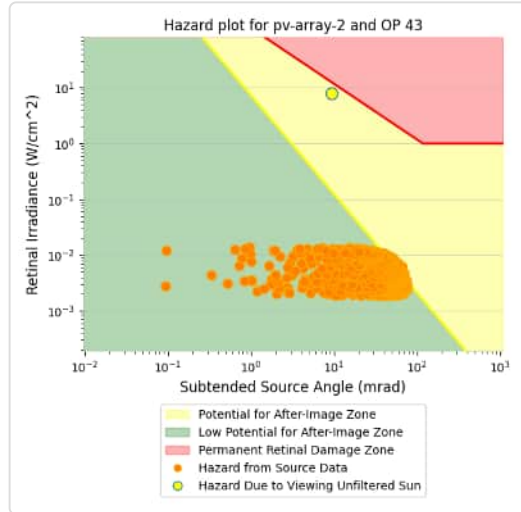
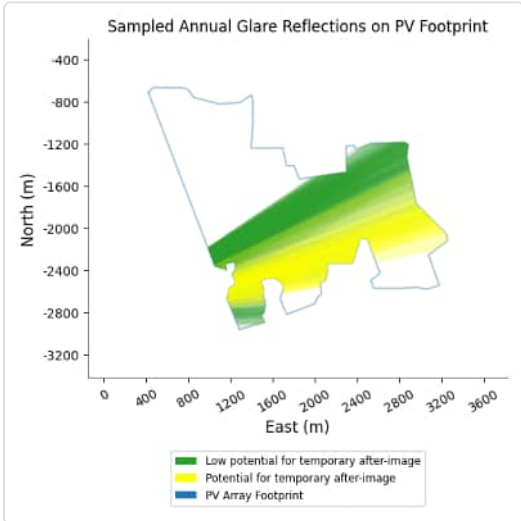
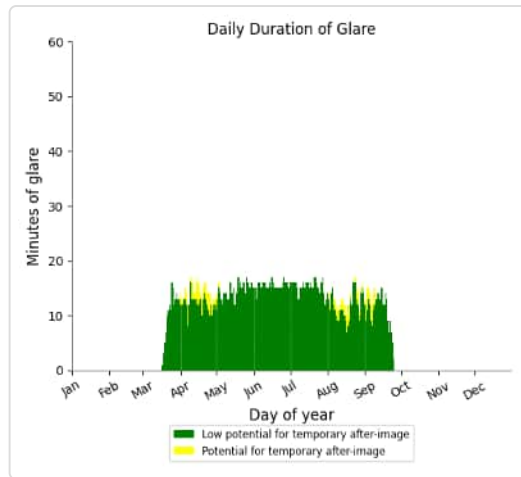
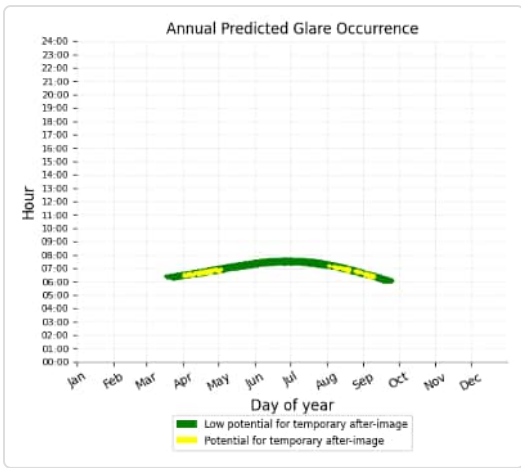
- 1,202 minutes of "green" glare with low potential to cause temporary after-image.
- 37 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 43)

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

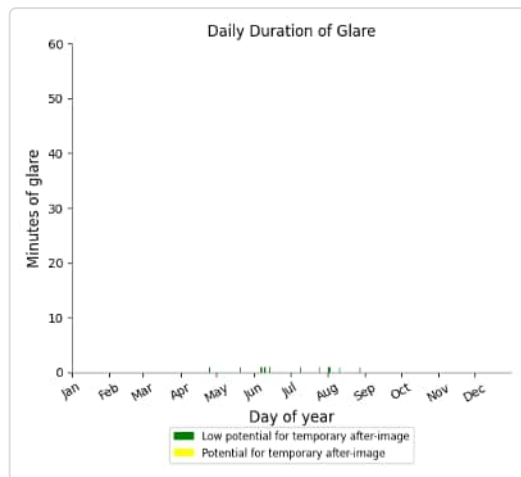
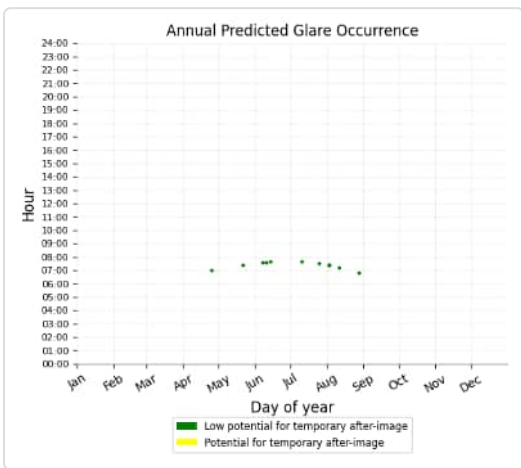
- 2,544 minutes of "green" glare with low potential to cause temporary after-image.
- 132 minutes of "yellow" glare with potential to cause temporary after-image.

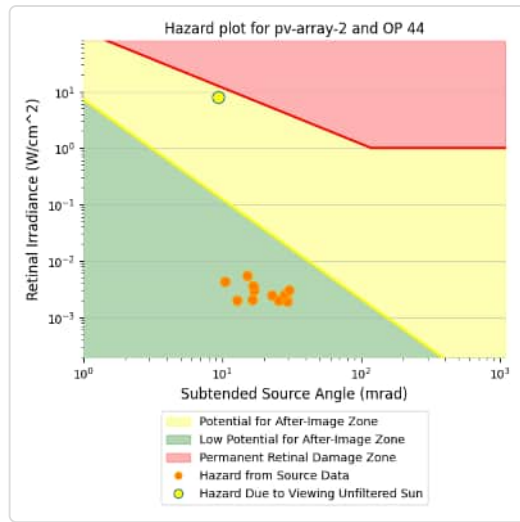
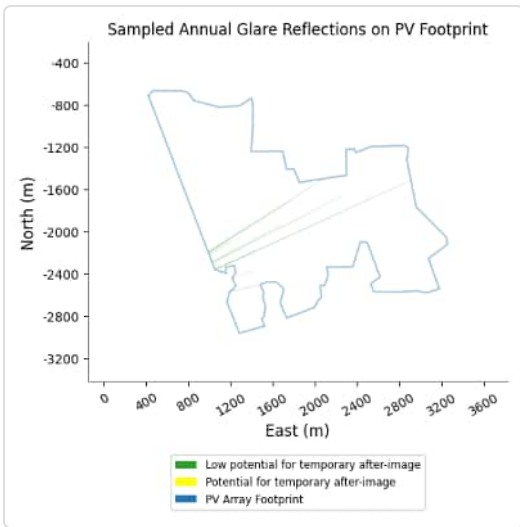


PV array 2 - OP Receptor (OP 44)

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

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





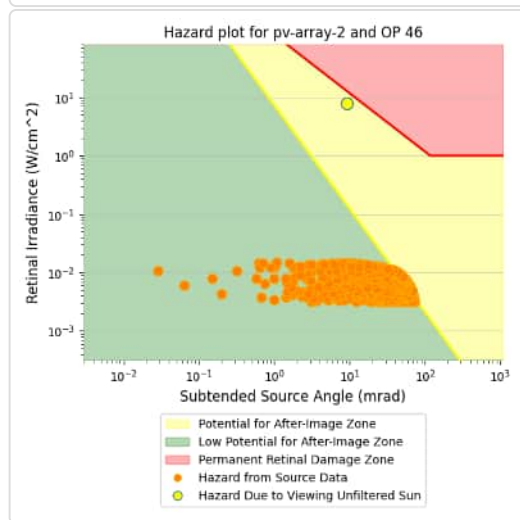
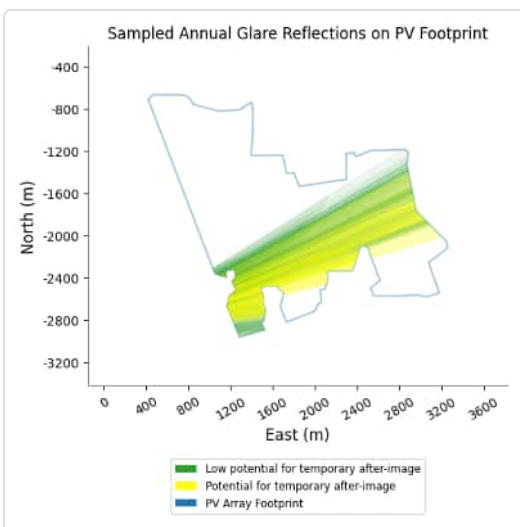
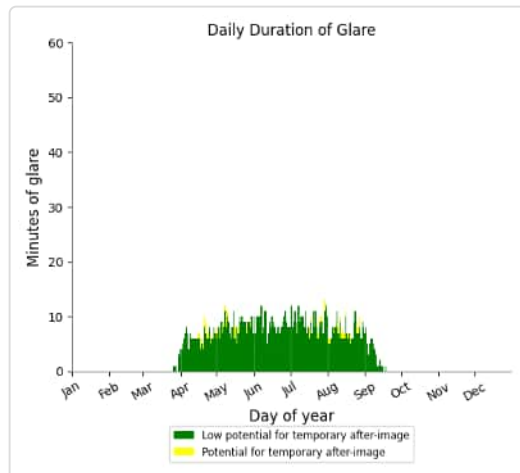
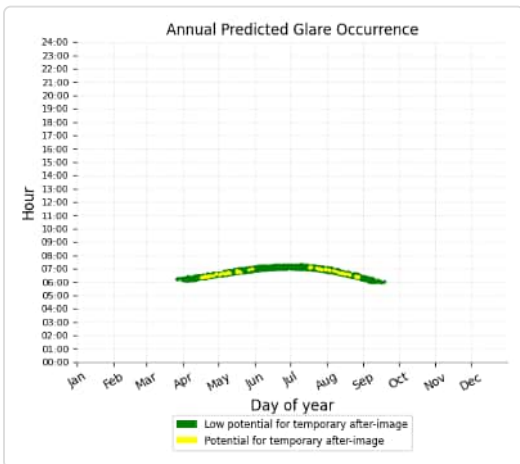
PV array 2 - OP Receptor (OP 45)

No glare found

PV array 2 - OP Receptor (OP 46)

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

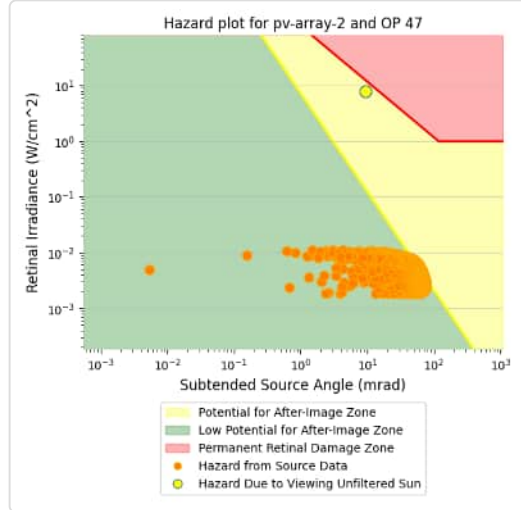
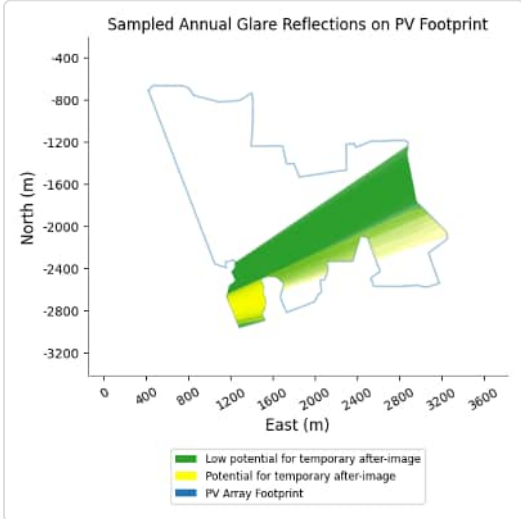
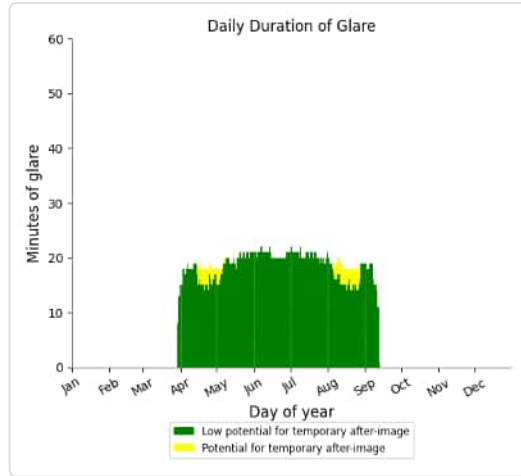
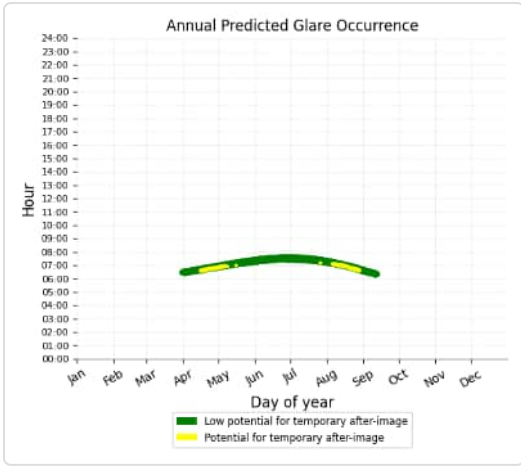
- 1,266 minutes of "green" glare with low potential to cause temporary after-image.
- 59 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 47)

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

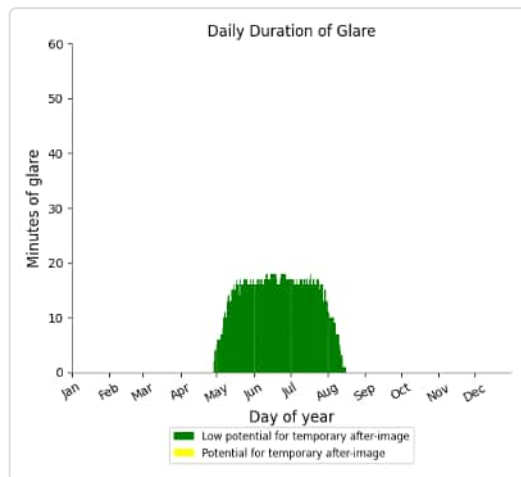
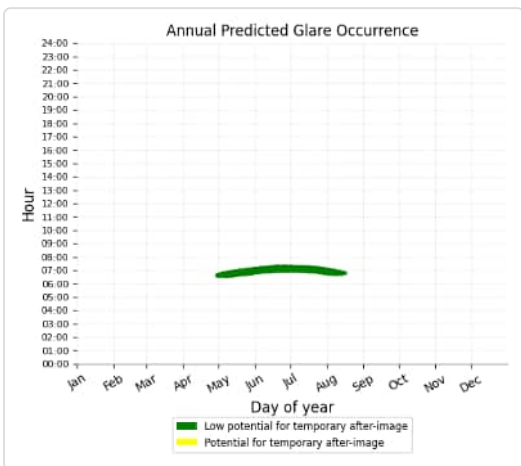
- 3,076 minutes of "green" glare with low potential to cause temporary after-image.
- 136 minutes of "yellow" glare with potential to cause temporary after-image.

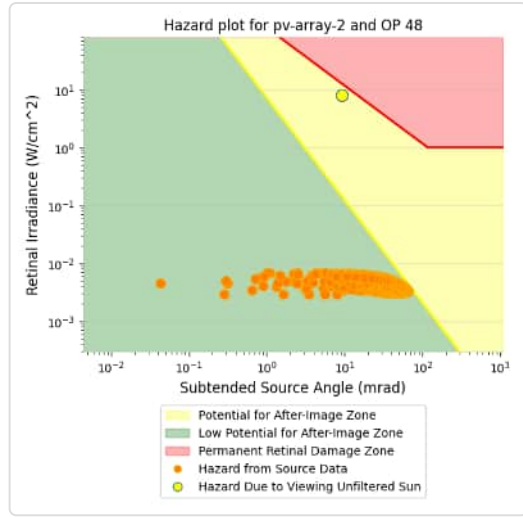
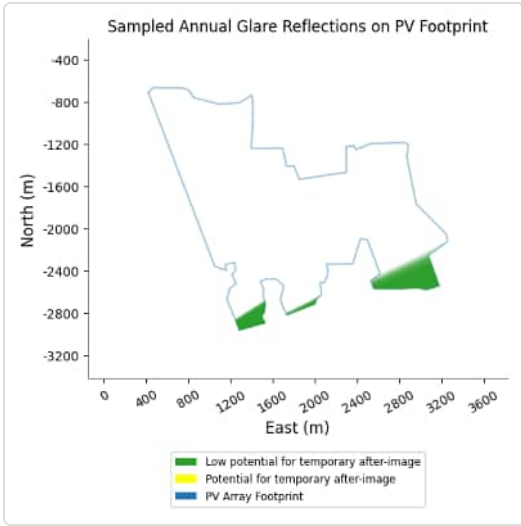


PV array 2 - OP Receptor (OP 48)

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

- 1,546 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

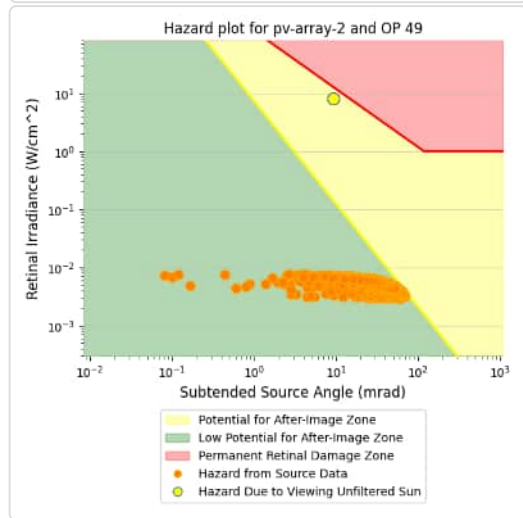
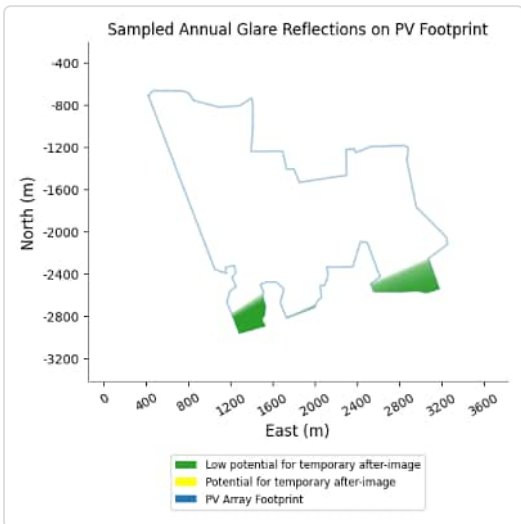
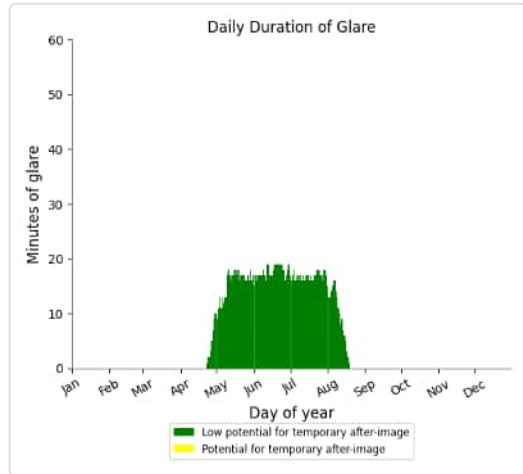
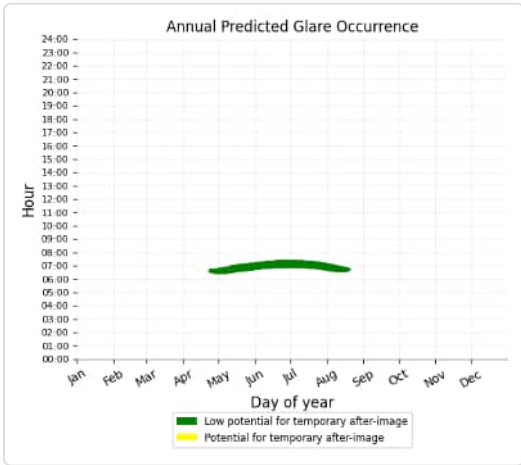




PV array 2 - OP Receptor (OP 49)

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

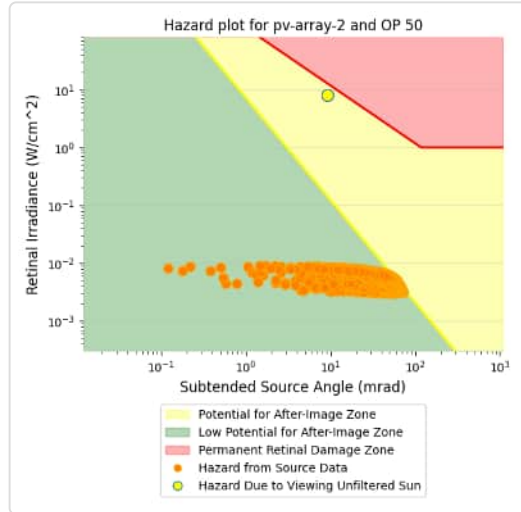
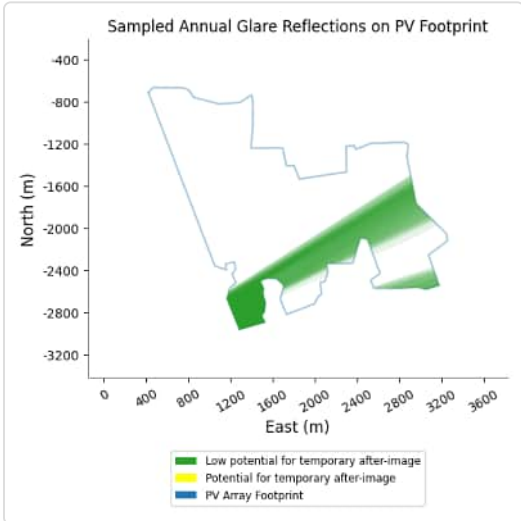
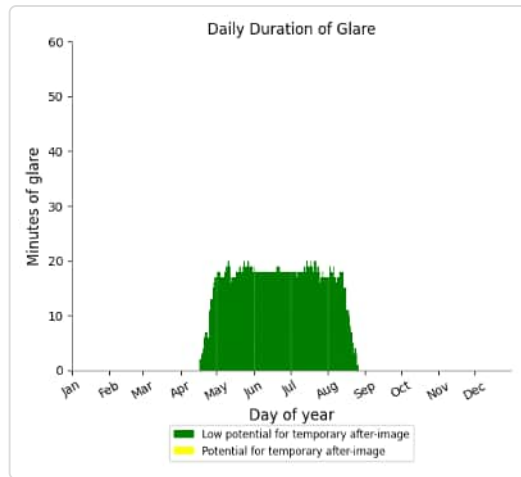
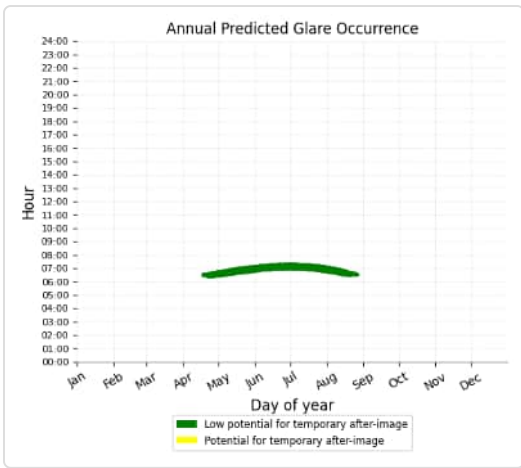
- 1,761 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 50)

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

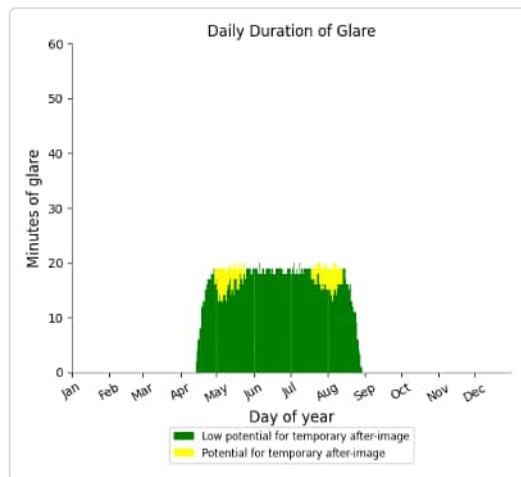
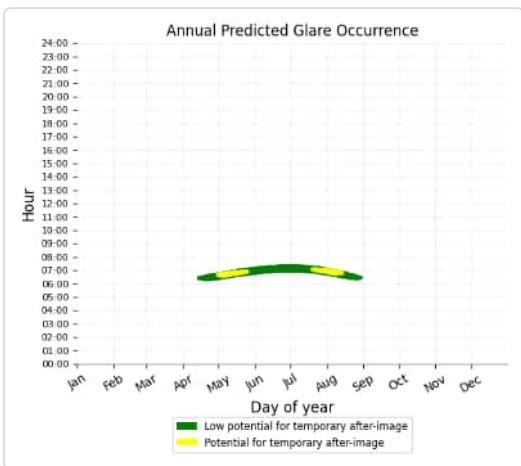
- 2,136 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

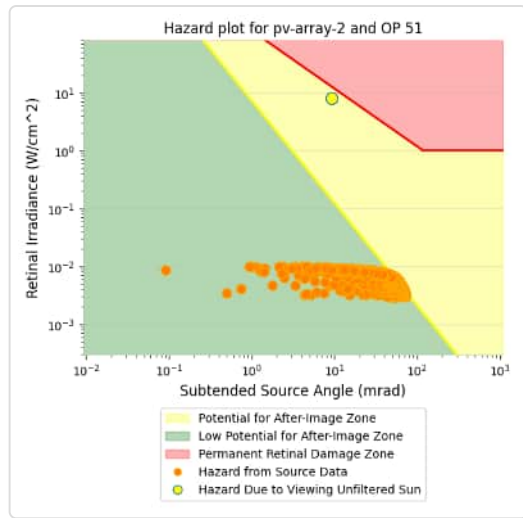
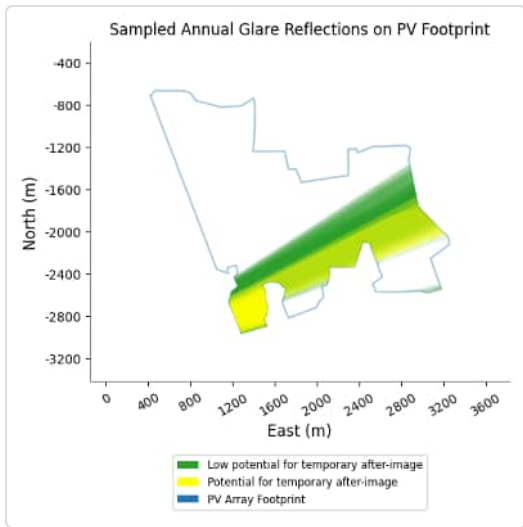


PV array 2 - OP Receptor (OP 51)

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

- 2,206 minutes of "green" glare with low potential to cause temporary after-image.
- 195 minutes of "yellow" glare with potential to cause temporary after-image.

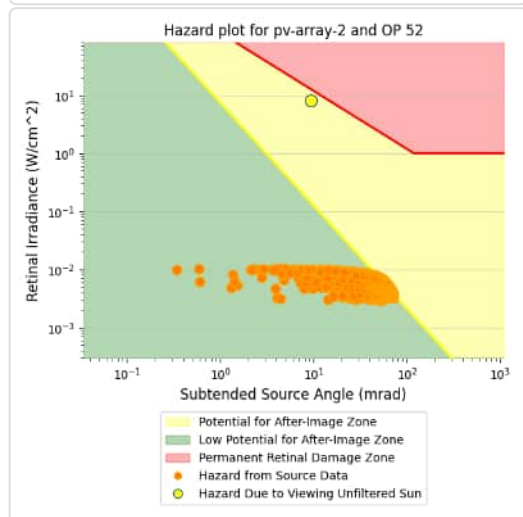
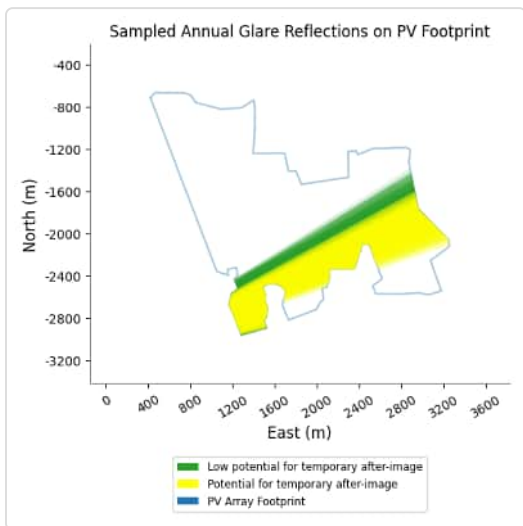
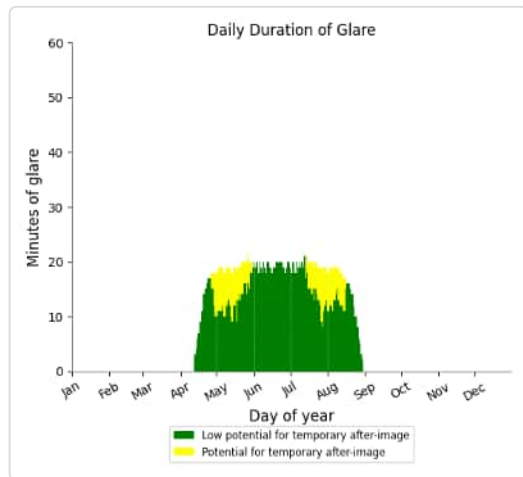
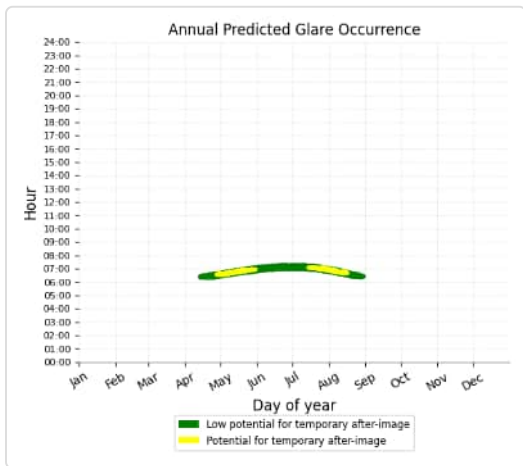




PV array 2 - OP Receptor (OP 52)

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

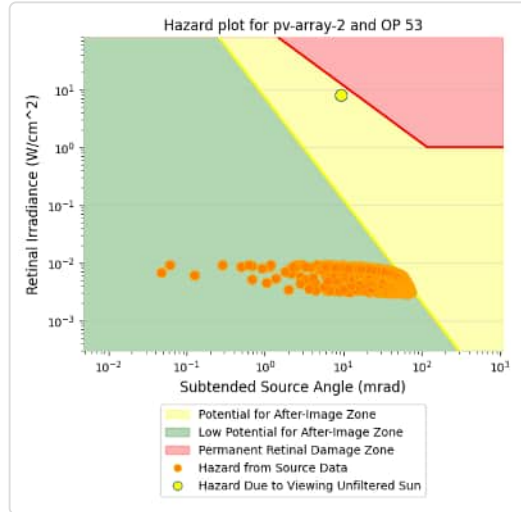
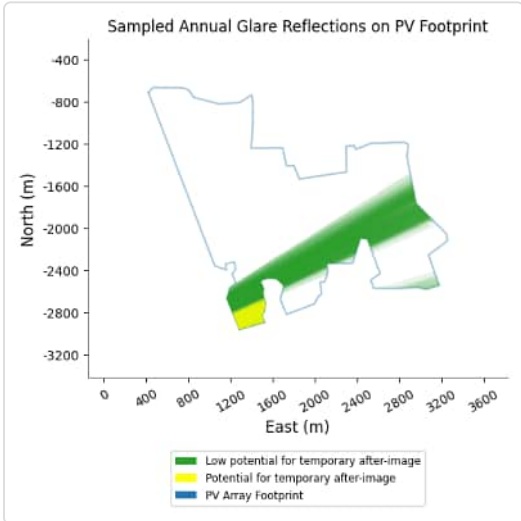
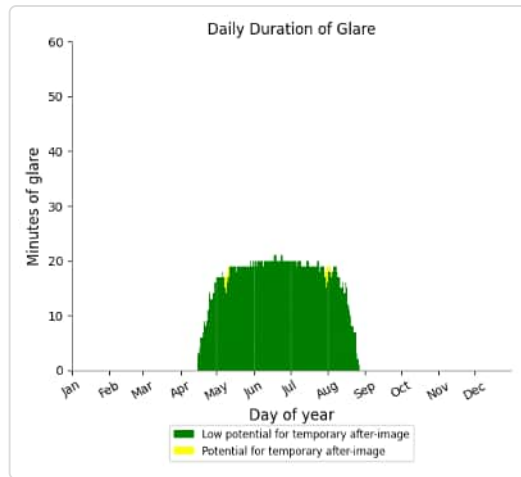
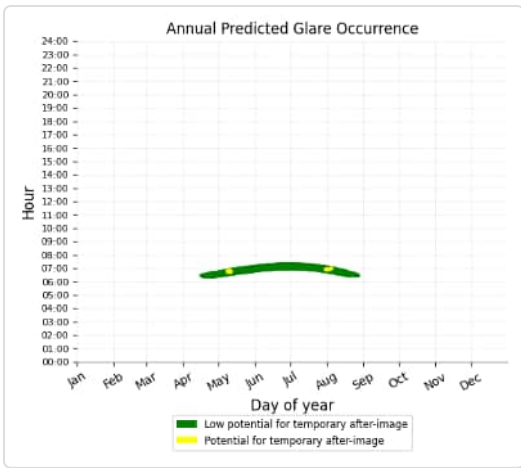
- 2,029 minutes of "green" glare with low potential to cause temporary after-image.
- 415 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 53)

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

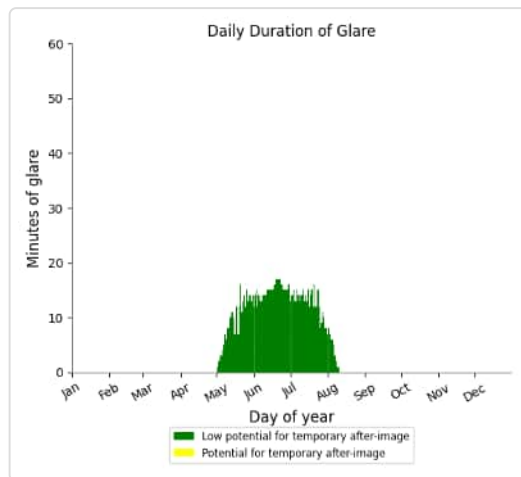
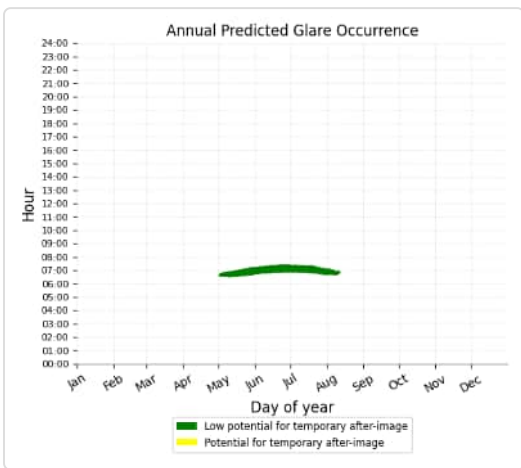
- 2,260 minutes of "green" glare with low potential to cause temporary after-image.
- 19 minutes of "yellow" glare with potential to cause temporary after-image.

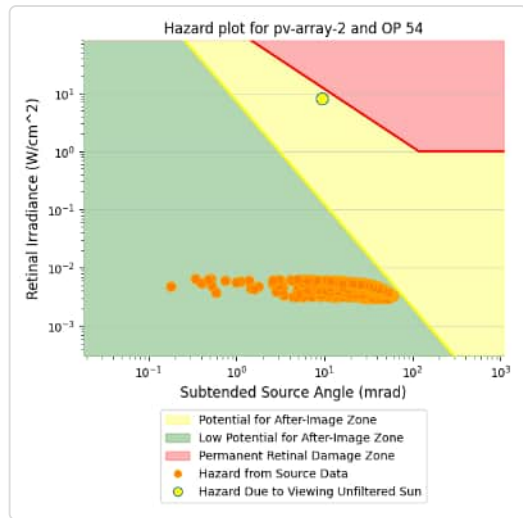
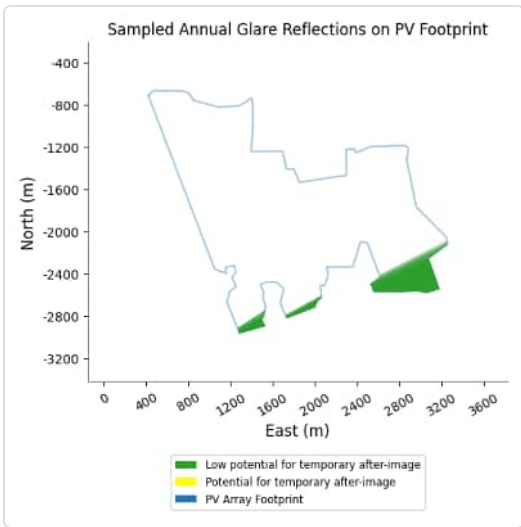


PV array 2 - OP Receptor (OP 54)

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

- 1,176 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.





PV array 3 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	35	0
OP: OP 16	188	0
OP: OP 17	342	0
OP: OP 18	0	0
OP: OP 19	80	0
OP: OP 20	232	0
OP: OP 21	1929	577
OP: OP 22	3101	339
OP: OP 23	1316	0
OP: OP 24	1497	0
OP: OP 25	1789	0
OP: OP 26	1911	0
OP: OP 27	2090	0
OP: OP 28	1784	0
OP: OP 29	1681	0
OP: OP 30	1548	0
OP: OP 31	1270	0
OP: OP 32	2325	0
OP: OP 33	2429	0
OP: OP 34	3261	0
OP: OP 35	3101	0

OP: OP 36	558	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
OP: OP 41	0	0
OP: OP 42	0	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0

PV array 3 - OP Receptor (OP 1)

No glare found

PV array 3 - OP Receptor (OP 2)

No glare found

PV array 3 - OP Receptor (OP 3)

No glare found

PV array 3 - OP Receptor (OP 4)

No glare found

PV array 3 - OP Receptor (OP 5)

No glare found

PV array 3 - OP Receptor (OP 6)

No glare found

PV array 3 - OP Receptor (OP 7)

No glare found

PV array 3 - OP Receptor (OP 8)

No glare found

PV array 3 - OP Receptor (OP 9)

No glare found

PV array 3 - OP Receptor (OP 10)

No glare found

PV array 3 - OP Receptor (OP 11)

No glare found

PV array 3 - OP Receptor (OP 12)

No glare found

PV array 3 - OP Receptor (OP 13)

No glare found

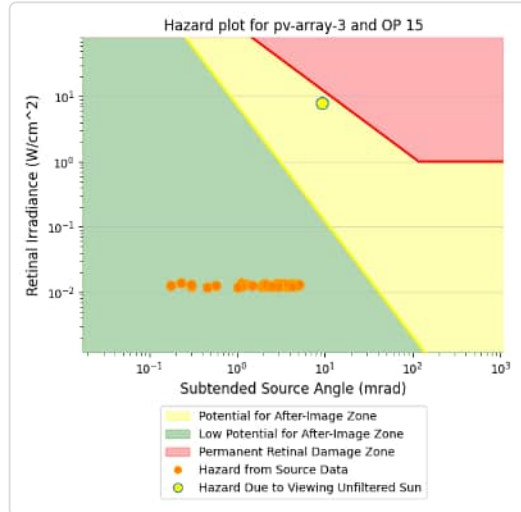
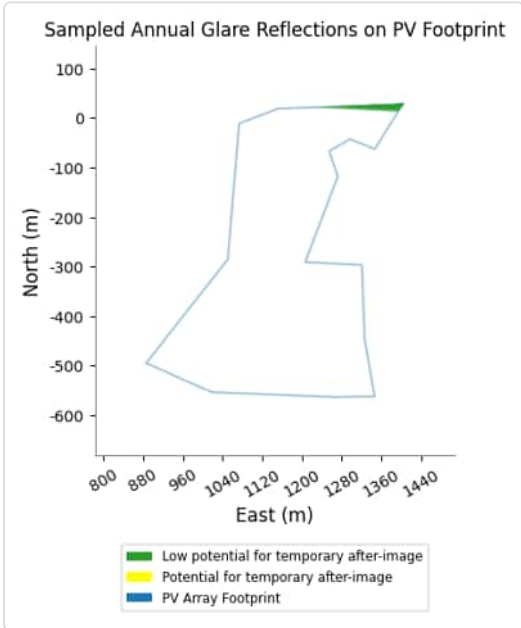
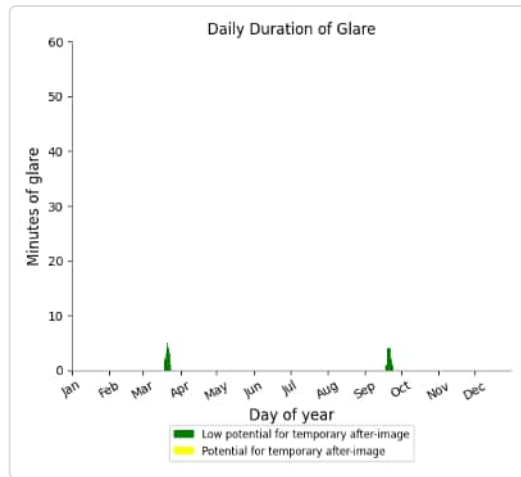
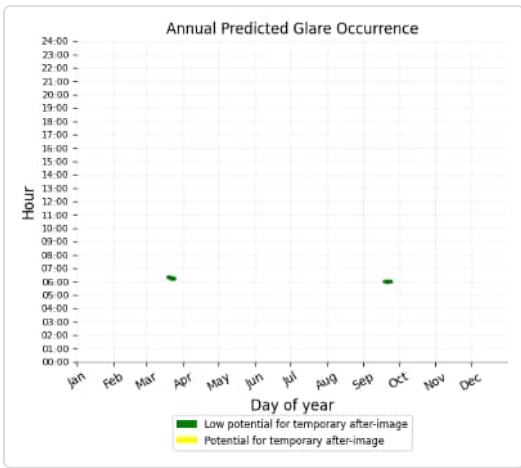
PV array 3 - OP Receptor (OP 14)

No glare found

PV array 3 - OP Receptor (OP 15)

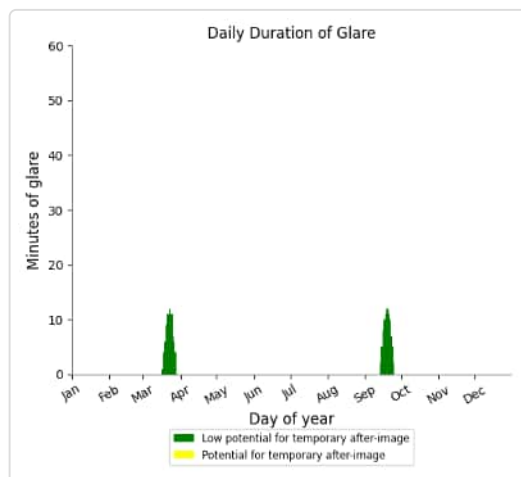
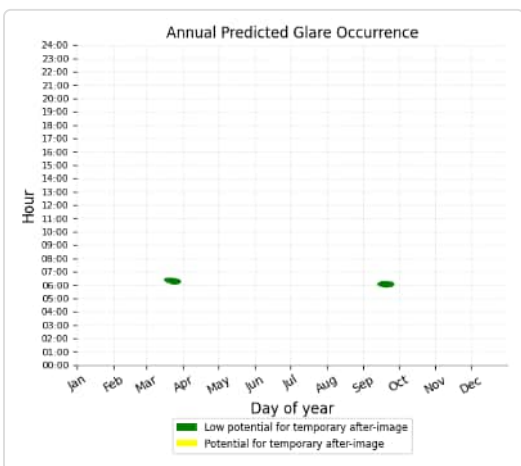
PV array is expected to produce the following glare for receptors at this location:

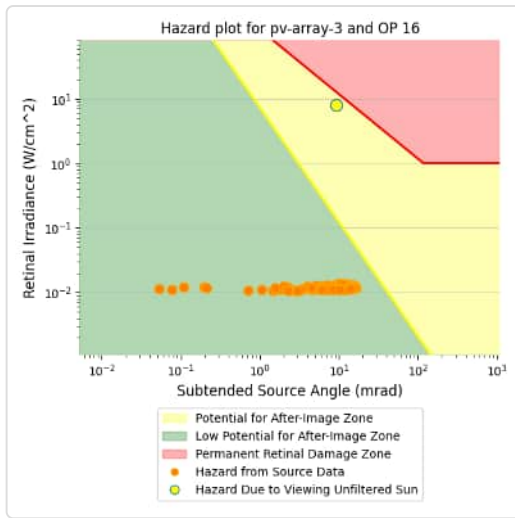
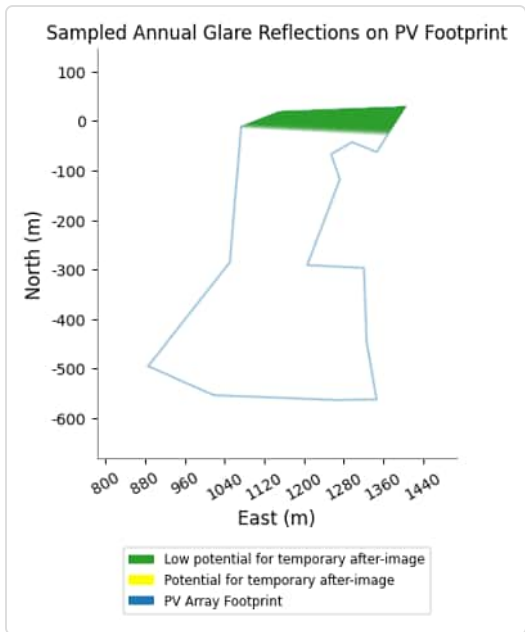
- 35 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 16)

- PV array is expected to produce the following glare for receptors at this location:
- 188 minutes of "green" glare with low potential to cause temporary after-image.
 - 0 minutes of "yellow" glare with potential to cause temporary after-image.

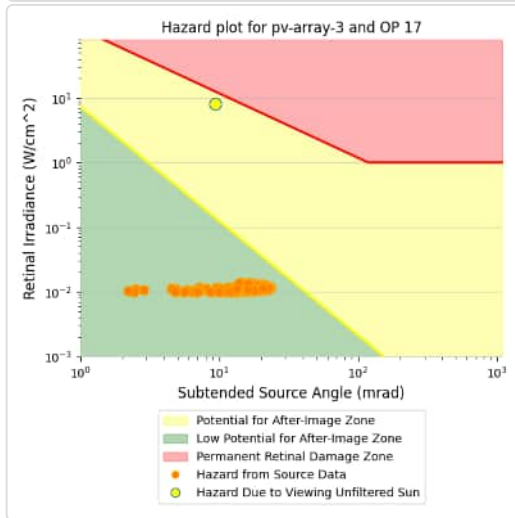
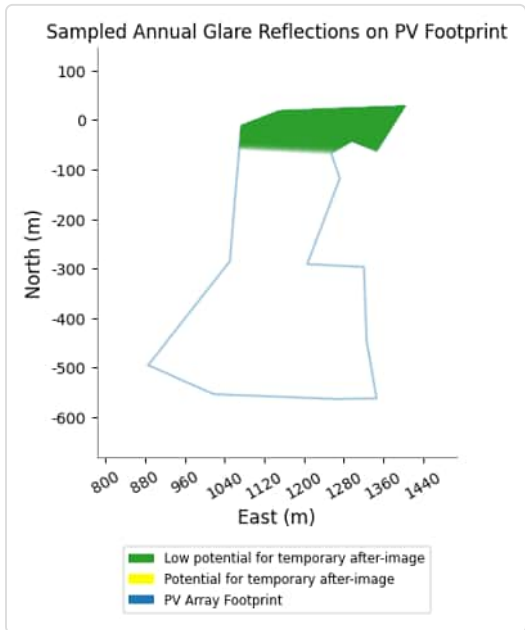
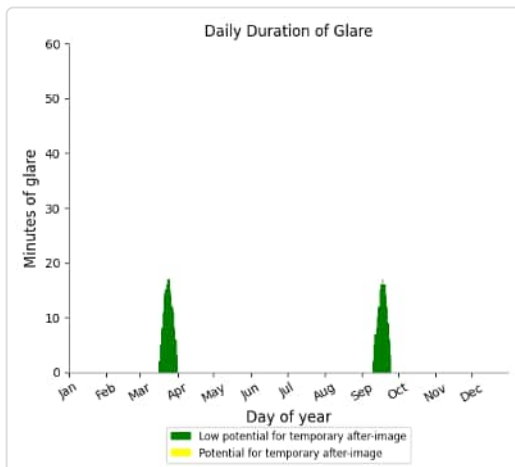
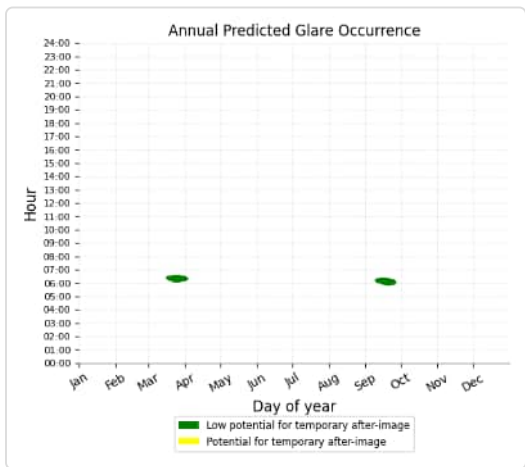




PV array 3 - OP Receptor (OP 17)

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

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



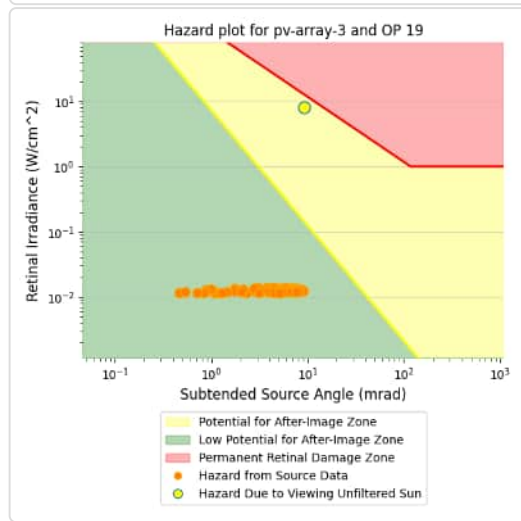
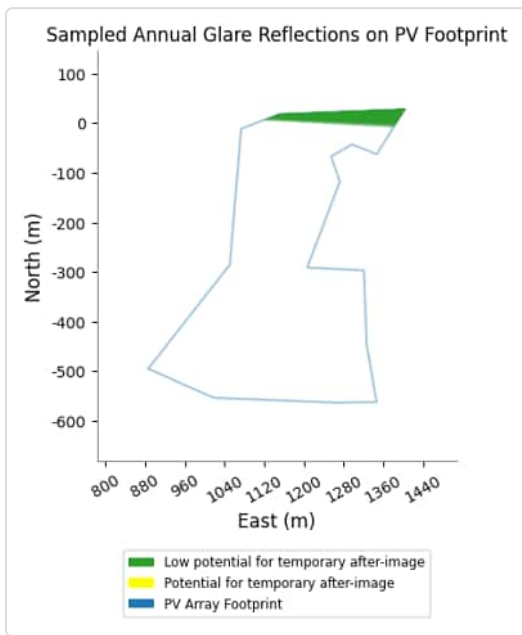
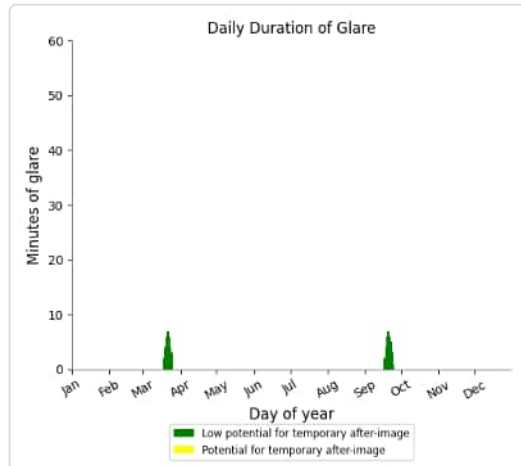
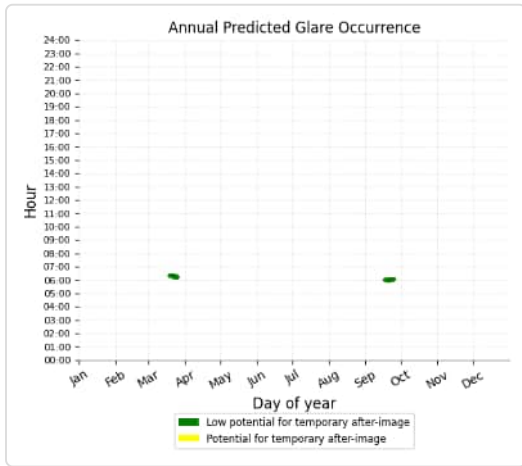
PV array 3 - OP Receptor (OP 18)

No glare found

PV array 3 - OP Receptor (OP 19)

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

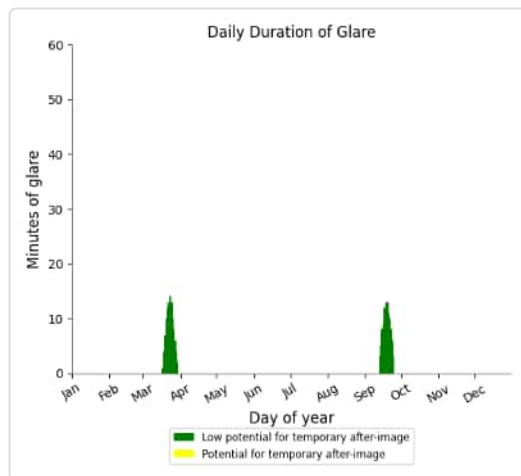
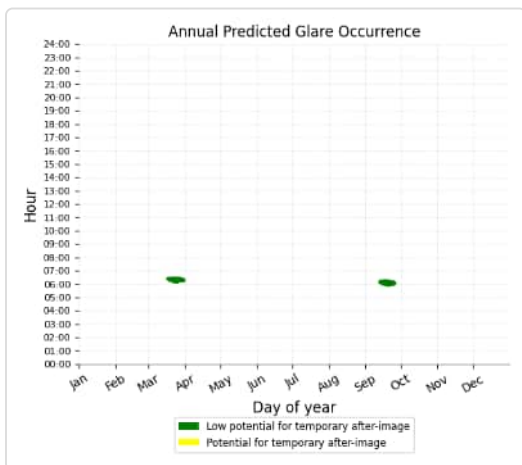
- 80 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

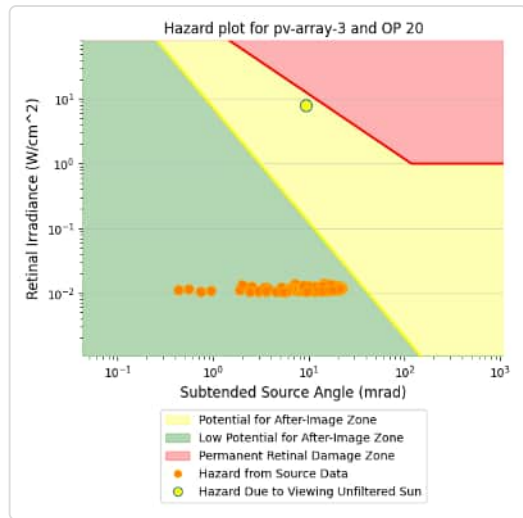
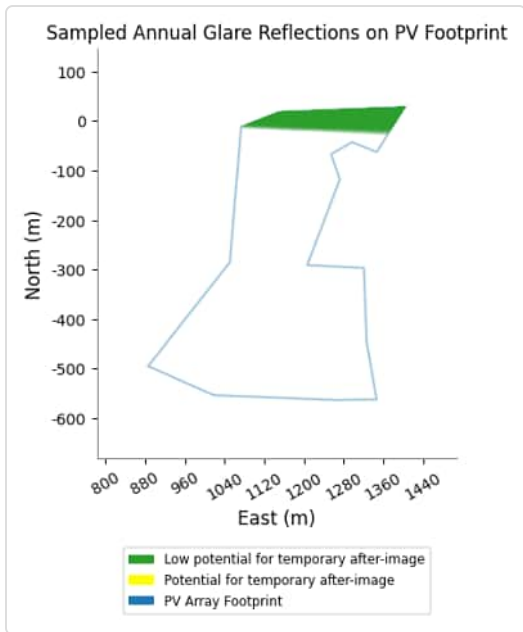


PV array 3 - OP Receptor (OP 20)

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

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

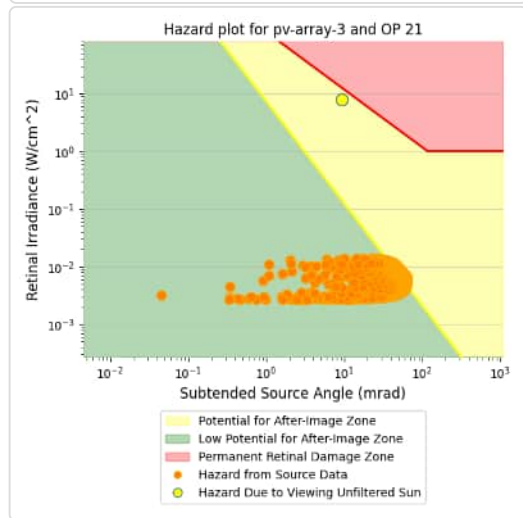
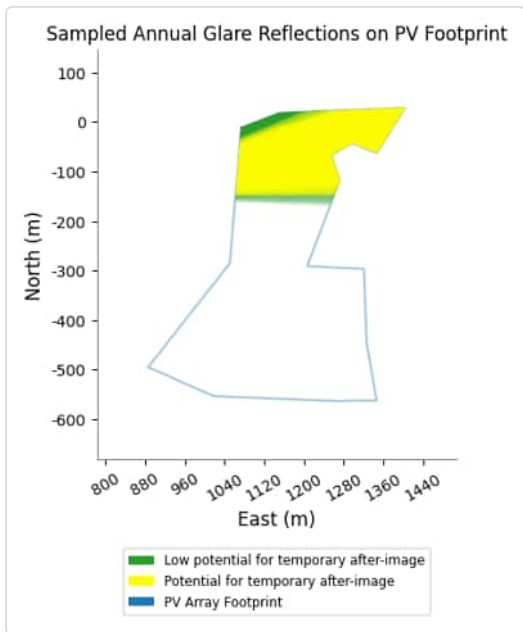
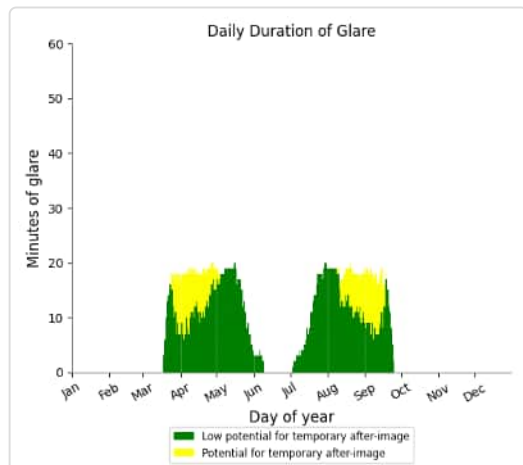
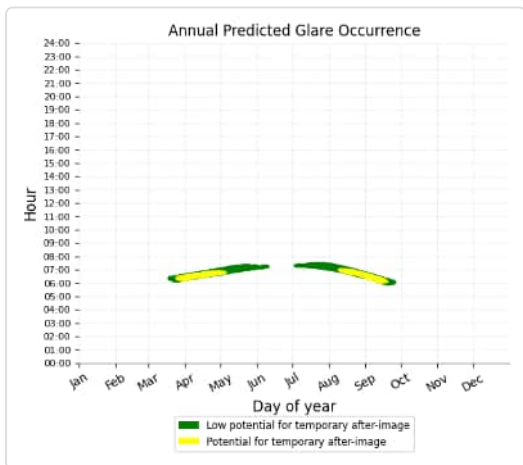




PV array 3 - OP Receptor (OP 21)

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

- 1,929 minutes of "green" glare with low potential to cause temporary after-image.
- 577 minutes of "yellow" glare with potential to cause temporary after-image.

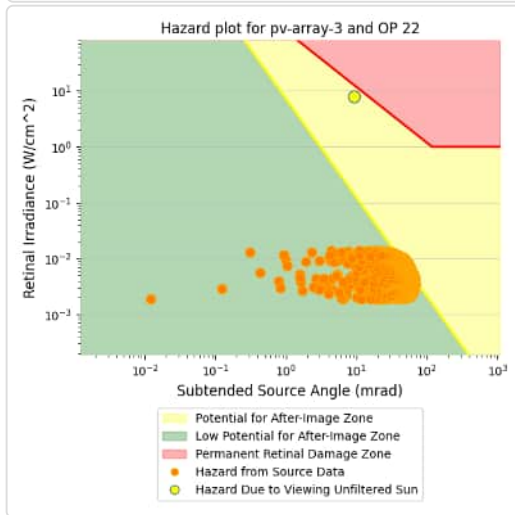
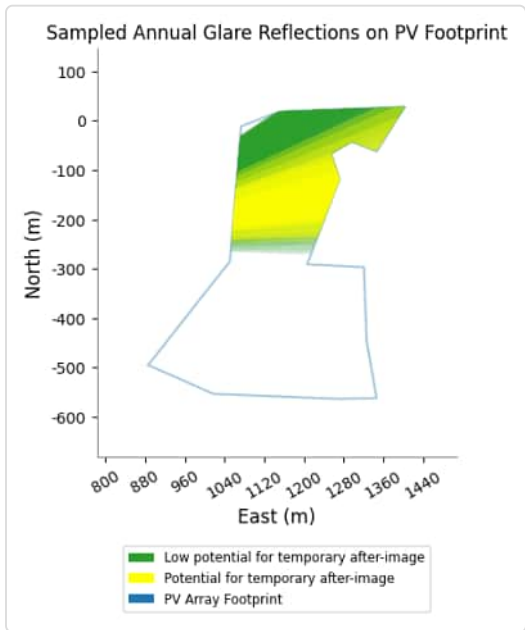
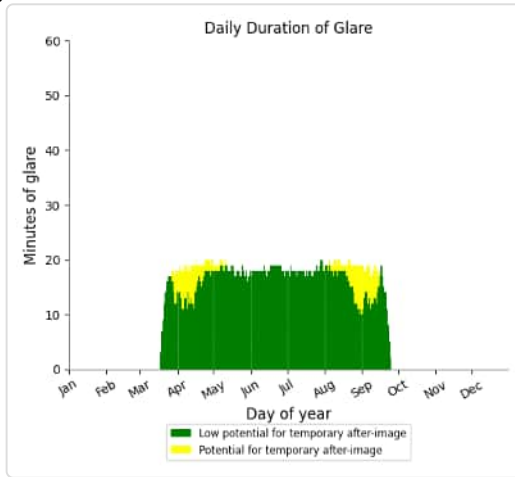
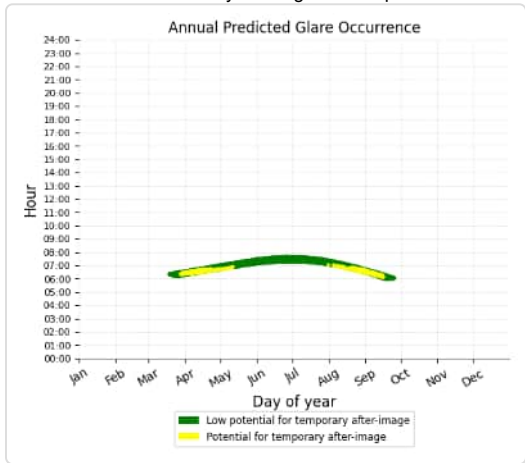


PV array 3 - OP Receptor (OP 22)

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

- 3,101 minutes of "green" glare with low potential to cause temporary after-image.

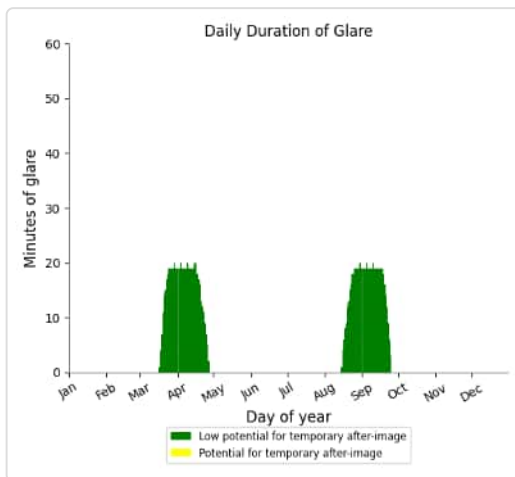
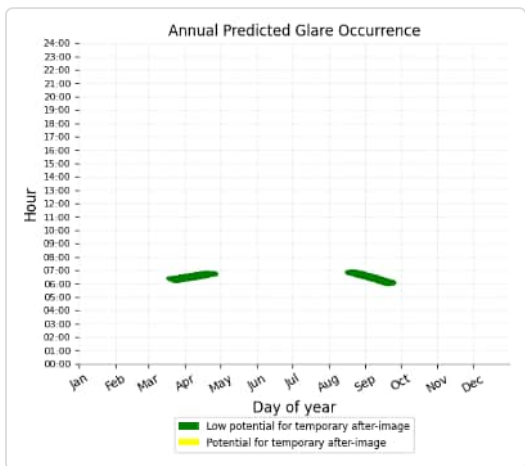
- 339 minutes of "yellow" glare with potential to cause temporary after-image.

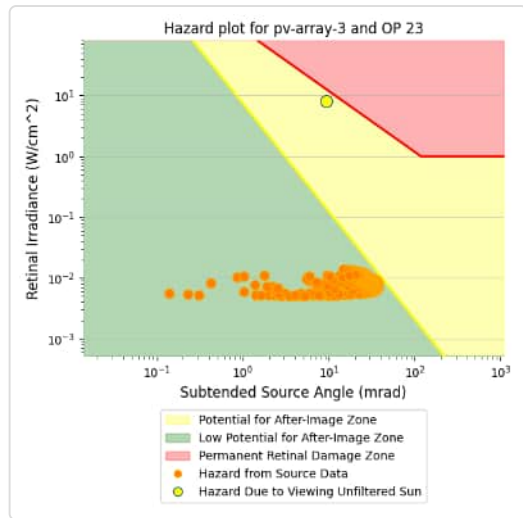
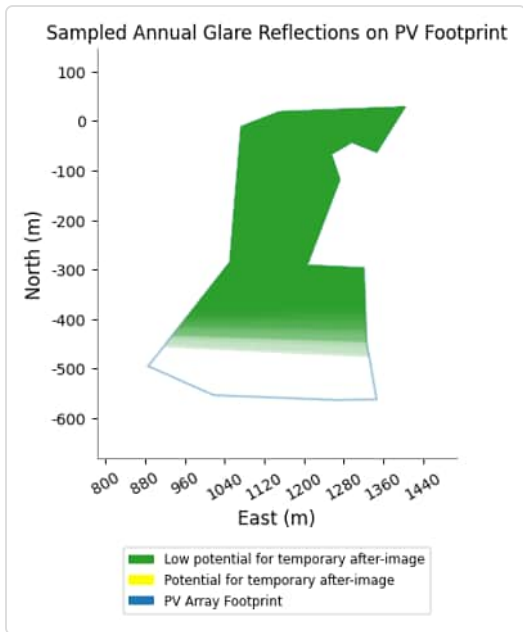


PV array 3 - OP Receptor (OP 23)

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

- 1,316 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

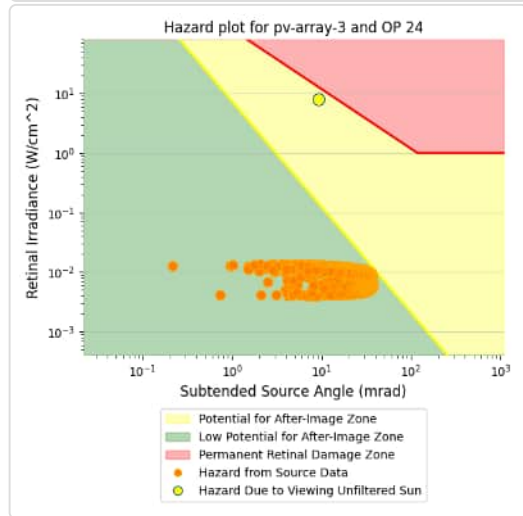
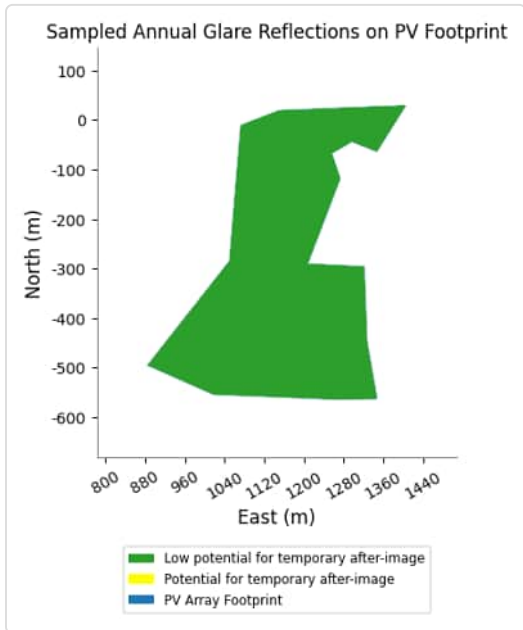
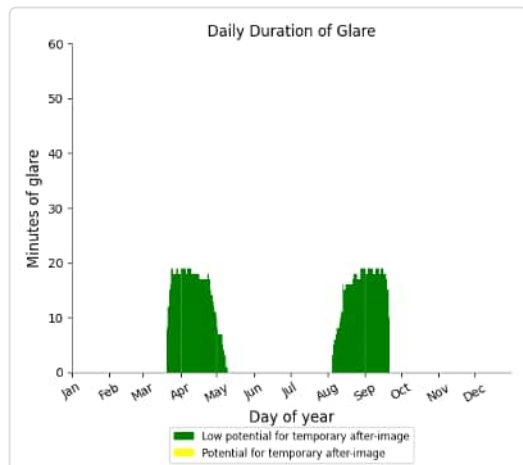
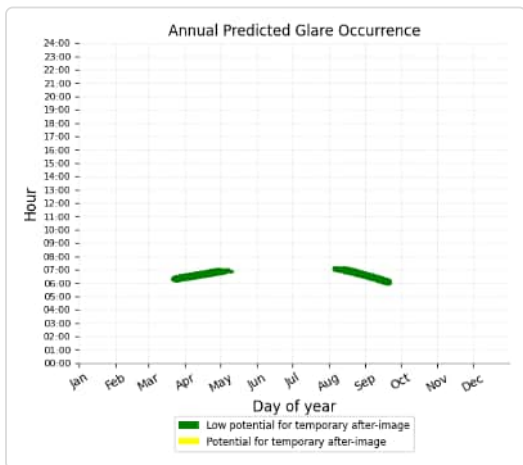




PV array 3 - OP Receptor (OP 24)

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

- 1,497 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

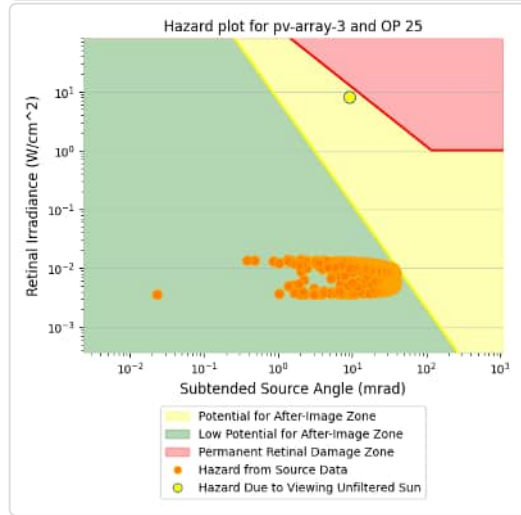
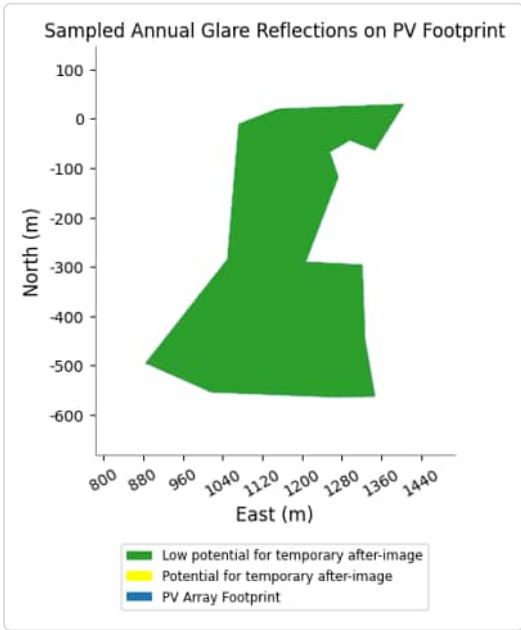
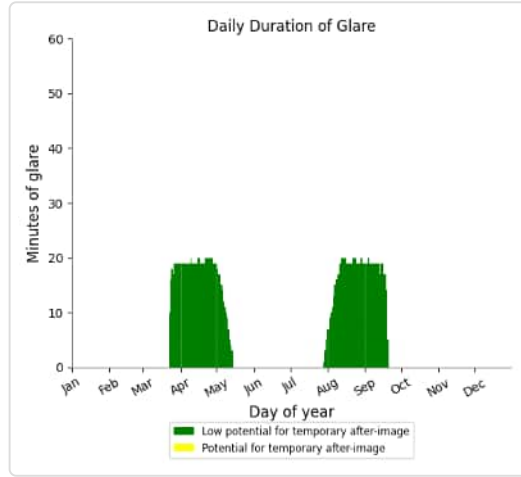
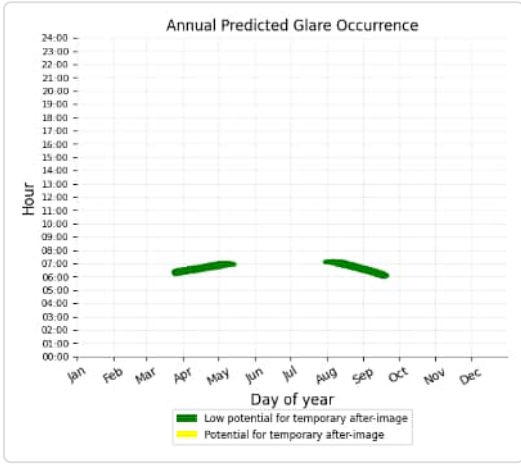


PV array 3 - OP Receptor (OP 25)

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

- 1,789 minutes of "green" glare with low potential to cause temporary after-image.

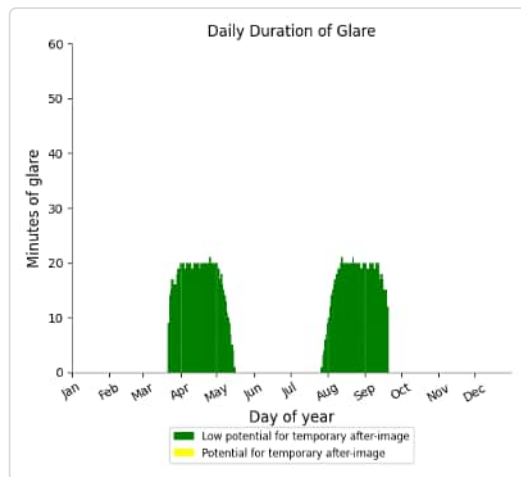
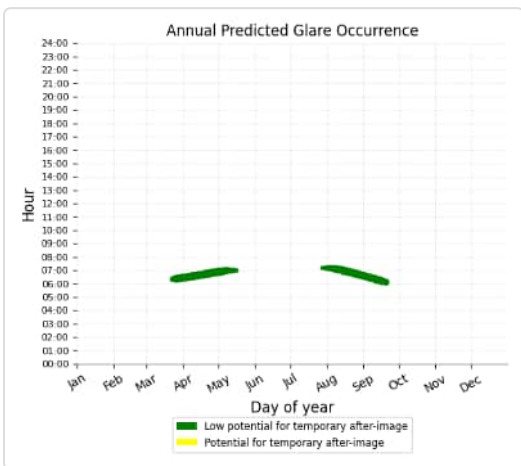
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

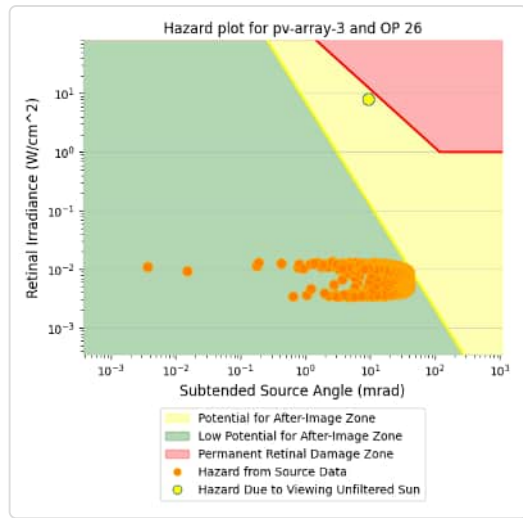
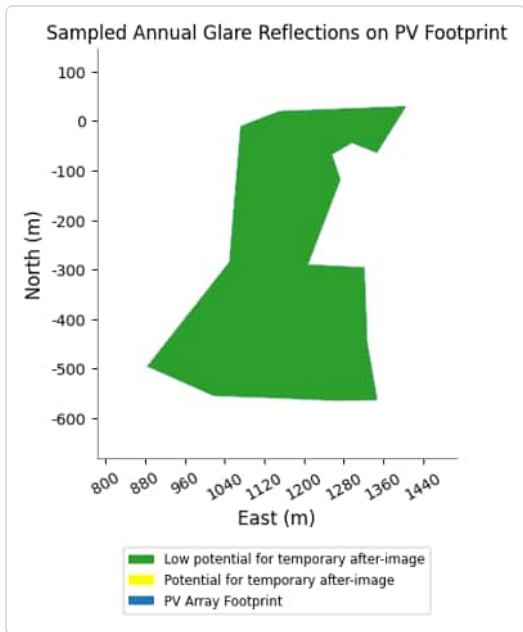


PV array 3 - OP Receptor (OP 26)

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

- 1,911 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

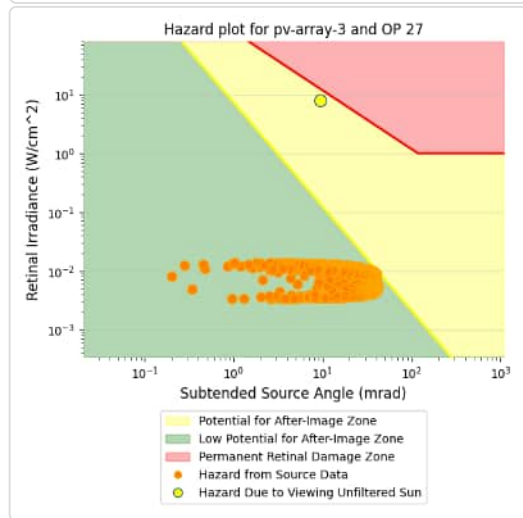
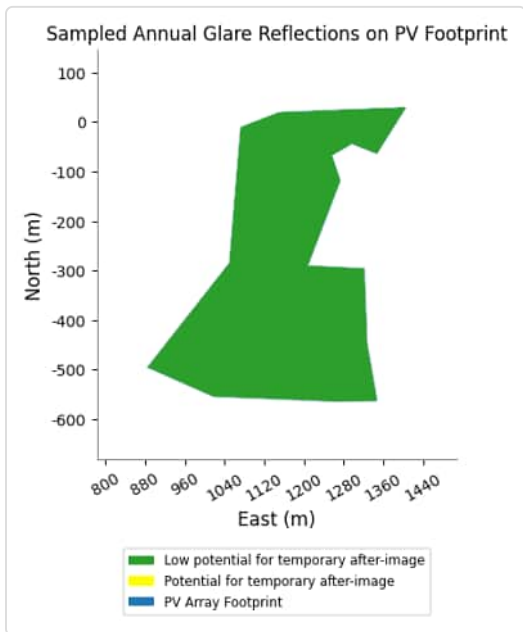
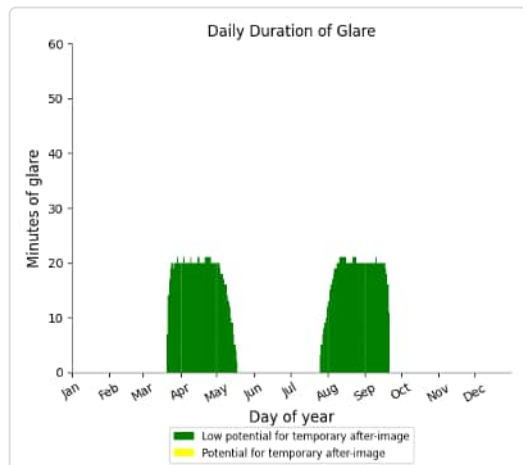
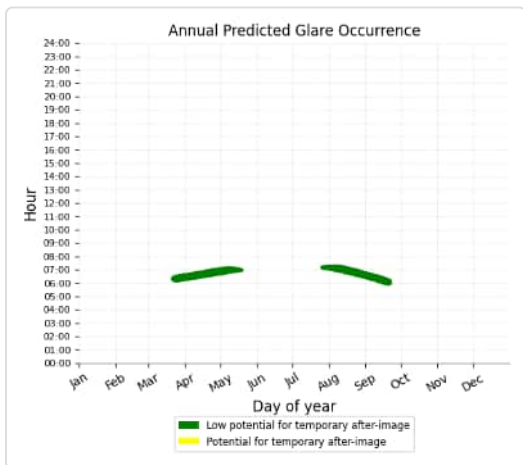




PV array 3 - OP Receptor (OP 27)

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

- 2,090 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

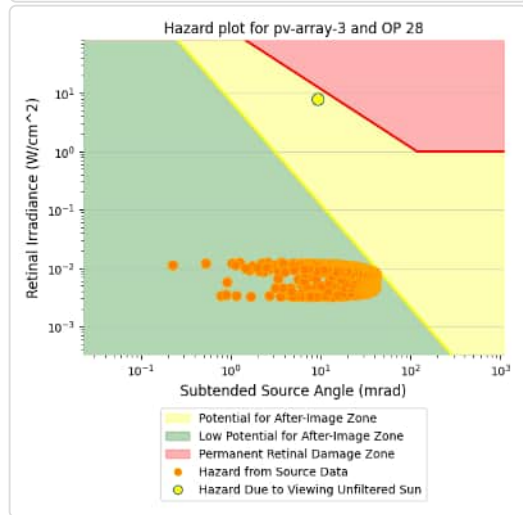
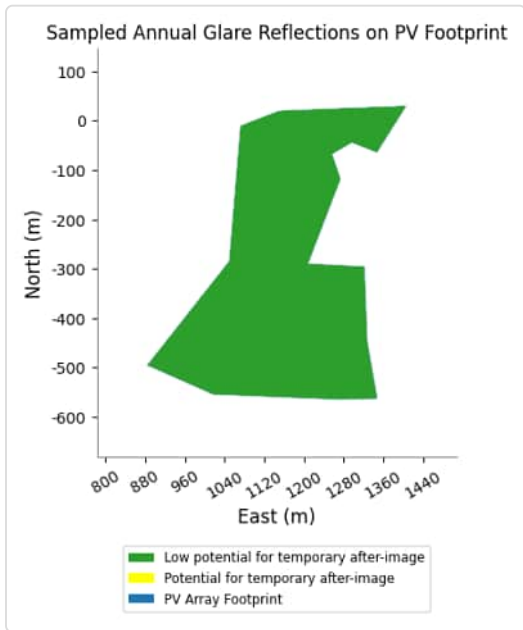
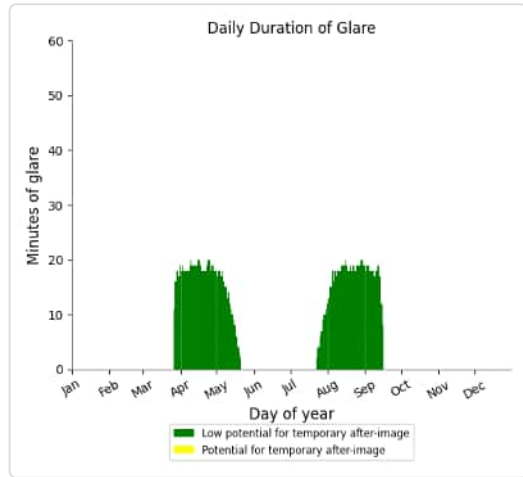
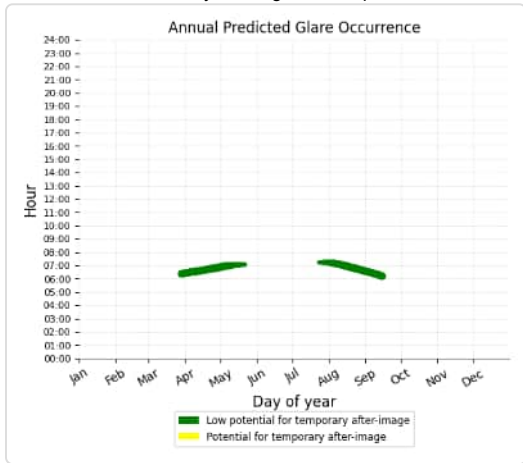


PV array 3 - OP Receptor (OP 28)

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

- 1,784 minutes of "green" glare with low potential to cause temporary after-image.

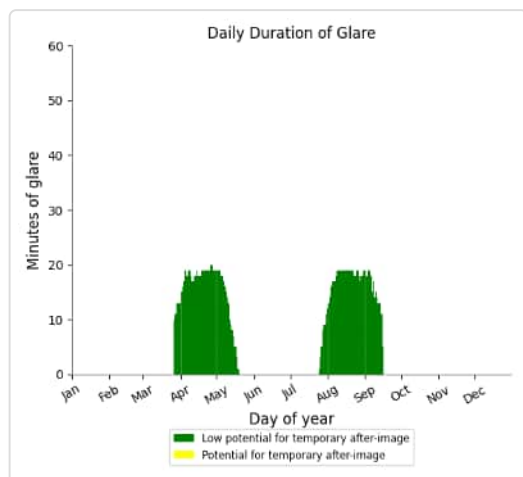
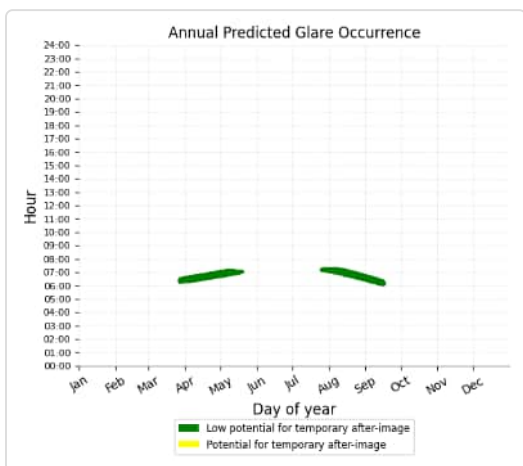
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

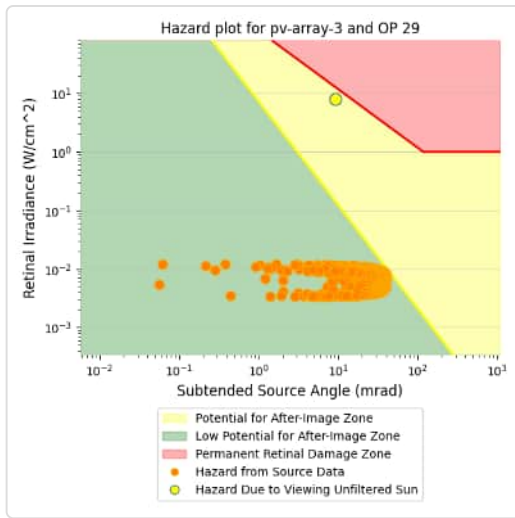
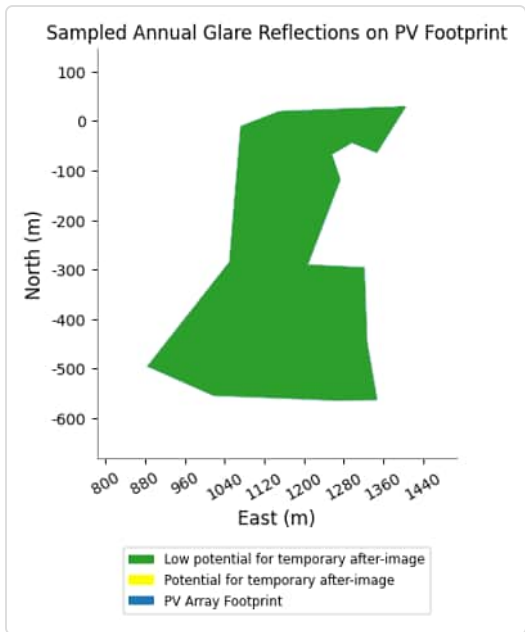


PV array 3 - OP Receptor (OP 29)

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

- 1,681 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

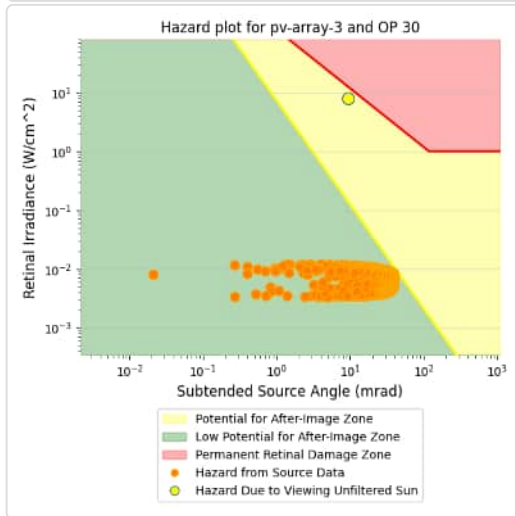
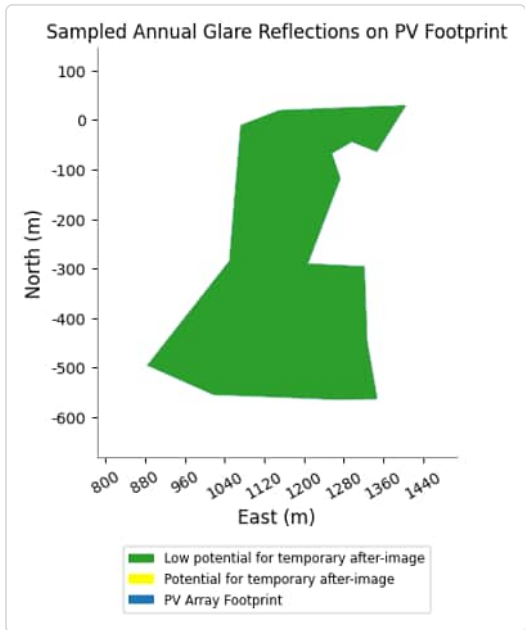
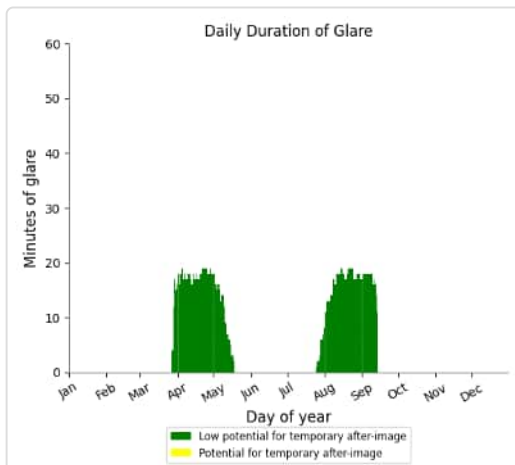
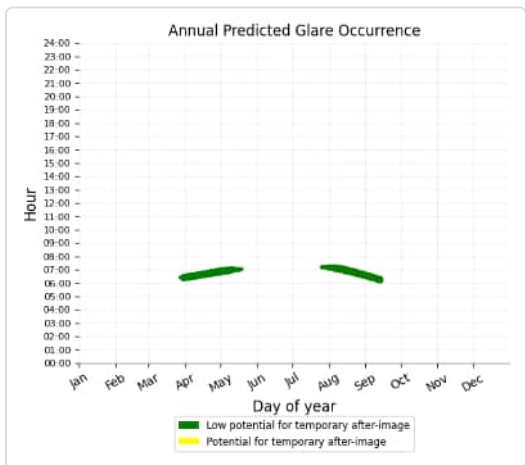




PV array 3 - OP Receptor (OP 30)

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

- 1,548 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

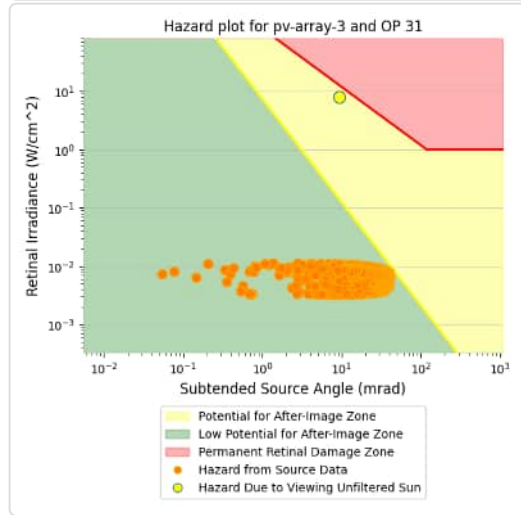
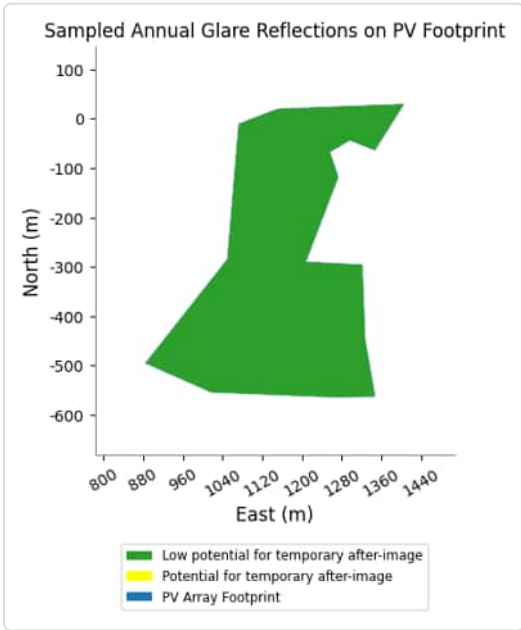
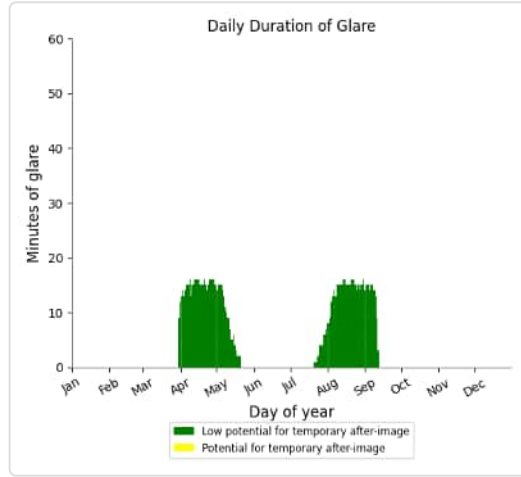
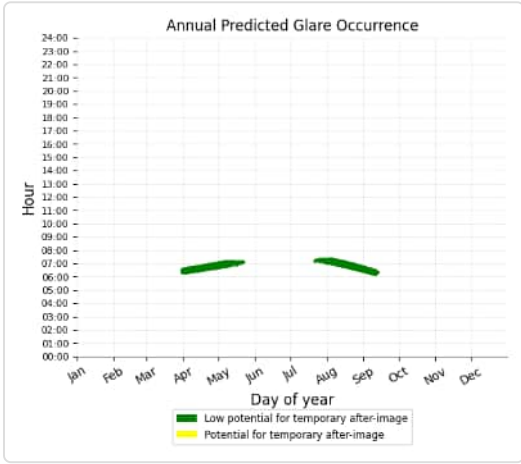


PV array 3 - OP Receptor (OP 31)

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

- 1,270 minutes of "green" glare with low potential to cause temporary after-image.

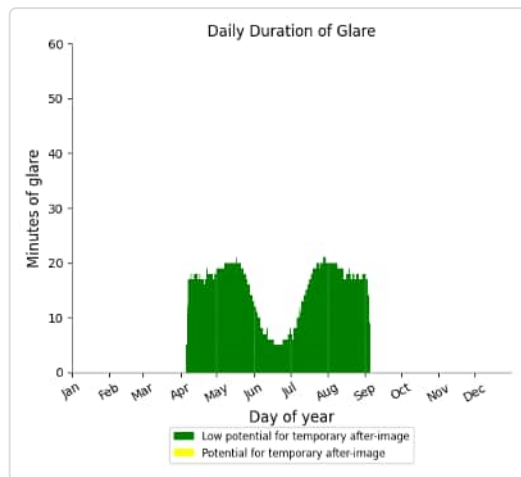
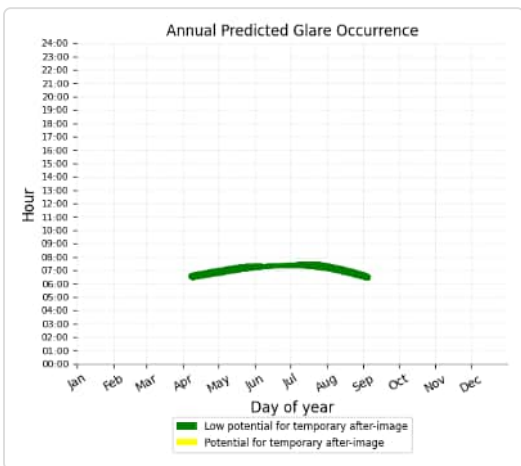
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

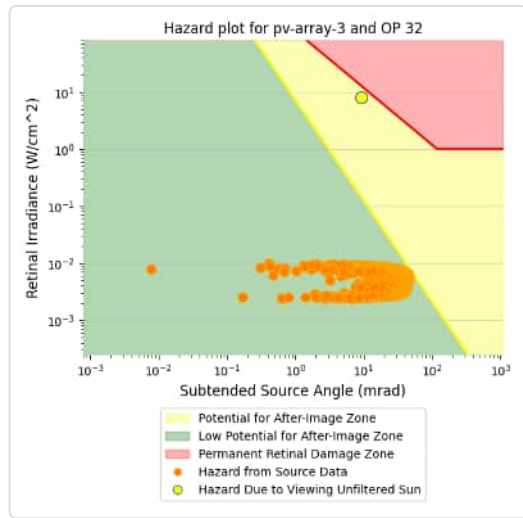
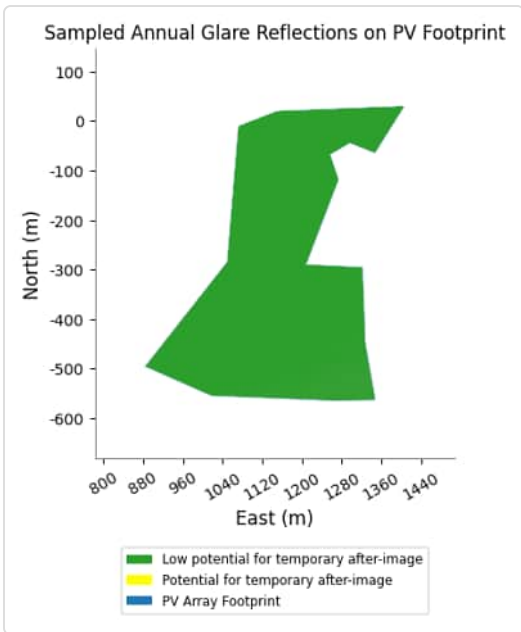


PV array 3 - OP Receptor (OP 32)

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

- 2,325 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

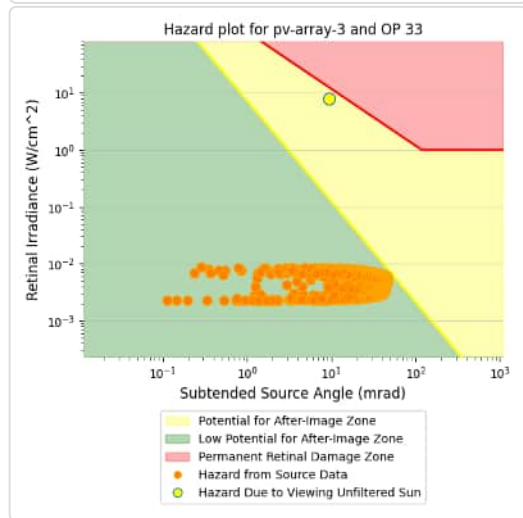
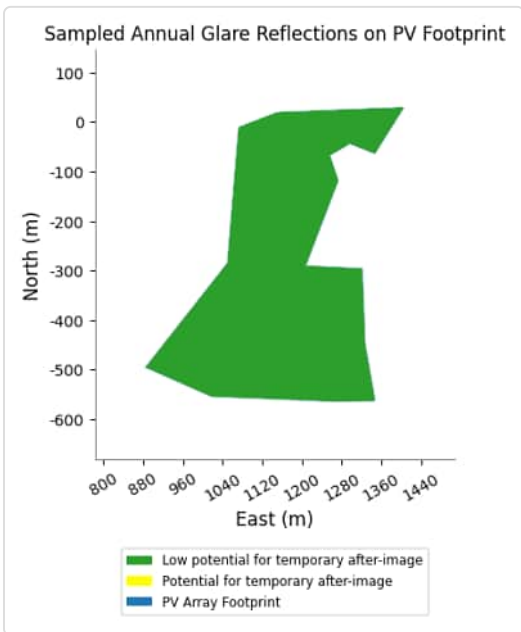
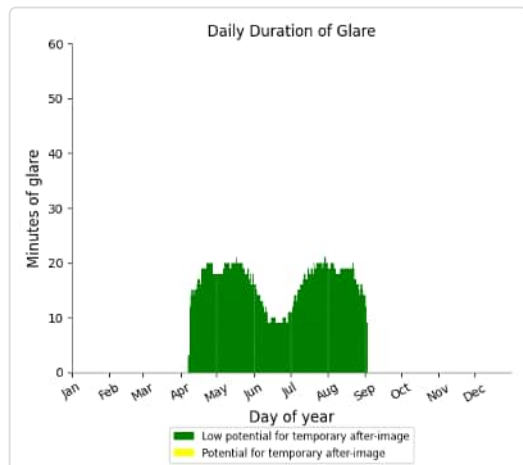
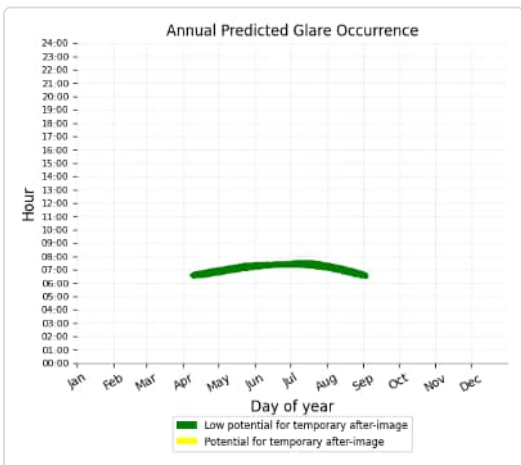




PV array 3 - OP Receptor (OP 33)

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

- 2,429 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

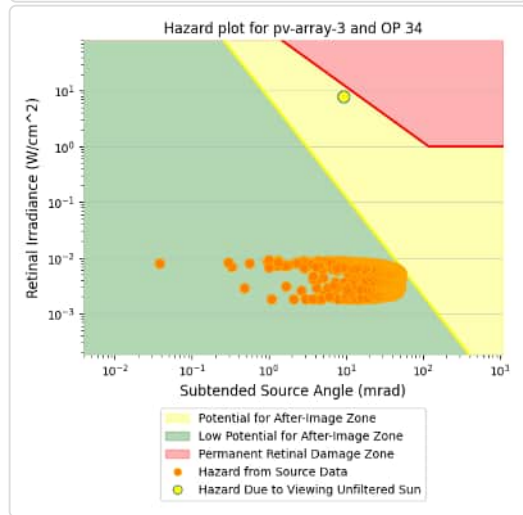
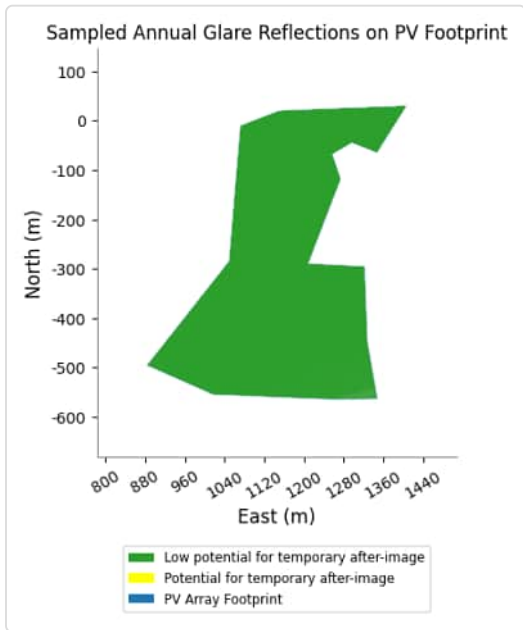
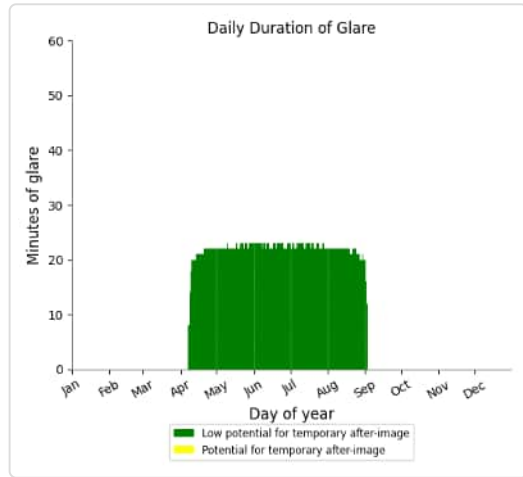
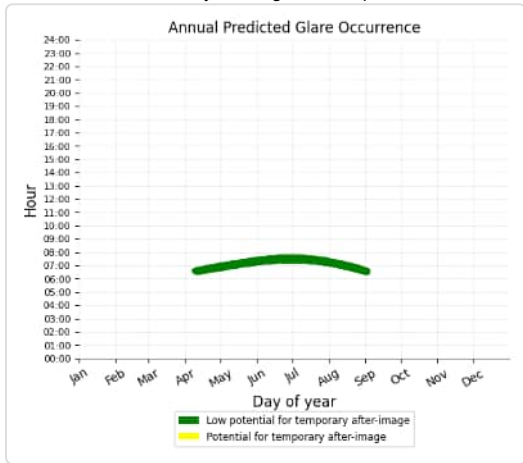


PV array 3 - OP Receptor (OP 34)

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

- 3,261 minutes of "green" glare with low potential to cause temporary after-image.

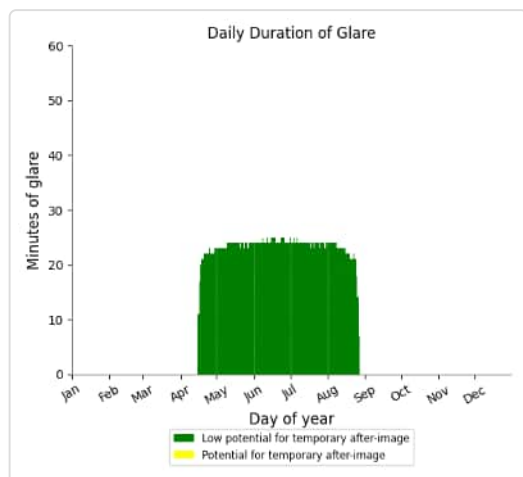
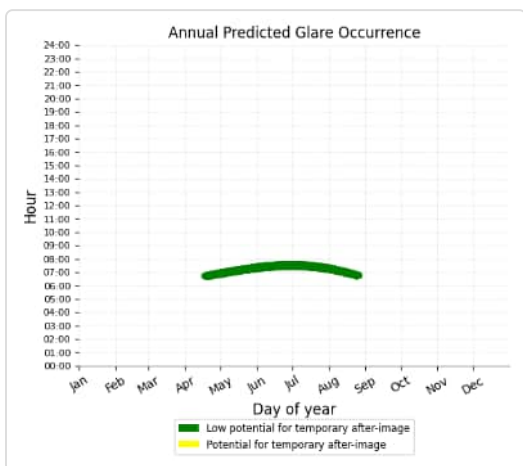
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

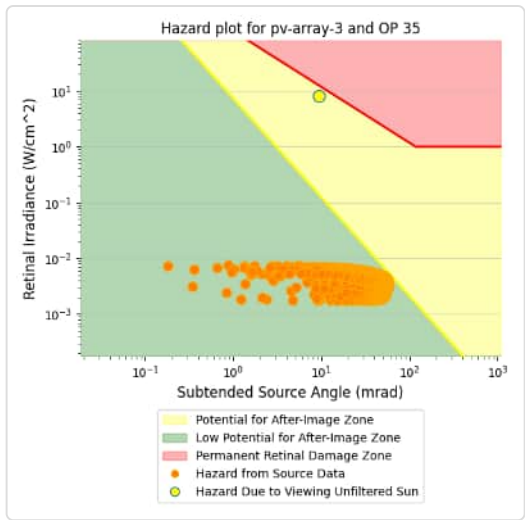
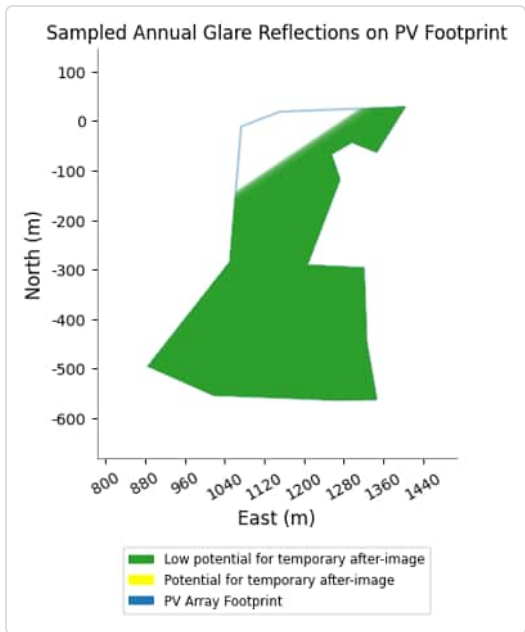


PV array 3 - OP Receptor (OP 35)

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

- 3,101 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

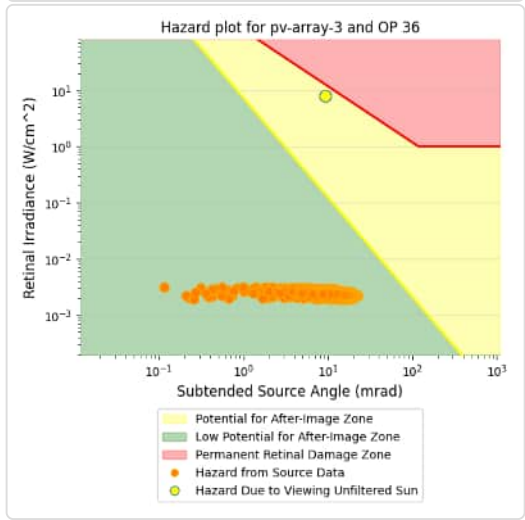
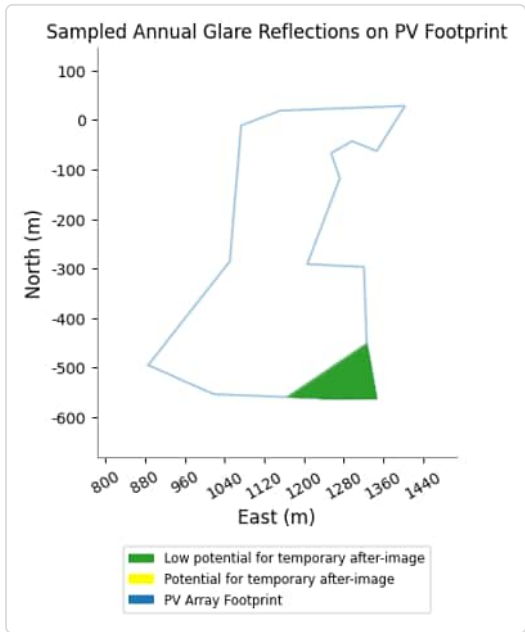
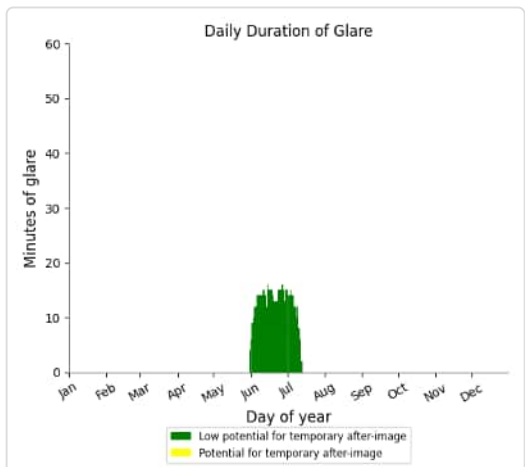
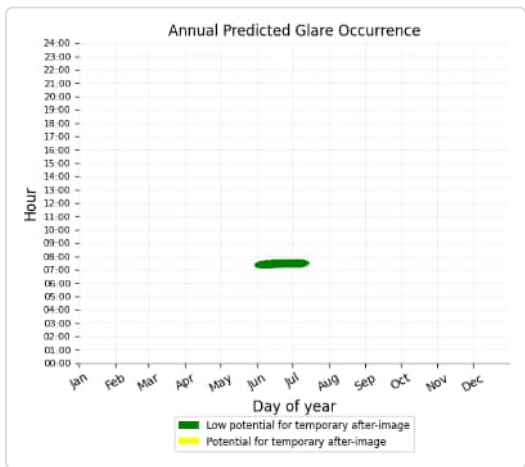




PV array 3 - OP Receptor (OP 36)

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

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



PV array 3 - OP Receptor (OP 37)

No glare found

PV array 3 - OP Receptor (OP 38)

No glare found

PV array 3 - OP Receptor (OP 39)

No glare found

PV array 3 - OP Receptor (OP 40)

No glare found

PV array 3 - OP Receptor (OP 41)

No glare found

PV array 3 - OP Receptor (OP 42)

No glare found

PV array 3 - OP Receptor (OP 43)

No glare found

PV array 3 - OP Receptor (OP 44)

No glare found

PV array 3 - OP Receptor (OP 45)

No glare found

PV array 3 - OP Receptor (OP 46)

No glare found

PV array 3 - OP Receptor (OP 47)

No glare found

PV array 3 - OP Receptor (OP 48)

No glare found

PV array 3 - OP Receptor (OP 49)

No glare found

PV array 3 - OP Receptor (OP 50)

No glare found

PV array 3 - OP Receptor (OP 51)

No glare found

PV array 3 - OP Receptor (OP 52)

No glare found

PV array 3 - OP Receptor (OP 53)

No glare found

PV array 3 - OP Receptor (OP 54)

No glare found

PV array 4 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0

OP: OP 4	0	0
OP: OP 5	151	0
OP: OP 6	119	0
OP: OP 7	158	0
OP: OP 8	269	0
OP: OP 9	0	0
OP: OP 10	351	35
OP: OP 11	642	161
OP: OP 12	804	472
OP: OP 13	2734	972
OP: OP 14	2746	718
OP: OP 15	2756	429
OP: OP 16	2287	190
OP: OP 17	2000	65
OP: OP 18	1447	165
OP: OP 19	1333	72
OP: OP 20	2829	731
OP: OP 21	767	0
OP: OP 22	0	0
OP: OP 23	28	0
OP: OP 24	1612	0
OP: OP 25	1289	0
OP: OP 26	8	0
OP: OP 27	1259	0
OP: OP 28	967	0
OP: OP 29	1466	0
OP: OP 30	1533	0
OP: OP 31	1488	0
OP: OP 32	356	0
OP: OP 33	350	0
OP: OP 34	329	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
OP: OP 41	0	0
OP: OP 42	0	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0
OP: OP 54	0	0

PV array 4 - OP Receptor (OP 1)

No glare found

PV array 4 - OP Receptor (OP 2)

No glare found

PV array 4 - OP Receptor (OP 3)

No glare found

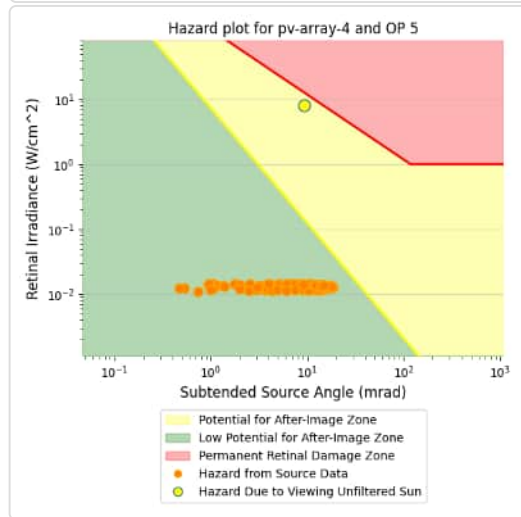
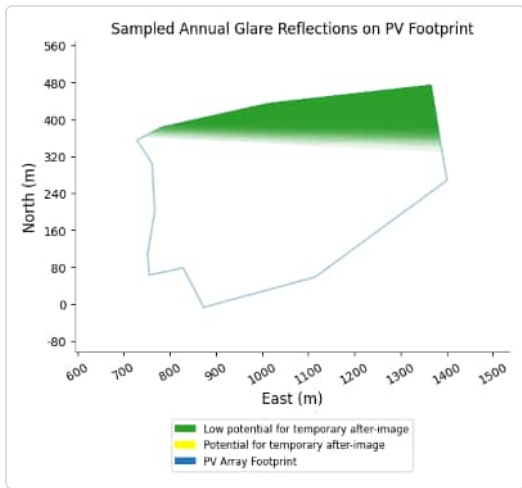
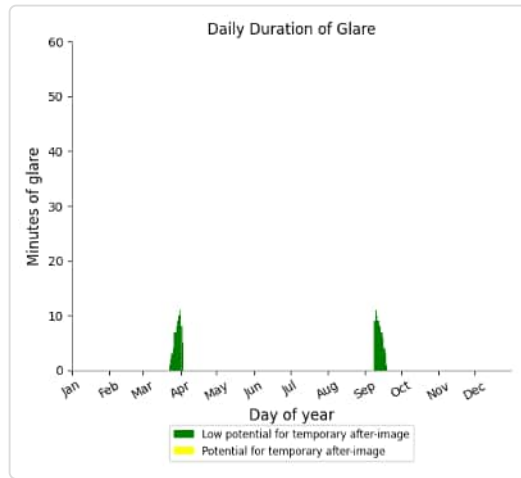
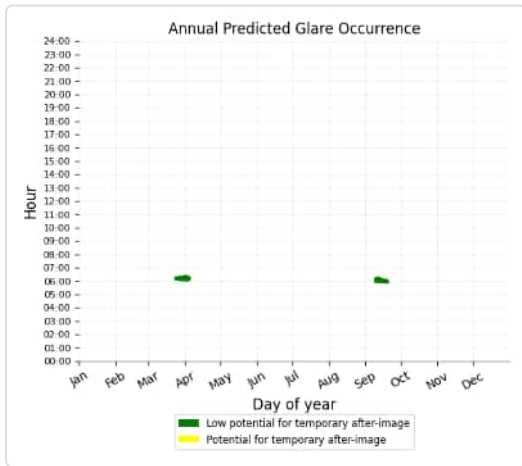
PV array 4 - OP Receptor (OP 4)

No glare found

PV array 4 - OP Receptor (OP 5)

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

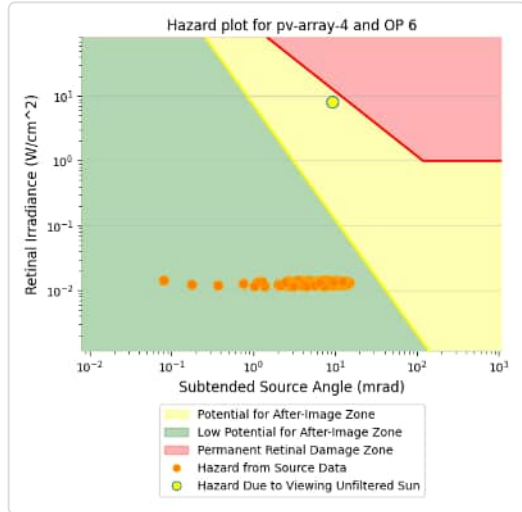
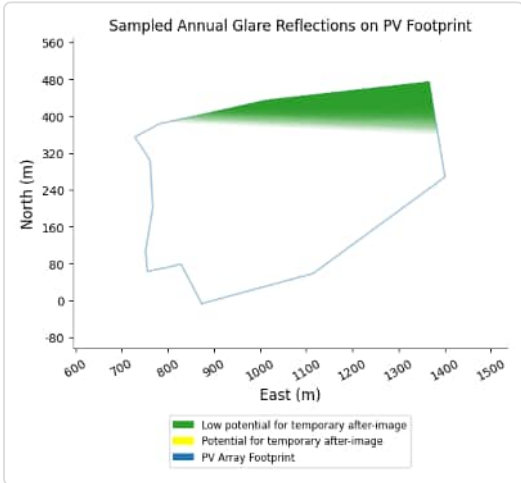
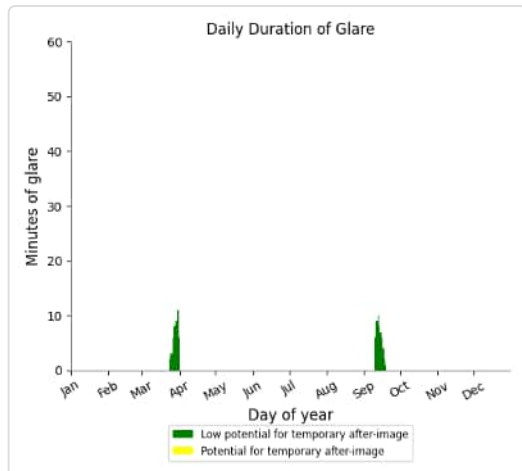
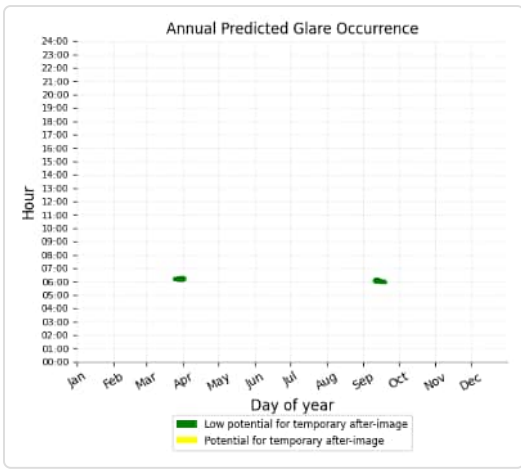
- 151 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 6)

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

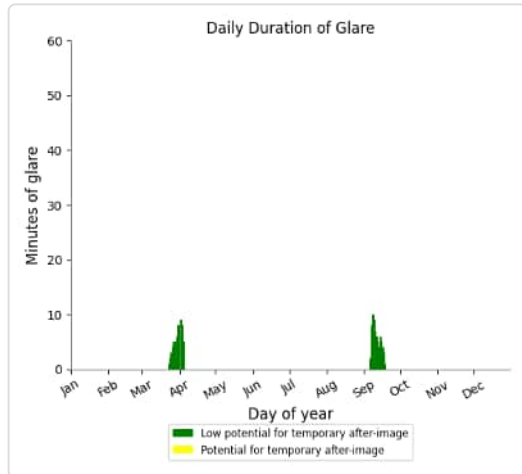
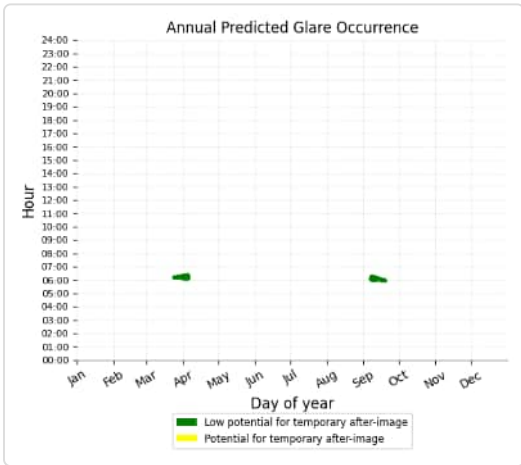
- 119 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

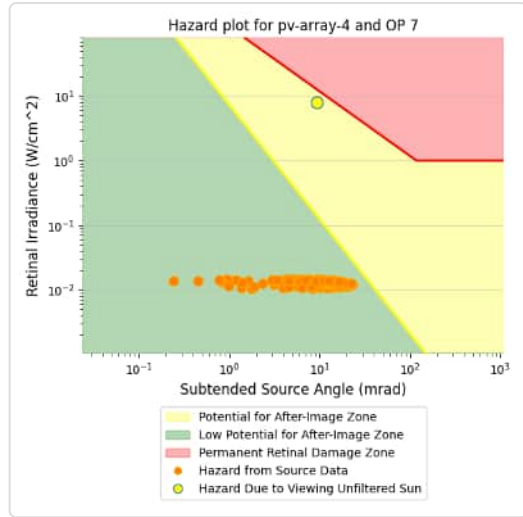
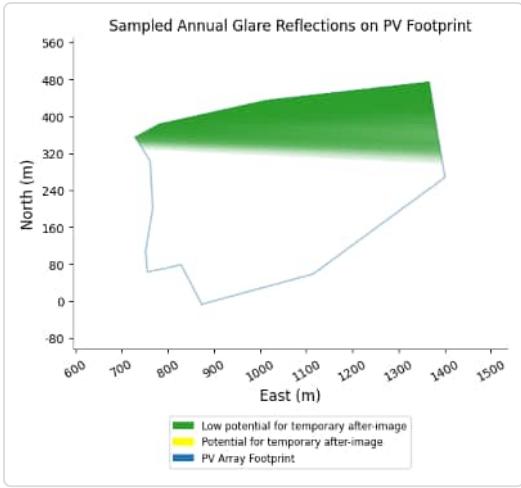


PV array 4 - OP Receptor (OP 7)

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

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

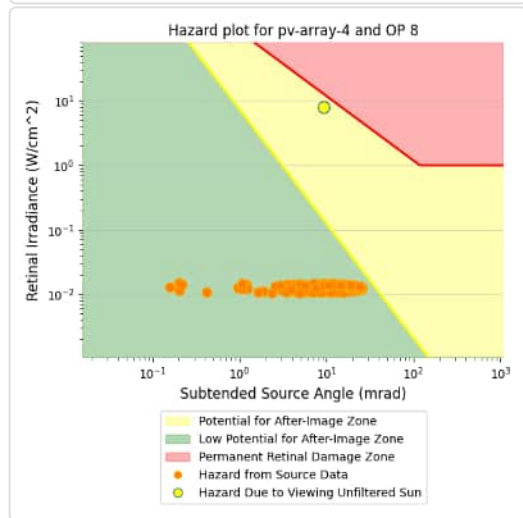
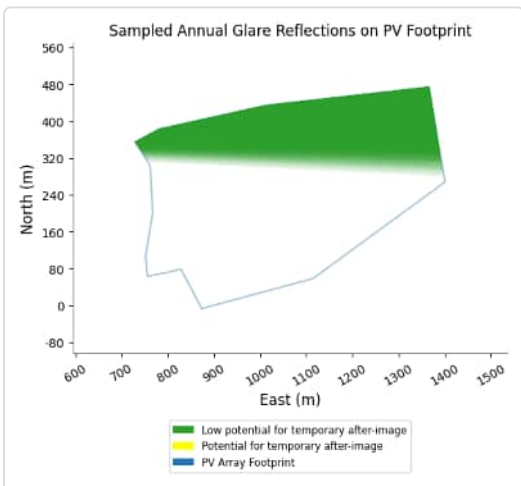
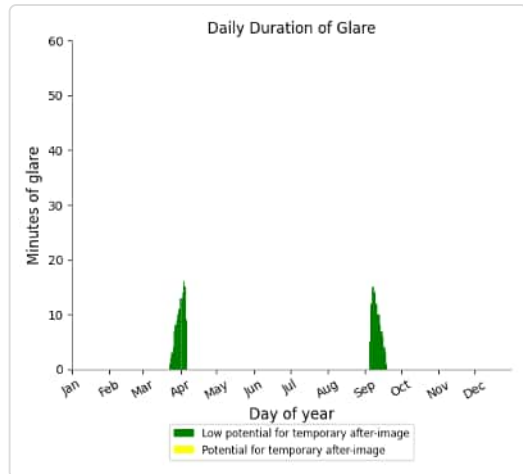
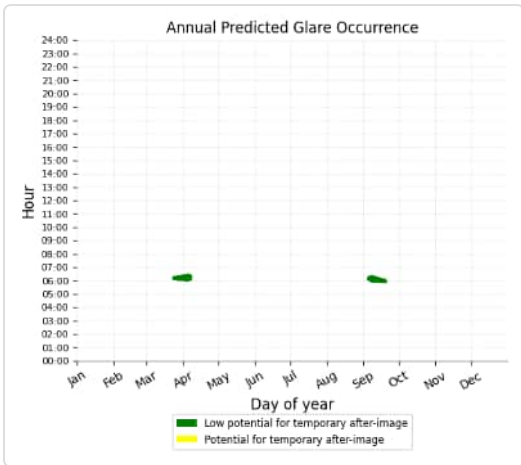




PV array 4 - OP Receptor (OP 8)

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

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



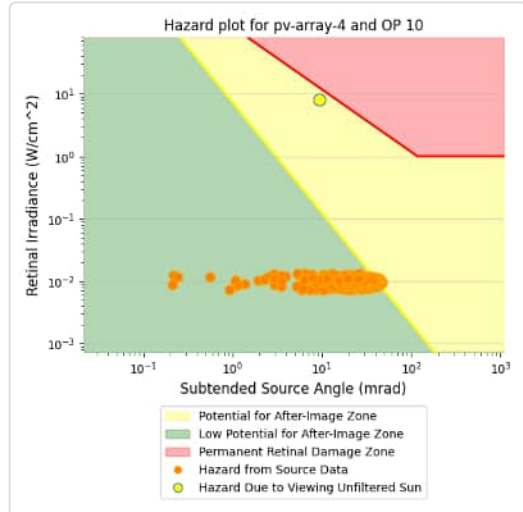
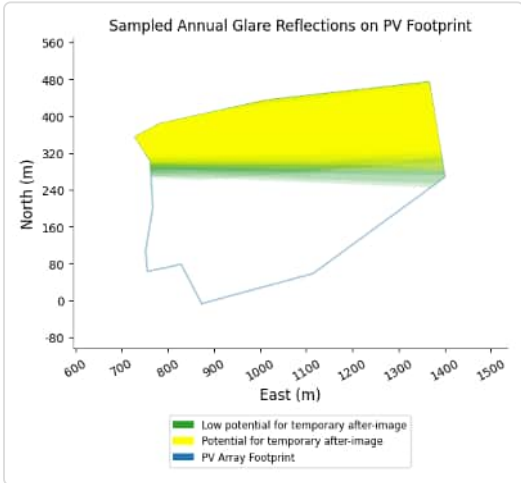
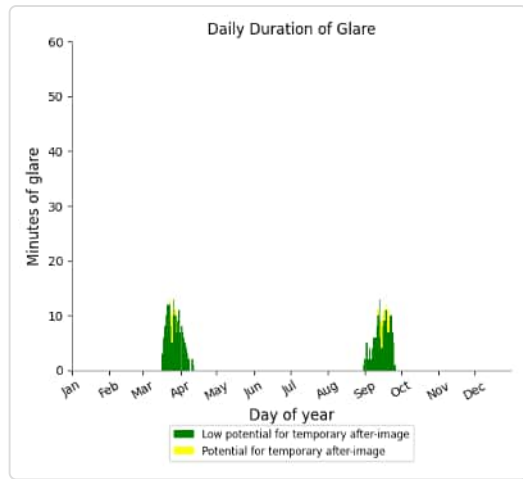
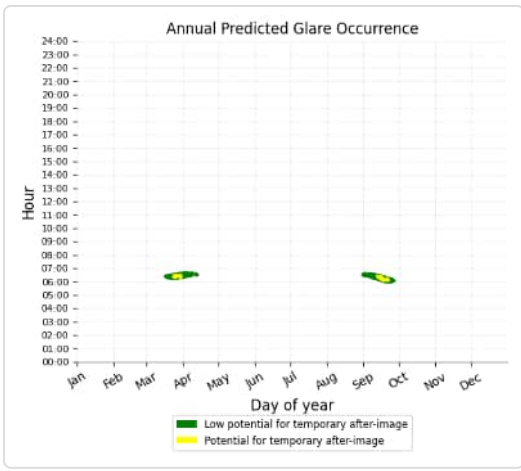
PV array 4 - OP Receptor (OP 9)

No glare found

PV array 4 - OP Receptor (OP 10)

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

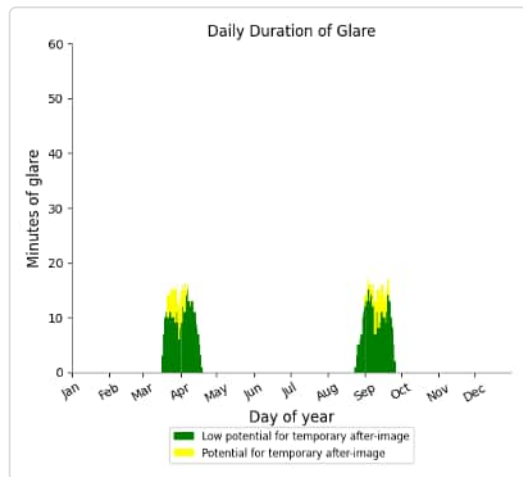
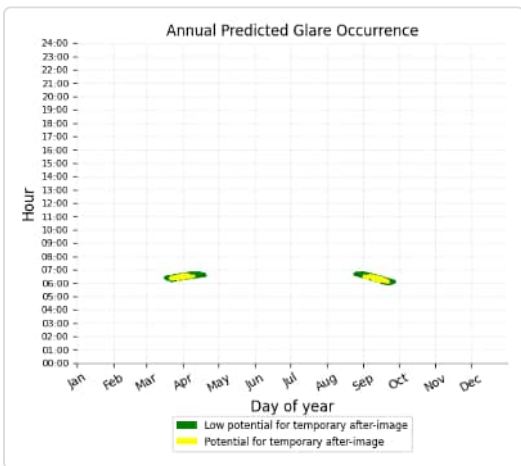
- 351 minutes of "green" glare with low potential to cause temporary after-image.
- 35 minutes of "yellow" glare with potential to cause temporary after-image.

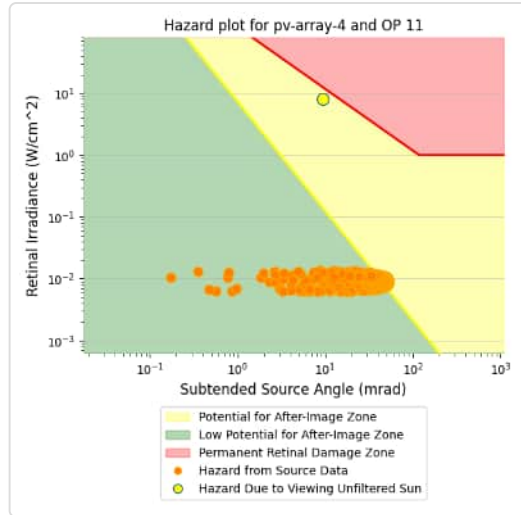
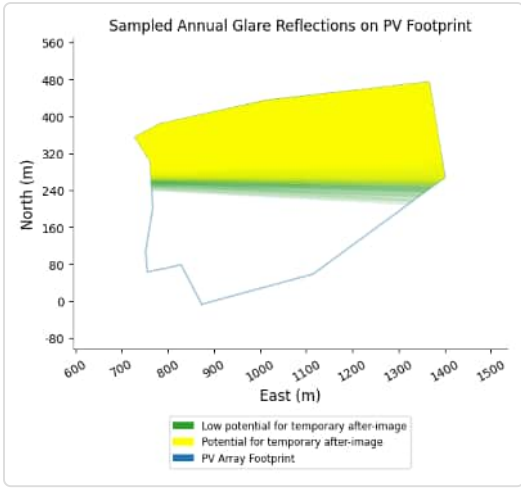


PV array 4 - OP Receptor (OP 11)

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

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

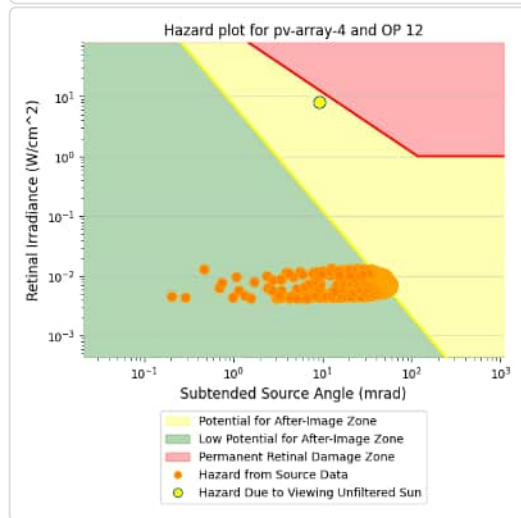
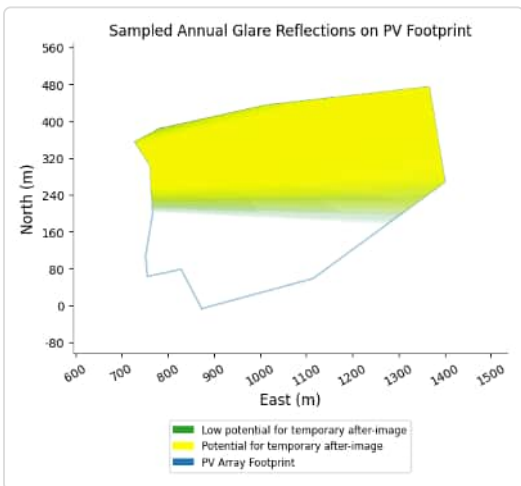
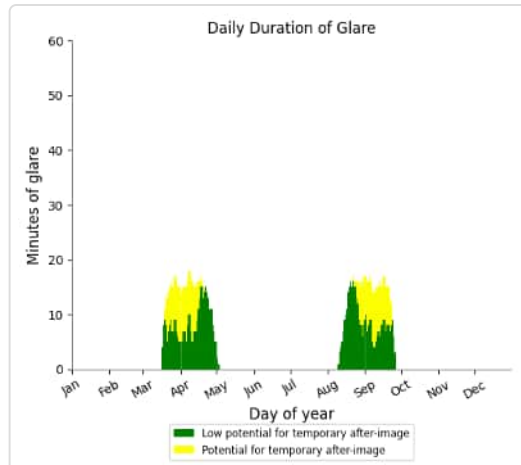
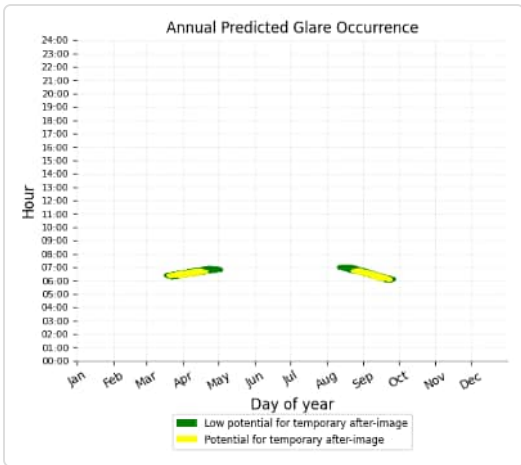




PV array 4 - OP Receptor (OP 12)

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

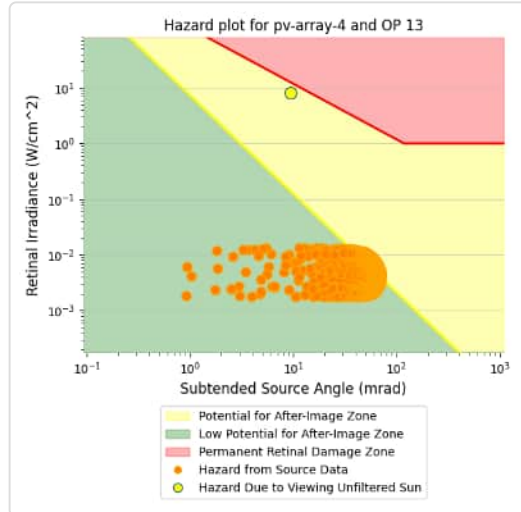
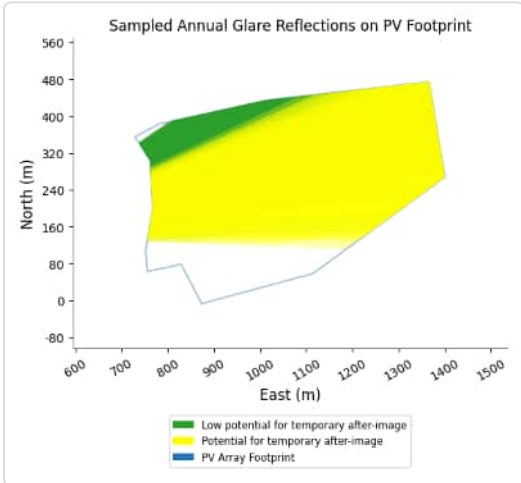
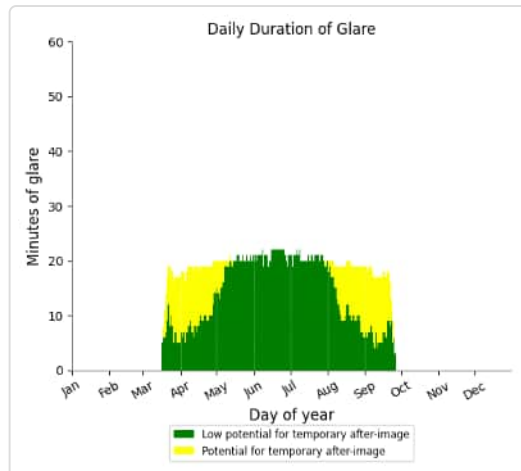
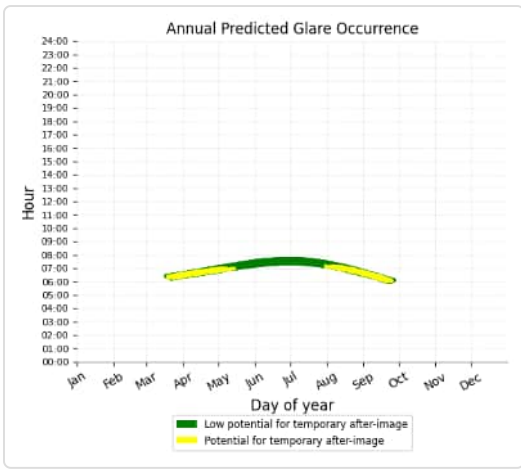
- 804 minutes of "green" glare with low potential to cause temporary after-image.
- 472 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 13)

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

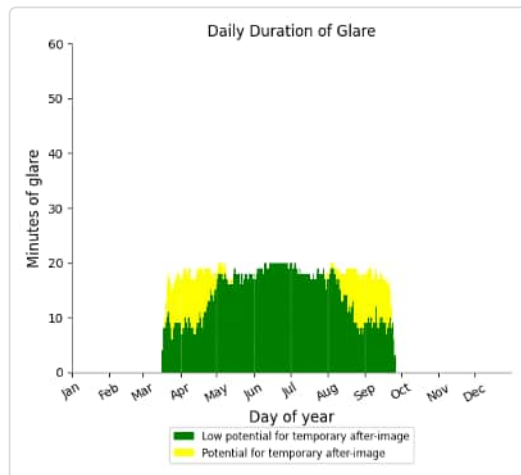
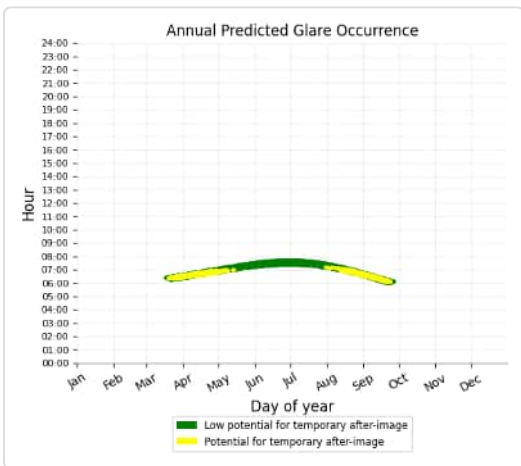
- 2,734 minutes of "green" glare with low potential to cause temporary after-image.
- 972 minutes of "yellow" glare with potential to cause temporary after-image.

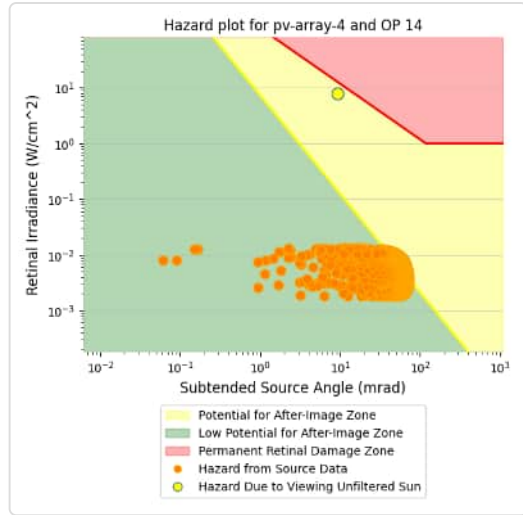
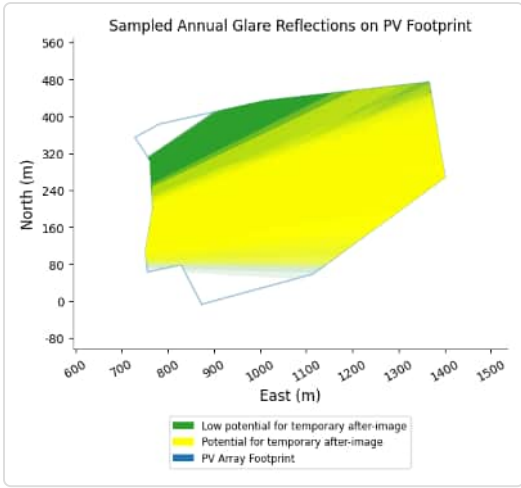


PV array 4 - OP Receptor (OP 14)

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

- 2,746 minutes of "green" glare with low potential to cause temporary after-image.
- 718 minutes of "yellow" glare with potential to cause temporary after-image.

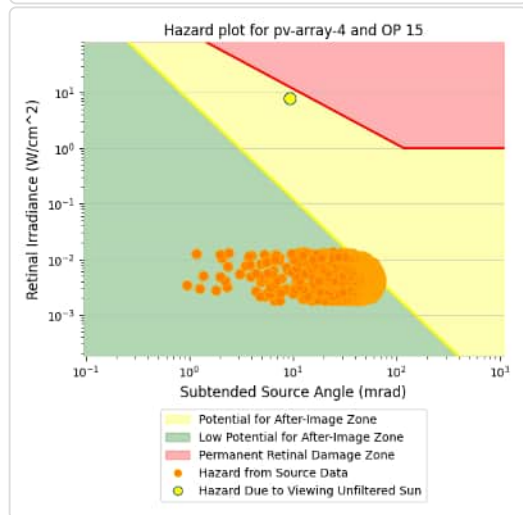
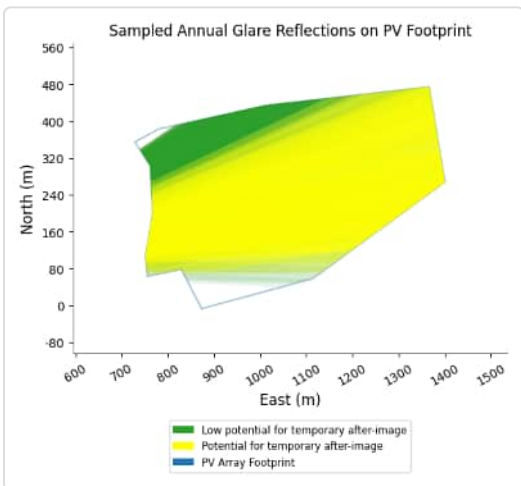
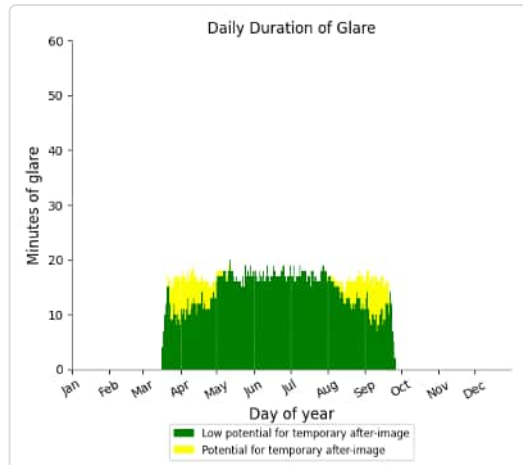
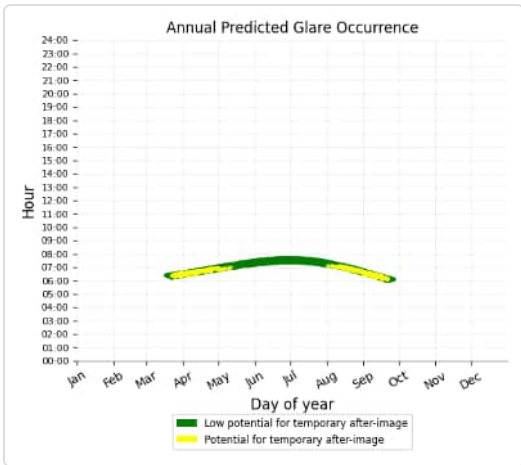




PV array 4 - OP Receptor (OP 15)

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

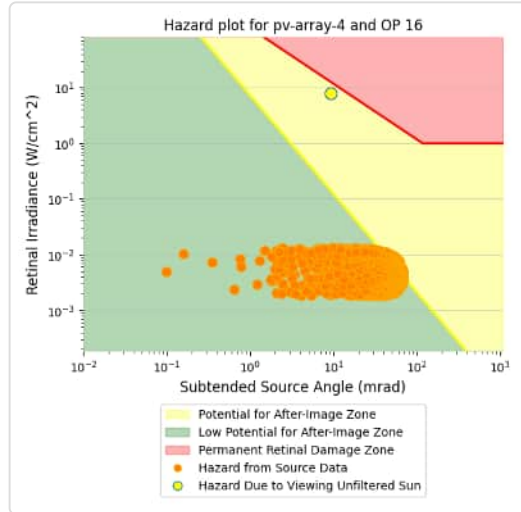
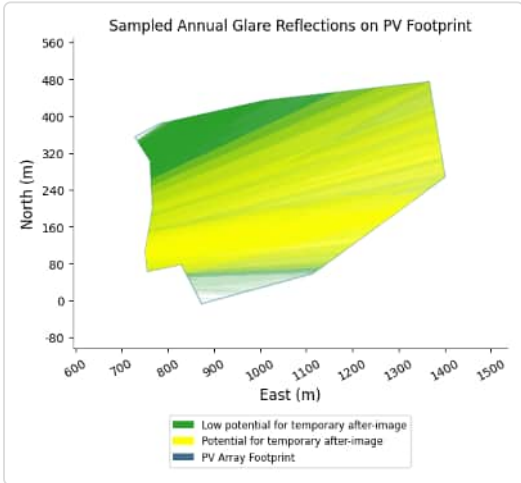
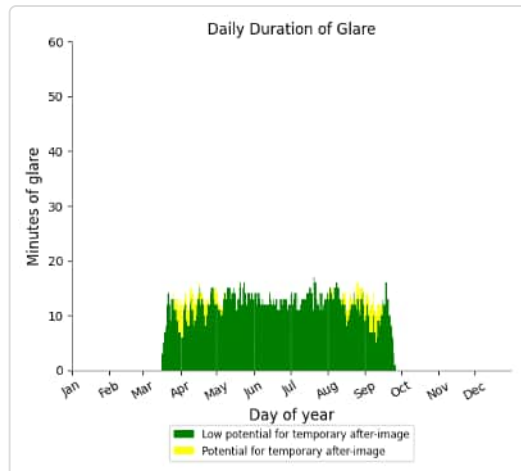
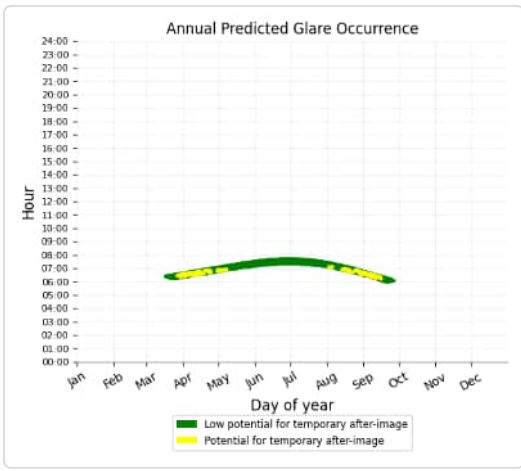
- 2,756 minutes of "green" glare with low potential to cause temporary after-image.
- 429 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 16)

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

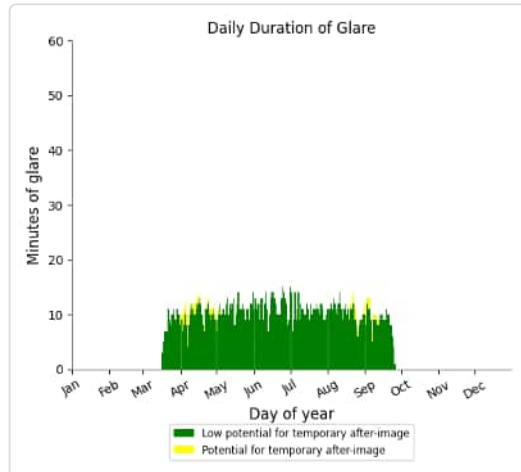
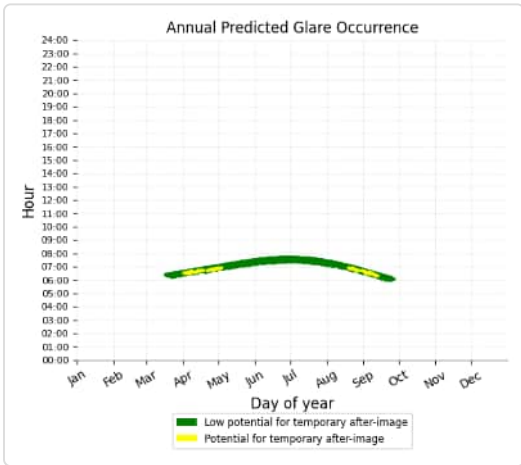
- 2,287 minutes of "green" glare with low potential to cause temporary after-image.
- 190 minutes of "yellow" glare with potential to cause temporary after-image.

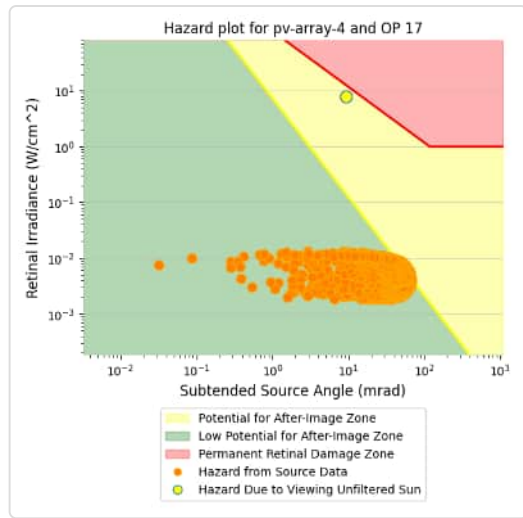
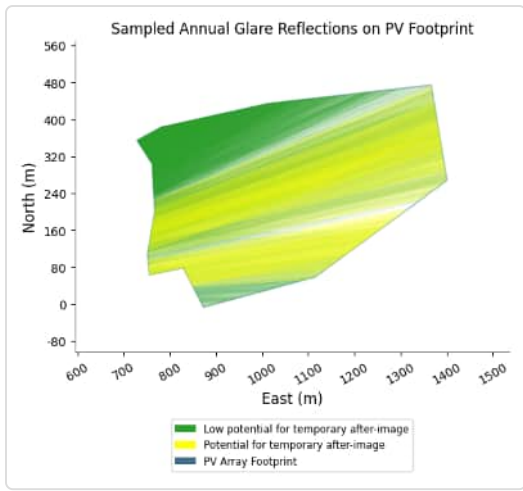


PV array 4 - OP Receptor (OP 17)

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

- 2,000 minutes of "green" glare with low potential to cause temporary after-image.
- 65 minutes of "yellow" glare with potential to cause temporary after-image.

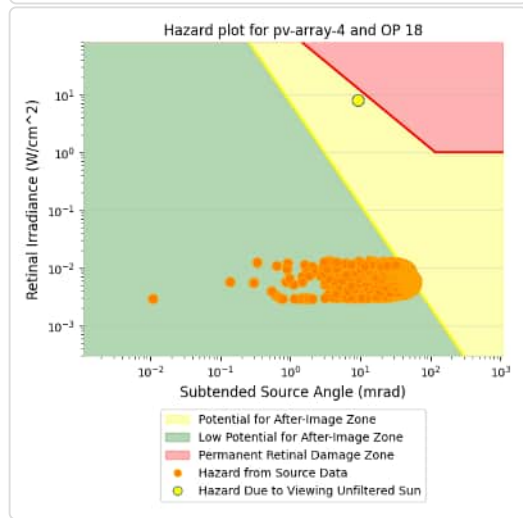
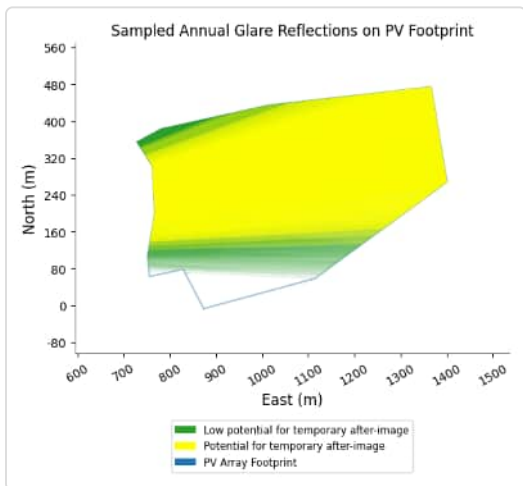
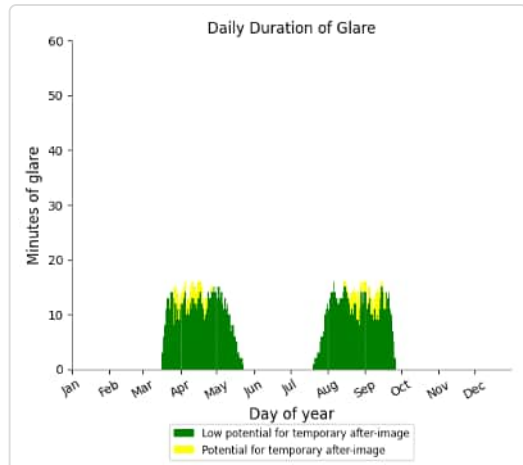
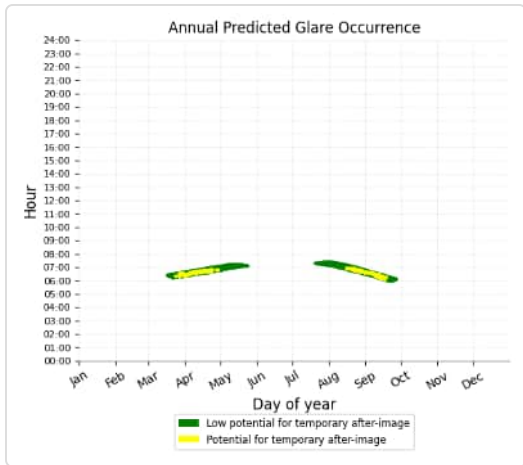




PV array 4 - OP Receptor (OP 18)

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

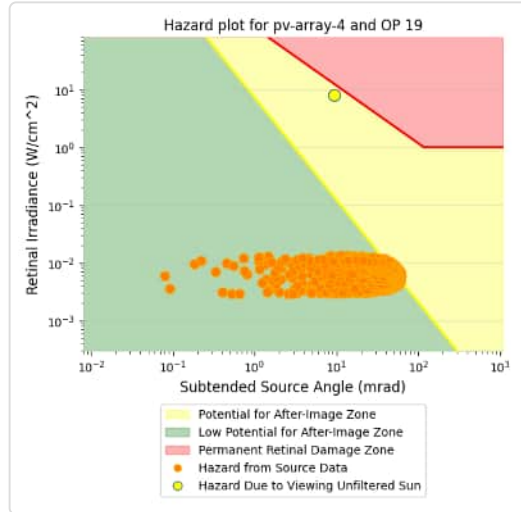
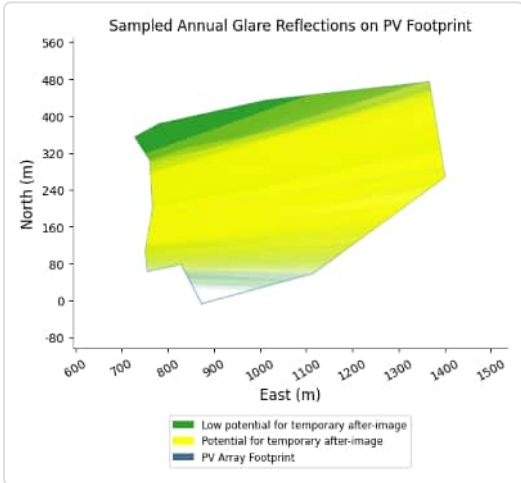
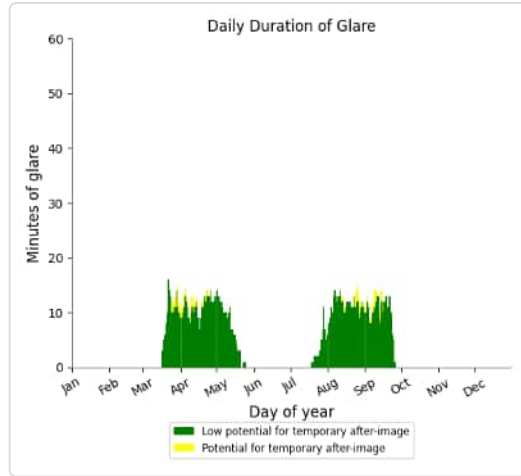
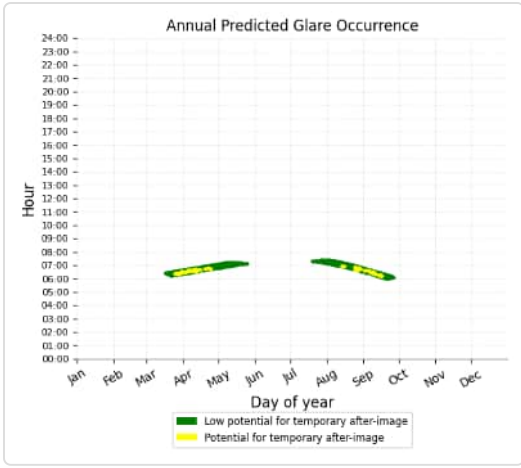
- 1,447 minutes of "green" glare with low potential to cause temporary after-image.
- 165 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 19)

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

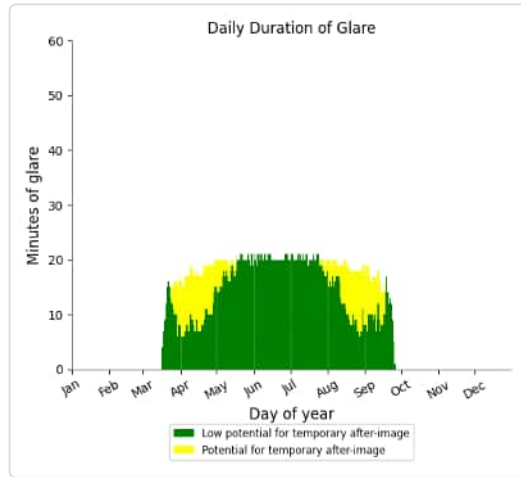
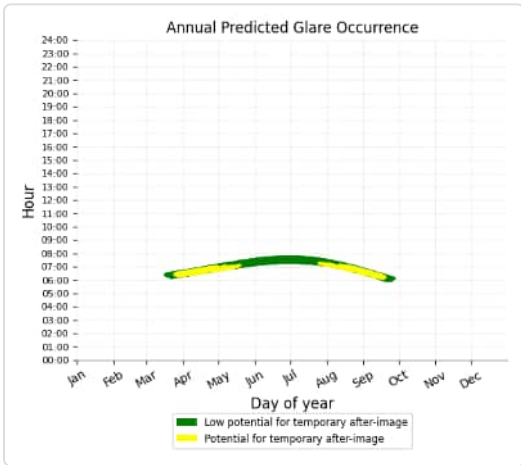
- 1,333 minutes of "green" glare with low potential to cause temporary after-image.
- 72 minutes of "yellow" glare with potential to cause temporary after-image.

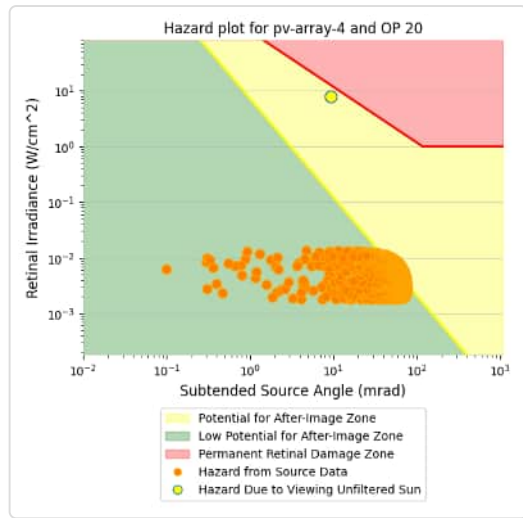
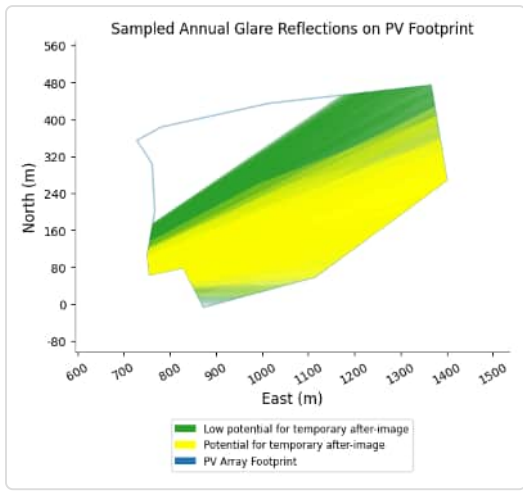


PV array 4 - OP Receptor (OP 20)

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

- 2,829 minutes of "green" glare with low potential to cause temporary after-image.
- 731 minutes of "yellow" glare with potential to cause temporary after-image.

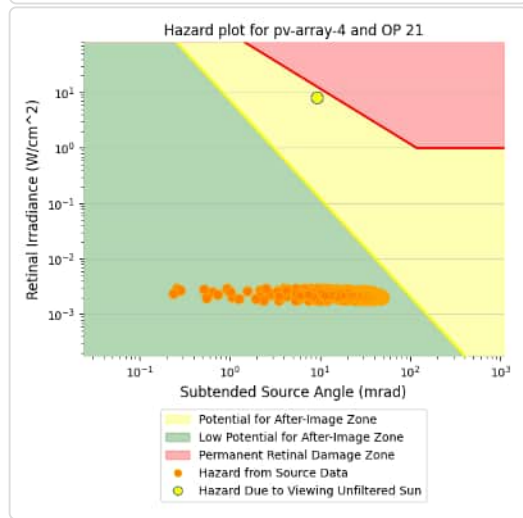
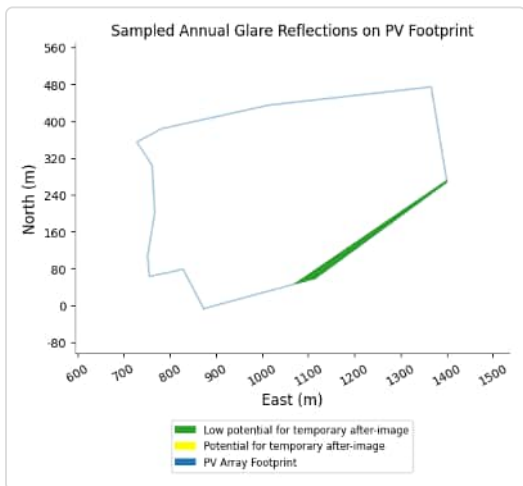
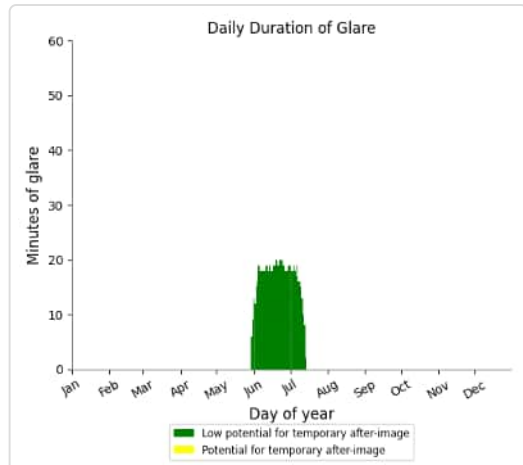
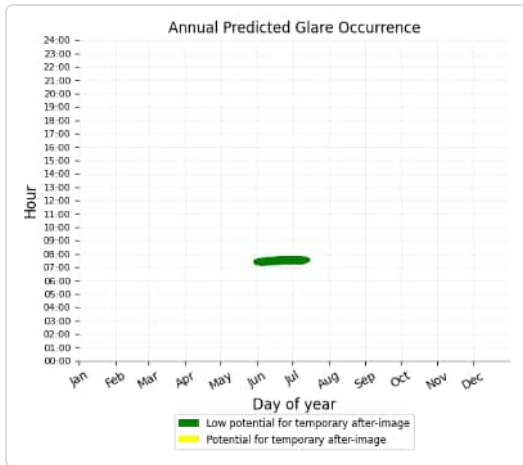




PV array 4 - OP Receptor (OP 21)

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

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



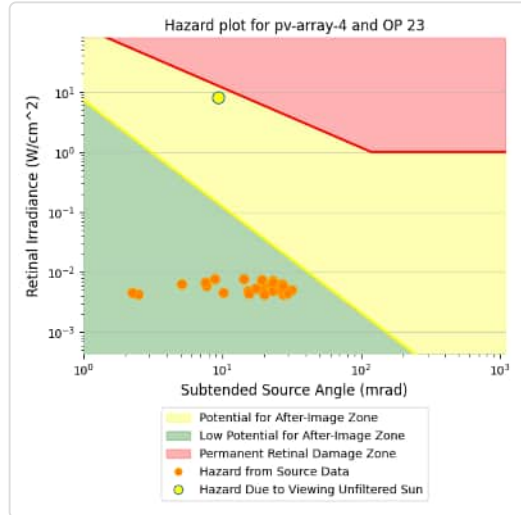
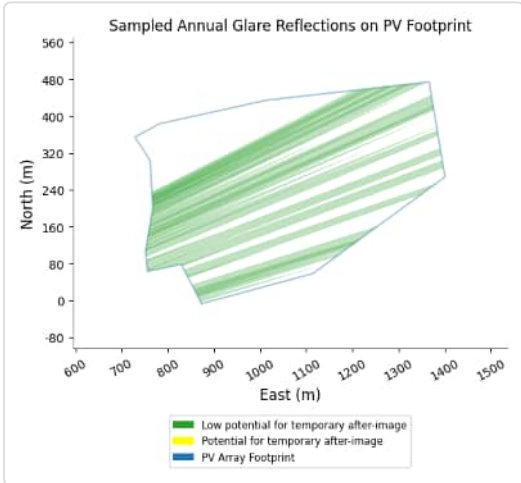
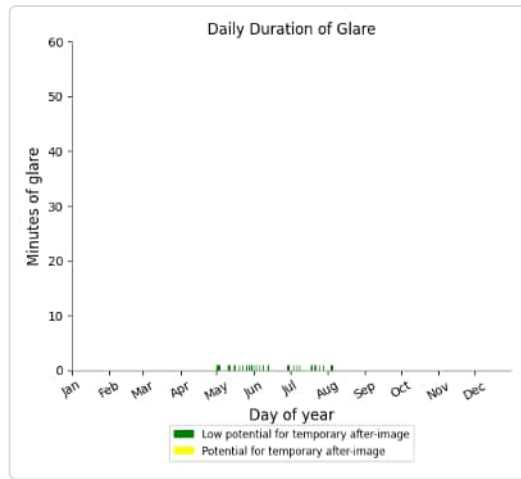
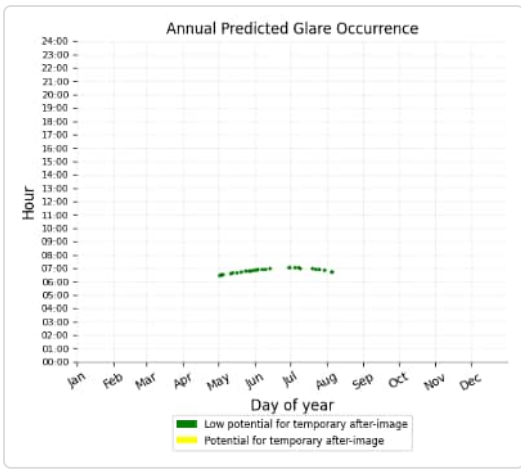
PV array 4 - OP Receptor (OP 22)

No glare found

PV array 4 - OP Receptor (OP 23)

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

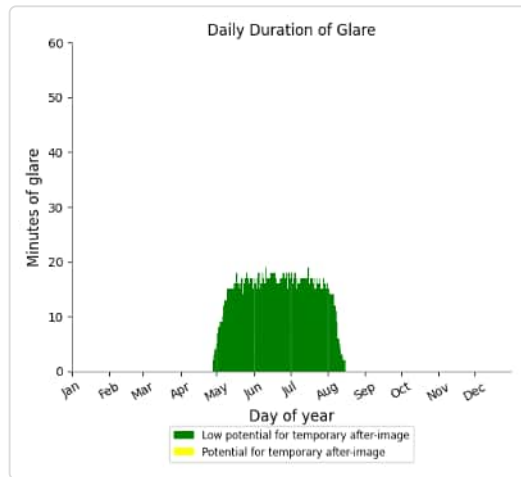
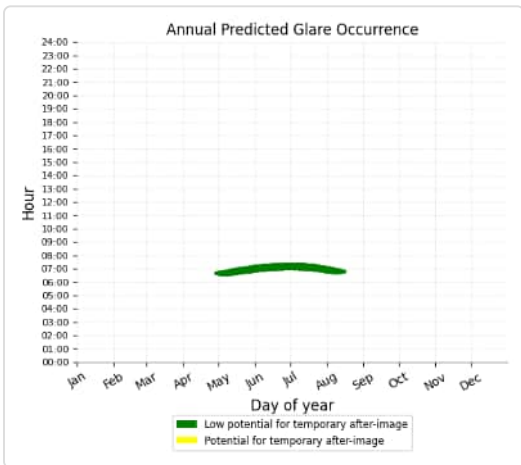
- 28 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

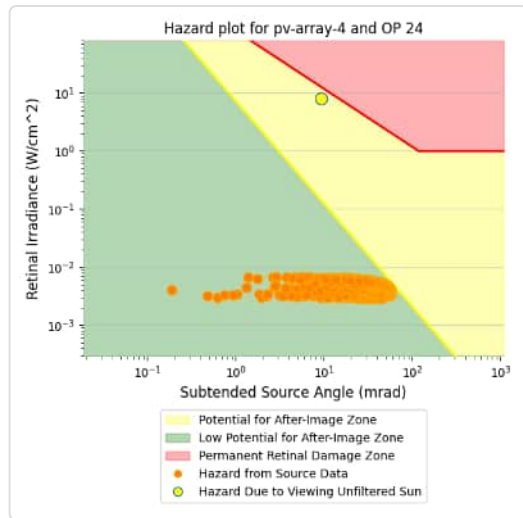
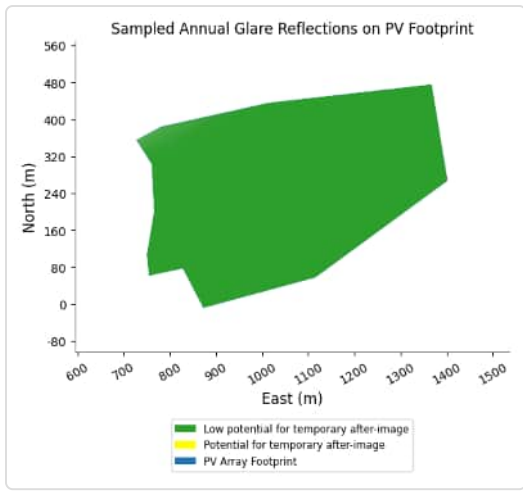


PV array 4 - OP Receptor (OP 24)

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

- 1,612 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

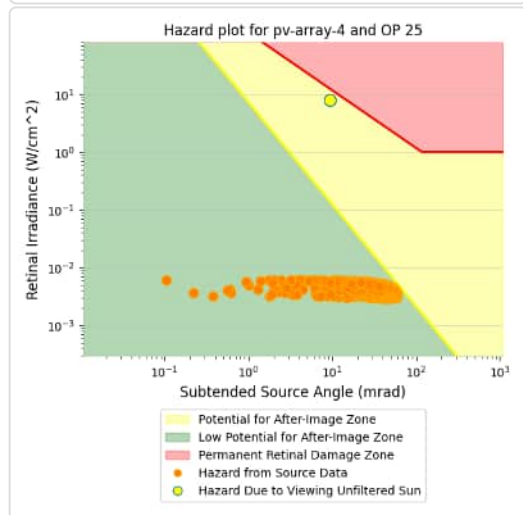
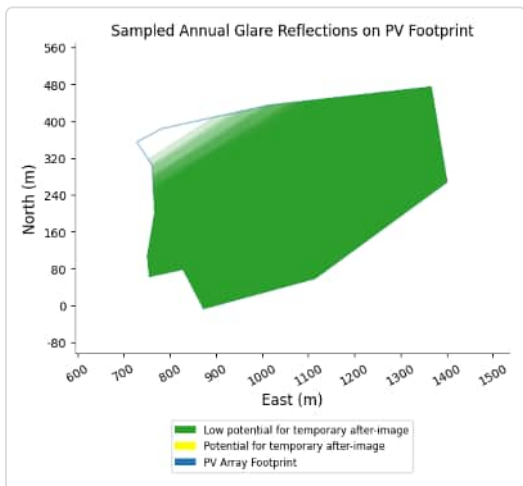
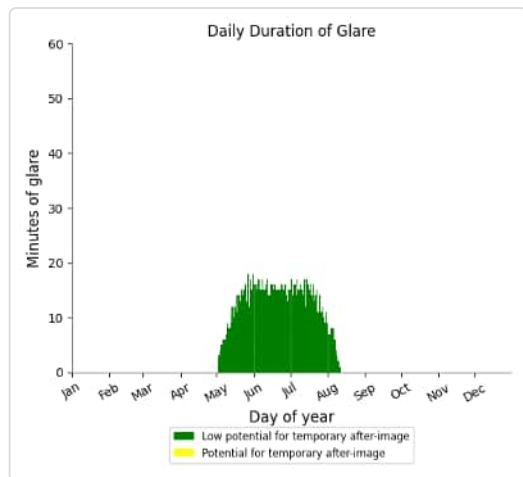
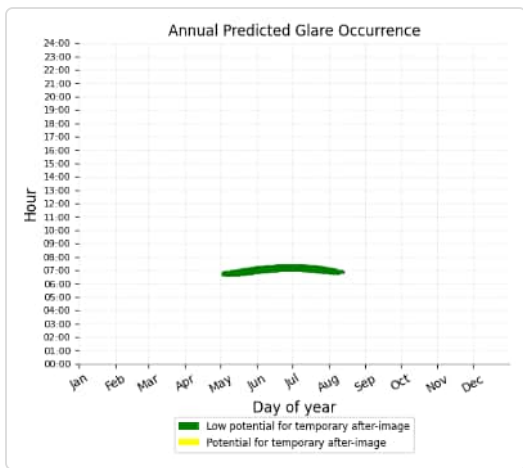




PV array 4 - OP Receptor (OP 25)

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

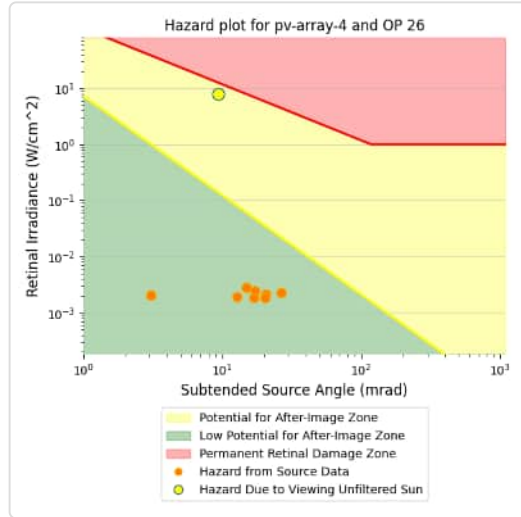
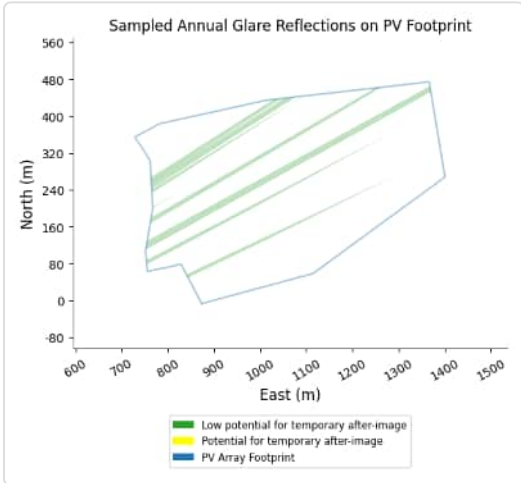
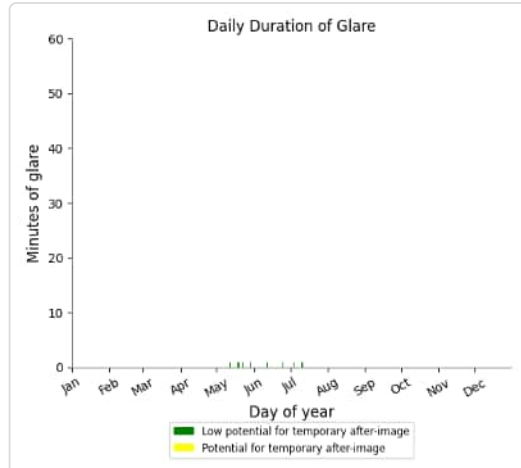
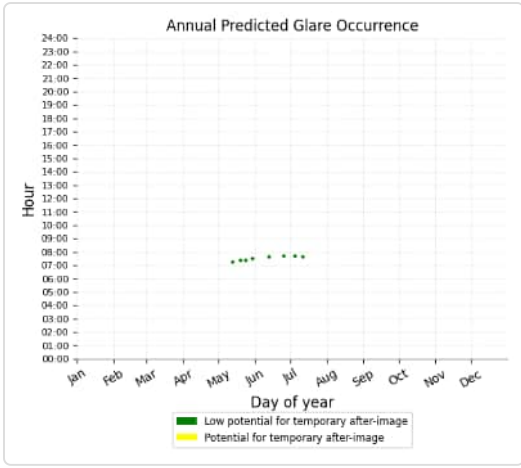
- 1,289 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 26)

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

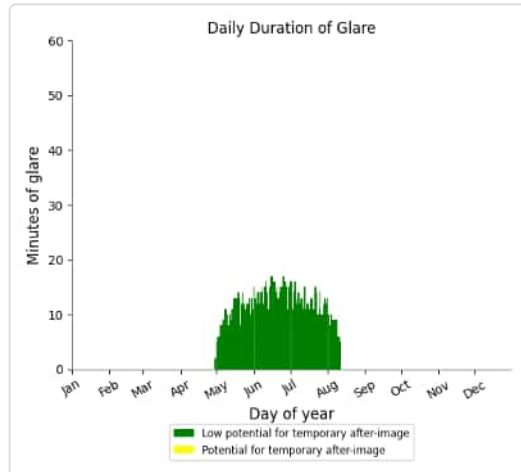
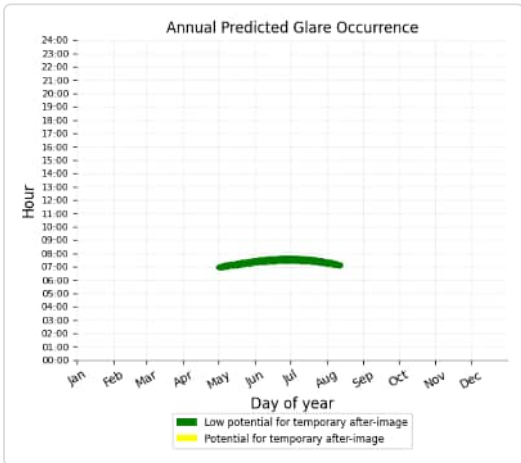
- 8 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

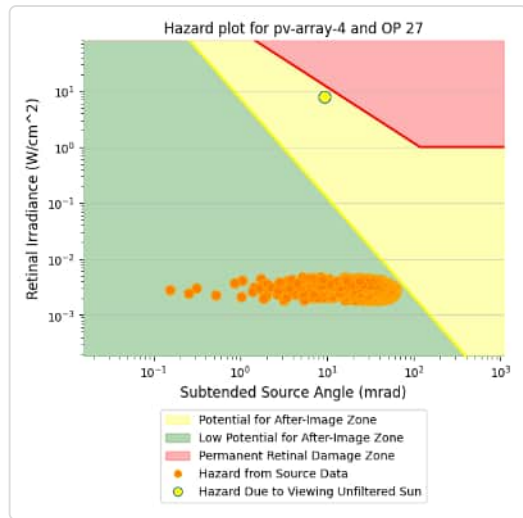
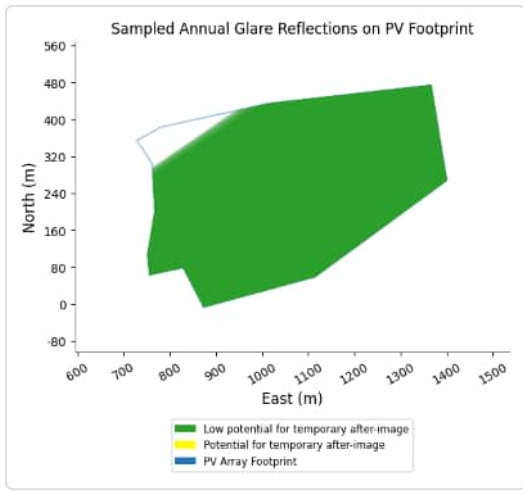


PV array 4 - OP Receptor (OP 27)

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

- 1,259 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

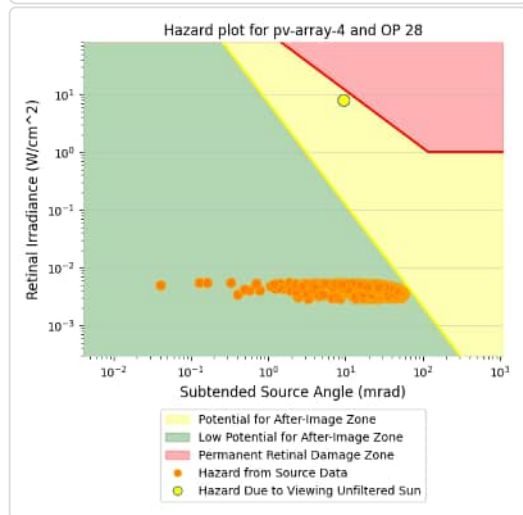
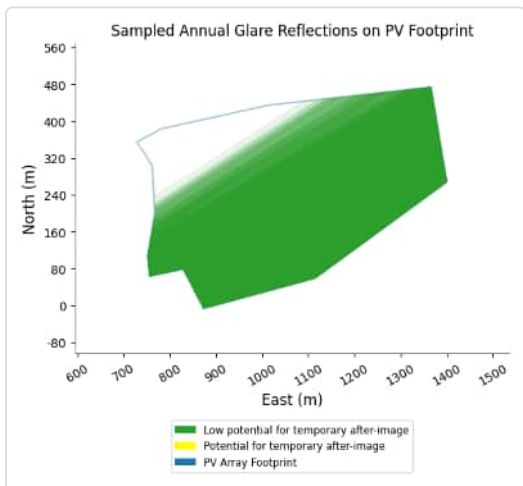
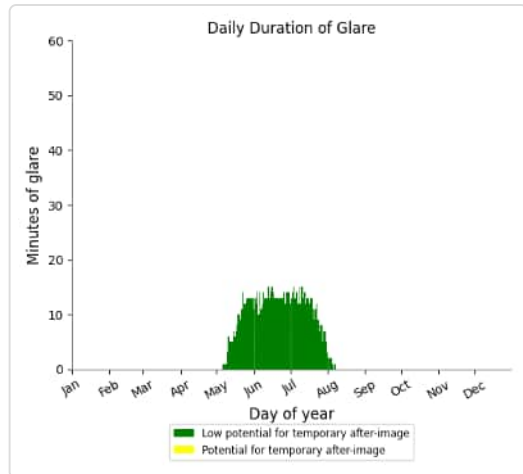
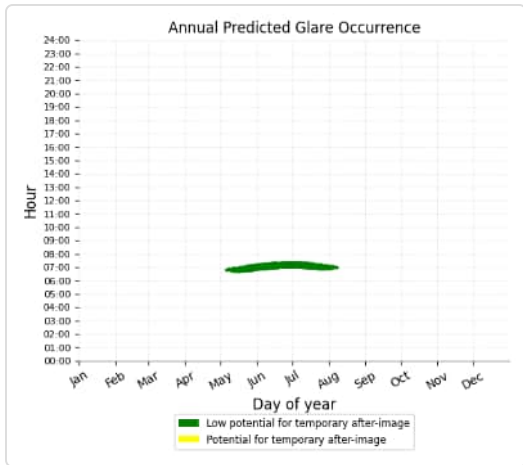




PV array 4 - OP Receptor (OP 28)

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

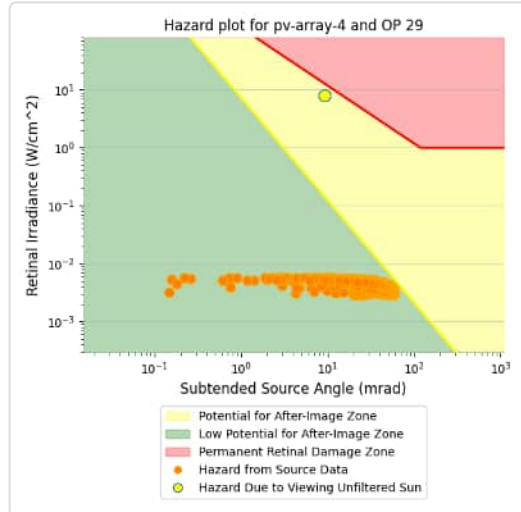
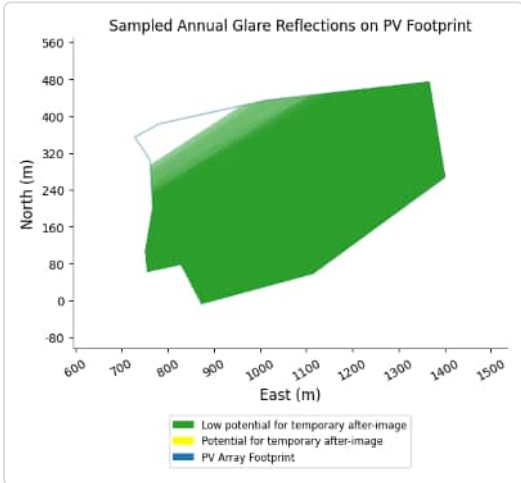
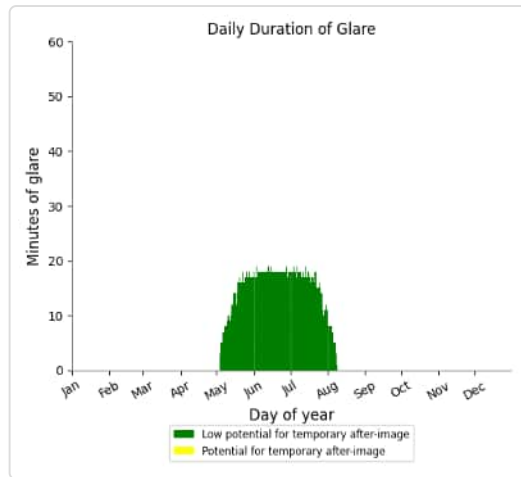
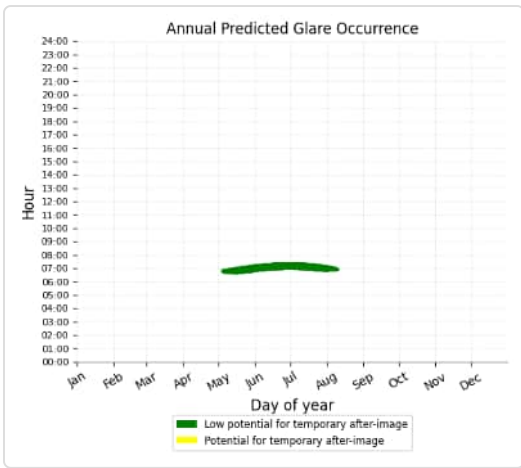
- 967 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 29)

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

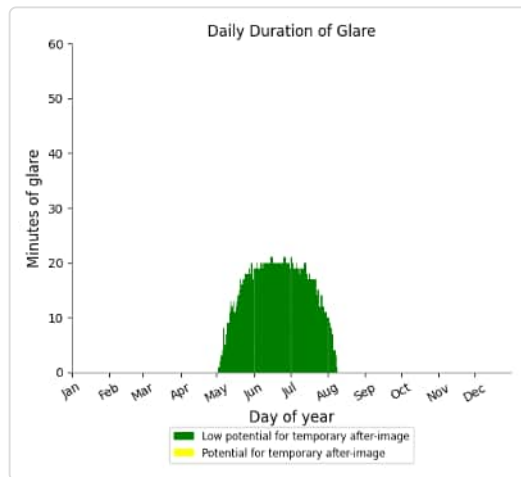
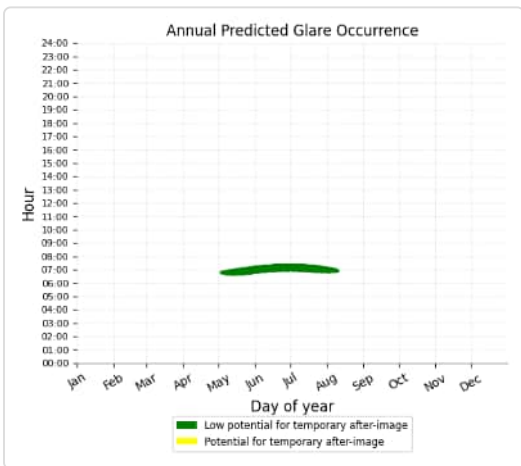
- 1,466 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

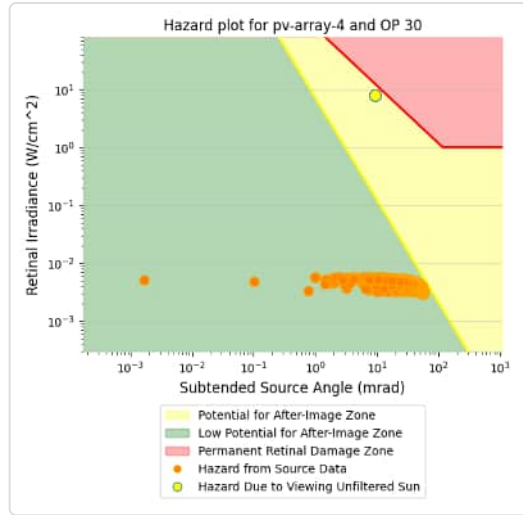
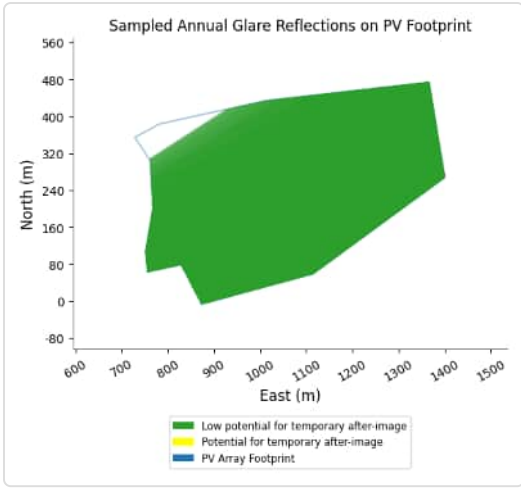


PV array 4 - OP Receptor (OP 30)

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

- 1,533 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

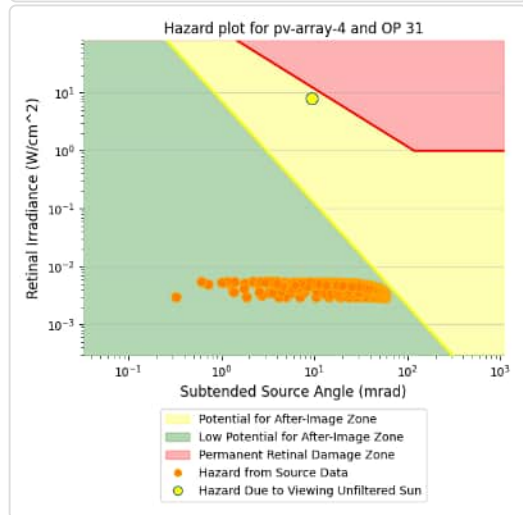
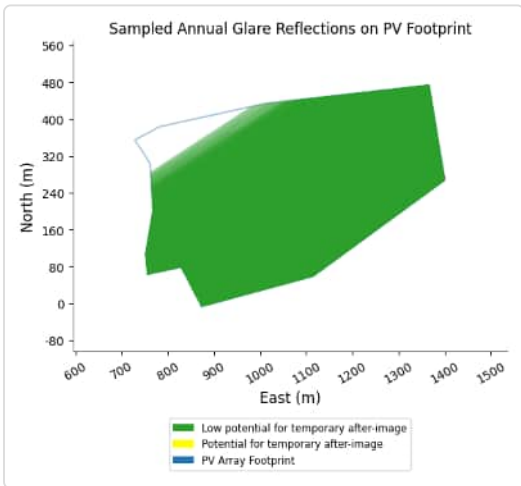
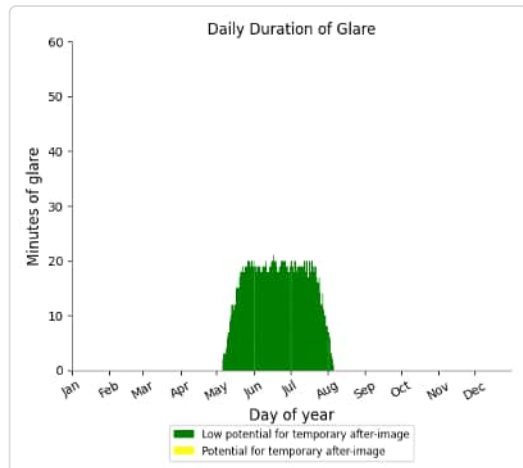
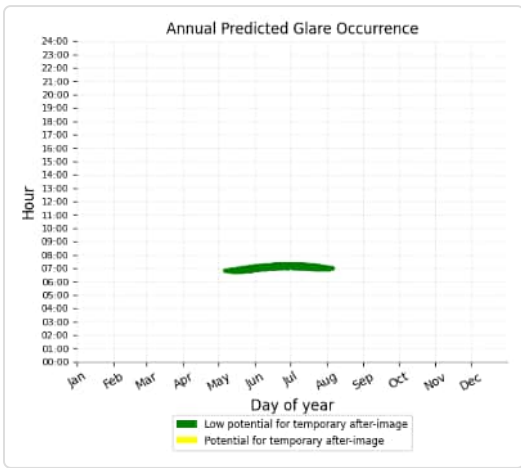




PV array 4 - OP Receptor (OP 31)

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

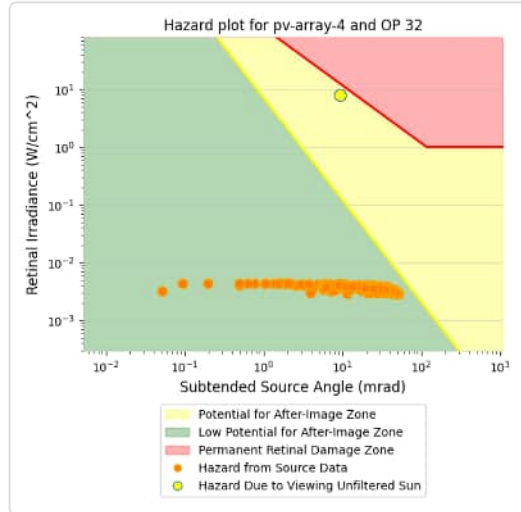
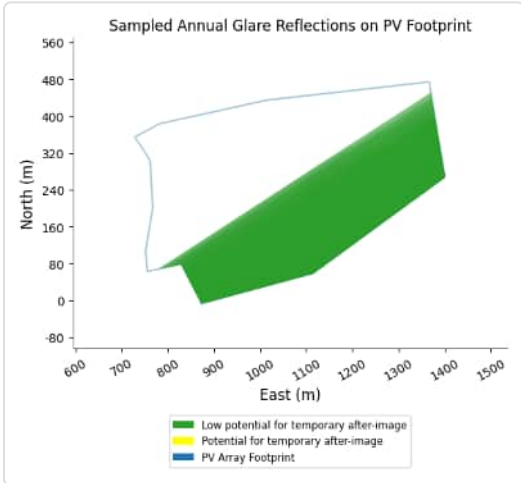
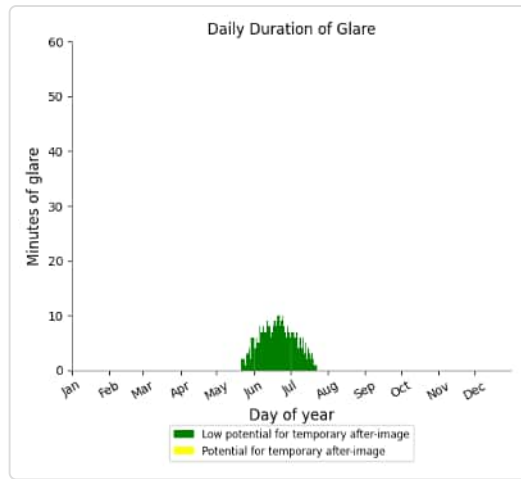
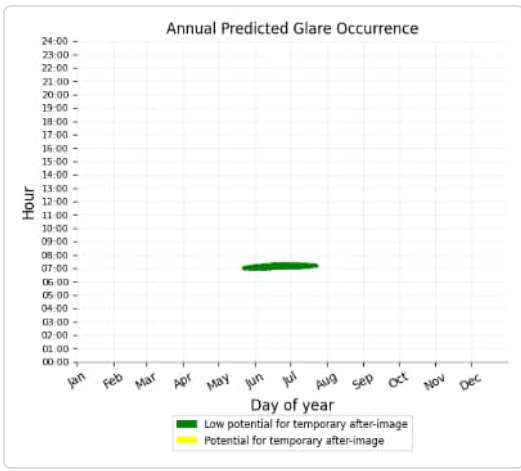
- 1,488 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 32)

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

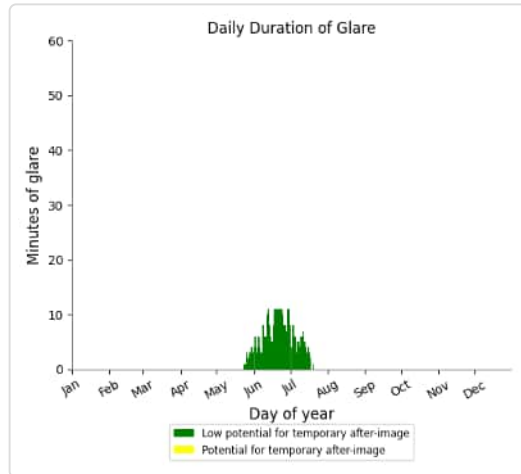
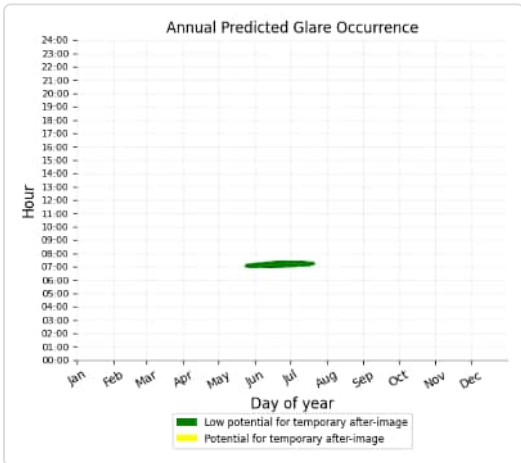
- 356 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

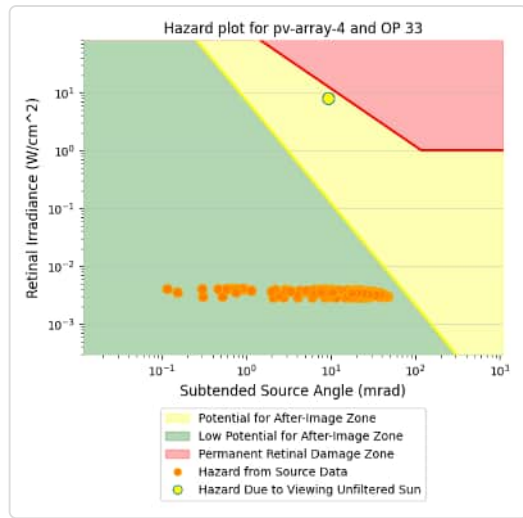
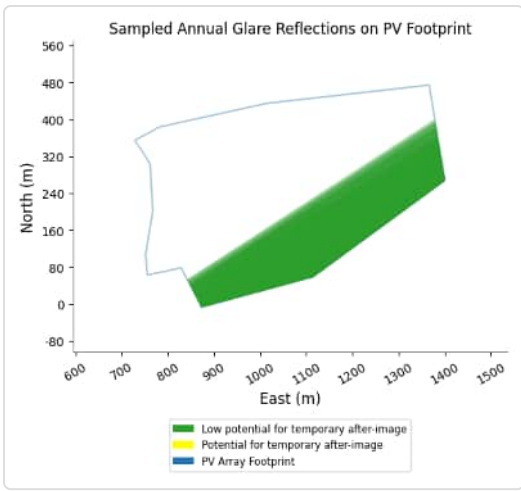


PV array 4 - OP Receptor (OP 33)

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

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

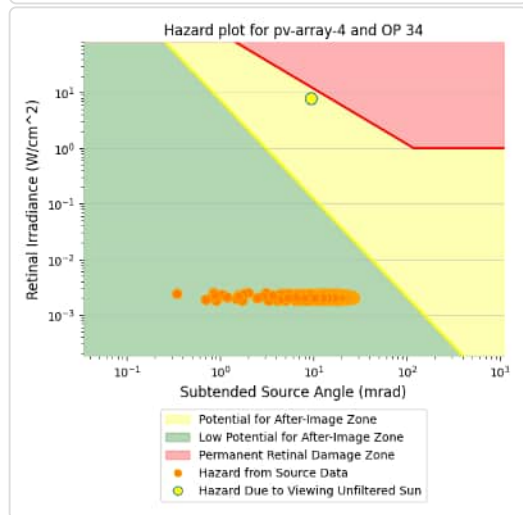
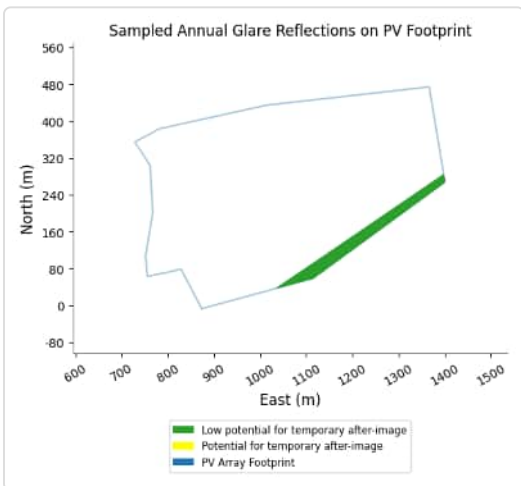
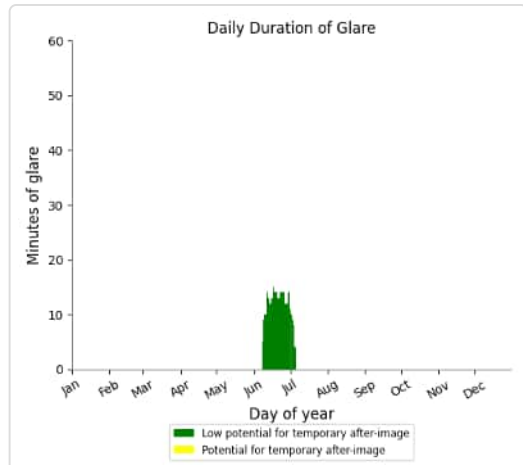
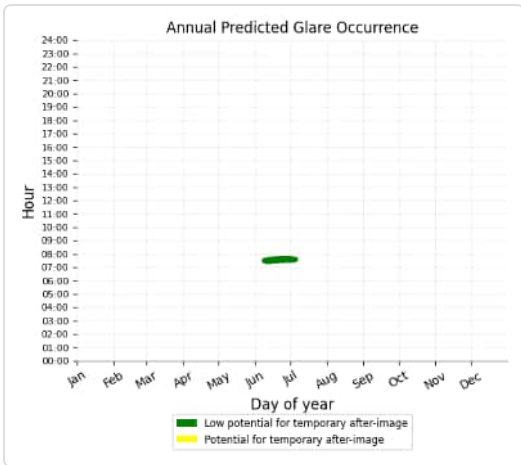




PV array 4 - OP Receptor (OP 34)

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

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



PV array 4 - OP Receptor (OP 35)

No glare found

PV array 4 - OP Receptor (OP 36)

No glare found

PV array 4 - OP Receptor (OP 37)

No glare found

PV array 4 - OP Receptor (OP 38)*No glare found***PV array 4 - OP Receptor (OP 39)***No glare found***PV array 4 - OP Receptor (OP 40)***No glare found***PV array 4 - OP Receptor (OP 41)***No glare found***PV array 4 - OP Receptor (OP 42)***No glare found***PV array 4 - OP Receptor (OP 43)***No glare found***PV array 4 - OP Receptor (OP 44)***No glare found***PV array 4 - OP Receptor (OP 45)***No glare found***PV array 4 - OP Receptor (OP 46)***No glare found***PV array 4 - OP Receptor (OP 47)***No glare found***PV array 4 - OP Receptor (OP 48)***No glare found***PV array 4 - OP Receptor (OP 49)***No glare found***PV array 4 - OP Receptor (OP 50)***No glare found***PV array 4 - OP Receptor (OP 51)***No glare found***PV array 4 - OP Receptor (OP 52)***No glare found***PV array 4 - OP Receptor (OP 53)***No glare found***PV array 4 - OP Receptor (OP 54)***No glare found*

Assumptions

- Times associated with glare are denoted in Standard time. For Daylight Savings, add one hour.
- Glare analyses do not automatically account for physical obstructions between reflectors and receptors. This includes buildings, tree cover and geographic obstructions.
- Detailed system geometry is not rigorously simulated.

- The glare hazard determination relies on several approximations including observer eye characteristics, angle of view, and typical blink response time. Actual values and results may vary.
- The system output calculation is a DNI-based approximation that assumes clear, sunny skies year-round. It should not be used in place of more rigorous modeling methods.
- Several V1 calculations utilize the PV array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array sub-sections can provide additional information on expected glare.
- The subtended source angle (glare spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size. Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards. (See previous point on related limitations.)
- Hazard zone boundaries shown in the Glare Hazard plot are an approximation and visual aid. Actual ocular impact outcomes encompass a continuous, not discrete, spectrum.
- Glare locations displayed on receptor plots are approximate. Actual glare-spot locations may differ.
- Refer to the **Help page** for detailed assumptions and limitations not listed here.

ANNEX D: RESIDENTIAL RECEPTOR GLARE RESULTS 5 DEGREES (55 – 107)





Gate Burton Solar Farm

Gate Burton Residential 5 Deg Receptors 55 - 107

Created Oct. 11, 2022
Updated Jan. 16, 2023
Time-step 1 minute
Timezone offset UTC0
Site ID 77377.13697

Project type Advanced
Project status: active
Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: **varies (1,000.0 W/m² peak)**
 Ocular transmission coefficient: **0.5**
 Pupil diameter: **0.002 m**
 Eye focal length: **0.017 m**
 Sun subtended angle: **9.3 mrad**

PV Analysis Methodology: **Version 2**
 Enhanced subtended angle calculation: **On**

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

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV array 1	5.0	180.0	93,422	2,183	-
PV array 2	5.0	180.0	28,740	8,755	-
PV array 3	5.0	180.0	31,156	0	-
PV array 4	5.0	180.0	82,770	14,461	-

Component Data

PV Array(s)

Total PV footprint area: 5,133,634 m²

Name: PV array 1
Footprint area: 1,566,789 m²
Axis tracking: Fixed (no rotation)
Tilt: 5.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.360164	-0.740929	25.37	3.50	28.87
2	53.359089	-0.745392	27.25	3.50	30.75
3	53.355324	-0.742796	26.83	3.50	30.33
4	53.356643	-0.738847	24.52	3.50	28.02
5	53.356476	-0.738161	24.99	3.50	28.49
6	53.356041	-0.737925	25.74	3.50	29.24
7	53.352452	-0.737796	29.36	3.50	32.86
8	53.348955	-0.739341	30.93	3.50	34.43
9	53.349019	-0.740242	32.51	3.50	36.01
10	53.349839	-0.742474	34.67	3.50	38.17
11	53.350210	-0.745006	33.13	3.50	36.63
12	53.349032	-0.744319	34.83	3.50	38.33
13	53.346547	-0.744062	28.42	3.50	31.92
14	53.346444	-0.745285	28.76	3.50	32.26
15	53.344574	-0.744705	24.66	3.50	28.16
16	53.344433	-0.745156	24.58	3.50	28.08
17	53.340962	-0.743160	25.60	3.50	29.10
18	53.340231	-0.741358	27.43	3.50	30.93
19	53.340833	-0.738289	29.00	3.50	32.50
20	53.339719	-0.737410	30.35	3.50	33.85
21	53.340372	-0.735157	30.09	3.50	33.59
22	53.340193	-0.731165	24.29	3.50	27.79
23	53.338566	-0.730479	22.28	3.50	25.78
24	53.337464	-0.730715	21.19	3.50	24.69
25	53.336939	-0.735393	27.65	3.50	31.15
26	53.335094	-0.734727	26.17	3.50	29.67
27	53.334786	-0.736530	27.80	3.50	31.30
28	53.333979	-0.736830	27.30	3.50	30.80
29	53.333466	-0.739577	29.91	3.50	33.41
30	53.332838	-0.739427	29.58	3.50	33.08
31	53.332633	-0.738890	29.27	3.50	32.77
32	53.332877	-0.733483	26.50	3.50	30.00
33	53.333992	-0.733826	26.54	3.50	30.04
34	53.334222	-0.731187	22.21	3.50	25.71
35	53.332928	-0.730822	22.96	3.50	26.46
36	53.333056	-0.728054	16.50	3.50	20.00
37	53.333082	-0.725822	16.02	3.50	19.52
38	53.333633	-0.725243	15.34	3.50	18.84
39	53.333223	-0.724492	16.74	3.50	20.24
40	53.332800	-0.724127	18.37	3.50	21.87
41	53.333210	-0.722454	17.65	3.50	21.15
42	53.334427	-0.722947	13.21	3.50	16.71
43	53.334286	-0.724556	13.62	3.50	17.12
44	53.336195	-0.725286	12.47	3.50	15.97
45	53.337118	-0.724814	13.00	3.50	16.50
46	53.340962	-0.727282	20.21	3.50	23.71
47	53.342832	-0.728440	22.87	3.50	26.37
48	53.342435	-0.730994	25.49	3.50	28.99
49	53.341026	-0.730608	23.57	3.50	27.07
50	53.340962	-0.731766	25.64	3.50	29.14
51	53.341256	-0.732217	26.37	3.50	29.87
52	53.344062	-0.733483	20.38	3.50	23.88
53	53.344728	-0.729663	20.11	3.50	23.61
54	53.345432	-0.730114	21.19	3.50	24.69
55	53.345343	-0.731680	22.81	3.50	26.31
56	53.344894	-0.734255	24.30	3.50	27.80
57	53.345035	-0.735071	24.65	3.50	28.15
58	53.343767	-0.734942	21.16	3.50	24.66
59	53.343767	-0.735672	21.70	3.50	25.20
60	53.344933	-0.736208	23.85	3.50	27.35
61	53.344958	-0.737968	22.48	3.50	25.98
62	53.345394	-0.738096	22.92	3.50	26.42
63	53.345471	-0.736873	23.97	3.50	27.47
64	53.346534	-0.737195	22.34	3.50	25.84

65	53.346995	-0.736594	22.46	3.50	25.96
66	53.347418	-0.736616	23.03	3.50	26.53
67	53.347200	-0.731058	24.73	3.50	28.23
68	53.353952	-0.735543	22.79	3.50	26.29
69	53.354196	-0.736337	22.12	3.50	25.62
70	53.355233	-0.736337	22.00	3.50	25.50
71	53.356882	-0.737453	23.41	3.50	26.91
72	53.356677	-0.738225	24.41	3.50	27.91
73	53.356792	-0.738740	24.08	3.50	27.58

Name: PV array 2
Footprint area: 3,187,461 m²
Axis tracking: Fixed (no rotation)
Tilt: 5.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.353754	-0.734662	23.97	3.50	27.47
2	53.338935	-0.725169	13.57	3.50	17.07
3	53.338615	-0.723559	12.00	3.50	15.50
4	53.339140	-0.723624	12.00	3.50	15.50
5	53.339294	-0.722401	12.00	3.50	15.50
6	53.338666	-0.722207	11.79	3.50	15.29
7	53.338269	-0.722744	12.00	3.50	15.50
8	53.337500	-0.722165	11.72	3.50	15.22
9	53.337064	-0.723066	12.31	3.50	15.81
10	53.336155	-0.723452	13.00	3.50	16.50
11	53.333515	-0.721671	15.87	3.50	19.37
12	53.334143	-0.718045	11.00	3.50	14.50
13	53.334745	-0.718538	11.00	3.50	14.50
14	53.334950	-0.718152	11.00	3.50	14.50
15	53.335783	-0.717959	10.14	3.50	13.64
16	53.336616	-0.718345	9.24	3.50	12.74
17	53.336975	-0.718216	9.59	3.50	13.09
18	53.337667	-0.718688	10.61	3.50	14.11
19	53.337897	-0.717723	10.95	3.50	14.45
20	53.337859	-0.716392	9.89	3.50	13.39
21	53.337269	-0.715341	9.24	3.50	12.74
22	53.336116	-0.715856	9.81	3.50	13.31
23	53.334809	-0.714955	10.90	3.50	14.40
24	53.335732	-0.710949	11.21	3.50	14.71
25	53.336244	-0.710563	11.08	3.50	14.58
26	53.336552	-0.709983	11.04	3.50	14.54
27	53.337564	-0.710155	12.22	3.50	15.72
28	53.337603	-0.709511	12.51	3.50	16.01
29	53.338410	-0.709061	13.25	3.50	16.75
30	53.339153	-0.709211	13.80	3.50	17.30
31	53.339178	-0.705520	14.81	3.50	18.31
32	53.341318	-0.704426	14.16	3.50	17.66
33	53.341254	-0.703460	15.00	3.50	18.50
34	53.338320	-0.701636	14.00	3.50	17.50
35	53.337731	-0.702967	14.70	3.50	18.20
36	53.337052	-0.702516	14.29	3.50	17.79
37	53.337039	-0.698825	16.56	3.50	20.06
38	53.337128	-0.696336	19.06	3.50	22.56
39	53.336962	-0.695049	20.32	3.50	23.82
40	53.337295	-0.693182	19.41	3.50	22.91
41	53.339883	-0.694727	14.00	3.50	17.50
42	53.341087	-0.692023	13.00	3.50	16.50
43	53.341664	-0.692109	13.00	3.50	16.50
44	53.344277	-0.696465	12.00	3.50	15.50
45	53.348287	-0.697817	13.08	3.50	16.58
46	53.349350	-0.697602	14.02	3.50	17.52
47	53.349516	-0.698224	14.00	3.50	17.50
48	53.349427	-0.702924	17.52	3.50	21.02
49	53.348914	-0.705091	17.98	3.50	21.48
50	53.349222	-0.705305	18.00	3.50	21.50
51	53.349183	-0.706464	18.00	3.50	21.50
52	53.346980	-0.706421	17.00	3.50	20.50
53	53.346378	-0.713138	13.88	3.50	17.38
54	53.347505	-0.713910	14.28	3.50	17.78
55	53.347505	-0.714983	14.25	3.50	17.75
56	53.349030	-0.715498	16.00	3.50	19.50
57	53.349004	-0.720004	22.46	3.50	25.96
58	53.350848	-0.719789	21.00	3.50	24.50
59	53.352872	-0.719747	19.04	3.50	22.54
60	53.353564	-0.719918	18.54	3.50	22.04
61	53.352898	-0.721678	18.21	3.50	21.71
62	53.352782	-0.724574	17.76	3.50	21.26
63	53.353359	-0.728244	19.54	3.50	23.04
64	53.353961	-0.728887	19.19	3.50	22.69

65	53.354166	-0.729746	19.36	3.50	22.86
66	53.354179	-0.734016	22.69	3.50	26.19

Name: PV array 3

Footprint area: 162,560 m²

Axis tracking: Fixed (no rotation)

Tilt: 5.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.355703	-0.727643	18.87	3.50	22.37
2	53.355177	-0.725669	17.24	3.50	20.74
3	53.355088	-0.721935	18.98	3.50	22.48
4	53.355101	-0.720734	21.71	3.50	25.21
5	53.356125	-0.721034	21.89	3.50	25.39
6	53.357483	-0.721120	19.10	3.50	22.60
7	53.357534	-0.722836	18.29	3.50	21.79
8	53.359083	-0.721849	18.14	3.50	21.64
9	53.359544	-0.722107	16.73	3.50	20.23
10	53.359762	-0.721485	16.64	3.50	20.14
11	53.359583	-0.720734	17.67	3.50	21.17
12	53.360402	-0.719875	17.29	3.50	20.79
13	53.360313	-0.723673	16.00	3.50	19.50
14	53.360044	-0.724832	16.19	3.50	19.69
15	53.357585	-0.725175	17.45	3.50	20.95

Name: PV array 4

Footprint area: 216,825 m²

Axis tracking: Fixed (no rotation)

Tilt: 5.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.360082	-0.727836	17.00	3.50	20.50
2	53.360851	-0.728501	17.37	3.50	20.87
3	53.360710	-0.729596	18.17	3.50	21.67
4	53.361107	-0.729660	18.75	3.50	22.25
5	53.361952	-0.729424	19.00	3.50	22.50
6	53.362874	-0.729510	19.31	3.50	22.81
7	53.363335	-0.730003	20.12	3.50	23.62
8	53.363591	-0.729209	19.64	3.50	23.14
9	53.364052	-0.725733	17.95	3.50	21.45
10	53.364410	-0.720433	15.80	3.50	19.30
11	53.362554	-0.719918	16.00	3.50	19.50
12	53.360671	-0.724210	16.71	3.50	20.21

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	m	m	m
OP 1	53.330046	-0.742362	11.72	2.00	13.72
OP 2	53.330482	-0.741461	15.68	2.00	17.68
OP 3	53.329201	-0.740688	14.63	2.00	16.63
OP 4	53.328675	-0.740216	14.98	2.00	16.98
OP 5	53.328470	-0.738950	19.91	2.00	21.91
OP 6	53.328598	-0.737727	24.53	2.00	26.53
OP 7	53.329265	-0.736461	25.64	2.00	27.64
OP 8	53.328842	-0.735560	24.72	2.00	26.72
OP 9	53.329073	-0.734015	21.99	2.00	23.99
OP 10	53.329367	-0.731977	22.04	2.00	24.04
OP 11	53.332384	-0.716654	13.09	2.00	15.09
OP 12	53.337644	-0.723939	12.61	2.00	14.61
OP 13	53.336632	-0.708876	12.56	2.00	14.56
OP 14	53.337126	-0.703854	14.12	2.00	16.12
OP 15	53.339465	-0.704047	15.00	2.00	17.00
OP 16	53.340548	-0.680322	11.83	2.00	13.83
OP 17	53.344288	-0.684208	16.00	2.00	18.00
OP 18	53.343628	-0.683704	16.42	2.00	18.42
OP 19	53.343980	-0.683007	15.14	2.00	17.14
OP 20	53.348256	-0.680721	13.98	2.00	15.98
OP 21	53.343724	-0.682895	15.31	2.00	17.31
OP 22	53.346822	-0.685359	16.99	2.00	18.99
OP 23	53.346732	-0.687311	17.77	2.00	19.77
OP 24	53.346348	-0.690938	19.25	2.00	21.25
OP 25	53.347347	-0.686764	18.47	2.00	20.47
OP 26	53.348045	-0.685530	20.00	2.00	22.00
OP 27	53.348769	-0.686796	21.17	2.00	23.17
OP 28	53.348404	-0.691453	21.00	2.00	23.00
OP 29	53.349774	-0.691078	21.54	2.00	23.54
OP 30	53.349954	-0.689887	23.14	2.00	25.14
OP 31	53.350701	-0.689440	22.41	2.00	24.41
OP 32	53.351175	-0.686994	20.00	2.00	22.00
OP 33	53.351527	-0.685482	16.51	2.00	18.51
OP 34	53.351950	-0.683507	13.67	2.00	15.67
OP 35	53.352778	-0.694745	15.59	2.00	17.59
OP 36	53.352977	-0.690871	21.99	2.00	23.99
OP 37	53.353201	-0.691665	21.37	2.00	23.37
OP 38	53.354104	-0.691877	20.55	2.00	22.55
OP 39	53.354411	-0.692971	17.79	2.00	19.79
OP 40	53.355103	-0.692135	20.01	2.00	22.01
OP 41	53.355500	-0.691351	21.00	2.00	23.00
OP 42	53.356537	-0.690922	21.87	2.00	23.87
OP 43	53.360744	-0.718914	16.79	2.00	18.79
OP 44	53.360734	-0.718104	16.80	2.00	18.80
OP 45	53.360209	-0.716441	17.44	2.00	19.44
OP 46	53.360651	-0.715609	17.92	2.00	19.92
OP 47	53.360557	-0.712735	19.00	2.00	21.00
OP 48	53.360406	-0.712144	19.24	2.00	21.24
OP 49	53.360365	-0.711806	19.11	2.00	21.11
OP 50	53.360445	-0.711206	18.40	2.00	20.40
OP 51	53.359910	-0.711683	20.00	2.00	22.00
OP 52	53.360333	-0.706860	16.56	2.00	18.56
OP 53	53.361697	-0.706109	18.40	2.00	20.40

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
PV array 1	5.0	180.0	93,422	2,183	-	-
PV array 2	5.0	180.0	28,740	8,755	-	-
PV array 3	5.0	180.0	31,156	0	-	-
PV array 4	5.0	180.0	82,770	14,461	-	-

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
pv-array-1 (green)	0	29	418	833	1260	1346	1309	1052	537	135	0	0
pv-array-1 (yellow)	0	0	0	1	127	271	218	11	0	0	0	0
pv-array-2 (green)	0	0	0	312	1065	959	1061	665	15	0	0	0
pv-array-2 (yellow)	0	0	0	35	259	519	369	103	0	0	0	0
pv-array-3 (green)	0	0	5	183	437	548	500	283	42	0	0	0
pv-array-3 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
pv-array-4 (green)	0	0	342	657	348	706	420	577	534	30	0	0
pv-array-4 (yellow)	0	0	0	0	5	66	64	1	0	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

PV array 1 potential temporary after-image

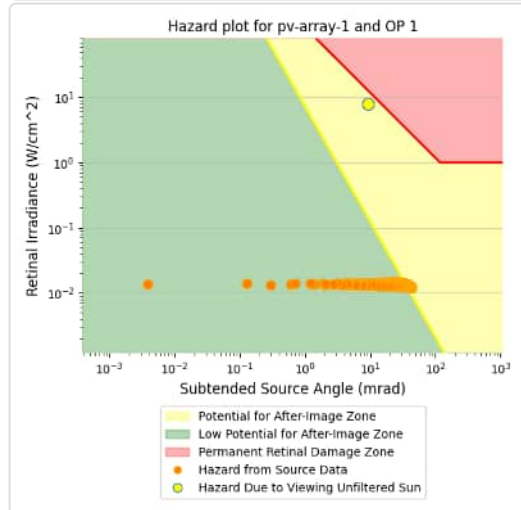
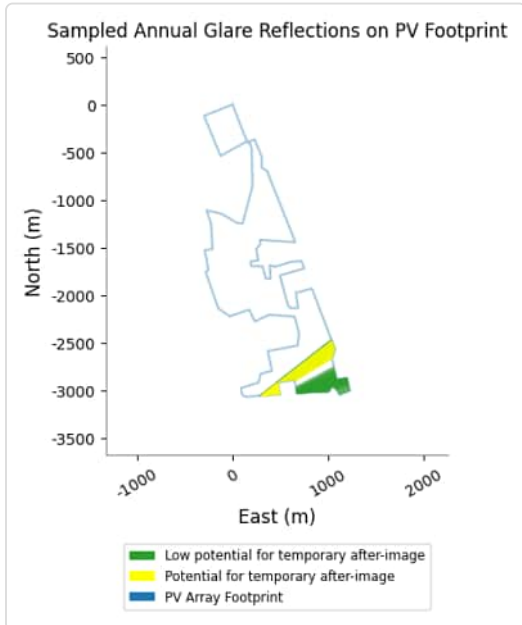
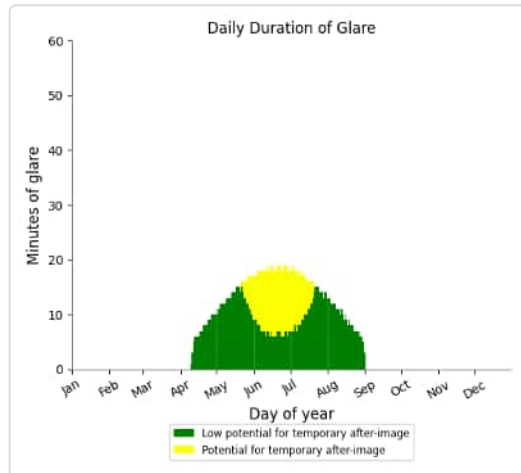
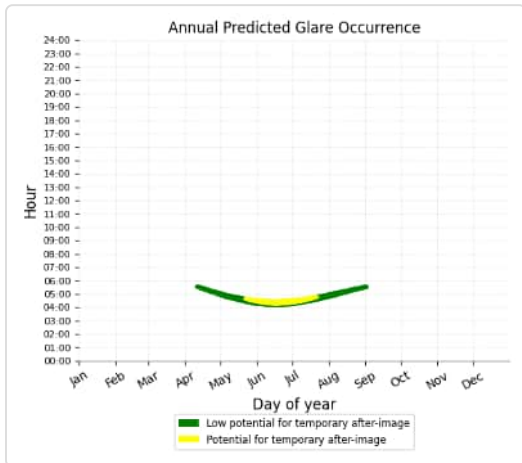
Component	Green glare (min)	Yellow glare (min)
OP: OP 1	1383	548
OP: OP 2	1343	618
OP: OP 3	1658	133
OP: OP 4	1668	0
OP: OP 5	1531	0
OP: OP 6	1197	0
OP: OP 7	553	0
OP: OP 8	522	0
OP: OP 9	818	0
OP: OP 10	401	0
OP: OP 11	1610	83
OP: OP 12	419	628
OP: OP 13	3557	173
OP: OP 14	4093	0
OP: OP 15	4183	0
OP: OP 16	3846	0
OP: OP 17	2870	0
OP: OP 18	3248	0
OP: OP 19	3047	0

OP: OP 20	2235	0
OP: OP 21	3181	0
OP: OP 22	2697	0
OP: OP 23	2600	0
OP: OP 24	3106	0
OP: OP 25	2664	0
OP: OP 26	2517	0
OP: OP 27	2456	0
OP: OP 28	2555	0
OP: OP 29	2341	0
OP: OP 30	2378	0
OP: OP 31	2173	0
OP: OP 32	1970	0
OP: OP 33	1851	0
OP: OP 34	1519	0
OP: OP 35	1670	0
OP: OP 36	1839	0
OP: OP 37	1791	0
OP: OP 38	1669	0
OP: OP 39	1540	0
OP: OP 40	1464	0
OP: OP 41	1445	0
OP: OP 42	1294	0
OP: OP 43	452	0
OP: OP 44	465	0
OP: OP 45	606	0
OP: OP 46	518	0
OP: OP 47	622	0
OP: OP 48	627	0
OP: OP 49	658	0
OP: OP 50	652	0
OP: OP 51	771	0
OP: OP 52	666	0
OP: OP 53	483	0

PV array 1 - OP Receptor (OP 1)

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

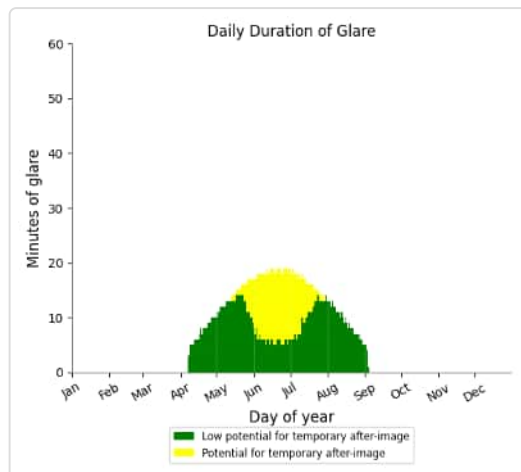
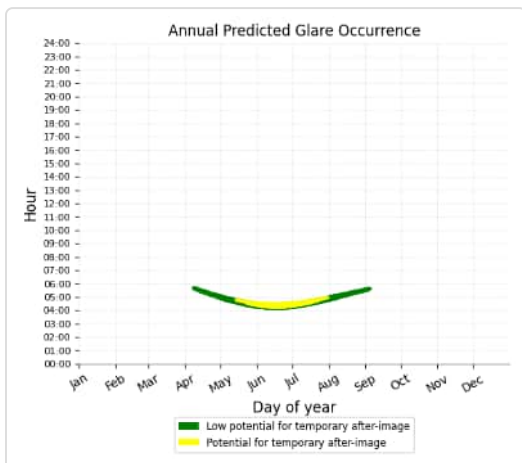
- 1,383 minutes of "green" glare with low potential to cause temporary after-image.
- 548 minutes of "yellow" glare with potential to cause temporary after-image.

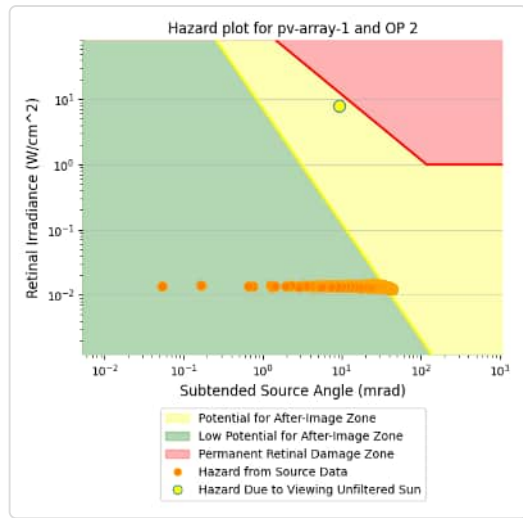
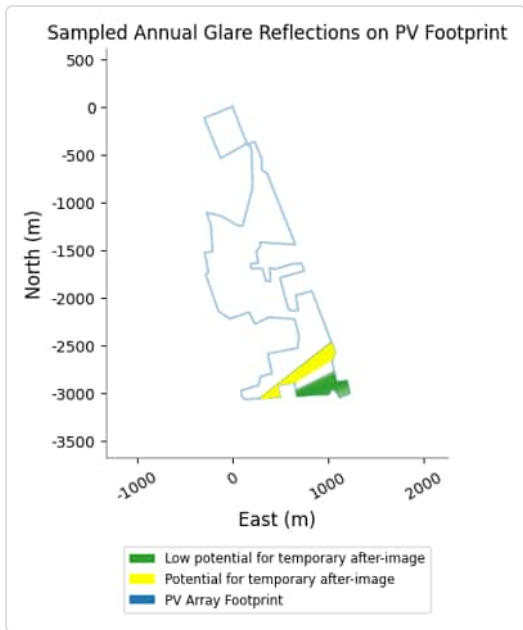


PV array 1 - OP Receptor (OP 2)

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

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

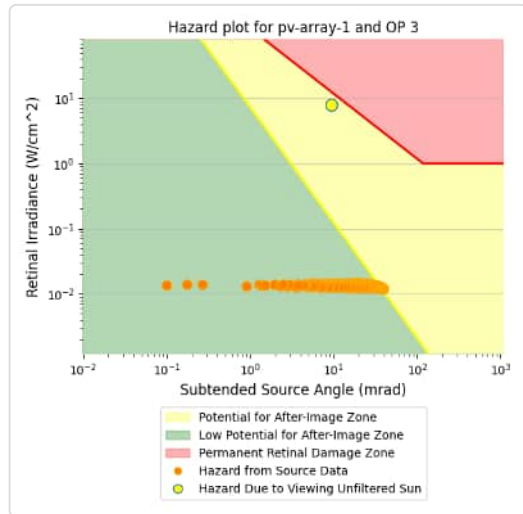
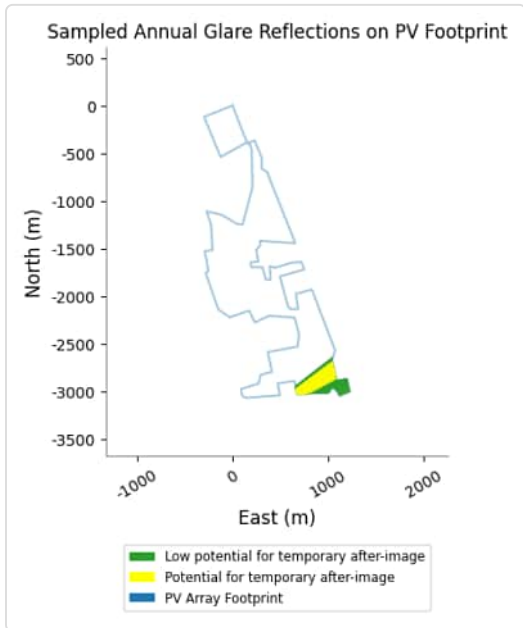
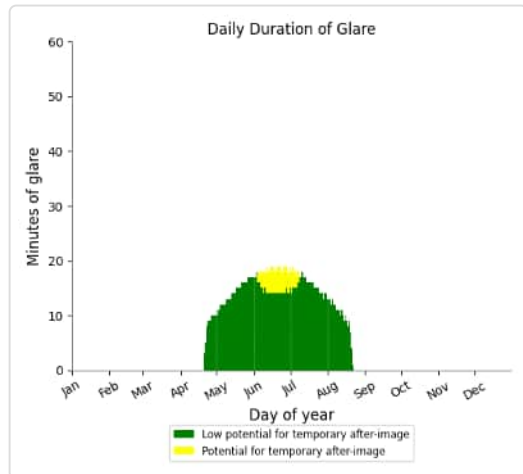
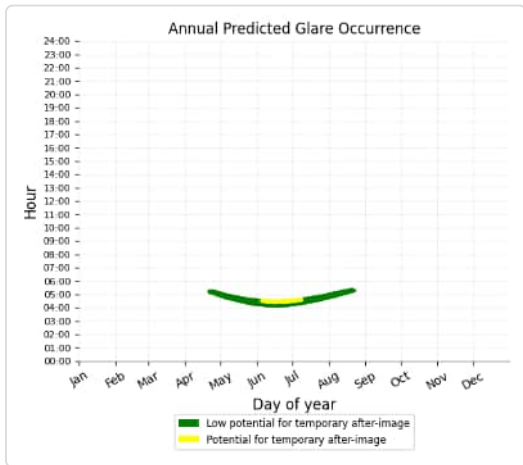




PV array 1 - OP Receptor (OP 3)

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

- 1,658 minutes of "green" glare with low potential to cause temporary after-image.
- 133 minutes of "yellow" glare with potential to cause temporary after-image.

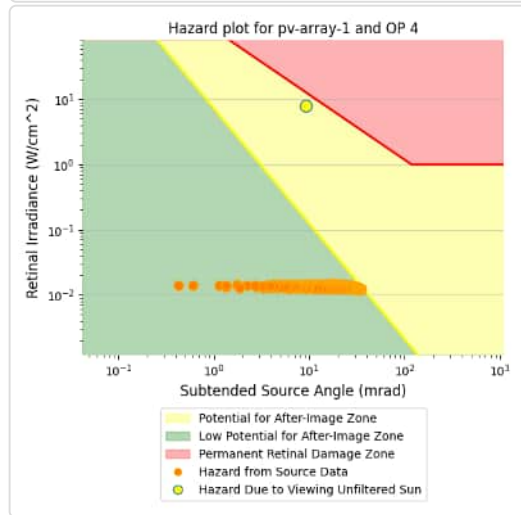
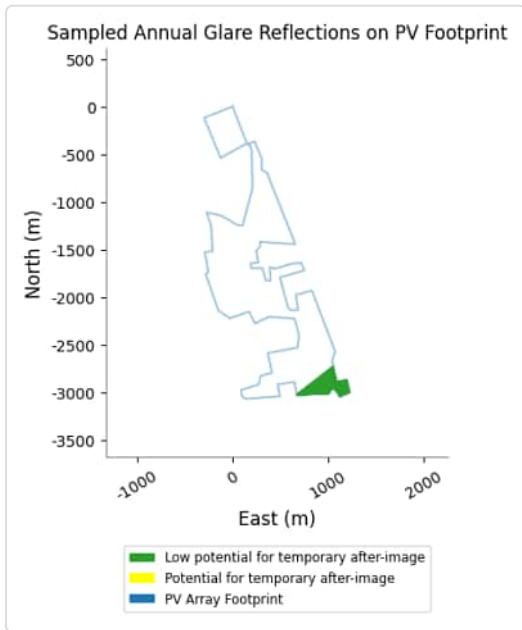
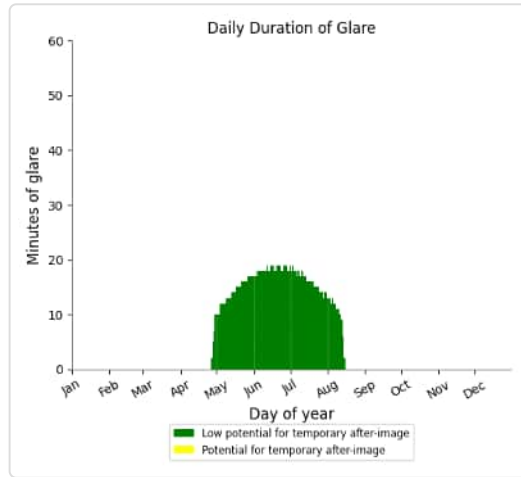
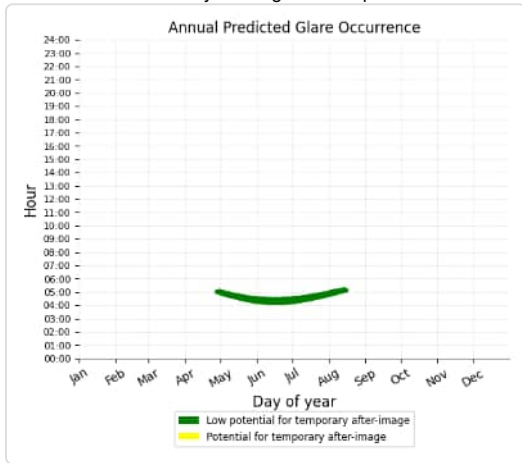


PV array 1 - OP Receptor (OP 4)

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

- 1,668 minutes of "green" glare with low potential to cause temporary after-image.

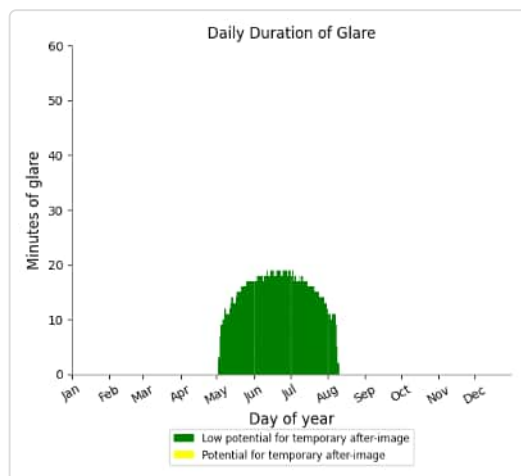
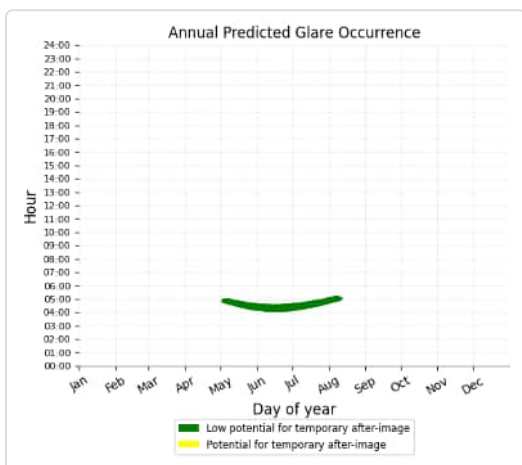
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

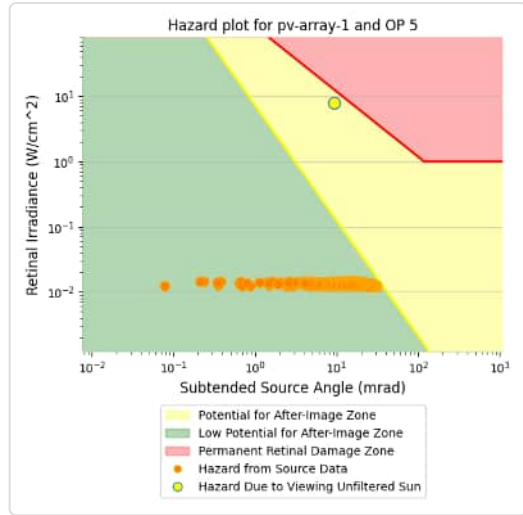
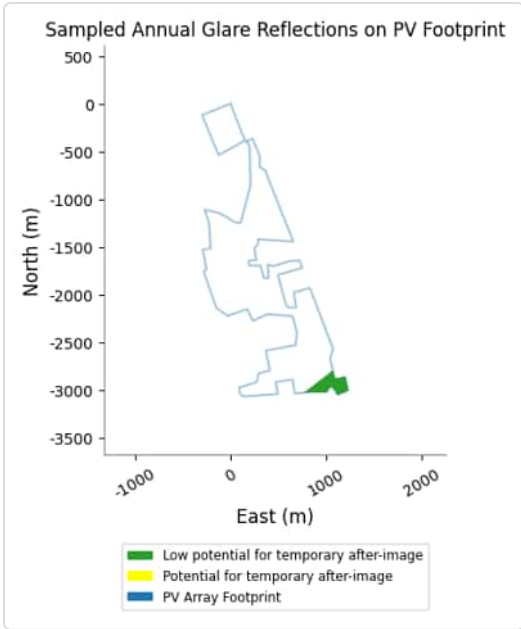


PV array 1 - OP Receptor (OP 5)

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

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

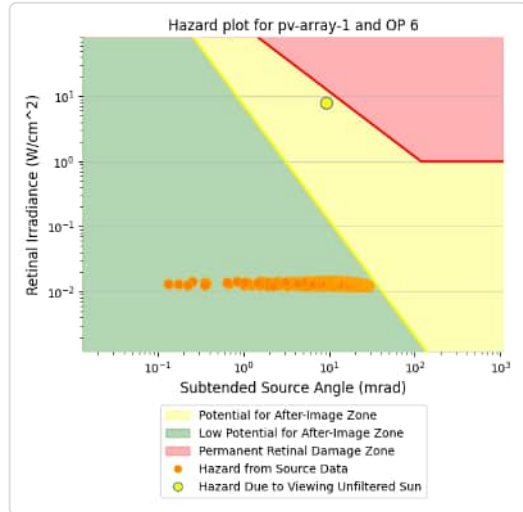
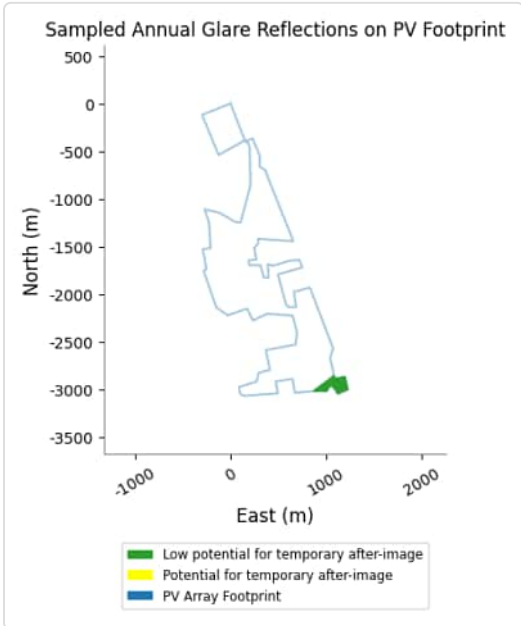
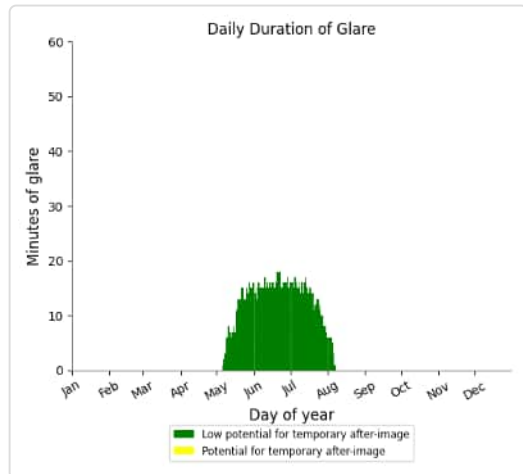
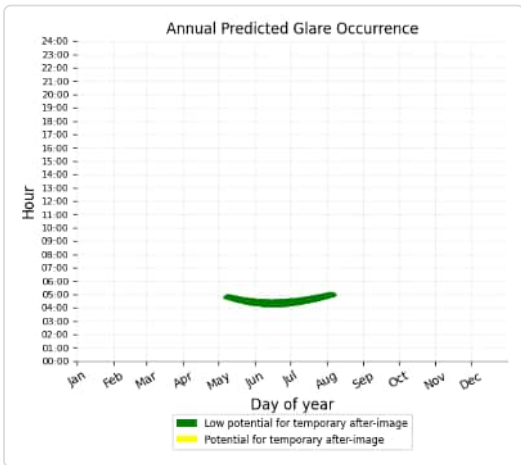




PV array 1 - OP Receptor (OP 6)

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

- 1,197 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

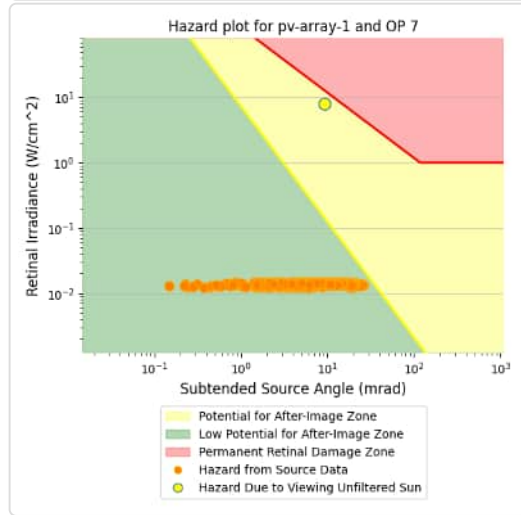
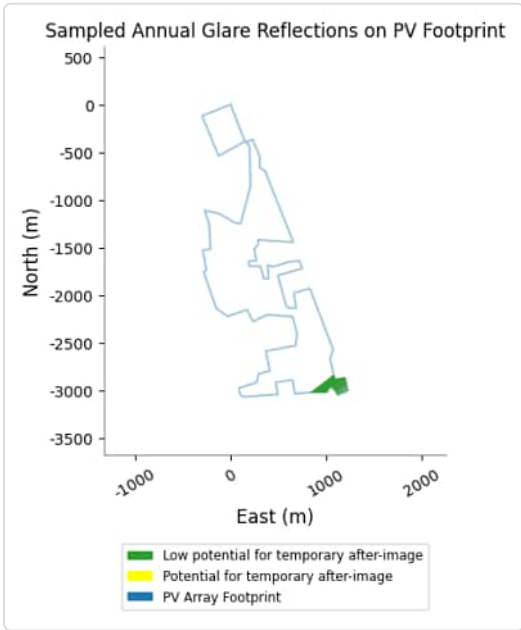
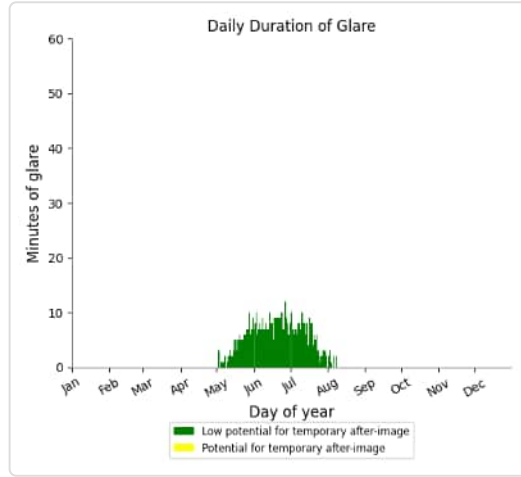
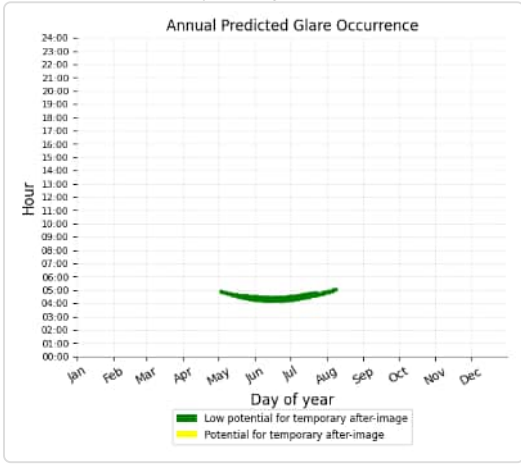


PV array 1 - OP Receptor (OP 7)

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

- 553 minutes of "green" glare with low potential to cause temporary after-image.

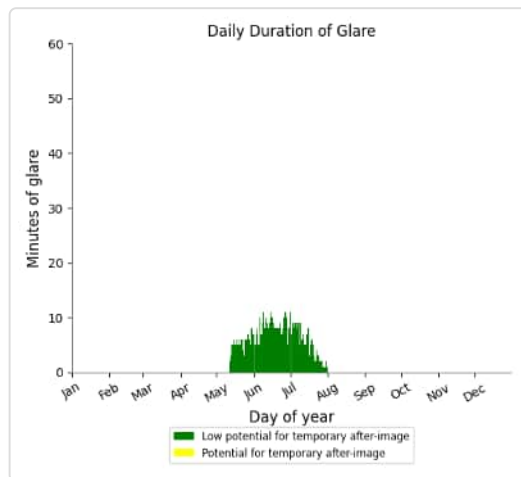
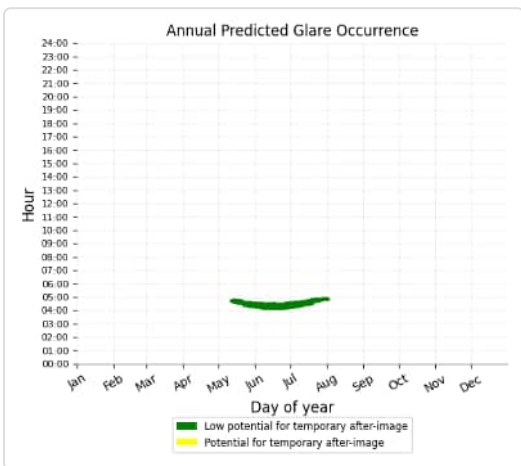
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

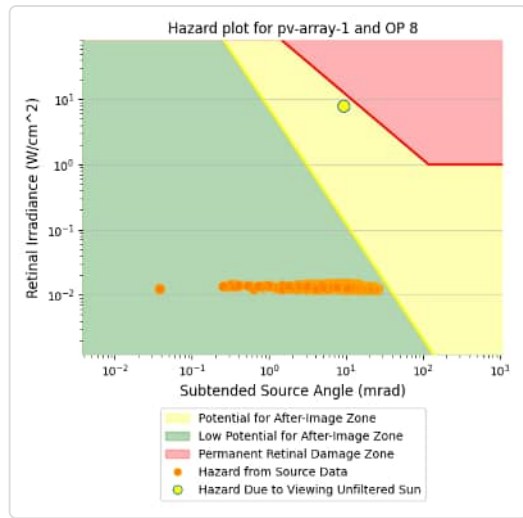
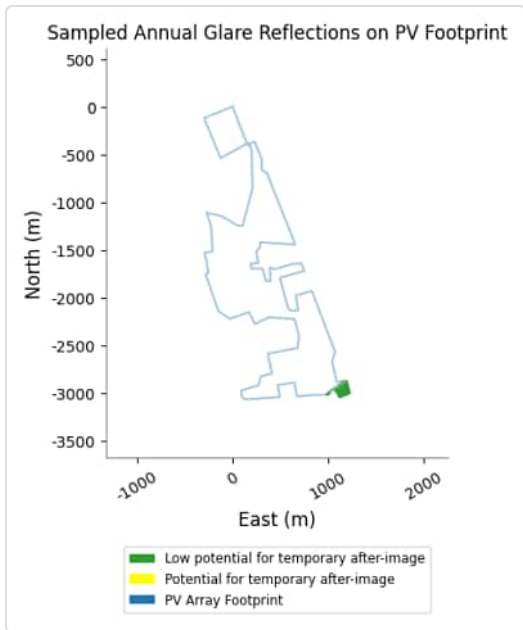


PV array 1 - OP Receptor (OP 8)

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

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

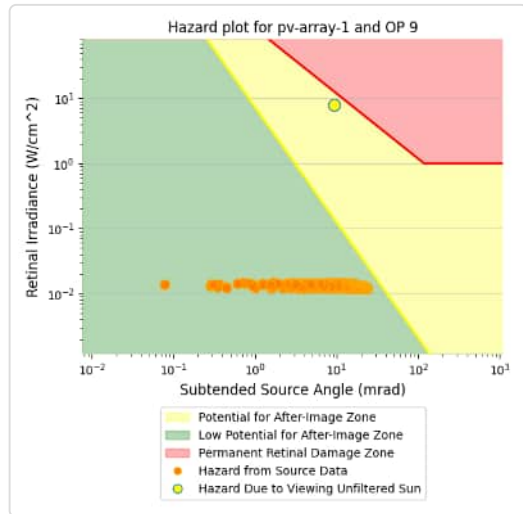
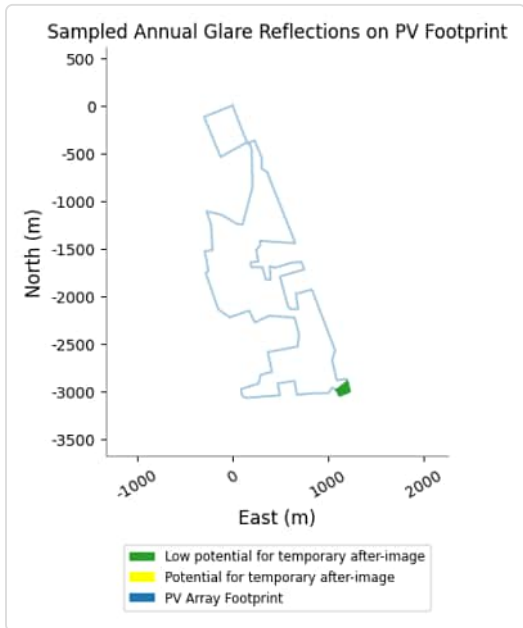
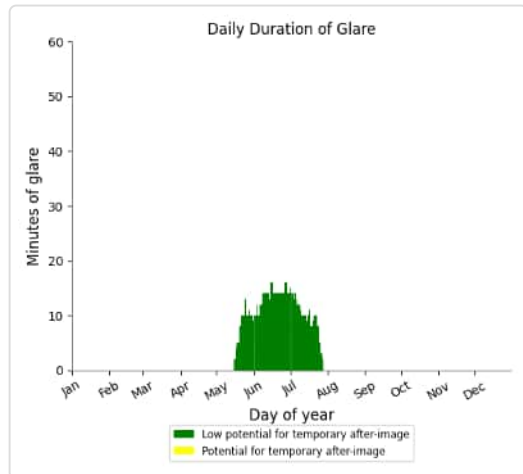
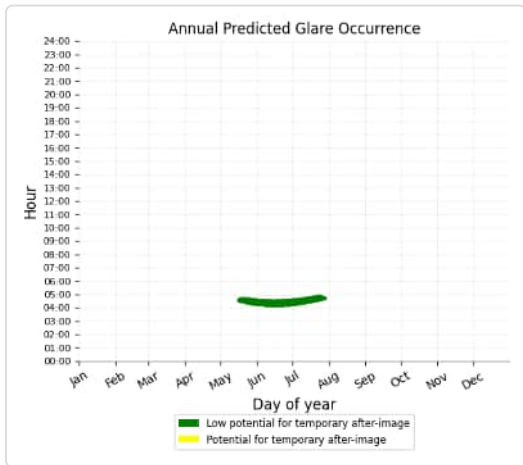




PV array 1 - OP Receptor (OP 9)

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

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

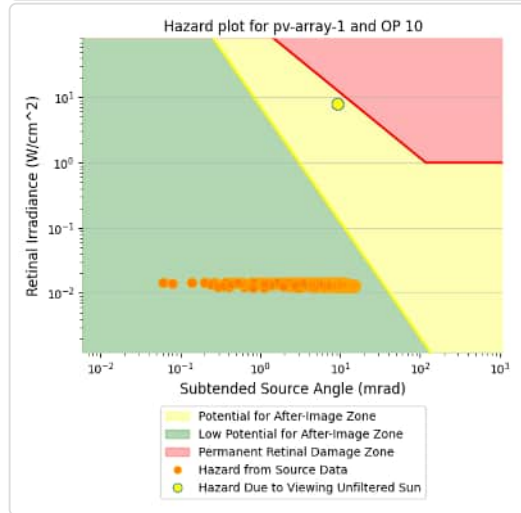
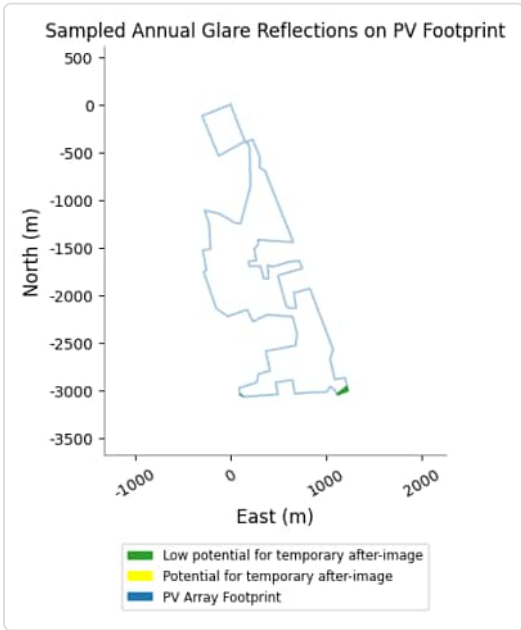
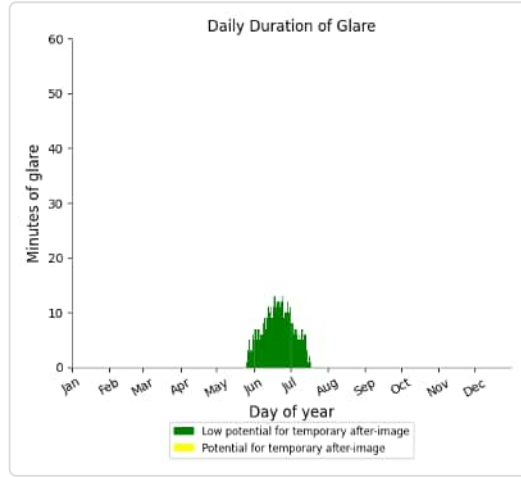
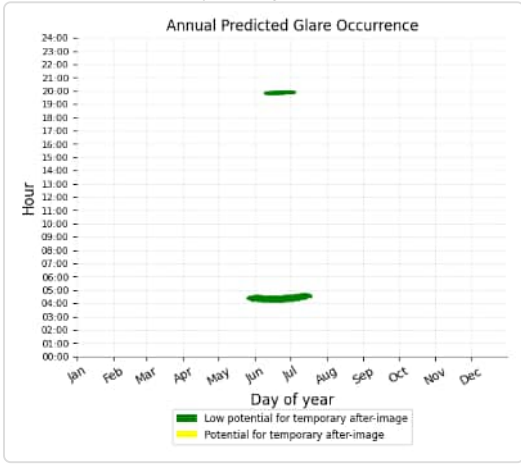


PV array 1 - OP Receptor (OP 10)

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

- 401 minutes of "green" glare with low potential to cause temporary after-image.

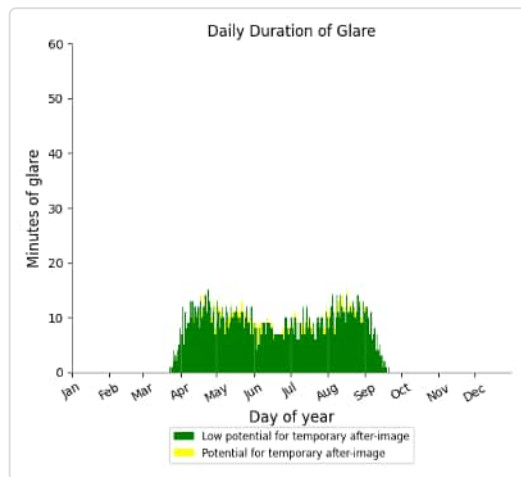
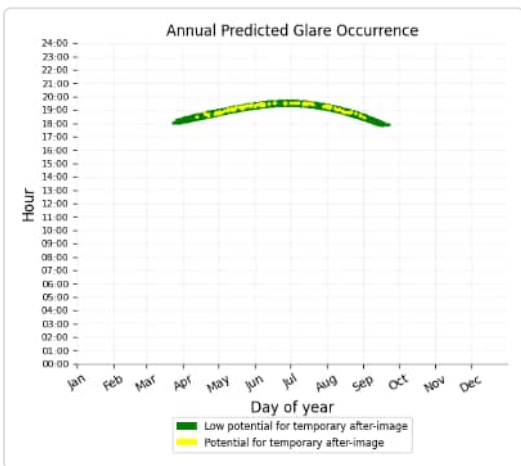
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

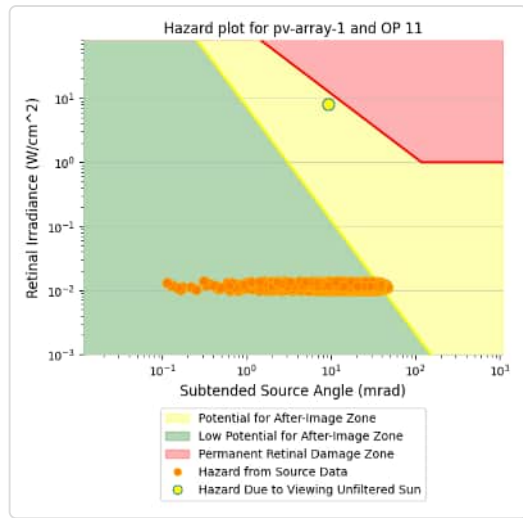
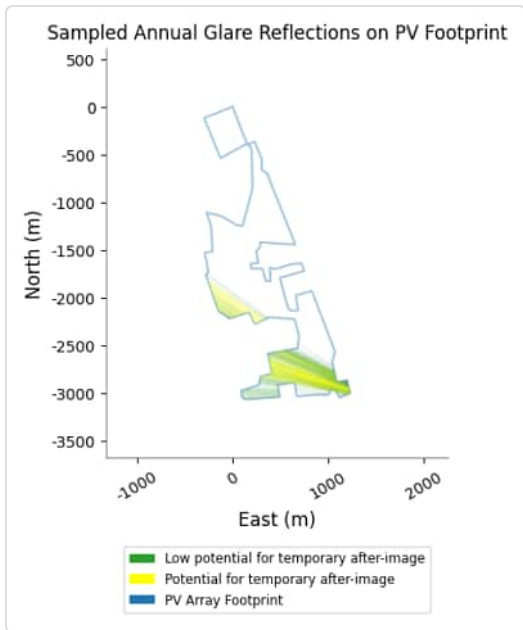


PV array 1 - OP Receptor (OP 11)

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

- 1,610 minutes of "green" glare with low potential to cause temporary after-image.
- 83 minutes of "yellow" glare with potential to cause temporary after-image.

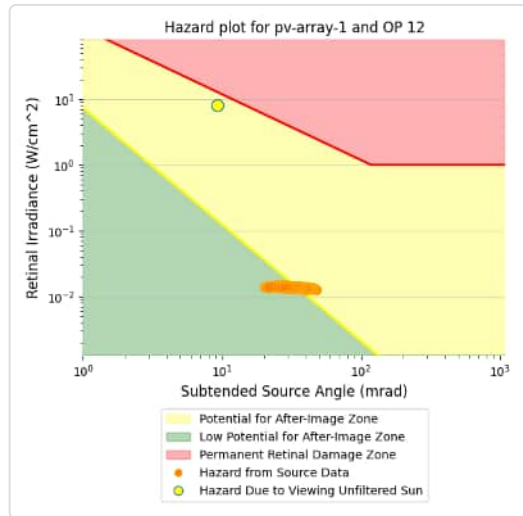
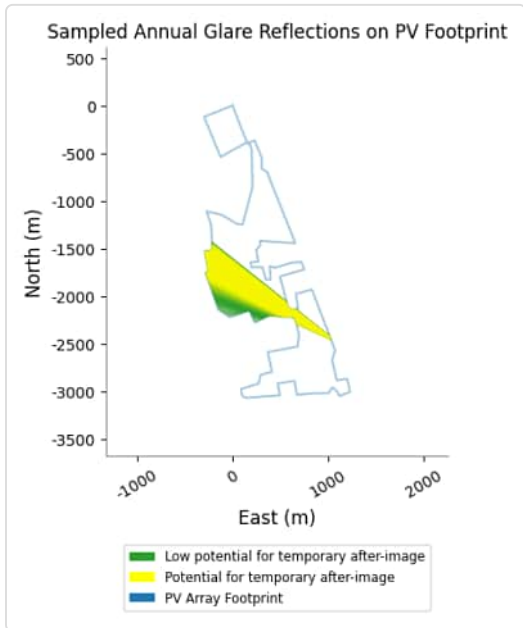
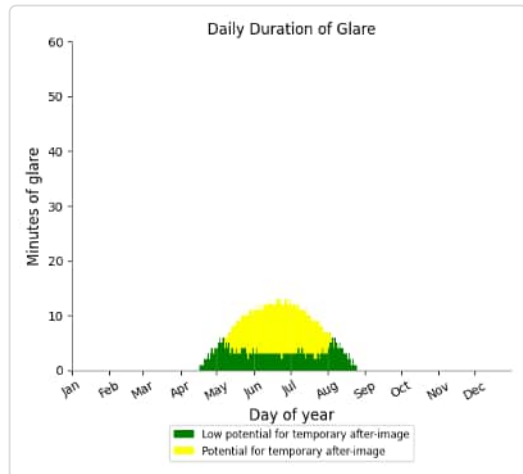
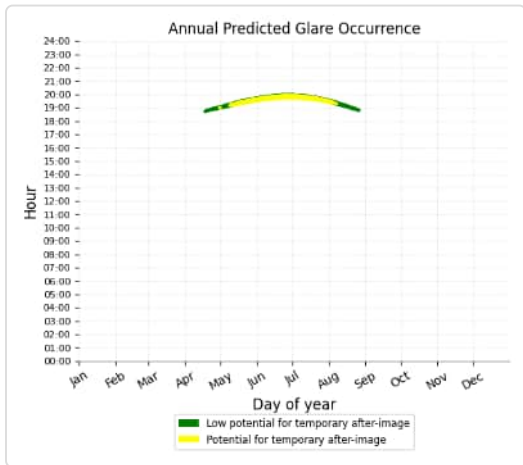




PV array 1 - OP Receptor (OP 12)

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

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

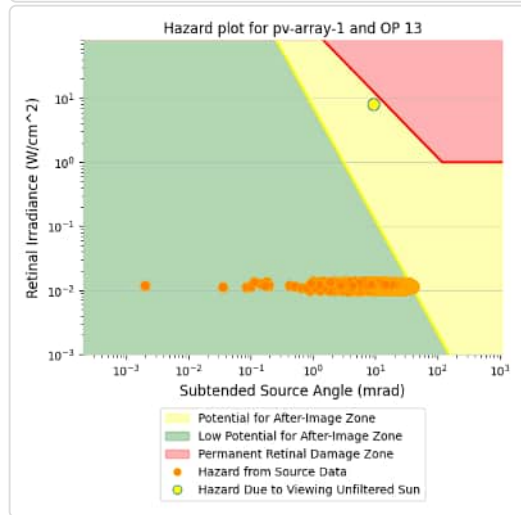
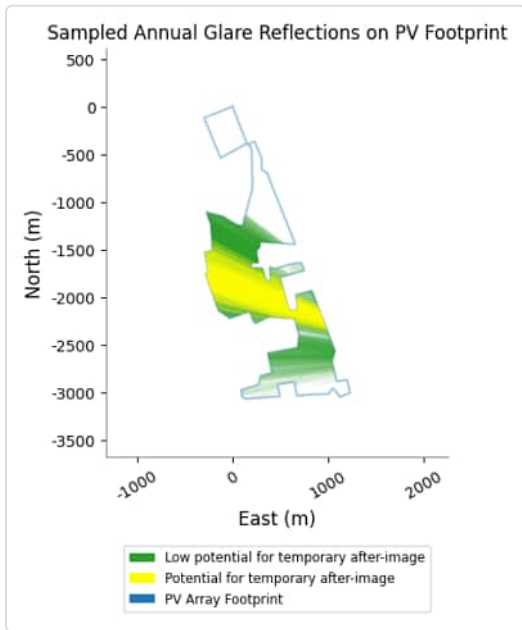
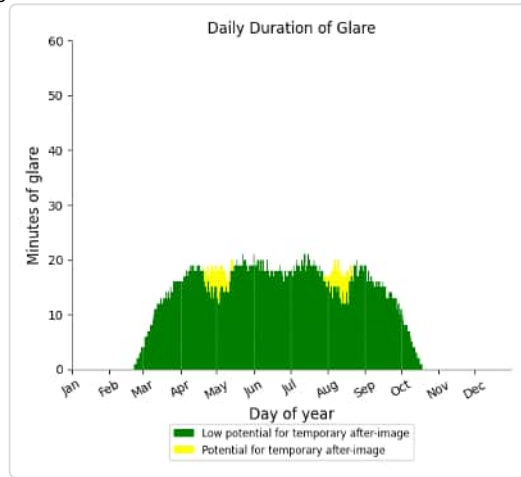
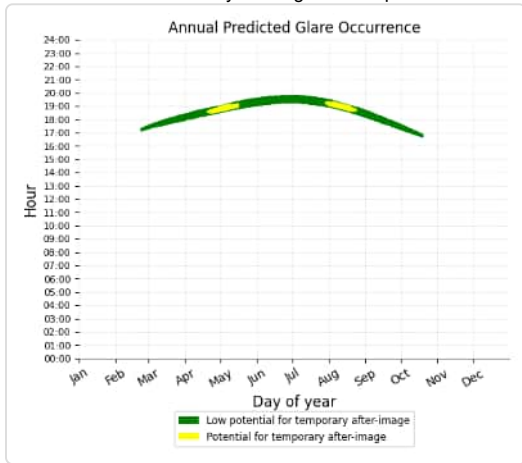


PV array 1 - OP Receptor (OP 13)

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

- 3,557 minutes of "green" glare with low potential to cause temporary after-image.

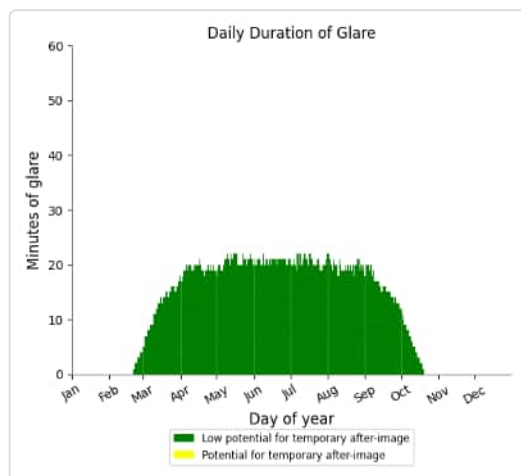
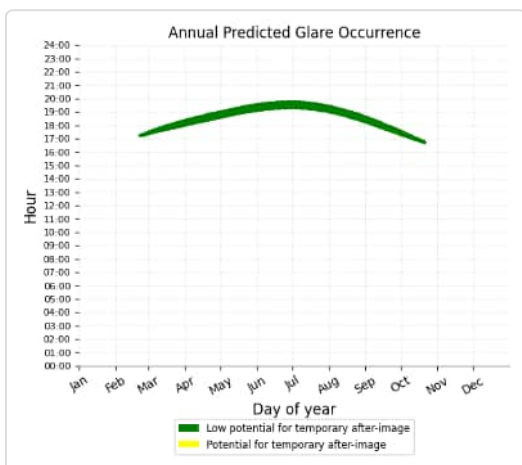
- 173 minutes of "yellow" glare with potential to cause temporary after-image.

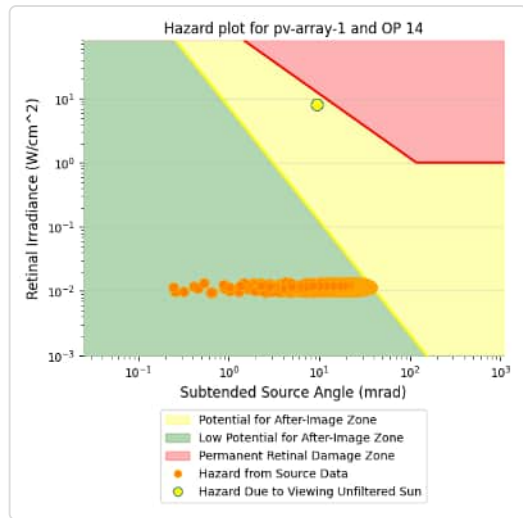
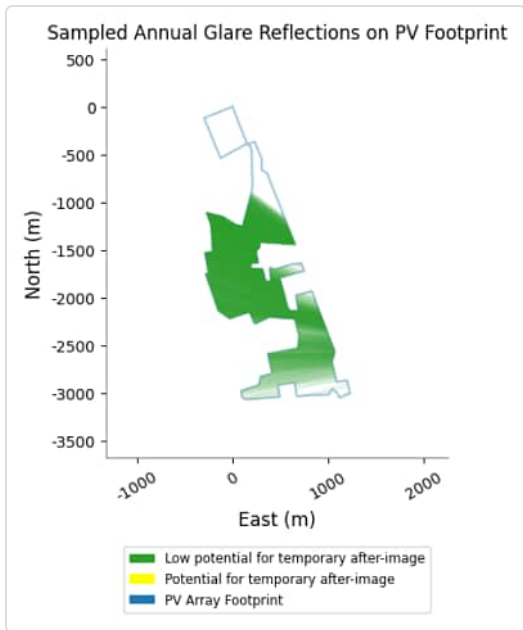


PV array 1 - OP Receptor (OP 14)

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

- 4,093 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

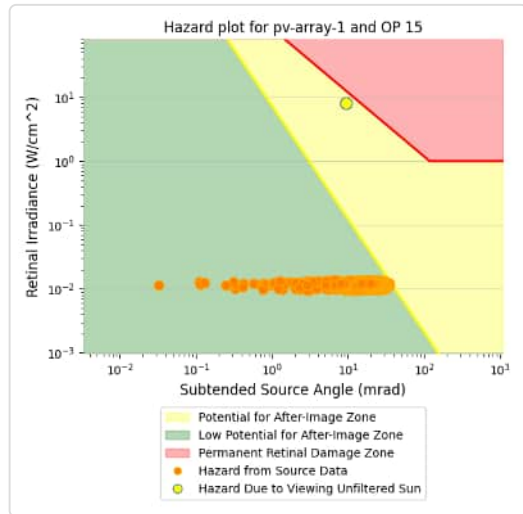
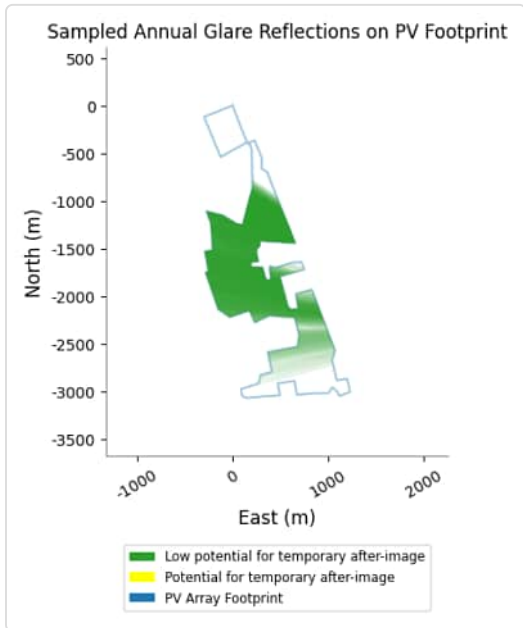
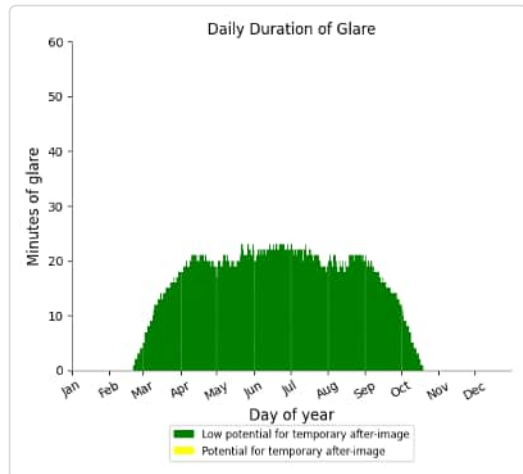
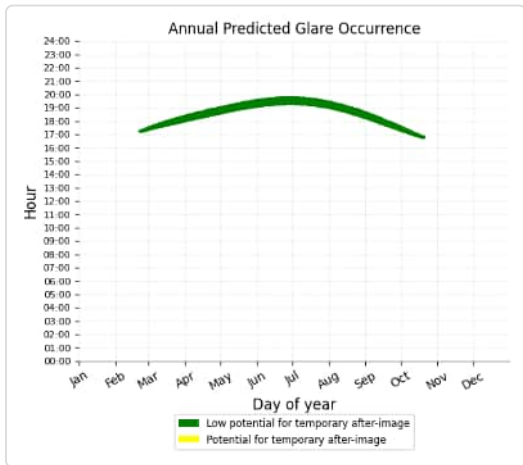




PV array 1 - OP Receptor (OP 15)

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

- 4,183 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

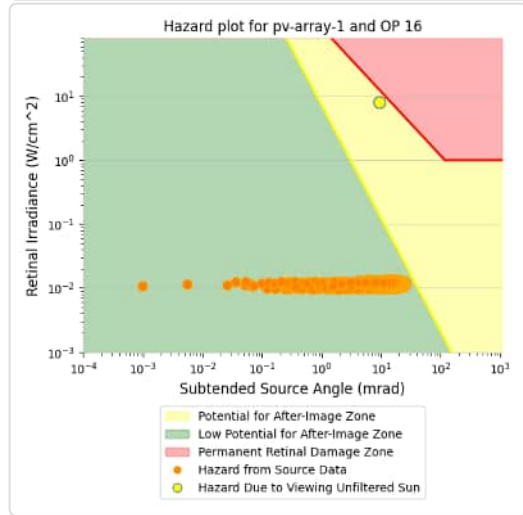
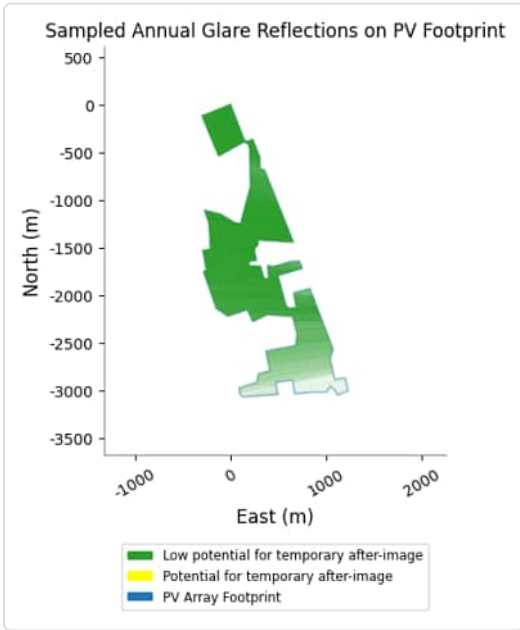
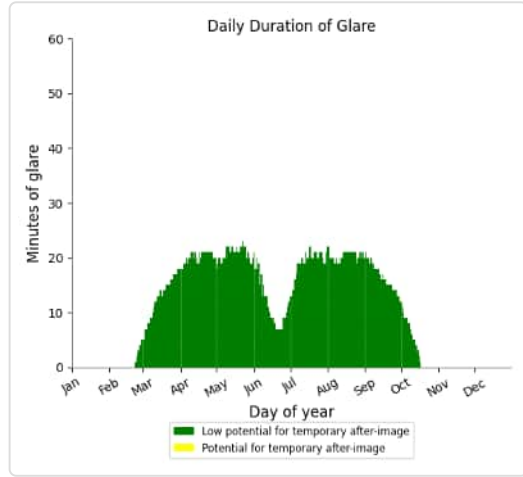
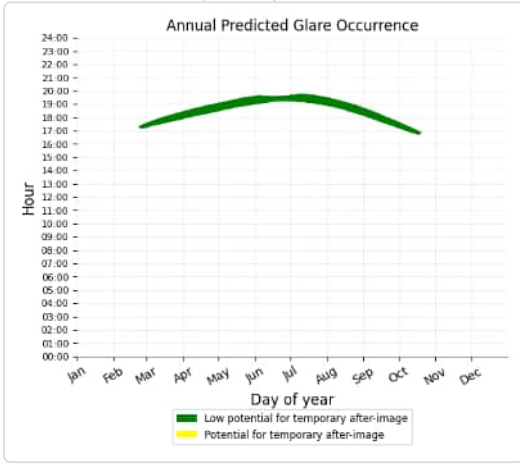


PV array 1 - OP Receptor (OP 16)

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

- 3,846 minutes of "green" glare with low potential to cause temporary after-image.

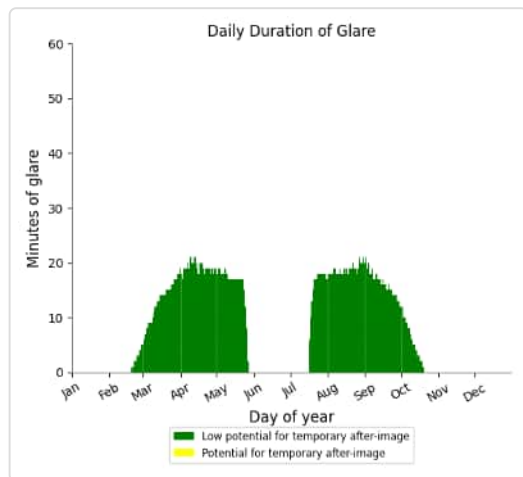
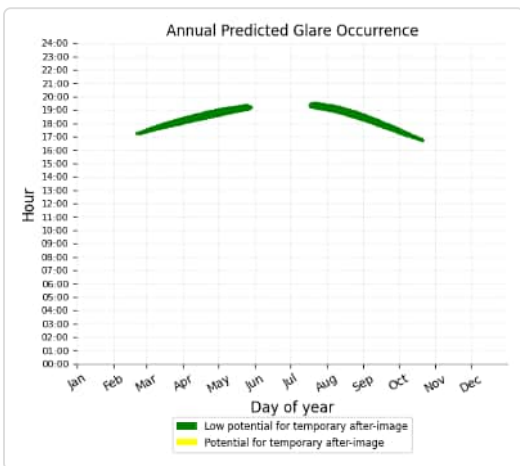
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

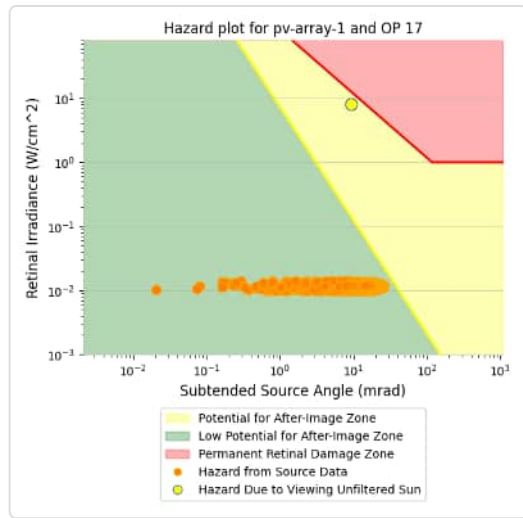
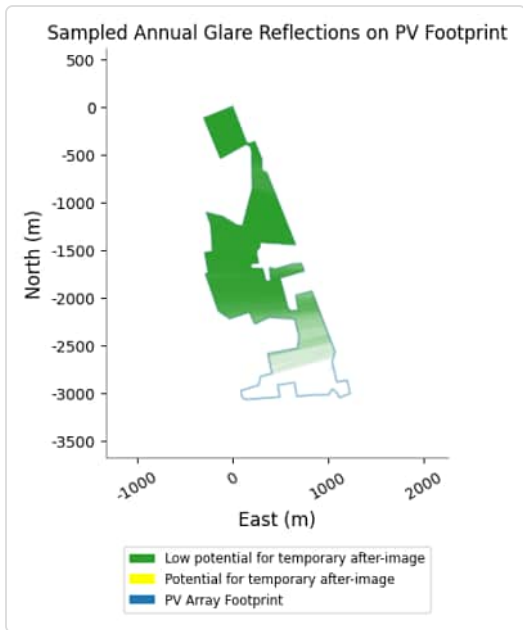


PV array 1 - OP Receptor (OP 17)

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

- 2,870 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

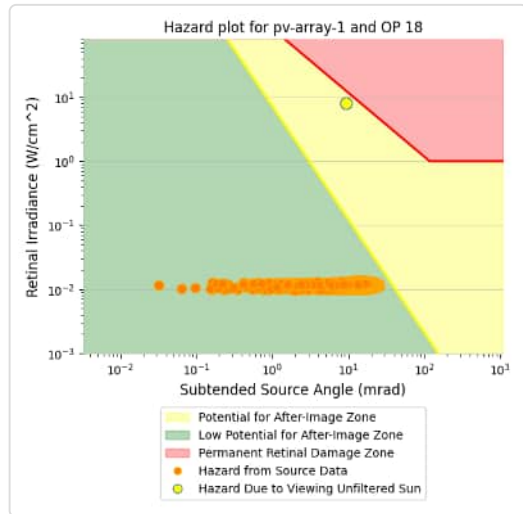
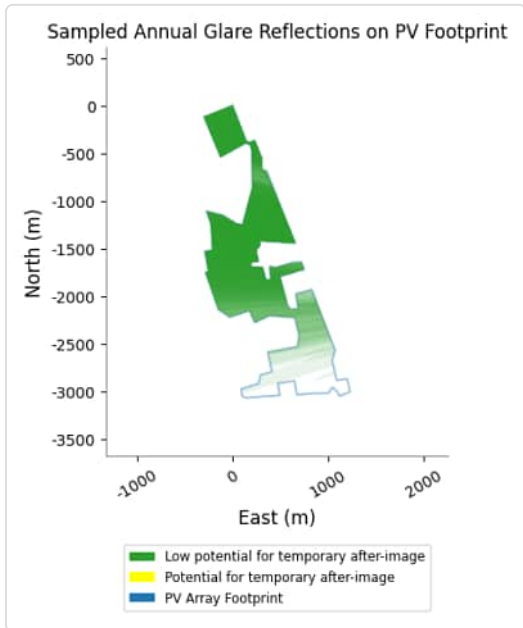
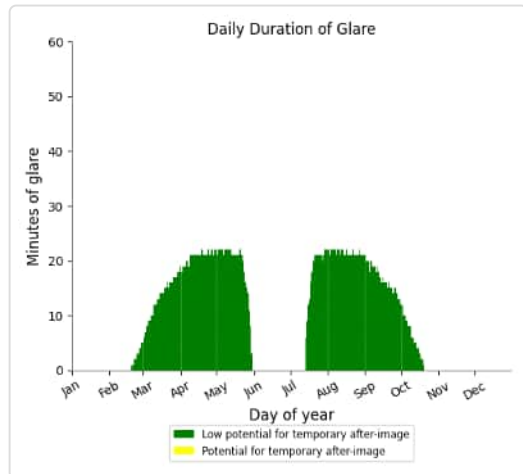
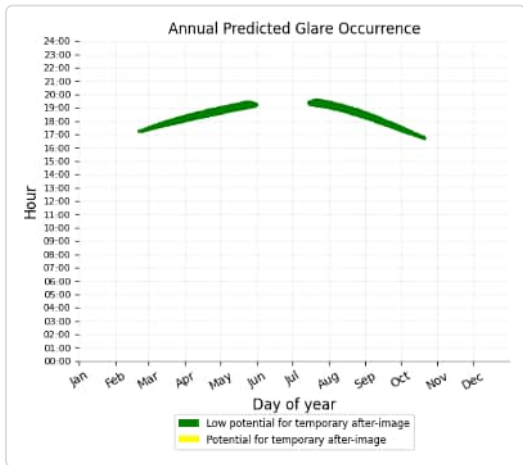




PV array 1 - OP Receptor (OP 18)

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

- 3,248 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

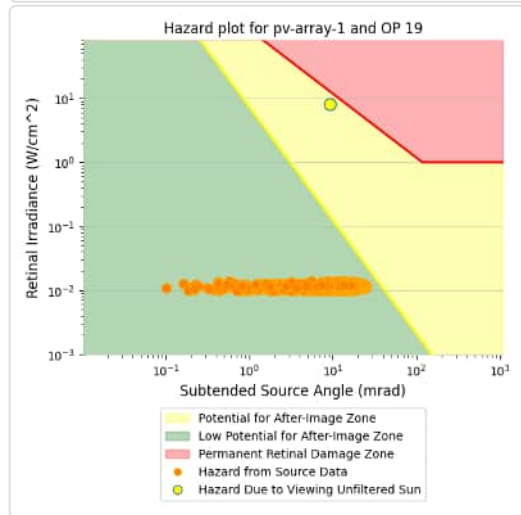
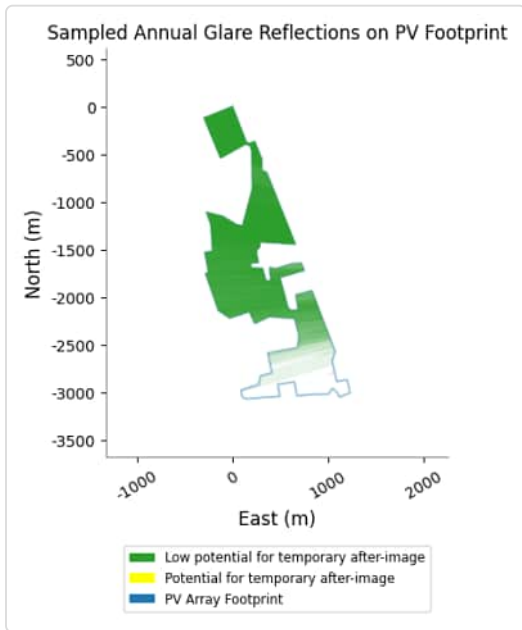
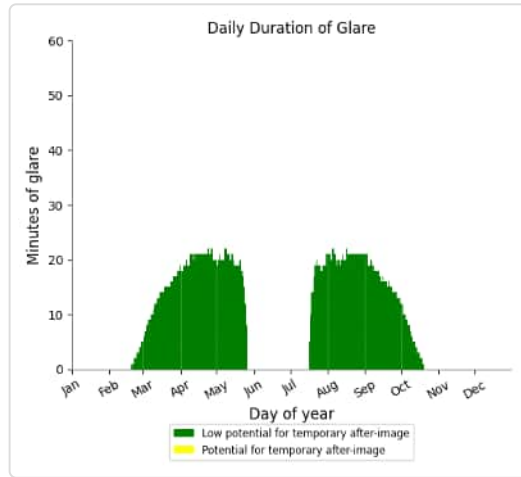
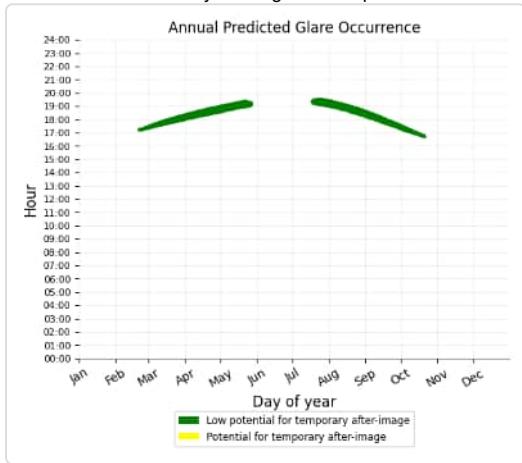


PV array 1 - OP Receptor (OP 19)

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

- 3,047 minutes of "green" glare with low potential to cause temporary after-image.

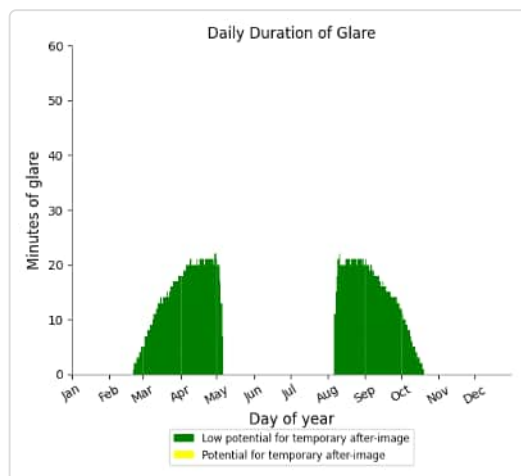
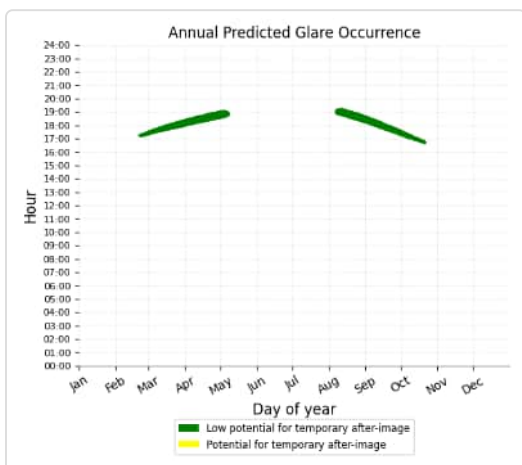
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

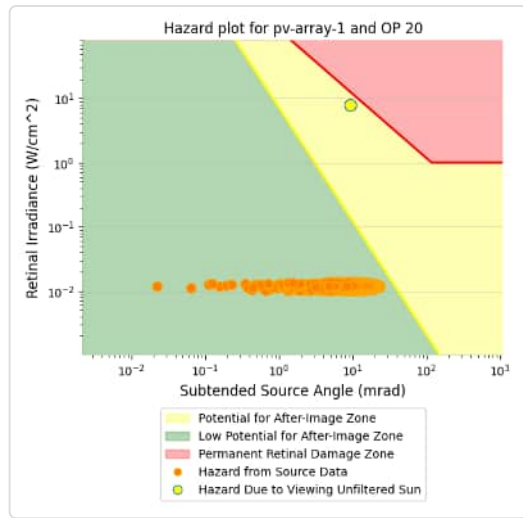
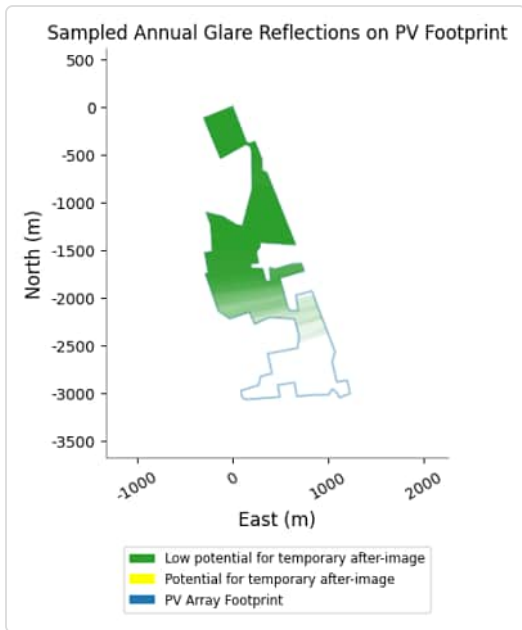


PV array 1 - OP Receptor (OP 20)

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

- 2,235 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

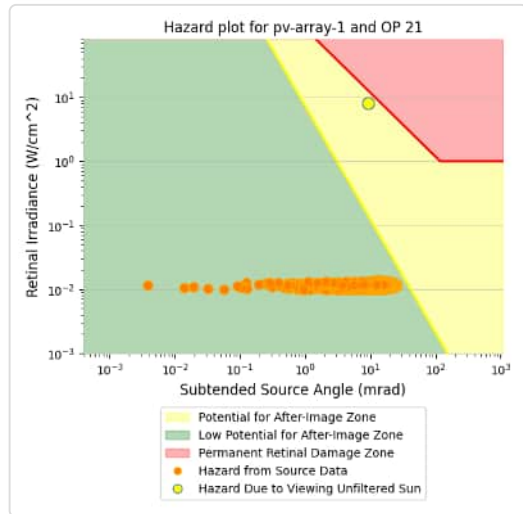
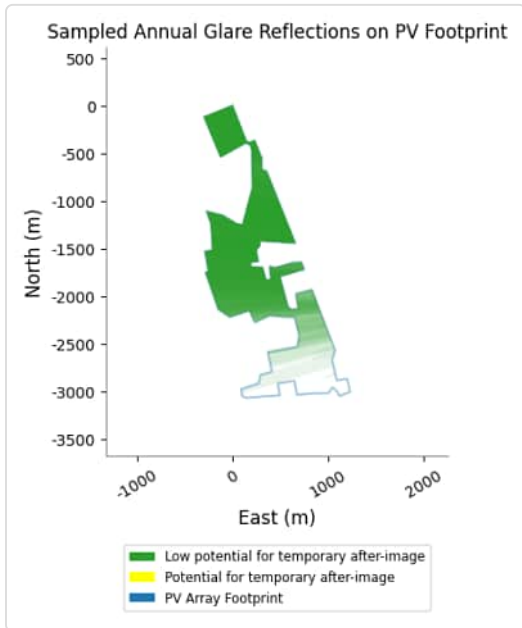
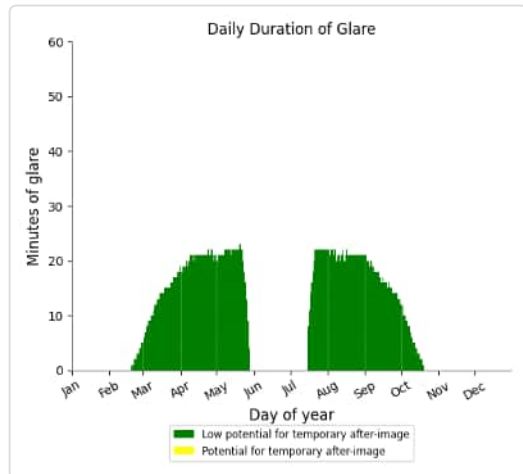
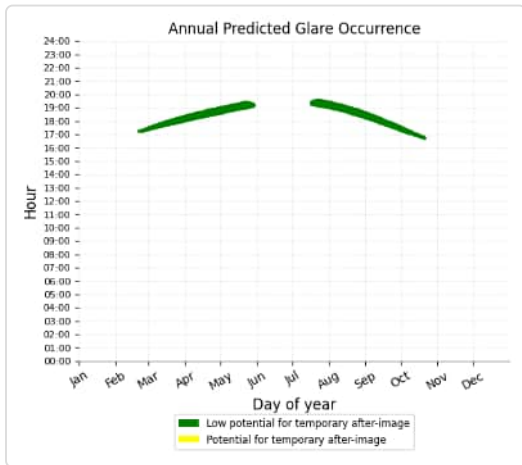




PV array 1 - OP Receptor (OP 21)

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

- 3,181 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

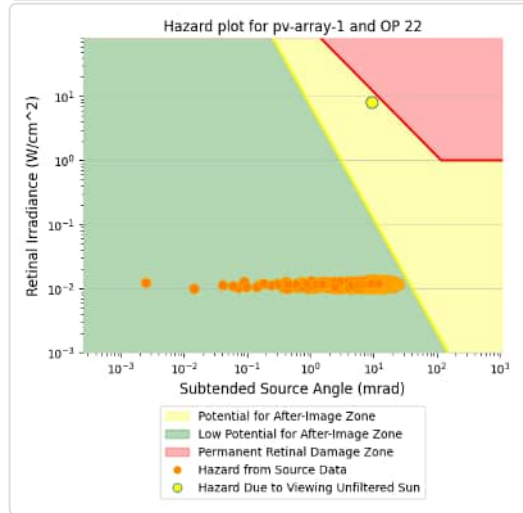
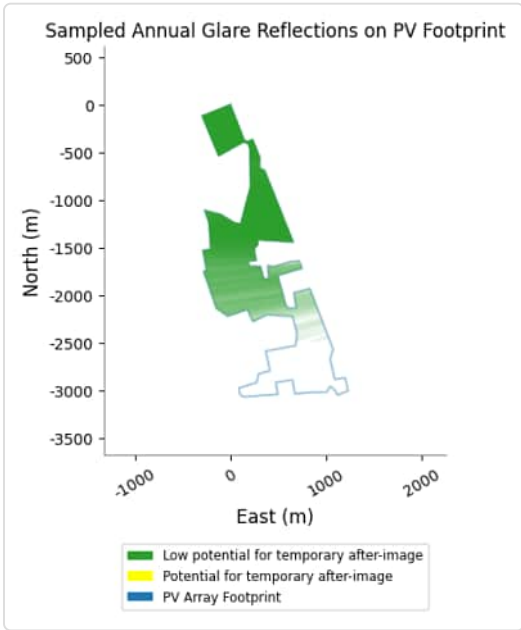
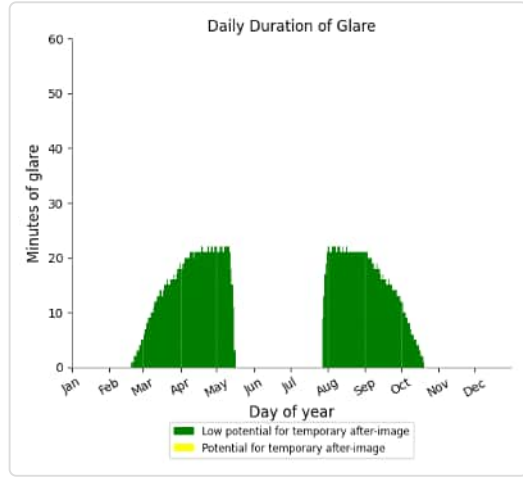
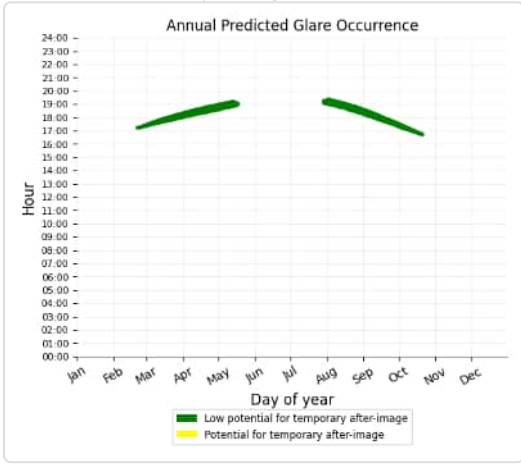


PV array 1 - OP Receptor (OP 22)

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

- 2,697 minutes of "green" glare with low potential to cause temporary after-image.

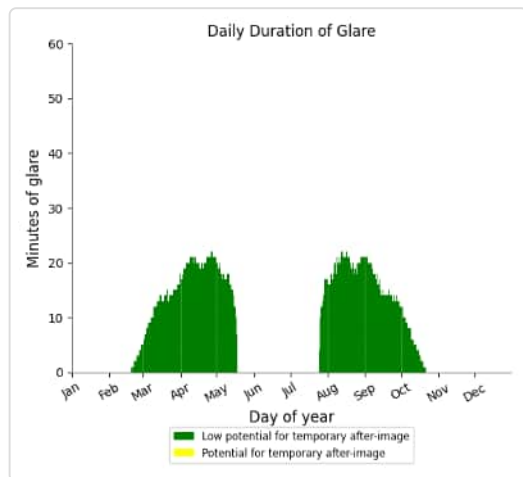
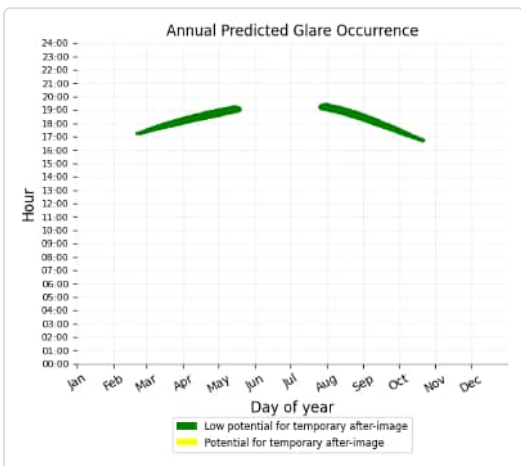
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

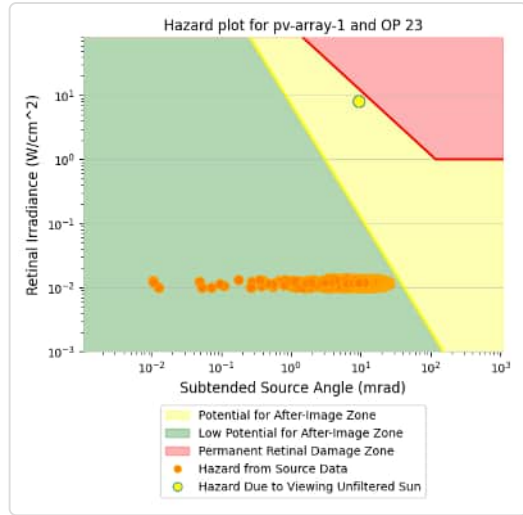
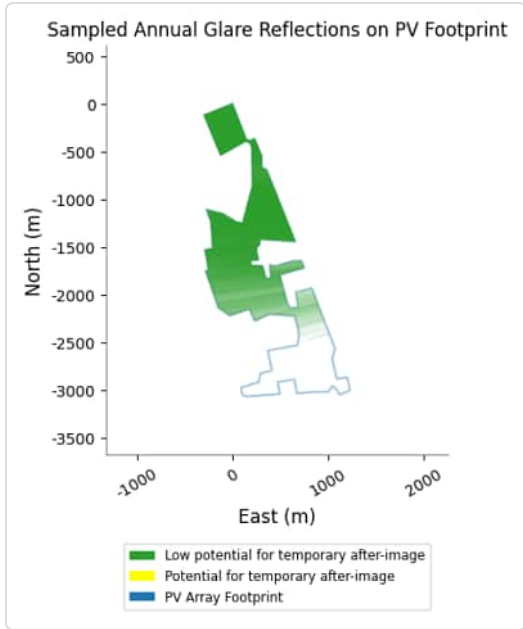


PV array 1 - OP Receptor (OP 23)

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

- 2,600 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

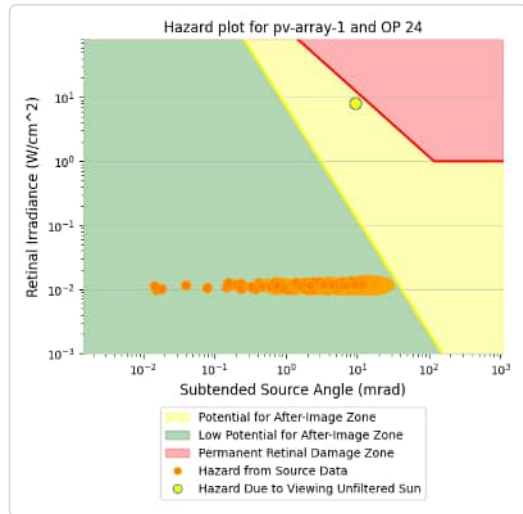
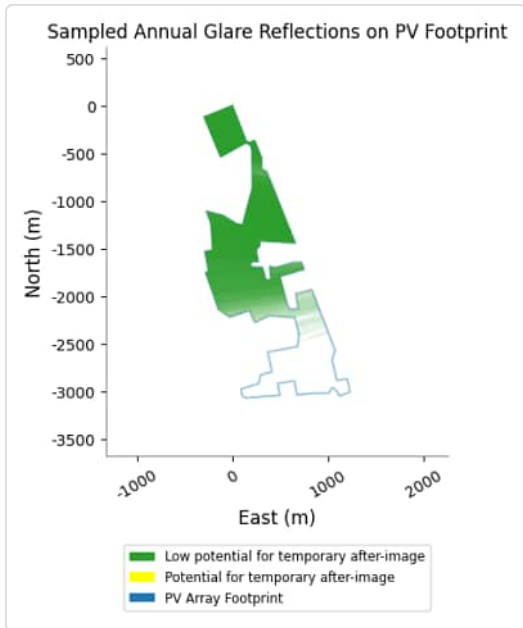
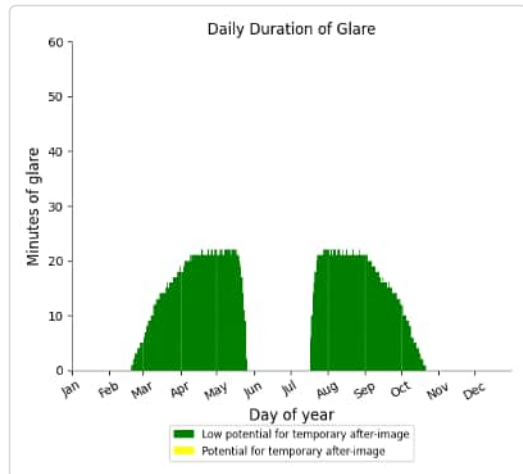
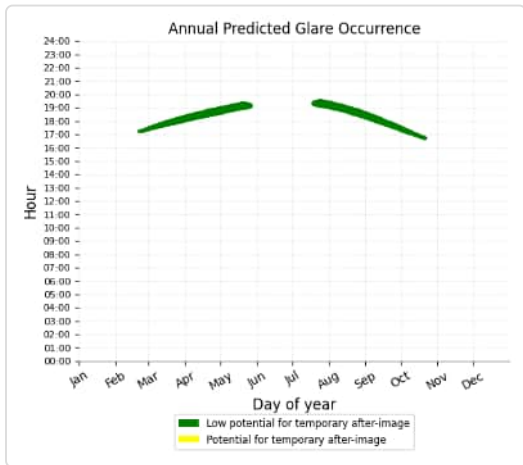




PV array 1 - OP Receptor (OP 24)

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

- 3,106 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

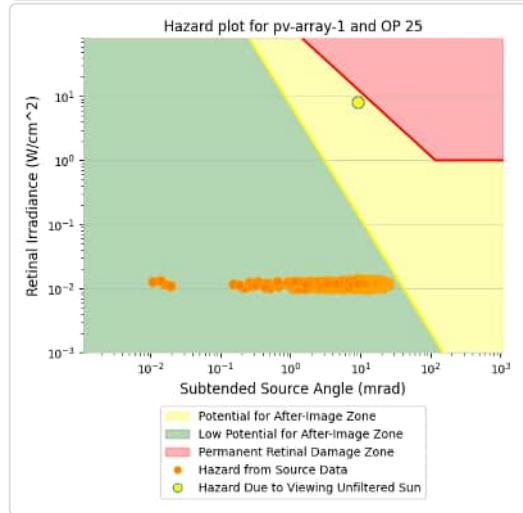
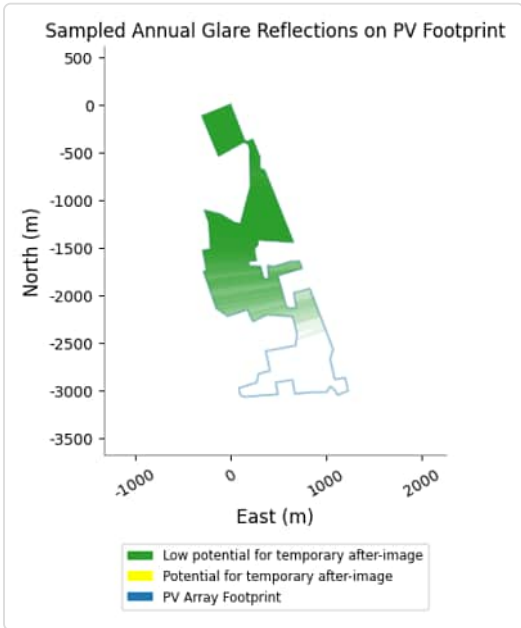
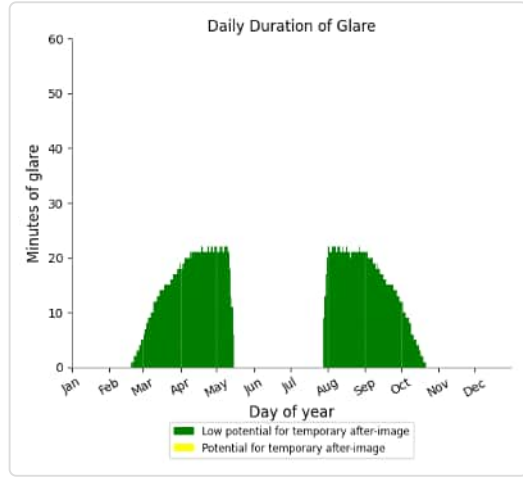
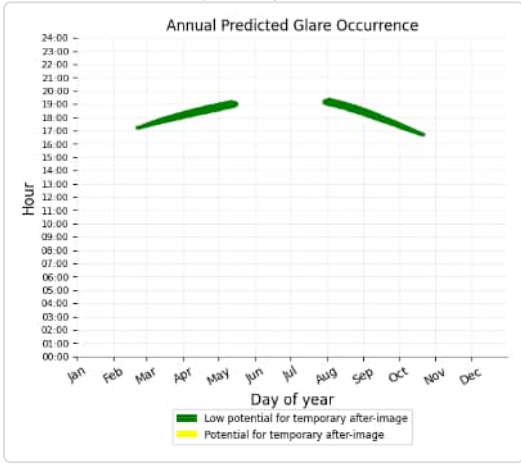


PV array 1 - OP Receptor (OP 25)

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

- 2,664 minutes of "green" glare with low potential to cause temporary after-image.

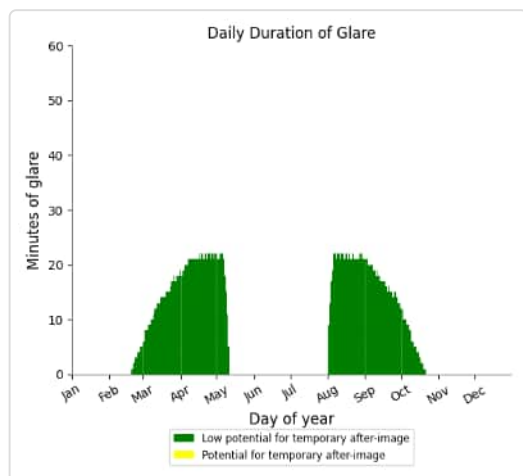
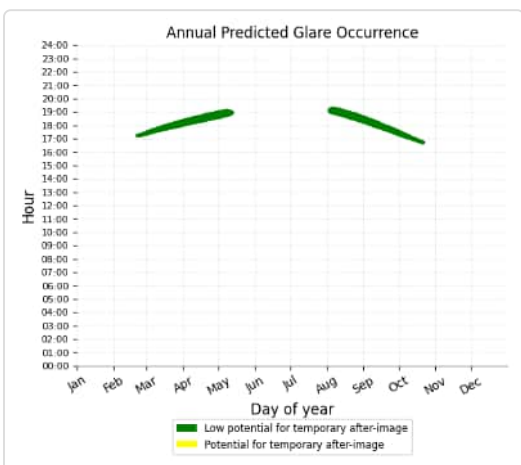
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

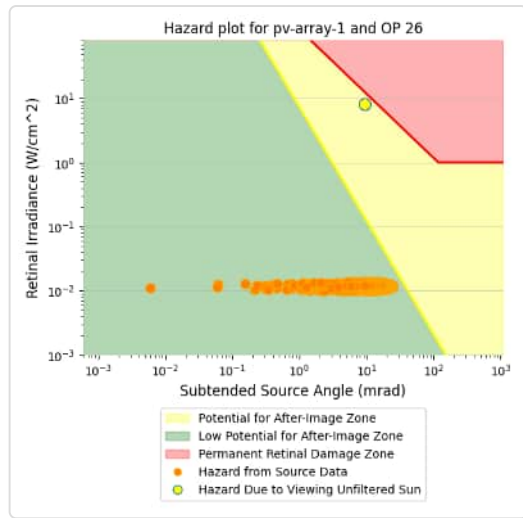
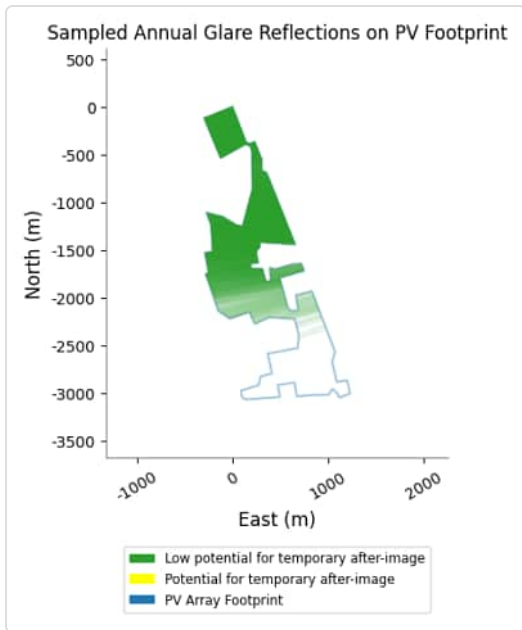


PV array 1 - OP Receptor (OP 26)

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

- 2,517 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

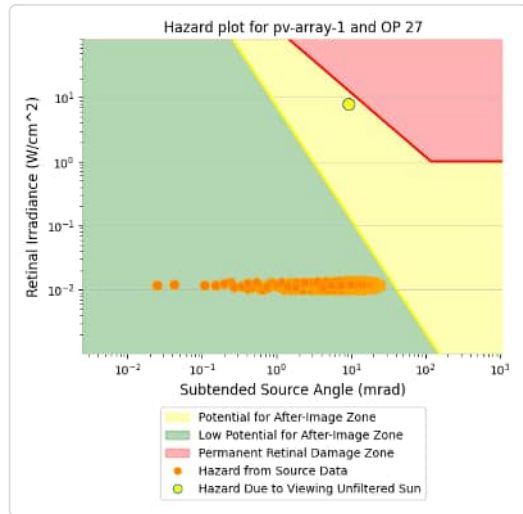
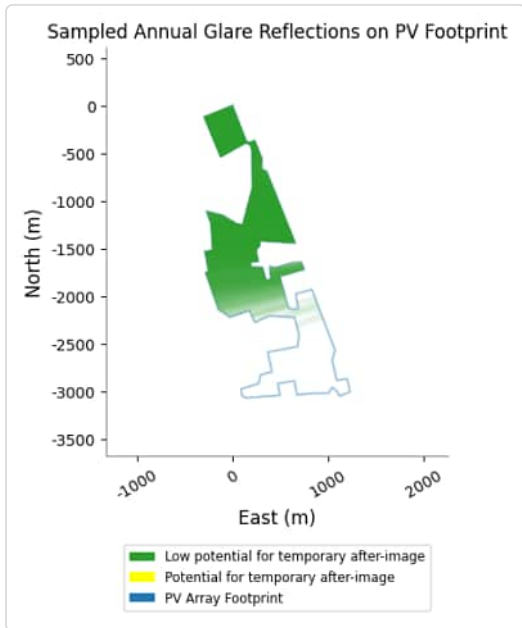
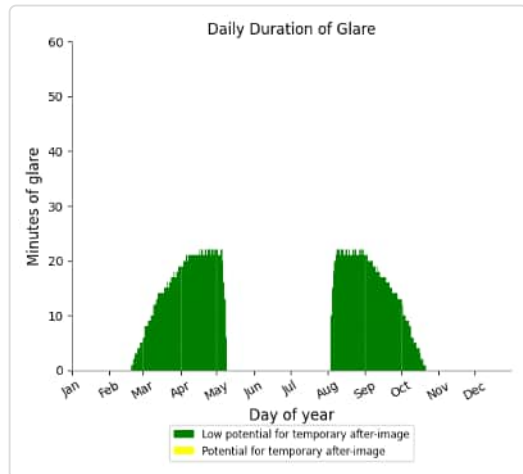
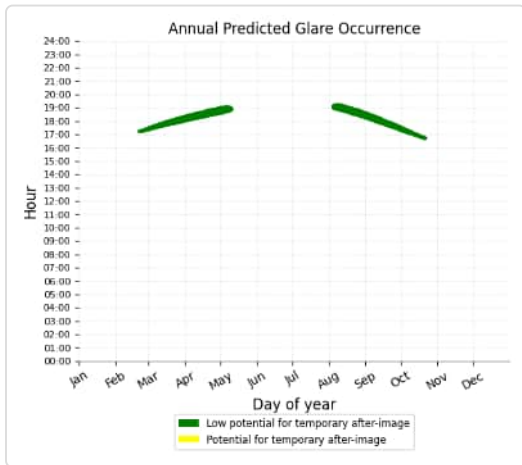




PV array 1 - OP Receptor (OP 27)

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

- 2,456 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

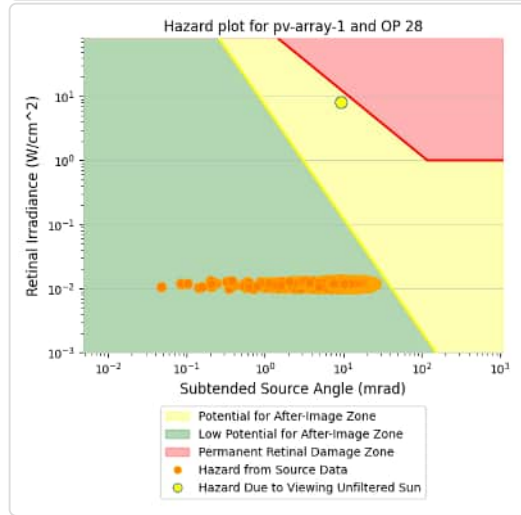
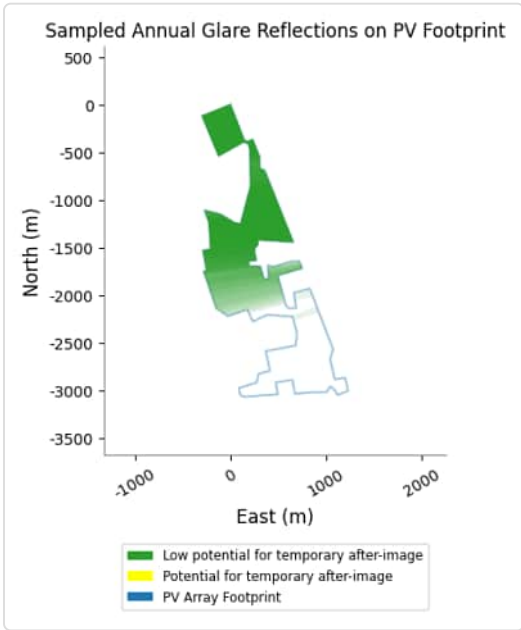
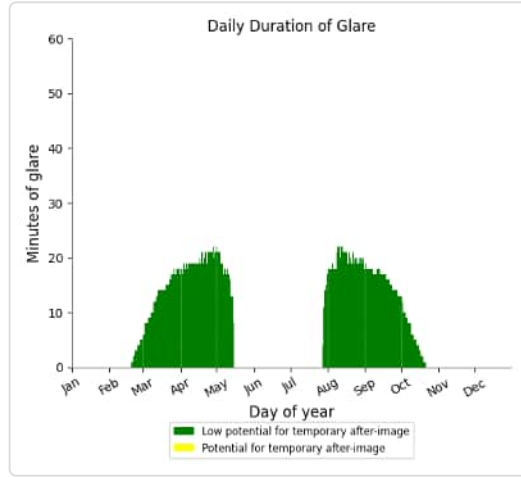
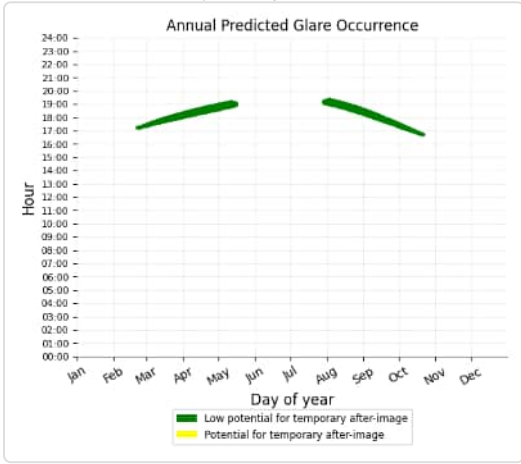


PV array 1 - OP Receptor (OP 28)

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

- 2,555 minutes of "green" glare with low potential to cause temporary after-image.

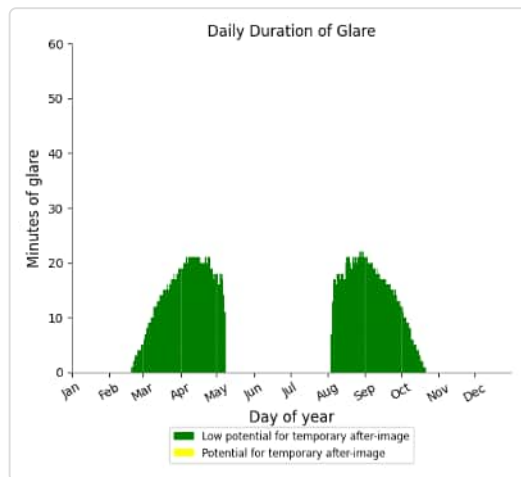
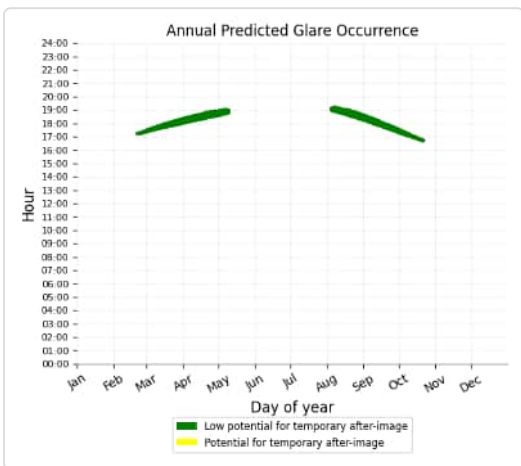
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

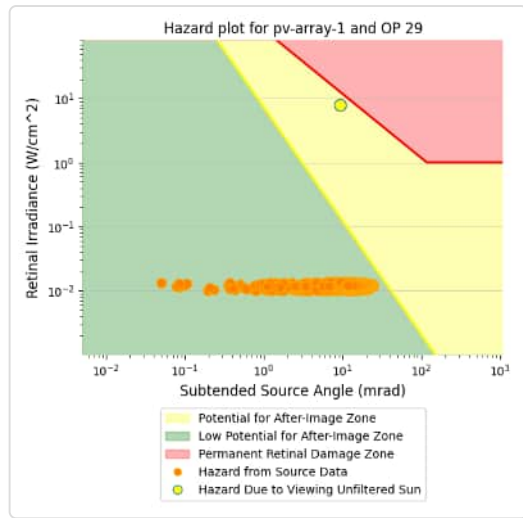
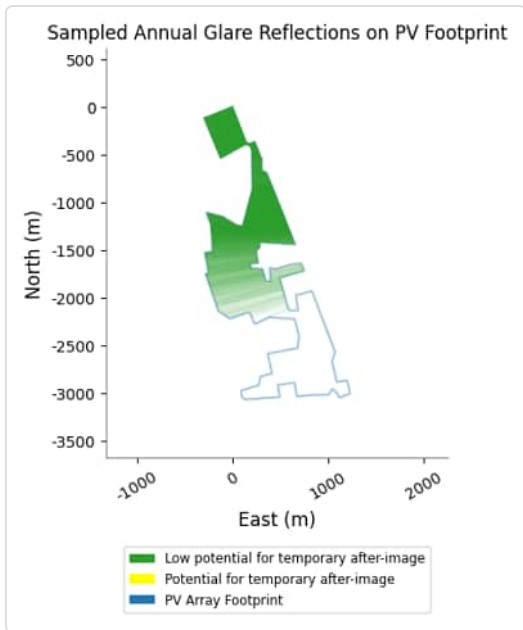


PV array 1 - OP Receptor (OP 29)

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

- 2,341 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

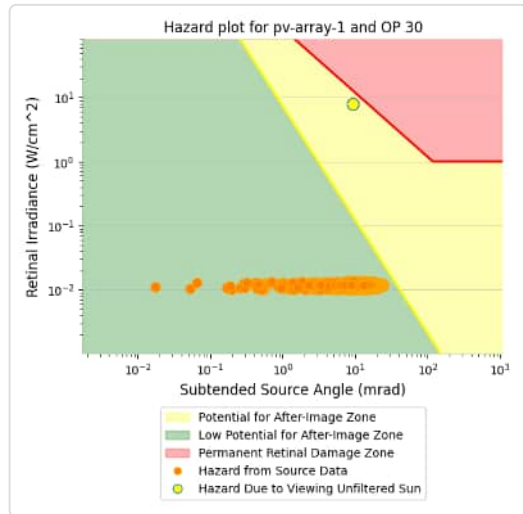
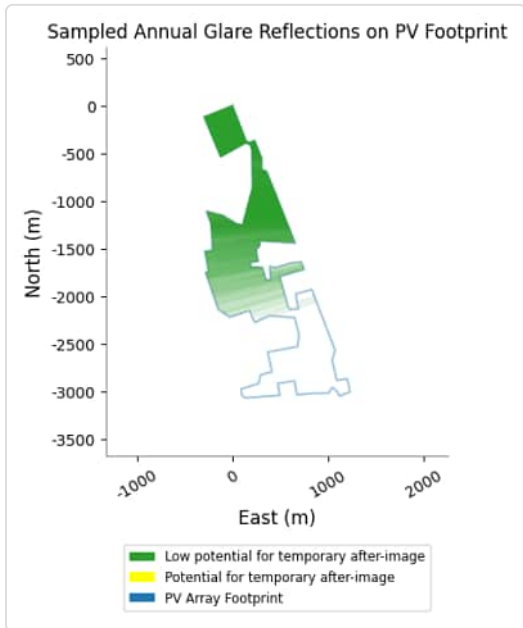
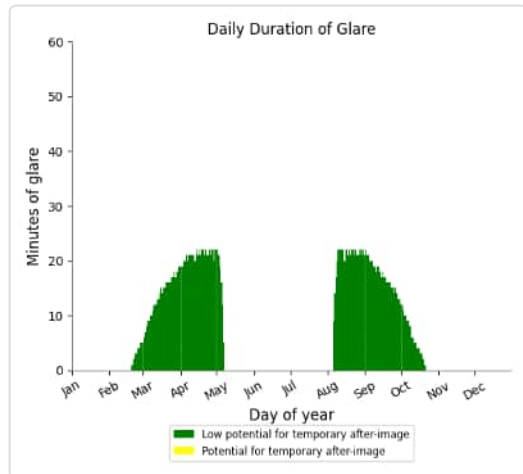
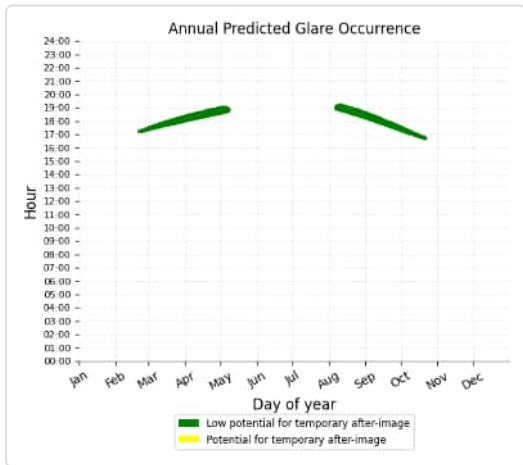




PV array 1 - OP Receptor (OP 30)

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

- 2,378 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

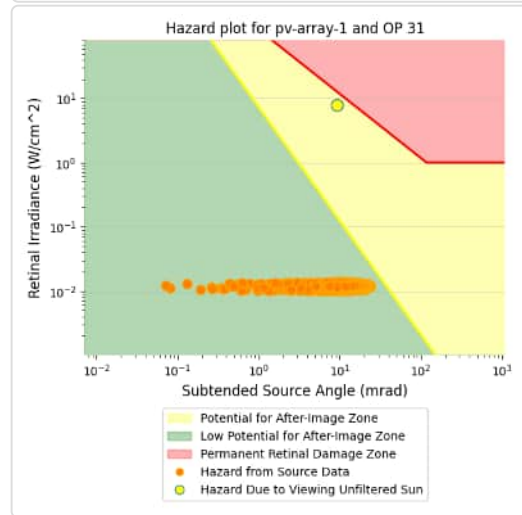
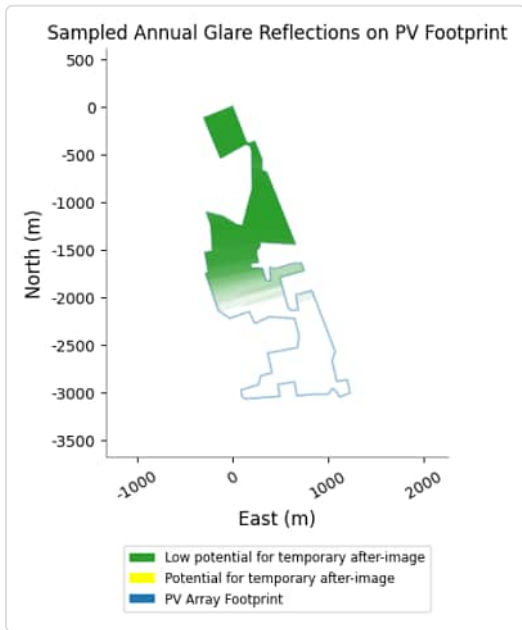
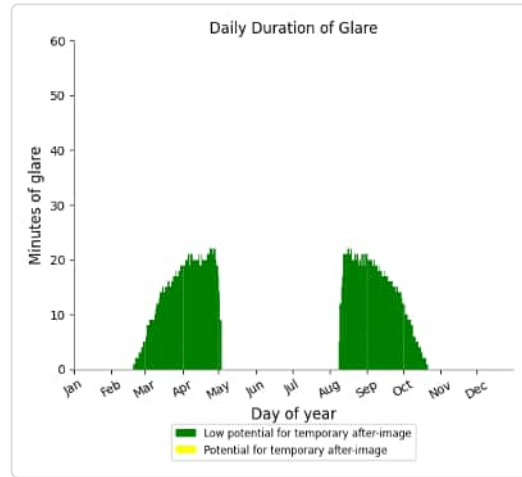
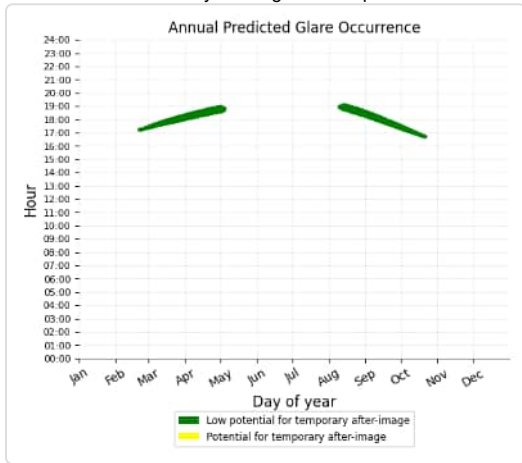


PV array 1 - OP Receptor (OP 31)

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

- 2,173 minutes of "green" glare with low potential to cause temporary after-image.

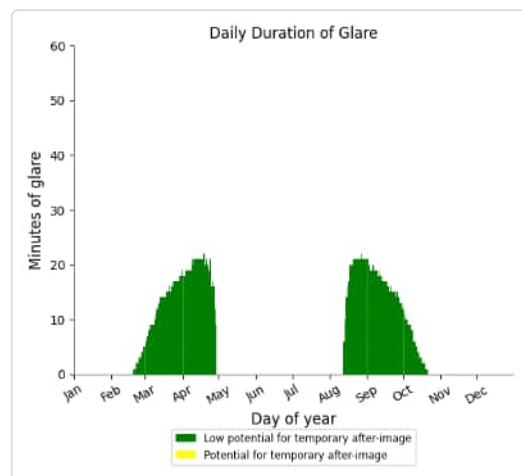
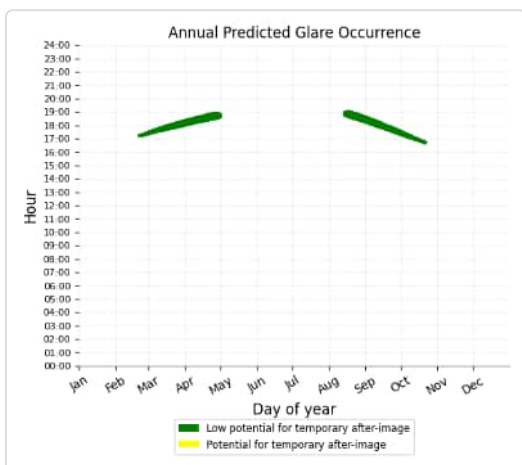
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

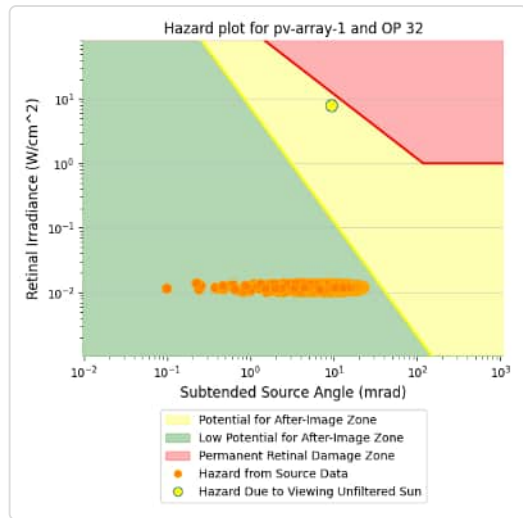
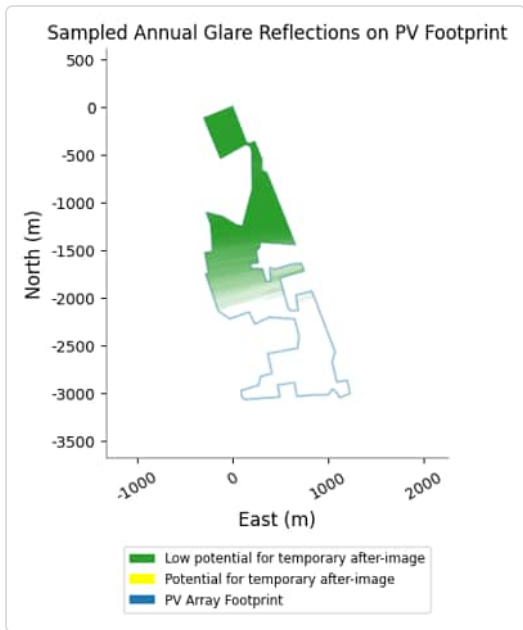


PV array 1 - OP Receptor (OP 32)

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

- 1,970 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

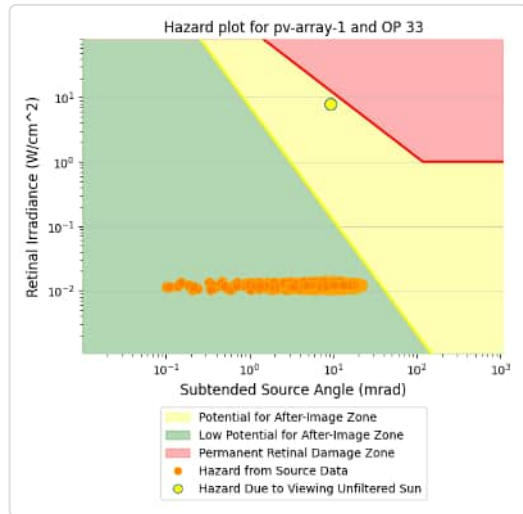
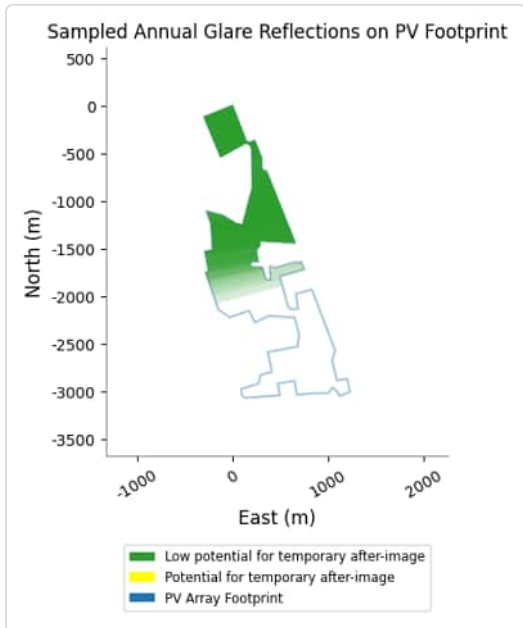
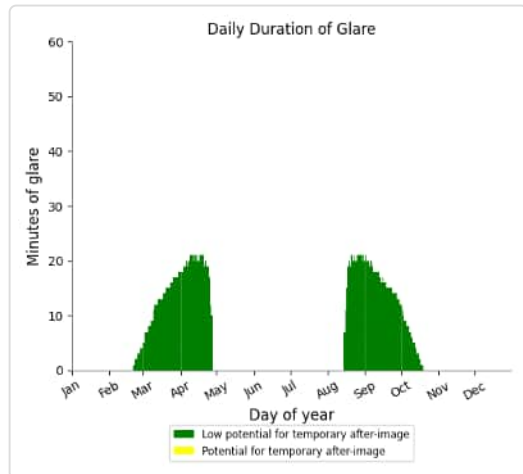
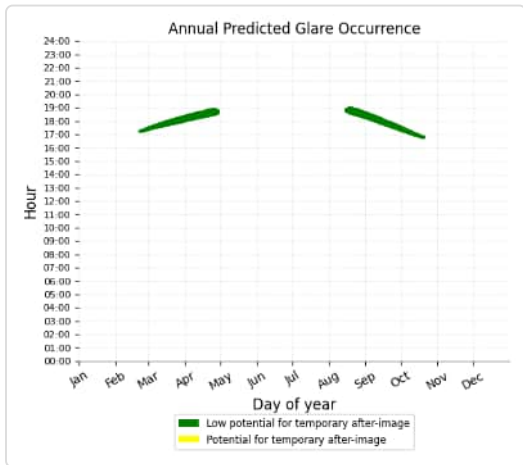




PV array 1 - OP Receptor (OP 33)

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

- 1,851 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

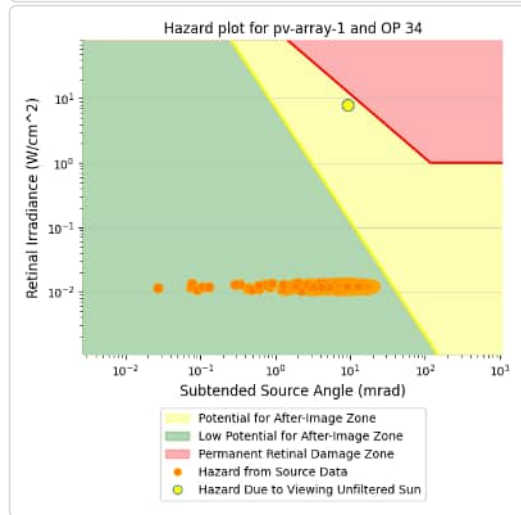
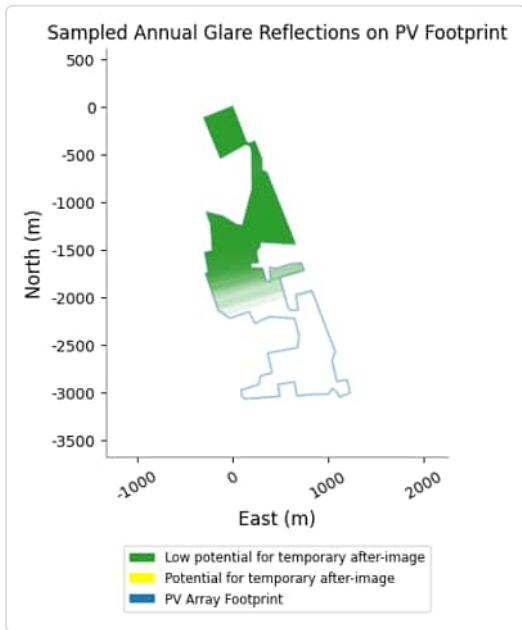
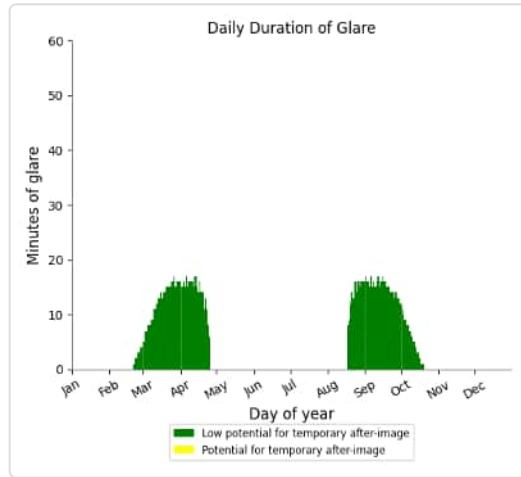
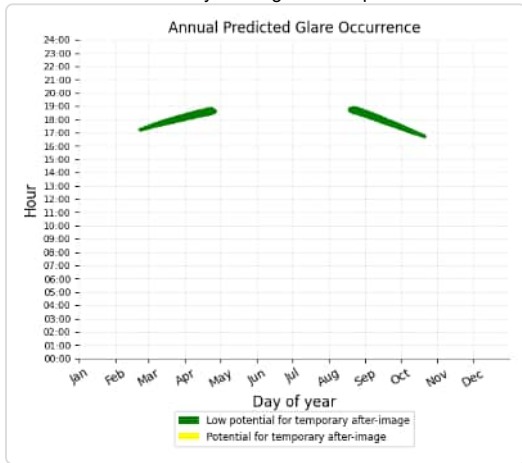


PV array 1 - OP Receptor (OP 34)

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

- 1,519 minutes of "green" glare with low potential to cause temporary after-image.

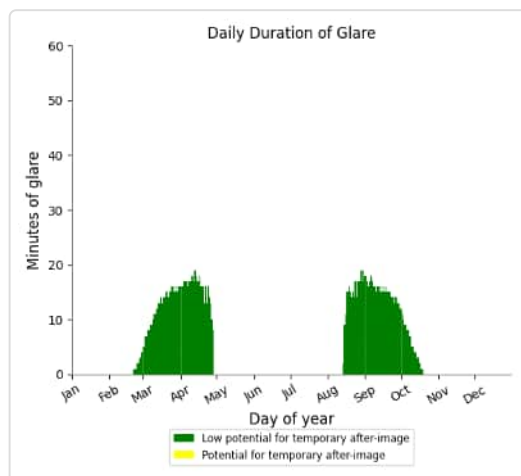
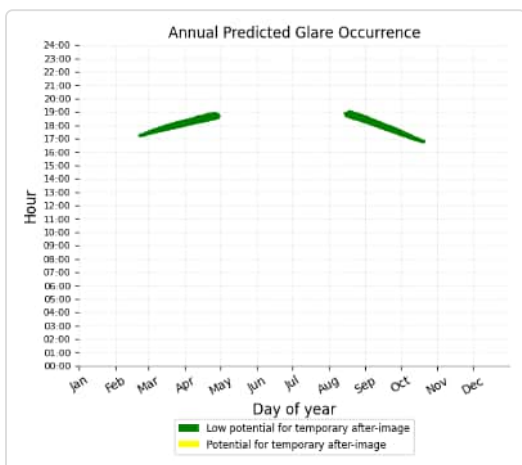
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

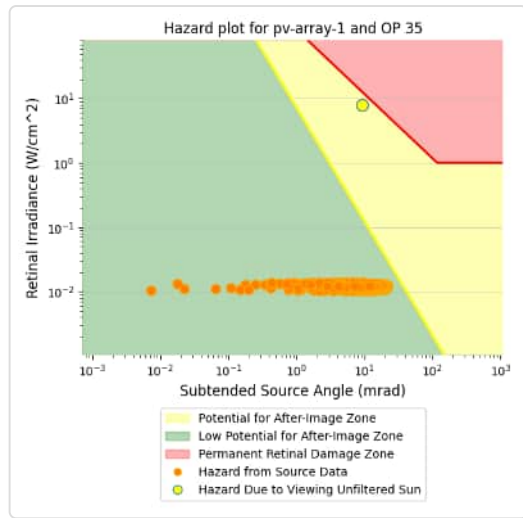
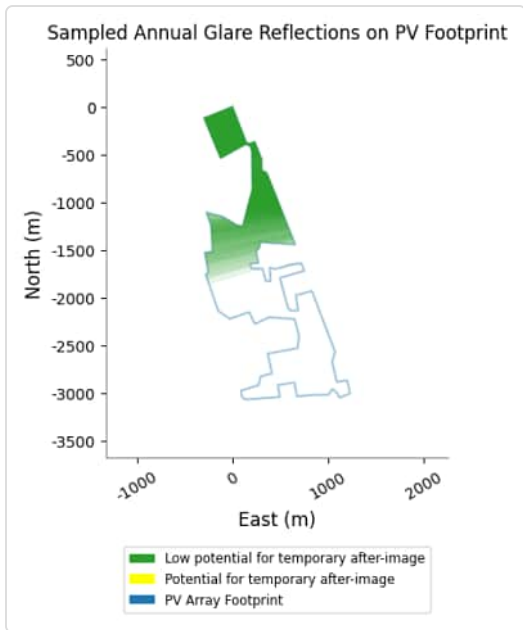


PV array 1 - OP Receptor (OP 35)

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

- 1,670 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

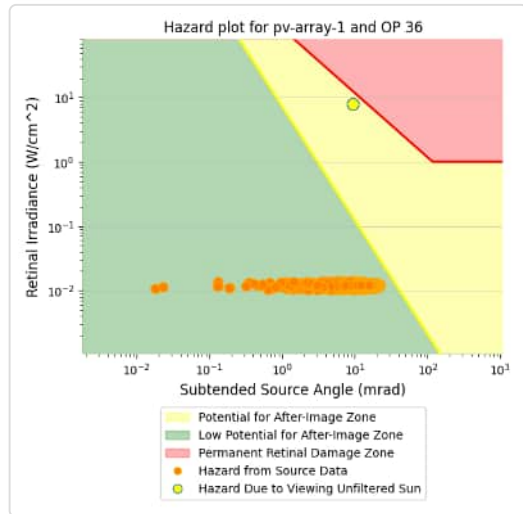
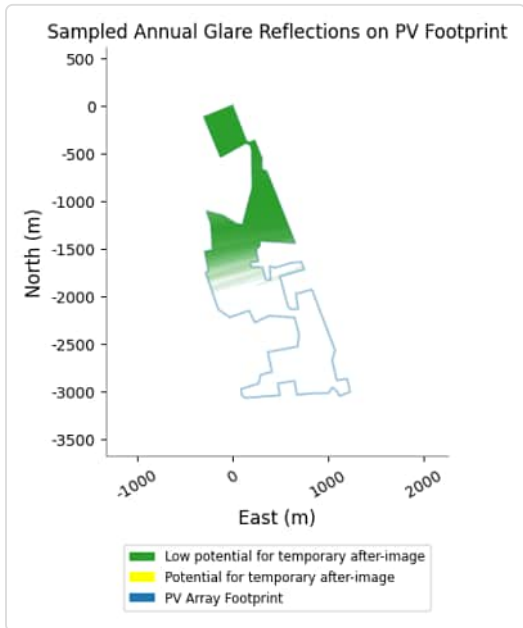
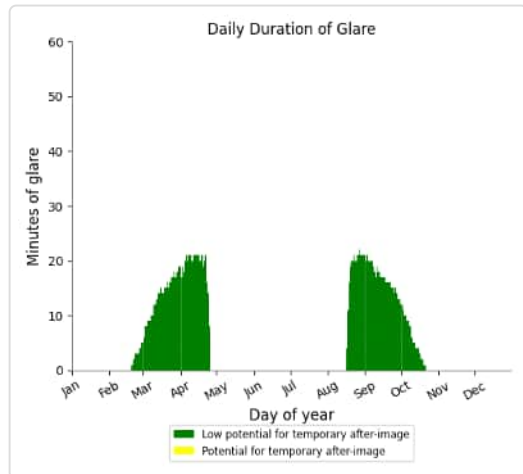
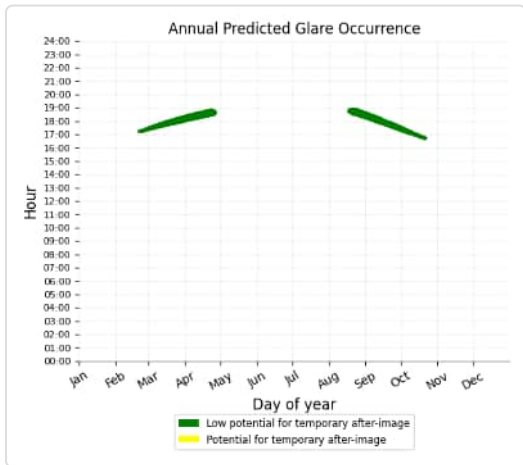




PV array 1 - OP Receptor (OP 36)

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

- 1,839 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

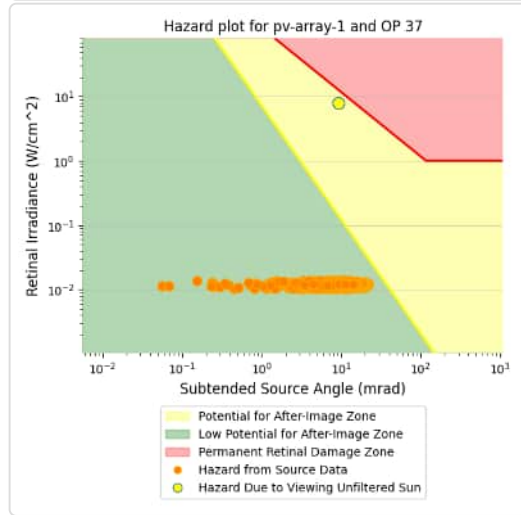
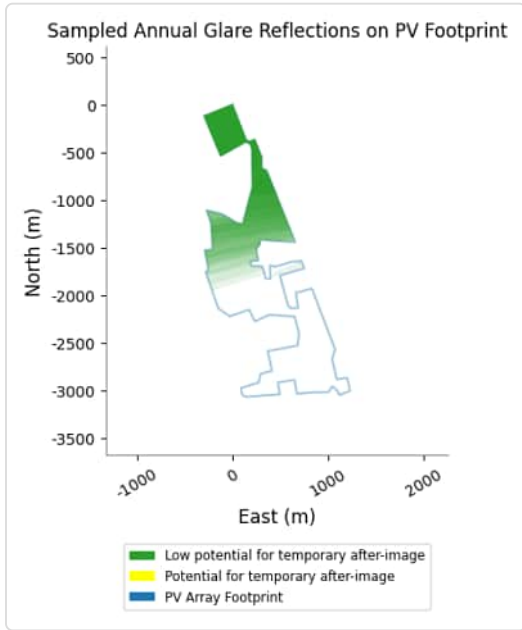
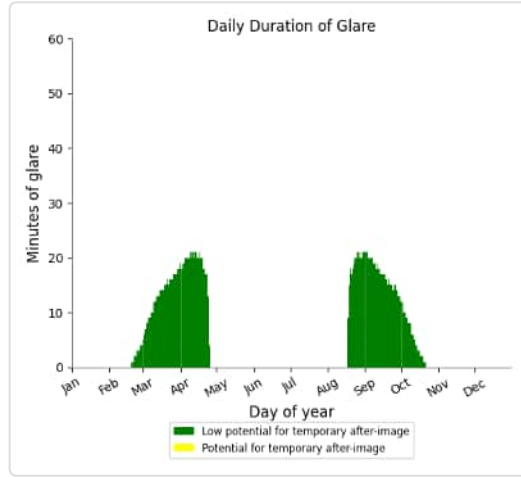
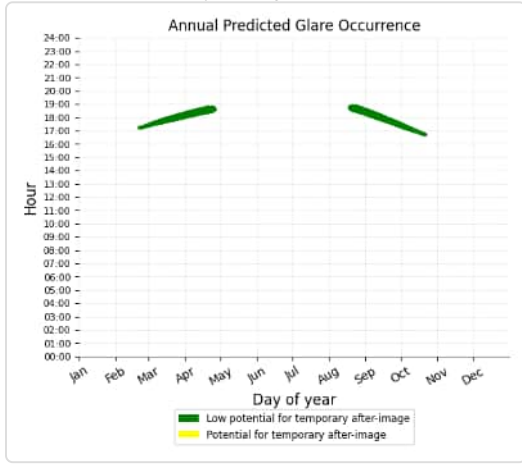


PV array 1 - OP Receptor (OP 37)

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

- 1,791 minutes of "green" glare with low potential to cause temporary after-image.

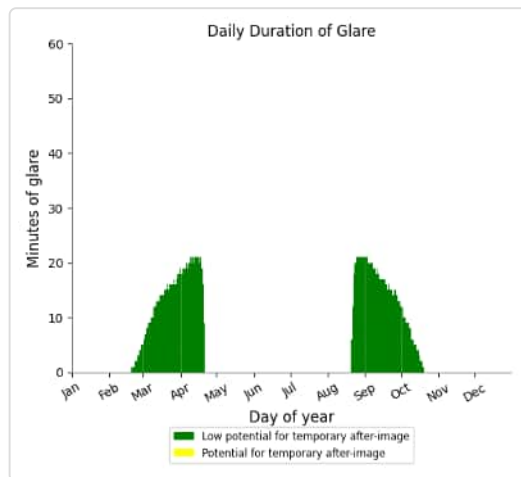
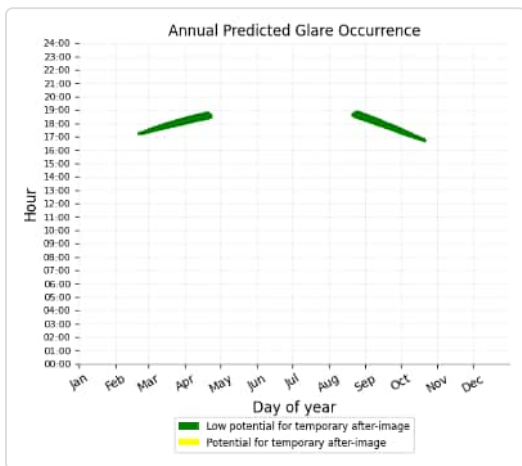
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

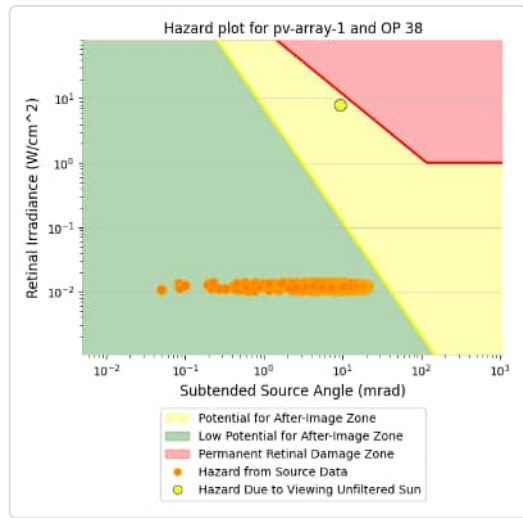
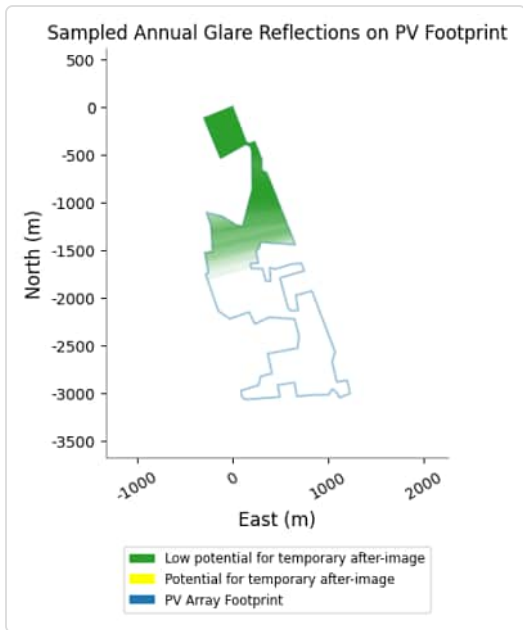


PV array 1 - OP Receptor (OP 38)

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

- 1,669 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

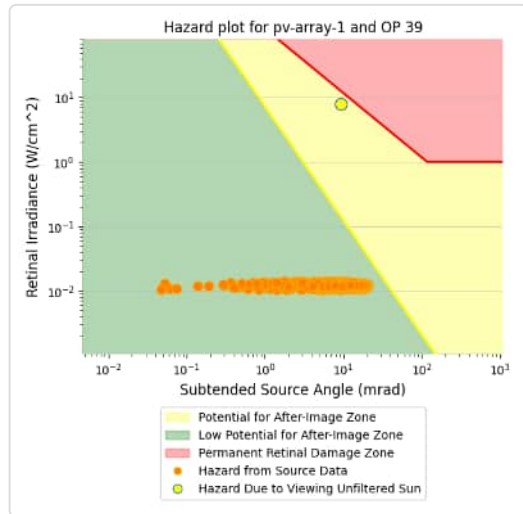
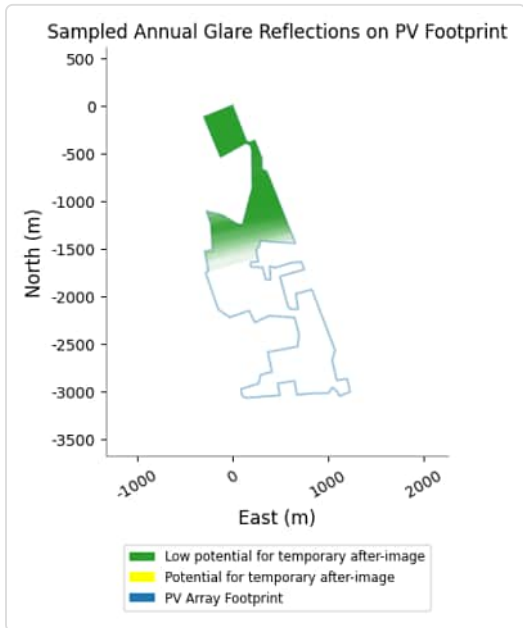
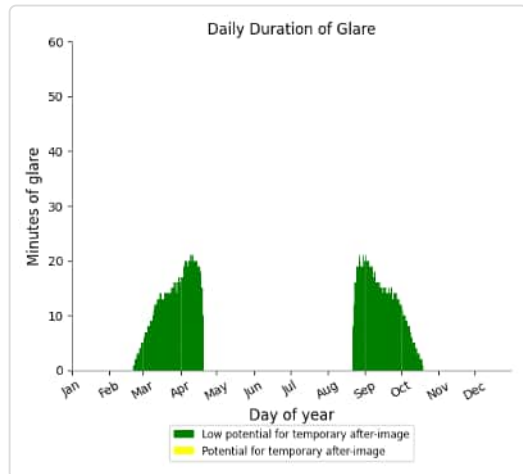
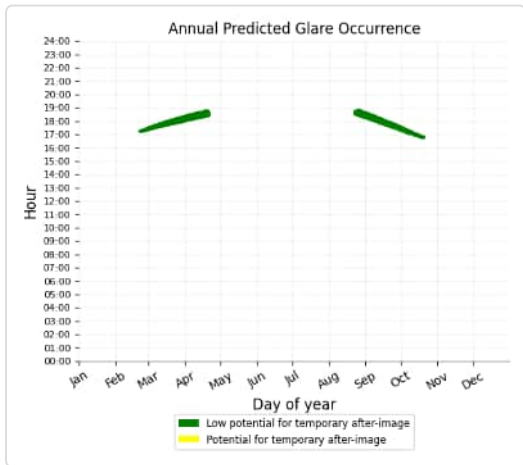




PV array 1 - OP Receptor (OP 39)

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

- 1,540 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

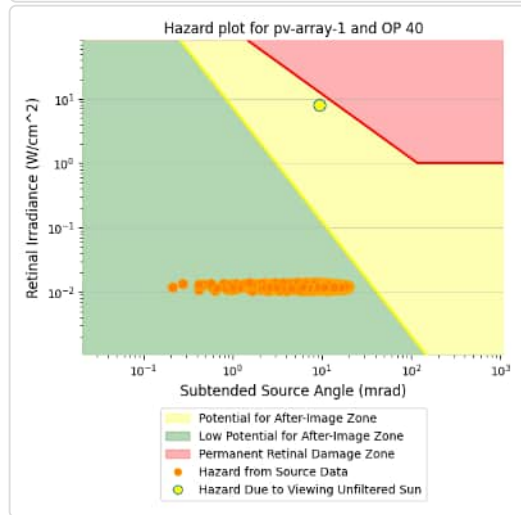
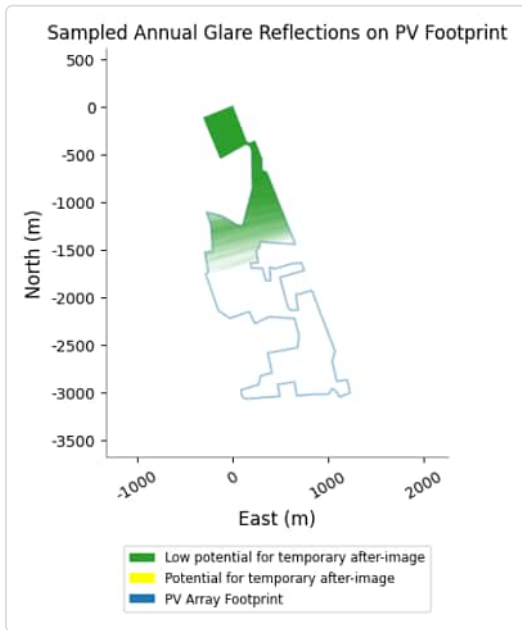
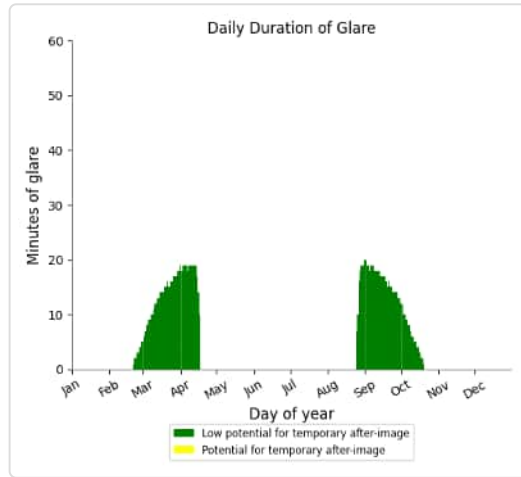
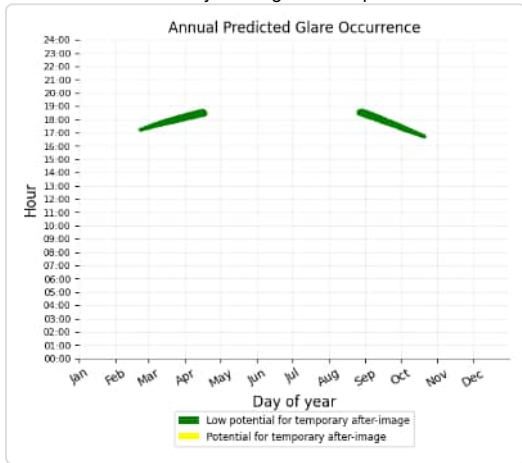


PV array 1 - OP Receptor (OP 40)

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

- 1,464 minutes of "green" glare with low potential to cause temporary after-image.

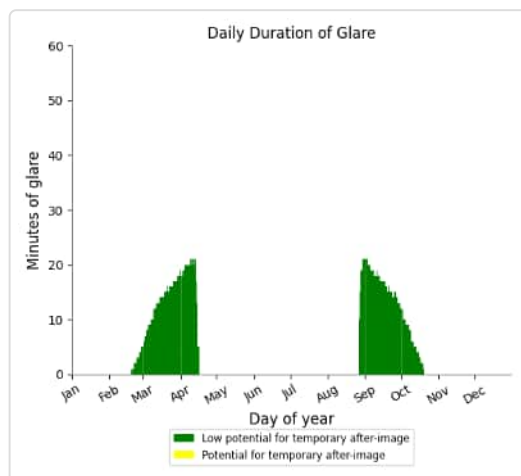
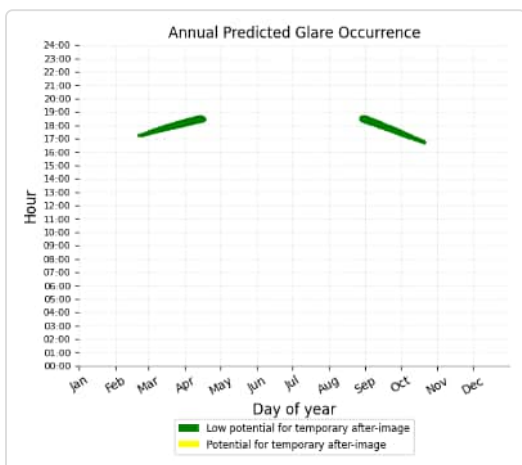
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

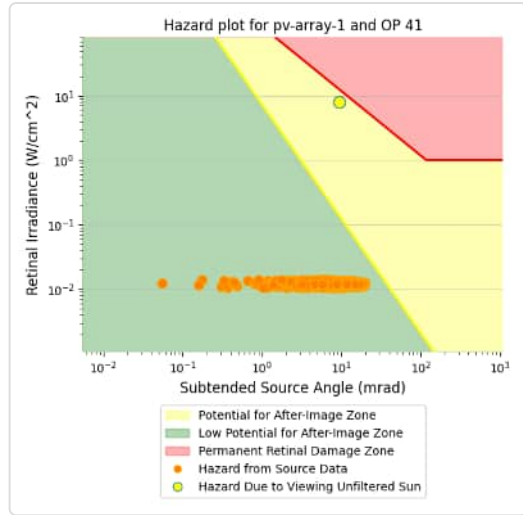
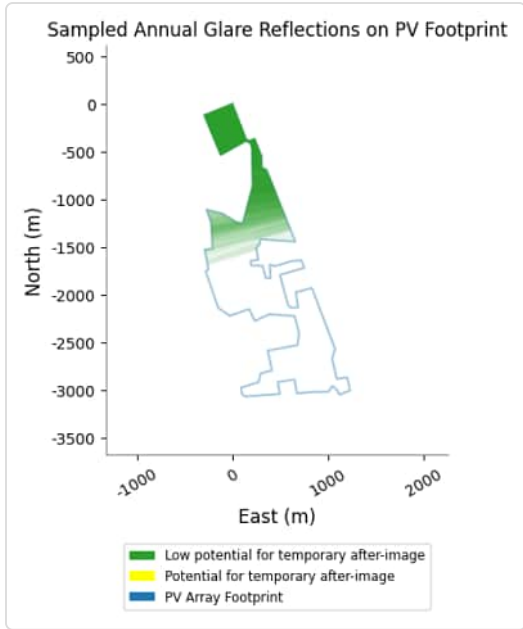


PV array 1 - OP Receptor (OP 41)

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

- 1,445 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

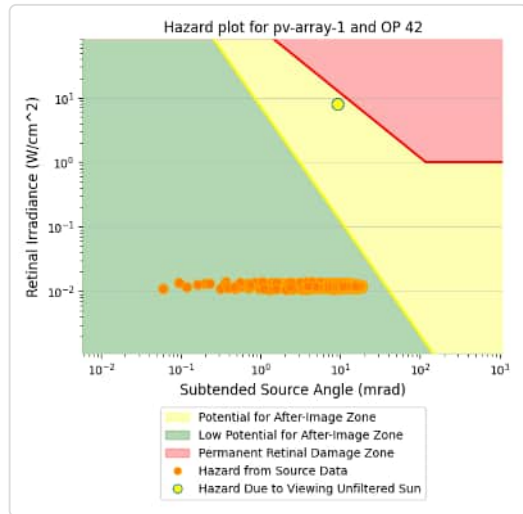
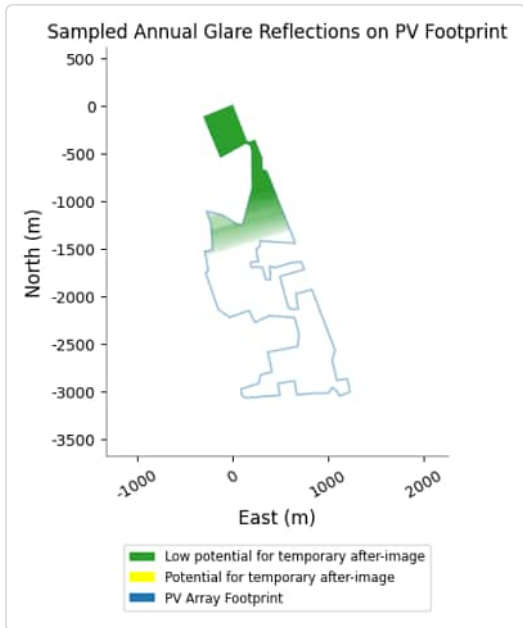
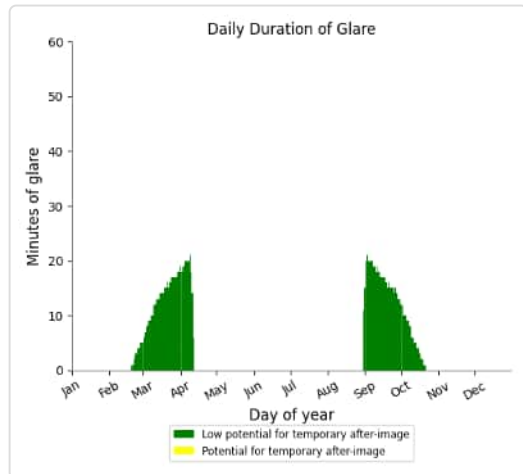
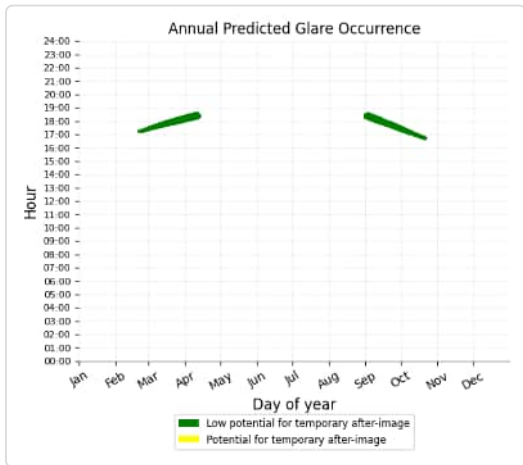




PV array 1 - OP Receptor (OP 42)

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

- 1,294 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

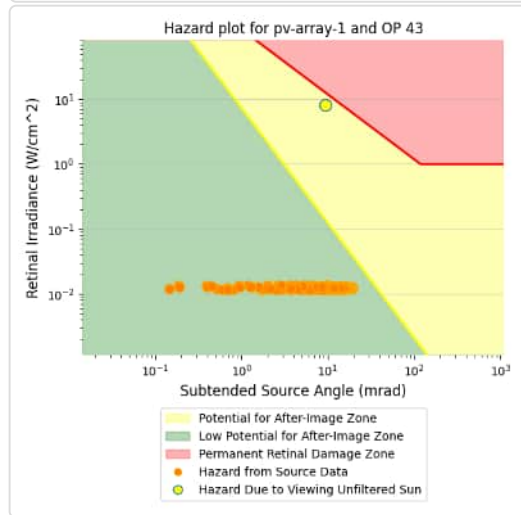
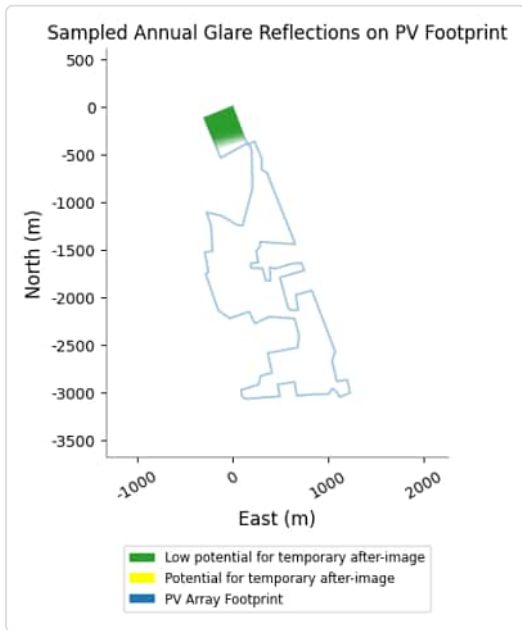
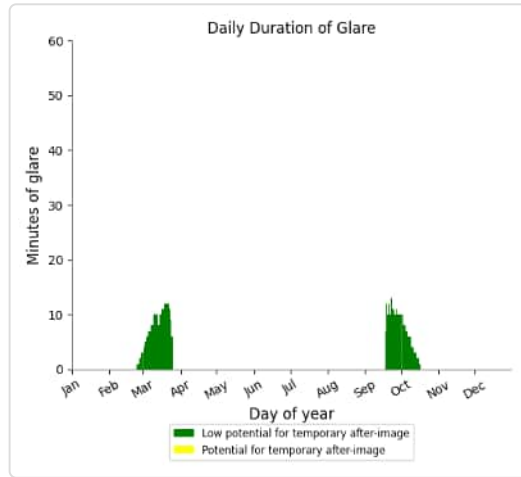
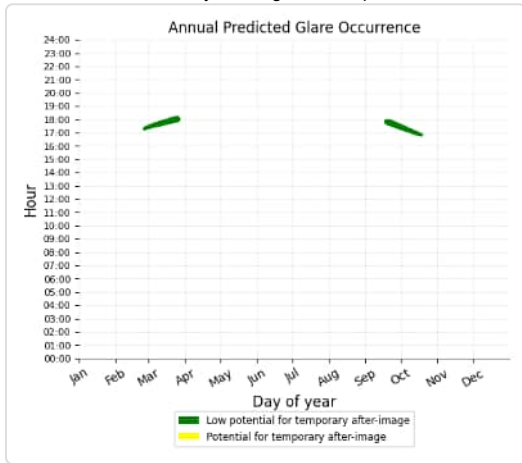


PV array 1 - OP Receptor (OP 43)

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

- 452 minutes of "green" glare with low potential to cause temporary after-image.

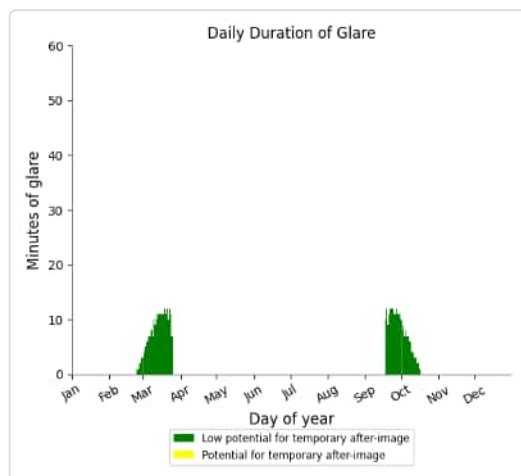
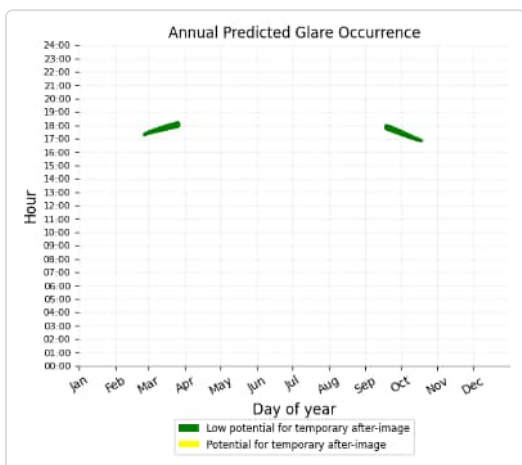
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

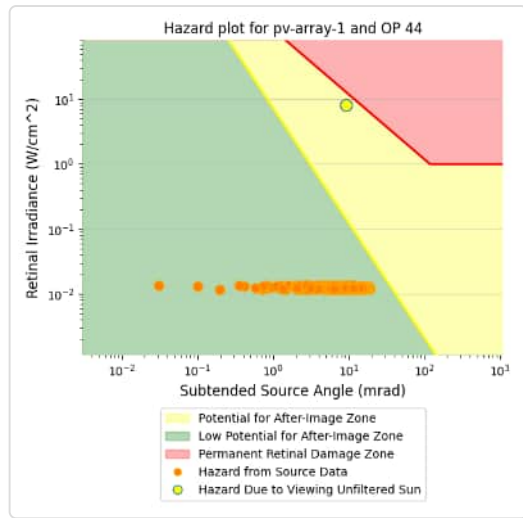
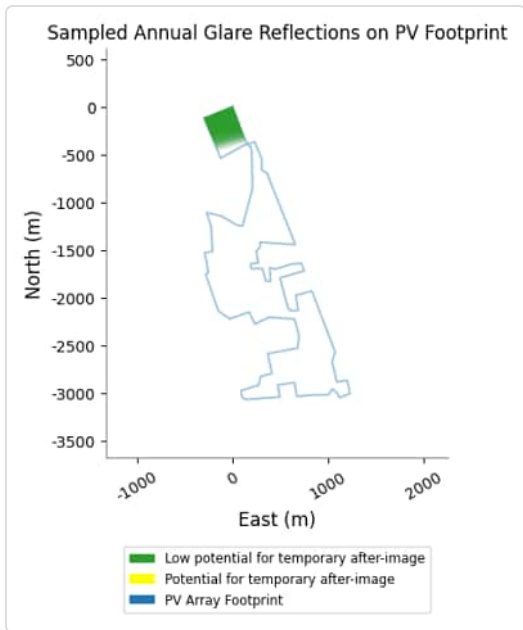


PV array 1 - OP Receptor (OP 44)

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

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

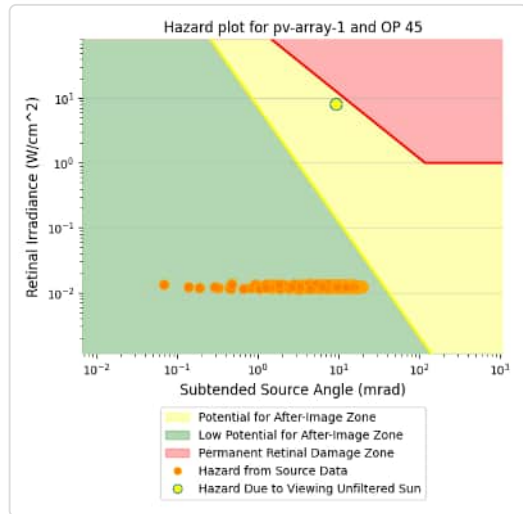
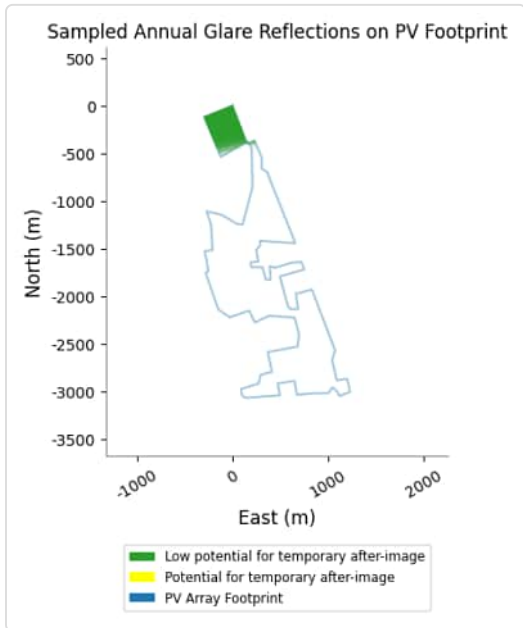
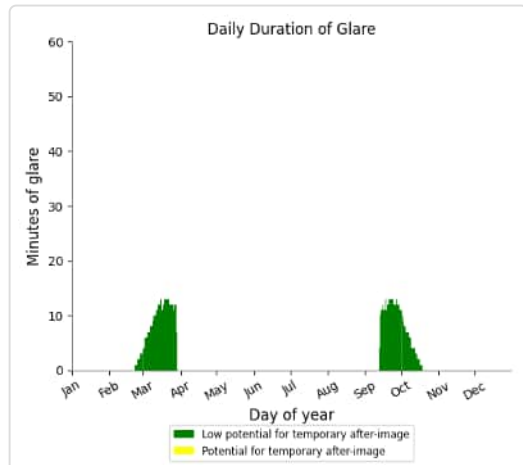
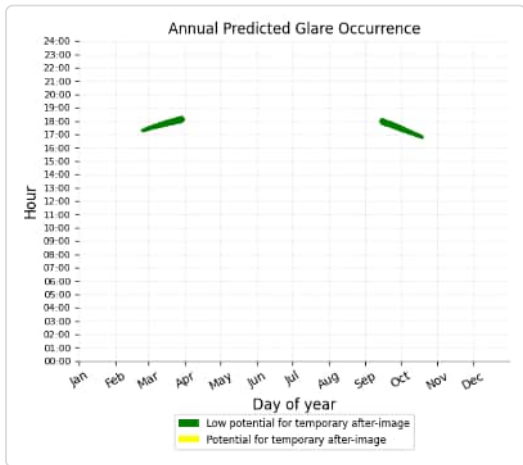




PV array 1 - OP Receptor (OP 45)

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

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

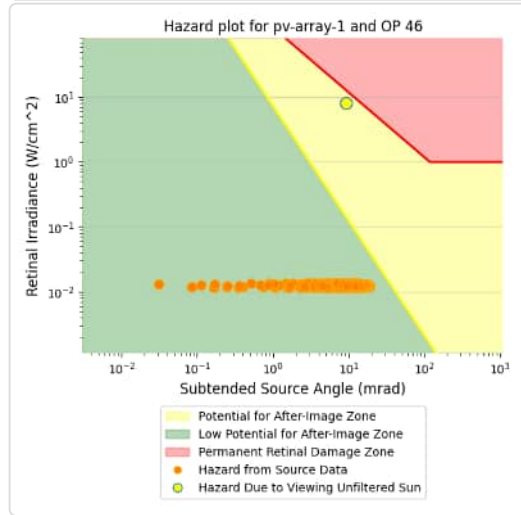
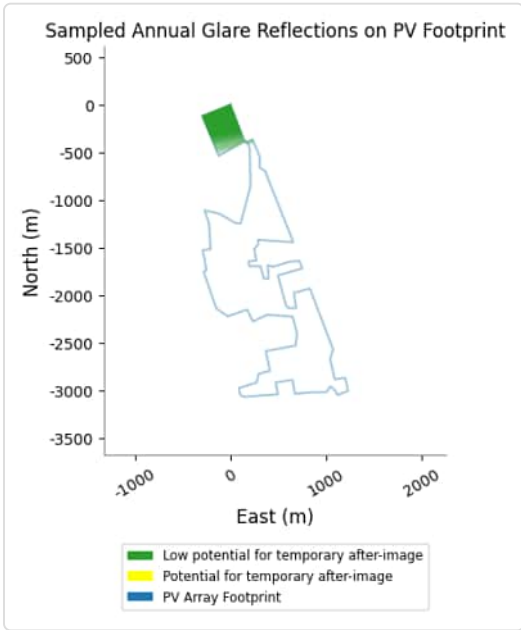
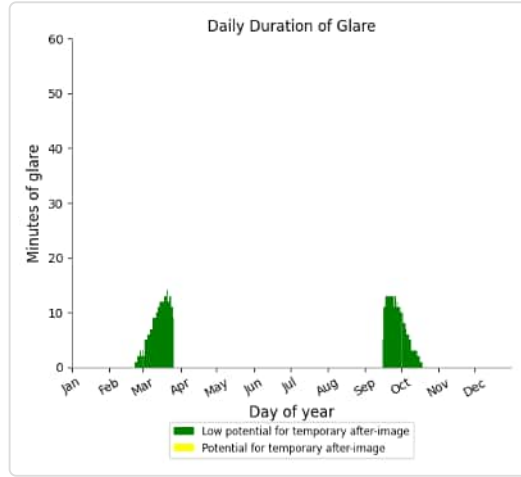
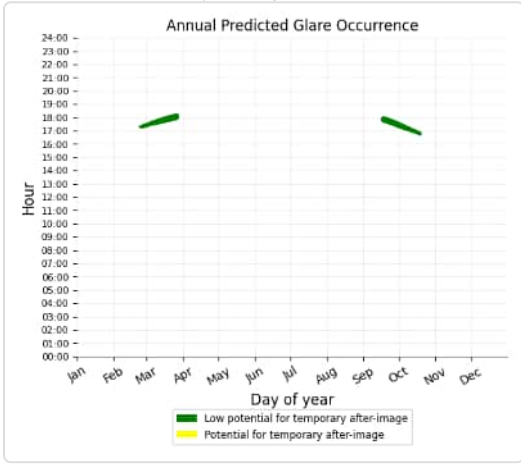


PV array 1 - OP Receptor (OP 46)

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

- 518 minutes of "green" glare with low potential to cause temporary after-image.

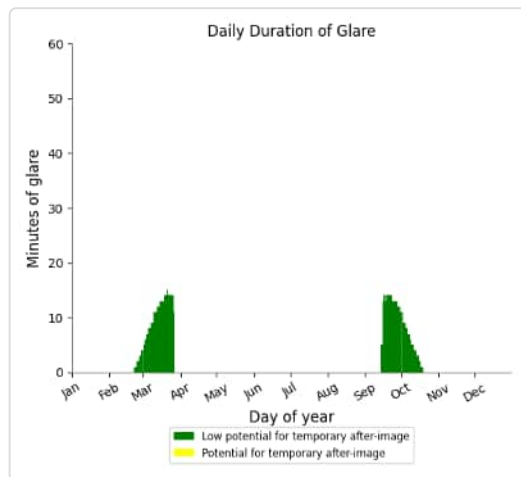
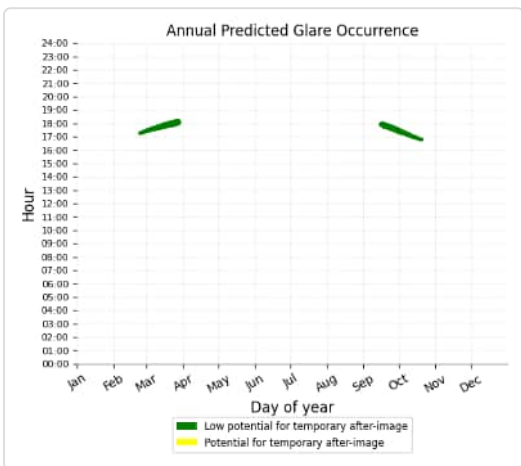
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

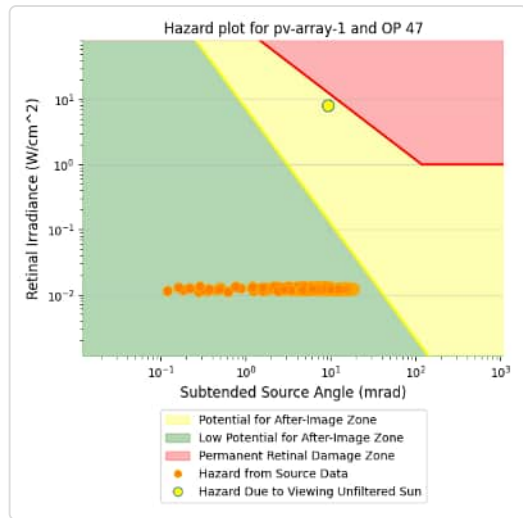
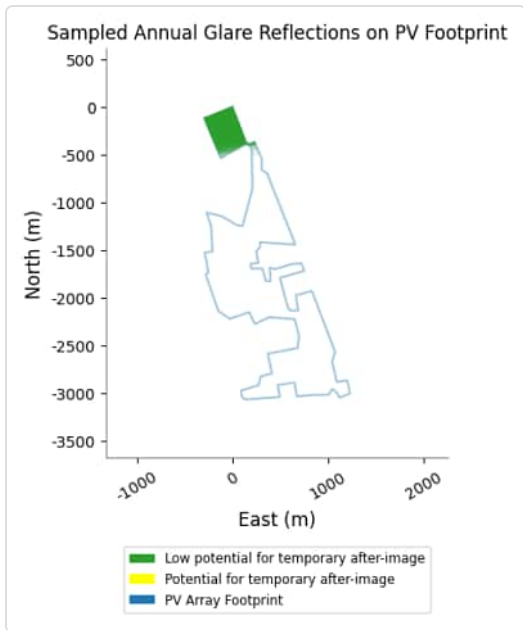


PV array 1 - OP Receptor (OP 47)

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

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

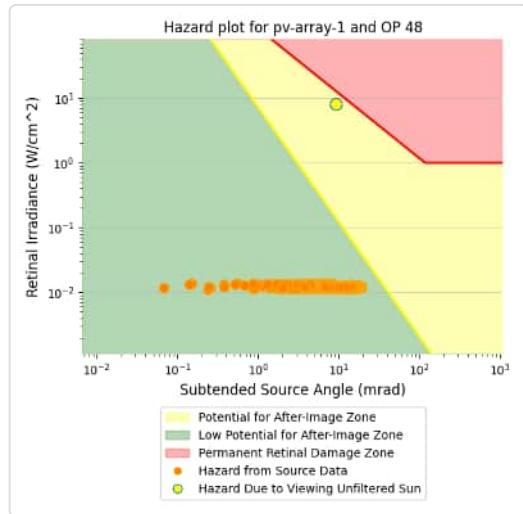
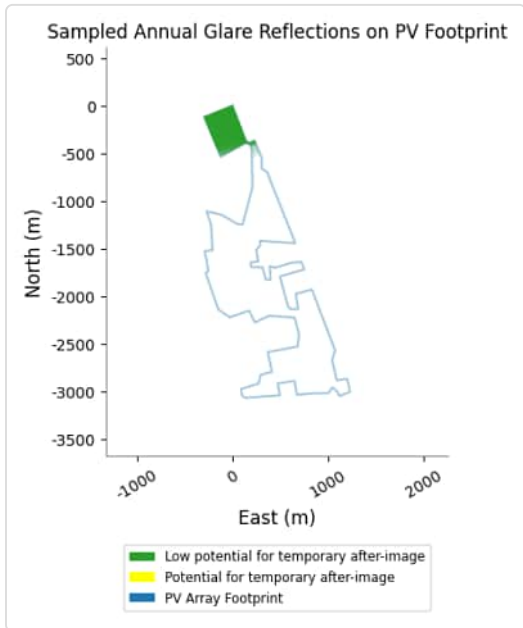
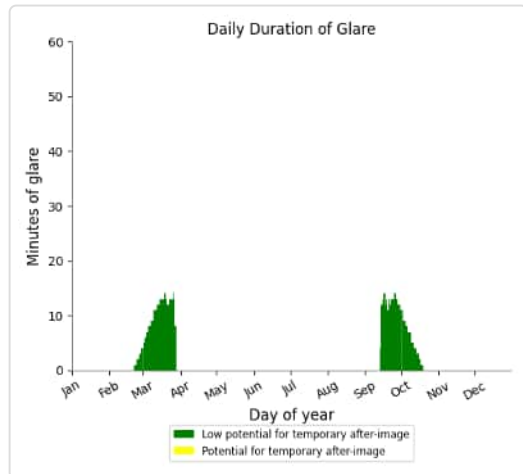
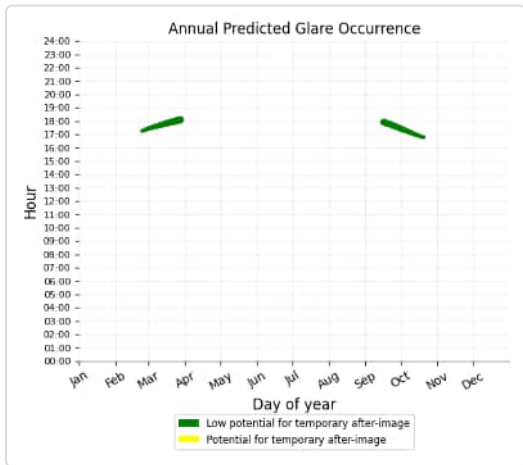




PV array 1 - OP Receptor (OP 48)

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

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

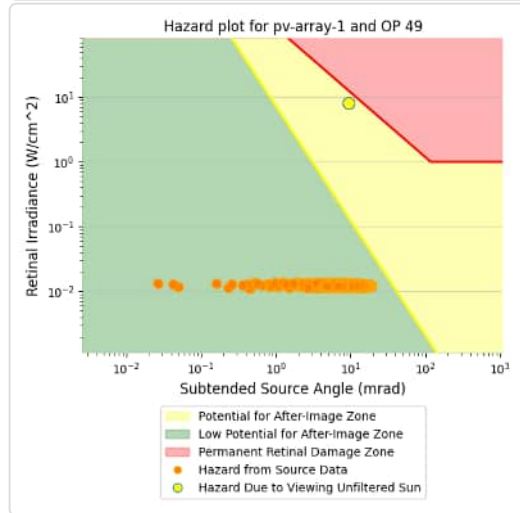
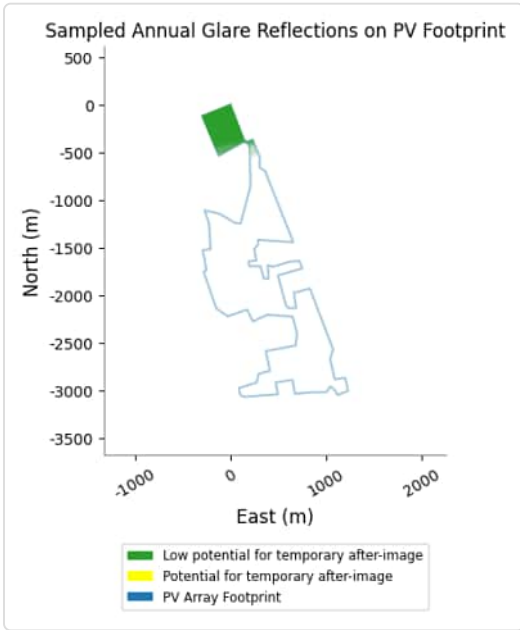
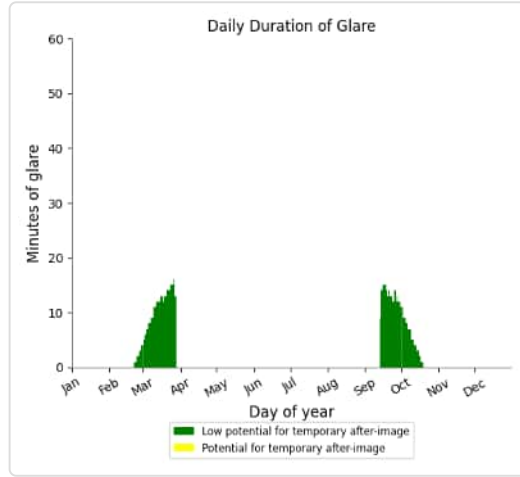
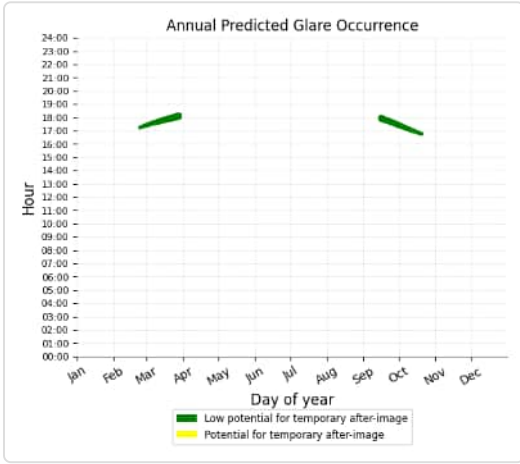


PV array 1 - OP Receptor (OP 49)

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

- 658 minutes of "green" glare with low potential to cause temporary after-image.

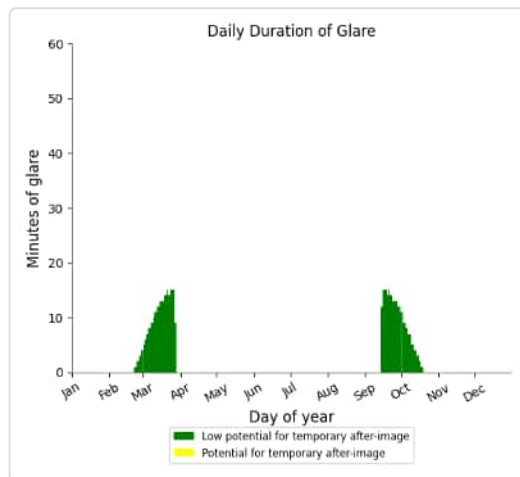
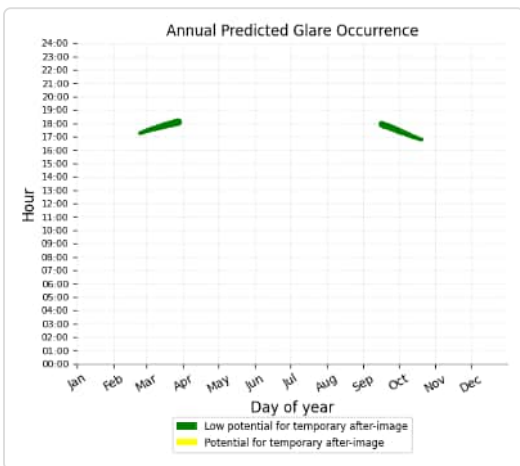
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

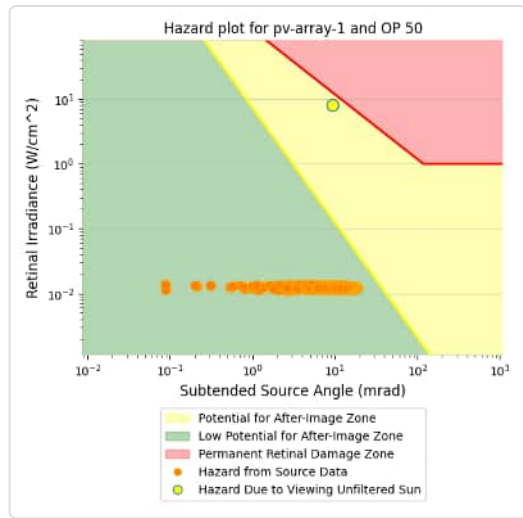
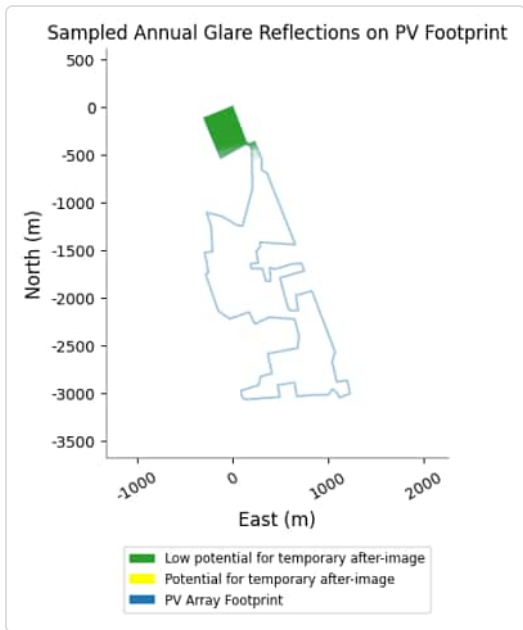


PV array 1 - OP Receptor (OP 50)

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

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

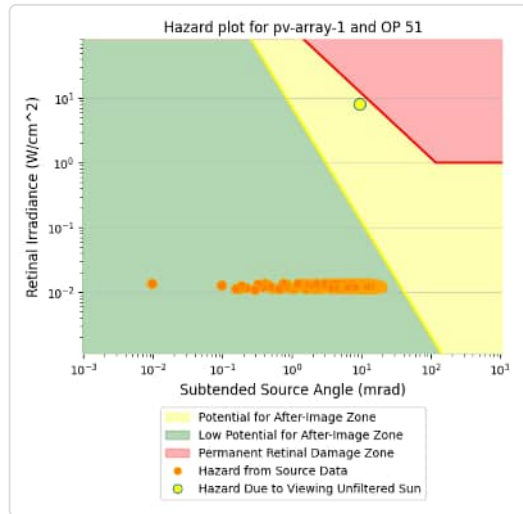
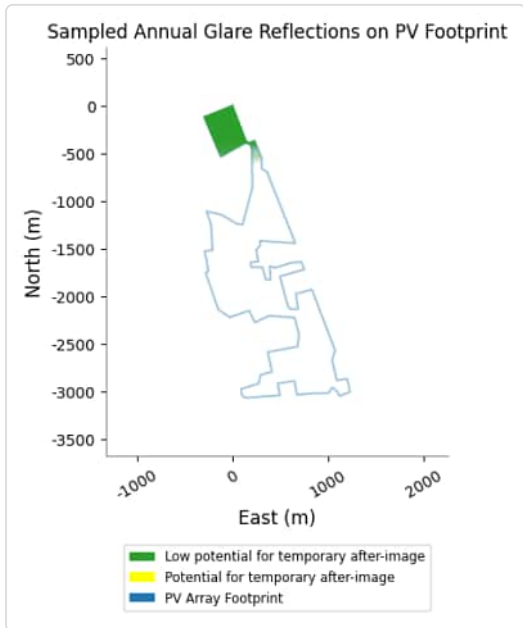
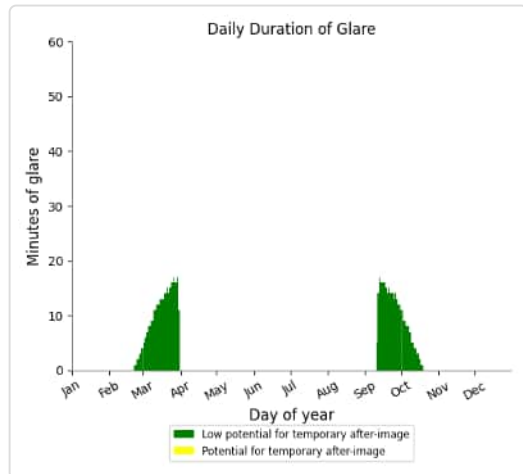
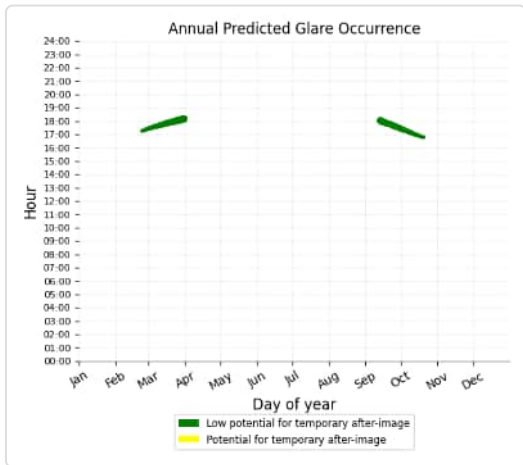




PV array 1 - OP Receptor (OP 51)

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

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

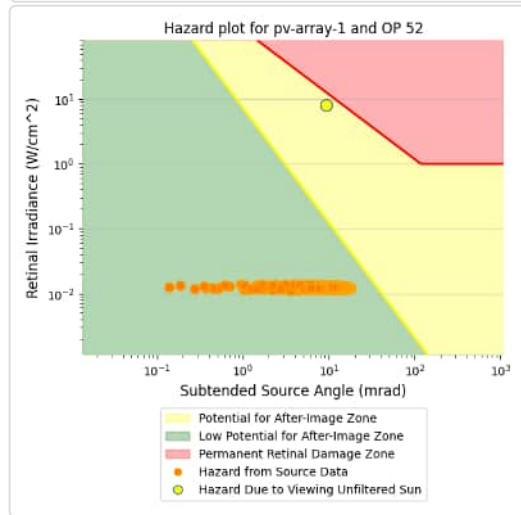
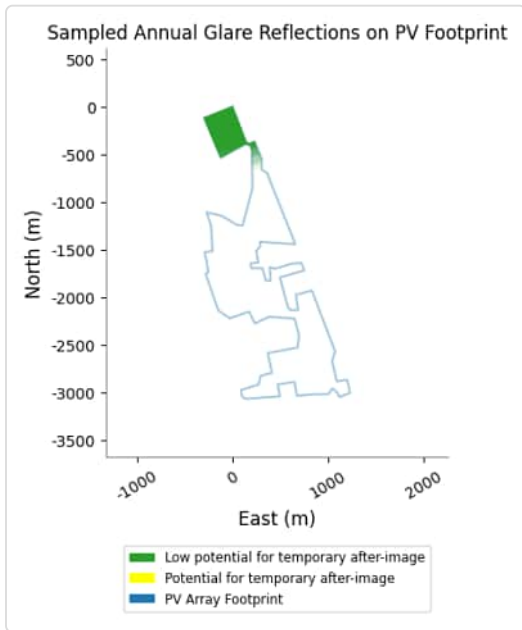
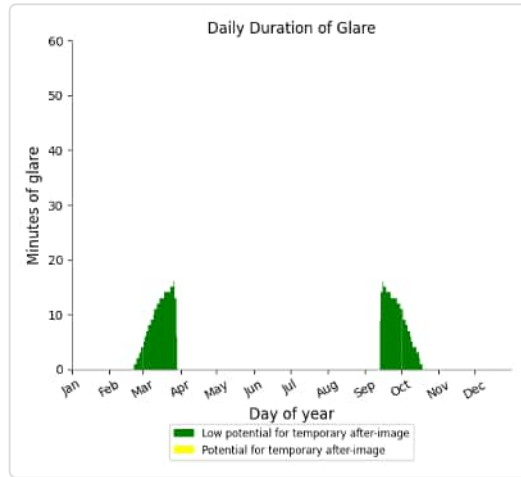
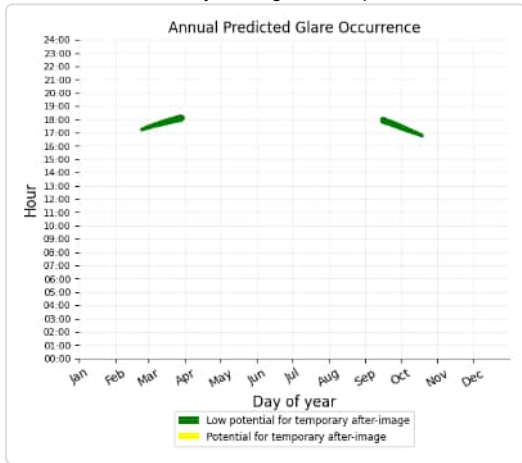


PV array 1 - OP Receptor (OP 52)

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

- 666 minutes of "green" glare with low potential to cause temporary after-image.

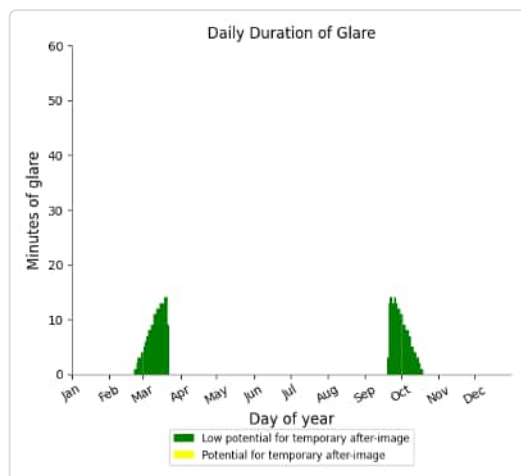
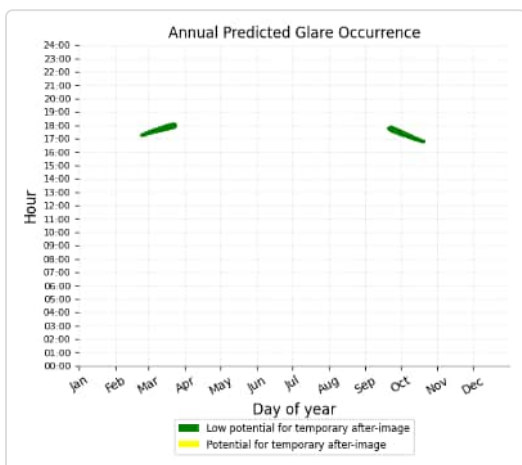
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

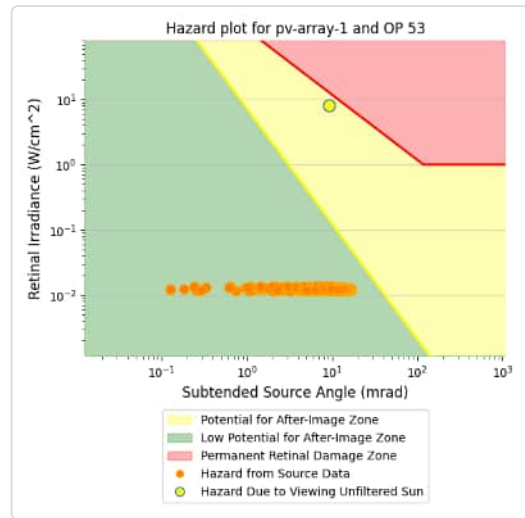
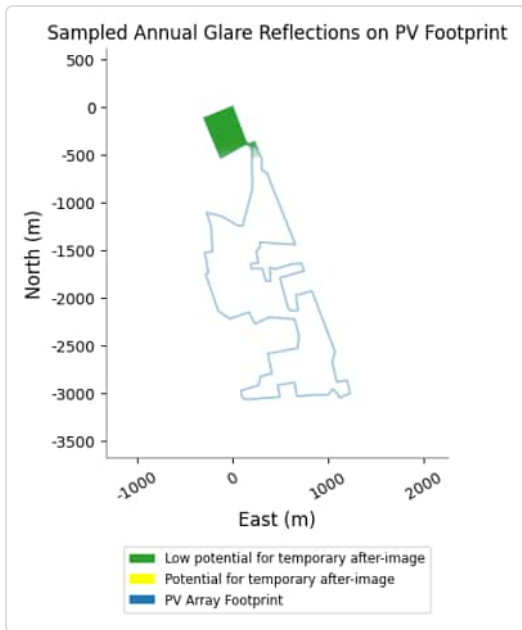


PV array 1 - OP Receptor (OP 53)

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

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





PV array 2 potential temporary after-image

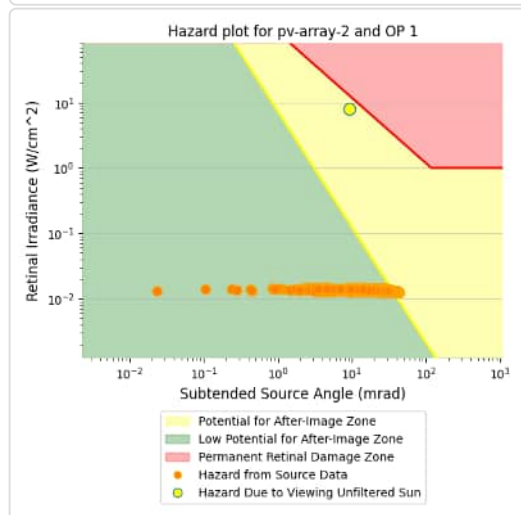
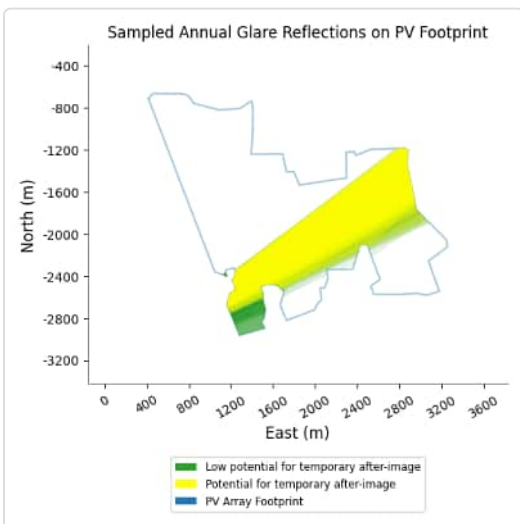
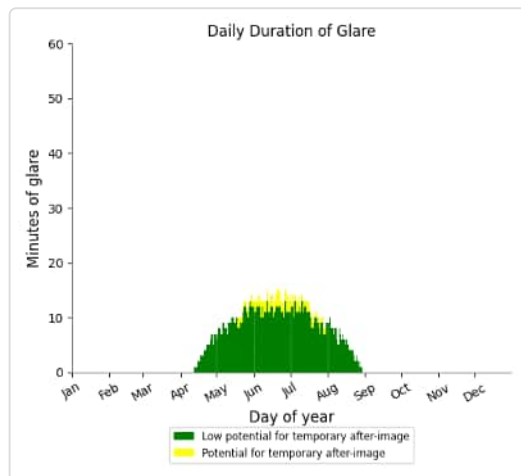
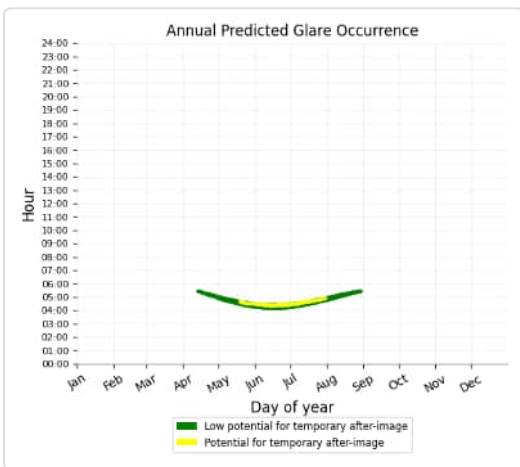
Component	Green glare (min)	Yellow glare (min)
OP: OP 1	1179	120
OP: OP 2	893	7
OP: OP 3	739	26
OP: OP 4	842	26
OP: OP 5	1177	93
OP: OP 6	1732	329
OP: OP 7	1594	851
OP: OP 8	1624	365
OP: OP 9	1595	157
OP: OP 10	1611	188
OP: OP 11	2553	120
OP: OP 12	584	828
OP: OP 13	1187	1667
OP: OP 14	914	1945
OP: OP 15	850	2010
OP: OP 16	1460	23
OP: OP 17	1413	0
OP: OP 18	1481	0
OP: OP 19	1246	0
OP: OP 20	56	0
OP: OP 21	1393	0
OP: OP 22	216	0
OP: OP 23	422	0
OP: OP 24	1486	0
OP: OP 25	200	0
OP: OP 26	80	0
OP: OP 27	9	0
OP: OP 28	155	0
OP: OP 29	14	0
OP: OP 30	21	0
OP: OP 31	10	0
OP: OP 32	0	0

OP: OP 33	4	0
OP: OP 34	0	0
OP: OP 35	0	0
OP: OP 36	0	0
OP: OP 37	0	0
OP: OP 38	0	0
OP: OP 39	0	0
OP: OP 40	0	0
OP: OP 41	0	0
OP: OP 42	0	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0
OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0

PV array 2 - OP Receptor (OP 1)

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

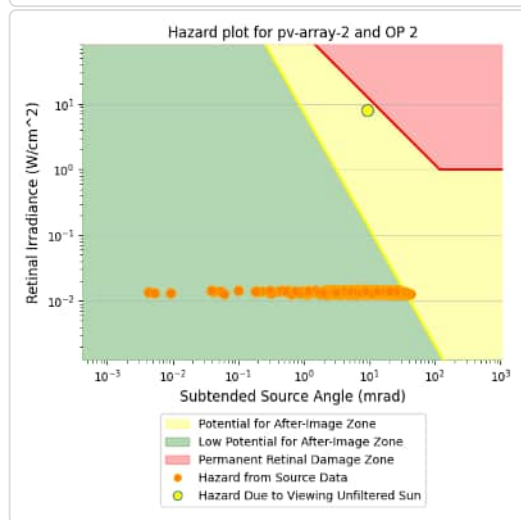
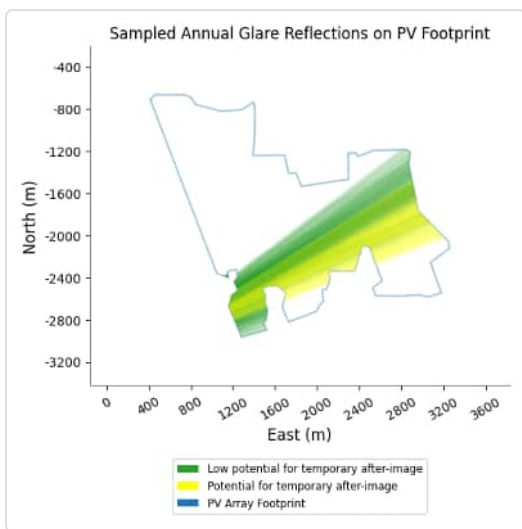
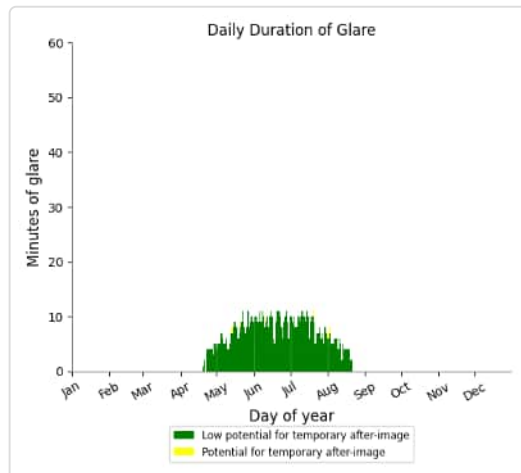
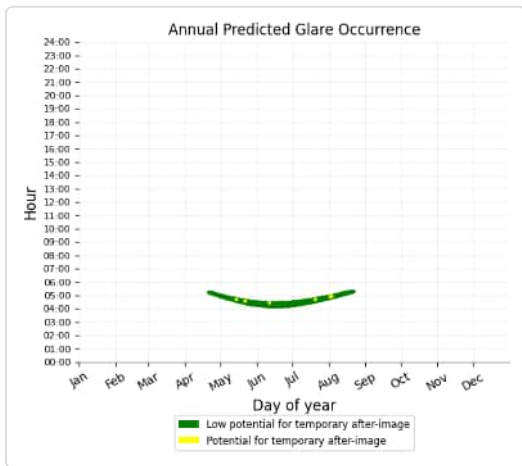
- 1,179 minutes of "green" glare with low potential to cause temporary after-image.
- 120 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 2)

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

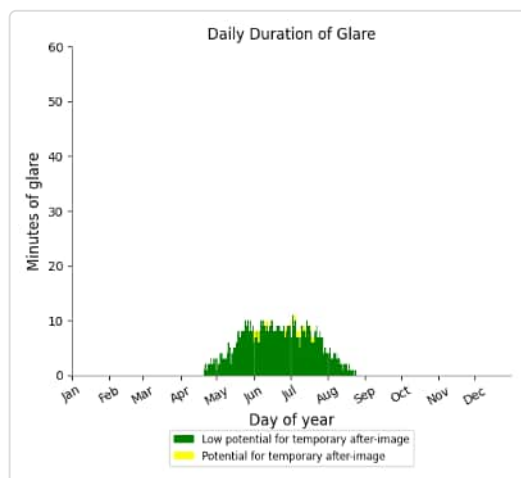
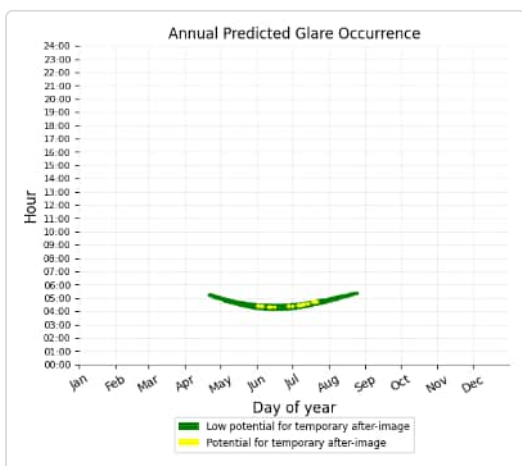
- 893 minutes of "green" glare with low potential to cause temporary after-image.
- 7 minutes of "yellow" glare with potential to cause temporary after-image.

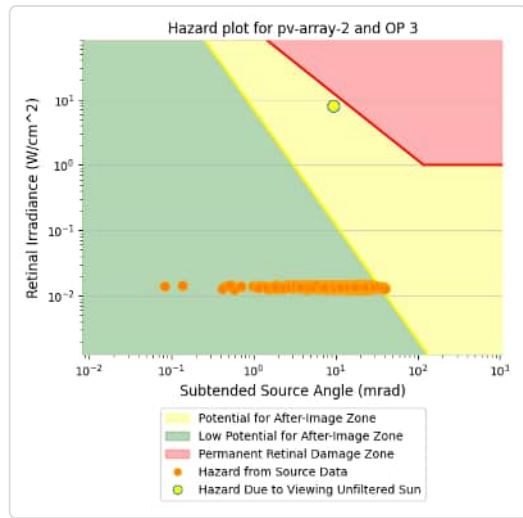
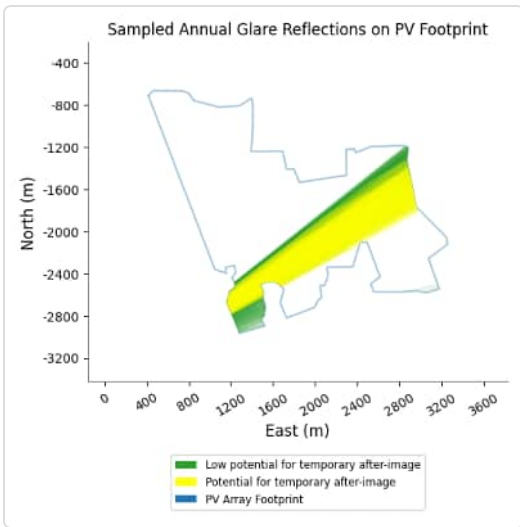


PV array 2 - OP Receptor (OP 3)

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

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

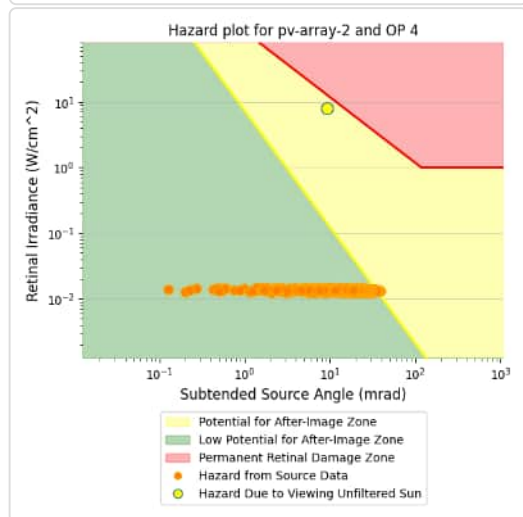
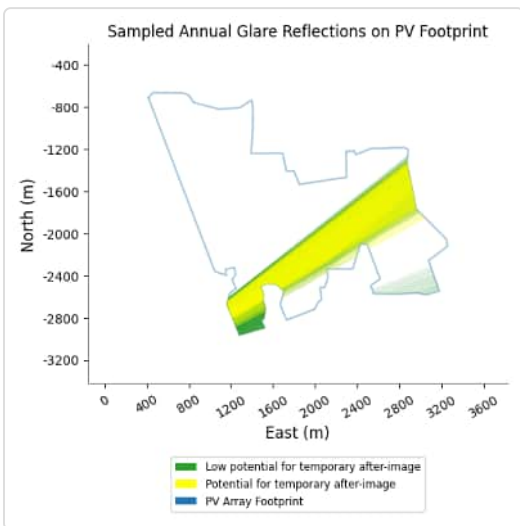
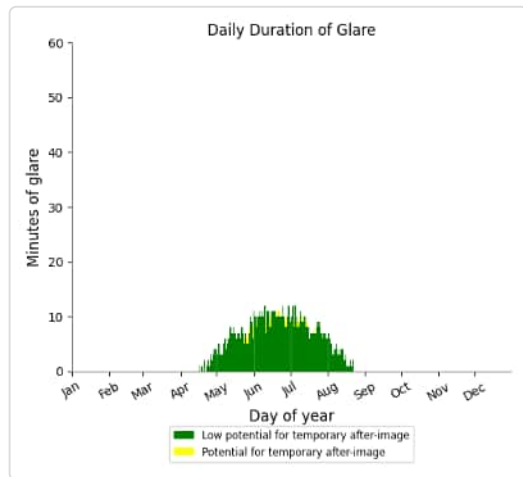
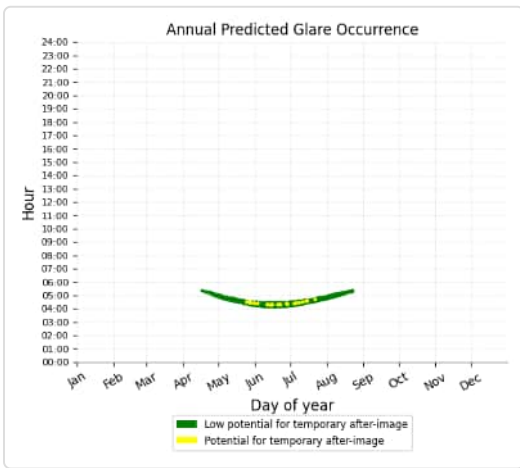




PV array 2 - OP Receptor (OP 4)

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

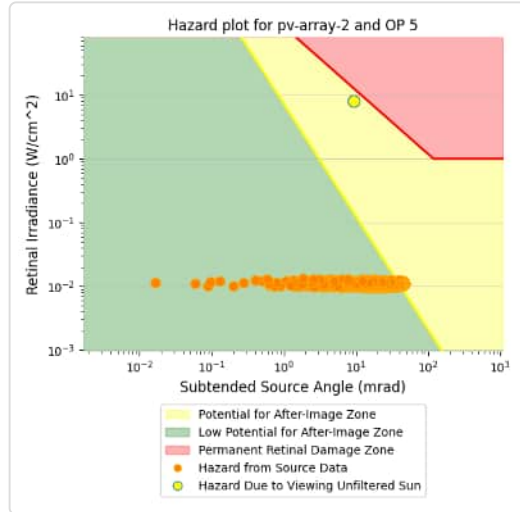
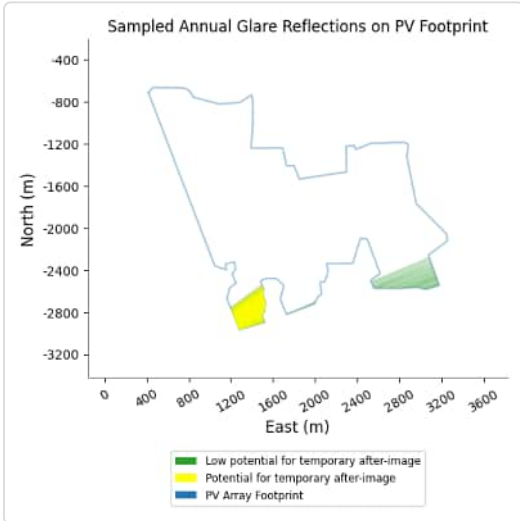
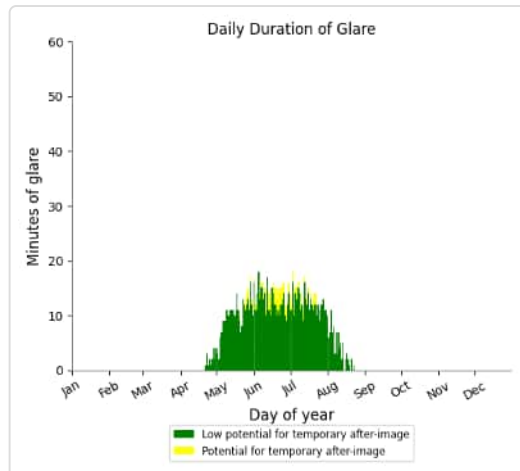
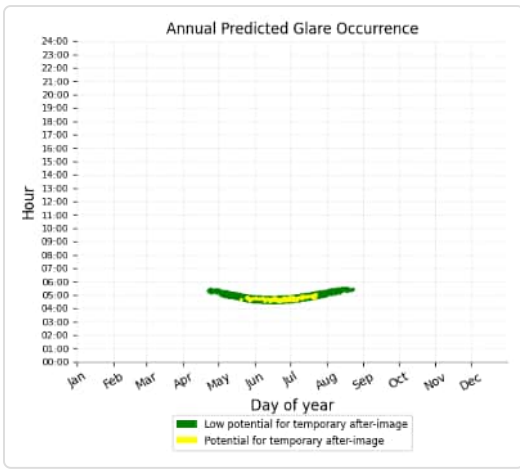
- 842 minutes of "green" glare with low potential to cause temporary after-image.
- 26 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 5)

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

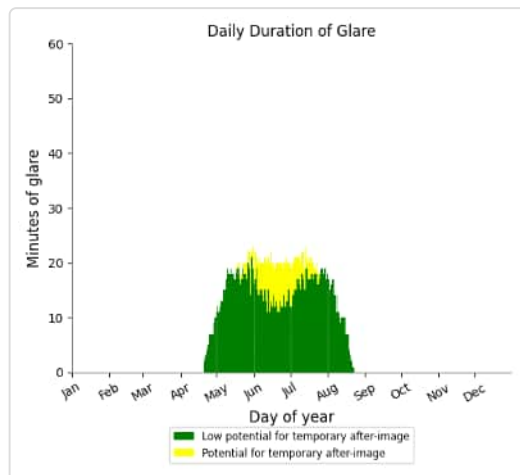
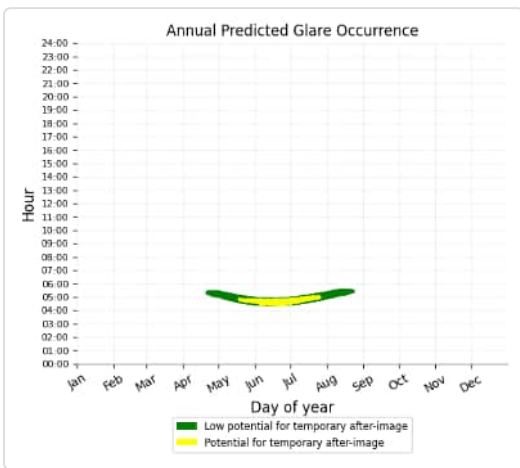
- 1,177 minutes of "green" glare with low potential to cause temporary after-image.
- 93 minutes of "yellow" glare with potential to cause temporary after-image.

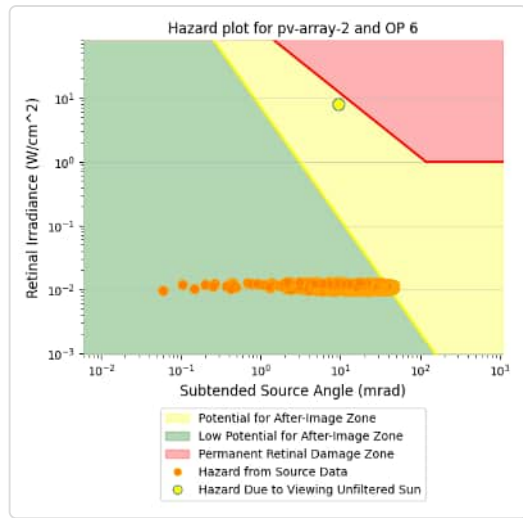
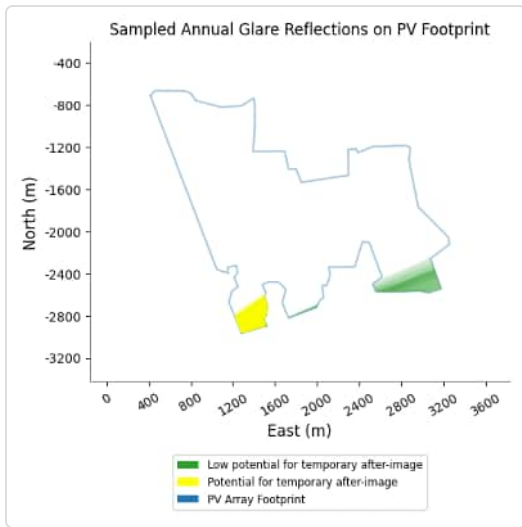


PV array 2 - OP Receptor (OP 6)

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

- 1,732 minutes of "green" glare with low potential to cause temporary after-image.
- 329 minutes of "yellow" glare with potential to cause temporary after-image.

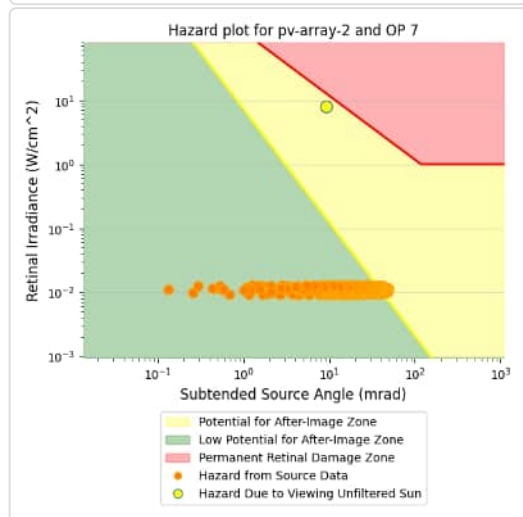
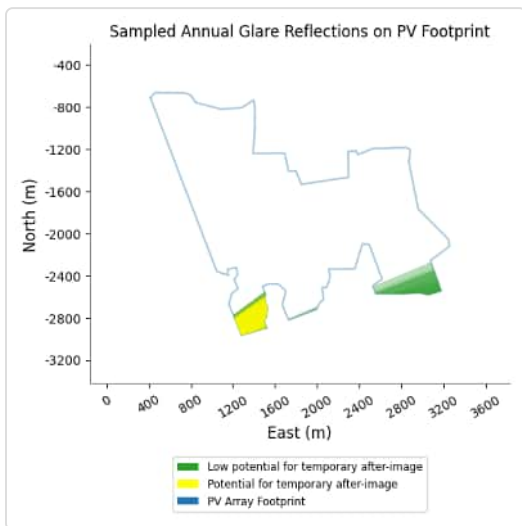
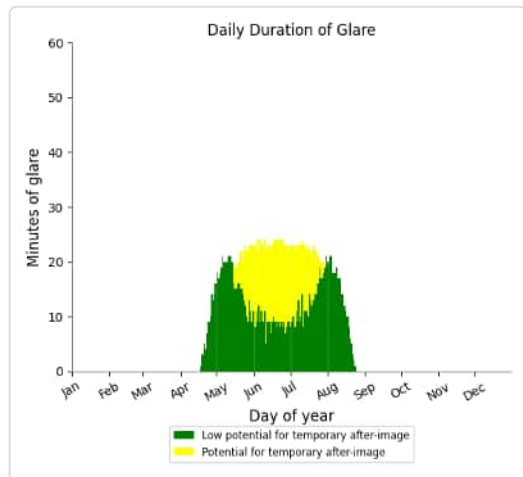
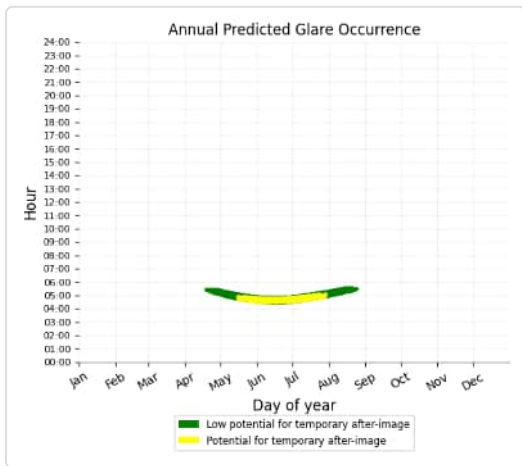




PV array 2 - OP Receptor (OP 7)

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

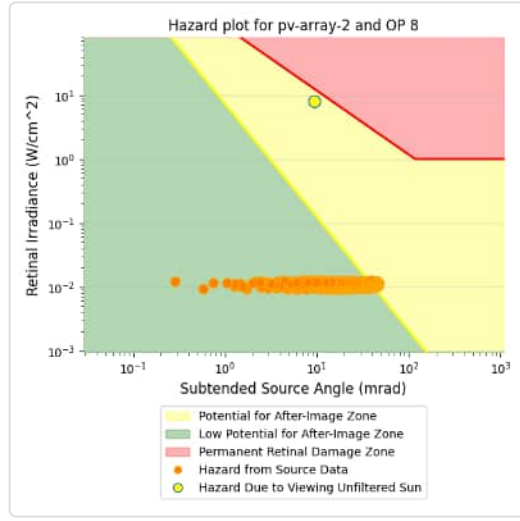
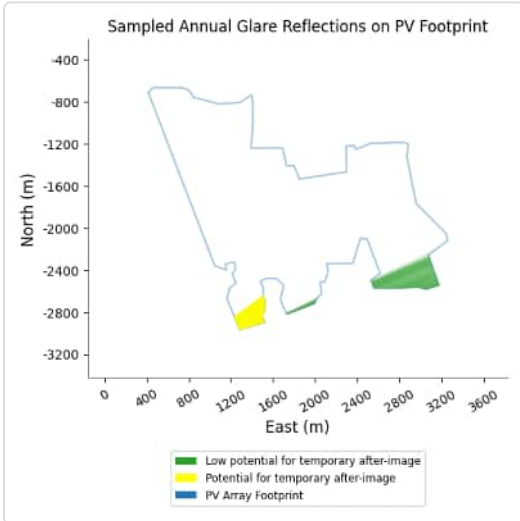
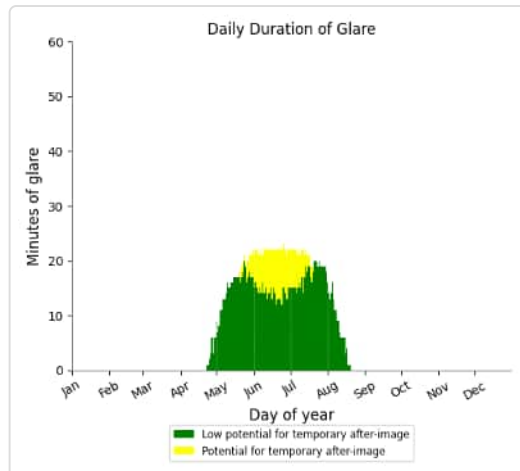
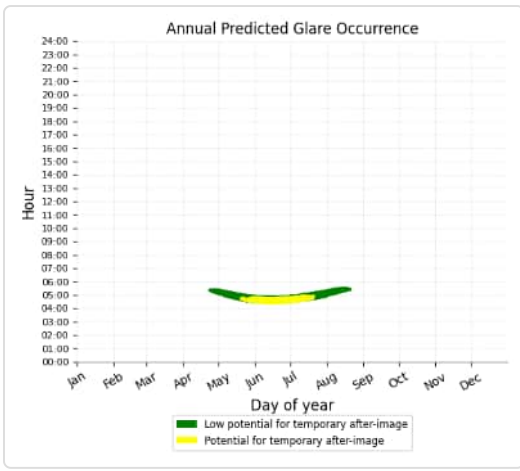
- 1,594 minutes of "green" glare with low potential to cause temporary after-image.
- 851 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 8)

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

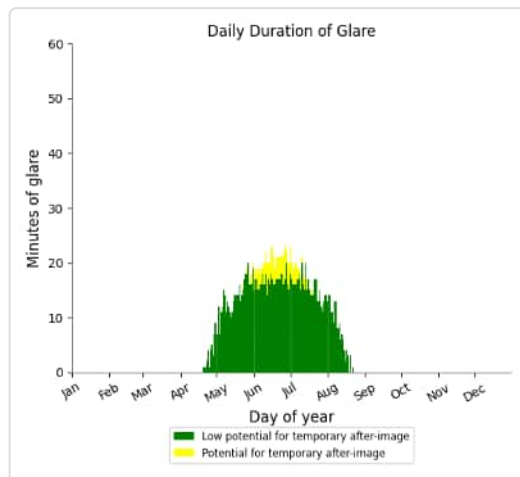
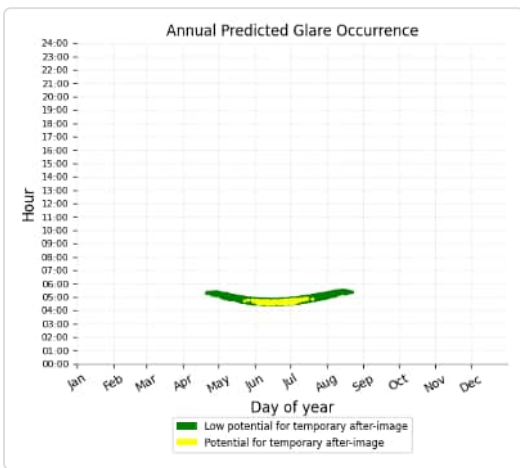
- 1,624 minutes of "green" glare with low potential to cause temporary after-image.
- 365 minutes of "yellow" glare with potential to cause temporary after-image.

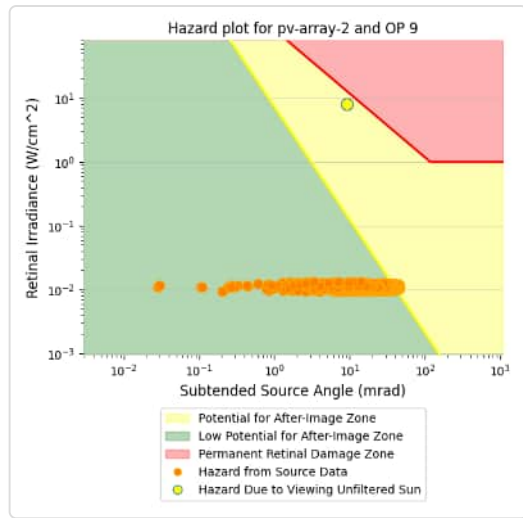
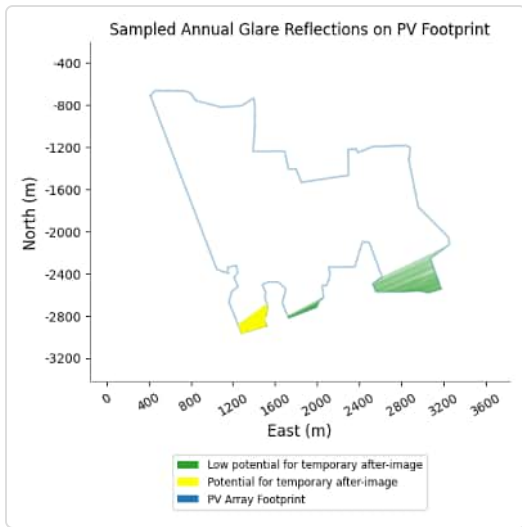


PV array 2 - OP Receptor (OP 9)

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

- 1,595 minutes of "green" glare with low potential to cause temporary after-image.
- 157 minutes of "yellow" glare with potential to cause temporary after-image.

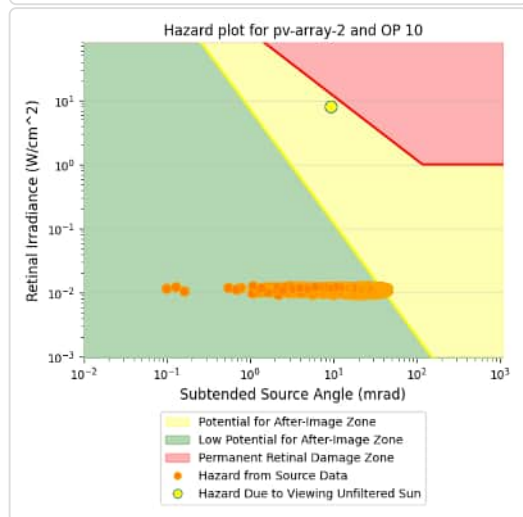
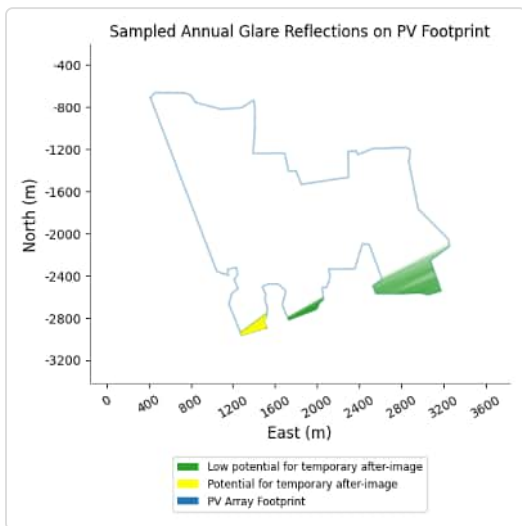
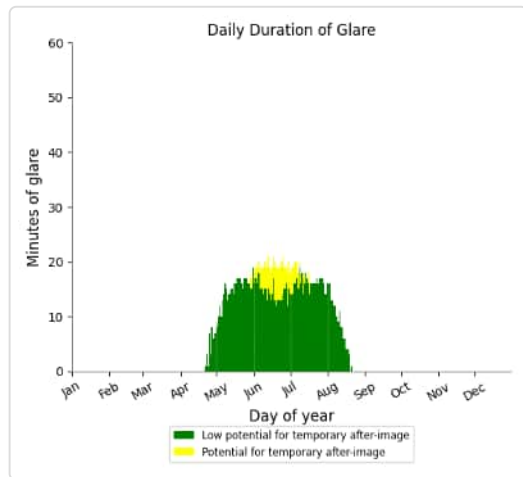
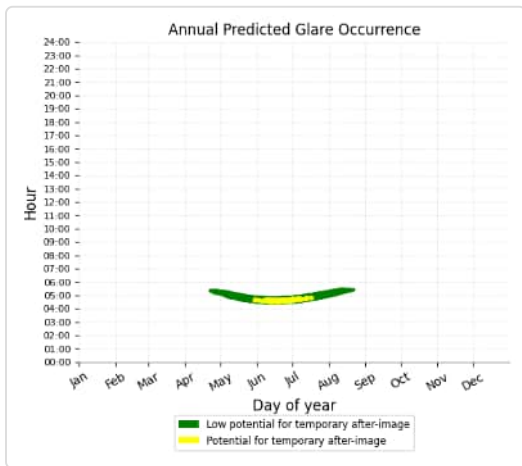




PV array 2 - OP Receptor (OP 10)

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

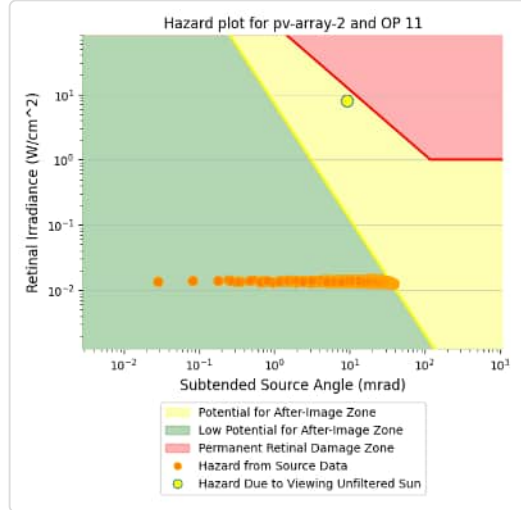
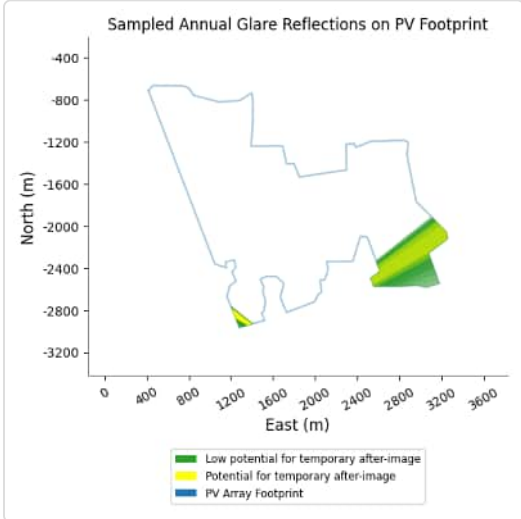
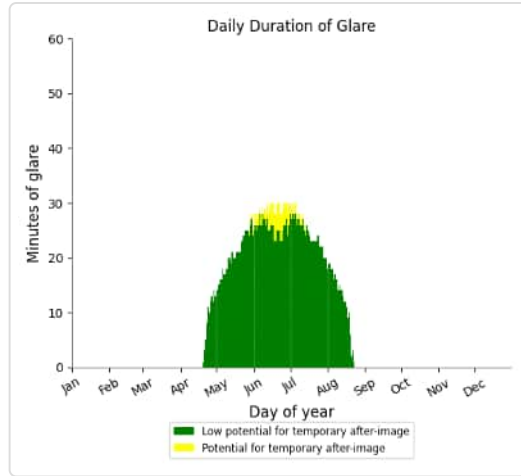
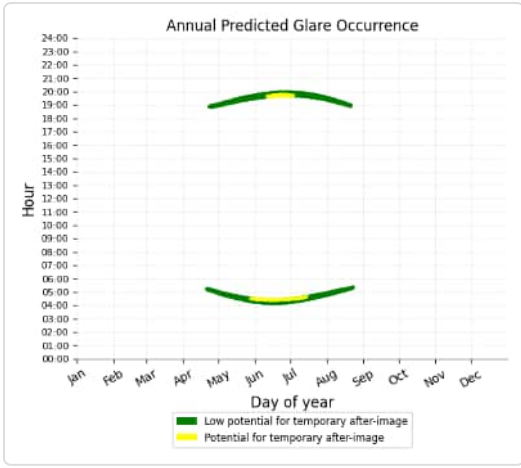
- 1,611 minutes of "green" glare with low potential to cause temporary after-image.
- 188 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 11)

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

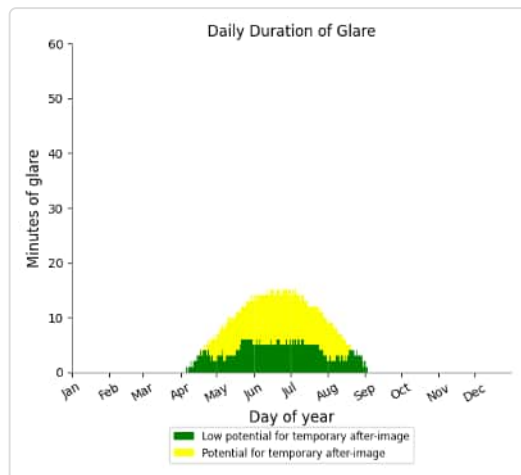
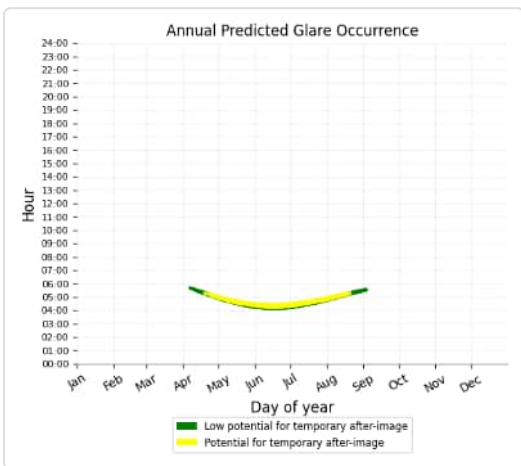
- 2,553 minutes of "green" glare with low potential to cause temporary after-image.
- 120 minutes of "yellow" glare with potential to cause temporary after-image.

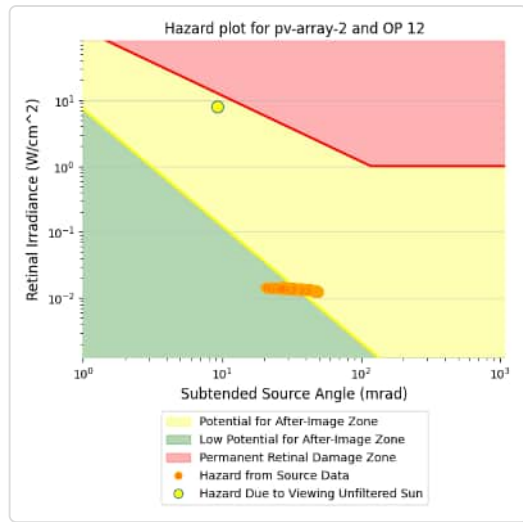
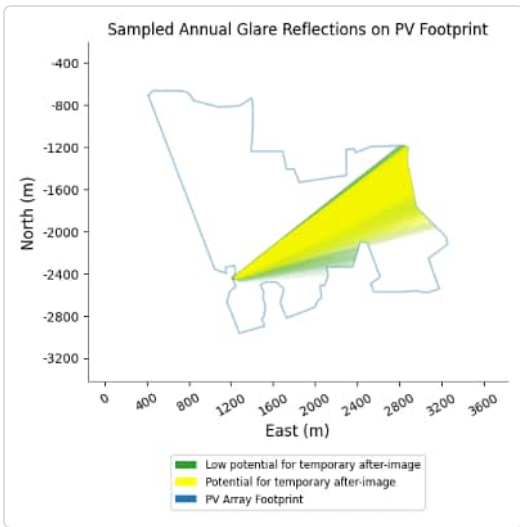


PV array 2 - OP Receptor (OP 12)

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

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

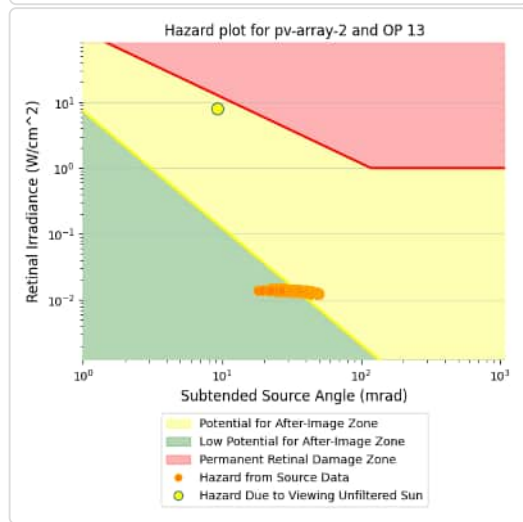
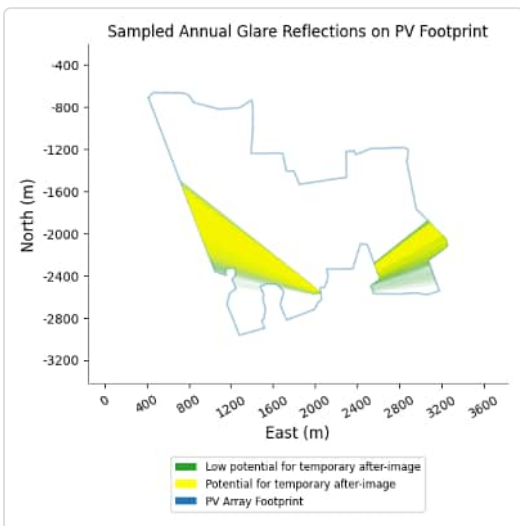
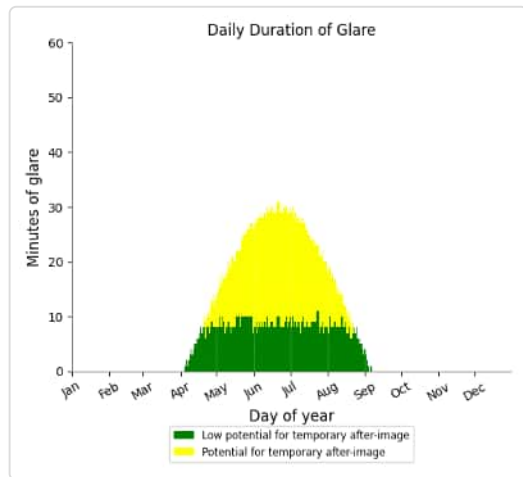
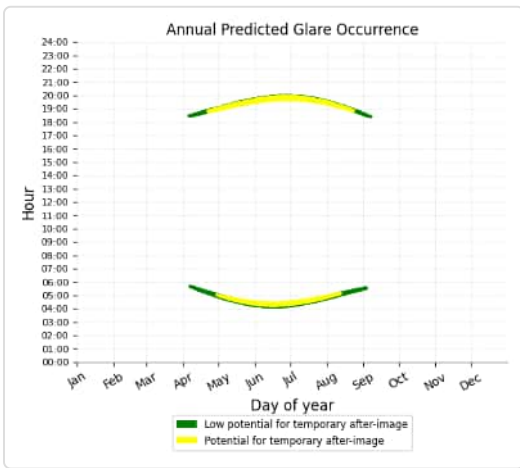




PV array 2 - OP Receptor (OP 13)

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

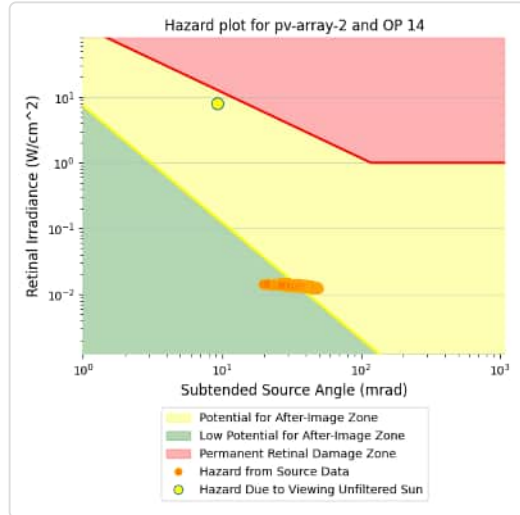
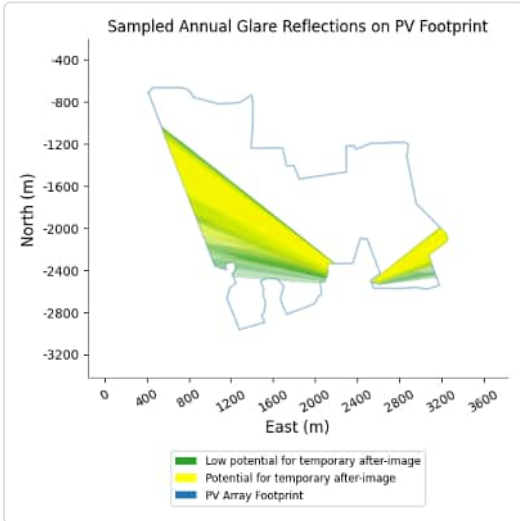
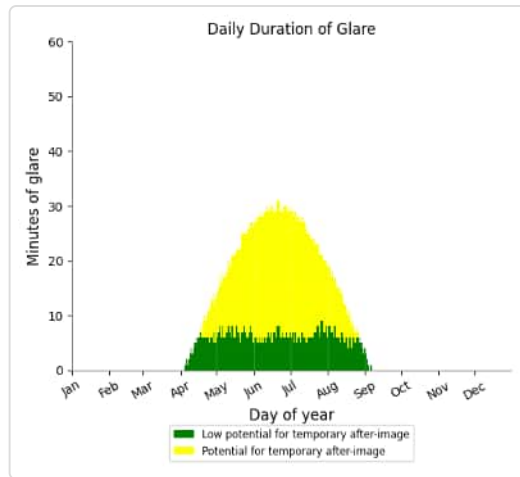
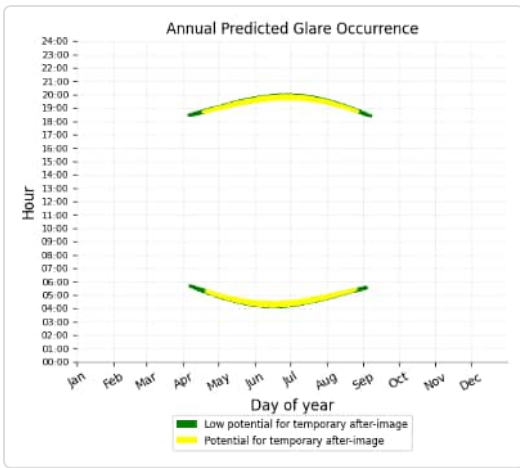
- 1,187 minutes of "green" glare with low potential to cause temporary after-image.
- 1,667 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 14)

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

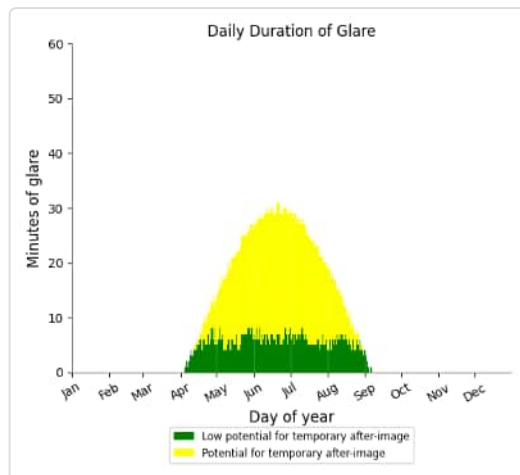
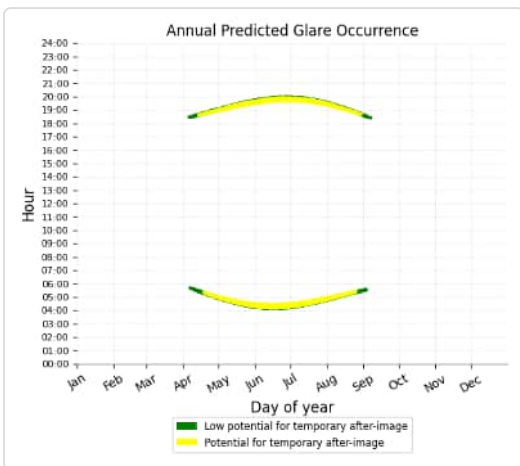
- 914 minutes of "green" glare with low potential to cause temporary after-image.
- 1,945 minutes of "yellow" glare with potential to cause temporary after-image.

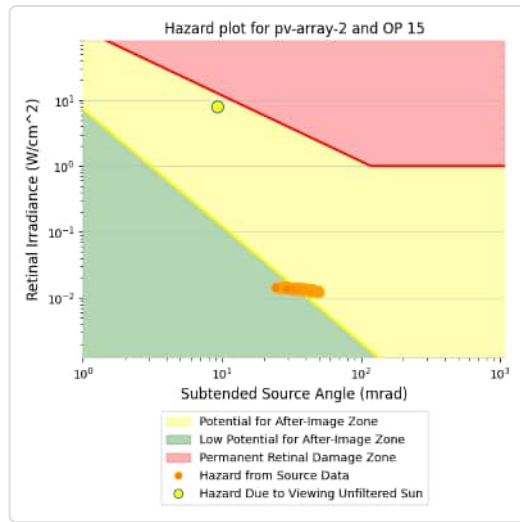
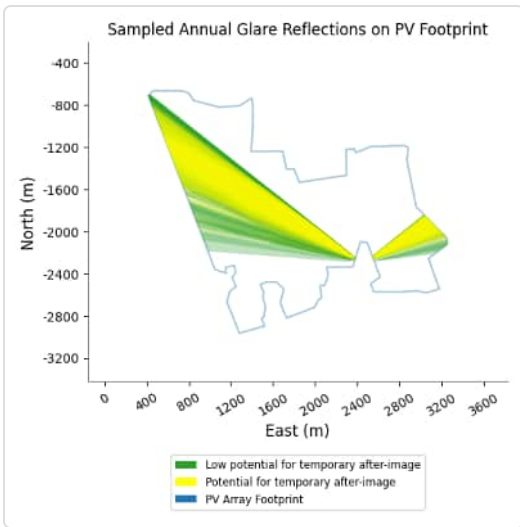


PV array 2 - OP Receptor (OP 15)

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

- 850 minutes of "green" glare with low potential to cause temporary after-image.
- 2,010 minutes of "yellow" glare with potential to cause temporary after-image.

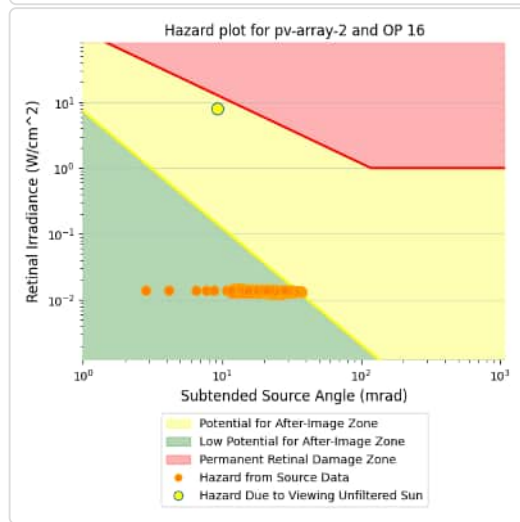
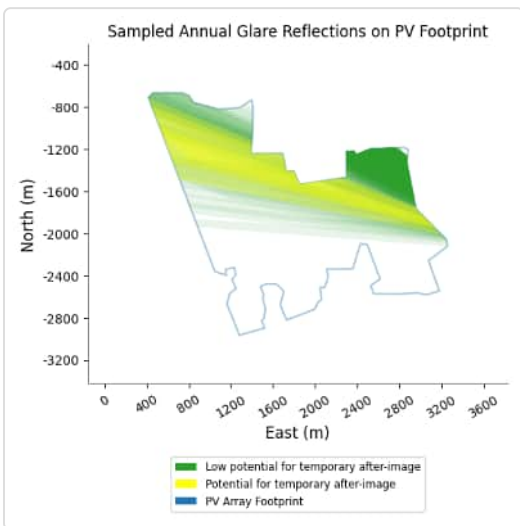
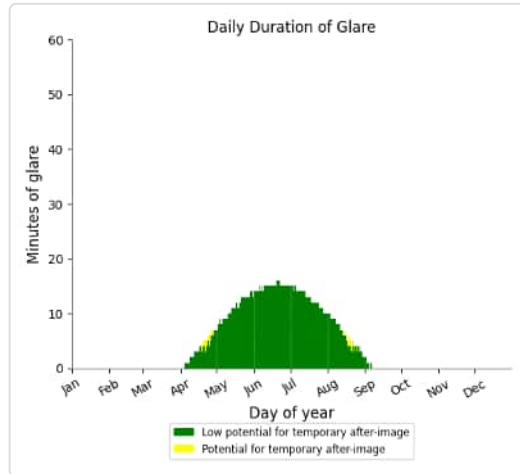
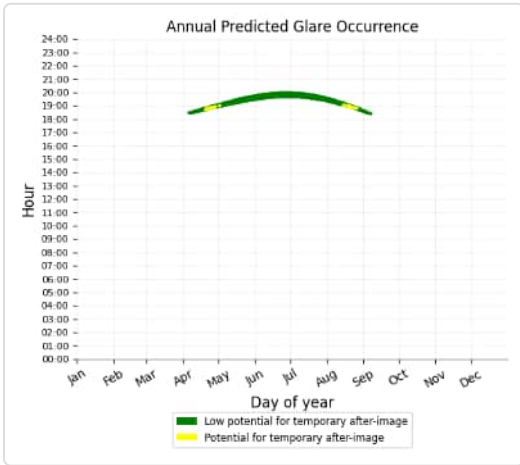




PV array 2 - OP Receptor (OP 16)

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

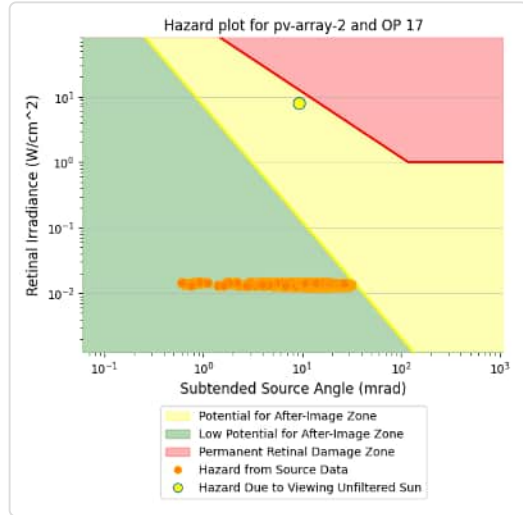
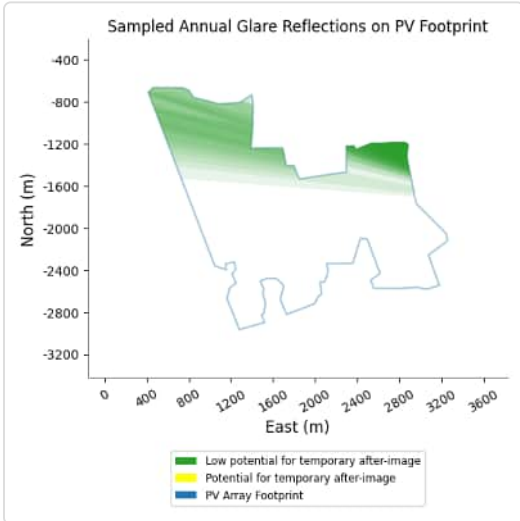
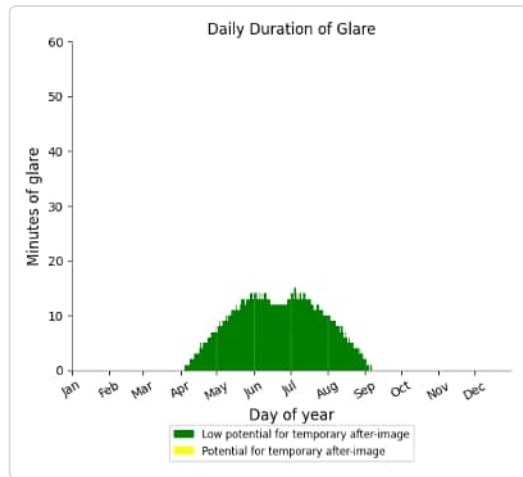
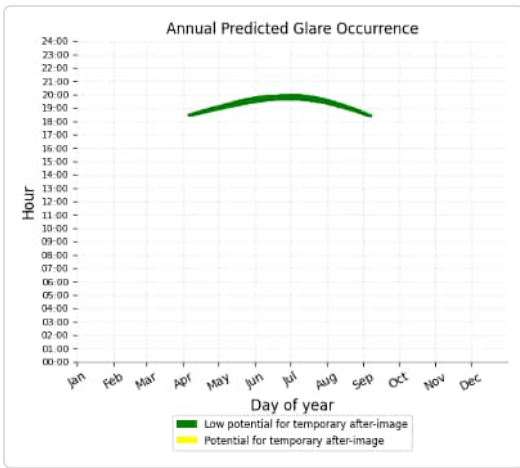
- 1,460 minutes of "green" glare with low potential to cause temporary after-image.
- 23 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 17)

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

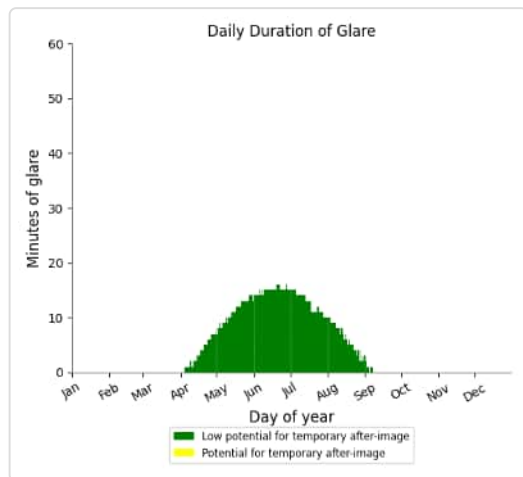
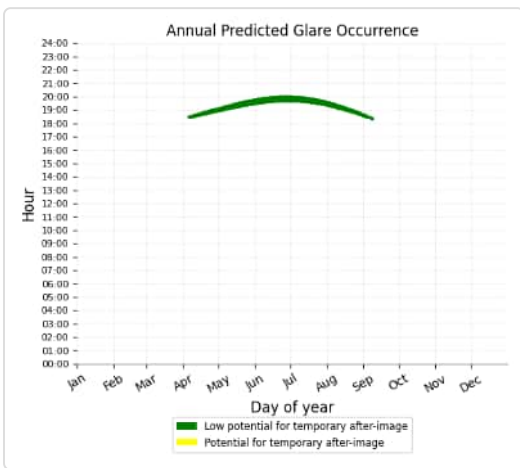
- 1,413 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

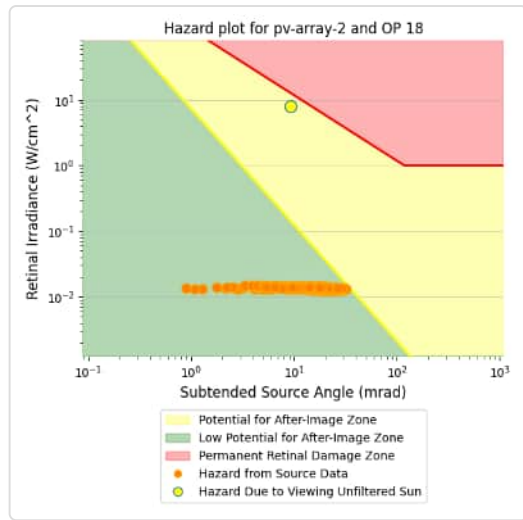
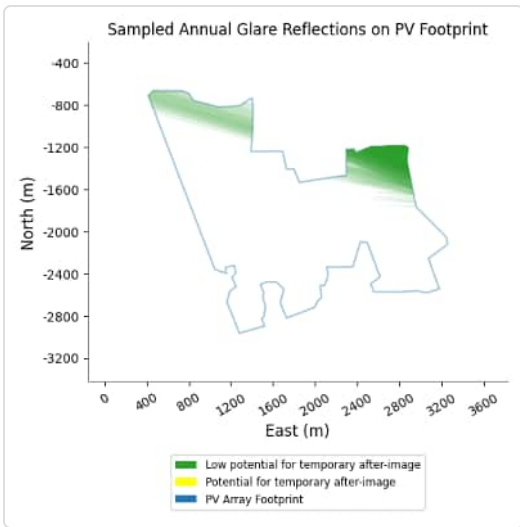


PV array 2 - OP Receptor (OP 18)

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

- 1,481 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

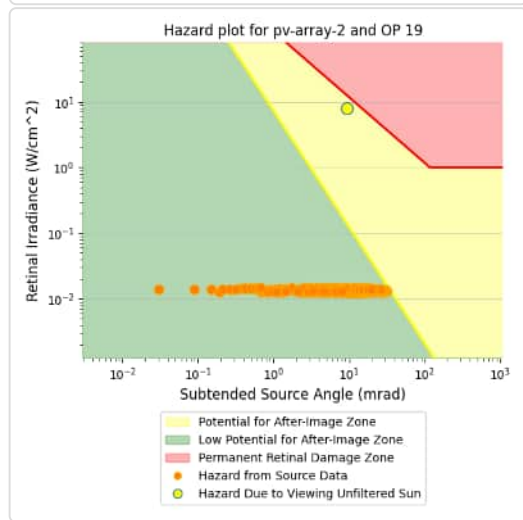
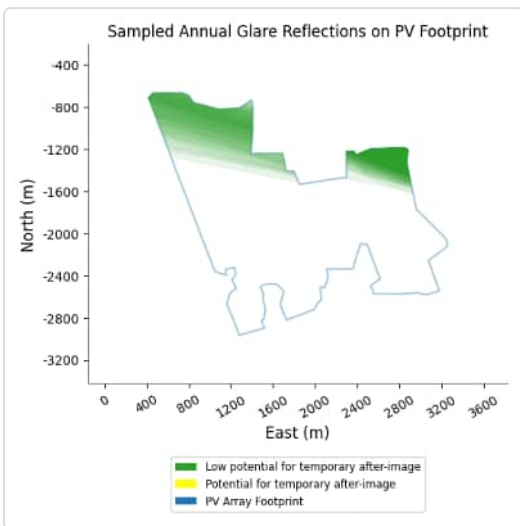
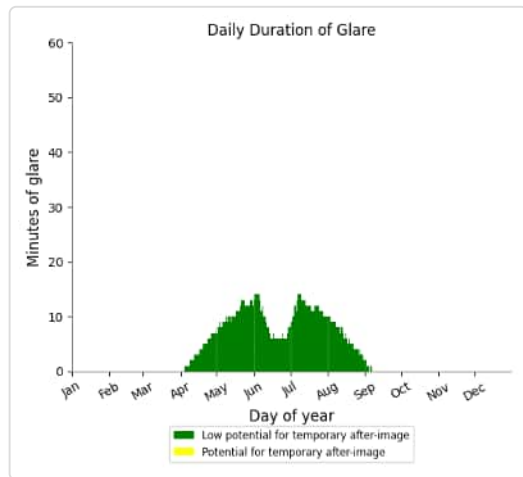
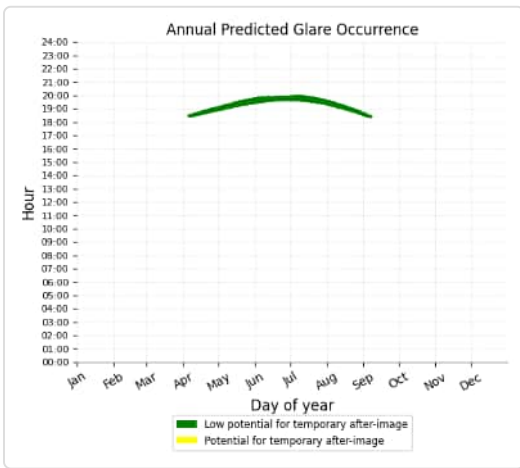




PV array 2 - OP Receptor (OP 19)

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

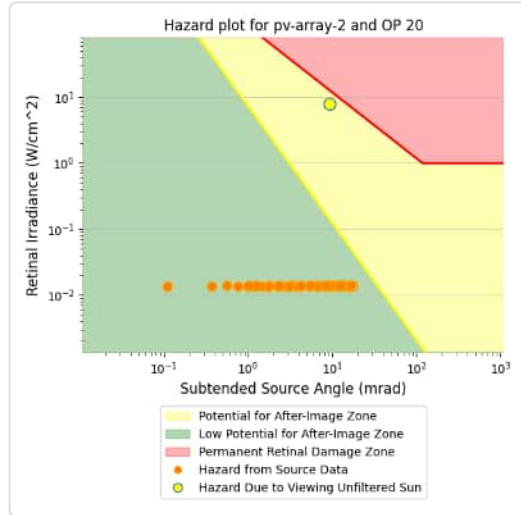
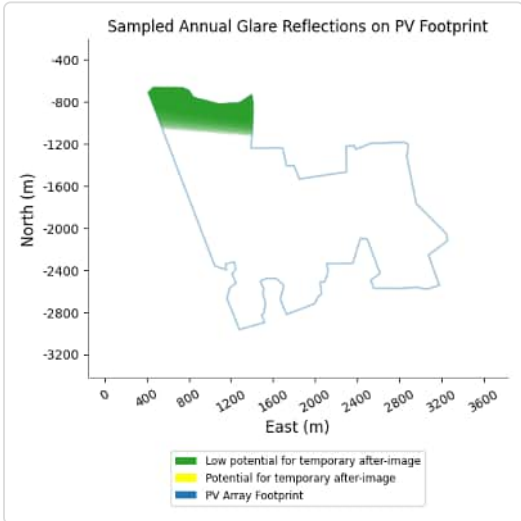
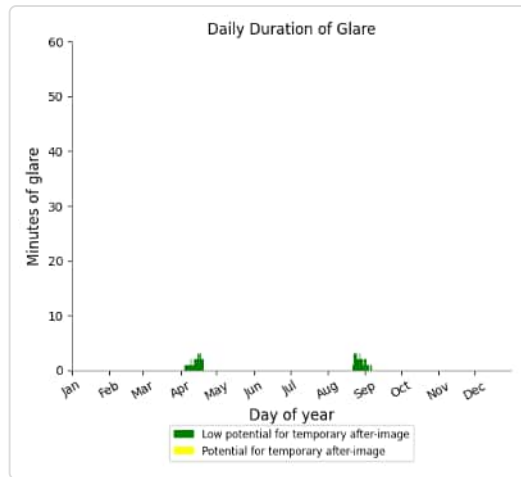
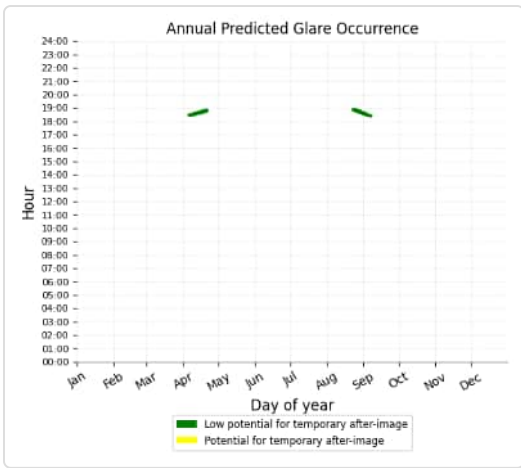
- 1,246 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 20)

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

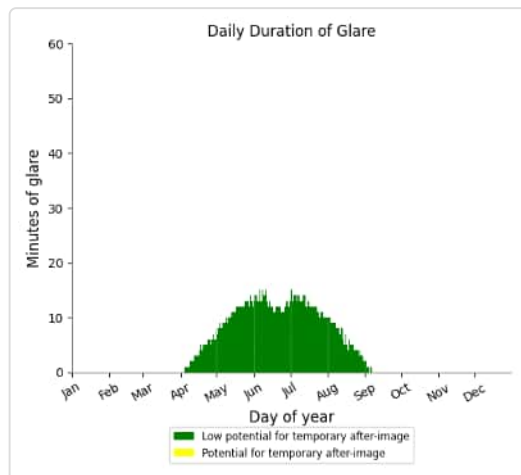
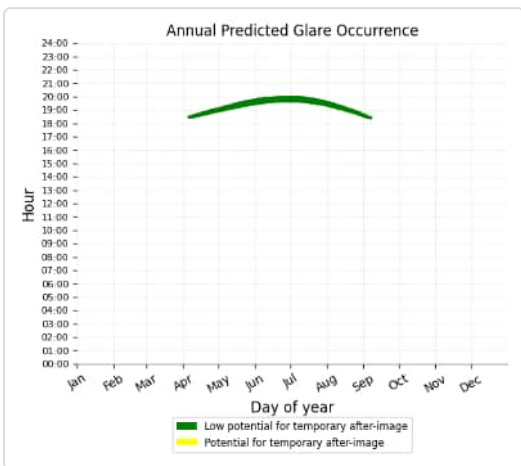
- 56 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

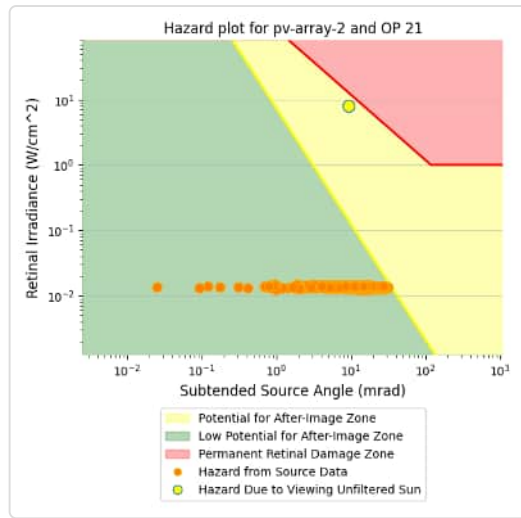
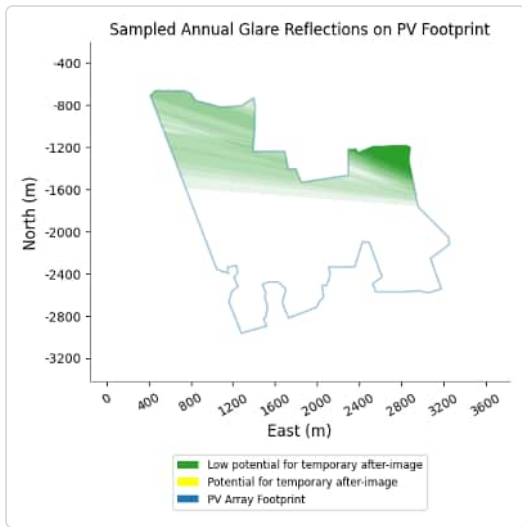


PV array 2 - OP Receptor (OP 21)

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

- 1,393 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

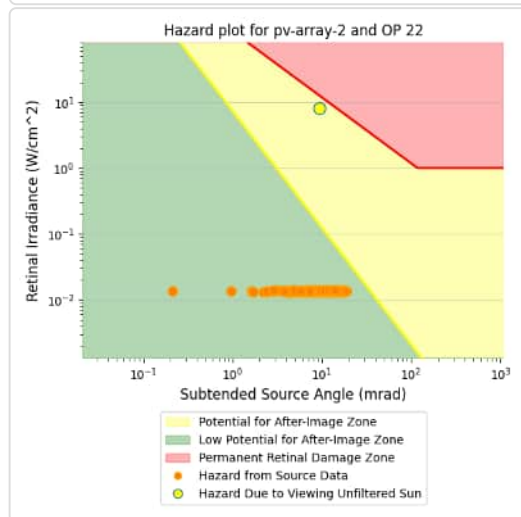
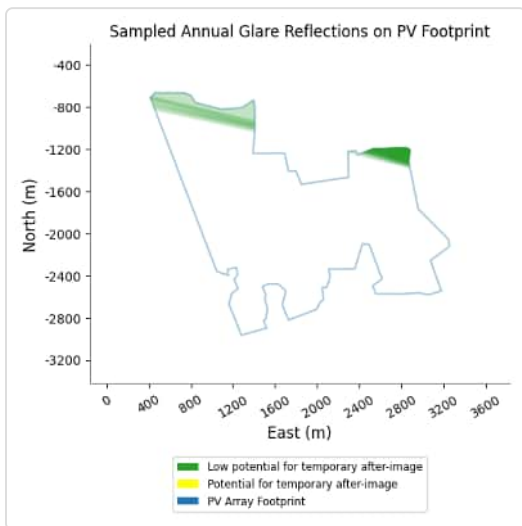
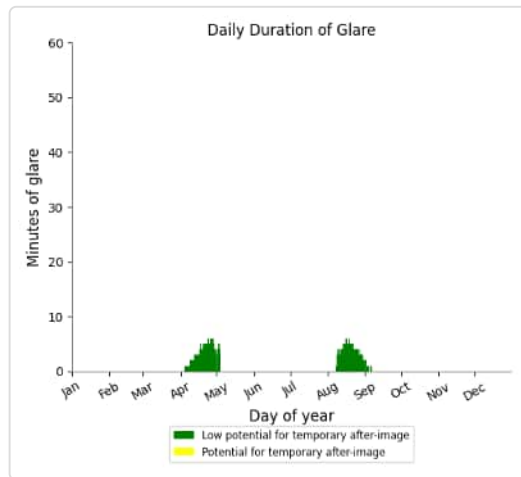
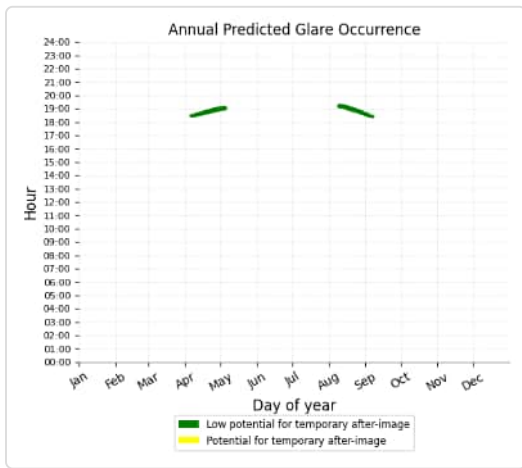




PV array 2 - OP Receptor (OP 22)

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

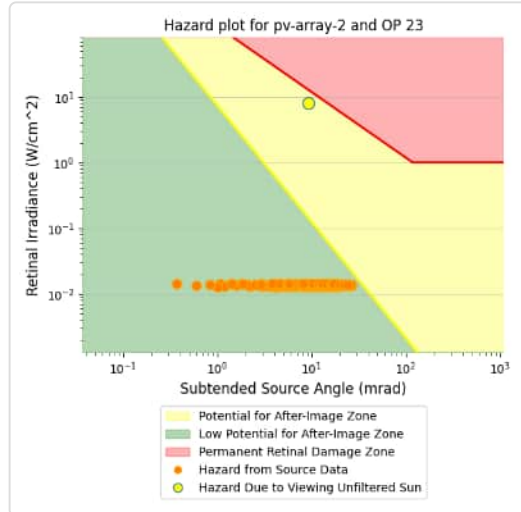
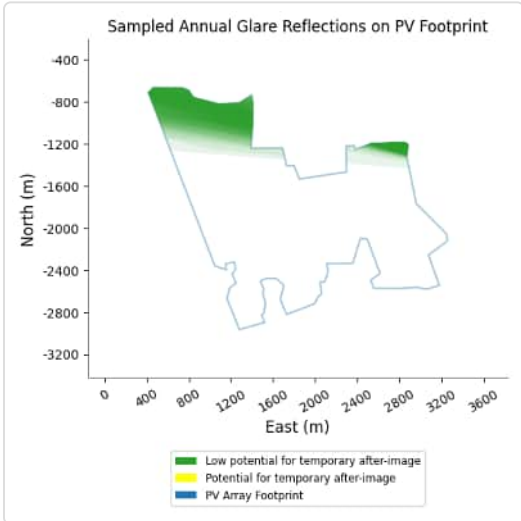
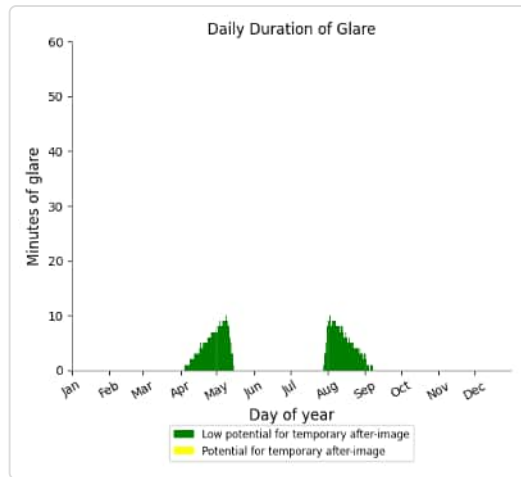
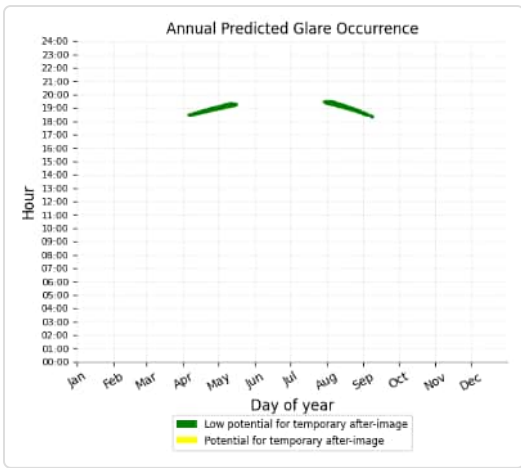
- 216 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 23)

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

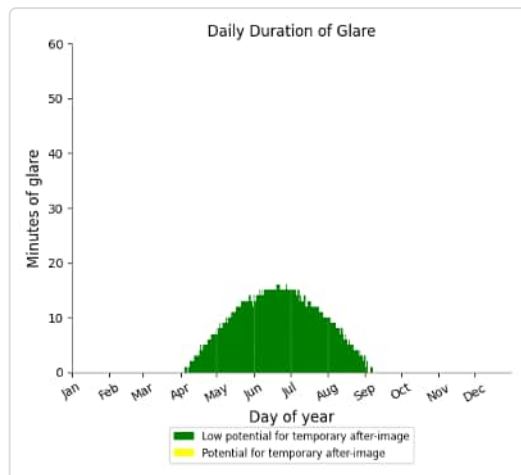
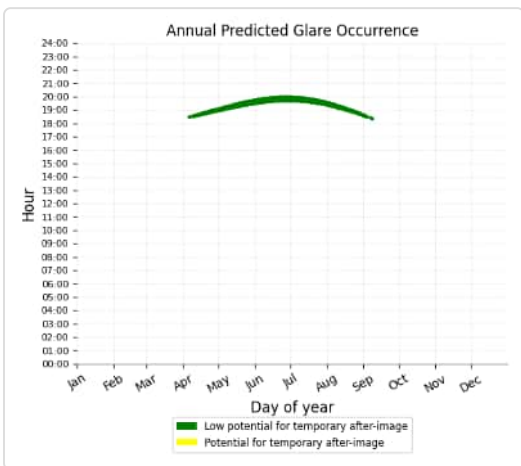
- 422 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

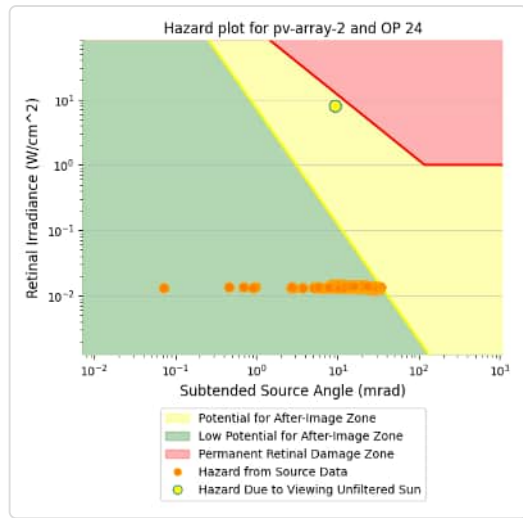
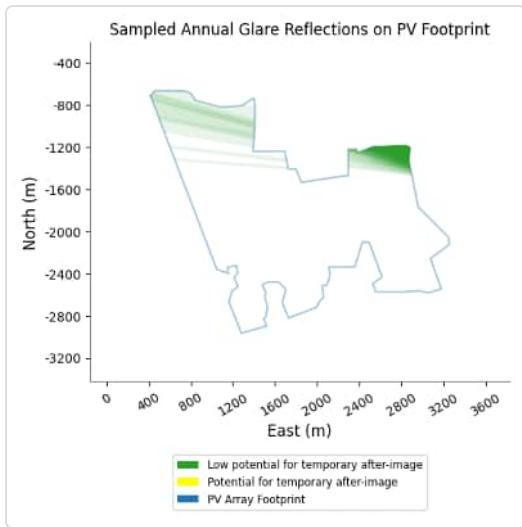


PV array 2 - OP Receptor (OP 24)

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

- 1,486 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

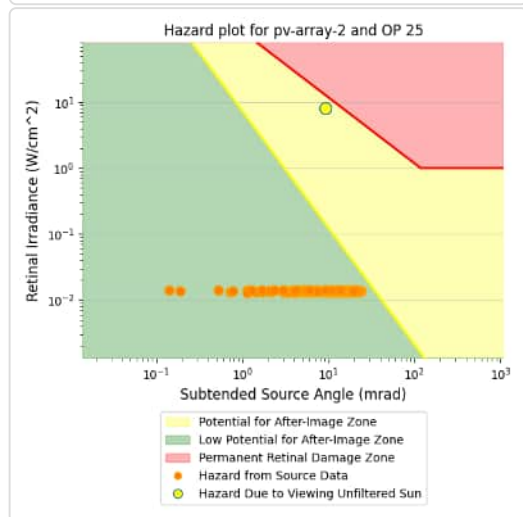
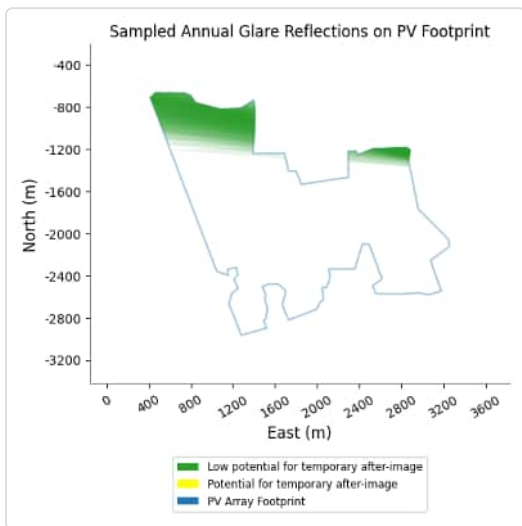
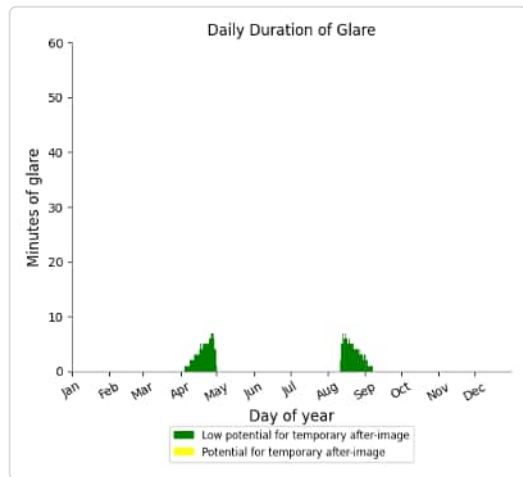
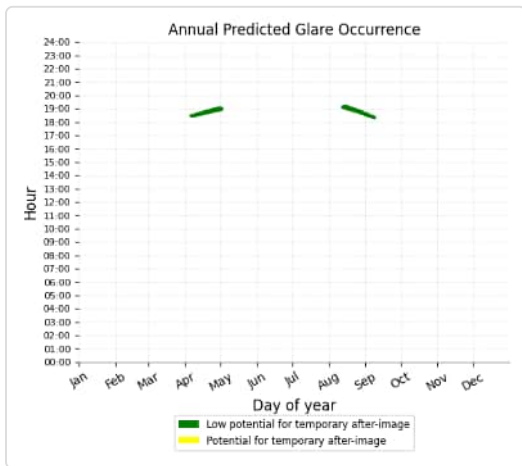




PV array 2 - OP Receptor (OP 25)

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

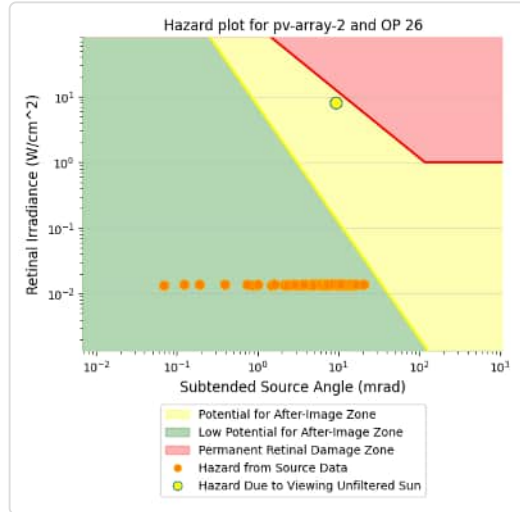
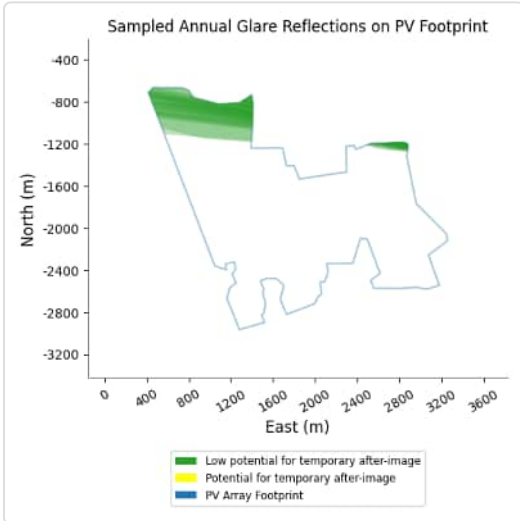
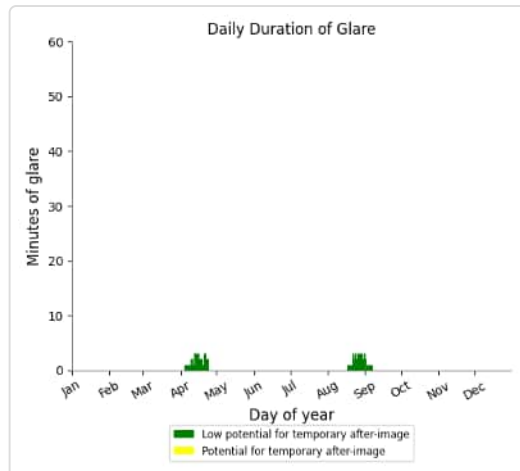
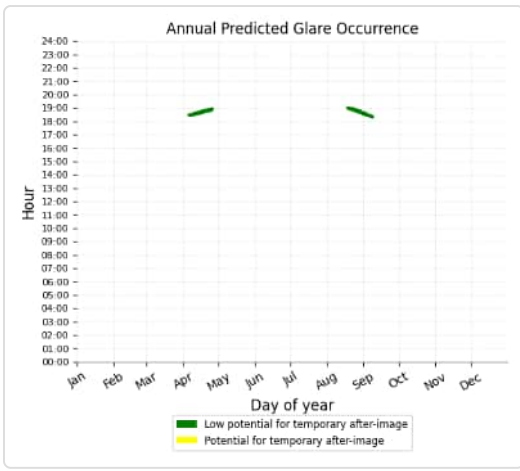
- 200 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 26)

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

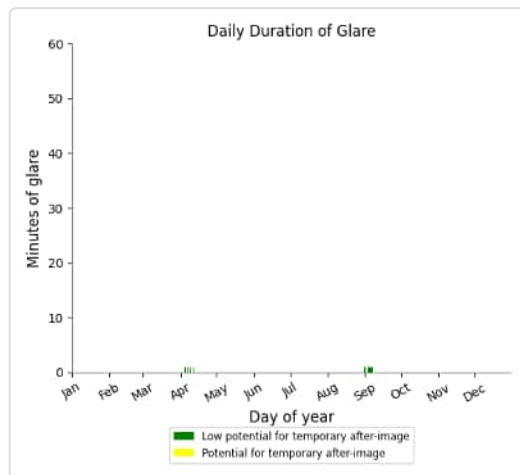
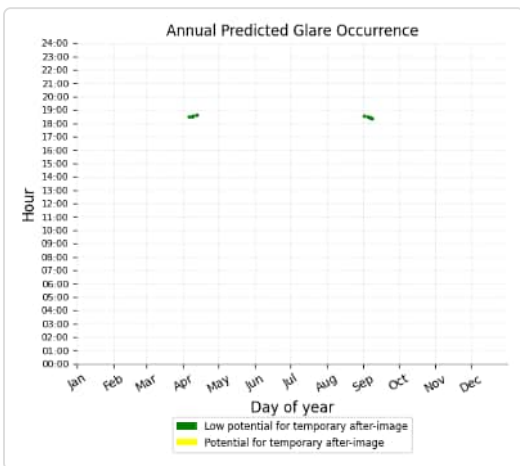
- 80 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

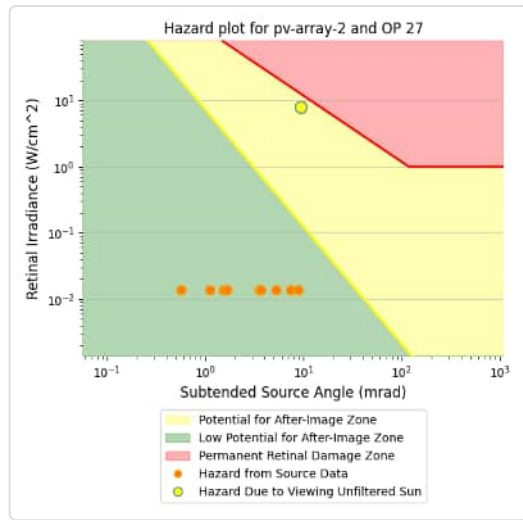
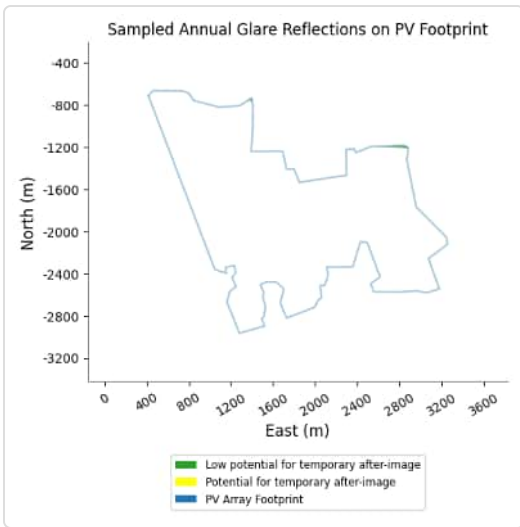


PV array 2 - OP Receptor (OP 27)

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

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

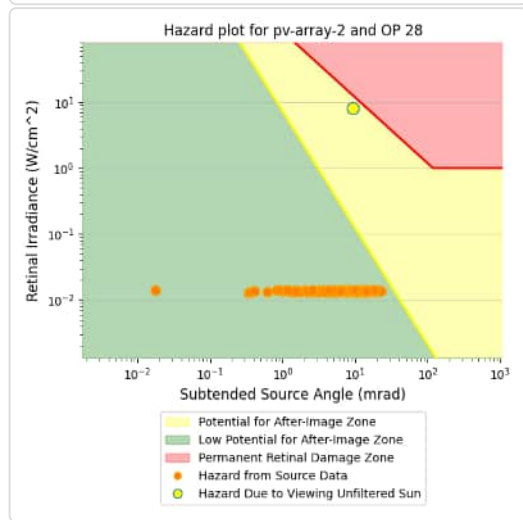
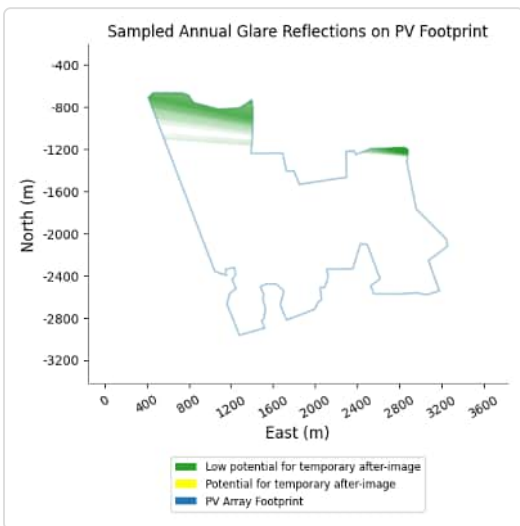
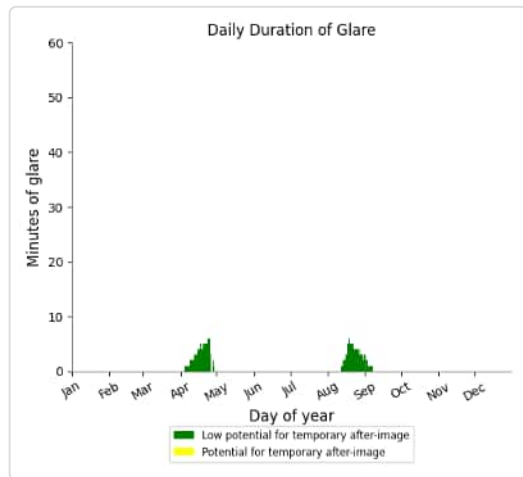
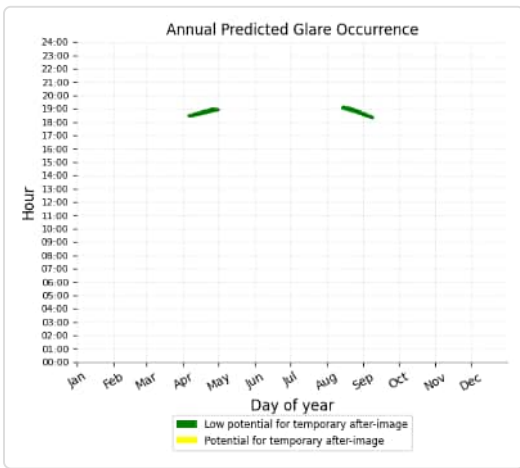




PV array 2 - OP Receptor (OP 28)

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

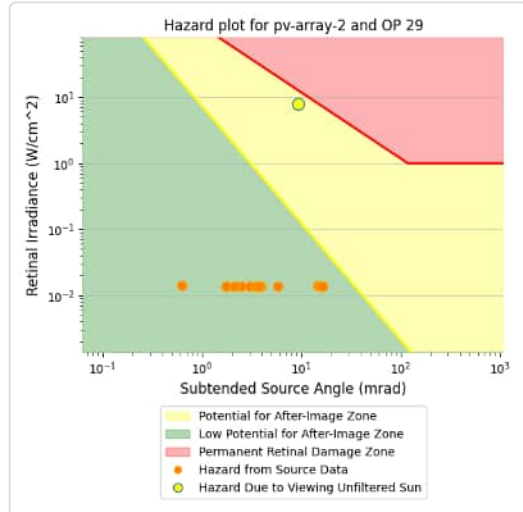
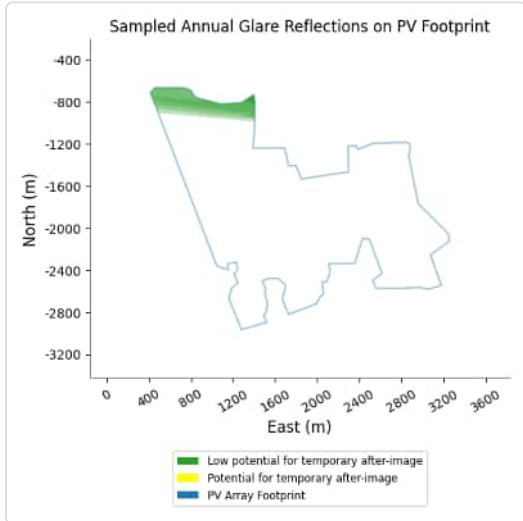
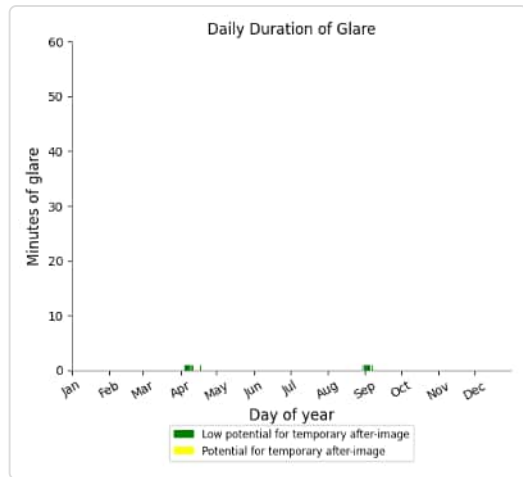
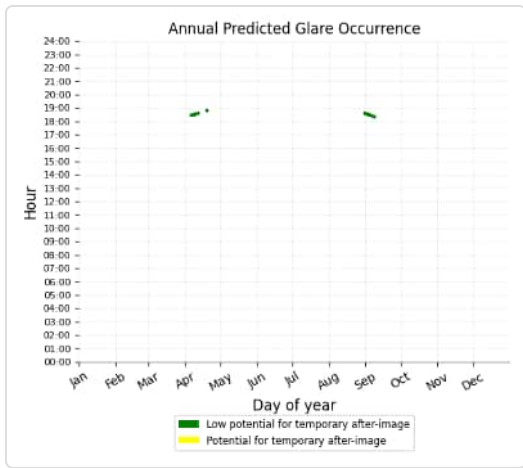
- 155 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 29)

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

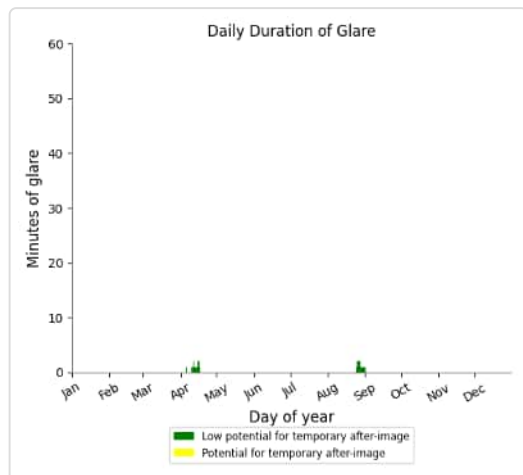
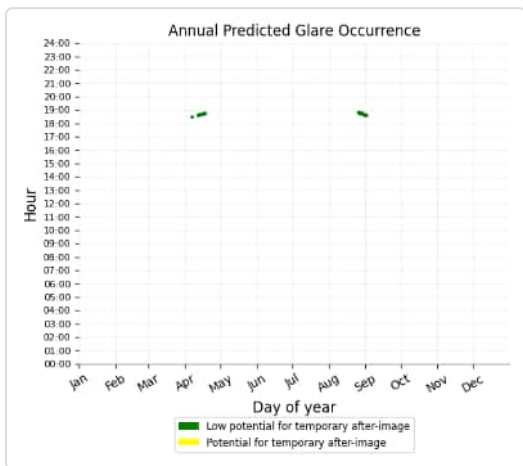
- 14 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

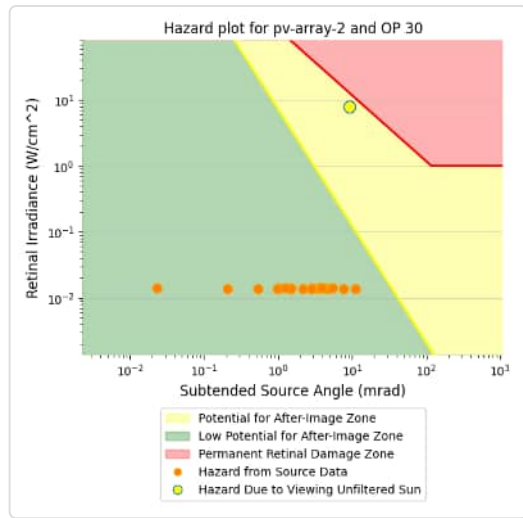
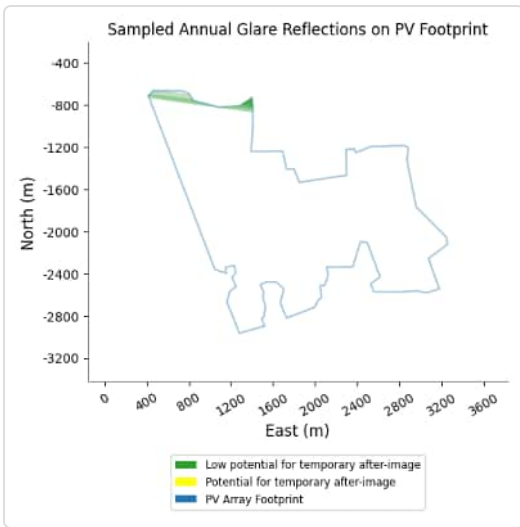


PV array 2 - OP Receptor (OP 30)

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

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

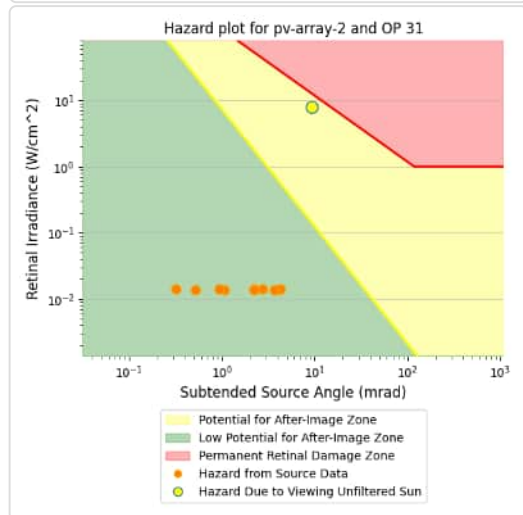
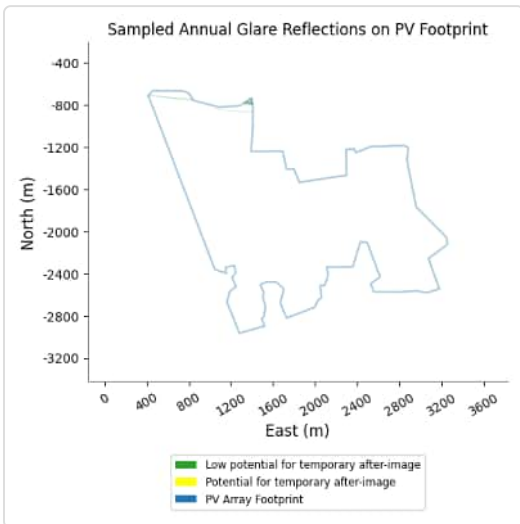
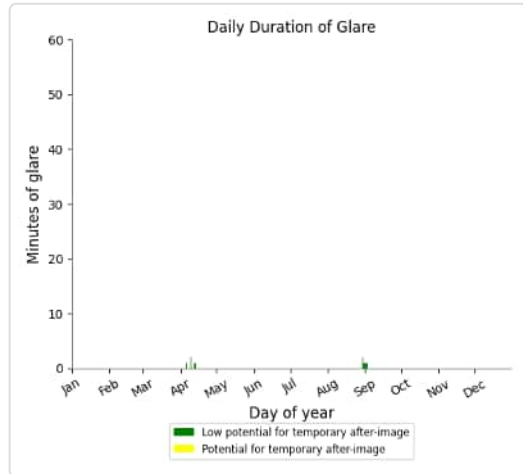
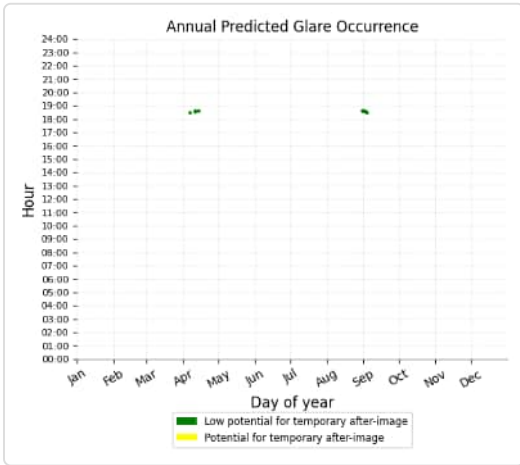




PV array 2 - OP Receptor (OP 31)

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

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



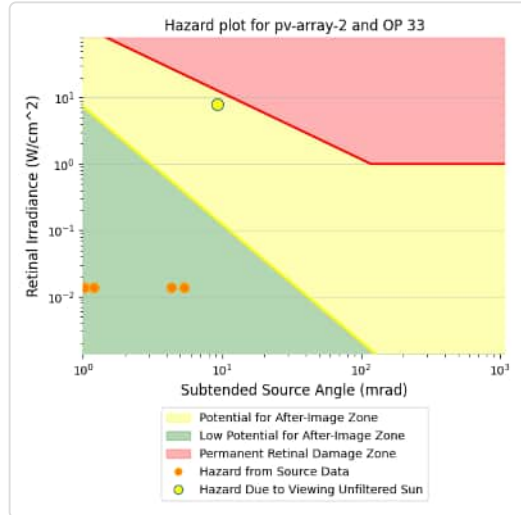
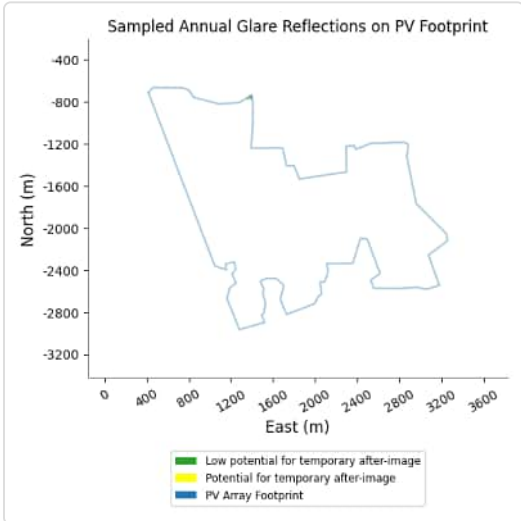
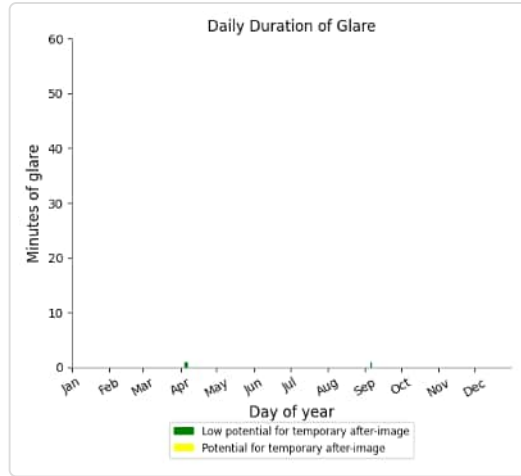
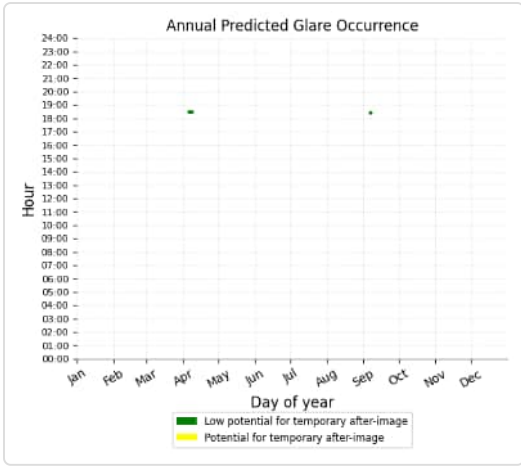
PV array 2 - OP Receptor (OP 32)

No glare found

PV array 2 - OP Receptor (OP 33)

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

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



PV array 2 - OP Receptor (OP 34)

No glare found

PV array 2 - OP Receptor (OP 35)

No glare found

PV array 2 - OP Receptor (OP 36)

No glare found

PV array 2 - OP Receptor (OP 37)

No glare found

PV array 2 - OP Receptor (OP 38)

No glare found

PV array 2 - OP Receptor (OP 39)

No glare found

PV array 2 - OP Receptor (OP 40)

No glare found

PV array 2 - OP Receptor (OP 41)

No glare found

PV array 2 - OP Receptor (OP 42)

No glare found

PV array 2 - OP Receptor (OP 43)

No glare found

PV array 2 - OP Receptor (OP 44)

No glare found

PV array 2 - OP Receptor (OP 45)

No glare found

PV array 2 - OP Receptor (OP 46)

No glare found

PV array 2 - OP Receptor (OP 47)

No glare found

PV array 2 - OP Receptor (OP 48)

No glare found

PV array 2 - OP Receptor (OP 49)

No glare found

PV array 2 - OP Receptor (OP 50)

No glare found

PV array 2 - OP Receptor (OP 51)

No glare found

PV array 2 - OP Receptor (OP 52)

No glare found

PV array 2 - OP Receptor (OP 53)

No glare found

PV array 3 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	1412	0
OP: OP 17	1629	0
OP: OP 18	1586	0
OP: OP 19	1643	0
OP: OP 20	993	0
OP: OP 21	1626	0
OP: OP 22	1742	0

OP: OP 23	1744	0
OP: OP 24	1674	0
OP: OP 25	1816	0
OP: OP 26	1617	0
OP: OP 27	1485	0
OP: OP 28	1828	0
OP: OP 29	1751	0
OP: OP 30	1247	0
OP: OP 31	1108	0
OP: OP 32	817	0
OP: OP 33	688	0
OP: OP 34	558	0
OP: OP 35	967	0
OP: OP 36	653	0
OP: OP 37	683	0
OP: OP 38	528	0
OP: OP 39	514	0
OP: OP 40	272	0
OP: OP 41	310	0
OP: OP 42	158	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	43	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	3	0
OP: OP 49	3	0
OP: OP 50	2	0
OP: OP 51	52	0
OP: OP 52	4	0
OP: OP 53	0	0

PV array 3 - OP Receptor (OP 1)

No glare found

PV array 3 - OP Receptor (OP 2)

No glare found

PV array 3 - OP Receptor (OP 3)

No glare found

PV array 3 - OP Receptor (OP 4)

No glare found

PV array 3 - OP Receptor (OP 5)

No glare found

PV array 3 - OP Receptor (OP 6)

No glare found

PV array 3 - OP Receptor (OP 7)

No glare found

PV array 3 - OP Receptor (OP 8)

No glare found

PV array 3 - OP Receptor (OP 9)

No glare found

PV array 3 - OP Receptor (OP 10)

No glare found

PV array 3 - OP Receptor (OP 11)

No glare found

PV array 3 - OP Receptor (OP 12)

No glare found

PV array 3 - OP Receptor (OP 13)

No glare found

PV array 3 - OP Receptor (OP 14)

No glare found

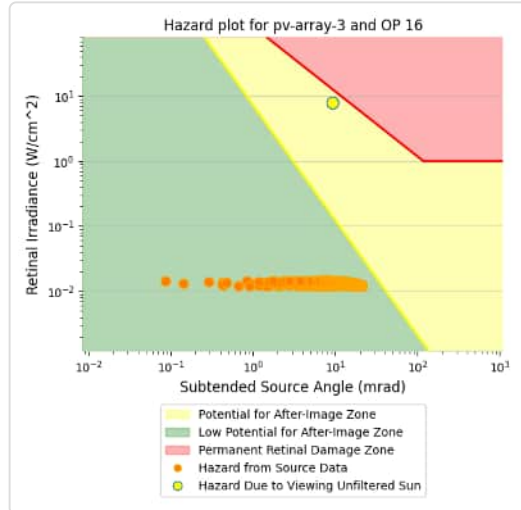
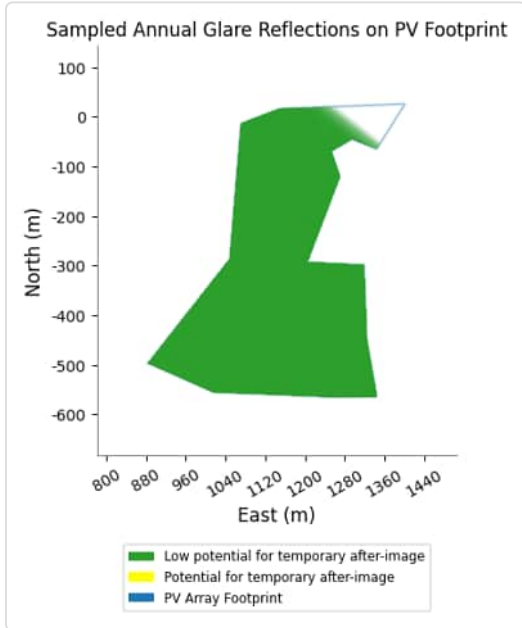
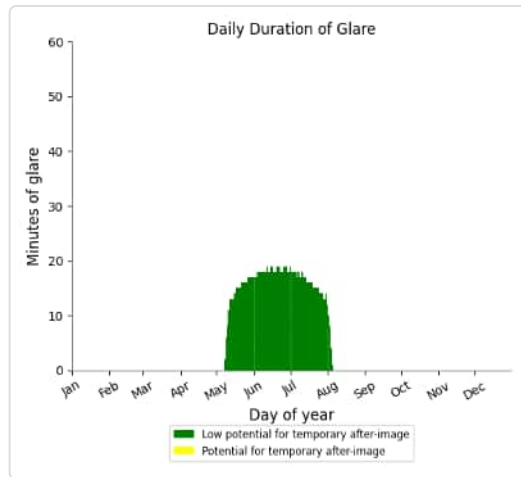
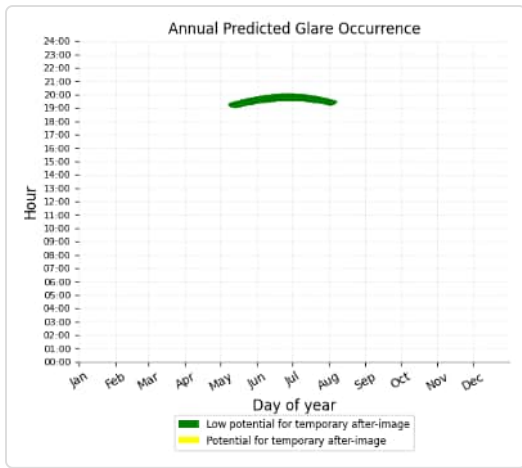
PV array 3 - OP Receptor (OP 15)

No glare found

PV array 3 - OP Receptor (OP 16)

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

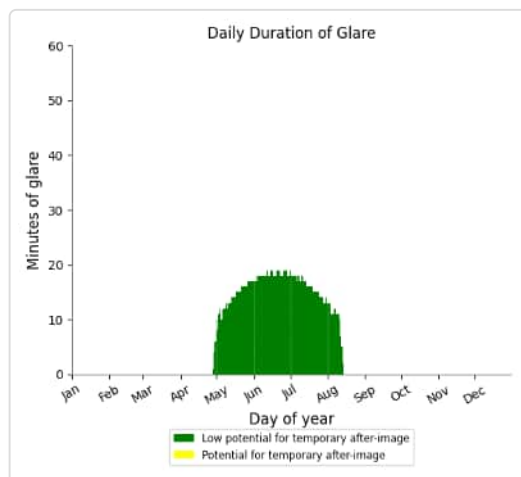
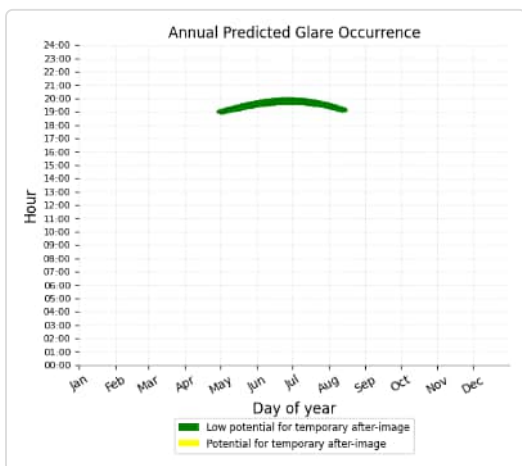
- 1,412 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

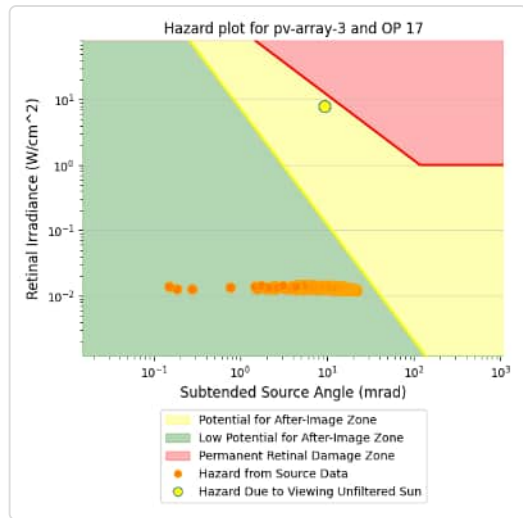
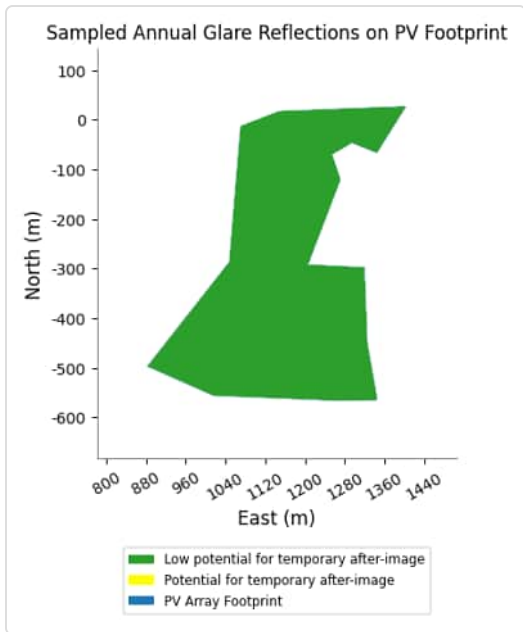


PV array 3 - OP Receptor (OP 17)

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

- 1,629 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

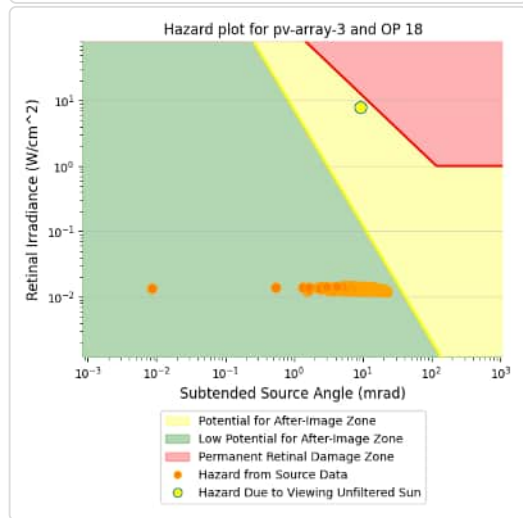
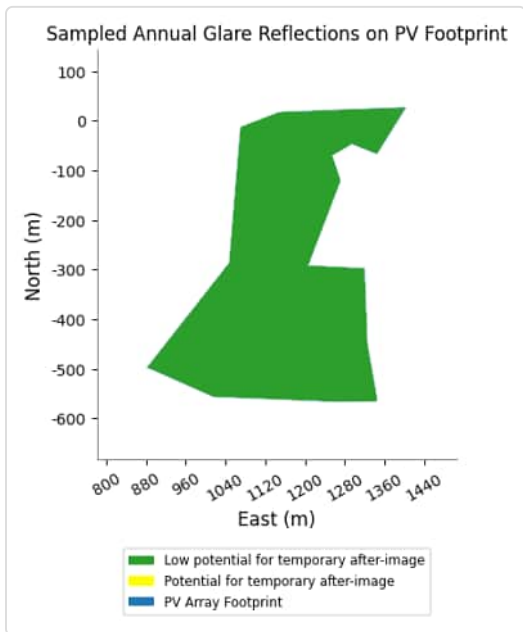
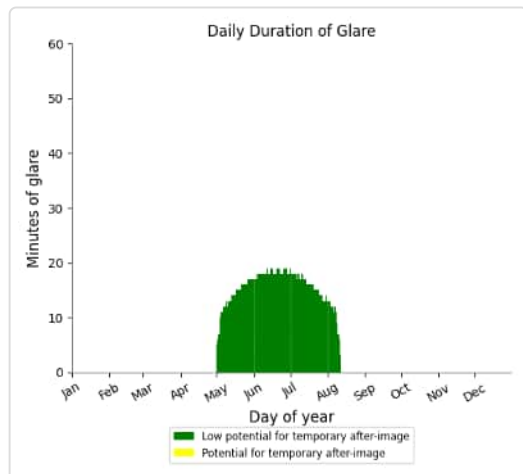
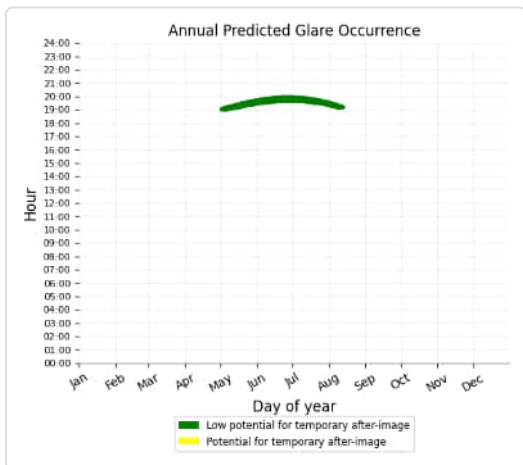




PV array 3 - OP Receptor (OP 18)

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

- 1,586 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

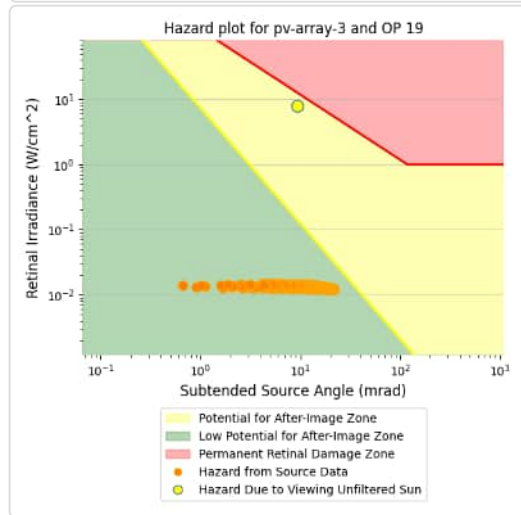
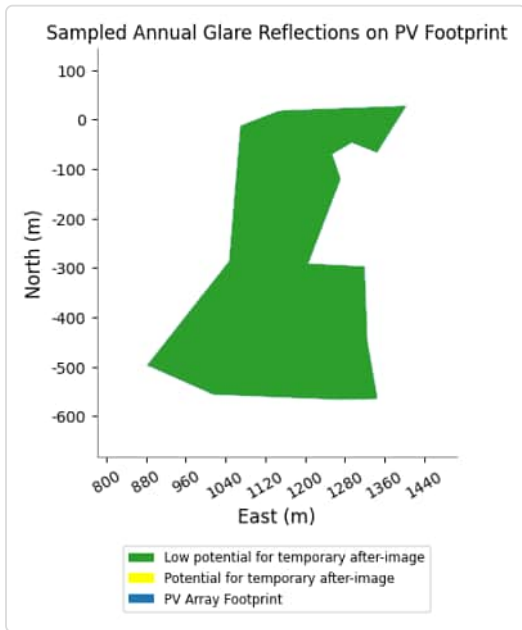
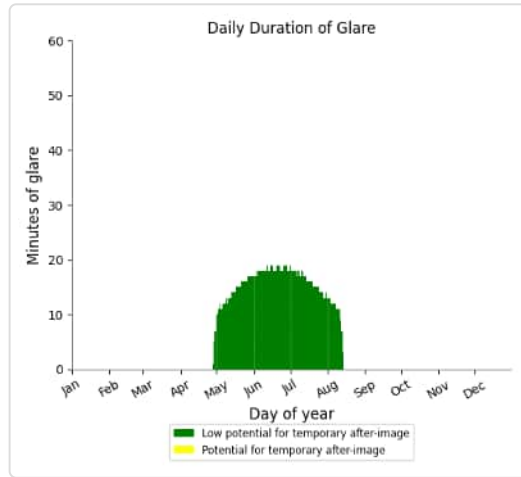
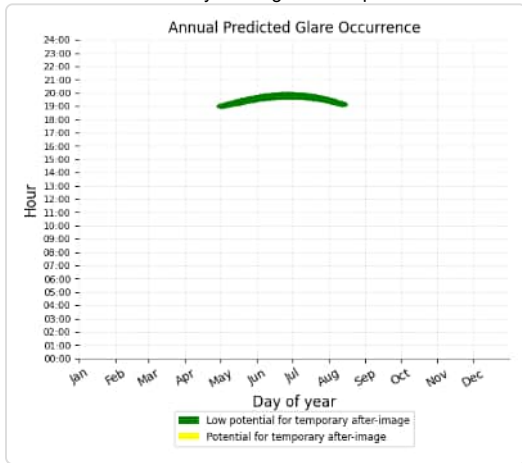


PV array 3 - OP Receptor (OP 19)

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

- 1,643 minutes of "green" glare with low potential to cause temporary after-image.

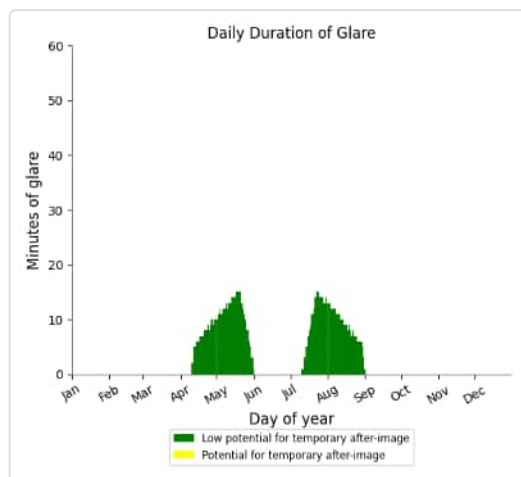
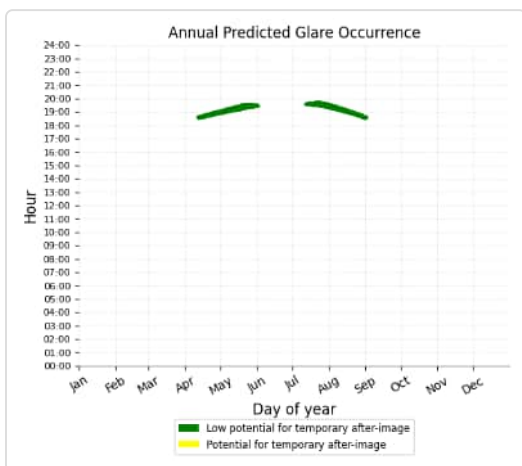
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

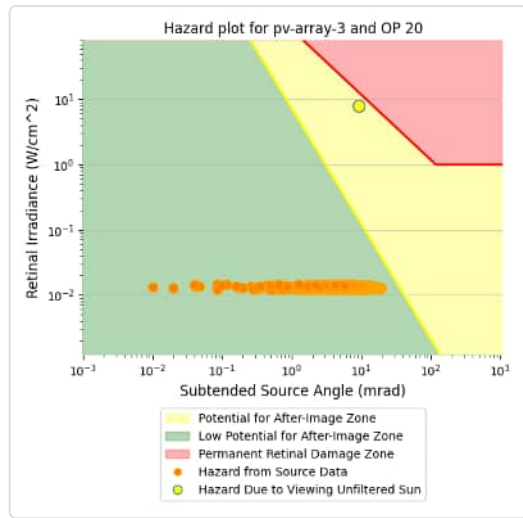
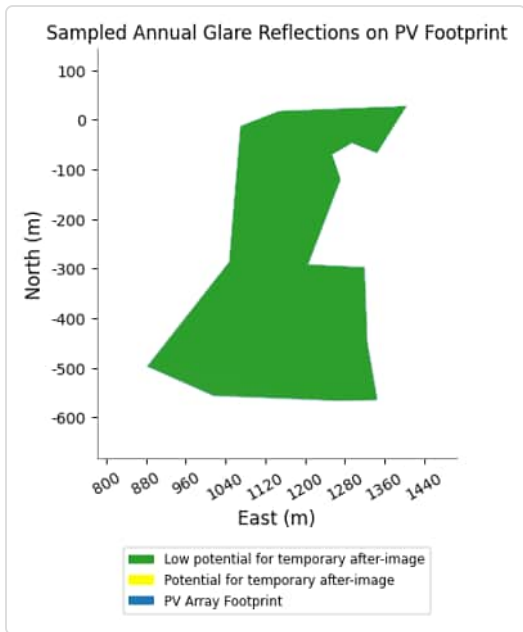


PV array 3 - OP Receptor (OP 20)

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

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

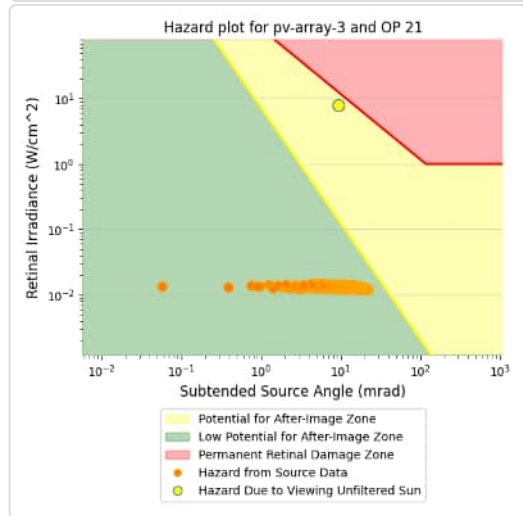
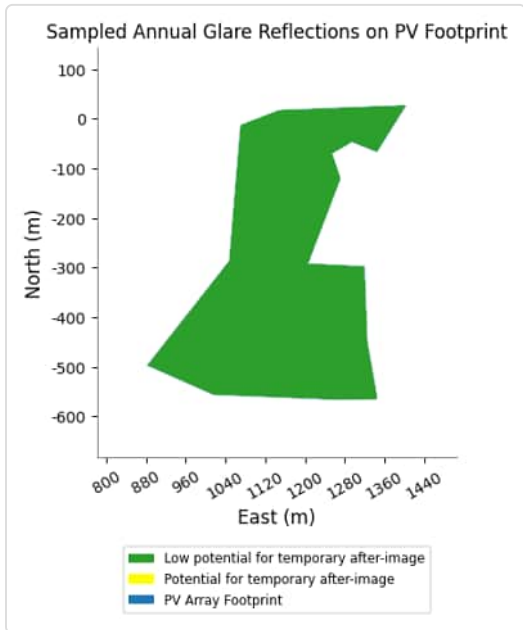
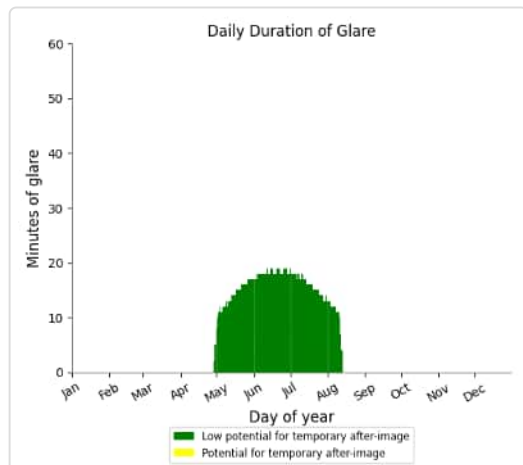
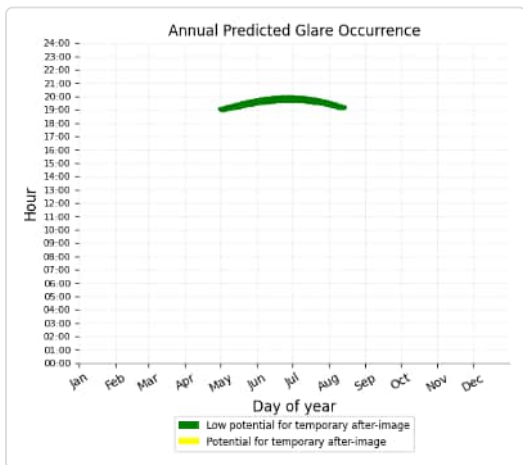




PV array 3 - OP Receptor (OP 21)

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

- 1,626 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

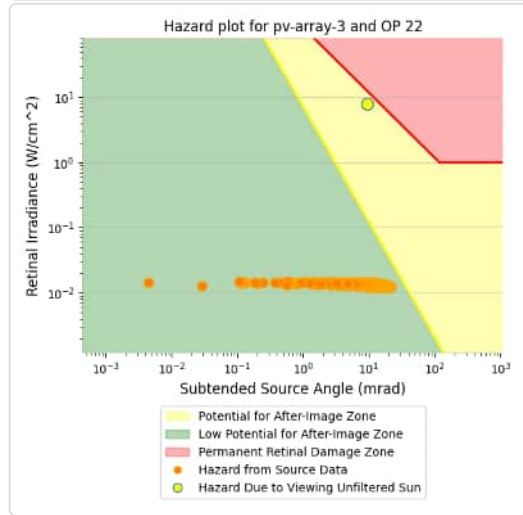
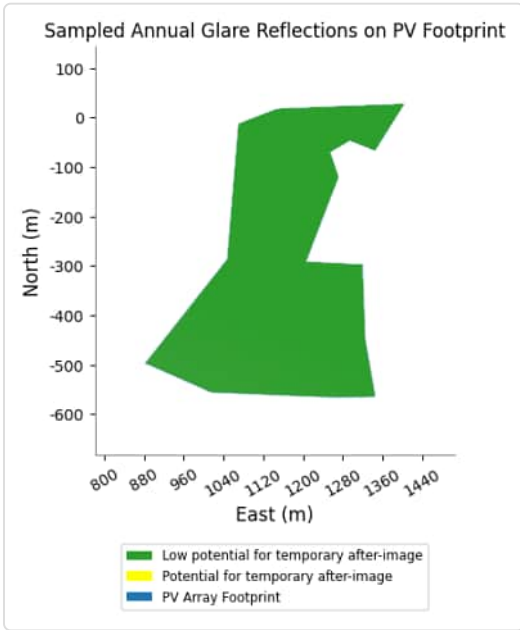
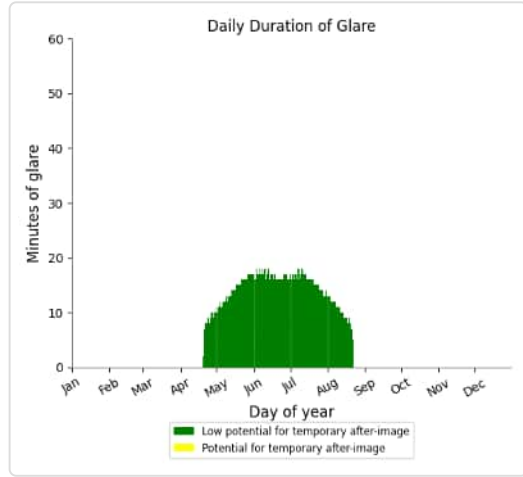
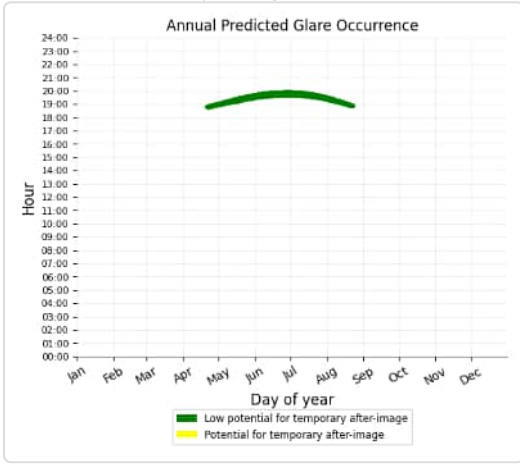


PV array 3 - OP Receptor (OP 22)

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

- 1,742 minutes of "green" glare with low potential to cause temporary after-image.

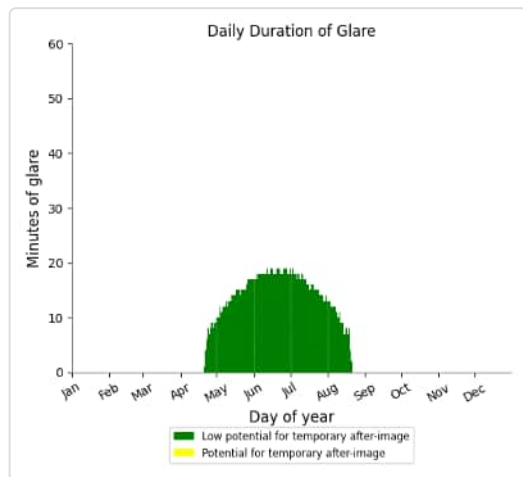
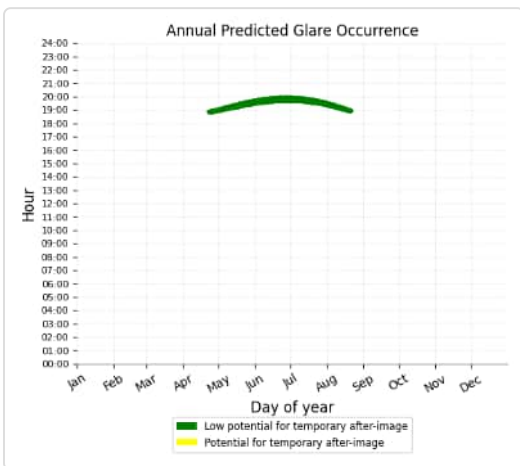
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

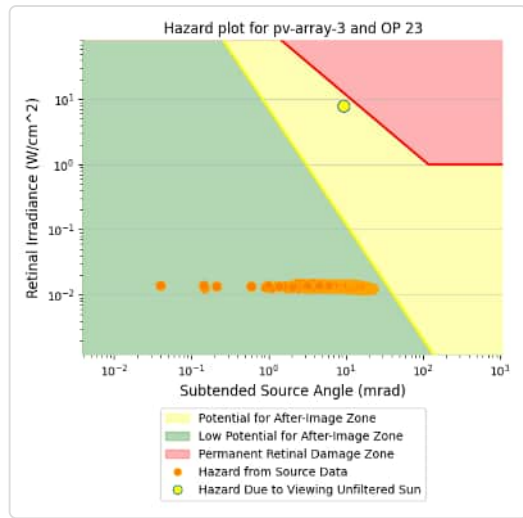
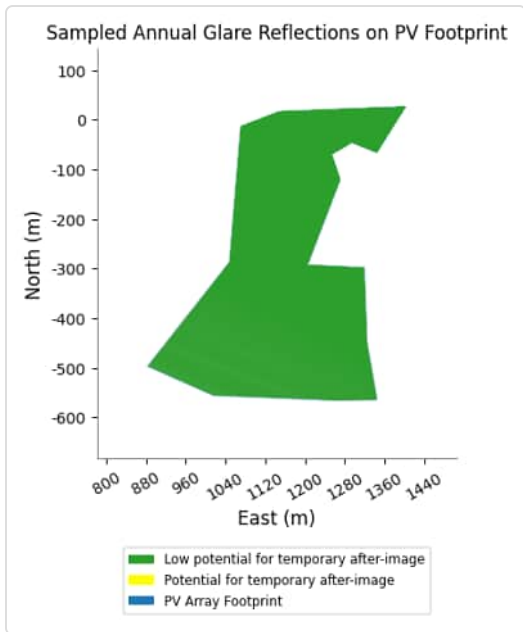


PV array 3 - OP Receptor (OP 23)

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

- 1,744 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

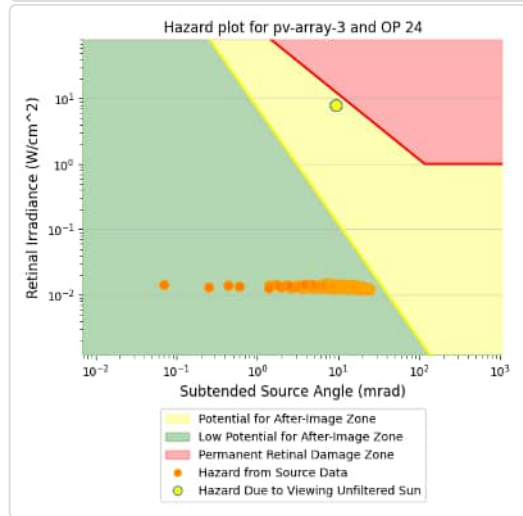
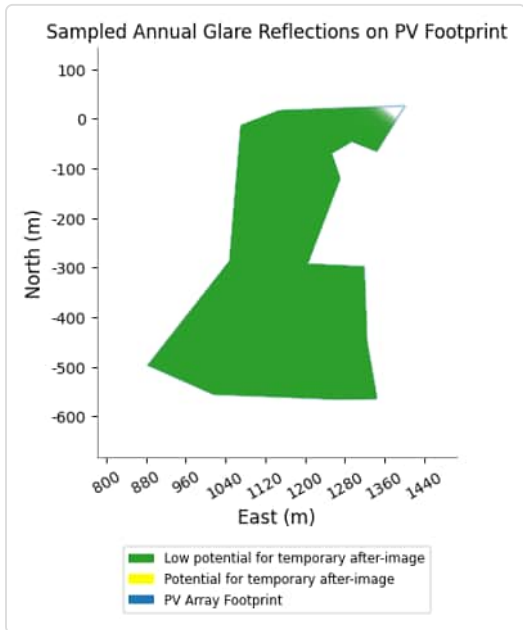
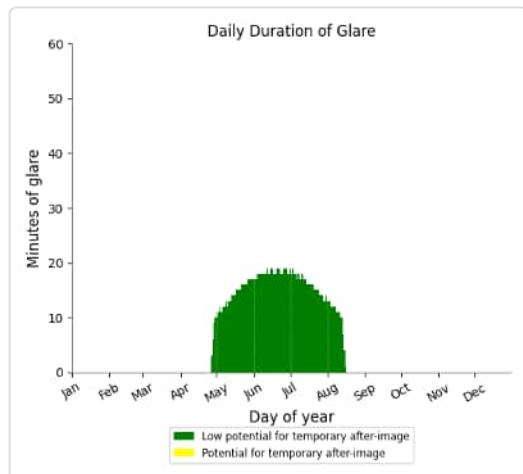
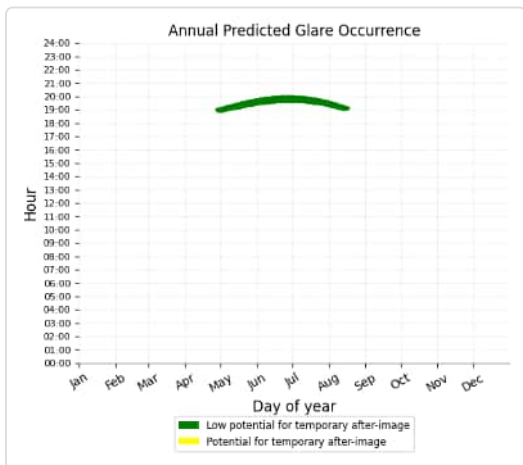




PV array 3 - OP Receptor (OP 24)

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

- 1,674 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

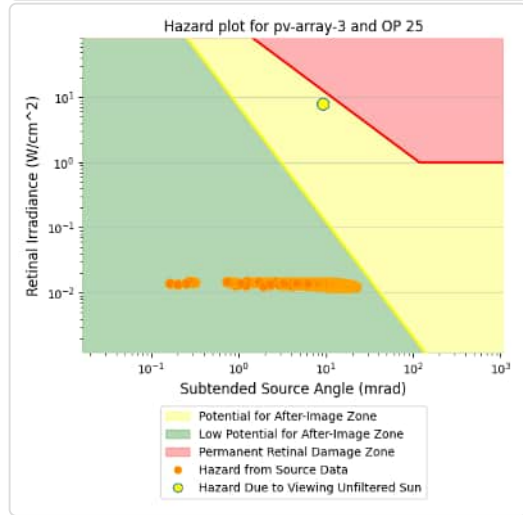
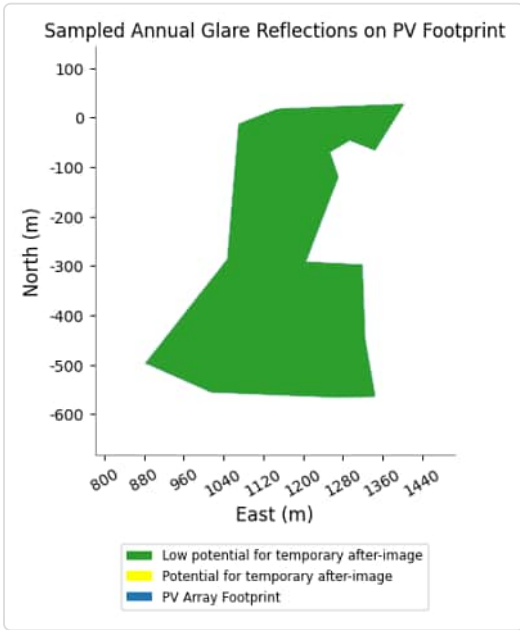
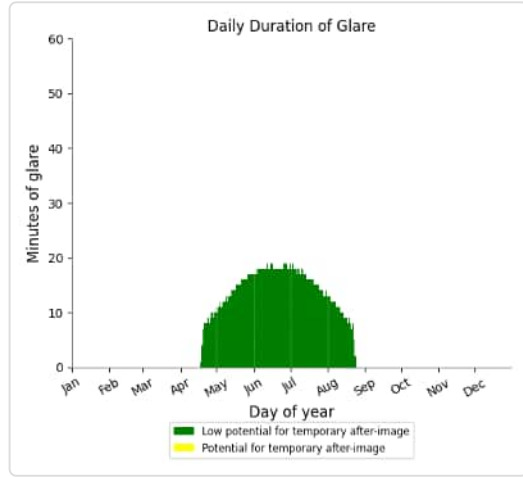
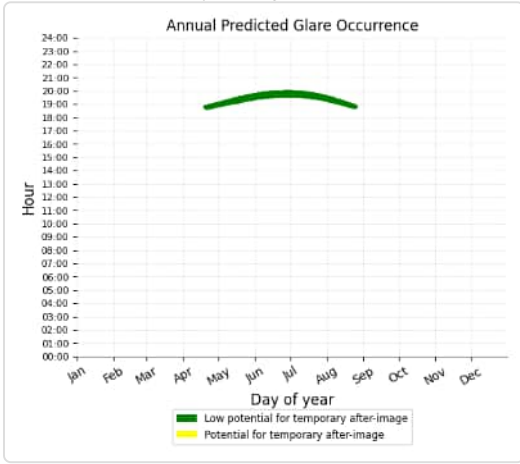


PV array 3 - OP Receptor (OP 25)

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

- 1,816 minutes of "green" glare with low potential to cause temporary after-image.

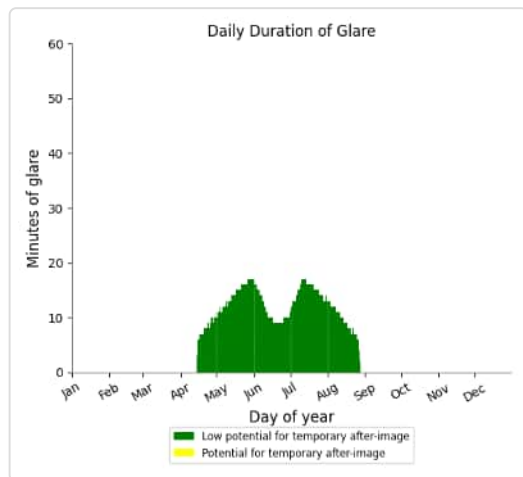
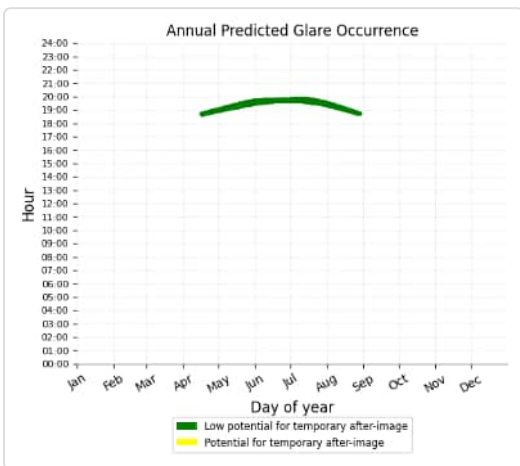
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

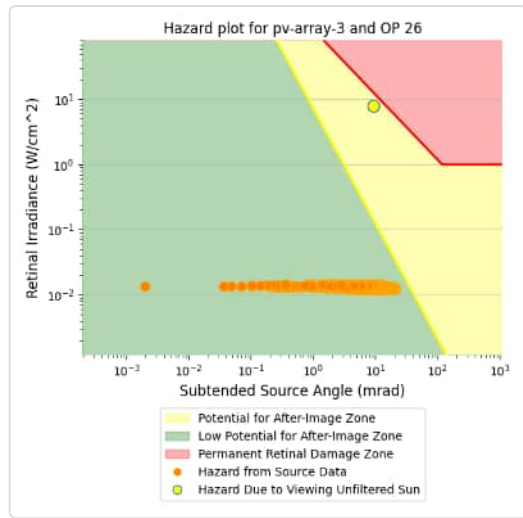
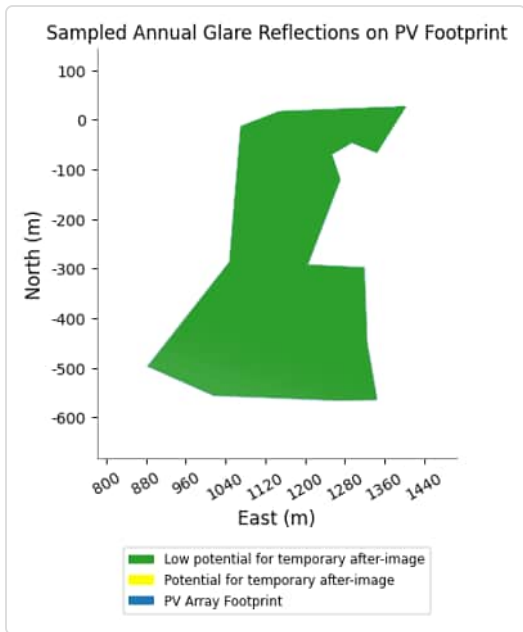


PV array 3 - OP Receptor (OP 26)

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

- 1,617 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

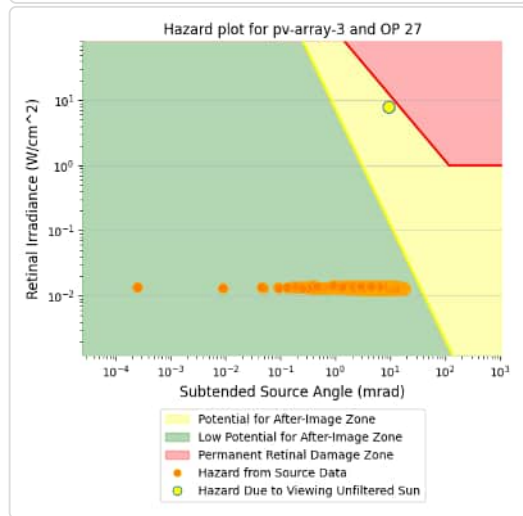
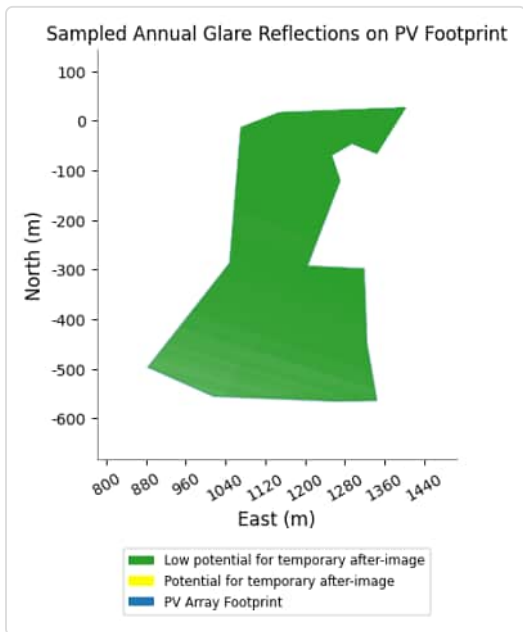
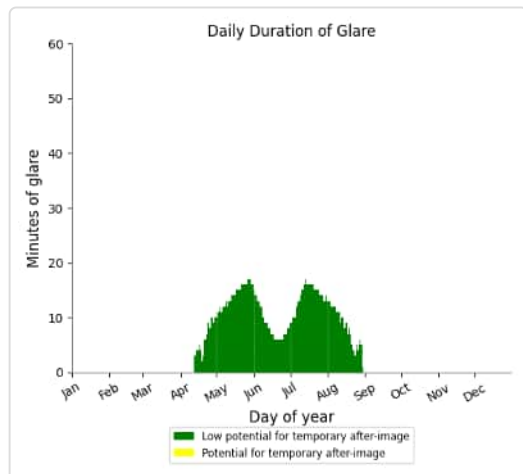
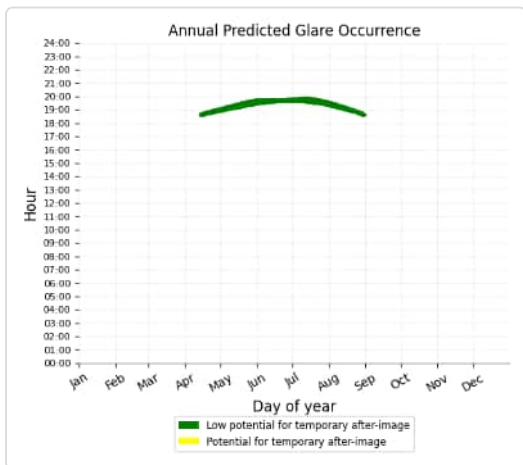




PV array 3 - OP Receptor (OP 27)

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

- 1,485 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

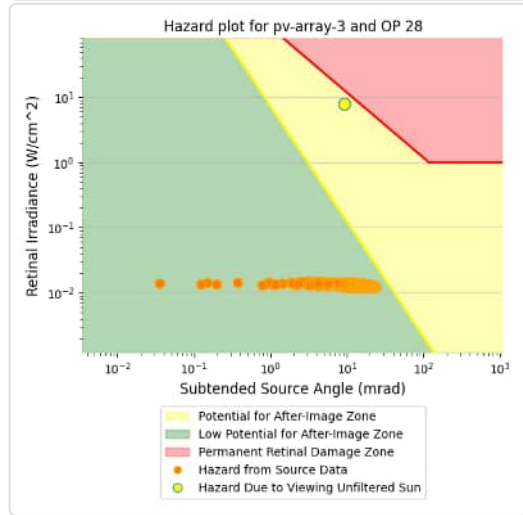
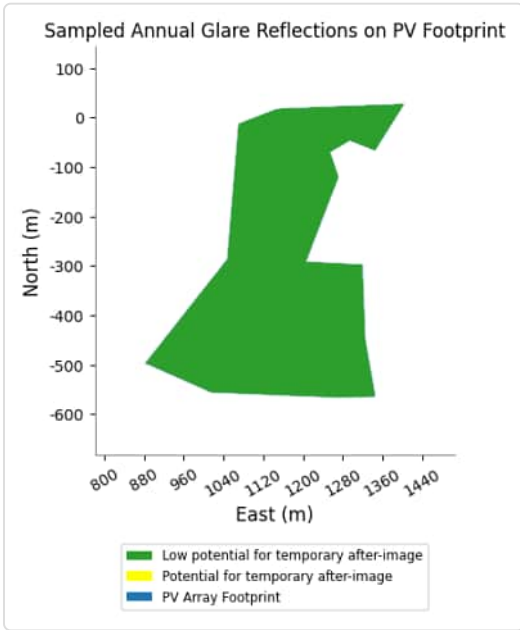
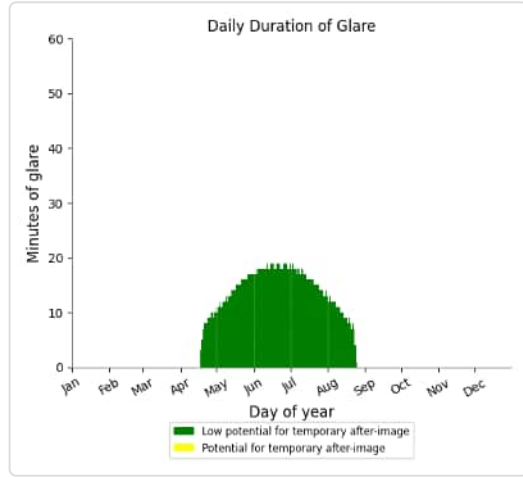
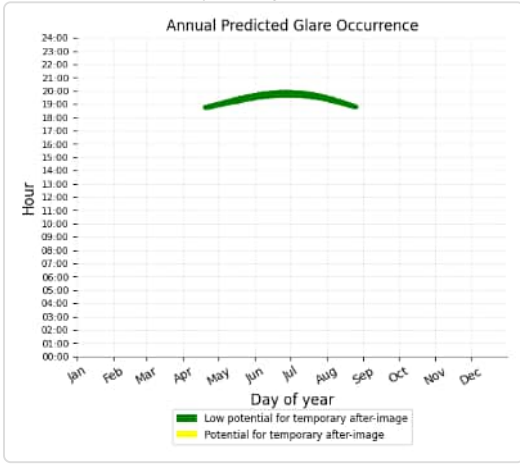


PV array 3 - OP Receptor (OP 28)

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

- 1,828 minutes of "green" glare with low potential to cause temporary after-image.

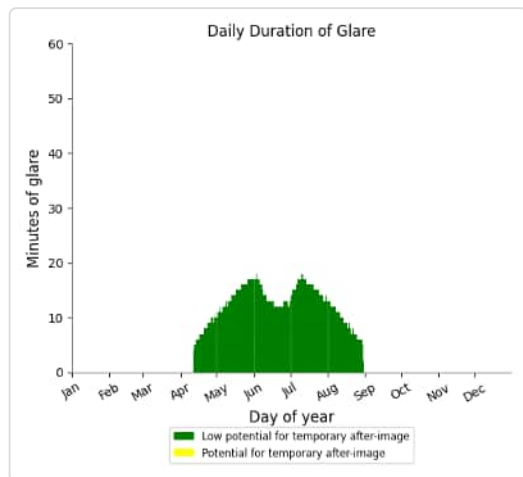
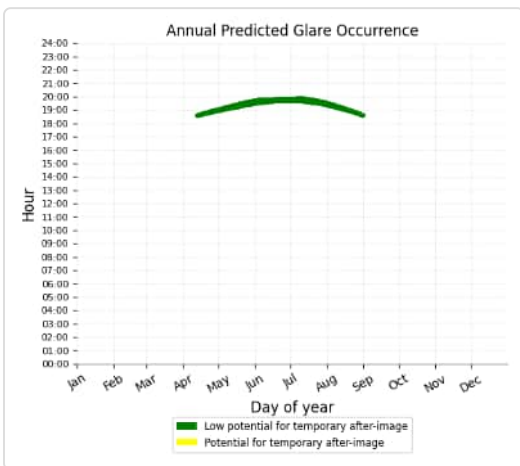
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

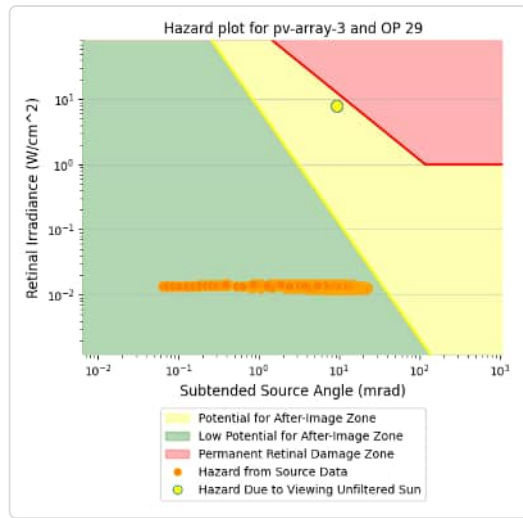
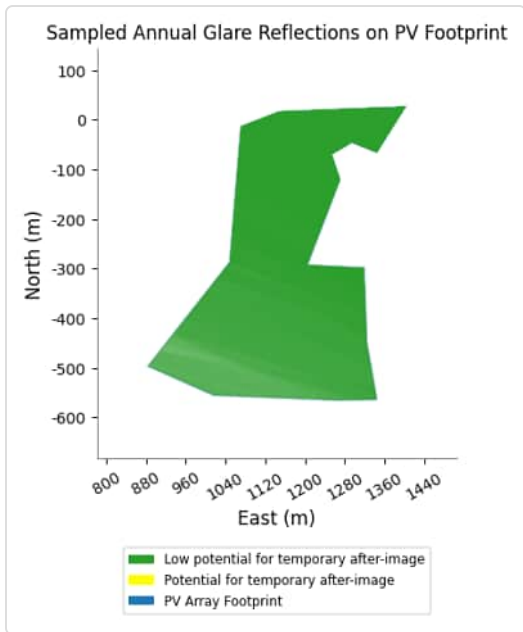


PV array 3 - OP Receptor (OP 29)

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

- 1,751 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

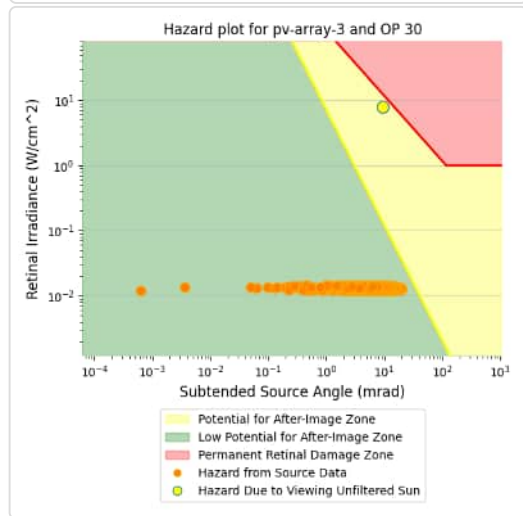
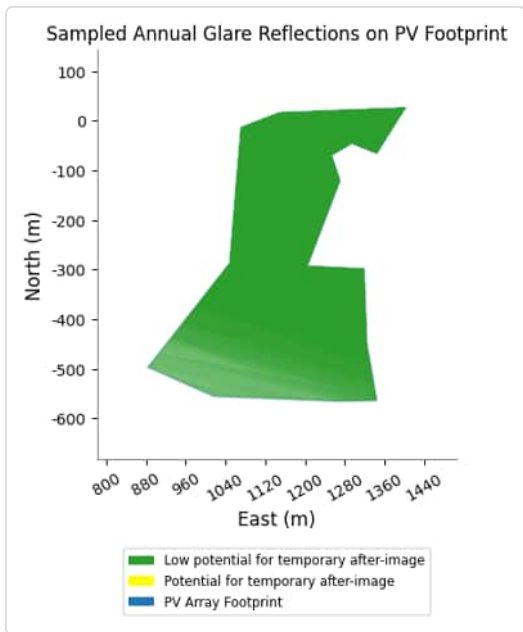
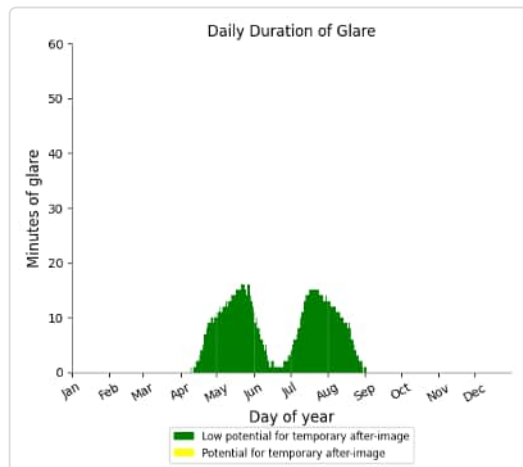
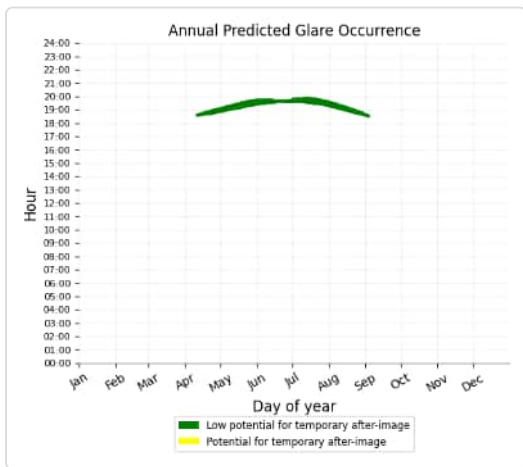




PV array 3 - OP Receptor (OP 30)

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

- 1,247 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

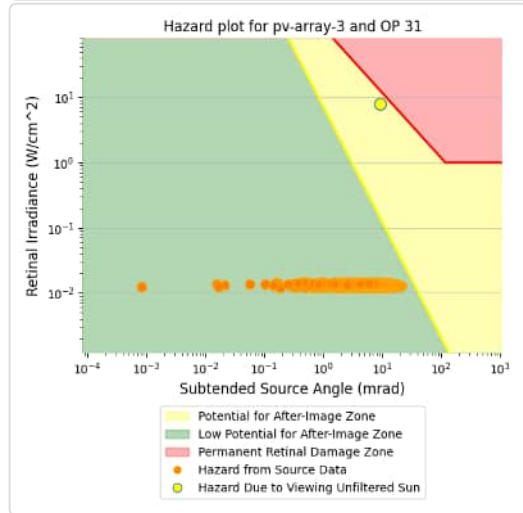
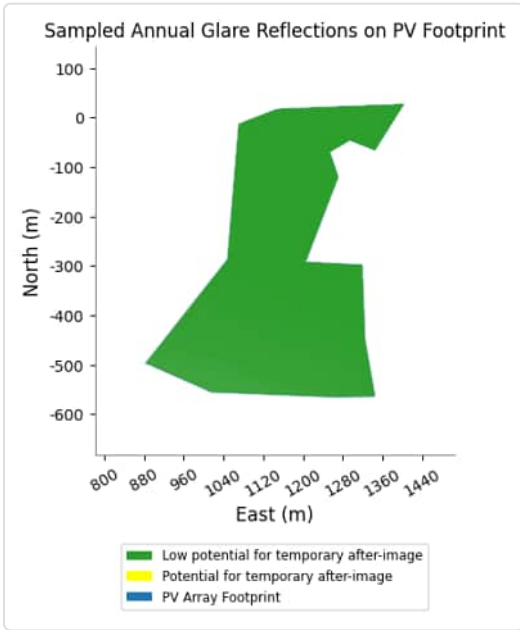
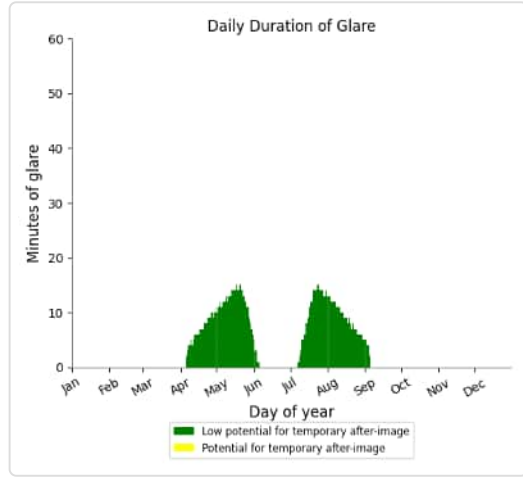
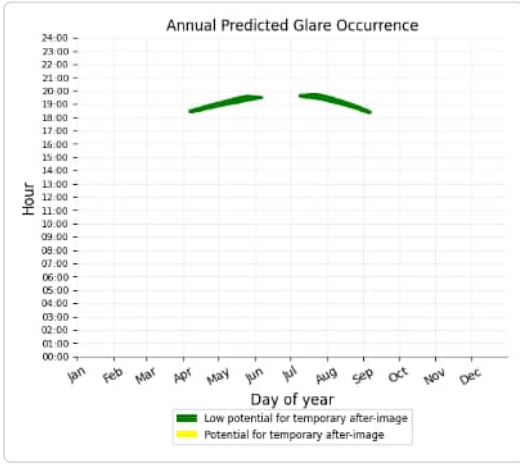


PV array 3 - OP Receptor (OP 31)

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

- 1,108 minutes of "green" glare with low potential to cause temporary after-image.

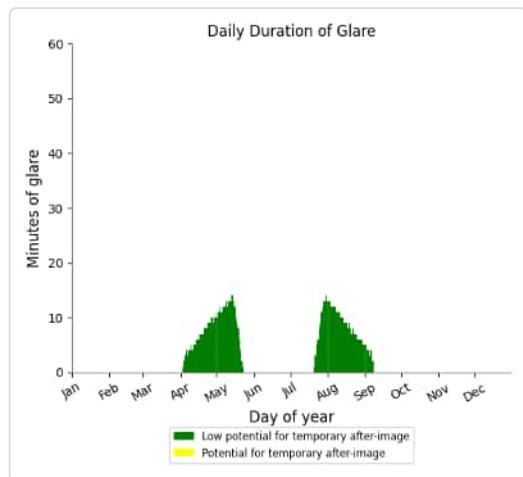
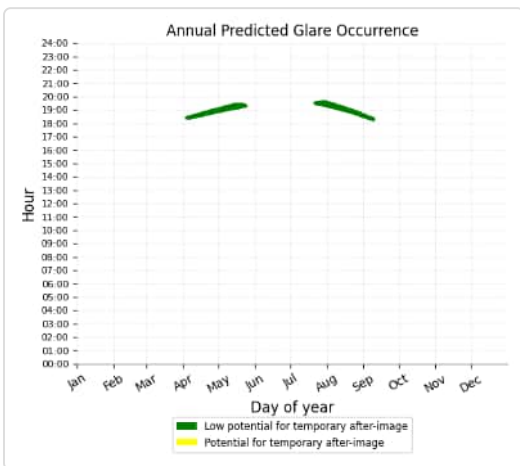
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

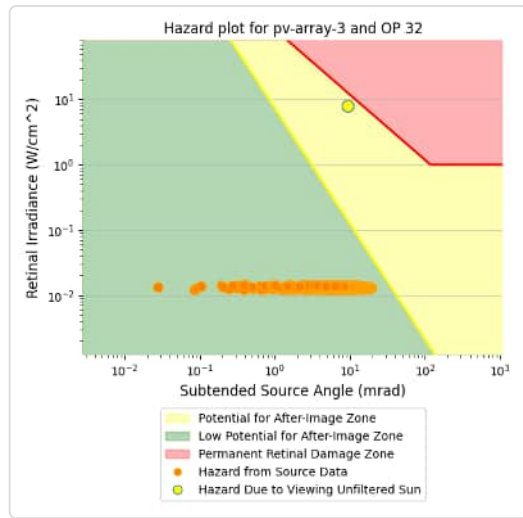
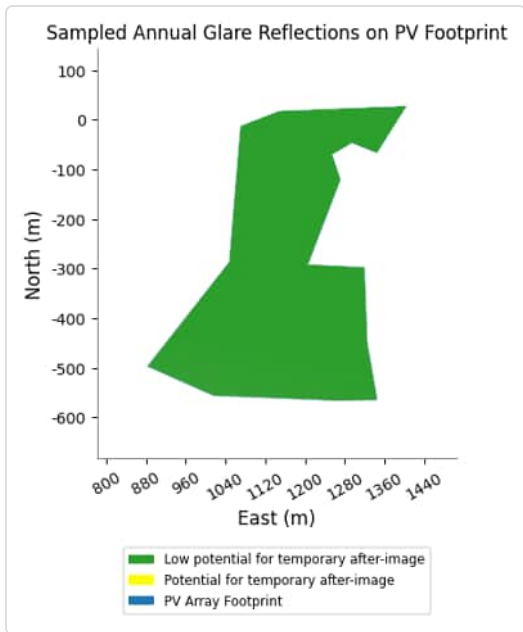


PV array 3 - OP Receptor (OP 32)

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

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

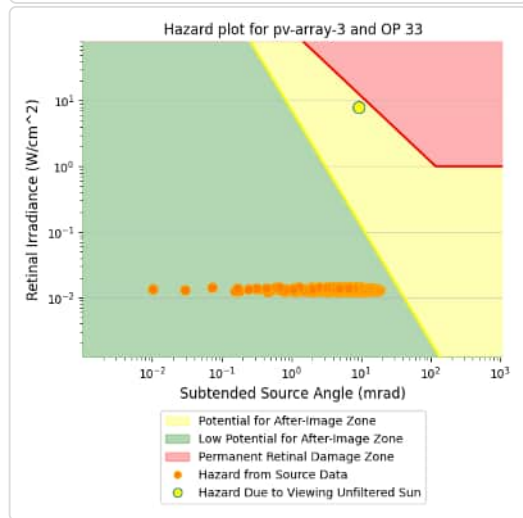
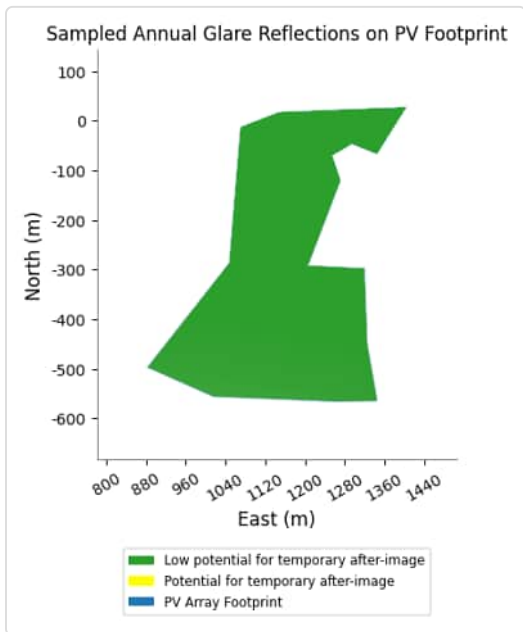
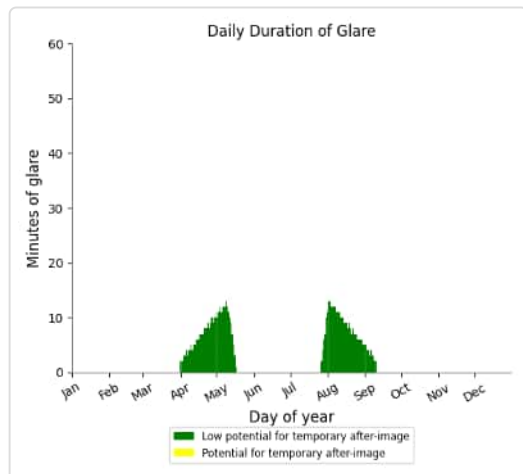
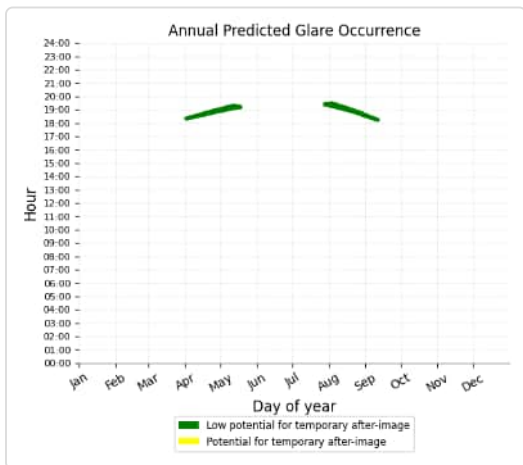




PV array 3 - OP Receptor (OP 33)

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

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

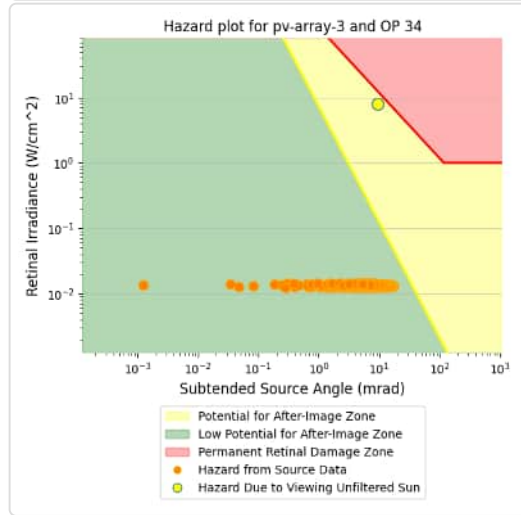
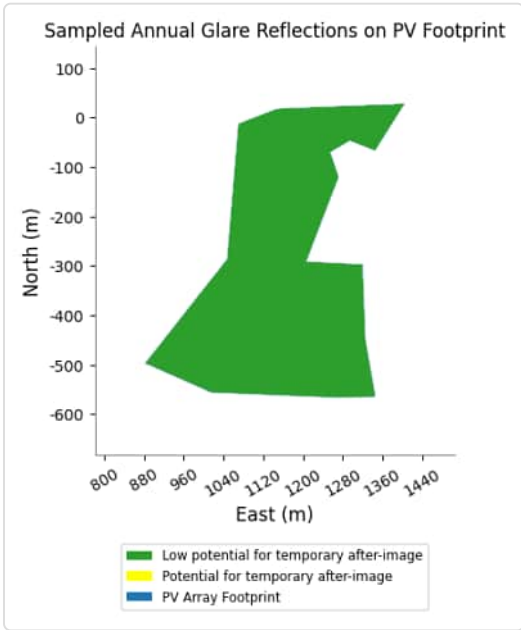
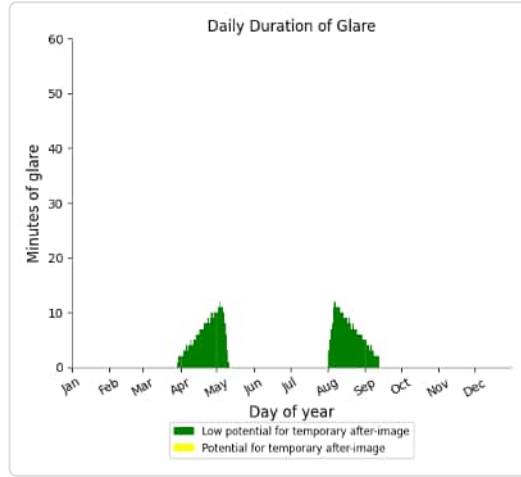
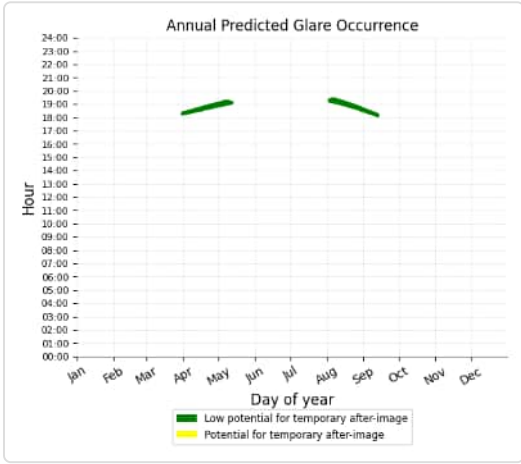


PV array 3 - OP Receptor (OP 34)

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

- 558 minutes of "green" glare with low potential to cause temporary after-image.

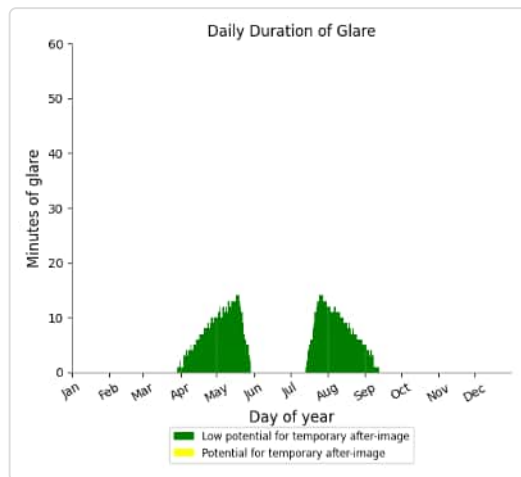
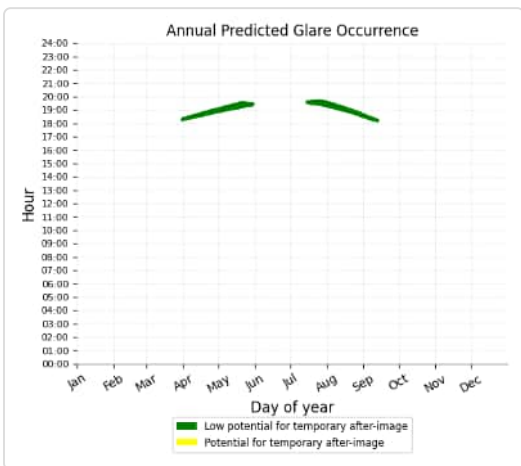
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

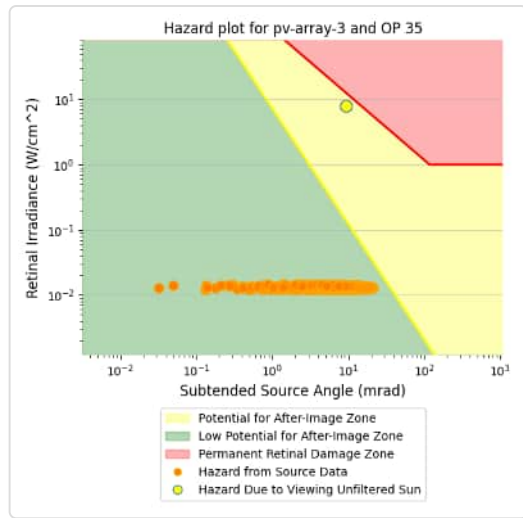
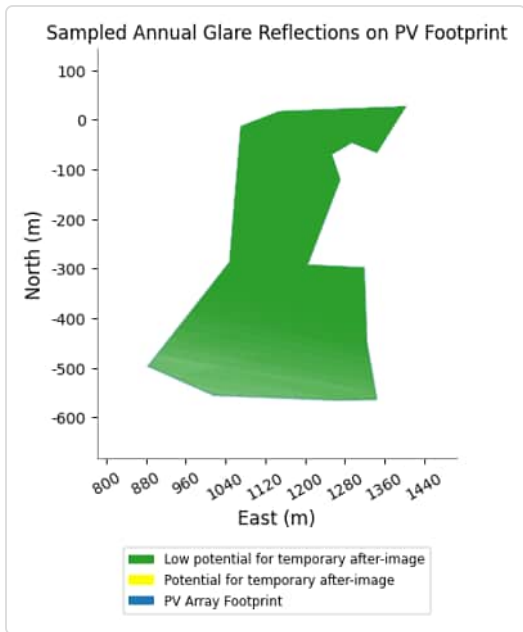


PV array 3 - OP Receptor (OP 35)

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

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

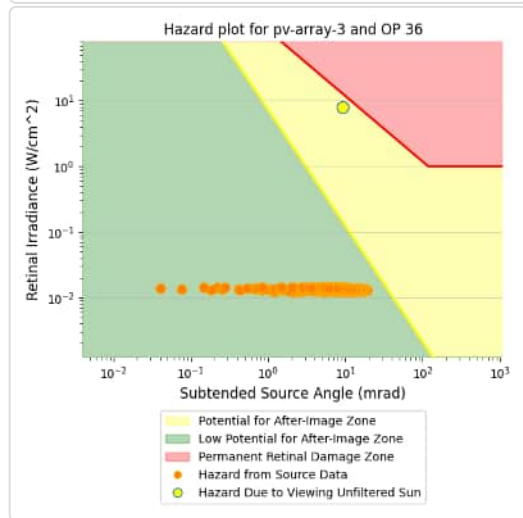
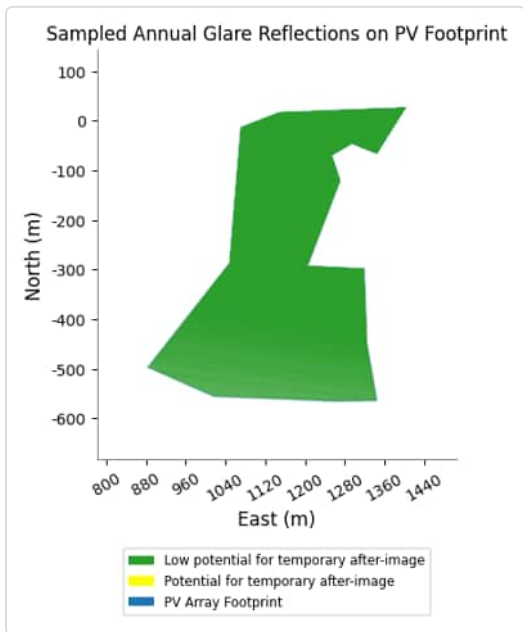
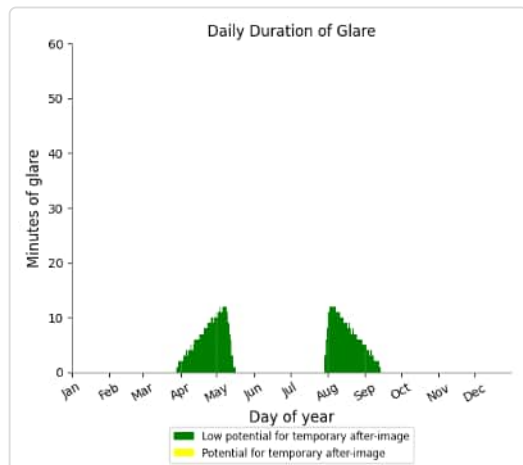
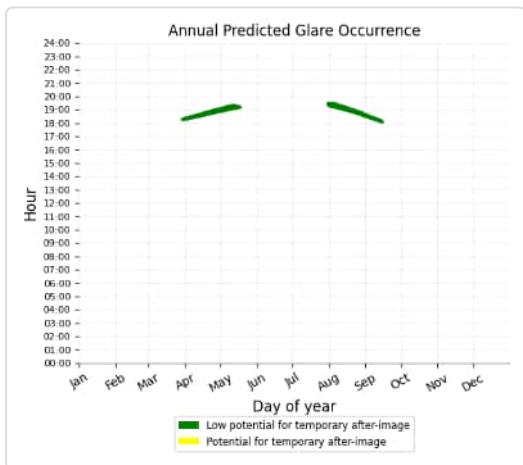




PV array 3 - OP Receptor (OP 36)

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

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

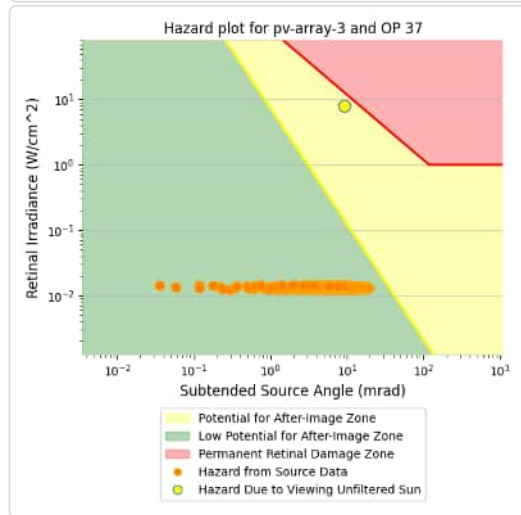
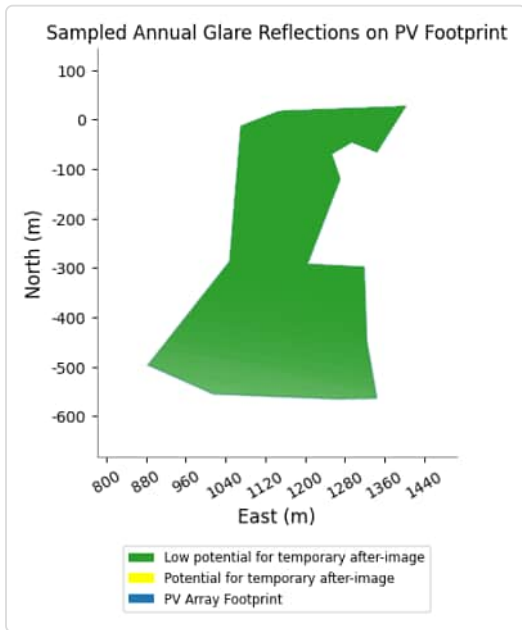
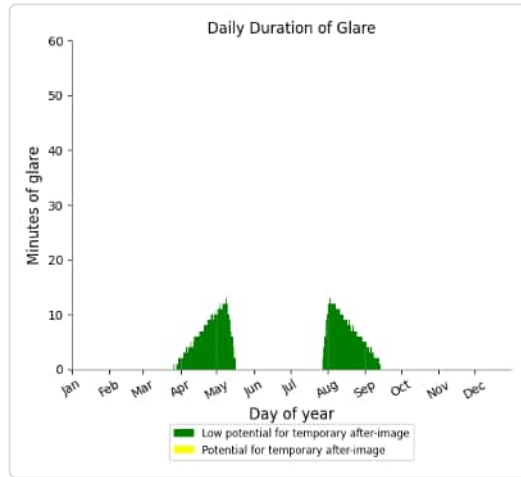
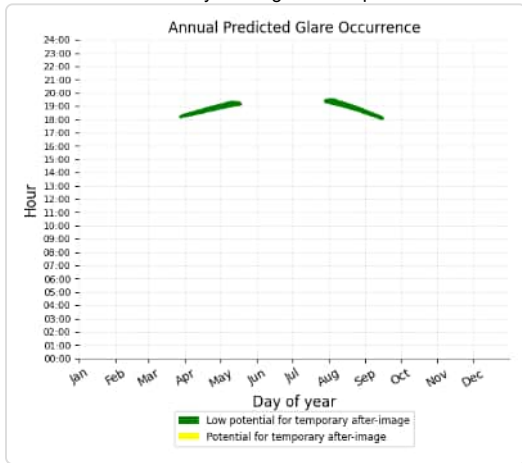


PV array 3 - OP Receptor (OP 37)

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

- 683 minutes of "green" glare with low potential to cause temporary after-image.

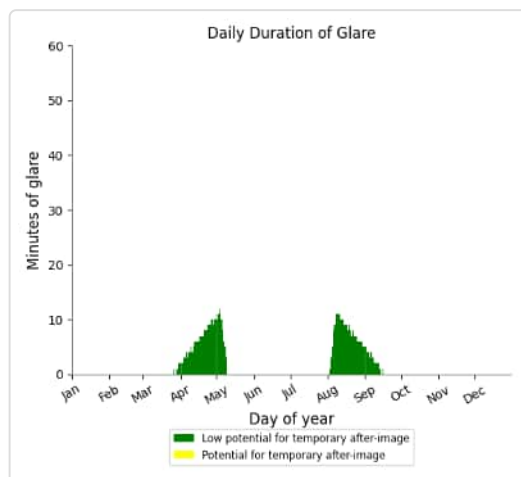
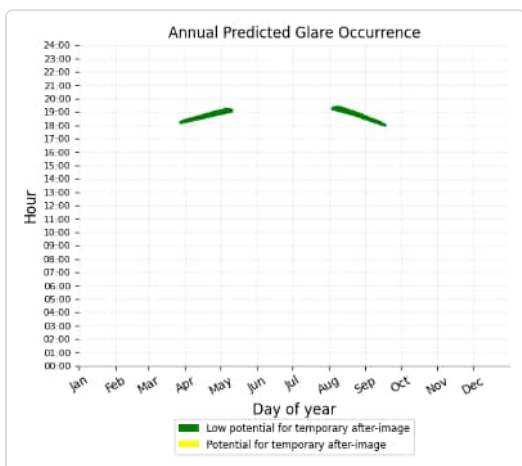
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

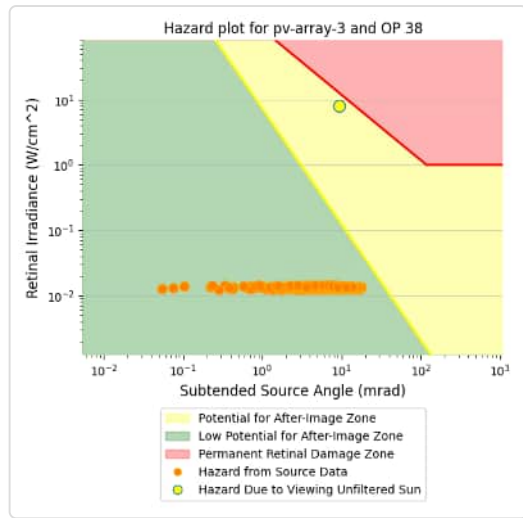
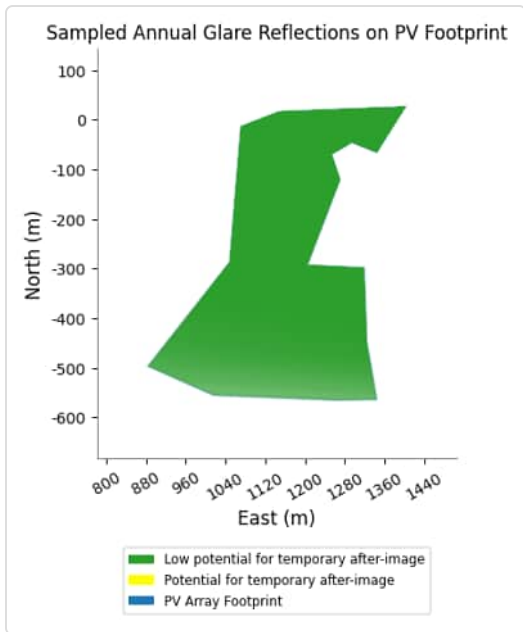


PV array 3 - OP Receptor (OP 38)

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

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

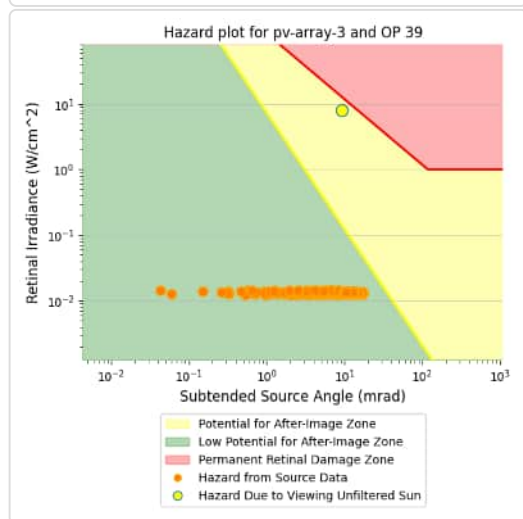
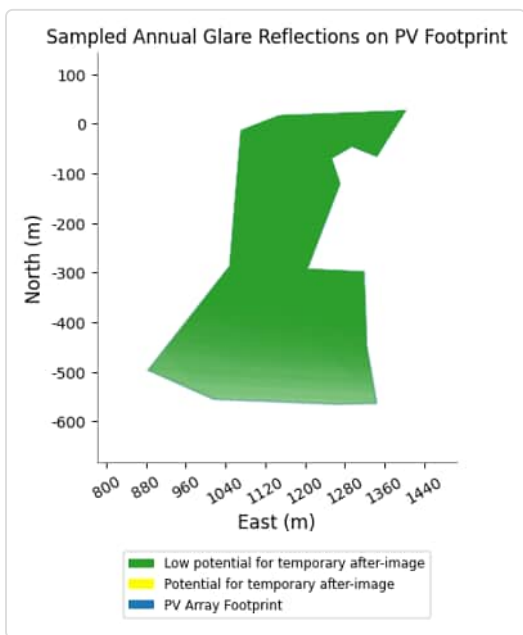
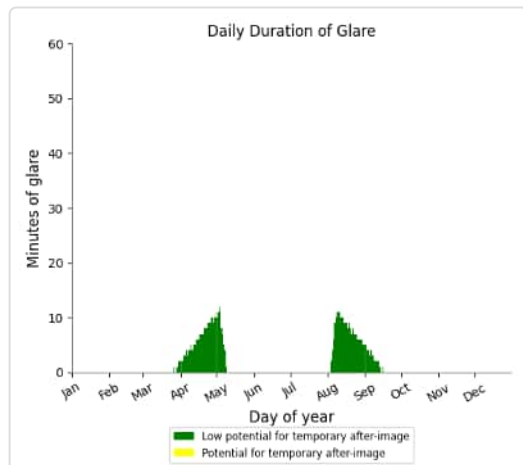
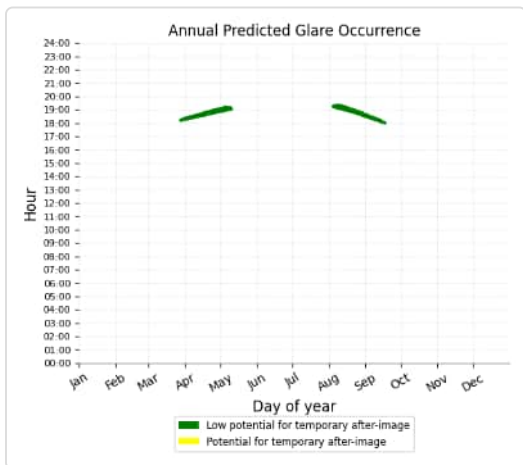




PV array 3 - OP Receptor (OP 39)

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

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

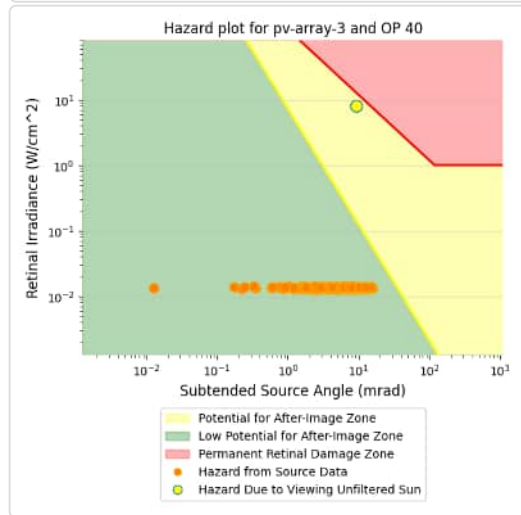
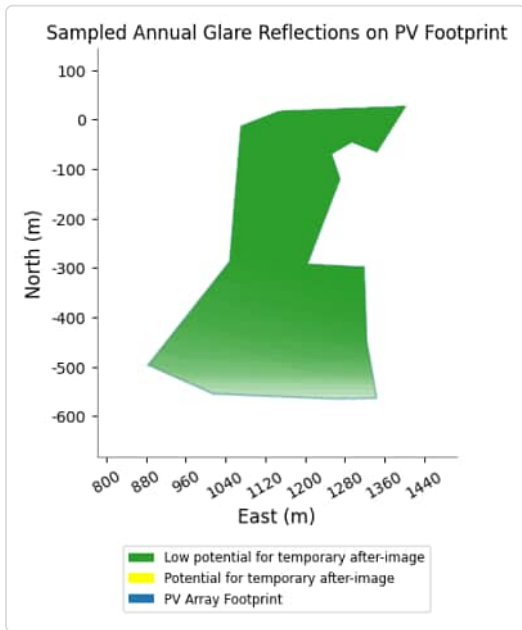
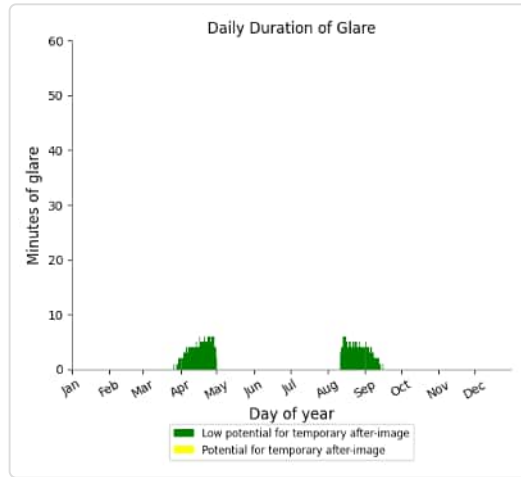
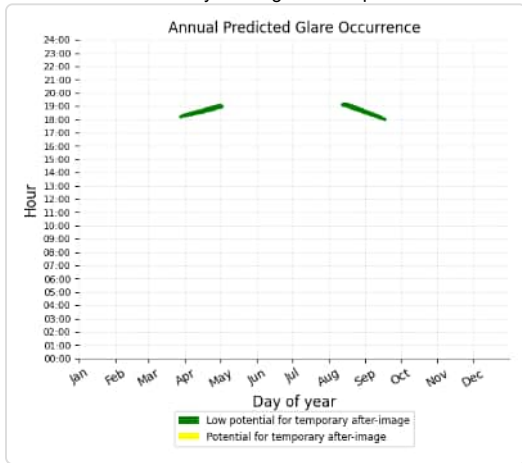


PV array 3 - OP Receptor (OP 40)

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

- 272 minutes of "green" glare with low potential to cause temporary after-image.

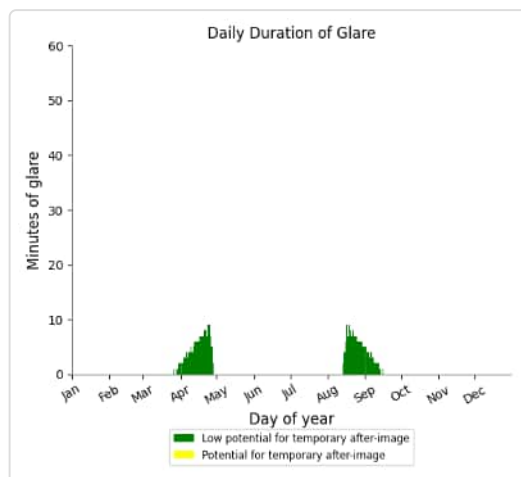
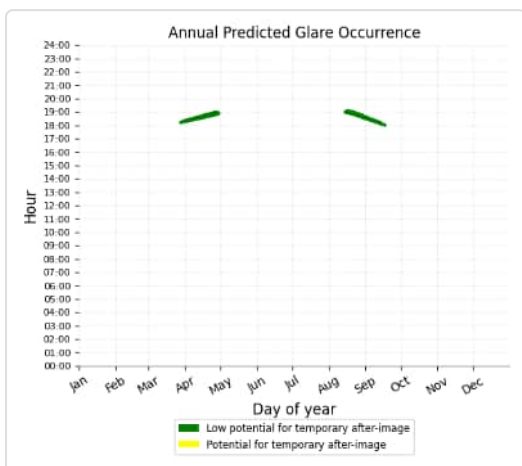
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

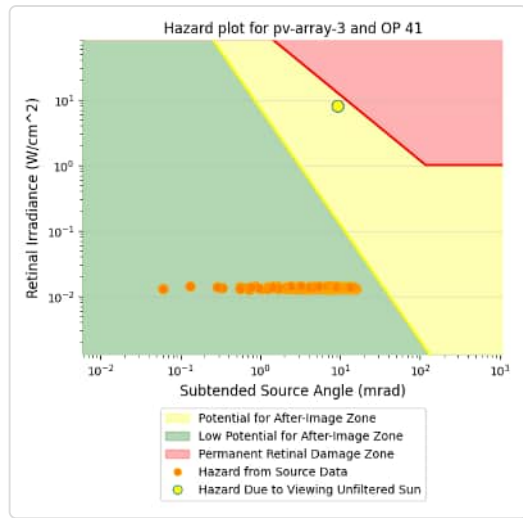
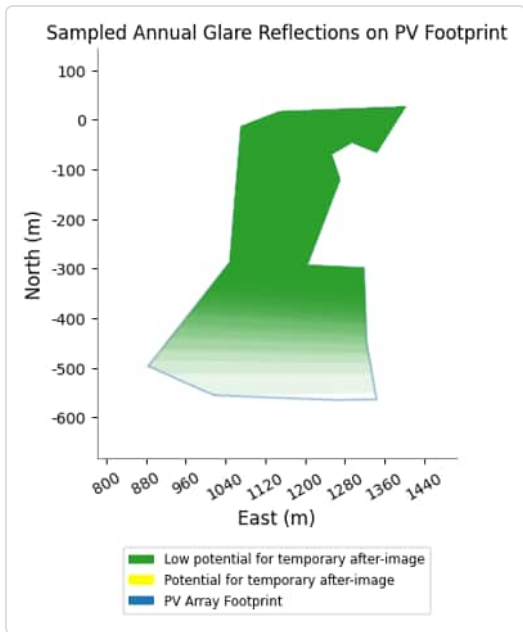


PV array 3 - OP Receptor (OP 41)

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

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

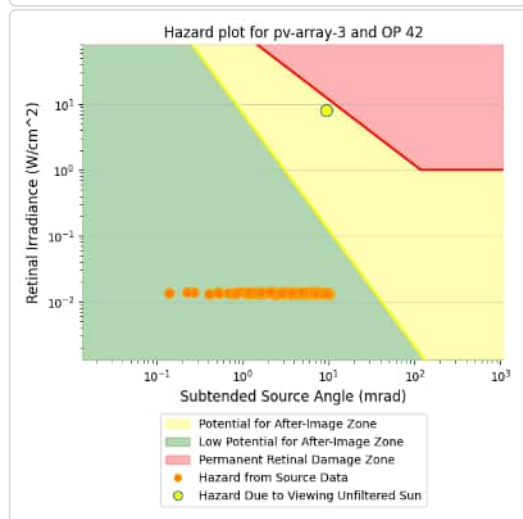
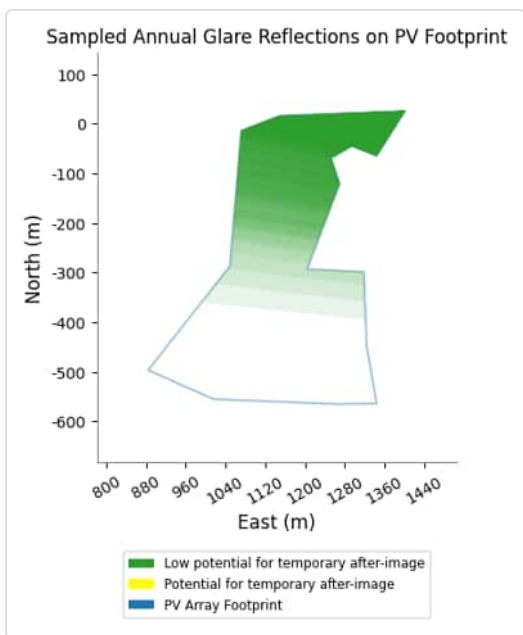
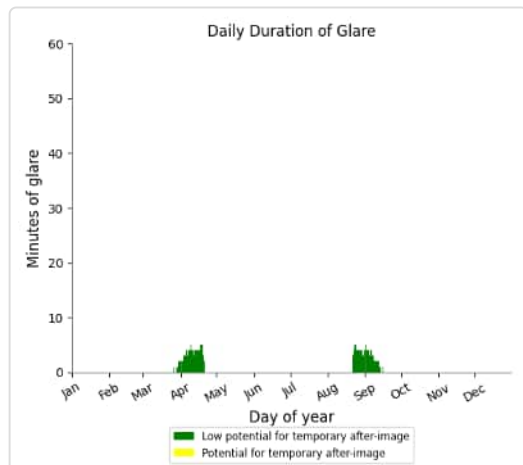
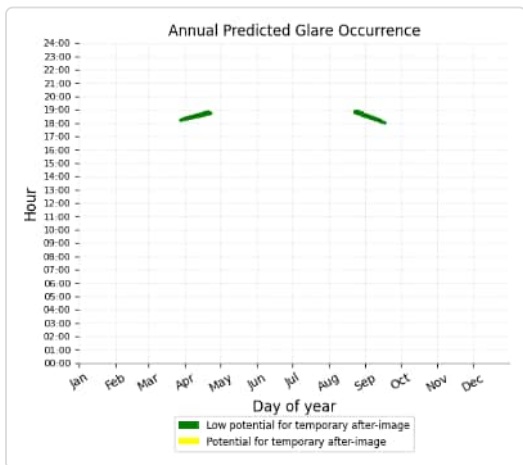




PV array 3 - OP Receptor (OP 42)

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

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



PV array 3 - OP Receptor (OP 43)

No glare found

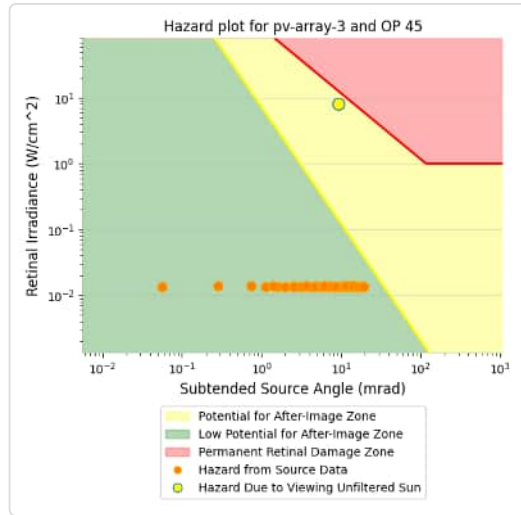
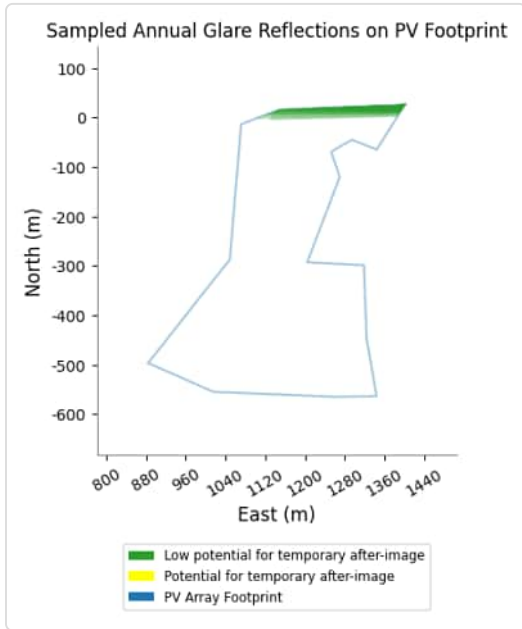
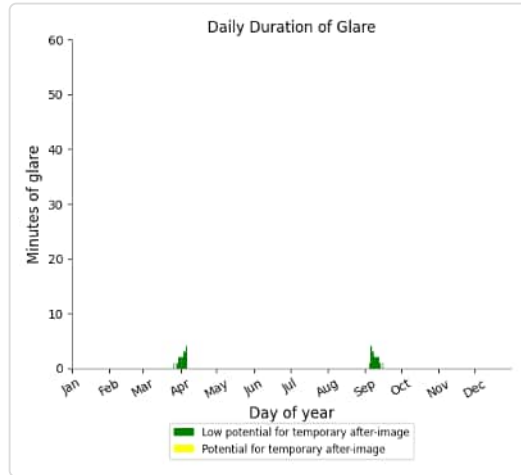
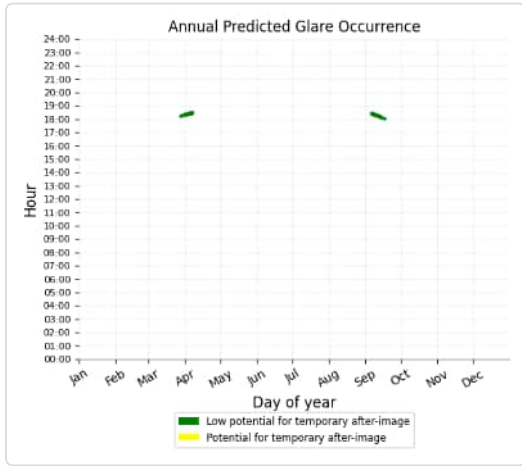
PV array 3 - OP Receptor (OP 44)

No glare found

PV array 3 - OP Receptor (OP 45)

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

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



PV array 3 - OP Receptor (OP 46)

No glare found

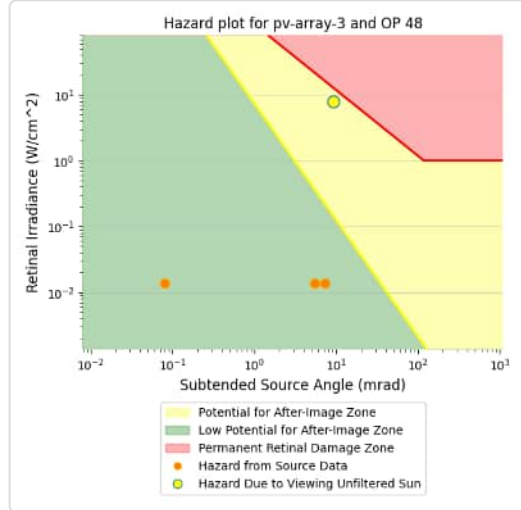
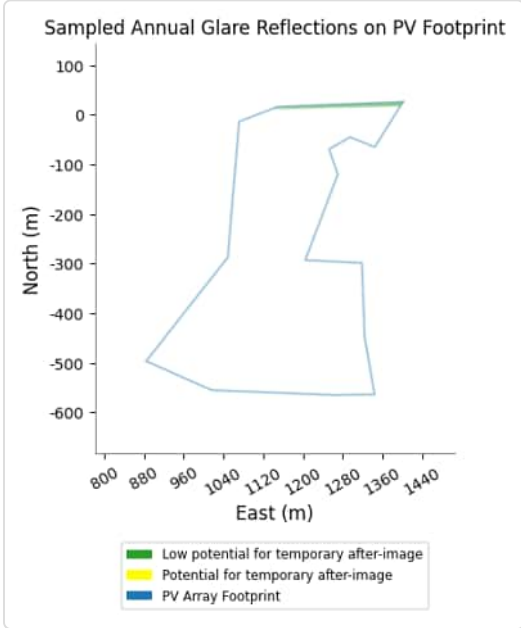
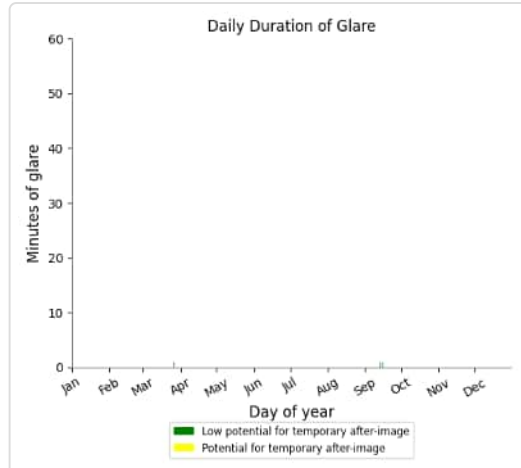
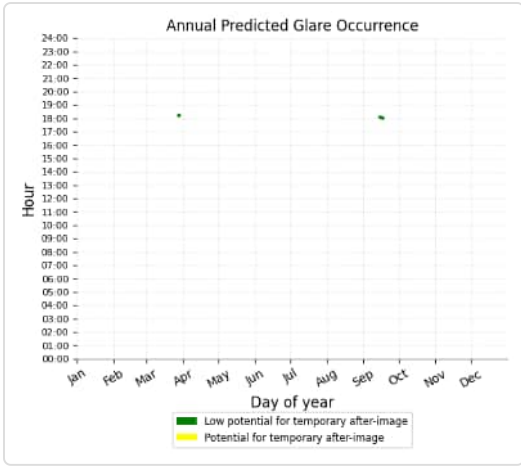
PV array 3 - OP Receptor (OP 47)

No glare found

PV array 3 - OP Receptor (OP 48)

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

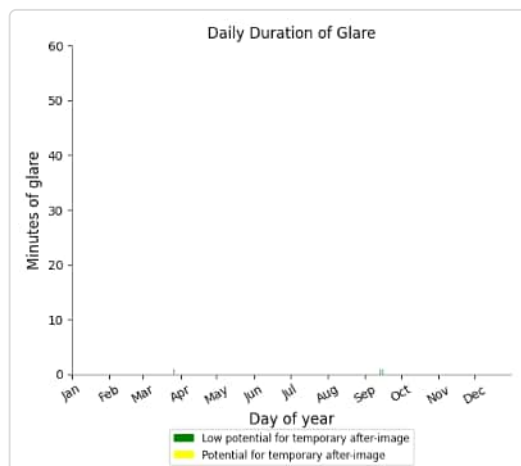
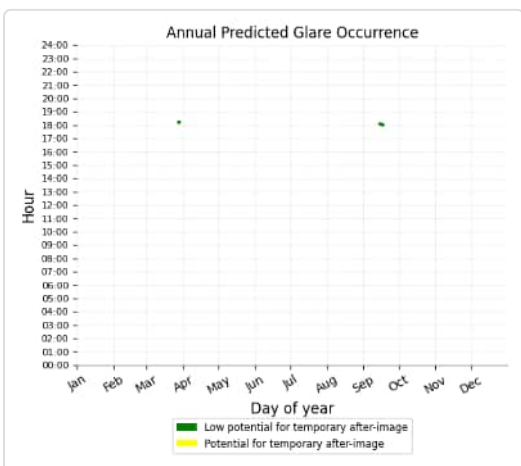
- 3 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

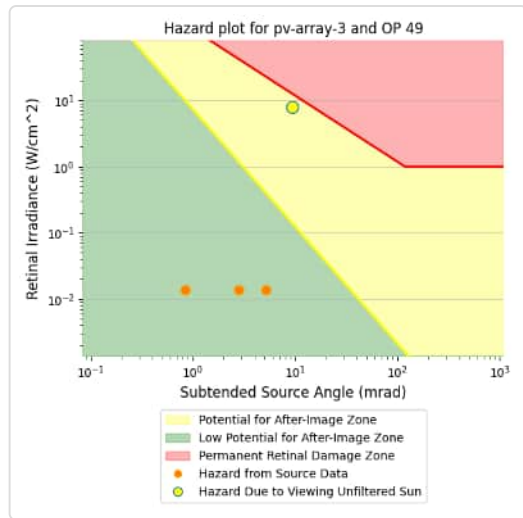
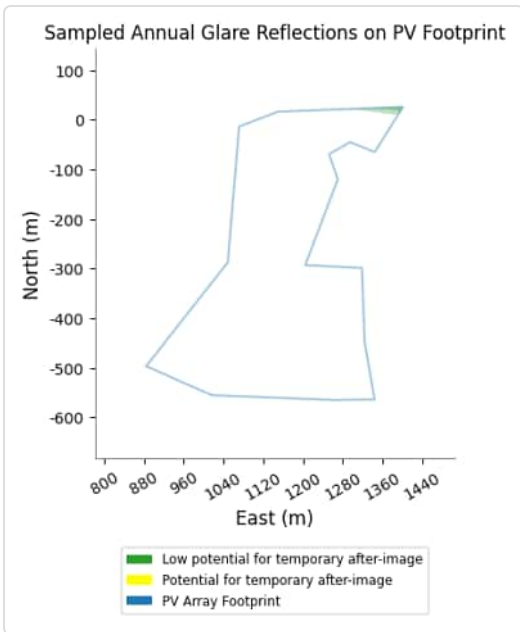


PV array 3 - OP Receptor (OP 49)

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

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

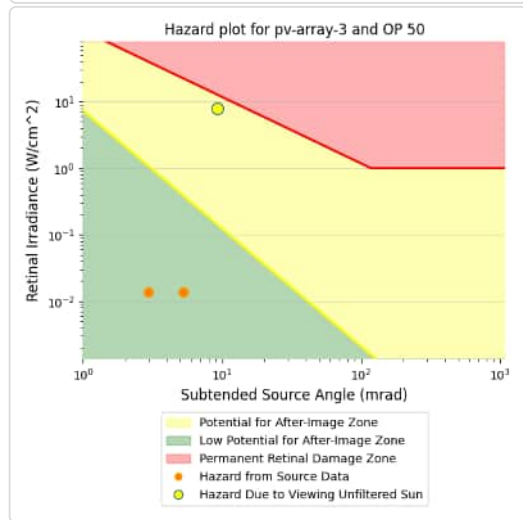
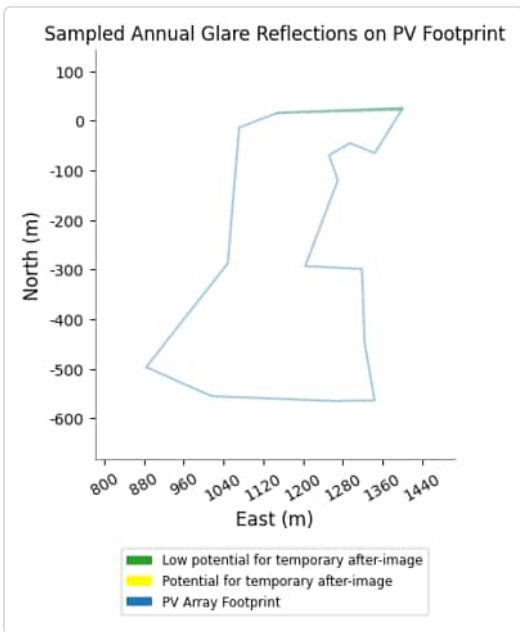
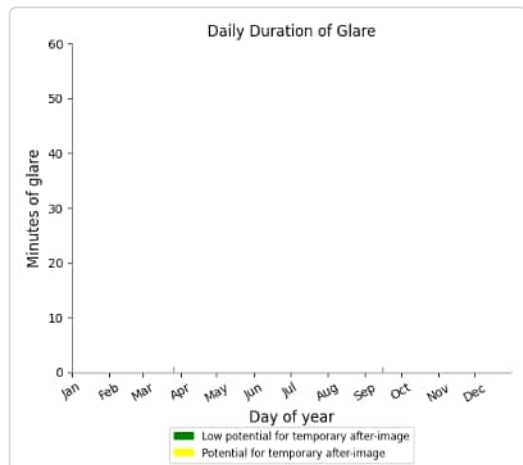
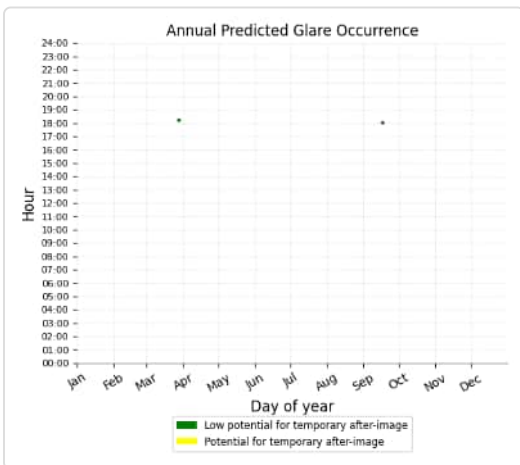




PV array 3 - OP Receptor (OP 50)

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

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

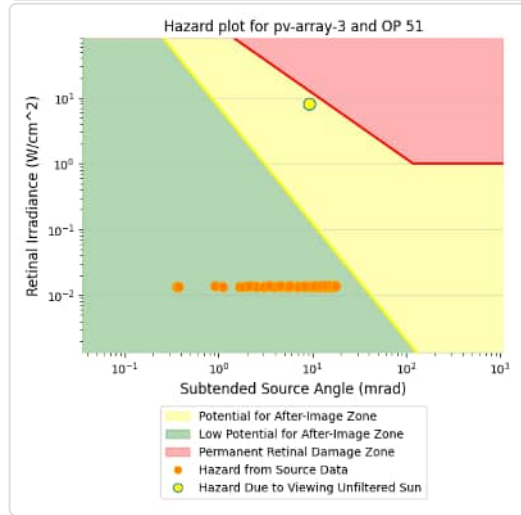
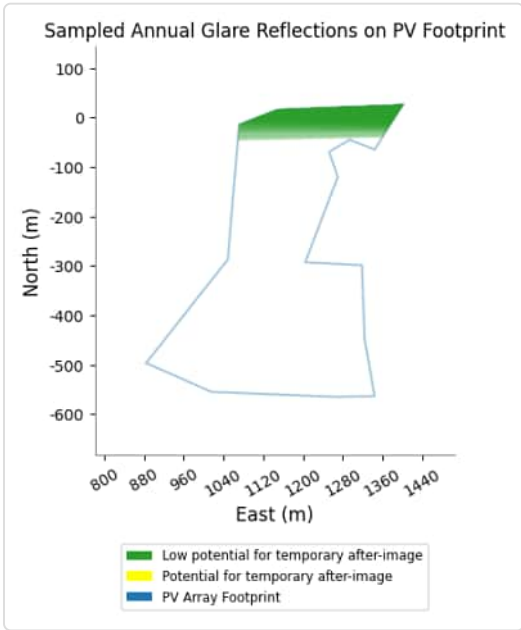
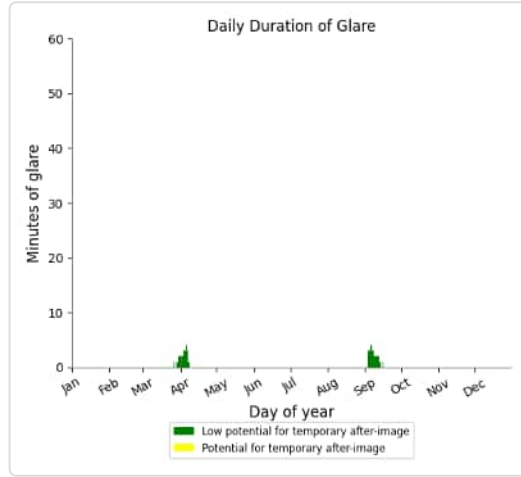
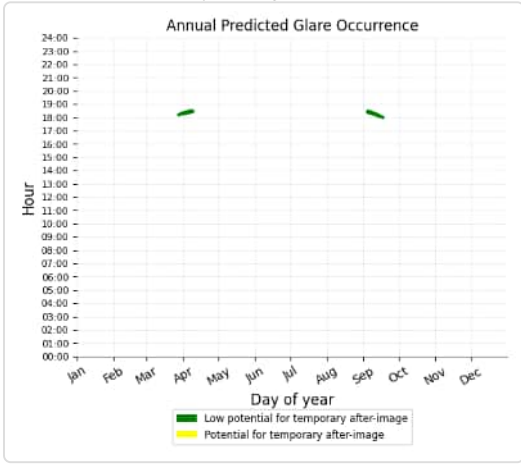


PV array 3 - OP Receptor (OP 51)

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

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

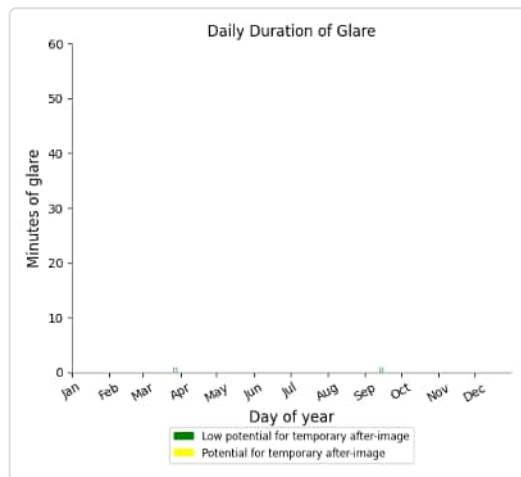
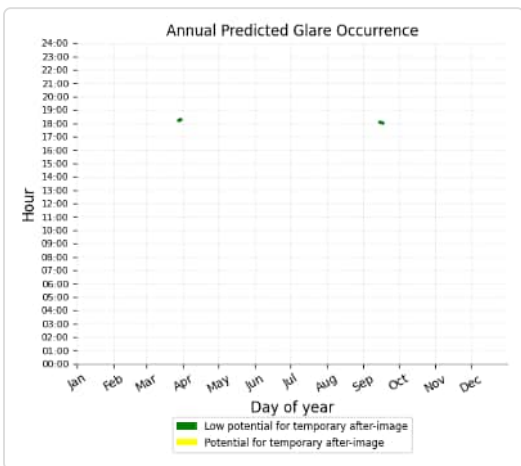
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

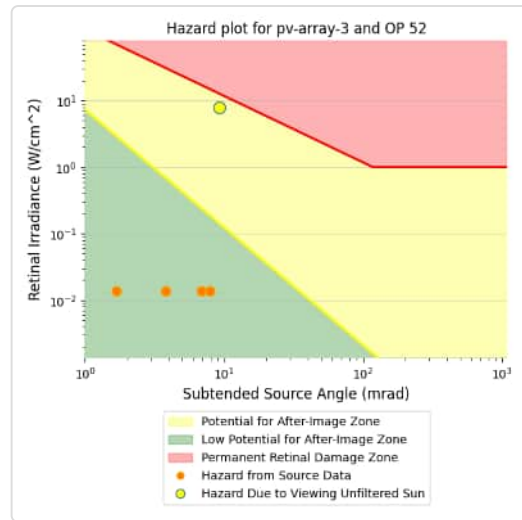
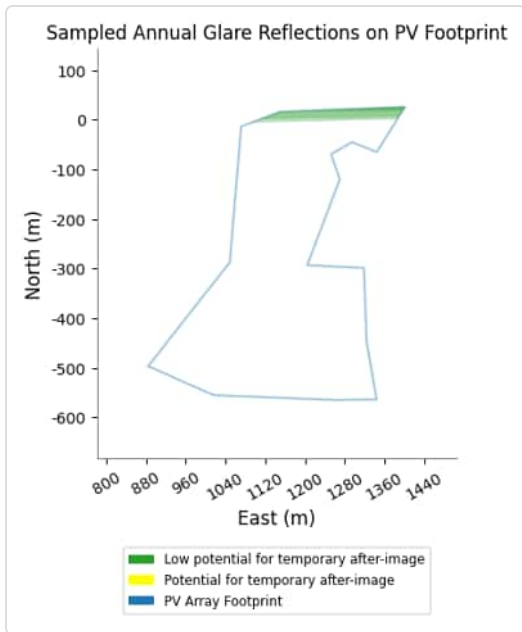


PV array 3 - OP Receptor (OP 52)

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

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





PV array 3 - OP Receptor (OP 53)

No glare found

PV array 4 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	112	0
OP: OP 17	1072	0
OP: OP 18	921	0
OP: OP 19	1107	0
OP: OP 20	2160	0
OP: OP 21	1044	0
OP: OP 22	1721	0
OP: OP 23	1496	0
OP: OP 24	901	0
OP: OP 25	1699	0
OP: OP 26	2021	0
OP: OP 27	2056	0
OP: OP 28	1638	0
OP: OP 29	2061	0
OP: OP 30	2199	0

OP: OP 31	2386	0
OP: OP 32	2573	0
OP: OP 33	2526	0
OP: OP 34	2508	0
OP: OP 35	2469	0
OP: OP 36	2836	0
OP: OP 37	2850	0
OP: OP 38	2971	0
OP: OP 39	2918	0
OP: OP 40	2970	0
OP: OP 41	2465	0
OP: OP 42	2040	0
OP: OP 43	1536	2671
OP: OP 44	1858	2400
OP: OP 45	2337	1766
OP: OP 46	2045	2278
OP: OP 47	2952	1412
OP: OP 48	3178	1175
OP: OP 49	3344	936
OP: OP 50	3770	470
OP: OP 51	2884	1353
OP: OP 52	3074	0
OP: OP 53	2072	0

PV array 4 - OP Receptor (OP 1)

No glare found

PV array 4 - OP Receptor (OP 2)

No glare found

PV array 4 - OP Receptor (OP 3)

No glare found

PV array 4 - OP Receptor (OP 4)

No glare found

PV array 4 - OP Receptor (OP 5)

No glare found

PV array 4 - OP Receptor (OP 6)

No glare found

PV array 4 - OP Receptor (OP 7)

No glare found

PV array 4 - OP Receptor (OP 8)

No glare found

PV array 4 - OP Receptor (OP 9)

No glare found

PV array 4 - OP Receptor (OP 10)

No glare found

PV array 4 - OP Receptor (OP 11)

No glare found

PV array 4 - OP Receptor (OP 12)

No glare found

PV array 4 - OP Receptor (OP 13)

No glare found

PV array 4 - OP Receptor (OP 14)

No glare found

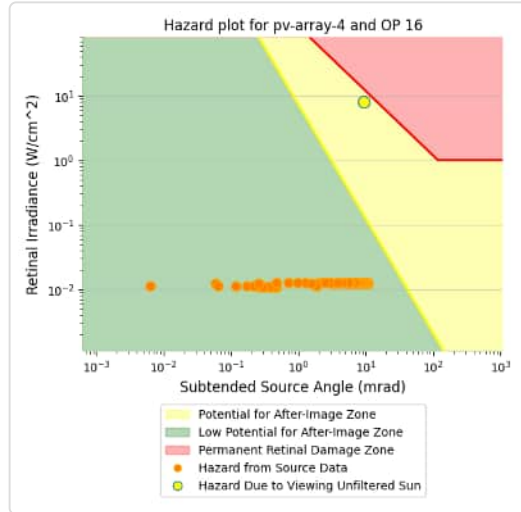
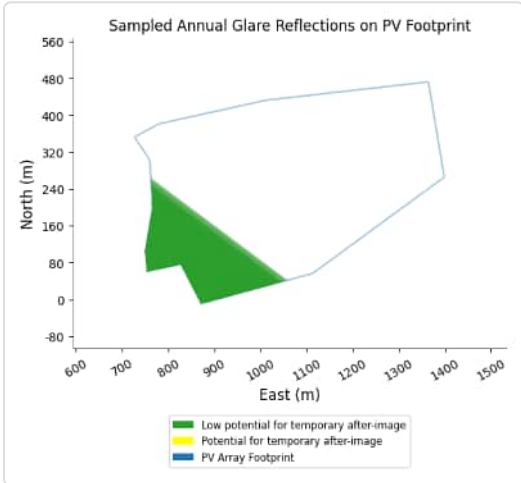
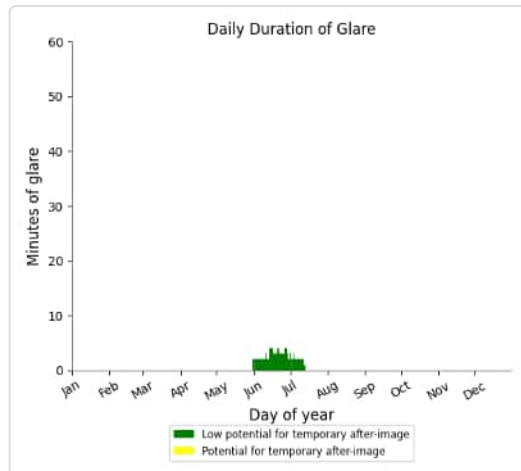
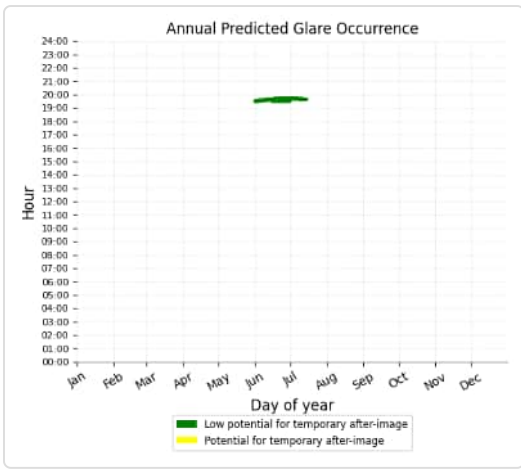
PV array 4 - OP Receptor (OP 15)

No glare found

PV array 4 - OP Receptor (OP 16)

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

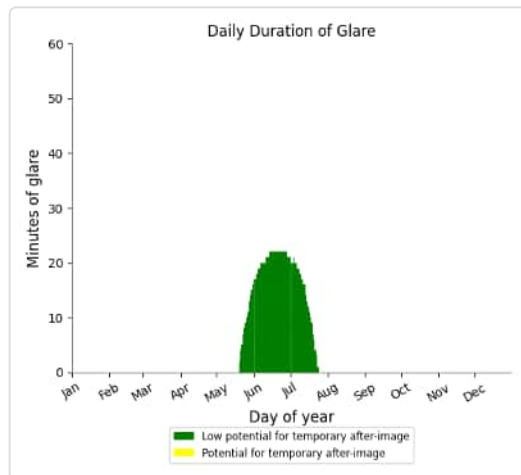
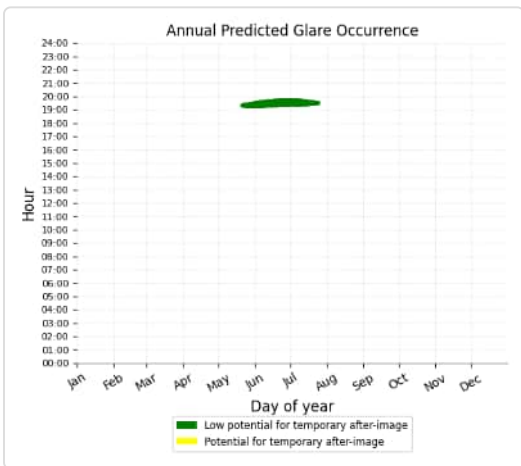
- 112 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

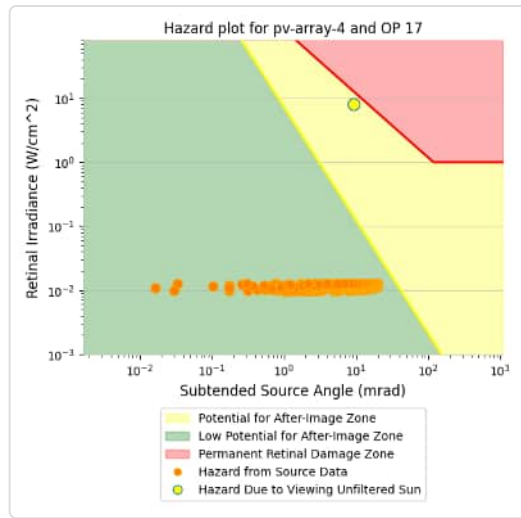
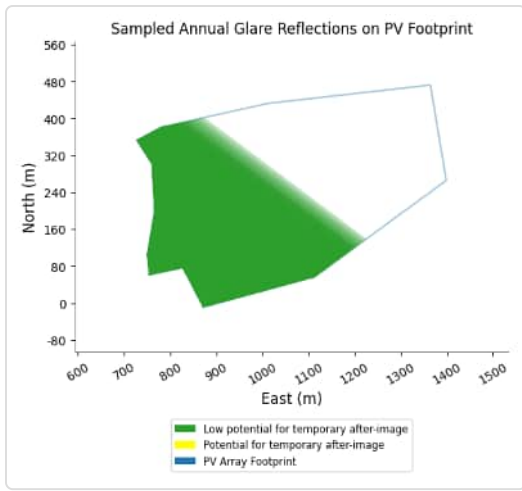


PV array 4 - OP Receptor (OP 17)

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

- 1,072 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

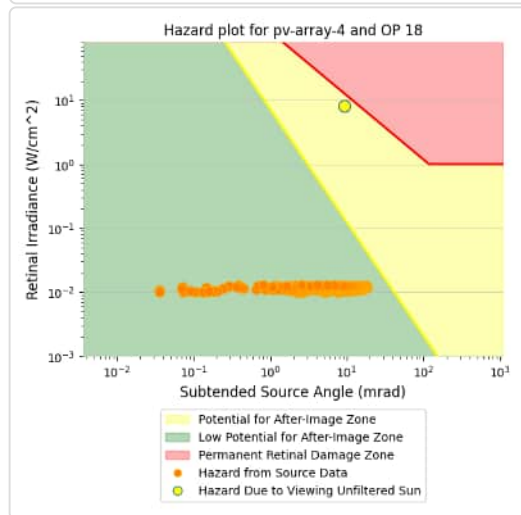
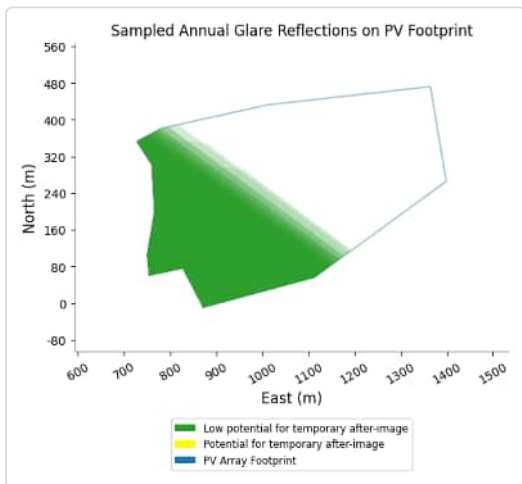
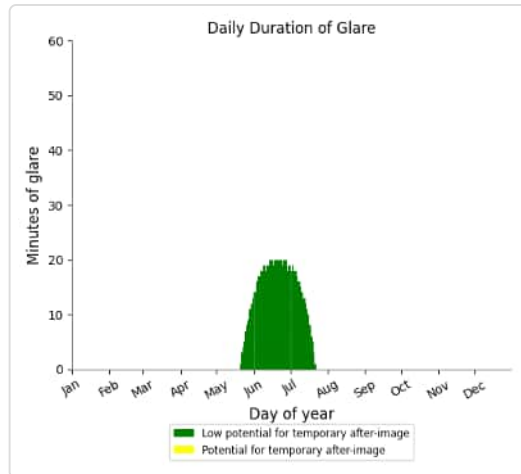
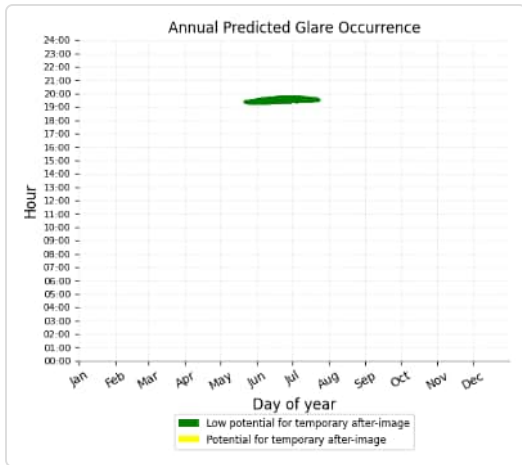




PV array 4 - OP Receptor (OP 18)

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

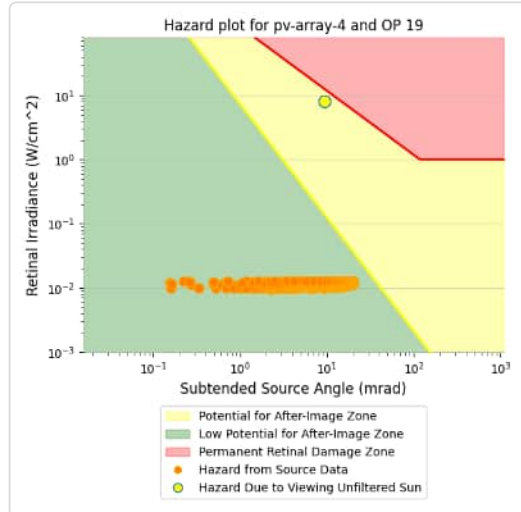
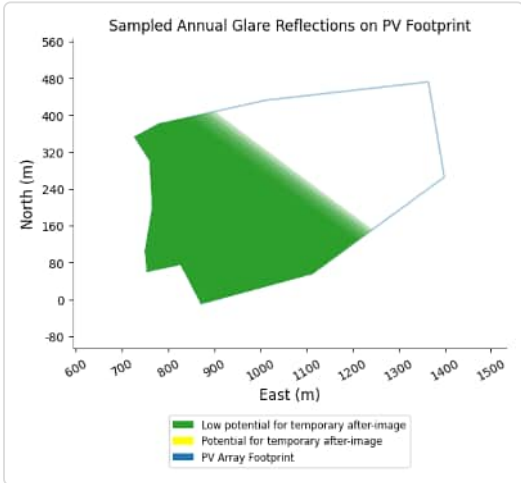
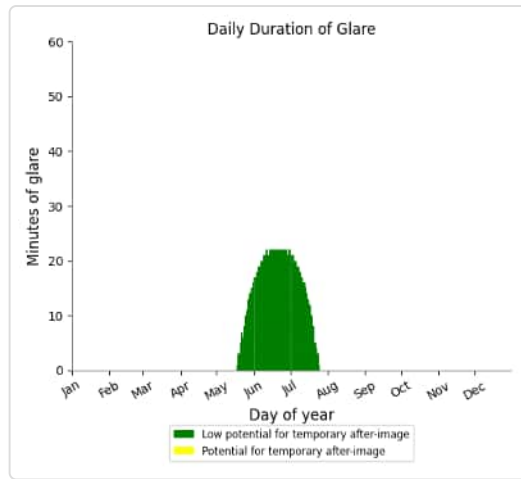
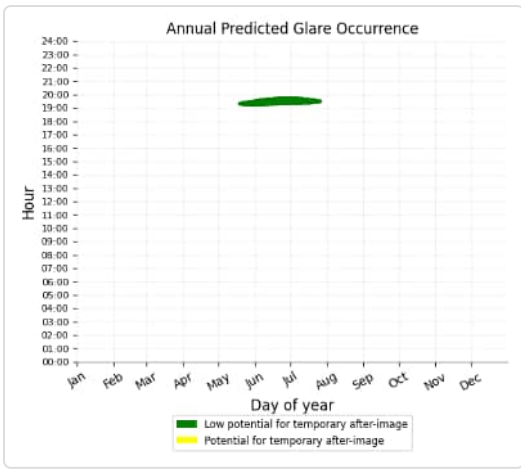
- 921 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 19)

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

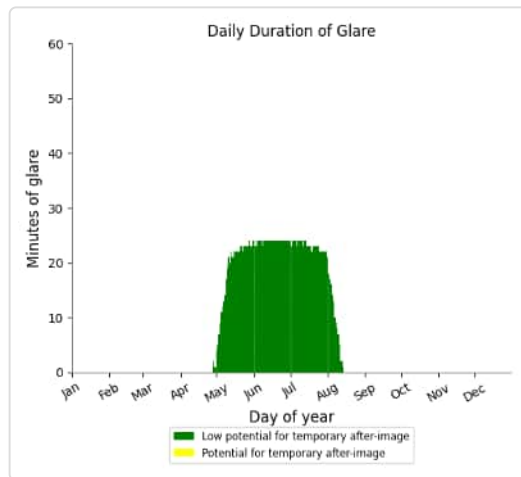
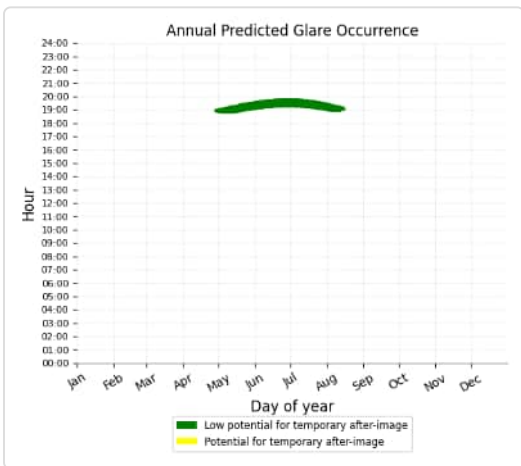
- 1,107 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

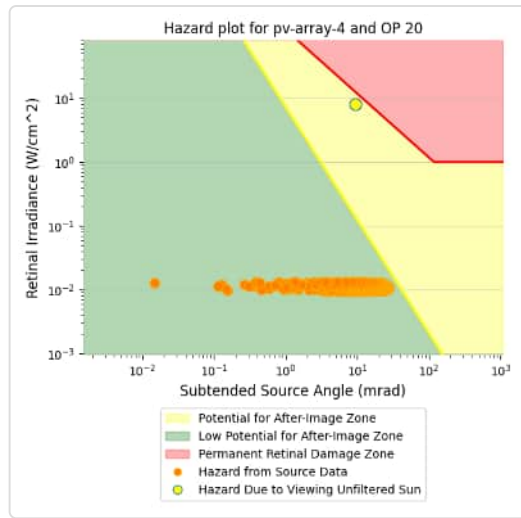
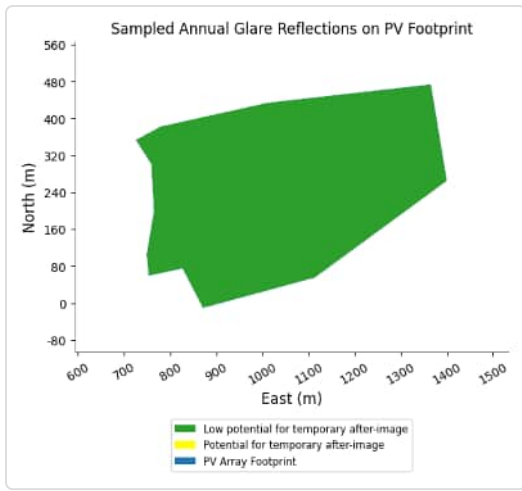


PV array 4 - OP Receptor (OP 20)

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

- 2,160 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

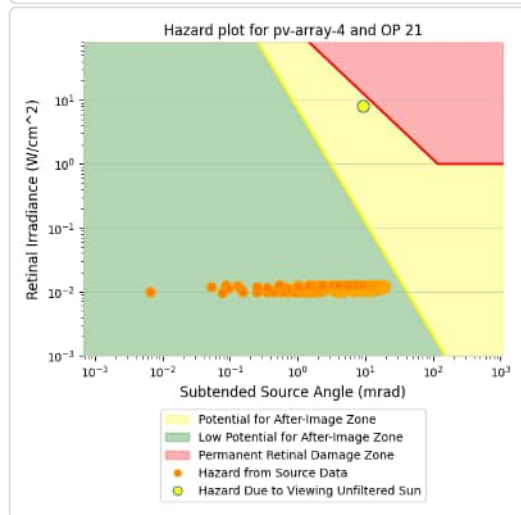
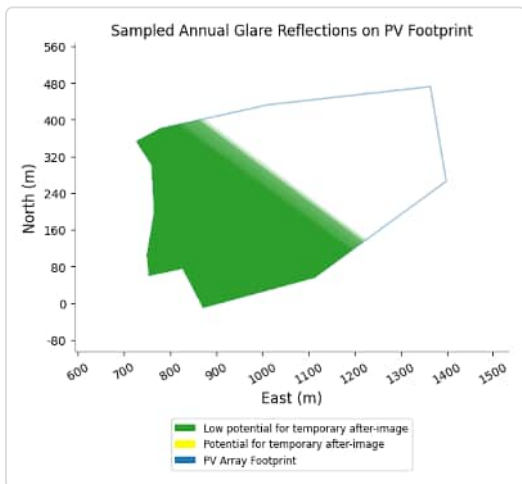
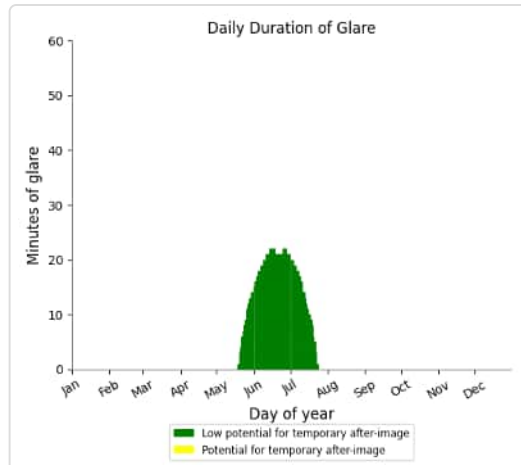
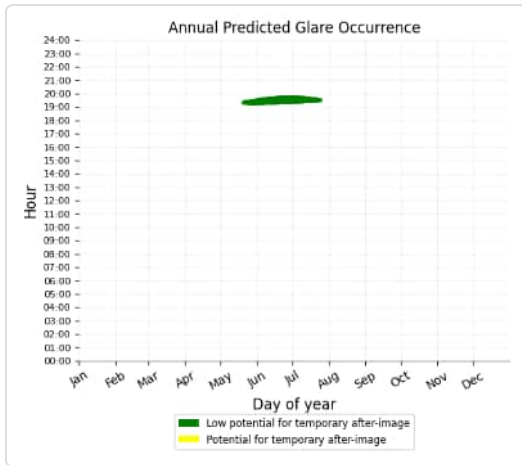




PV array 4 - OP Receptor (OP 21)

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

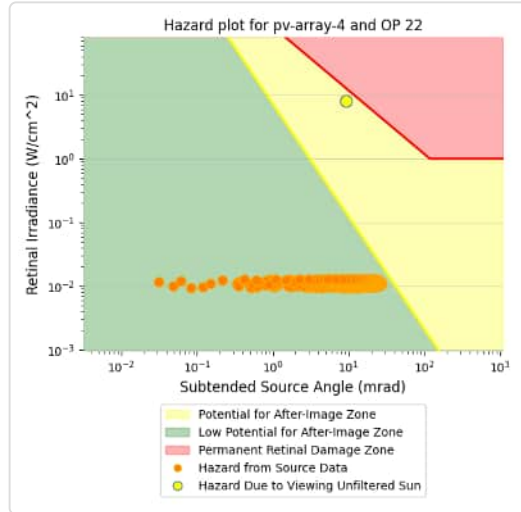
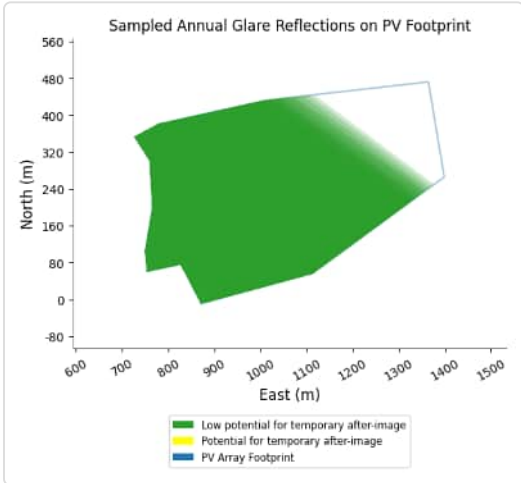
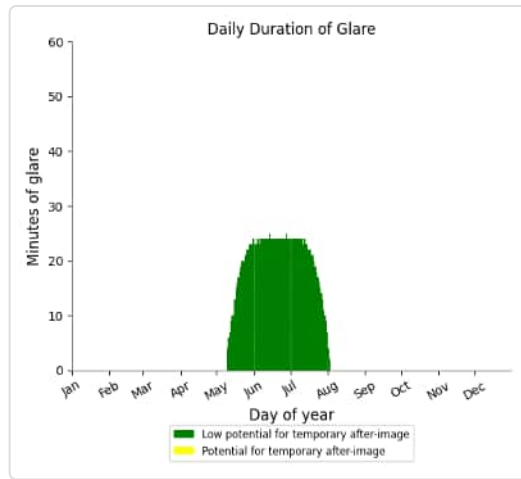
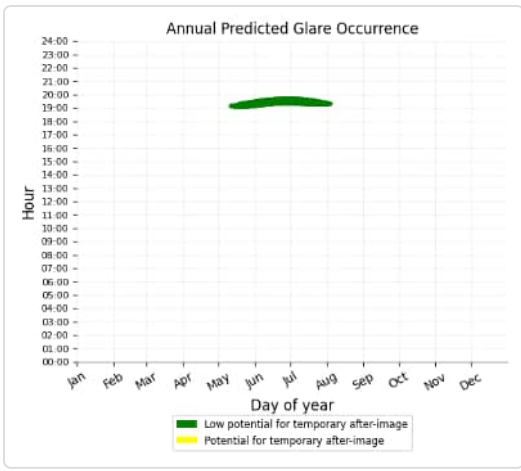
- 1,044 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 22)

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

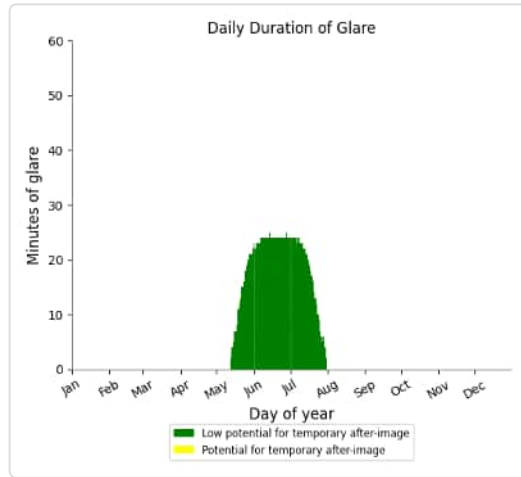
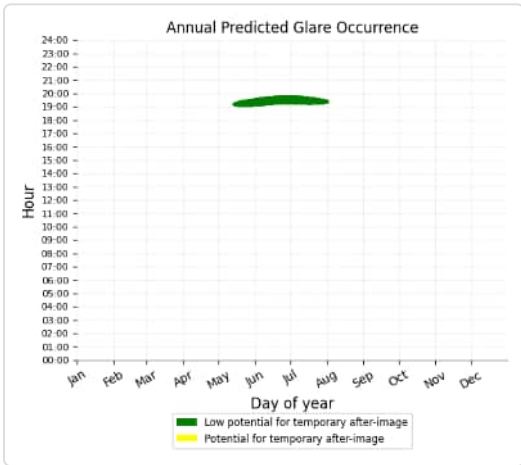
- 1,721 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

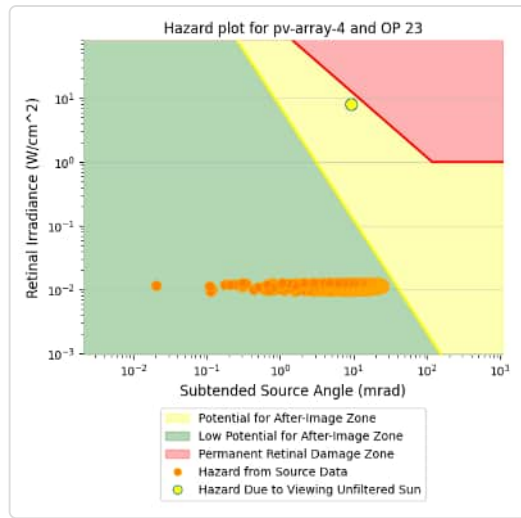
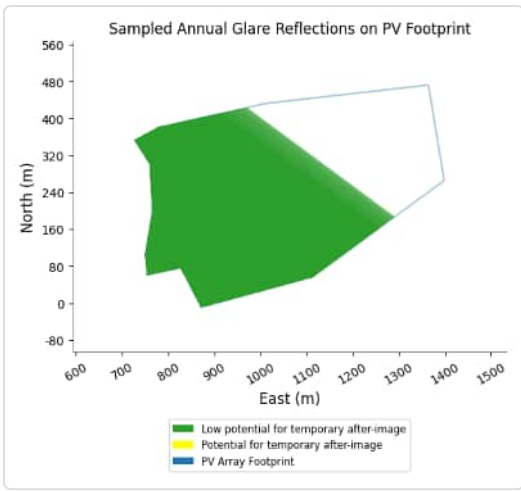


PV array 4 - OP Receptor (OP 23)

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

- 1,496 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

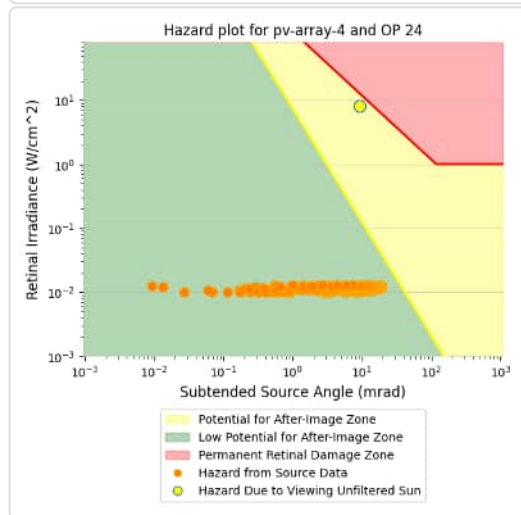
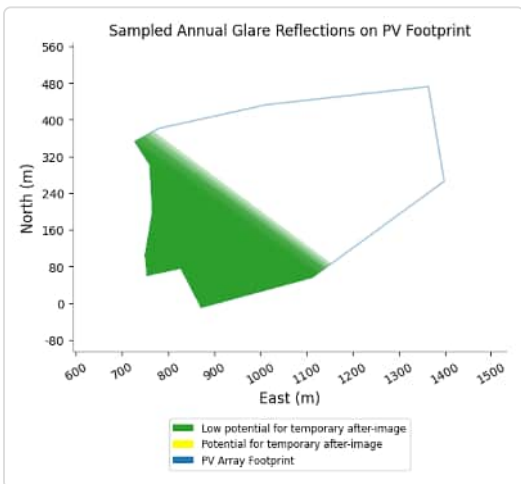
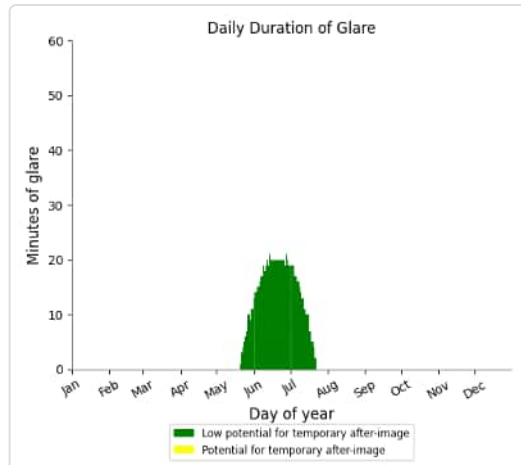
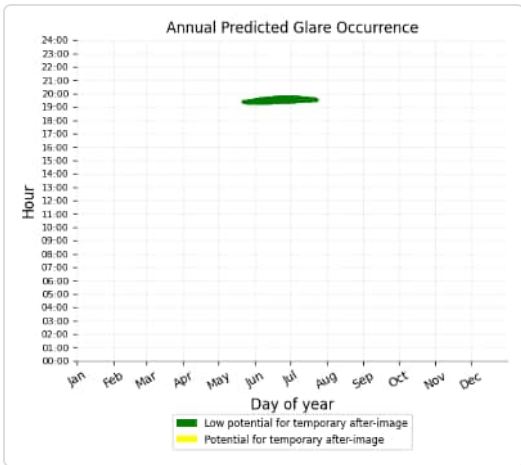




PV array 4 - OP Receptor (OP 24)

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

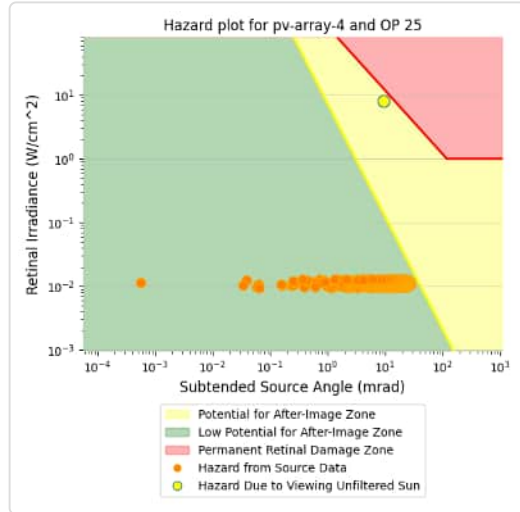
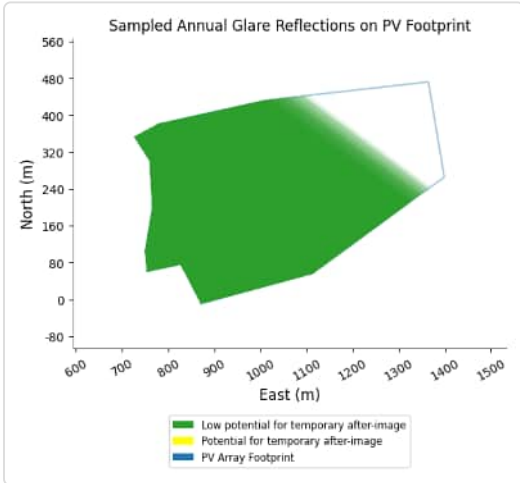
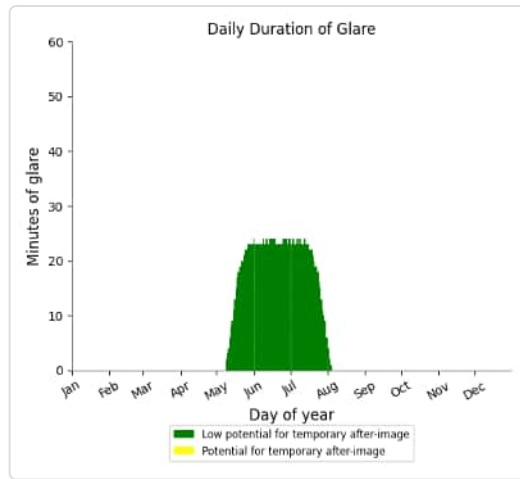
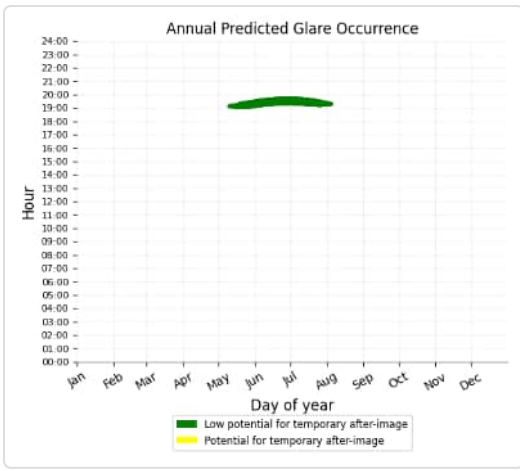
- 901 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 25)

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

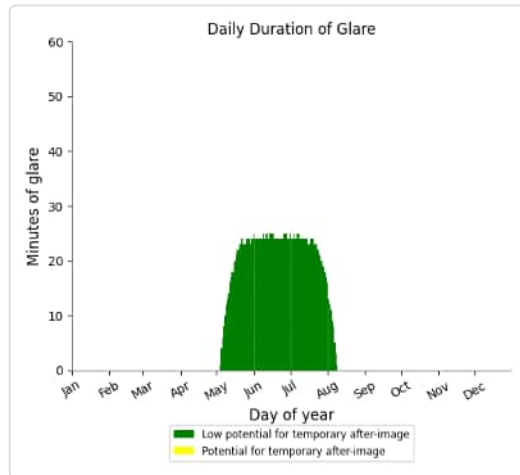
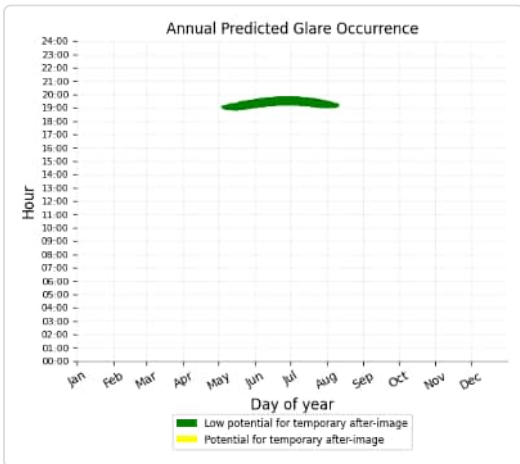
- 1,699 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

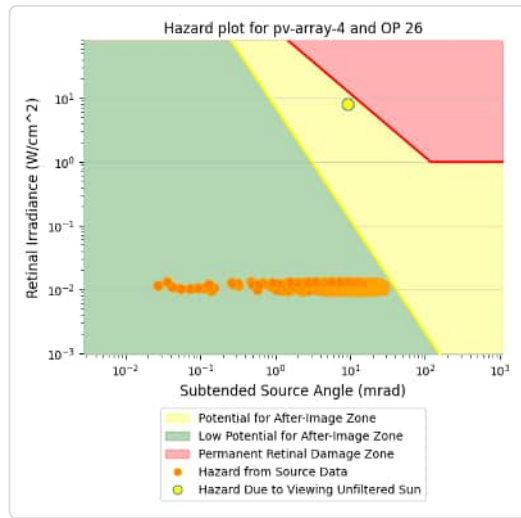
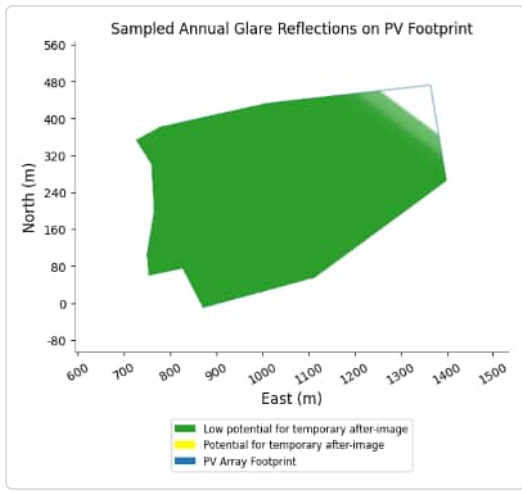


PV array 4 - OP Receptor (OP 26)

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

- 2,021 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

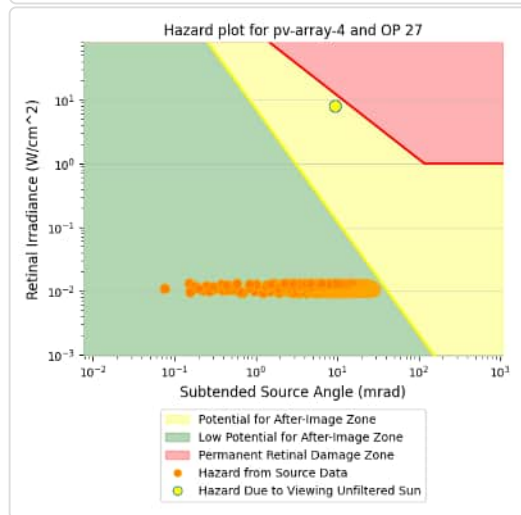
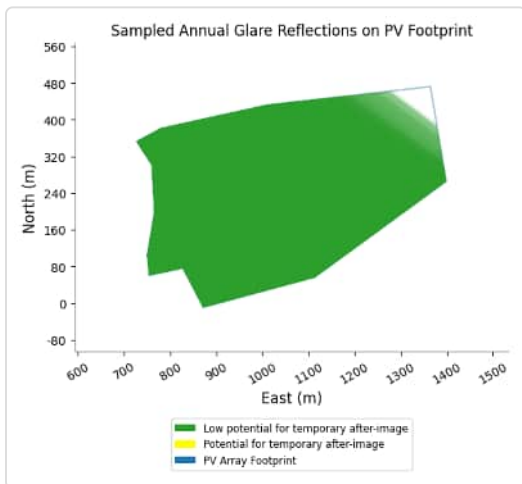
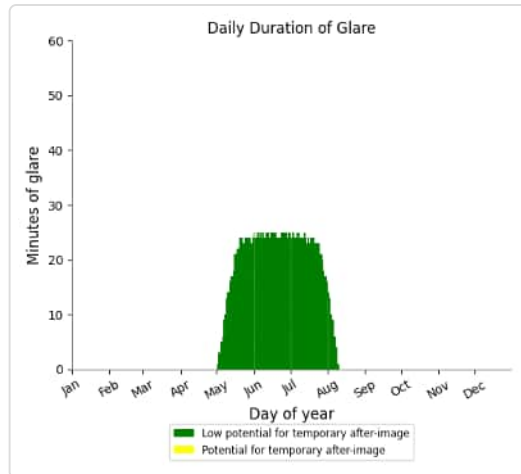
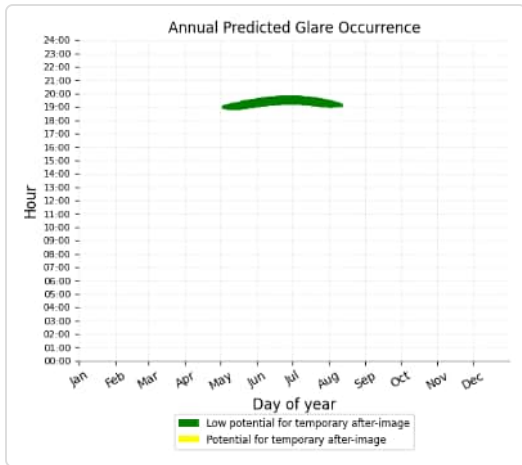




PV array 4 - OP Receptor (OP 27)

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

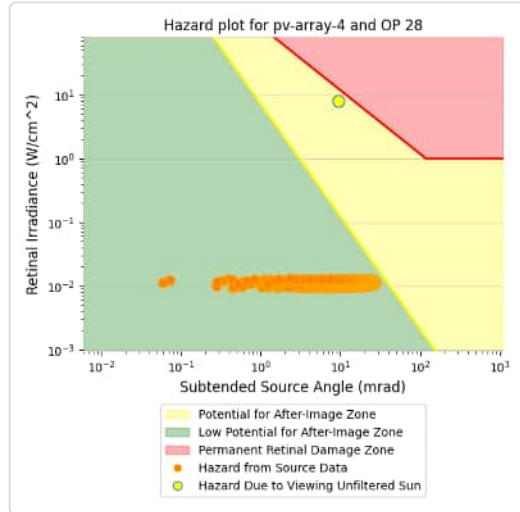
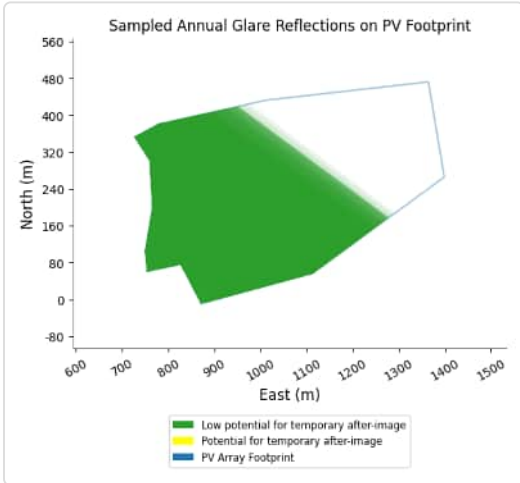
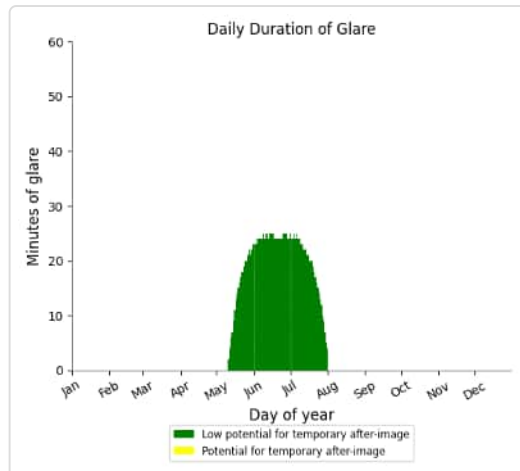
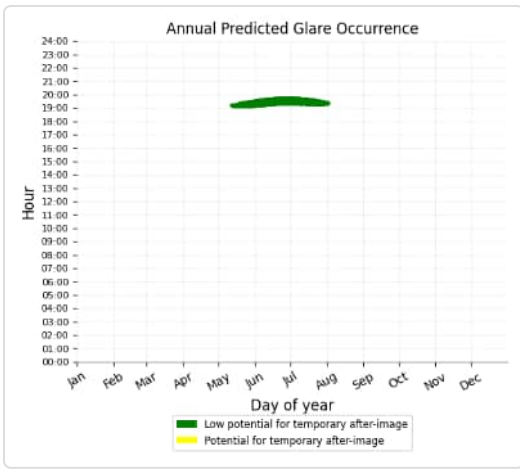
- 2,056 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 28)

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

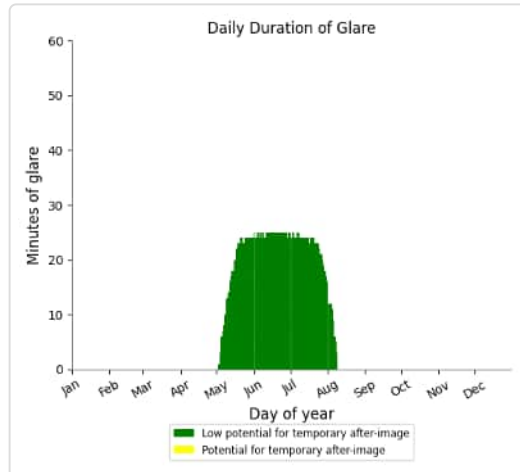
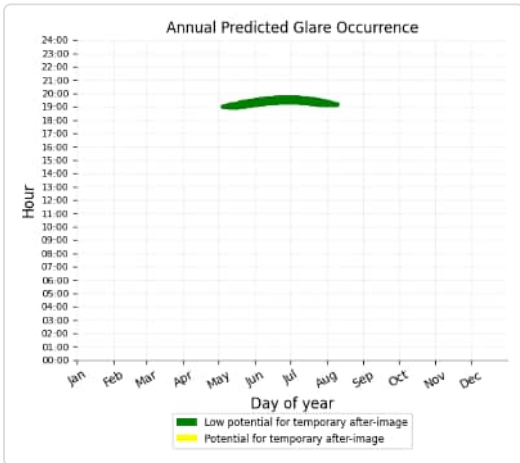
- 1,638 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

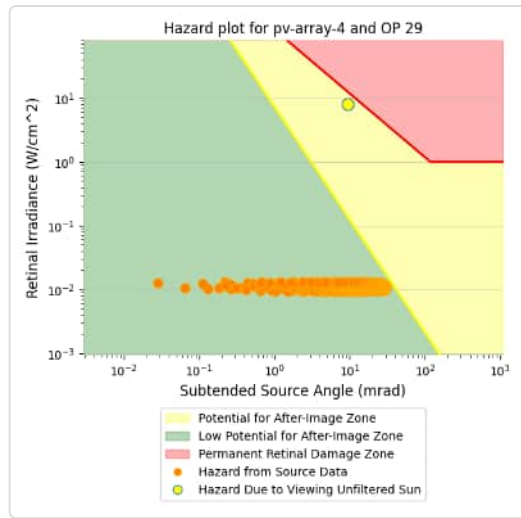
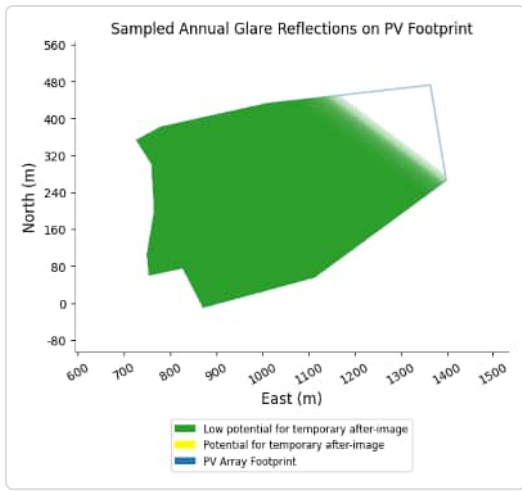


PV array 4 - OP Receptor (OP 29)

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

- 2,061 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

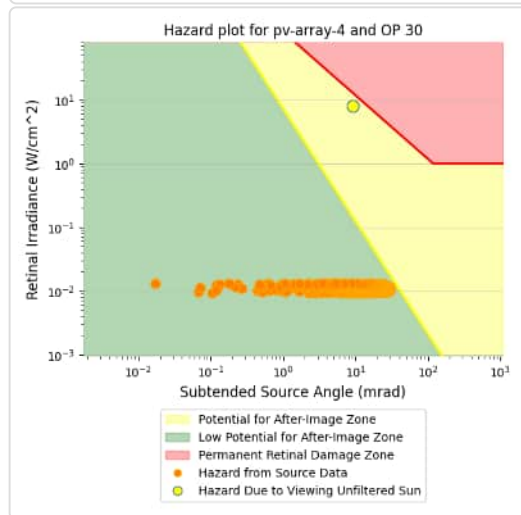
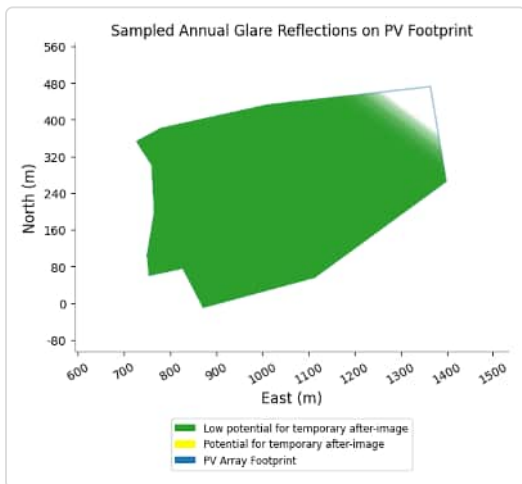
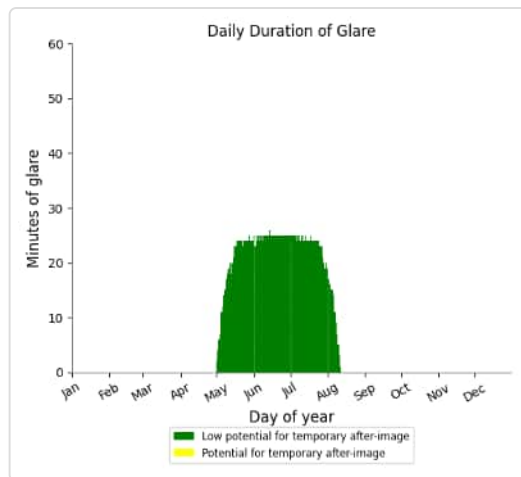
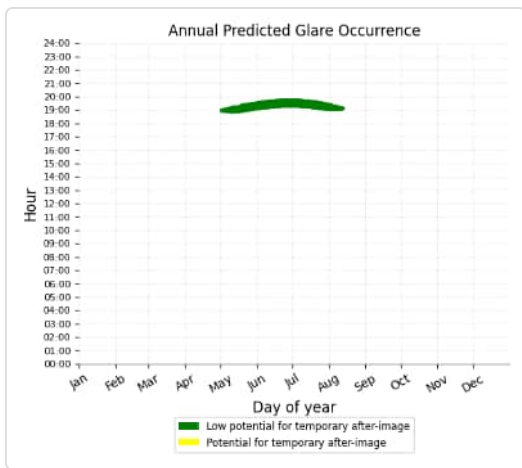




PV array 4 - OP Receptor (OP 30)

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

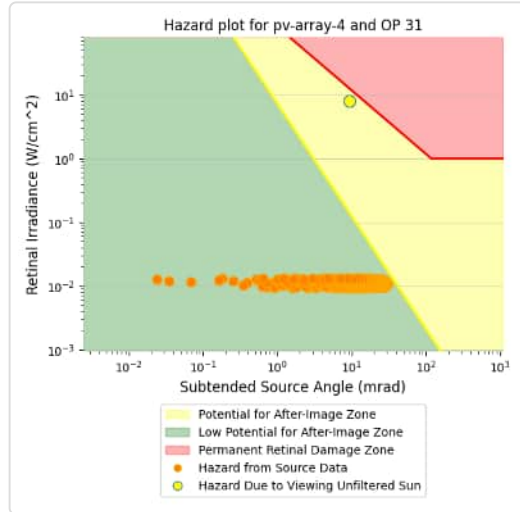
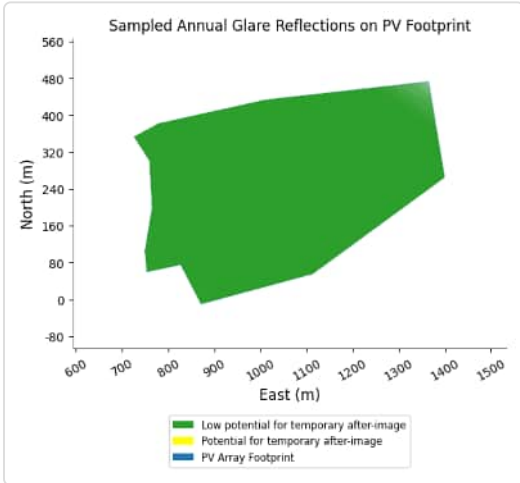
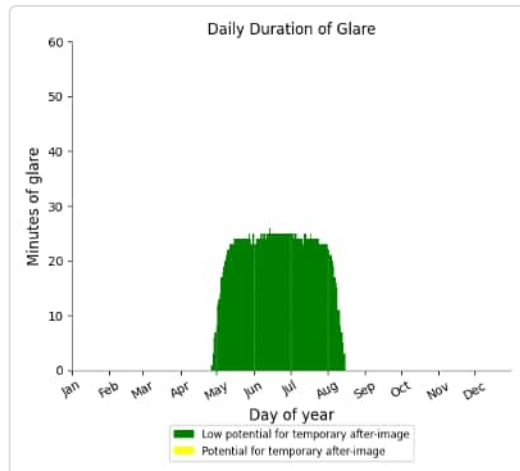
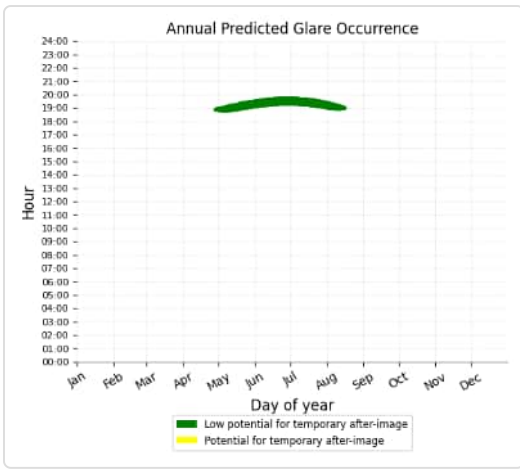
- 2,199 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 31)

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

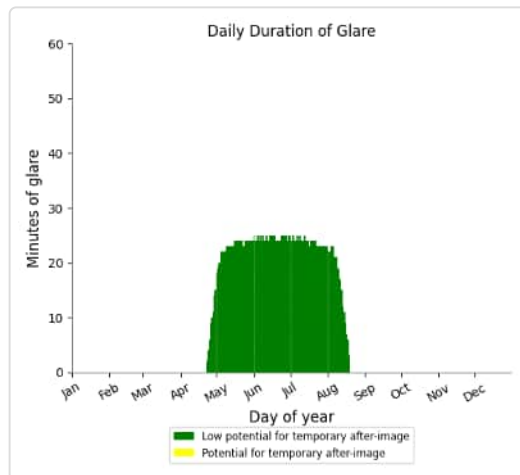
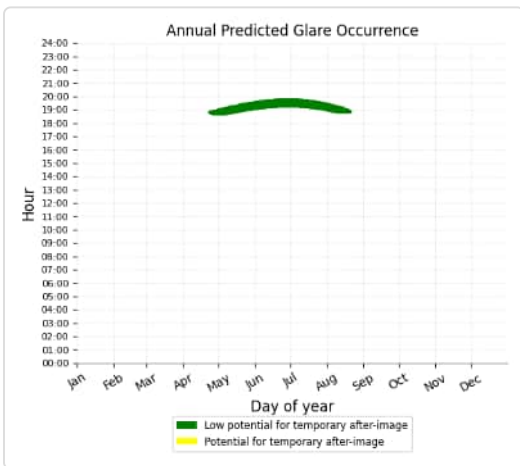
- 2,386 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

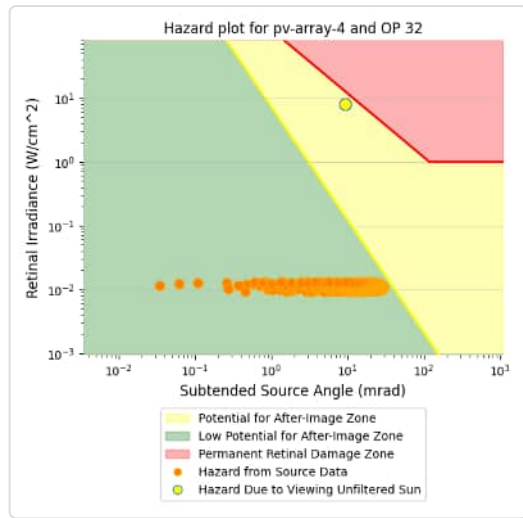
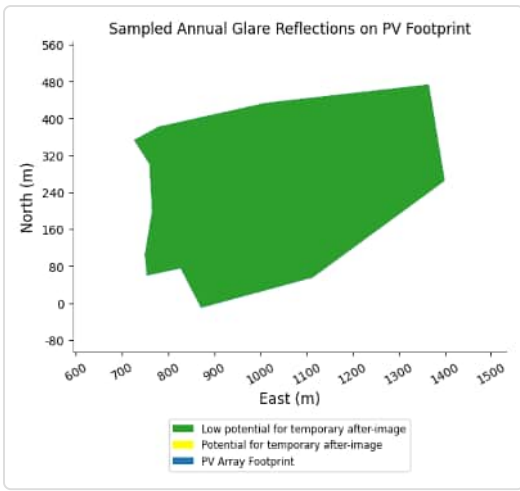


PV array 4 - OP Receptor (OP 32)

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

- 2,573 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

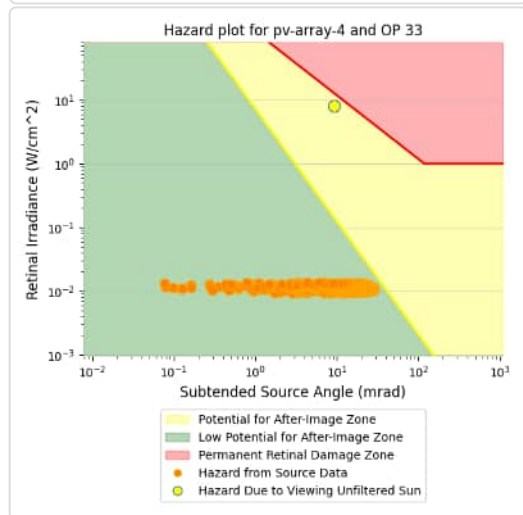
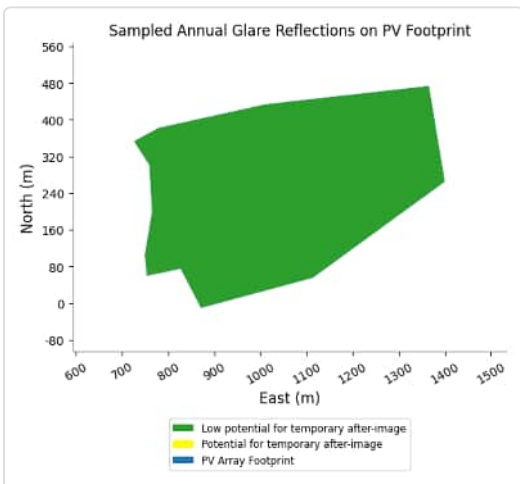
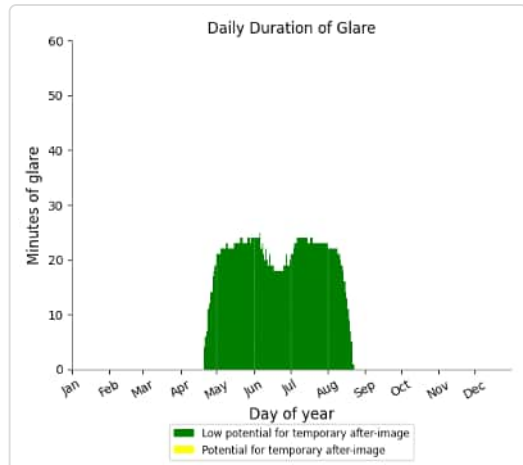
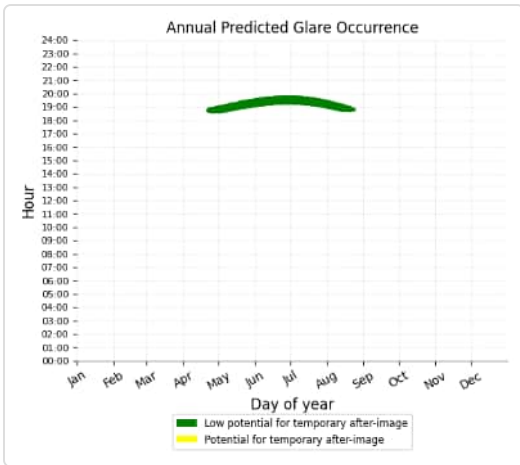




PV array 4 - OP Receptor (OP 33)

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

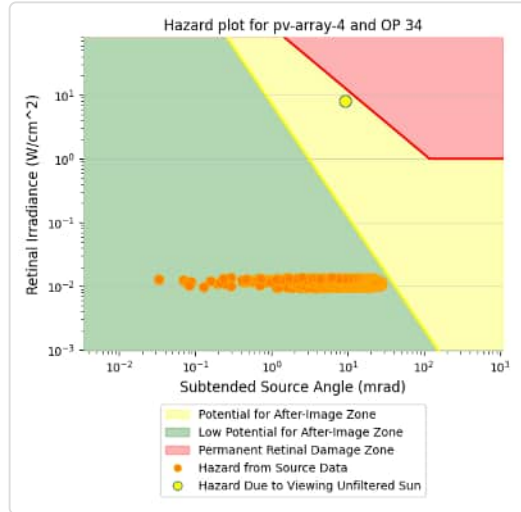
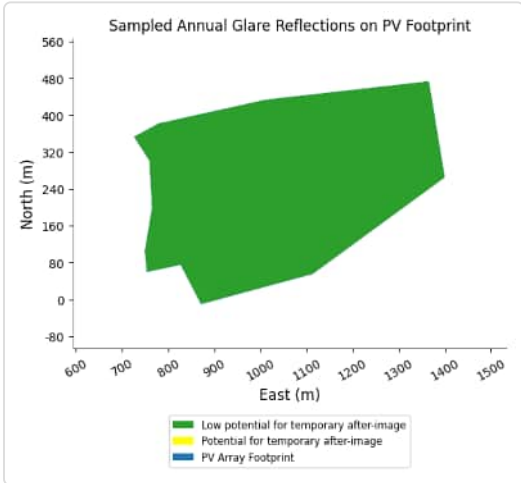
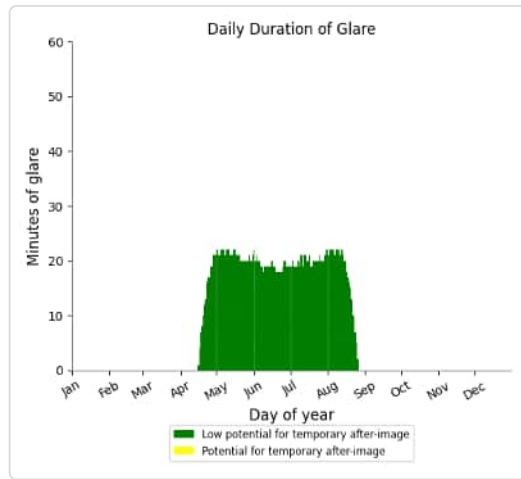
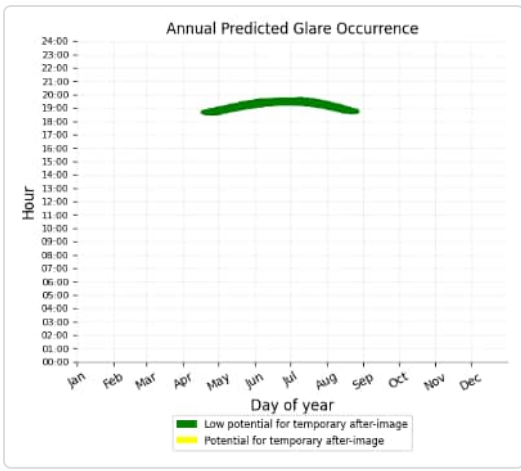
- 2,526 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 34)

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

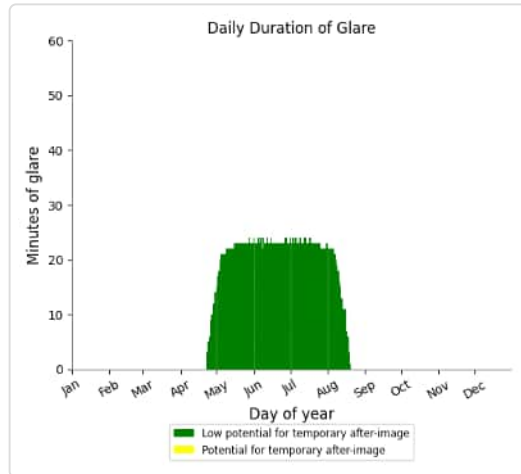
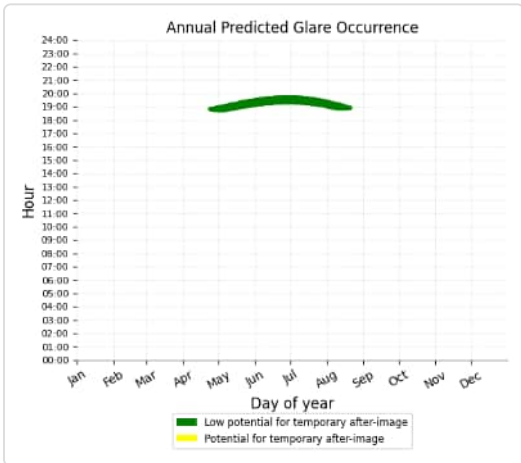
- 2,508 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

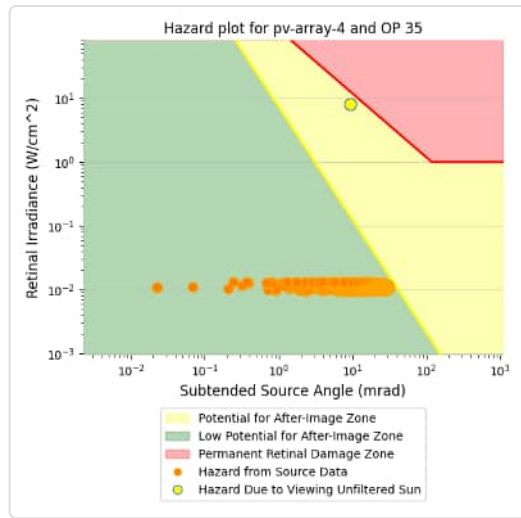
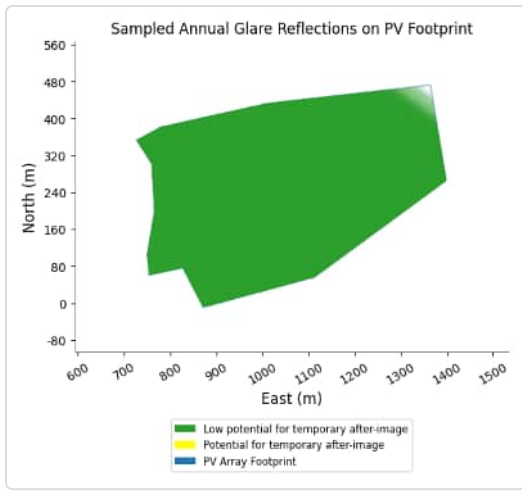


PV array 4 - OP Receptor (OP 35)

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

- 2,469 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

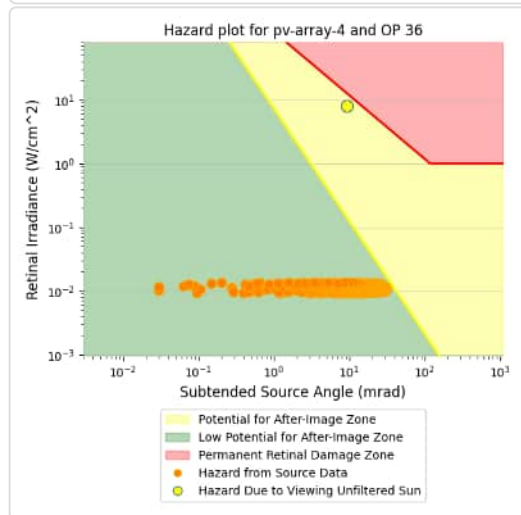
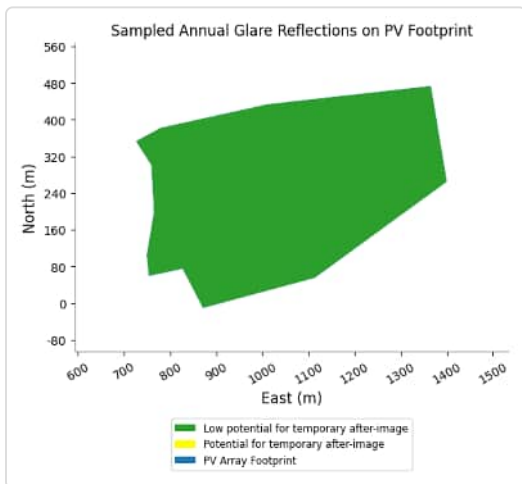
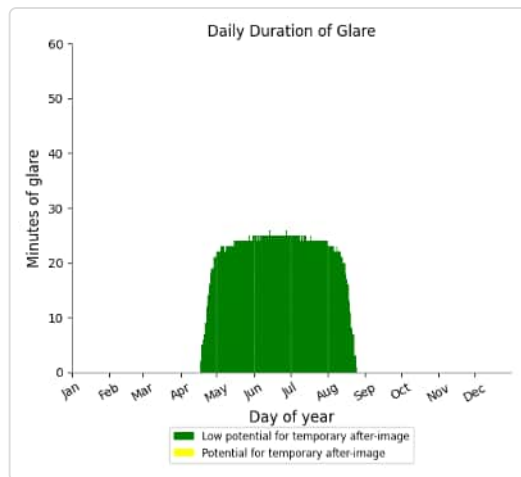
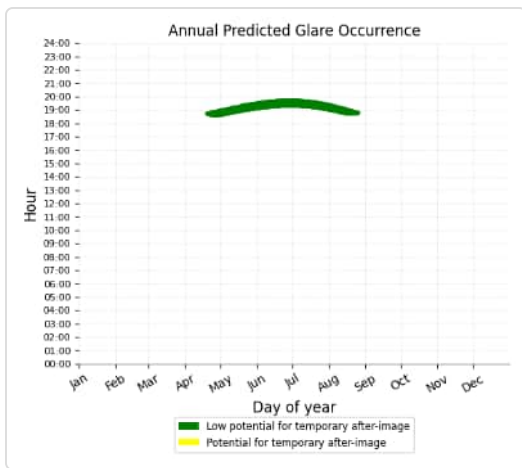




PV array 4 - OP Receptor (OP 36)

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

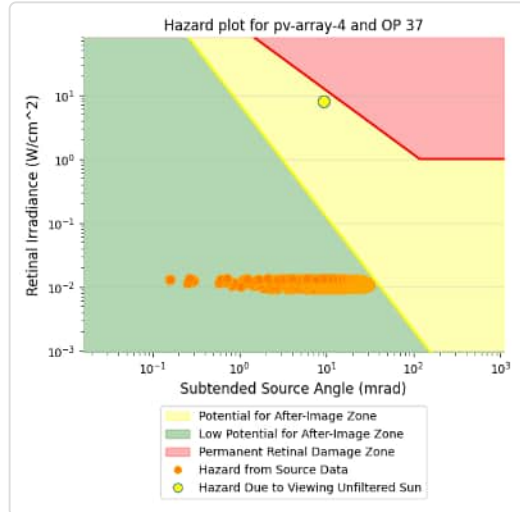
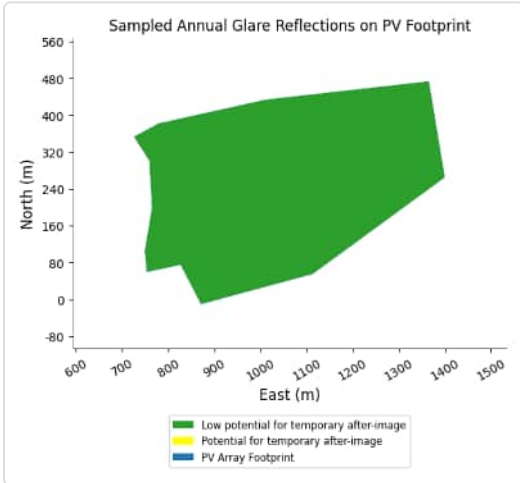
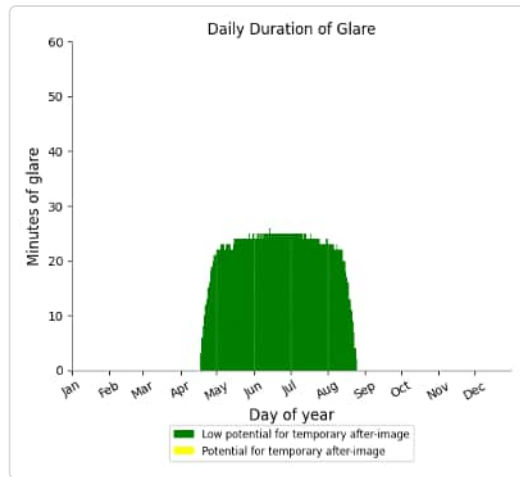
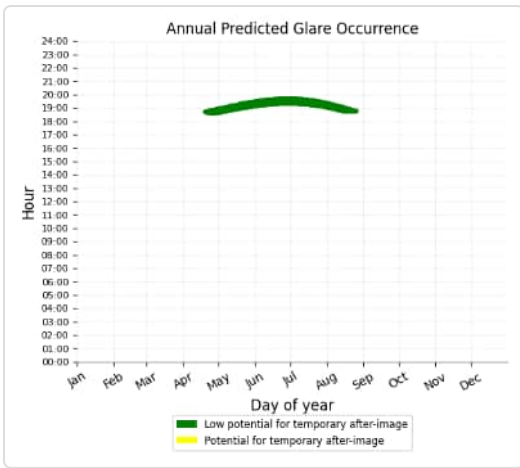
- 2,836 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 37)

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

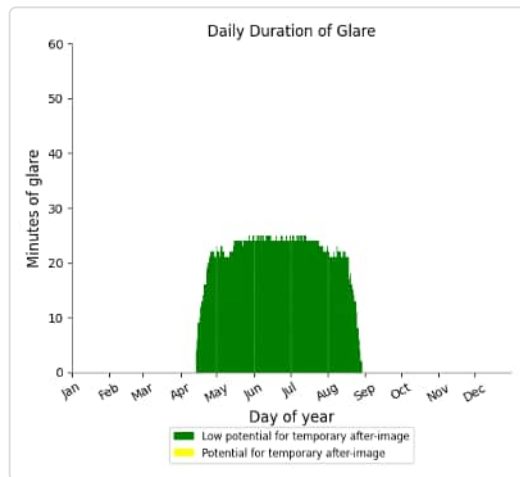
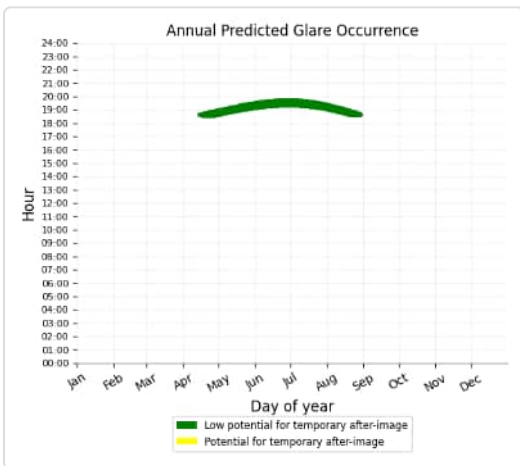
- 2,850 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

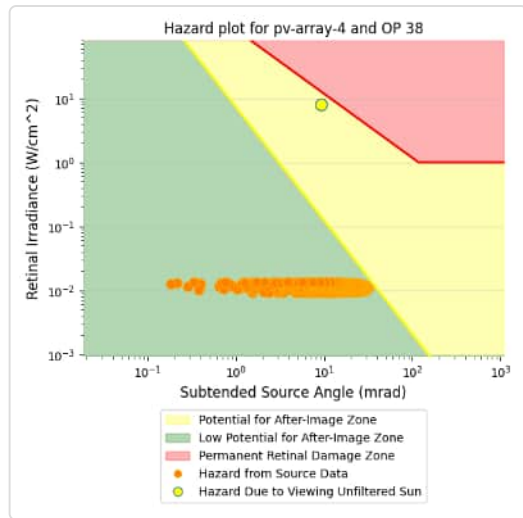
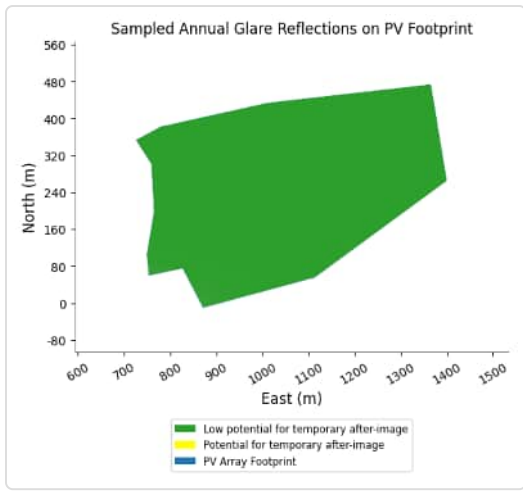


PV array 4 - OP Receptor (OP 38)

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

- 2,971 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

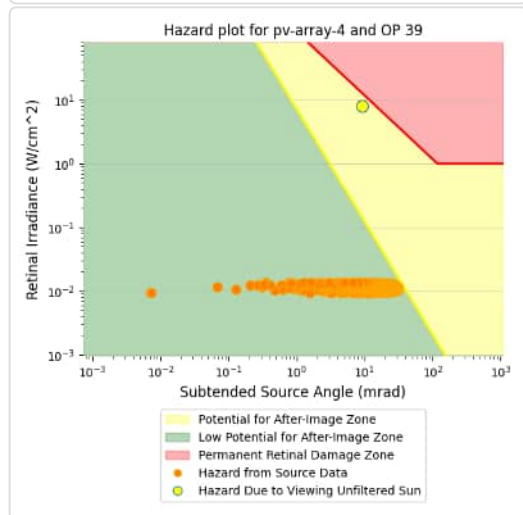
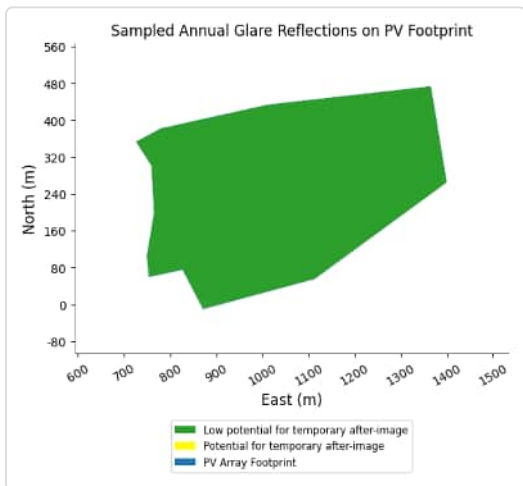
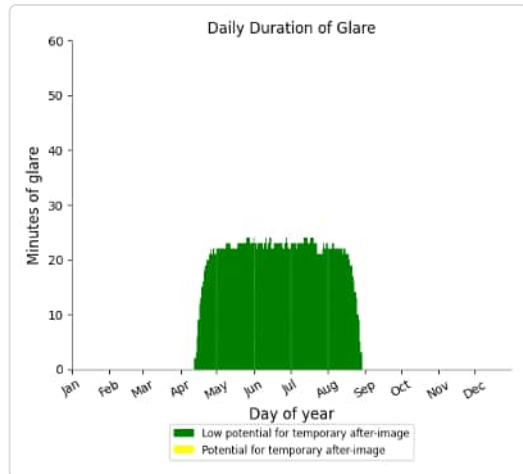
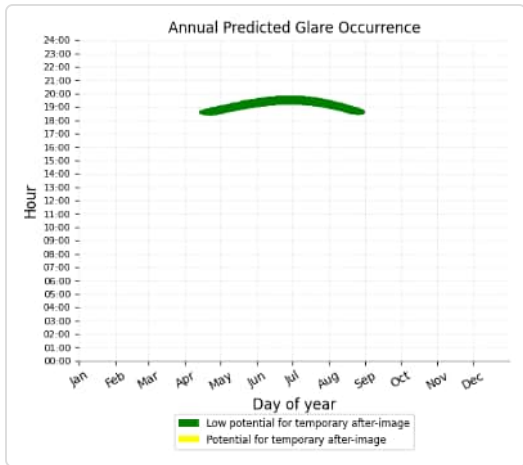




PV array 4 - OP Receptor (OP 39)

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

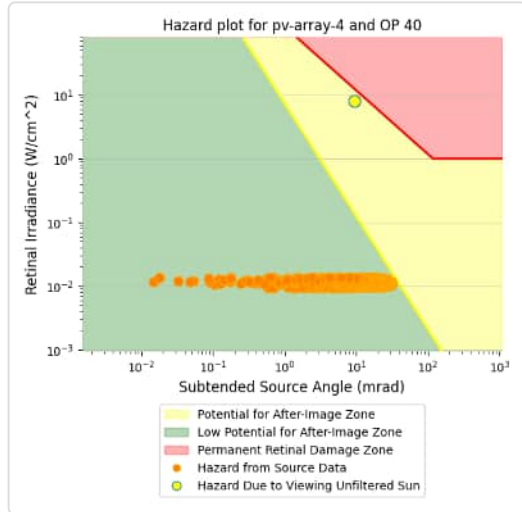
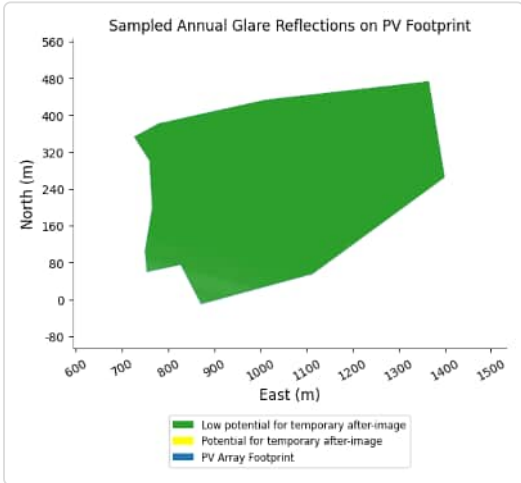
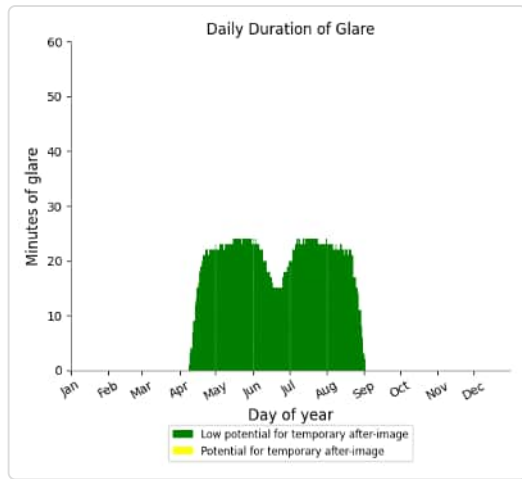
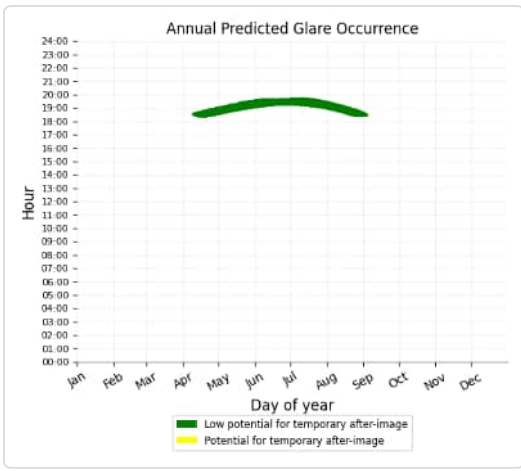
- 2,918 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 40)

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

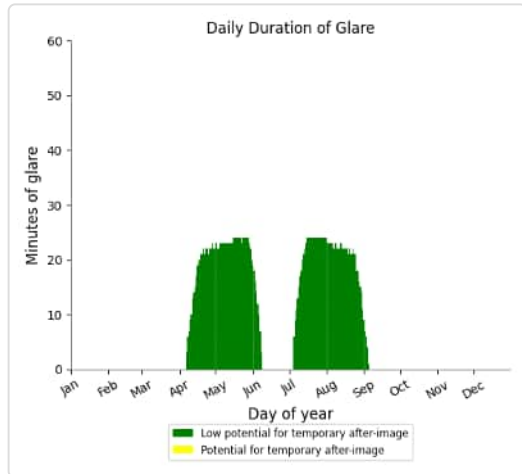
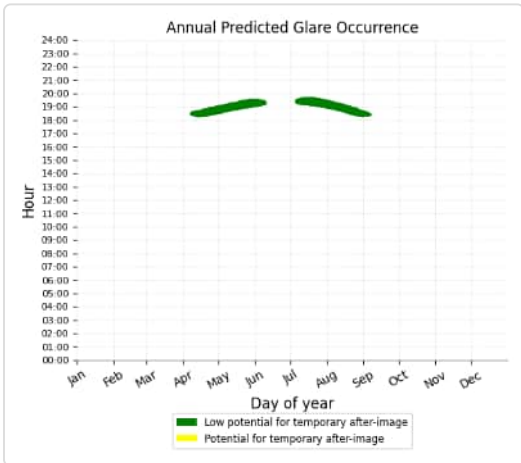
- 2,970 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

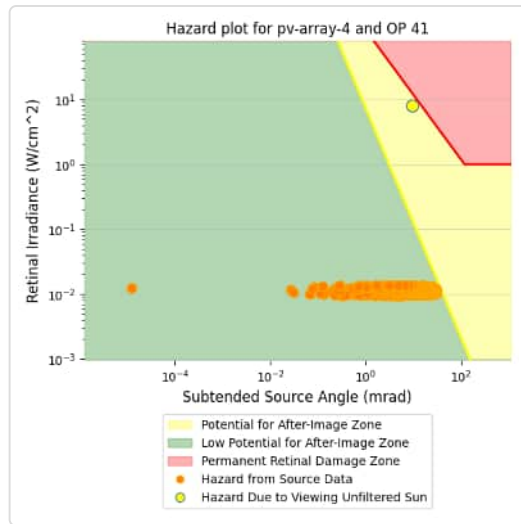
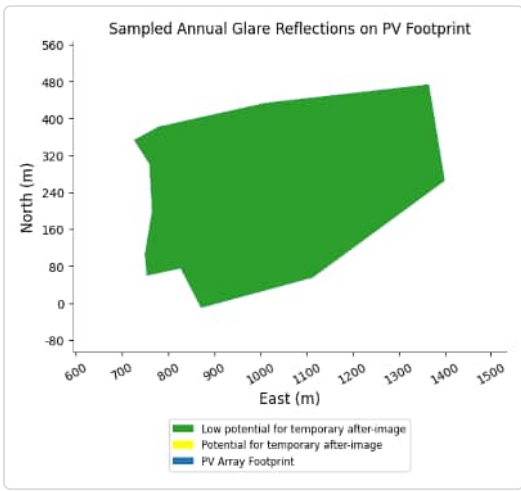


PV array 4 - OP Receptor (OP 41)

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

- 2,465 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

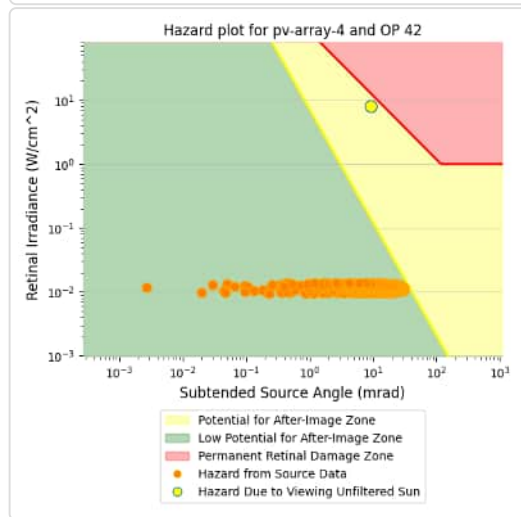
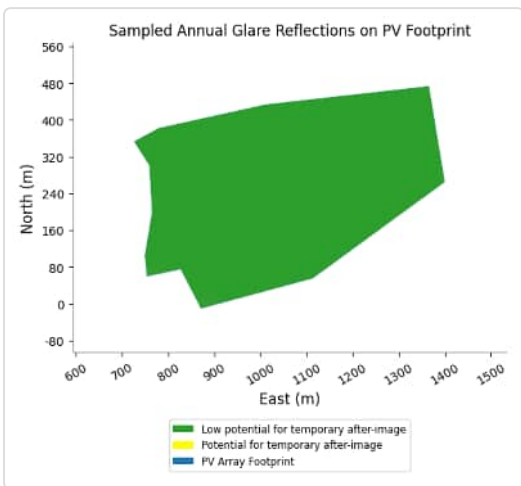
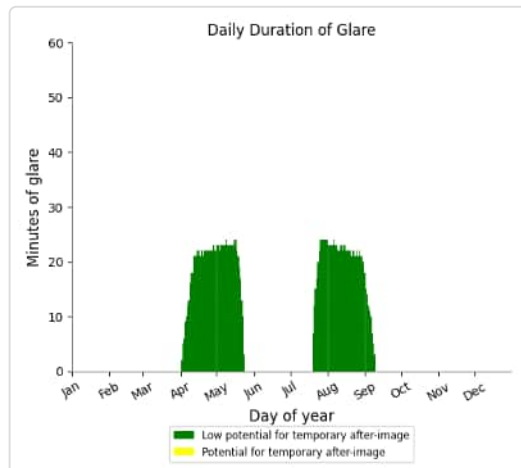
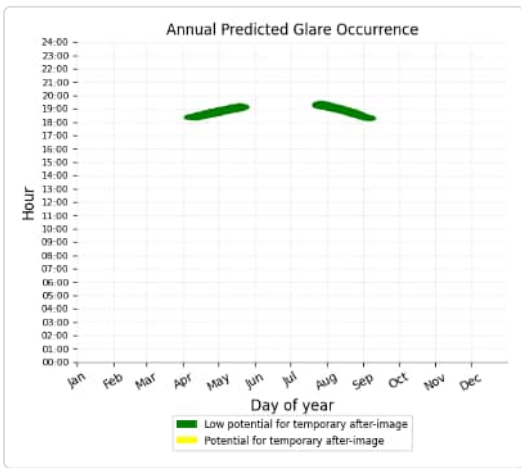




PV array 4 - OP Receptor (OP 42)

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

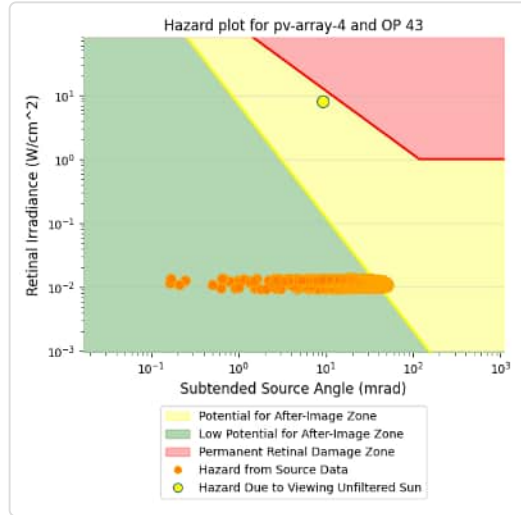
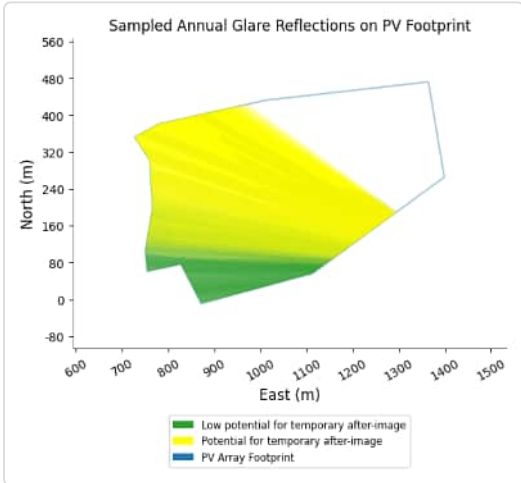
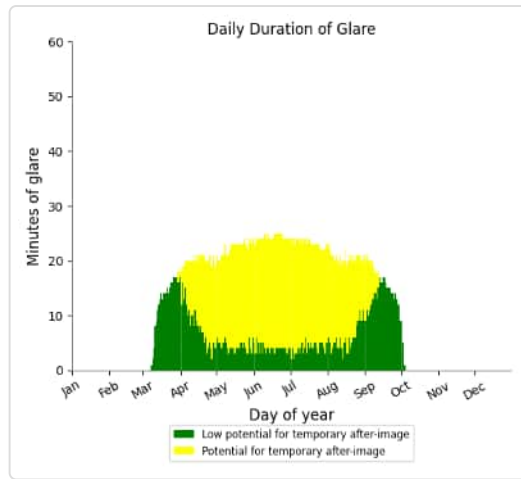
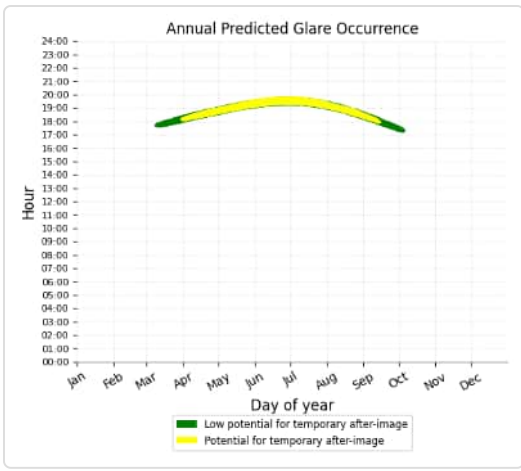
- 2,040 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 43)

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

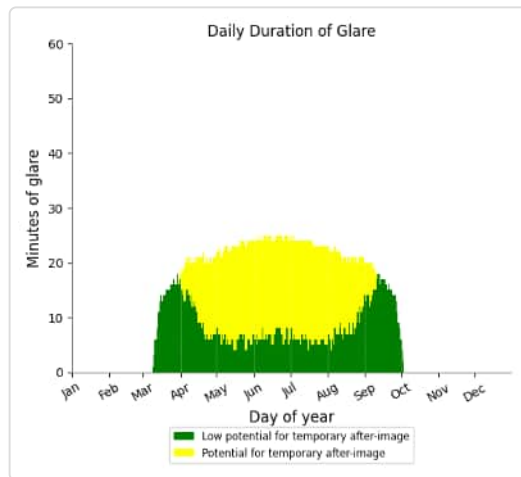
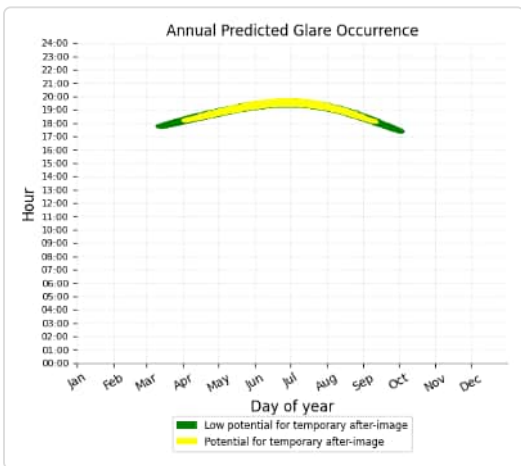
- 1,536 minutes of "green" glare with low potential to cause temporary after-image.
- 2,671 minutes of "yellow" glare with potential to cause temporary after-image.

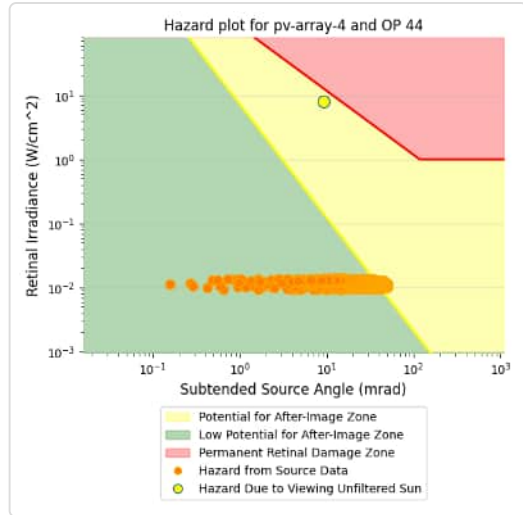
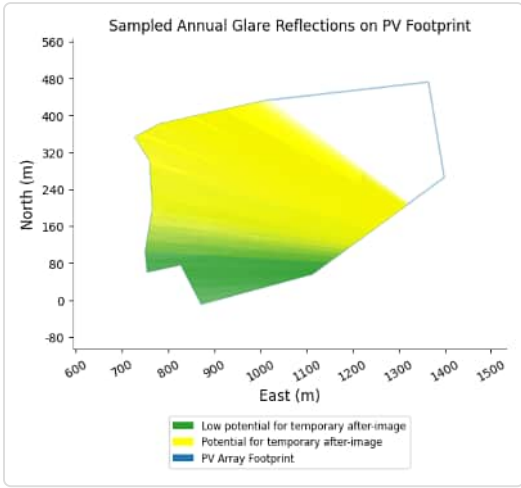


PV array 4 - OP Receptor (OP 44)

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

- 1,858 minutes of "green" glare with low potential to cause temporary after-image.
- 2,400 minutes of "yellow" glare with potential to cause temporary after-image.

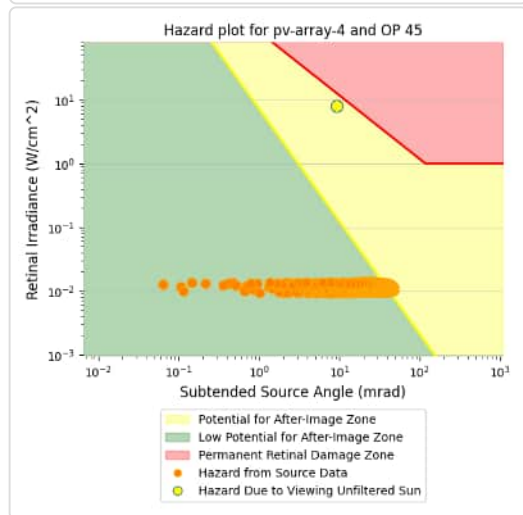
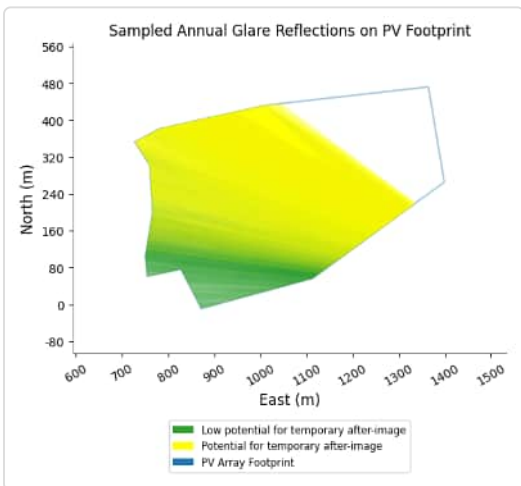
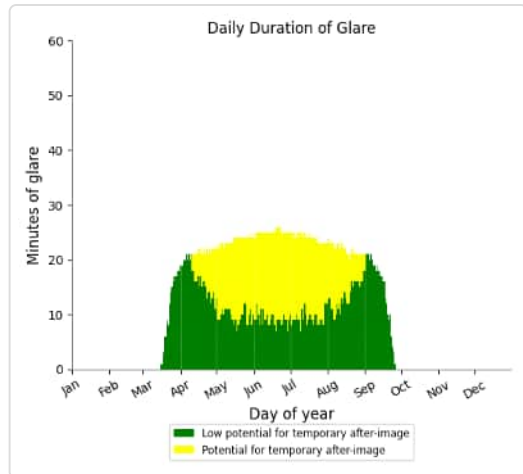
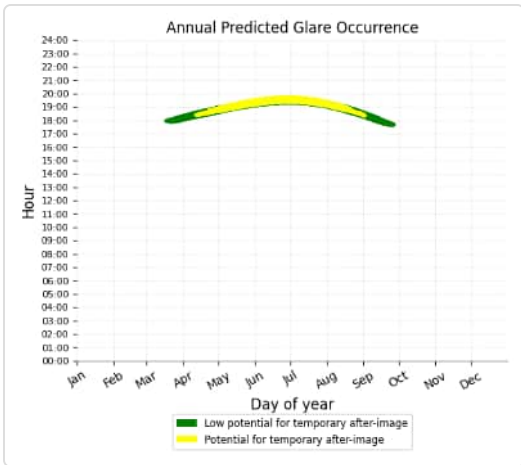




PV array 4 - OP Receptor (OP 45)

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

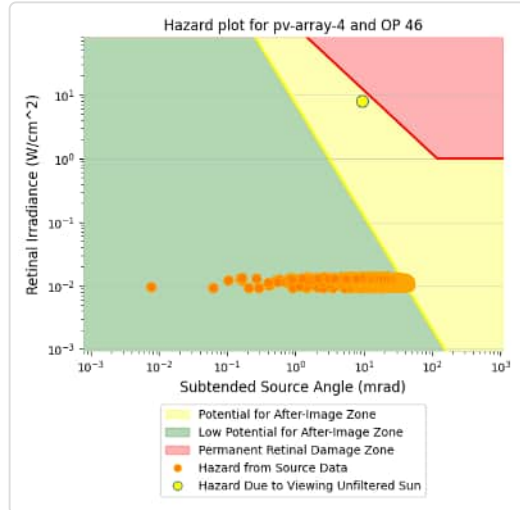
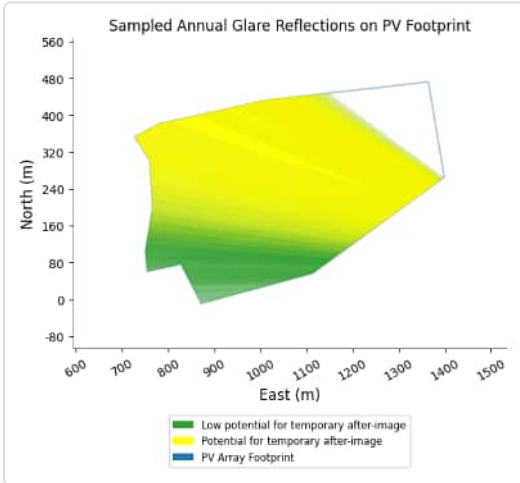
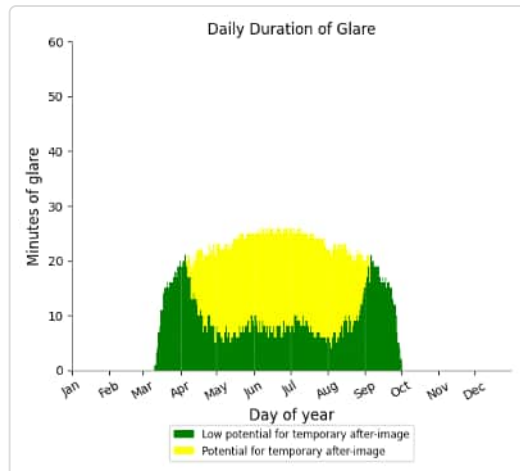
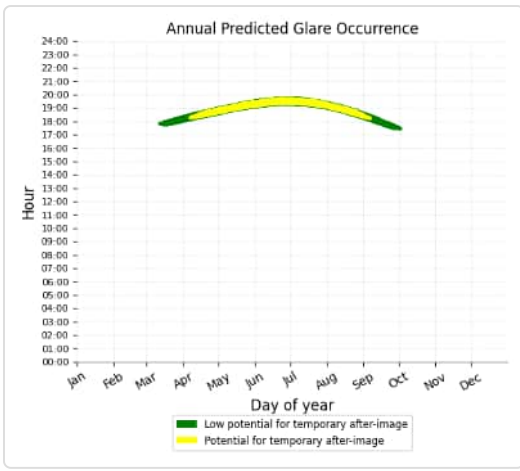
- 2,337 minutes of "green" glare with low potential to cause temporary after-image.
- 1,766 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 46)

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

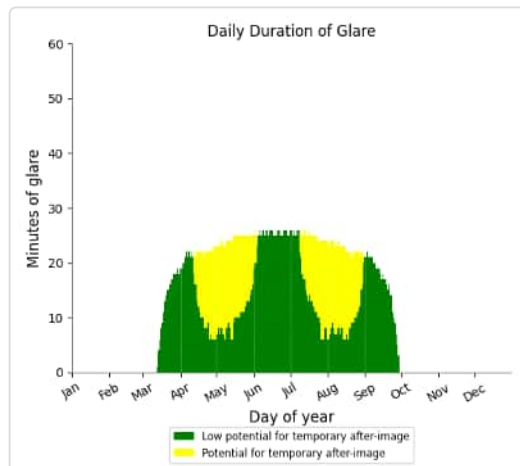
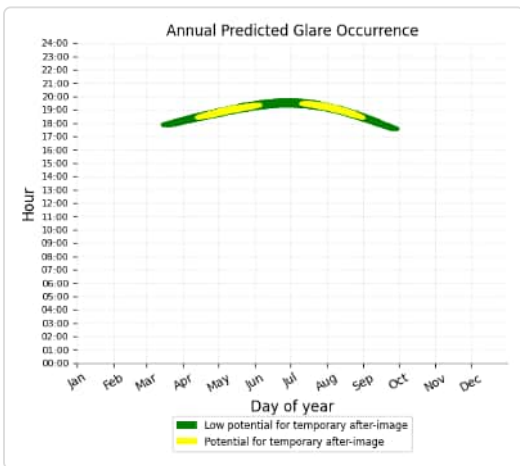
- 2,045 minutes of "green" glare with low potential to cause temporary after-image.
- 2,278 minutes of "yellow" glare with potential to cause temporary after-image.

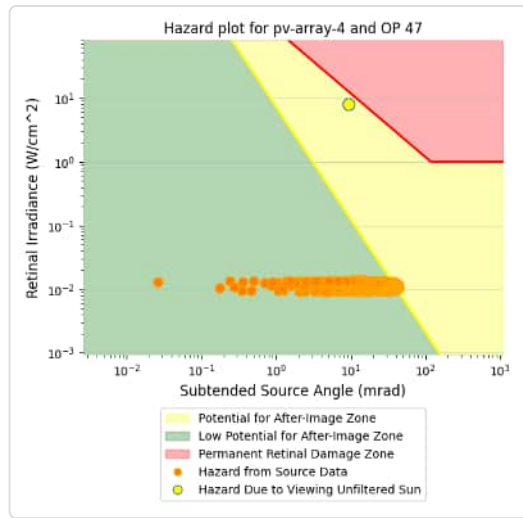
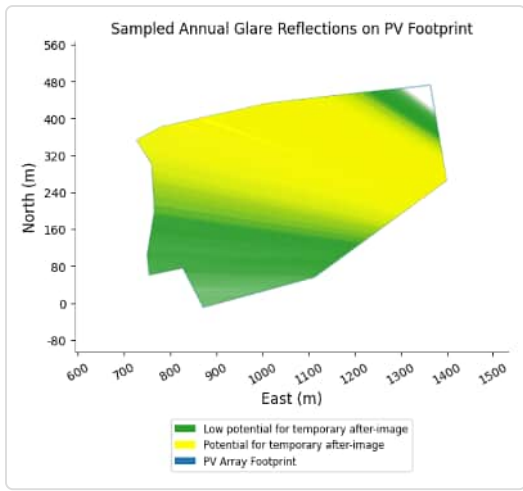


PV array 4 - OP Receptor (OP 47)

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

- 2,952 minutes of "green" glare with low potential to cause temporary after-image.
- 1,412 minutes of "yellow" glare with potential to cause temporary after-image.

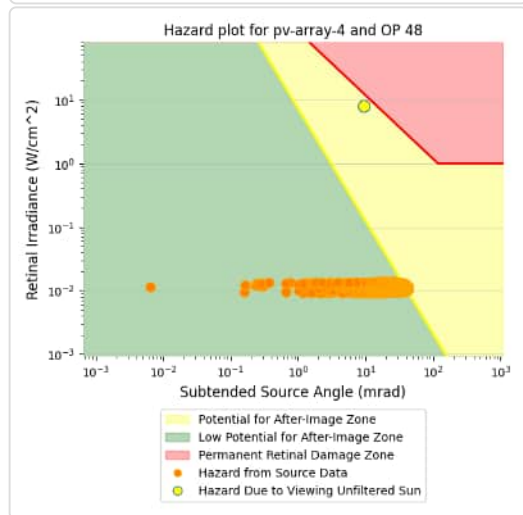
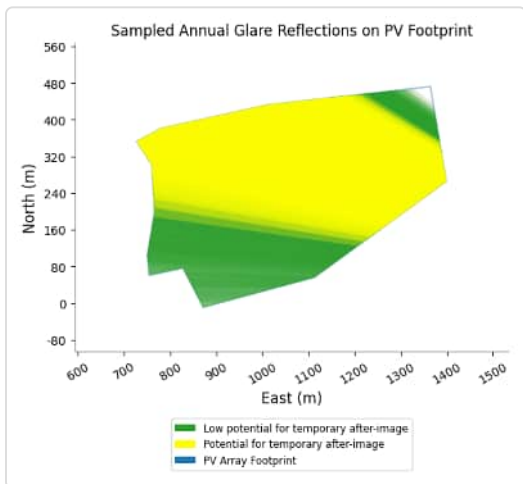
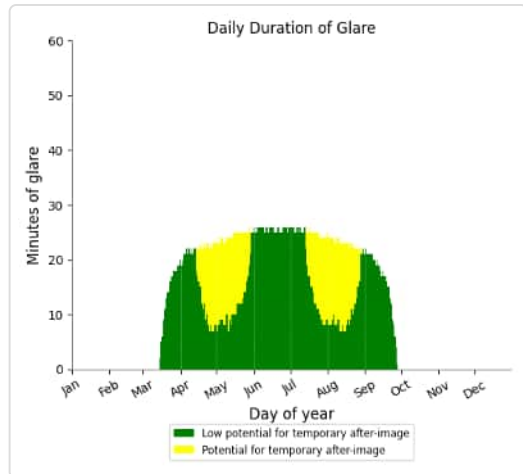
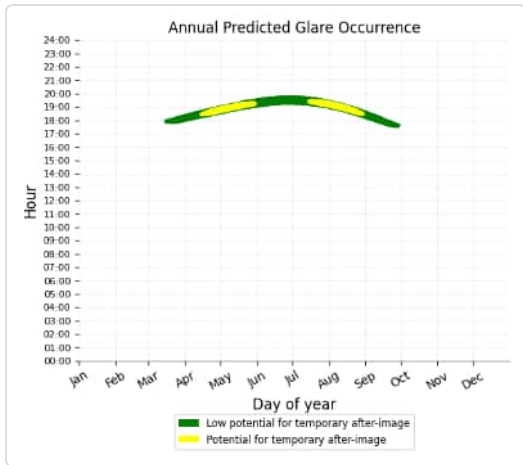




PV array 4 - OP Receptor (OP 48)

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

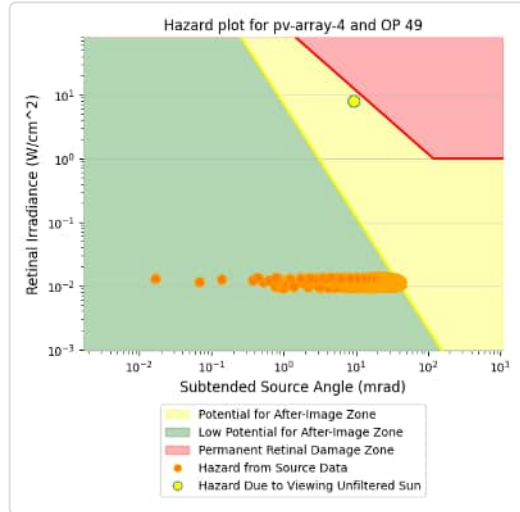
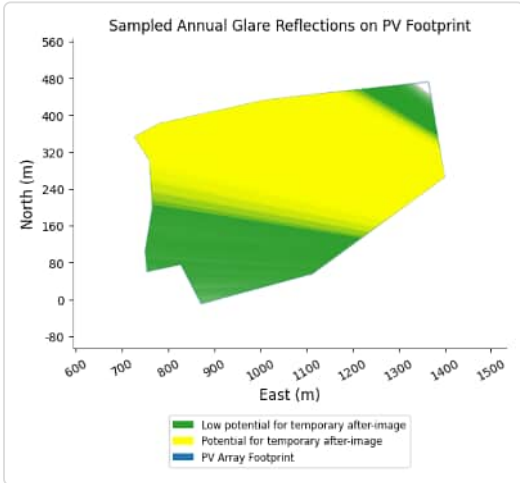
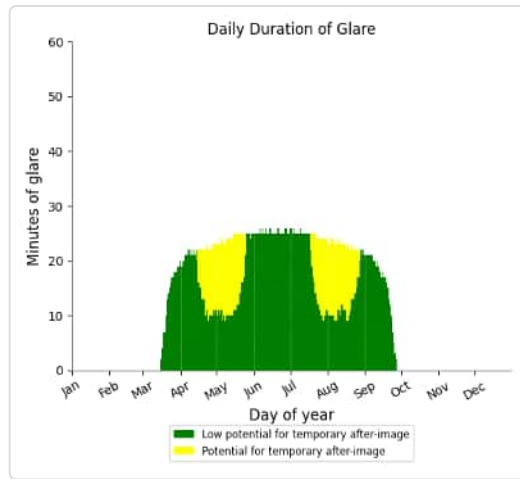
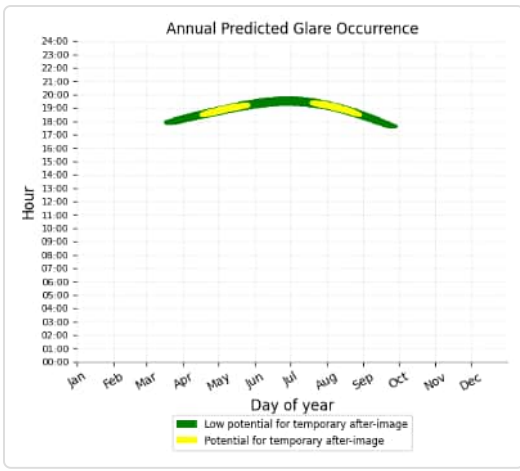
- 3,178 minutes of "green" glare with low potential to cause temporary after-image.
- 1,175 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 49)

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

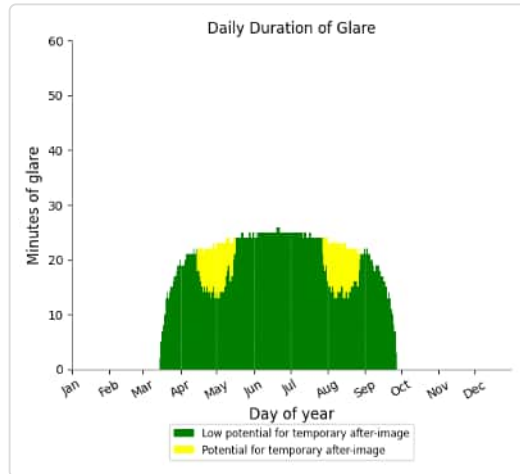
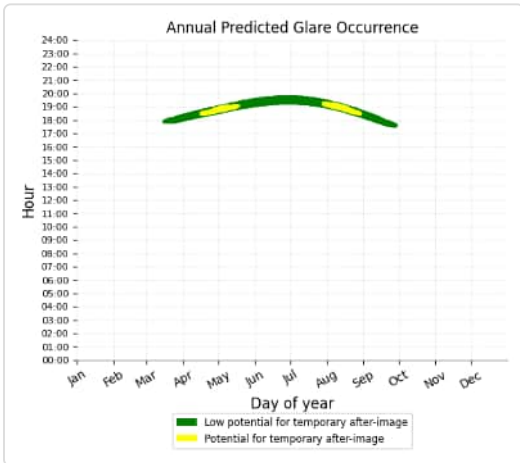
- 3,344 minutes of "green" glare with low potential to cause temporary after-image.
- 936 minutes of "yellow" glare with potential to cause temporary after-image.

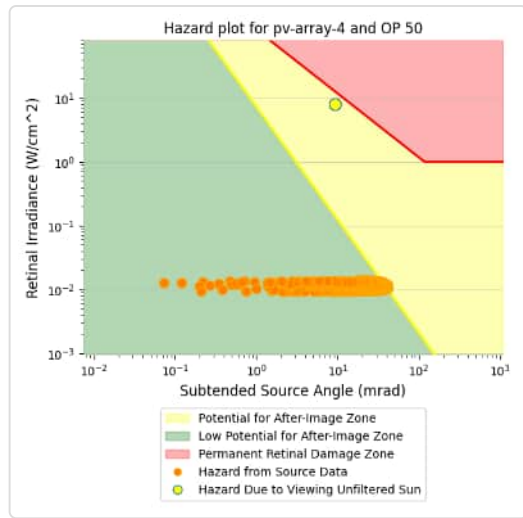
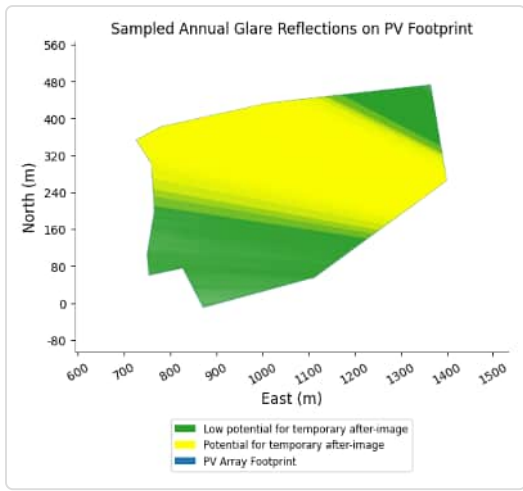


PV array 4 - OP Receptor (OP 50)

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

- 3,770 minutes of "green" glare with low potential to cause temporary after-image.
- 470 minutes of "yellow" glare with potential to cause temporary after-image.

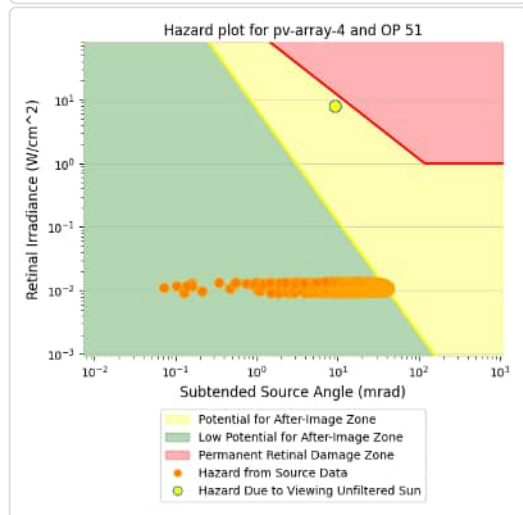
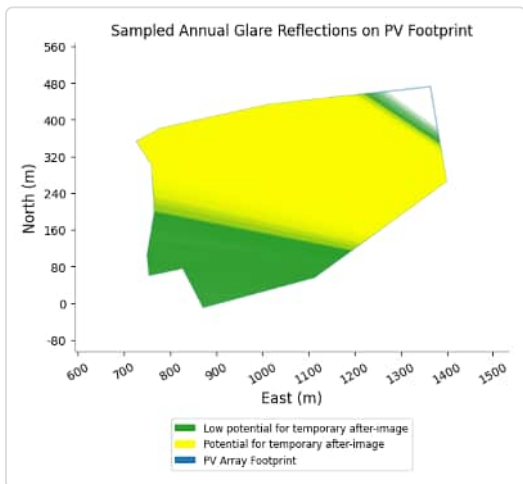
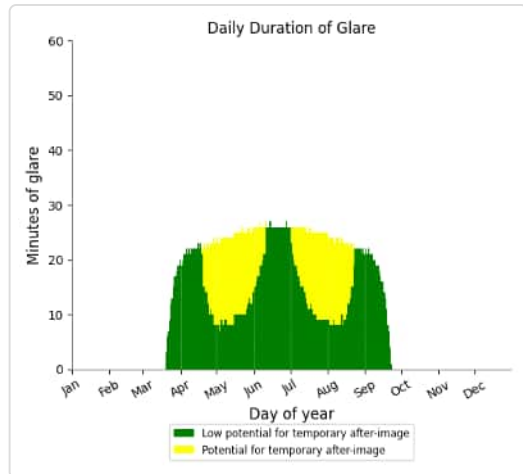
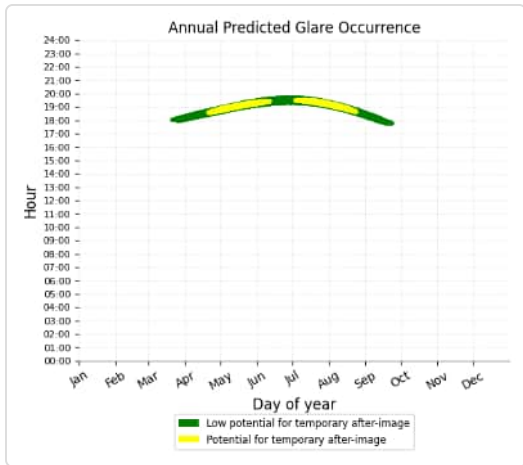




PV array 4 - OP Receptor (OP 51)

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

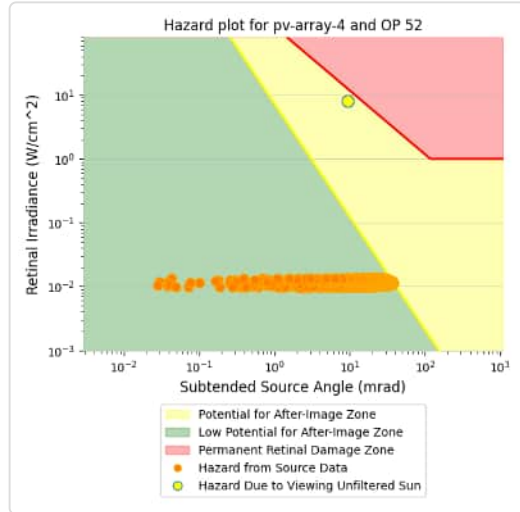
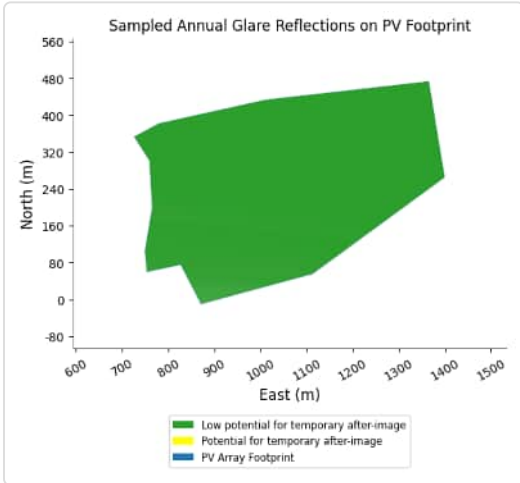
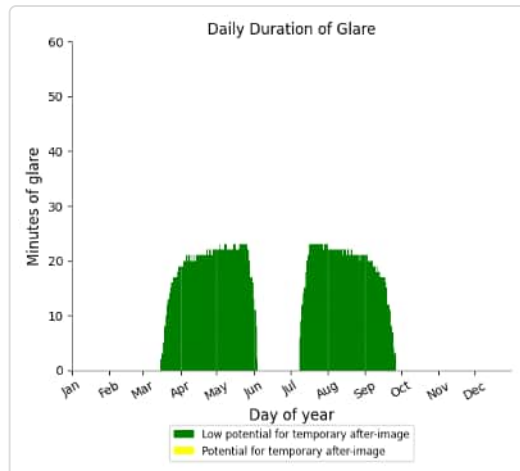
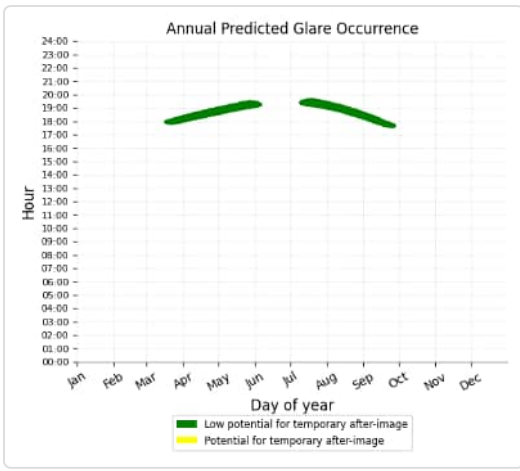
- 2,884 minutes of "green" glare with low potential to cause temporary after-image.
- 1,353 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 52)

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

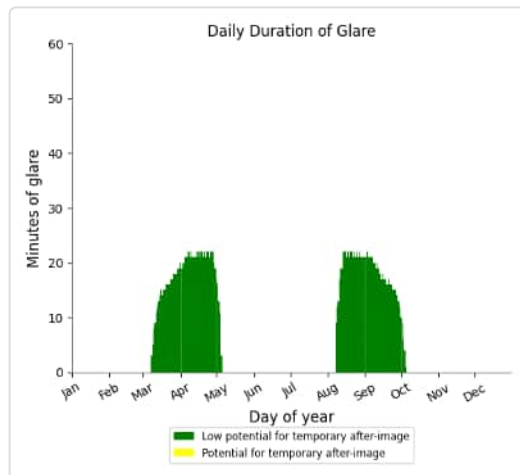
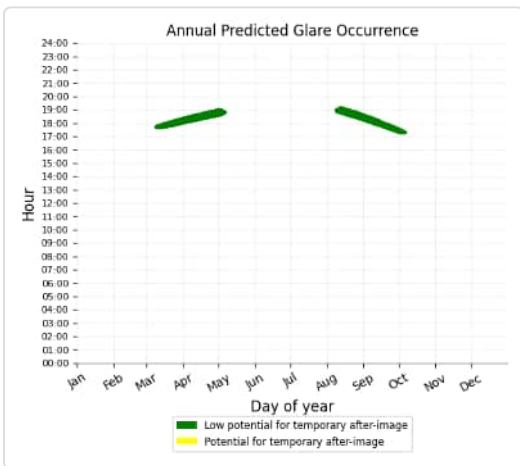
- 3,074 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

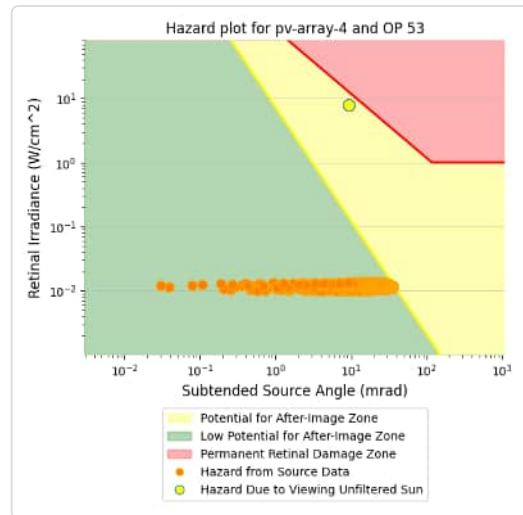
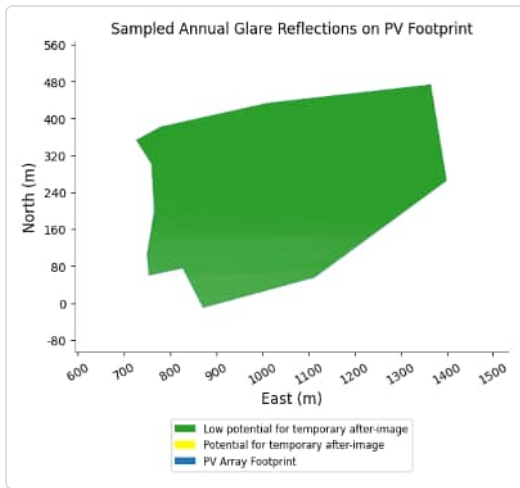


PV array 4 - OP Receptor (OP 53)

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

- 2,072 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.





Assumptions

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

ANNEX E: RESIDENTIAL RECEPTOR GLARE RESULTS 45 DEGREES (55 – 107)





Gate Burton Solar Farm

Gate Burton Residential 45 Deg Receptors 55 - 107

Created Jan. 16, 2023
Updated Jan. 16, 2023
Time-step 1 minute
Timezone offset UTC0
Site ID 82487.13697

Project type Advanced
Project status: active
Category 100 MW to 1 GW

Misc. Analysis Settings

DNI: **varies (1,000.0 W/m² peak)**
Ocular transmission coefficient: **0.5**
Pupil diameter: **0.002 m**
Eye focal length: **0.017 m**
Sun subtended angle: **9.3 mrad**

PV Analysis Methodology: **Version 2**
Enhanced subtended angle calculation: **On**

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

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced
	deg	deg	min	min	kWh
PV array 1	45.0	180.0	73,058	4,068	-
PV array 2	45.0	180.0	57,460	37,054	-
PV array 3	45.0	180.0	58,976	0	-
PV array 4	45.0	180.0	81,576	8,646	-

Component Data

PV Array(s)

Total PV footprint area: 5,134,406 m²

Name: PV array 1
Footprint area: 1,567,026 m²
Axis tracking: Fixed (no rotation)
Tilt: 45.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.360164	-0.740929	25.37	3.50	28.87
2	53.359089	-0.745392	27.25	3.50	30.75
3	53.355324	-0.742796	26.83	3.50	30.33
4	53.356643	-0.738847	24.52	3.50	28.02
5	53.356476	-0.738161	24.99	3.50	28.49
6	53.356041	-0.737925	25.74	3.50	29.24
7	53.352452	-0.737796	29.36	3.50	32.86
8	53.348955	-0.739341	30.93	3.50	34.43
9	53.349019	-0.740242	32.51	3.50	36.01
10	53.349839	-0.742474	34.67	3.50	38.17
11	53.350210	-0.745006	33.13	3.50	36.63
12	53.349032	-0.744319	34.83	3.50	38.33
13	53.346547	-0.744062	28.42	3.50	31.92
14	53.346444	-0.745285	28.76	3.50	32.26
15	53.344574	-0.744705	24.66	3.50	28.16
16	53.344433	-0.745156	24.58	3.50	28.08
17	53.340962	-0.743160	25.60	3.50	29.10
18	53.340231	-0.741358	27.43	3.50	30.93
19	53.340833	-0.738289	29.00	3.50	32.50
20	53.339719	-0.737410	30.35	3.50	33.85
21	53.340372	-0.735157	30.09	3.50	33.59
22	53.340193	-0.731165	24.29	3.50	27.79
23	53.338566	-0.730479	22.28	3.50	25.78
24	53.337464	-0.730715	21.19	3.50	24.69
25	53.336939	-0.735393	27.65	3.50	31.15
26	53.335094	-0.734727	26.17	3.50	29.67
27	53.334786	-0.736530	27.80	3.50	31.30
28	53.333979	-0.736830	27.30	3.50	30.80
29	53.333466	-0.739577	29.91	3.50	33.41
30	53.332838	-0.739427	29.58	3.50	33.08
31	53.332633	-0.738890	29.27	3.50	32.77
32	53.332877	-0.733483	26.50	3.50	30.00
33	53.333992	-0.733826	26.54	3.50	30.04
34	53.334222	-0.731187	22.21	3.50	25.71
35	53.332928	-0.730822	22.96	3.50	26.46
36	53.333056	-0.728054	16.50	3.50	20.00
37	53.333082	-0.725822	16.02	3.50	19.52
38	53.333633	-0.725243	15.34	3.50	18.84
39	53.333223	-0.724492	16.74	3.50	20.24
40	53.332800	-0.724127	18.37	3.50	21.87
41	53.333210	-0.722454	17.65	3.50	21.15
42	53.334427	-0.722947	13.21	3.50	16.71
43	53.334286	-0.724556	13.62	3.50	17.12
44	53.336195	-0.725286	12.47	3.50	15.97
45	53.337118	-0.724814	13.00	3.50	16.50
46	53.340962	-0.727282	20.21	3.50	23.71
47	53.342832	-0.728440	22.87	3.50	26.37
48	53.342435	-0.730994	25.49	3.50	28.99
49	53.341026	-0.730608	23.57	3.50	27.07
50	53.340962	-0.731766	25.64	3.50	29.14
51	53.341256	-0.732217	26.37	3.50	29.87
52	53.344062	-0.733483	20.38	3.50	23.88
53	53.344728	-0.729663	20.11	3.50	23.61
54	53.345432	-0.730114	21.19	3.50	24.69
55	53.345343	-0.731680	22.81	3.50	26.31
56	53.344894	-0.734255	24.30	3.50	27.80
57	53.345035	-0.735071	24.65	3.50	28.15
58	53.343767	-0.734942	21.16	3.50	24.66
59	53.343767	-0.735672	21.70	3.50	25.20
60	53.344933	-0.736208	23.85	3.50	27.35
61	53.344958	-0.737968	22.48	3.50	25.98
62	53.345394	-0.738096	22.92	3.50	26.42
63	53.345471	-0.736873	23.97	3.50	27.47
64	53.346534	-0.737195	22.34	3.50	25.84

65	53.346995	-0.736594	22.46	3.50	25.96
66	53.347418	-0.736616	23.03	3.50	26.53
67	53.347200	-0.731058	24.73	3.50	28.23
68	53.353952	-0.735543	22.79	3.50	26.29
69	53.354196	-0.736337	22.12	3.50	25.62
70	53.355233	-0.736337	22.00	3.50	25.50
71	53.356882	-0.737453	23.41	3.50	26.91
72	53.356677	-0.738225	24.41	3.50	27.91
73	53.356792	-0.738740	24.08	3.50	27.58

Name: PV array 2
Footprint area: 3,187,939 m²
Axis tracking: Fixed (no rotation)
Tilt: 45.0 deg
Orientation: 180.0 deg
Rated power: -
Panel material: Light textured glass with AR coating
Vary reflectivity with sun position? Yes
Correlate slope error with surface type? Yes
Slope error: 9.16 mrad



Vertex	Latitude	Longitude	Ground elevation	Height above ground	Total elevation
	deg	deg	m	m	m
1	53.353754	-0.734662	23.97	3.50	27.47
2	53.338935	-0.725169	13.57	3.50	17.07
3	53.338615	-0.723559	12.00	3.50	15.50
4	53.339140	-0.723624	12.00	3.50	15.50
5	53.339294	-0.722401	12.00	3.50	15.50
6	53.338666	-0.722207	11.79	3.50	15.29
7	53.338269	-0.722744	12.00	3.50	15.50
8	53.337500	-0.722165	11.72	3.50	15.22
9	53.337064	-0.723066	12.31	3.50	15.81
10	53.336155	-0.723452	13.00	3.50	16.50
11	53.333515	-0.721671	15.87	3.50	19.37
12	53.334143	-0.718045	11.00	3.50	14.50
13	53.334745	-0.718538	11.00	3.50	14.50
14	53.334950	-0.718152	11.00	3.50	14.50
15	53.335783	-0.717959	10.14	3.50	13.64
16	53.336616	-0.718345	9.24	3.50	12.74
17	53.336975	-0.718216	9.59	3.50	13.09
18	53.337667	-0.718688	10.61	3.50	14.11
19	53.337897	-0.717723	10.95	3.50	14.45
20	53.337859	-0.716392	9.89	3.50	13.39
21	53.337269	-0.715341	9.24	3.50	12.74
22	53.336116	-0.715856	9.81	3.50	13.31
23	53.334809	-0.714955	10.90	3.50	14.40
24	53.335732	-0.710949	11.21	3.50	14.71
25	53.336244	-0.710563	11.08	3.50	14.58
26	53.336552	-0.709983	11.04	3.50	14.54
27	53.337564	-0.710155	12.22	3.50	15.72
28	53.337603	-0.709511	12.51	3.50	16.01
29	53.338410	-0.709061	13.25	3.50	16.75
30	53.339153	-0.709211	13.80	3.50	17.30
31	53.339178	-0.705520	14.81	3.50	18.31
32	53.341318	-0.704426	14.16	3.50	17.66
33	53.341254	-0.703460	15.00	3.50	18.50
34	53.338320	-0.701636	14.00	3.50	17.50
35	53.337731	-0.702967	14.70	3.50	18.20
36	53.337052	-0.702516	14.29	3.50	17.79
37	53.337039	-0.698825	16.56	3.50	20.06
38	53.337128	-0.696336	19.06	3.50	22.56
39	53.336962	-0.695049	20.32	3.50	23.82
40	53.337295	-0.693182	19.41	3.50	22.91
41	53.339883	-0.694727	14.00	3.50	17.50
42	53.341087	-0.692023	13.00	3.50	16.50
43	53.341664	-0.692109	13.00	3.50	16.50
44	53.344277	-0.696465	12.00	3.50	15.50
45	53.348287	-0.697817	13.08	3.50	16.58
46	53.349350	-0.697602	14.02	3.50	17.52
47	53.349516	-0.698224	14.00	3.50	17.50
48	53.349427	-0.702924	17.52	3.50	21.02
49	53.348914	-0.705091	17.98	3.50	21.48
50	53.349222	-0.705305	18.00	3.50	21.50
51	53.349183	-0.706464	18.00	3.50	21.50
52	53.346980	-0.706421	17.00	3.50	20.50
53	53.346378	-0.713138	13.88	3.50	17.38
54	53.347505	-0.713910	14.28	3.50	17.78
55	53.347505	-0.714983	14.25	3.50	17.75
56	53.349030	-0.715498	16.00	3.50	19.50
57	53.349004	-0.720004	22.46	3.50	25.96
58	53.350848	-0.719789	21.00	3.50	24.50
59	53.352872	-0.719747	19.04	3.50	22.54
60	53.353564	-0.719918	18.54	3.50	22.04
61	53.352898	-0.721678	18.21	3.50	21.71
62	53.352782	-0.724574	17.76	3.50	21.26
63	53.353359	-0.728244	19.54	3.50	23.04
64	53.353961	-0.728887	19.19	3.50	22.69

65	53.354166	-0.729746	19.36	3.50	22.86
66	53.354179	-0.734016	22.69	3.50	26.19

Name: PV array 3

Footprint area: 162,584 m²

Axis tracking: Fixed (no rotation)

Tilt: 45.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.355703	-0.727643	18.87	3.50	22.37
2	53.355177	-0.725669	17.24	3.50	20.74
3	53.355088	-0.721935	18.98	3.50	22.48
4	53.355101	-0.720734	21.71	3.50	25.21
5	53.356125	-0.721034	21.89	3.50	25.39
6	53.357483	-0.721120	19.10	3.50	22.60
7	53.357534	-0.722836	18.29	3.50	21.79
8	53.359083	-0.721849	18.14	3.50	21.64
9	53.359544	-0.722107	16.73	3.50	20.23
10	53.359762	-0.721485	16.64	3.50	20.14
11	53.359583	-0.720734	17.67	3.50	21.17
12	53.360402	-0.719875	17.29	3.50	20.79
13	53.360313	-0.723673	16.00	3.50	19.50
14	53.360044	-0.724832	16.19	3.50	19.69
15	53.357585	-0.725175	17.45	3.50	20.95

Name: PV array 4

Footprint area: 216,857 m²

Axis tracking: Fixed (no rotation)

Tilt: 45.0 deg

Orientation: 180.0 deg

Rated power: -

Panel material: Light textured glass with AR coating

Vary reflectivity with sun position? Yes

Correlate slope error with surface type? Yes

Slope error: 9.16 mrad



Vertex	Latitude deg	Longitude deg	Ground elevation m	Height above ground m	Total elevation m
1	53.360082	-0.727836	17.00	3.50	20.50
2	53.360851	-0.728501	17.37	3.50	20.87
3	53.360710	-0.729596	18.17	3.50	21.67
4	53.361107	-0.729660	18.75	3.50	22.25
5	53.361952	-0.729424	19.00	3.50	22.50
6	53.362874	-0.729510	19.31	3.50	22.81
7	53.363335	-0.730003	20.12	3.50	23.62
8	53.363591	-0.729209	19.64	3.50	23.14
9	53.364052	-0.725733	17.95	3.50	21.45
10	53.364410	-0.720433	15.80	3.50	19.30
11	53.362554	-0.719918	16.00	3.50	19.50
12	53.360671	-0.724210	16.71	3.50	20.21

Discrete Observation Receptors

Number	Latitude	Longitude	Ground elevation	Height above ground	Total Elevation
	deg	deg	m	m	m
OP 1	53.330046	-0.742362	11.72	2.00	13.72
OP 2	53.330482	-0.741461	15.68	2.00	17.68
OP 3	53.329201	-0.740688	14.63	2.00	16.63
OP 4	53.328675	-0.740216	14.98	2.00	16.98
OP 5	53.328470	-0.738950	19.91	2.00	21.91
OP 6	53.328598	-0.737727	24.53	2.00	26.53
OP 7	53.329265	-0.736461	25.64	2.00	27.64
OP 8	53.328842	-0.735560	24.72	2.00	26.72
OP 9	53.329073	-0.734015	21.99	2.00	23.99
OP 10	53.329367	-0.731977	22.04	2.00	24.04
OP 11	53.332384	-0.716654	13.09	2.00	15.09
OP 12	53.337644	-0.723939	12.61	2.00	14.61
OP 13	53.336632	-0.708876	12.56	2.00	14.56
OP 14	53.337126	-0.703854	14.12	2.00	16.12
OP 15	53.339465	-0.704047	15.00	2.00	17.00
OP 16	53.340548	-0.680322	11.83	2.00	13.83
OP 17	53.344288	-0.684208	16.00	2.00	18.00
OP 18	53.343628	-0.683704	16.42	2.00	18.42
OP 19	53.343980	-0.683007	15.14	2.00	17.14
OP 20	53.348256	-0.680721	13.98	2.00	15.98
OP 21	53.343724	-0.682895	15.31	2.00	17.31
OP 22	53.346822	-0.685359	16.99	2.00	18.99
OP 23	53.346732	-0.687311	17.77	2.00	19.77
OP 24	53.346348	-0.690938	19.25	2.00	21.25
OP 25	53.347347	-0.686764	18.47	2.00	20.47
OP 26	53.348045	-0.685530	20.00	2.00	22.00
OP 27	53.348769	-0.686796	21.17	2.00	23.17
OP 28	53.348404	-0.691453	21.00	2.00	23.00
OP 29	53.349774	-0.691078	21.54	2.00	23.54
OP 30	53.349954	-0.689887	23.14	2.00	25.14
OP 31	53.350701	-0.689440	22.41	2.00	24.41
OP 32	53.351175	-0.686994	20.00	2.00	22.00
OP 33	53.351527	-0.685482	16.51	2.00	18.51
OP 34	53.351950	-0.683507	13.67	2.00	15.67
OP 35	53.352778	-0.694745	15.59	2.00	17.59
OP 36	53.352977	-0.690871	21.99	2.00	23.99
OP 37	53.353201	-0.691665	21.37	2.00	23.37
OP 38	53.354104	-0.691877	20.55	2.00	22.55
OP 39	53.354411	-0.692971	17.79	2.00	19.79
OP 40	53.355103	-0.692135	20.01	2.00	22.01
OP 41	53.355500	-0.691351	21.00	2.00	23.00
OP 42	53.356537	-0.690922	21.87	2.00	23.87
OP 43	53.360744	-0.718914	16.79	2.00	18.79
OP 44	53.360734	-0.718104	16.80	2.00	18.80
OP 45	53.360209	-0.716441	17.44	2.00	19.44
OP 46	53.360651	-0.715609	17.92	2.00	19.92
OP 47	53.360557	-0.712735	19.00	2.00	21.00
OP 48	53.360406	-0.712144	19.24	2.00	21.24
OP 49	53.360365	-0.711806	19.11	2.00	21.11
OP 50	53.360445	-0.711206	18.40	2.00	20.40
OP 51	53.359910	-0.711683	20.00	2.00	22.00
OP 52	53.360333	-0.706860	16.56	2.00	18.56
OP 53	53.361697	-0.706109	18.40	2.00	20.40

Summary of PV Glare Analysis

PV configuration and total predicted glare

PV Name	Tilt	Orientation	"Green" Glare	"Yellow" Glare	Energy Produced	Data File
	deg	deg	min	min	kWh	
PV array 1	45.0	180.0	73,058	4,068	-	-
PV array 2	45.0	180.0	57,460	37,054	-	-
PV array 3	45.0	180.0	58,976	0	-	-
PV array 4	45.0	180.0	81,576	8,646	-	-

Distinct glare per month

Excludes overlapping glare from PV array for multiple receptors at matching time(s)

PV	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
pv-array-1 (green)	0	0	230	1086	1621	1862	1734	1417	465	0	0	0
pv-array-1 (yellow)	0	0	13	603	729	504	664	762	152	0	0	0
pv-array-2 (green)	0	0	56	1011	1842	2097	1969	1476	265	0	0	0
pv-array-2 (yellow)	0	0	27	892	1426	1201	1379	1238	200	0	0	0
pv-array-3 (green)	0	0	63	632	670	682	684	656	281	0	0	0
pv-array-3 (yellow)	0	0	0	0	0	0	0	0	0	0	0	0
pv-array-4 (green)	0	0	178	357	688	701	708	511	263	0	0	0
pv-array-4 (yellow)	0	0	47	111	1	0	1	11	146	0	0	0

PV & Receptor Analysis Results

Results for each PV array and receptor

PV array 1 potential temporary after-image

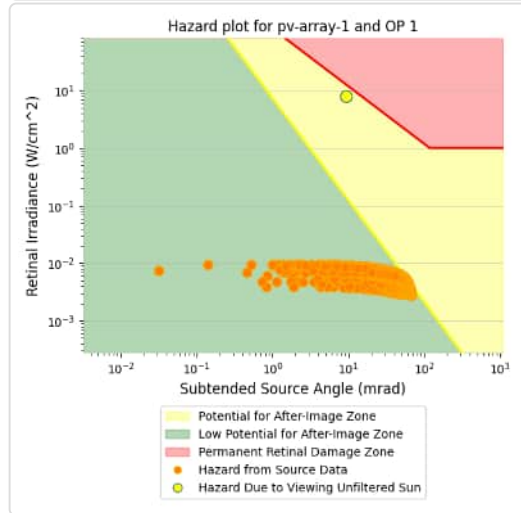
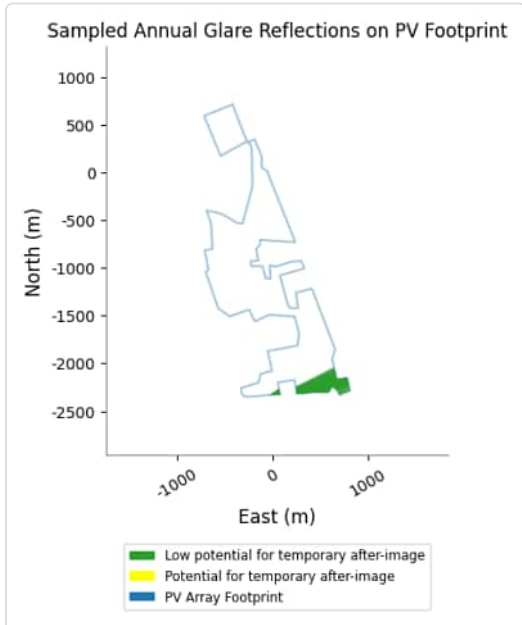
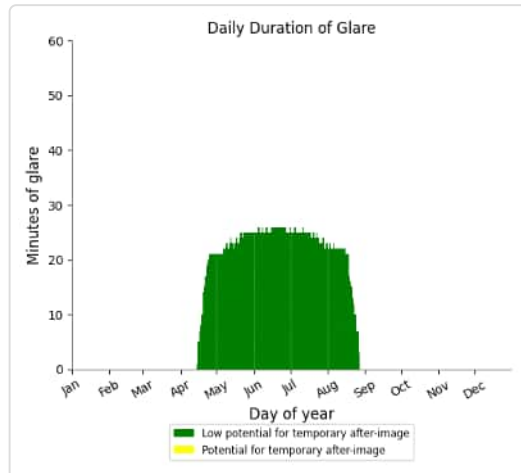
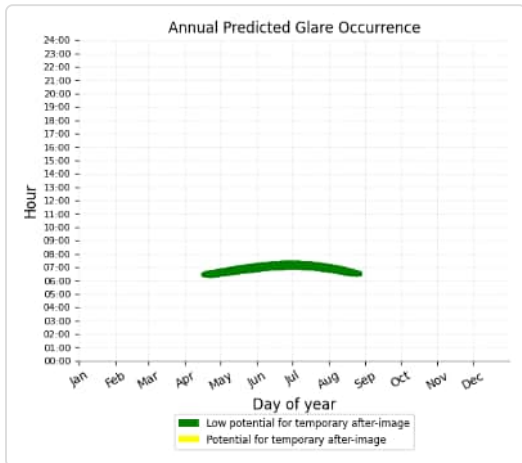
Component	Green glare (min)	Yellow glare (min)
OP: OP 1	2988	0
OP: OP 2	3150	0
OP: OP 3	2271	0
OP: OP 4	1892	0
OP: OP 5	1424	0
OP: OP 6	827	0
OP: OP 7	461	0
OP: OP 8	258	0
OP: OP 9	320	0
OP: OP 10	0	0
OP: OP 11	1709	73
OP: OP 12	1443	3424
OP: OP 13	2998	98
OP: OP 14	3321	220
OP: OP 15	3066	253
OP: OP 16	3015	0
OP: OP 17	2506	0
OP: OP 18	2600	0
OP: OP 19	2469	0

OP: OP 20	1640	0
OP: OP 21	2348	0
OP: OP 22	2103	0
OP: OP 23	2097	0
OP: OP 24	2379	0
OP: OP 25	1964	0
OP: OP 26	1927	0
OP: OP 27	1814	0
OP: OP 28	2053	0
OP: OP 29	1800	0
OP: OP 30	1634	0
OP: OP 31	1602	0
OP: OP 32	1392	0
OP: OP 33	1241	0
OP: OP 34	1148	0
OP: OP 35	1225	0
OP: OP 36	1264	0
OP: OP 37	1219	0
OP: OP 38	1080	0
OP: OP 39	1030	0
OP: OP 40	882	0
OP: OP 41	875	0
OP: OP 42	667	0
OP: OP 43	12	0
OP: OP 44	17	0
OP: OP 45	147	0
OP: OP 46	41	0
OP: OP 47	68	0
OP: OP 48	118	0
OP: OP 49	127	0
OP: OP 50	63	0
OP: OP 51	238	0
OP: OP 52	125	0
OP: OP 53	0	0

PV array 1 - OP Receptor (OP 1)

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

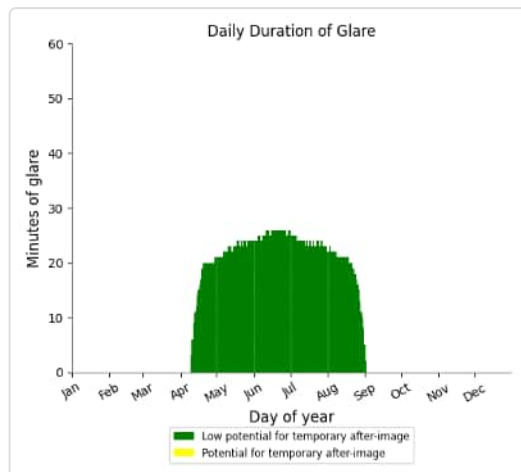
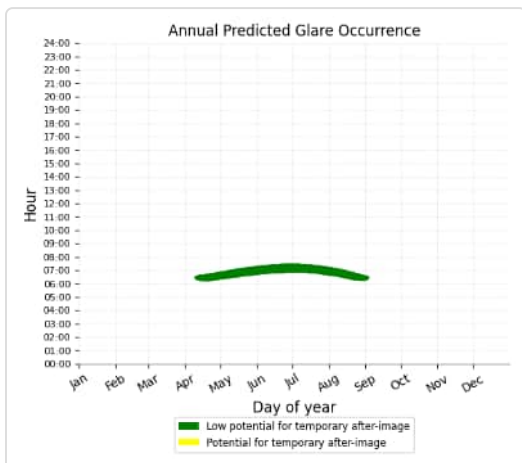
- 2,988 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

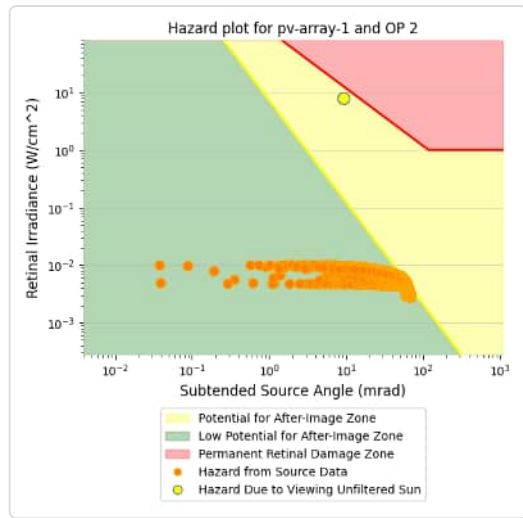
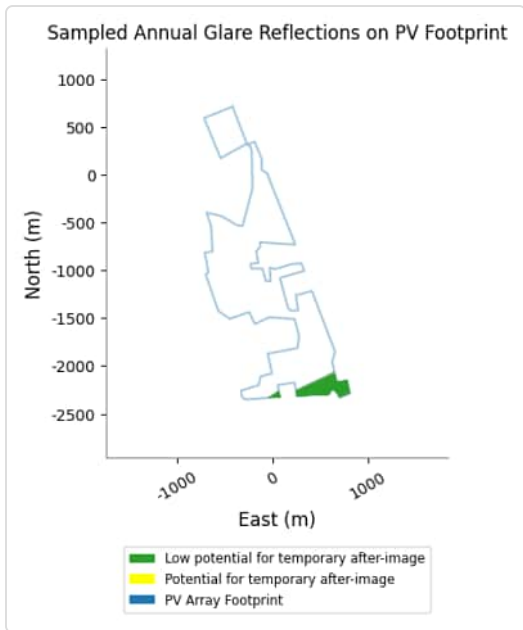


PV array 1 - OP Receptor (OP 2)

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

- 3,150 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

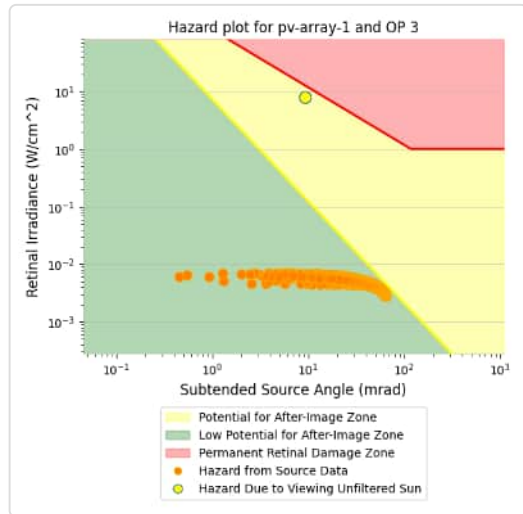
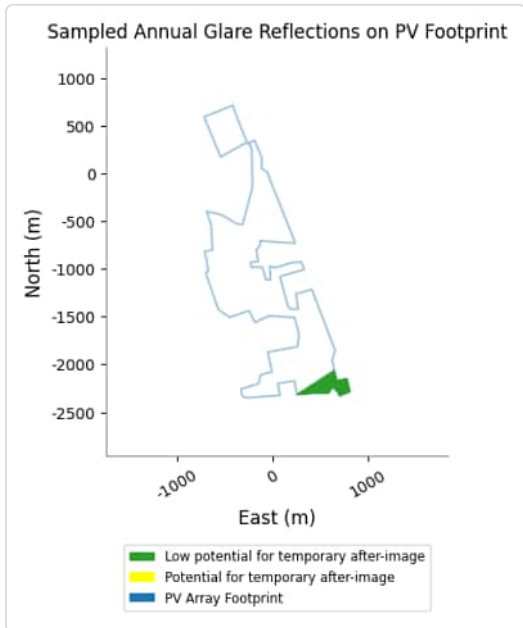
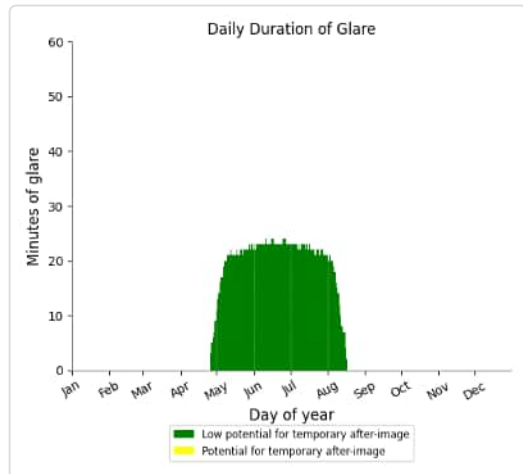
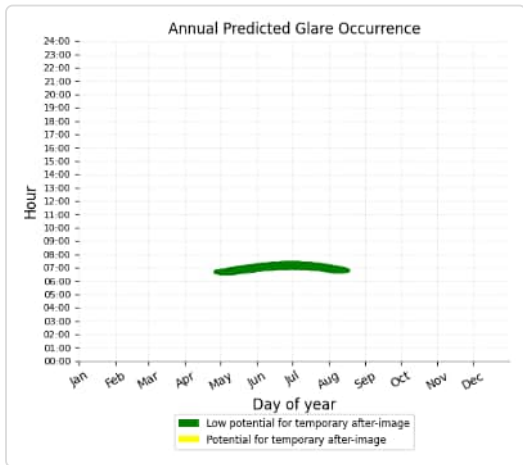




PV array 1 - OP Receptor (OP 3)

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

- 2,271 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

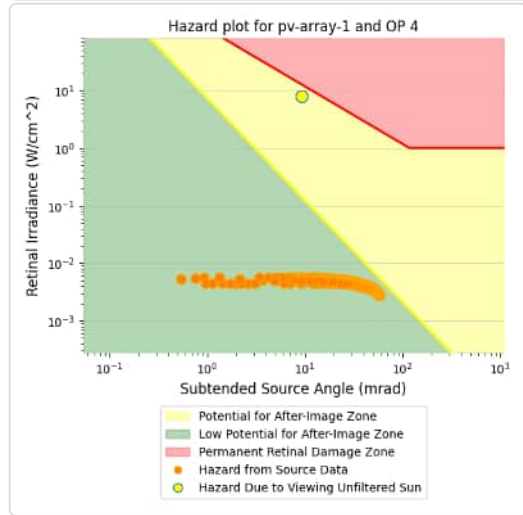
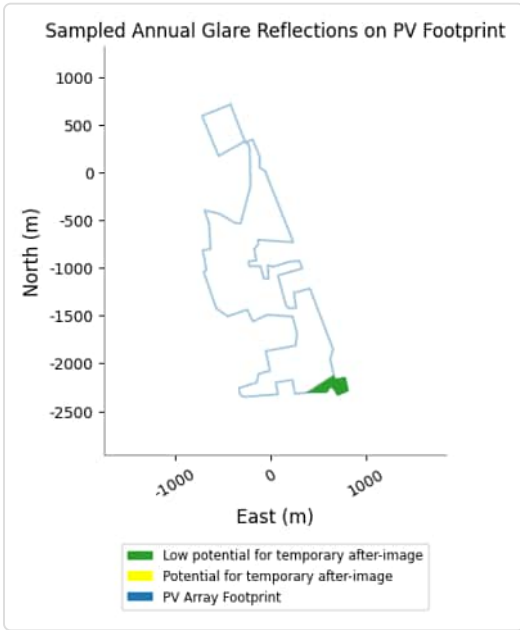
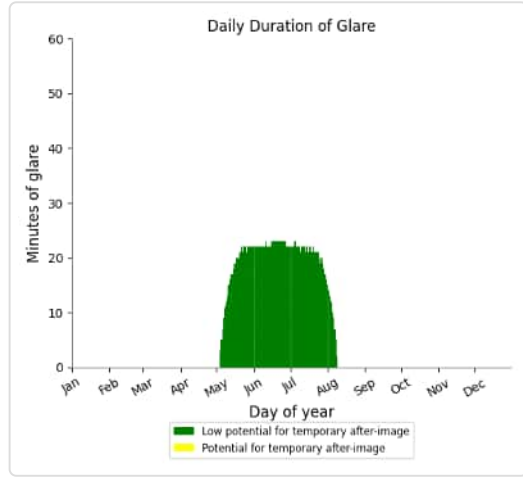
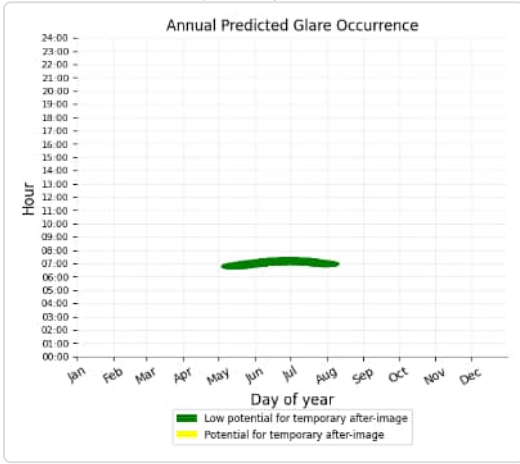


PV array 1 - OP Receptor (OP 4)

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

- 1,892 minutes of "green" glare with low potential to cause temporary after-image.

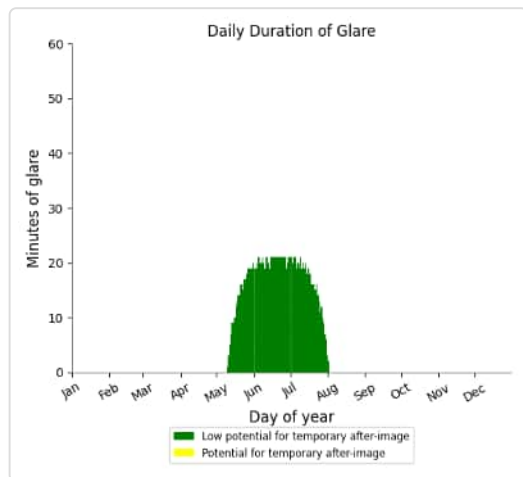
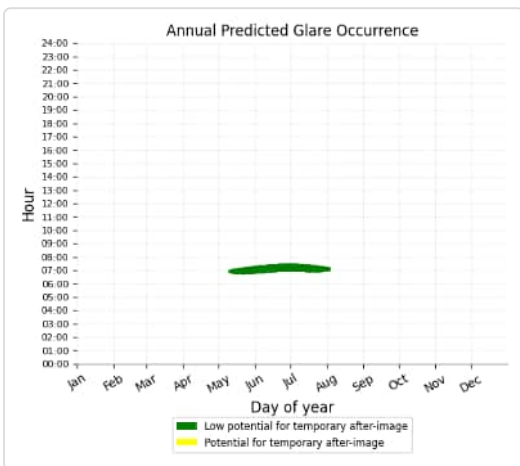
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

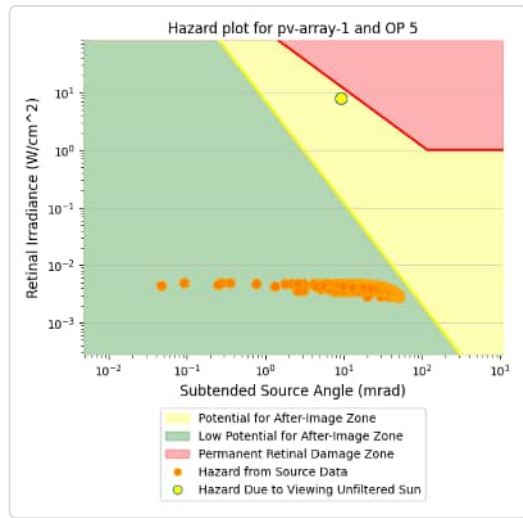
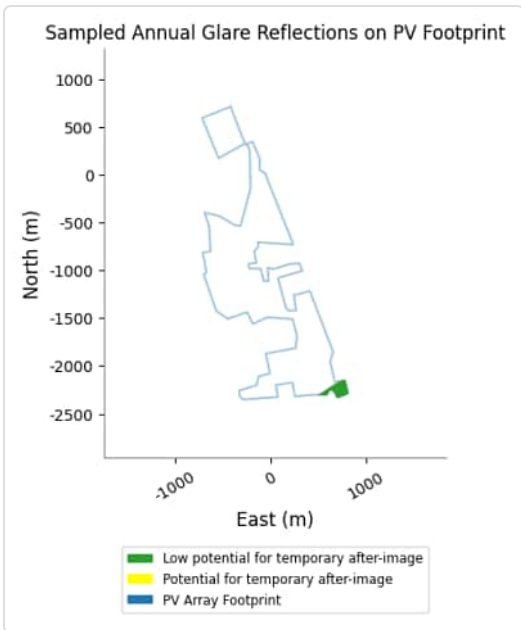


PV array 1 - OP Receptor (OP 5)

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

- 1,424 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

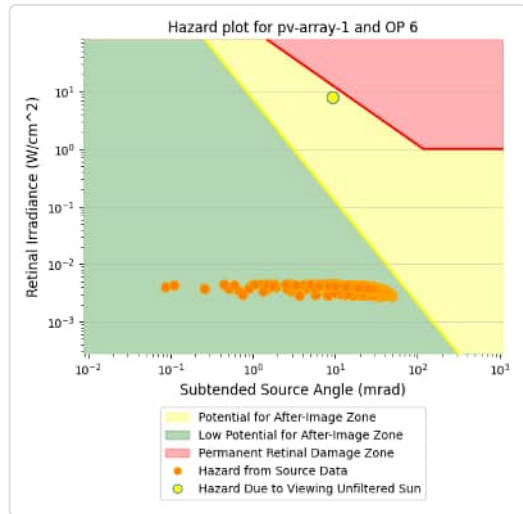
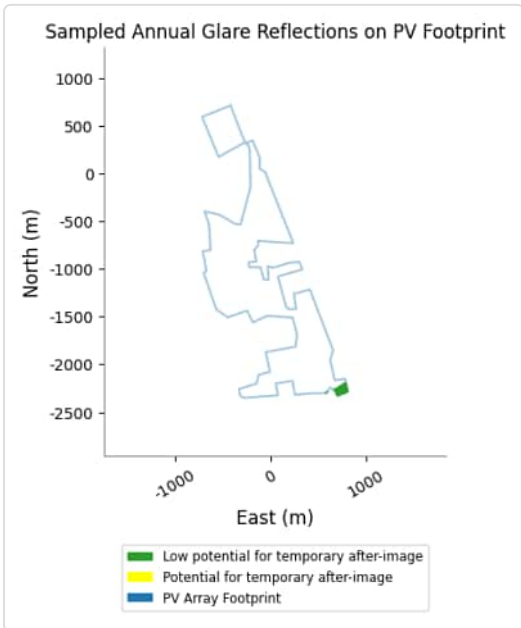
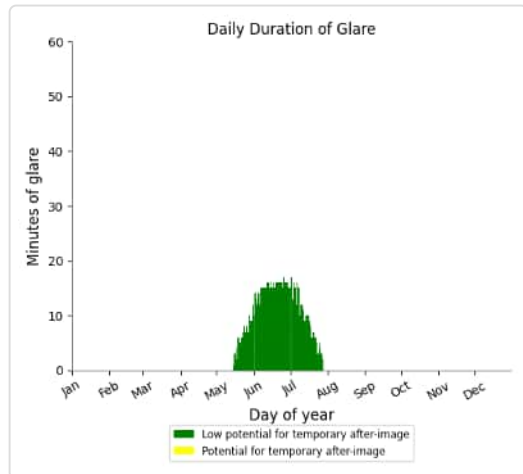
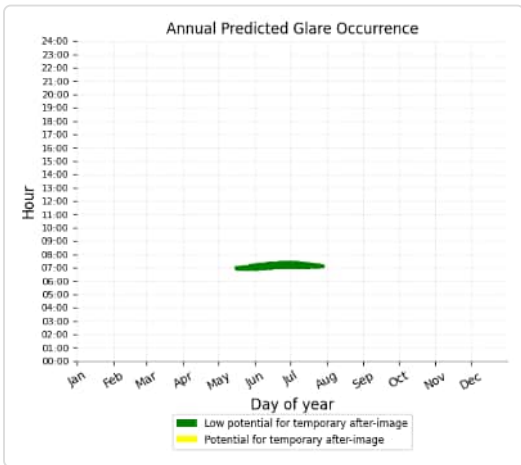




PV array 1 - OP Receptor (OP 6)

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

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

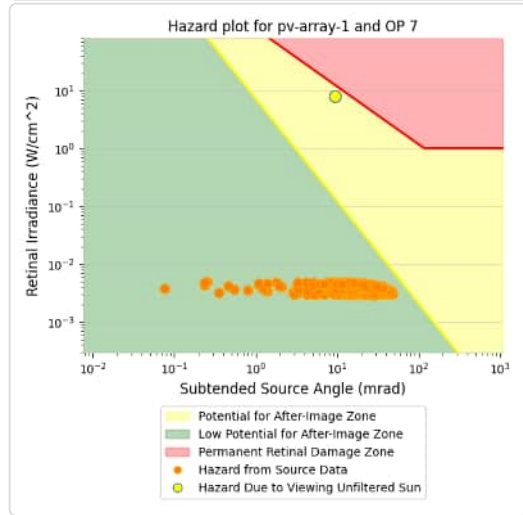
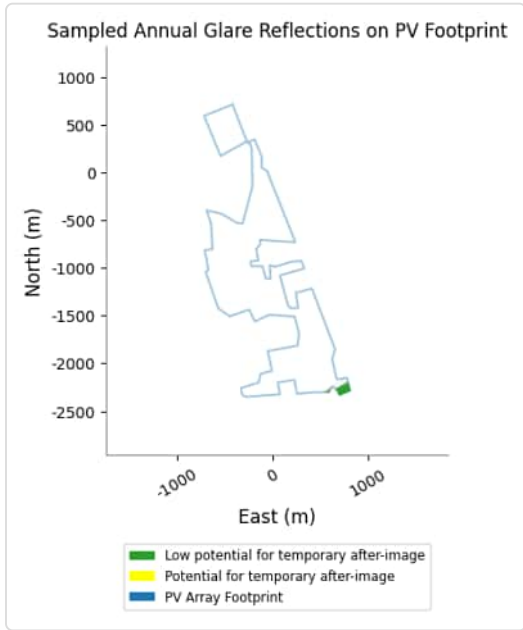
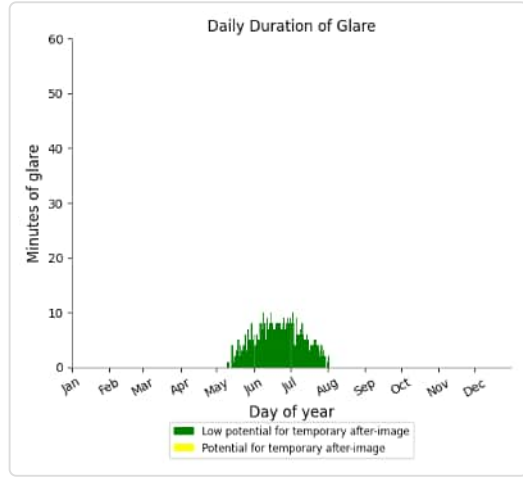
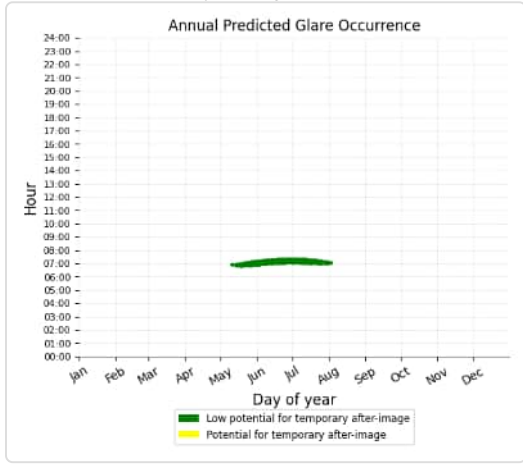


PV array 1 - OP Receptor (OP 7)

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

- 461 minutes of "green" glare with low potential to cause temporary after-image.

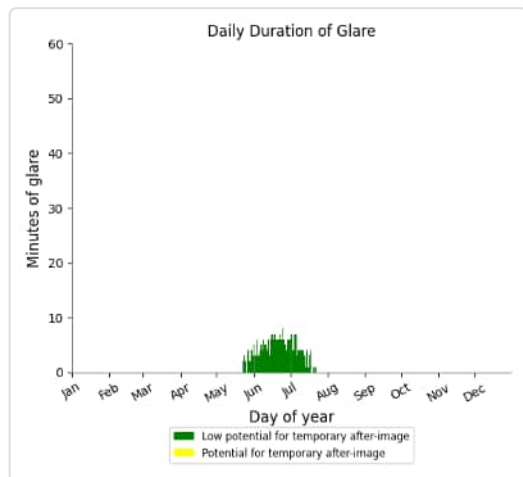
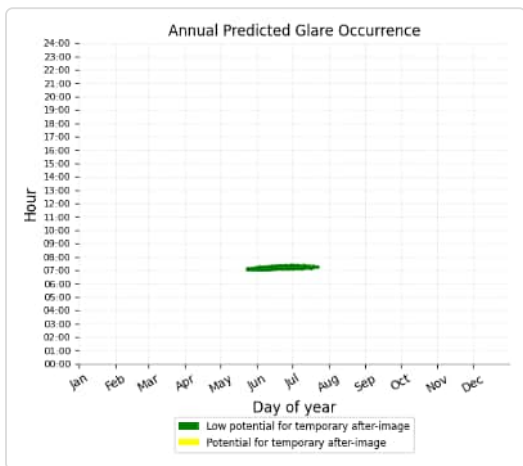
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

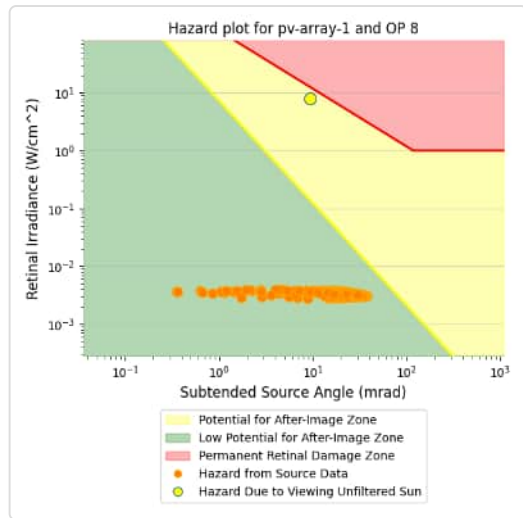
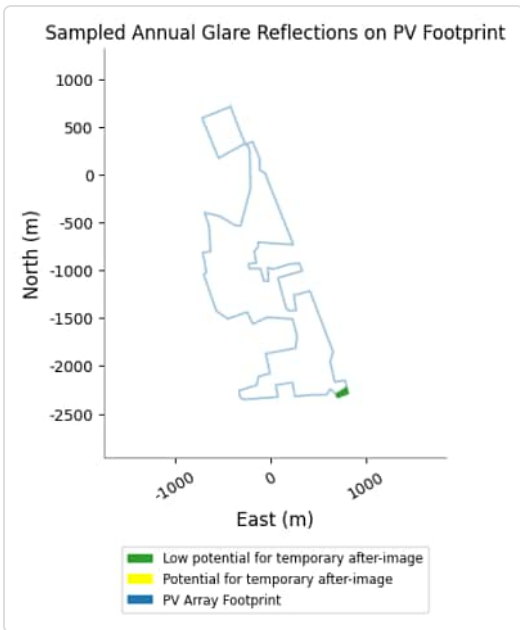


PV array 1 - OP Receptor (OP 8)

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

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

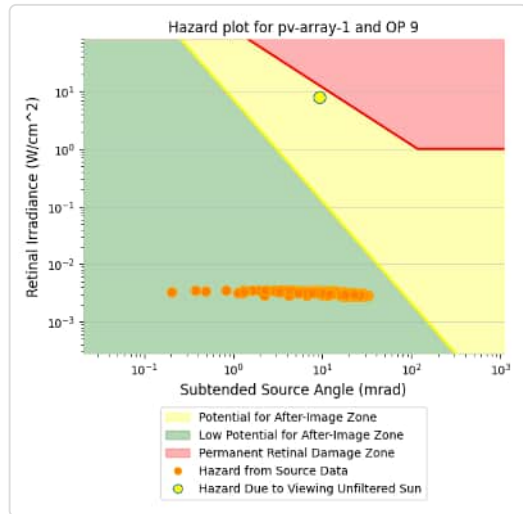
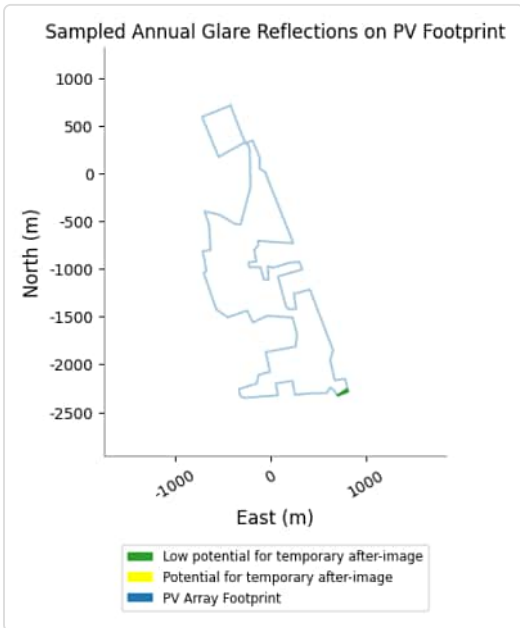
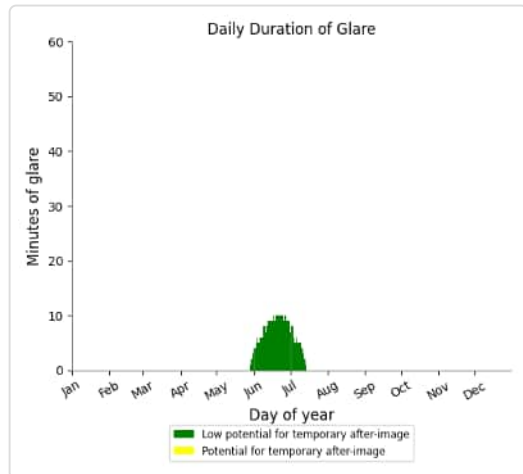
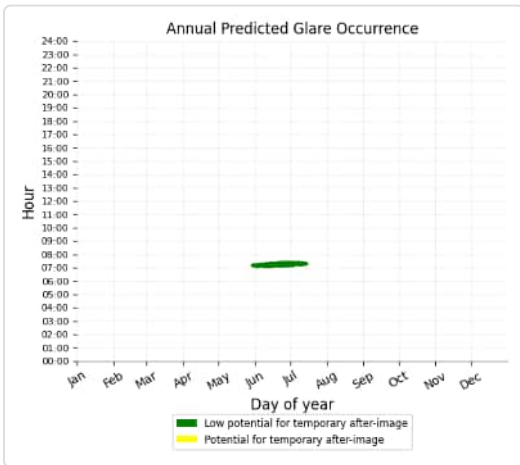




PV array 1 - OP Receptor (OP 9)

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

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



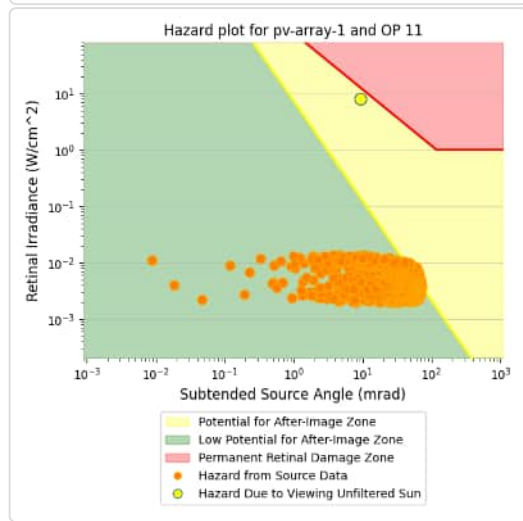
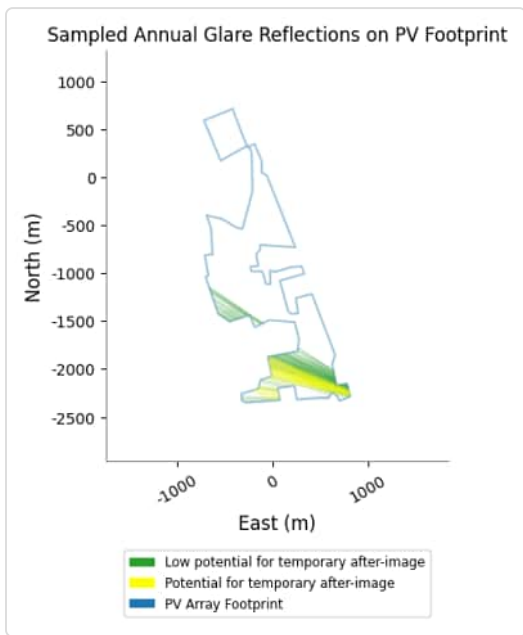
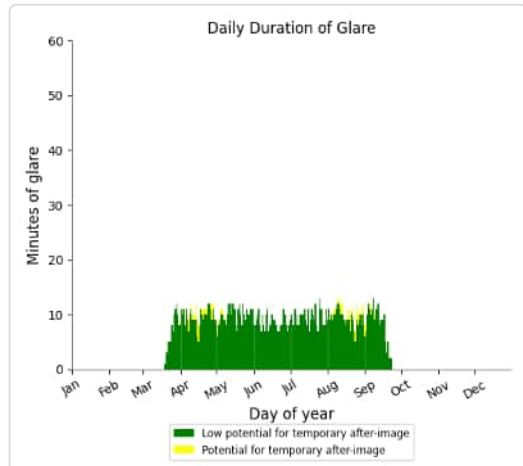
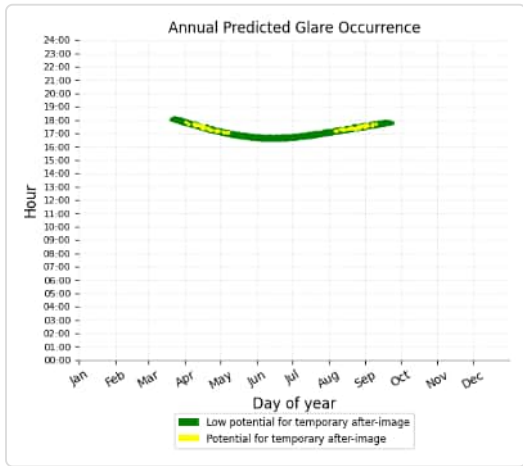
PV array 1 - OP Receptor (OP 10)

No glare found

PV array 1 - OP Receptor (OP 11)

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

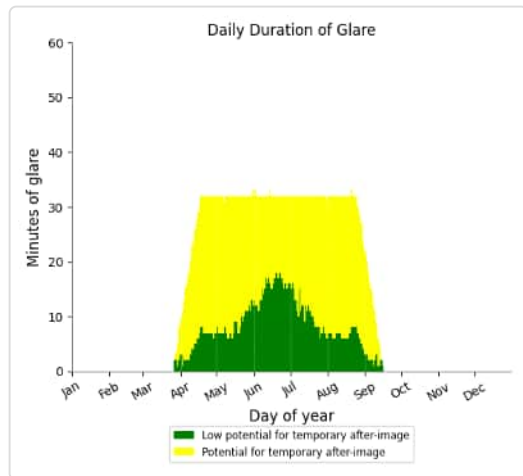
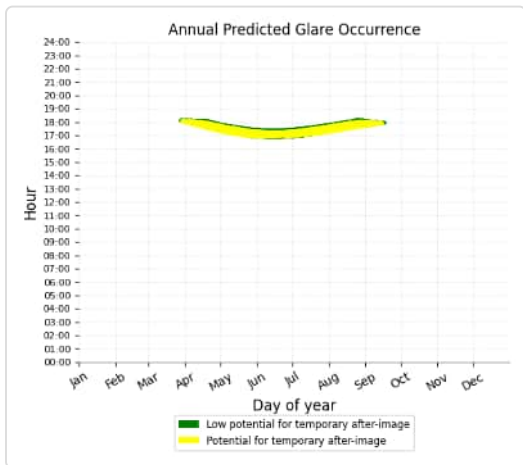
- 1,709 minutes of "green" glare with low potential to cause temporary after-image.
- 73 minutes of "yellow" glare with potential to cause temporary after-image.

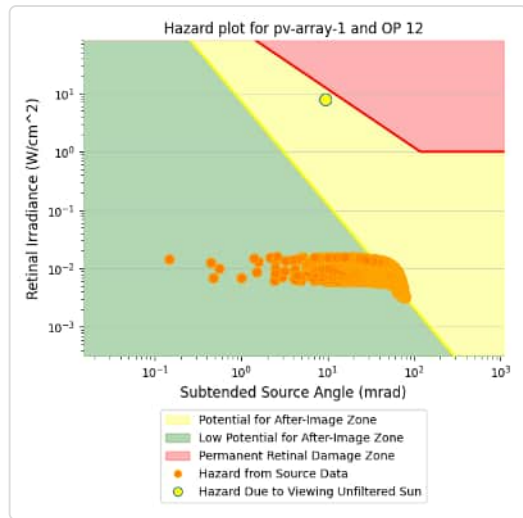
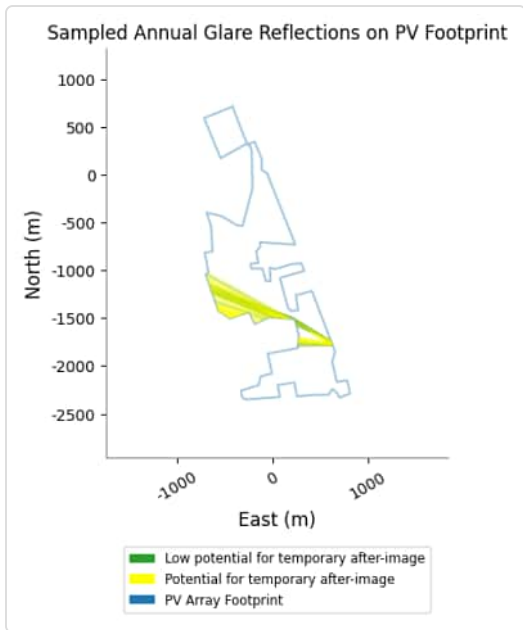


PV array 1 - OP Receptor (OP 12)

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

- 1,443 minutes of "green" glare with low potential to cause temporary after-image.
- 3,424 minutes of "yellow" glare with potential to cause temporary after-image.

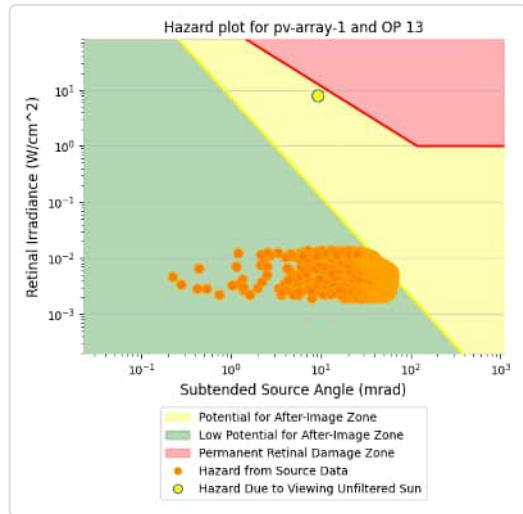
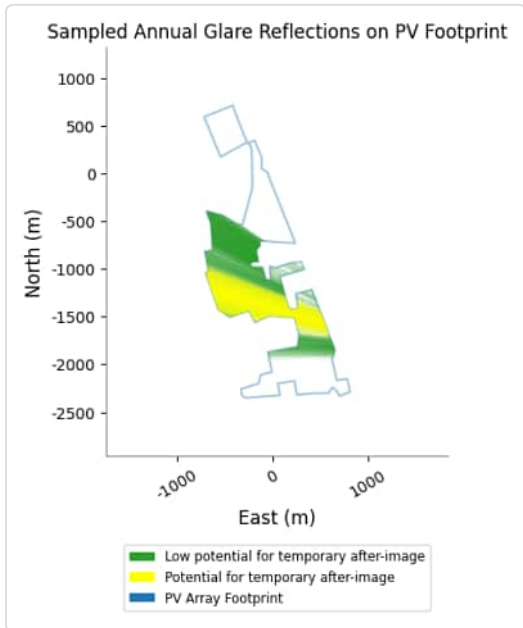
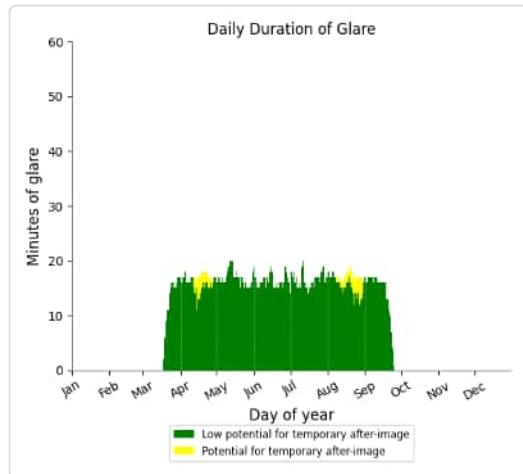
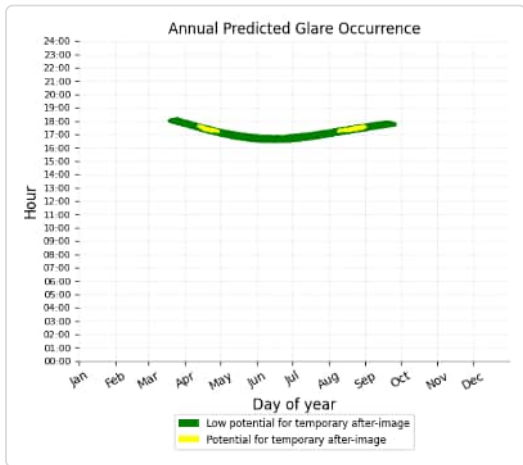




PV array 1 - OP Receptor (OP 13)

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

- 2,998 minutes of "green" glare with low potential to cause temporary after-image.
- 98 minutes of "yellow" glare with potential to cause temporary after-image.

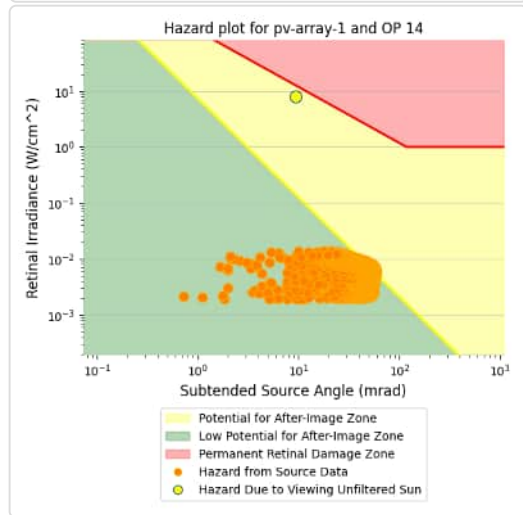
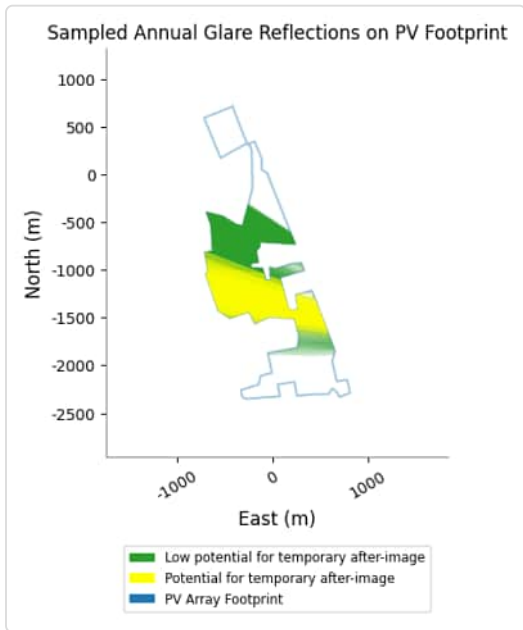
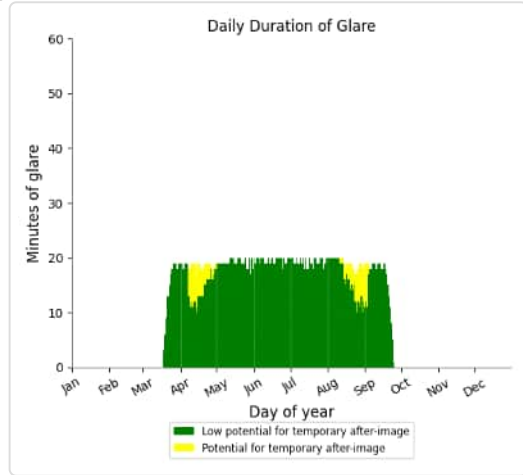
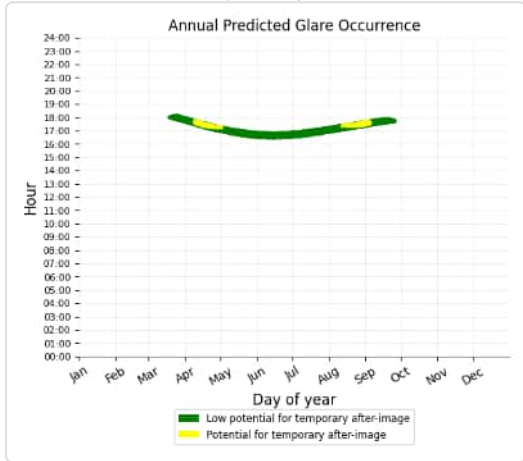


PV array 1 - OP Receptor (OP 14)

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

- 3,321 minutes of "green" glare with low potential to cause temporary after-image.

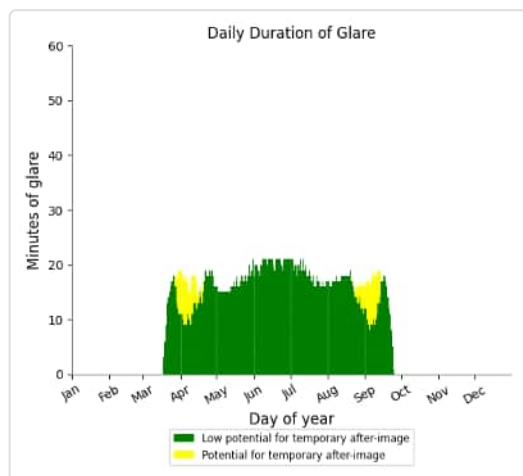
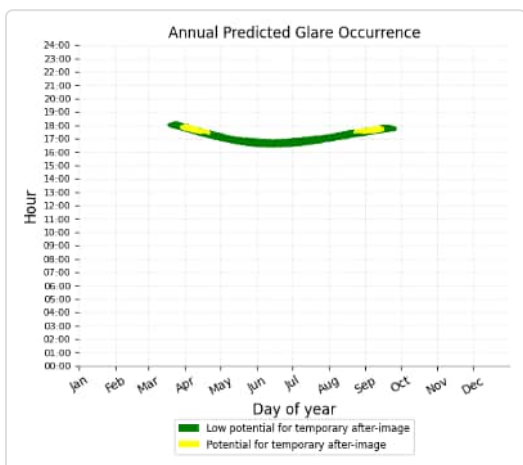
- 220 minutes of "yellow" glare with potential to cause temporary after-image.

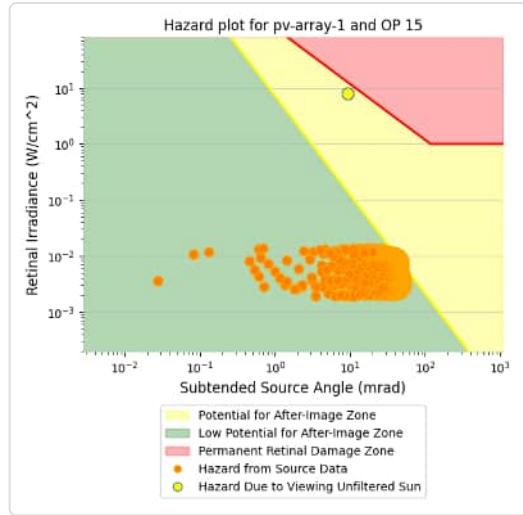
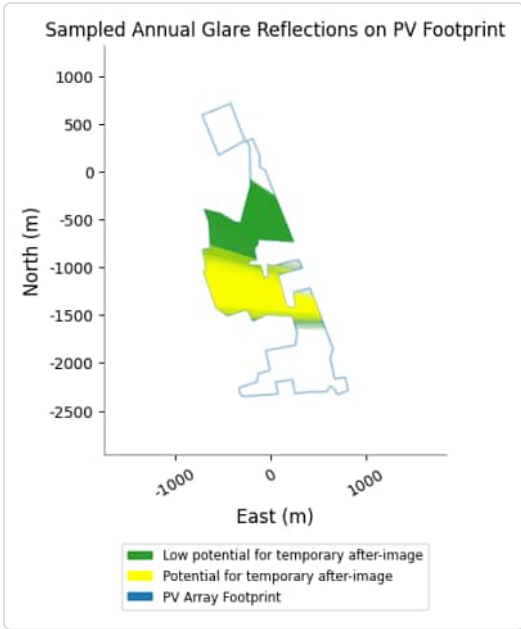


PV array 1 - OP Receptor (OP 15)

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

- 3,066 minutes of "green" glare with low potential to cause temporary after-image.
- 253 minutes of "yellow" glare with potential to cause temporary after-image.

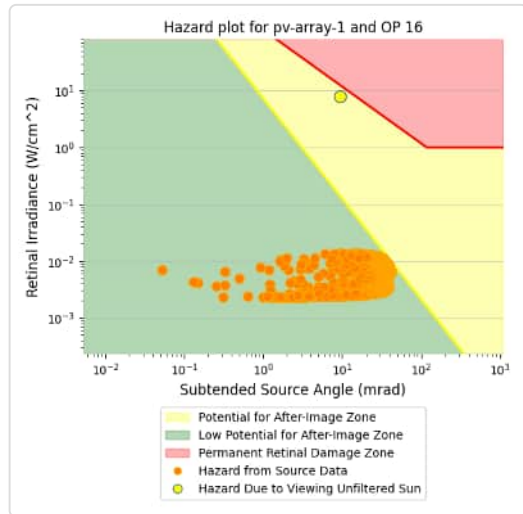
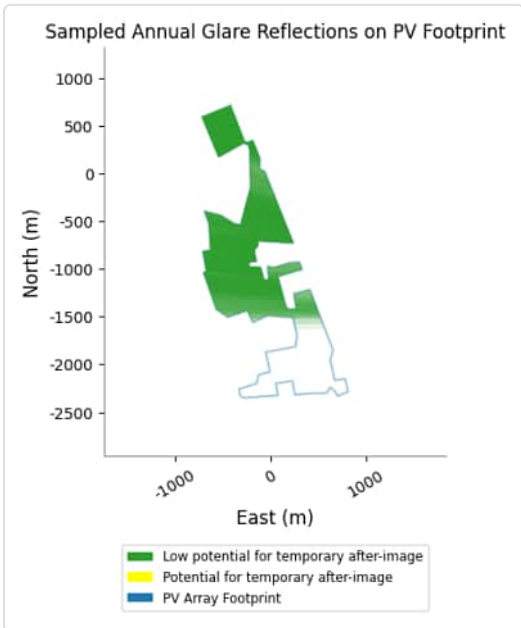
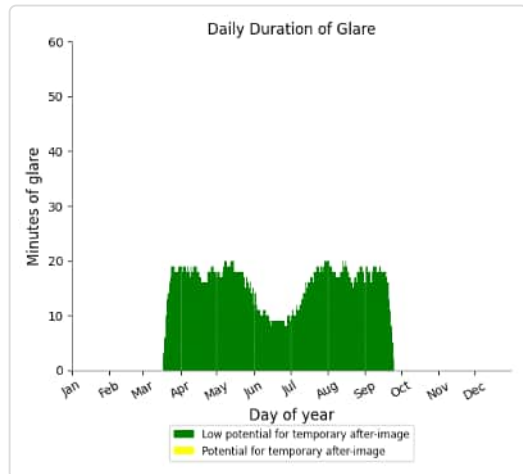
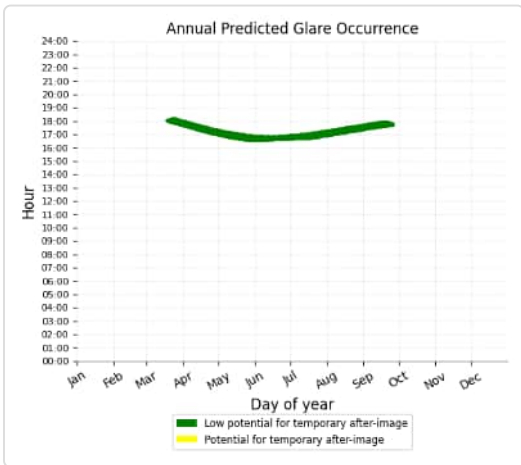




PV array 1 - OP Receptor (OP 16)

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

- 3,015 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

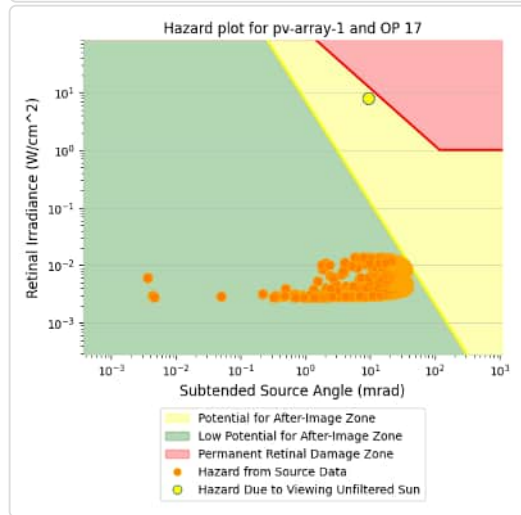
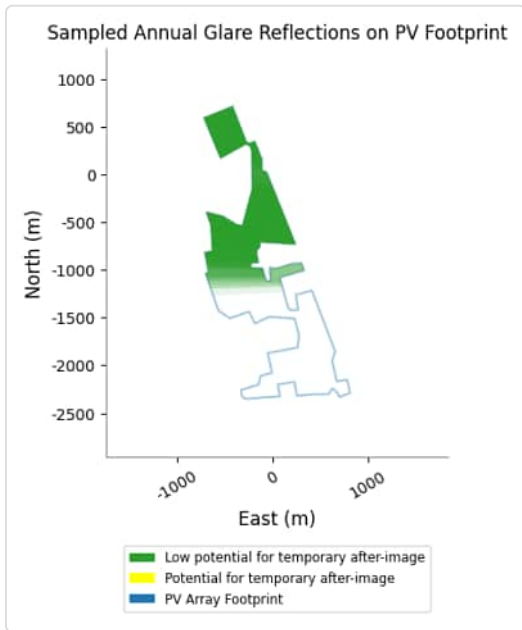
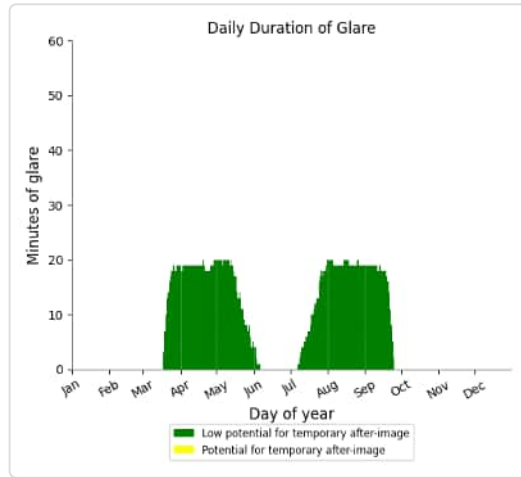
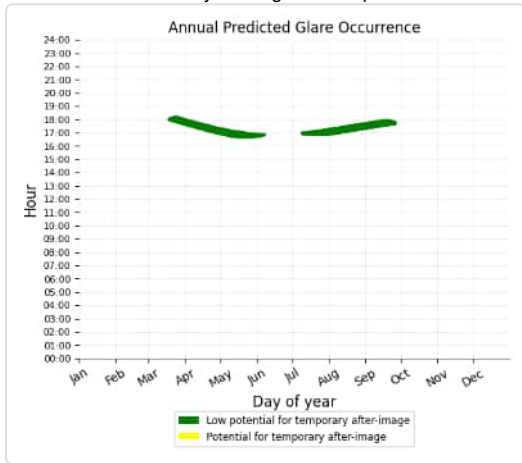


PV array 1 - OP Receptor (OP 17)

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

- 2,506 minutes of "green" glare with low potential to cause temporary after-image.

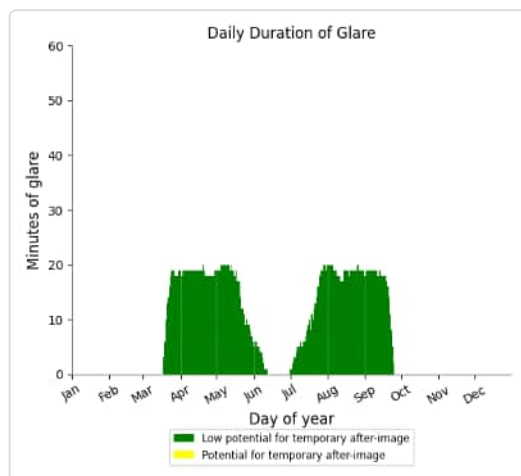
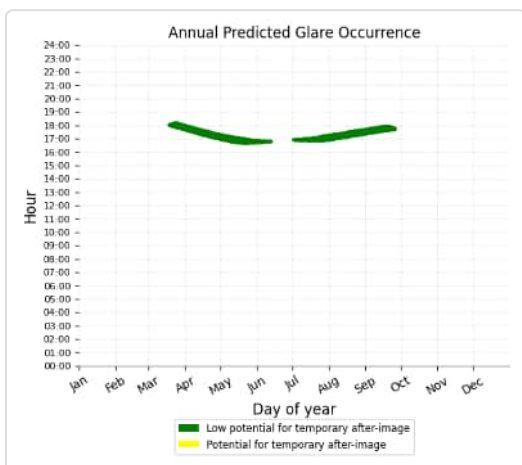
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

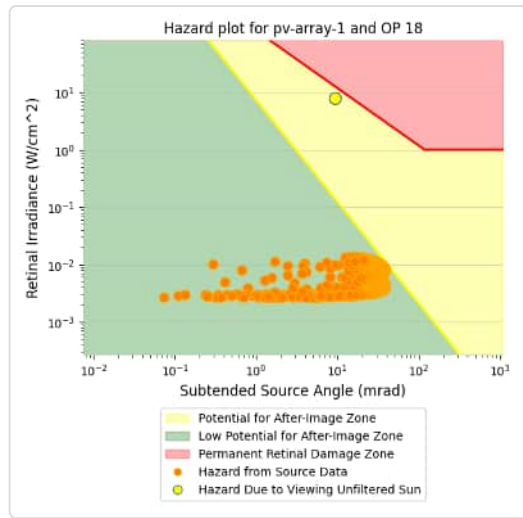
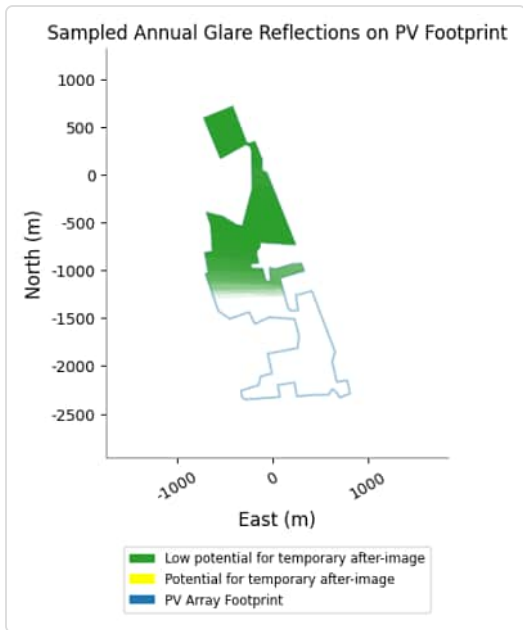


PV array 1 - OP Receptor (OP 18)

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

- 2,600 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

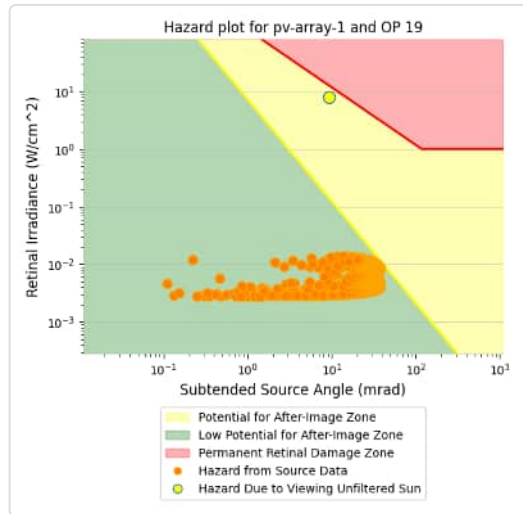
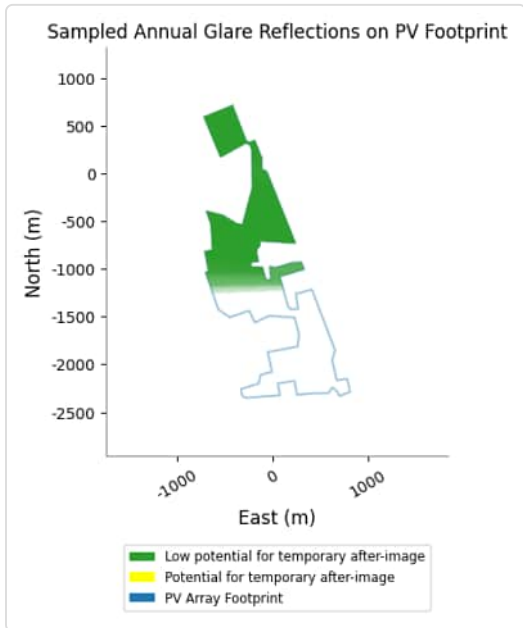
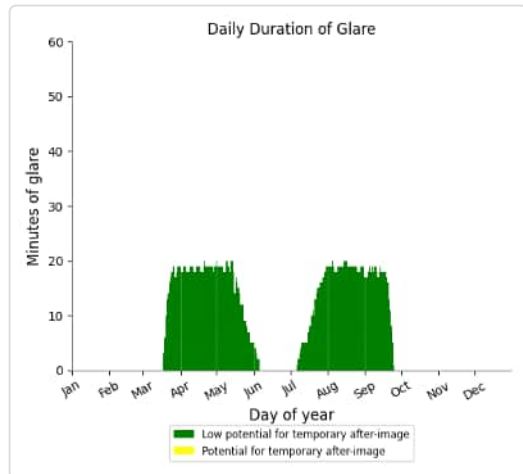
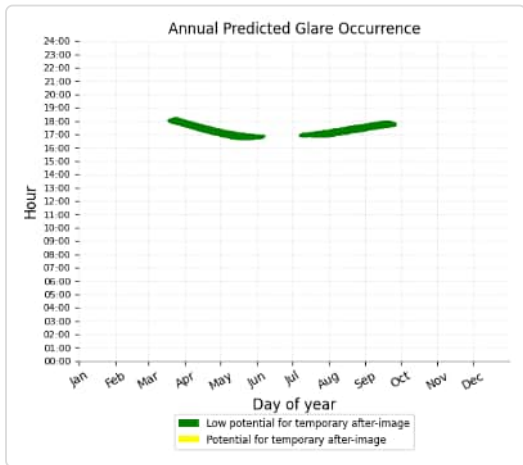




PV array 1 - OP Receptor (OP 19)

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

- 2,469 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

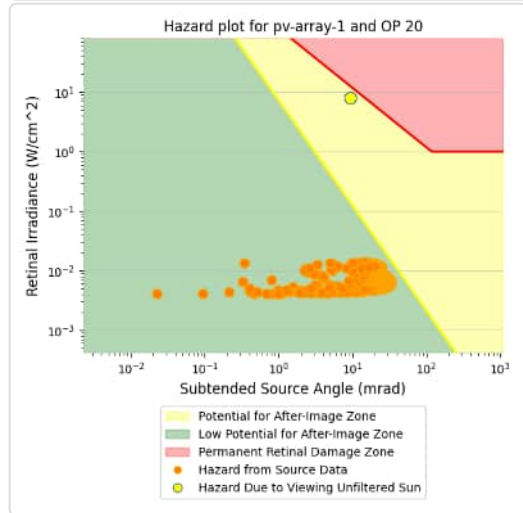
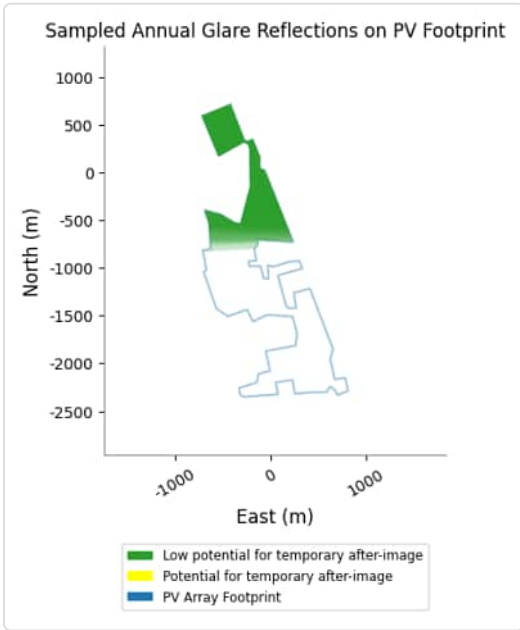
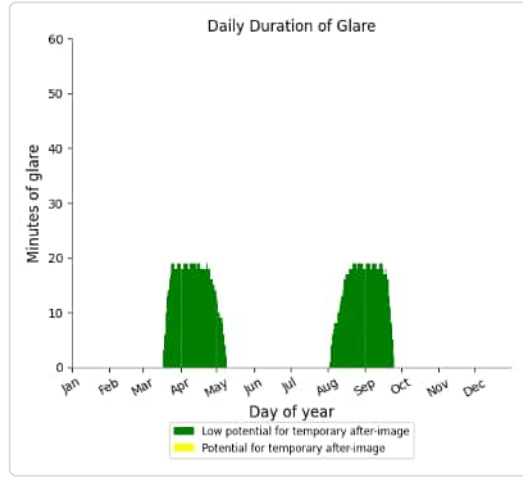
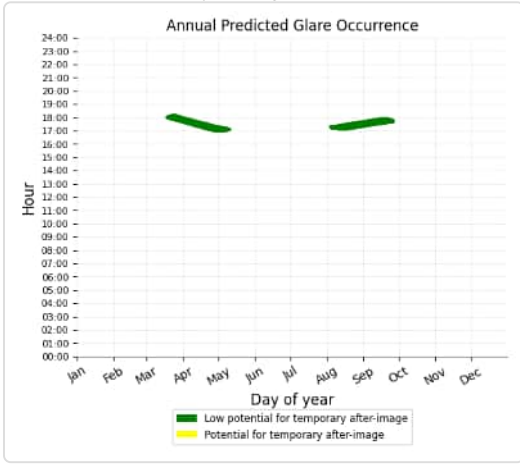


PV array 1 - OP Receptor (OP 20)

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

- 1,640 minutes of "green" glare with low potential to cause temporary after-image.

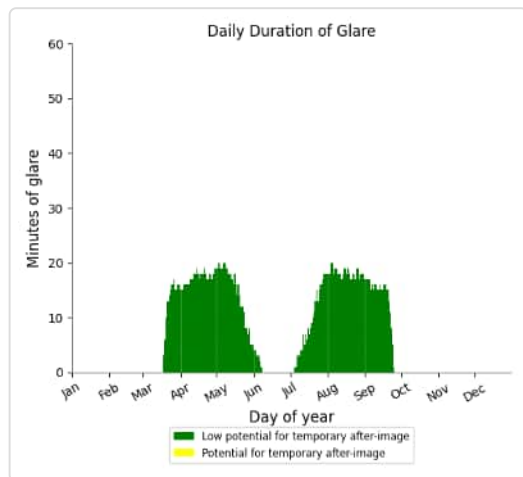
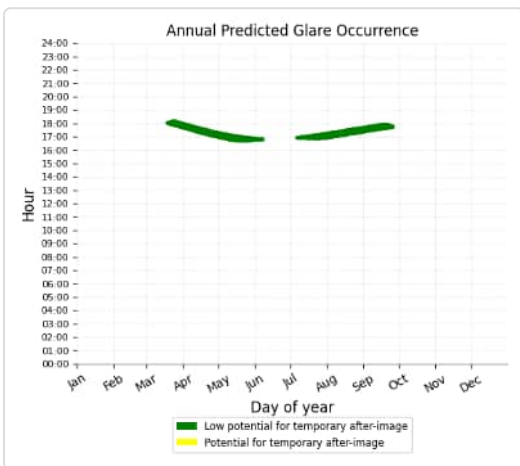
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

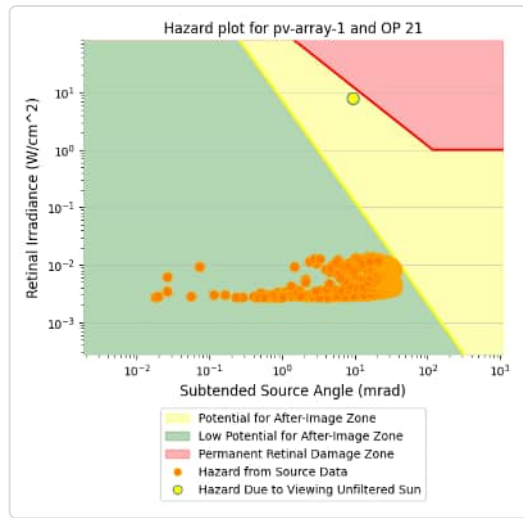
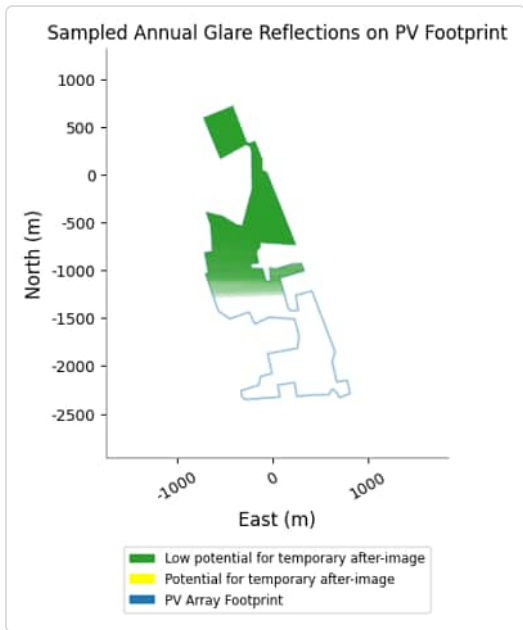


PV array 1 - OP Receptor (OP 21)

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

- 2,348 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

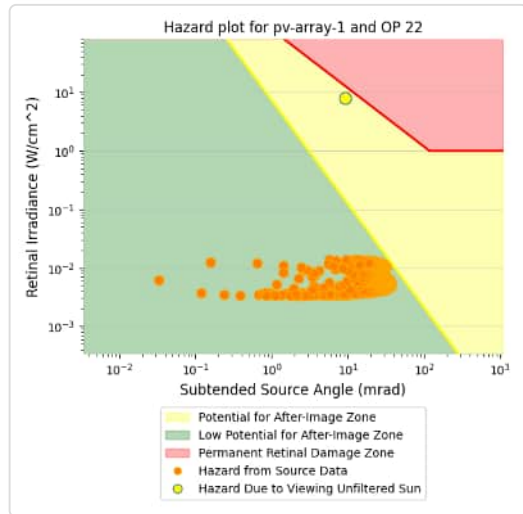
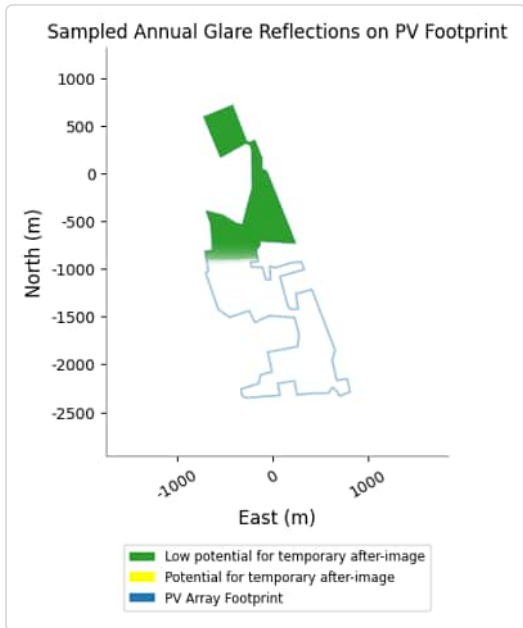
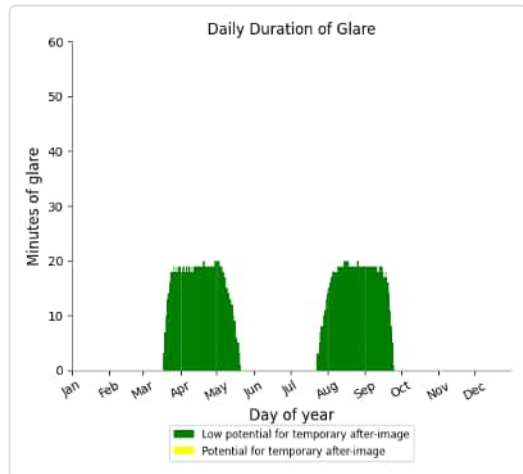
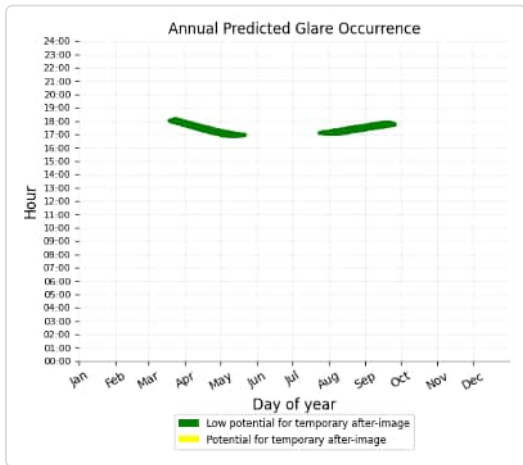




PV array 1 - OP Receptor (OP 22)

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

- 2,103 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

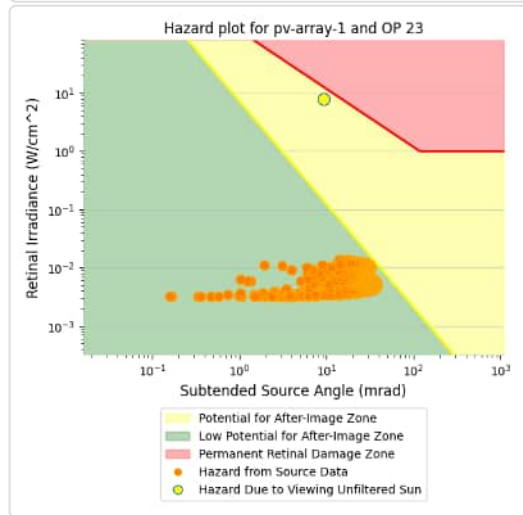
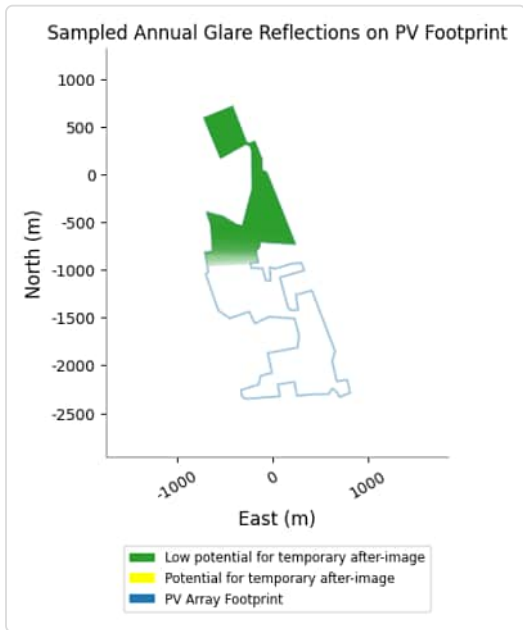
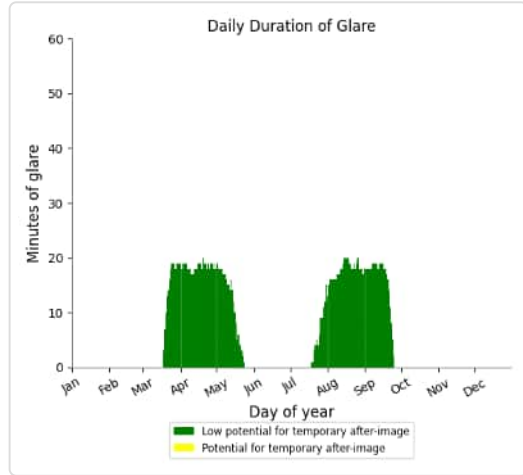
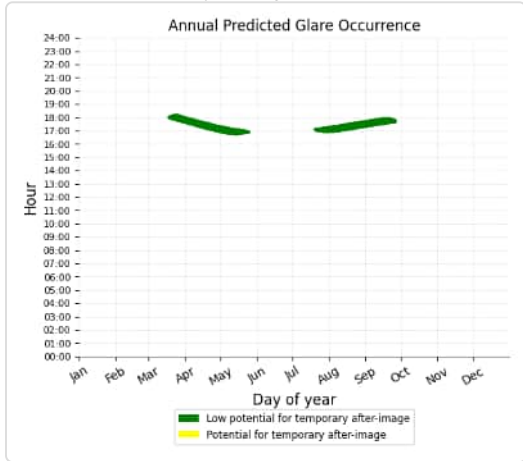


PV array 1 - OP Receptor (OP 23)

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

- 2,097 minutes of "green" glare with low potential to cause temporary after-image.

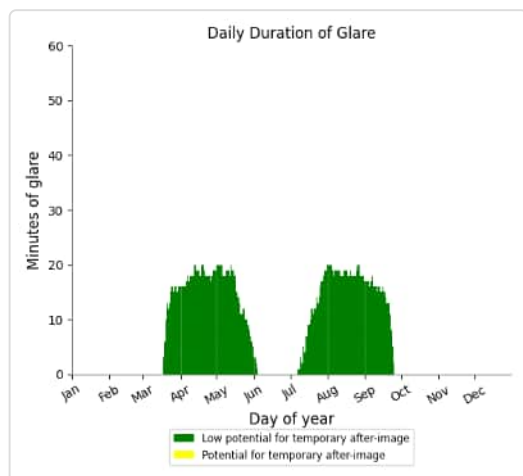
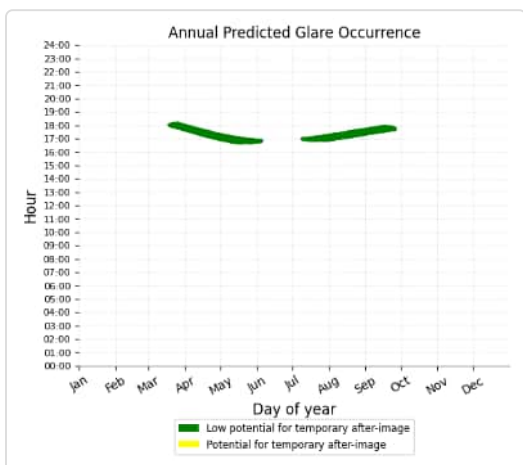
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

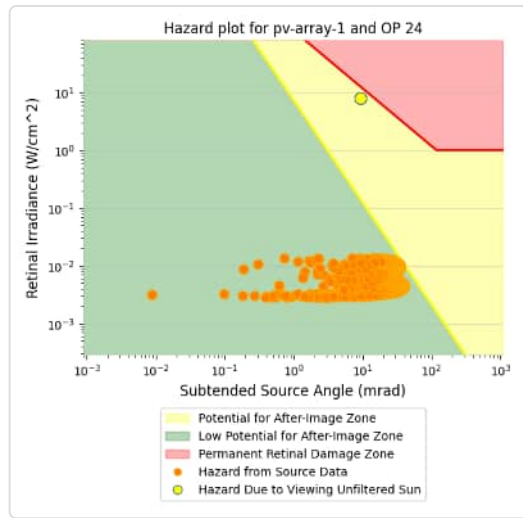
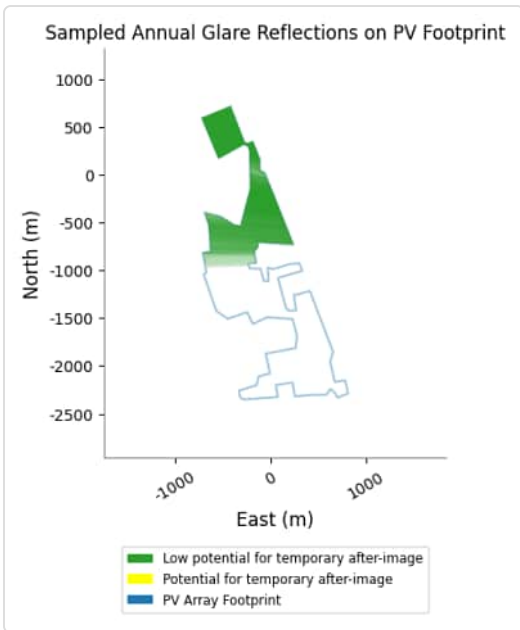


PV array 1 - OP Receptor (OP 24)

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

- 2,379 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

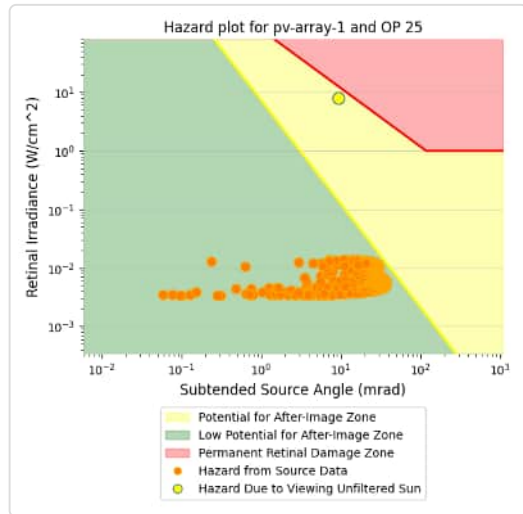
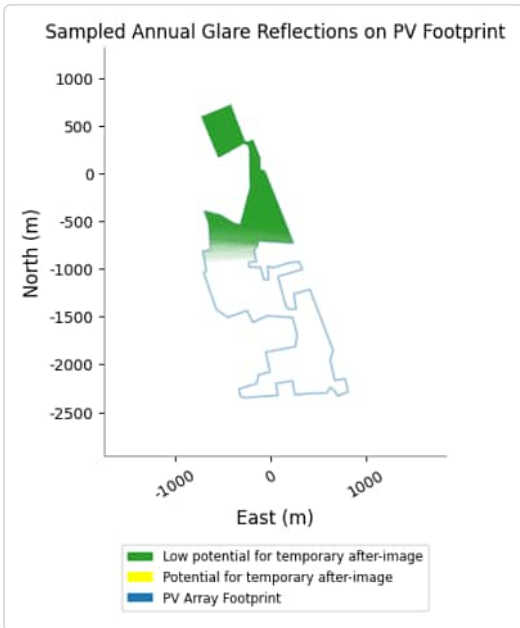
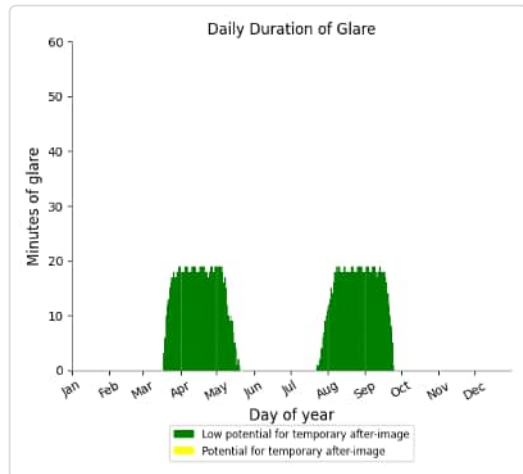
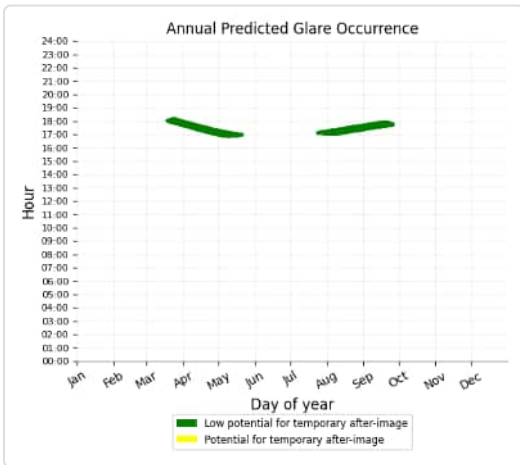




PV array 1 - OP Receptor (OP 25)

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

- 1,964 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

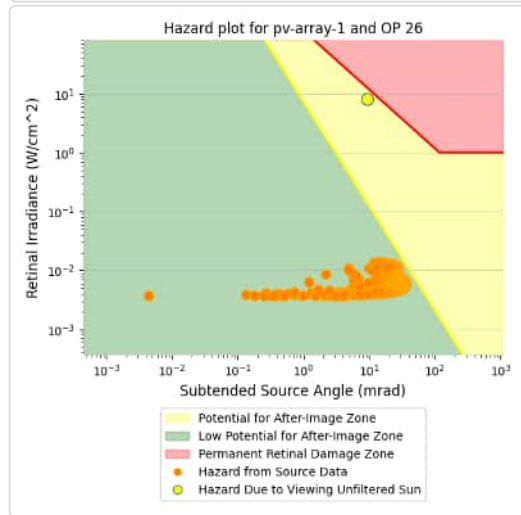
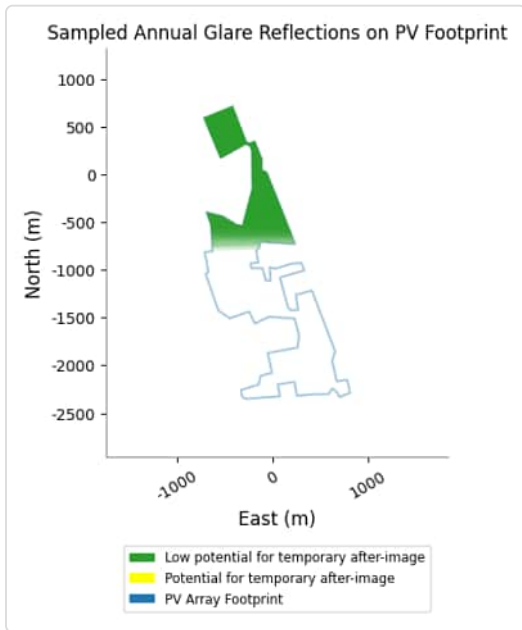
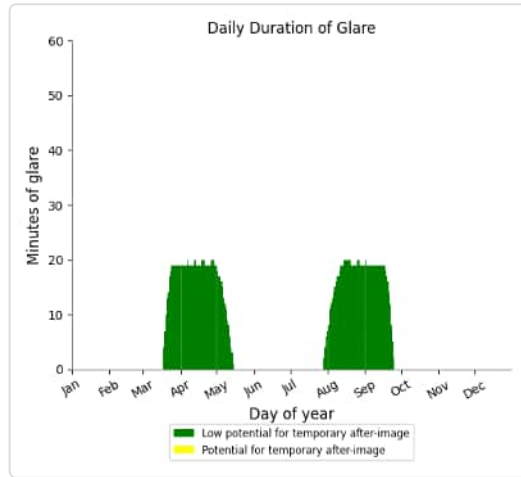
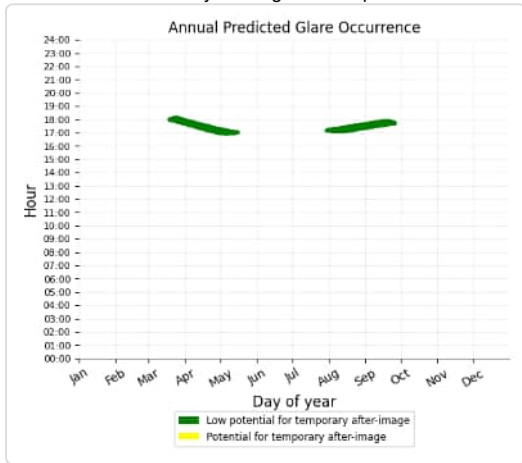


PV array 1 - OP Receptor (OP 26)

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

- 1,927 minutes of "green" glare with low potential to cause temporary after-image.

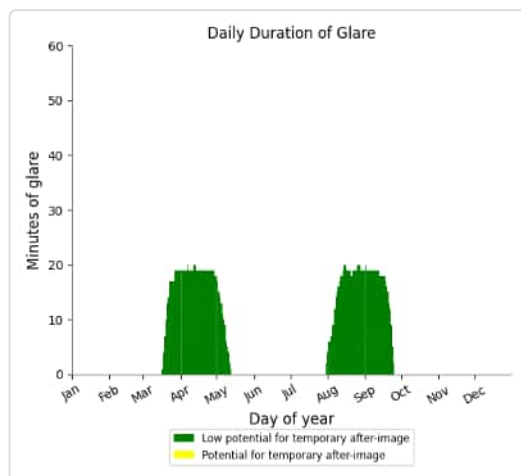
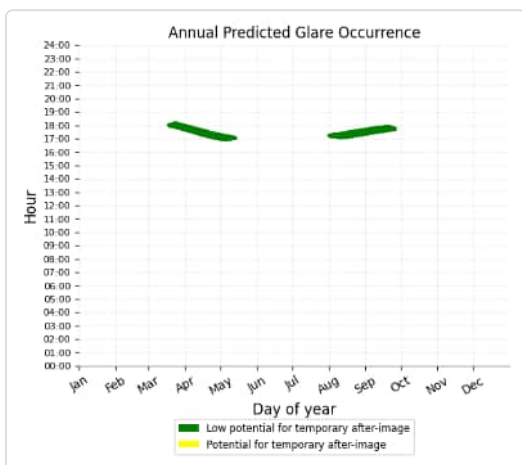
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

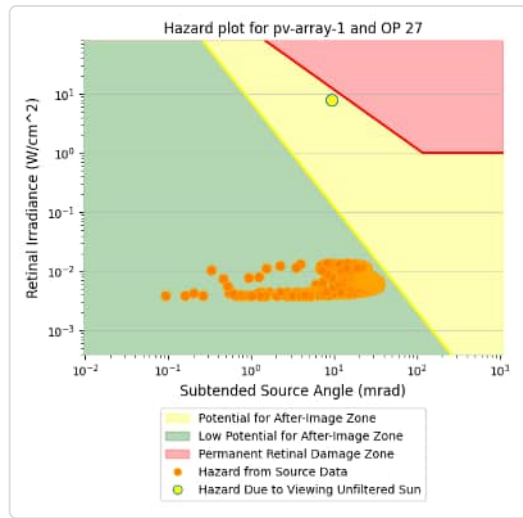
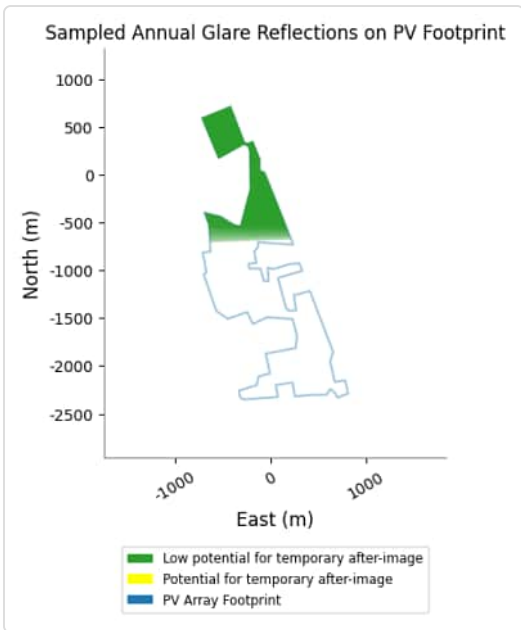


PV array 1 - OP Receptor (OP 27)

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

- 1,814 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

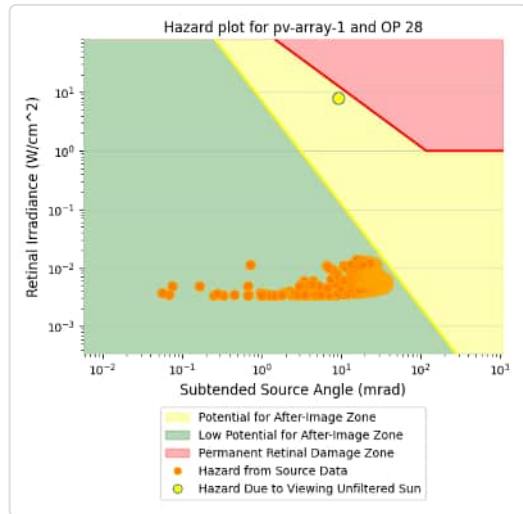
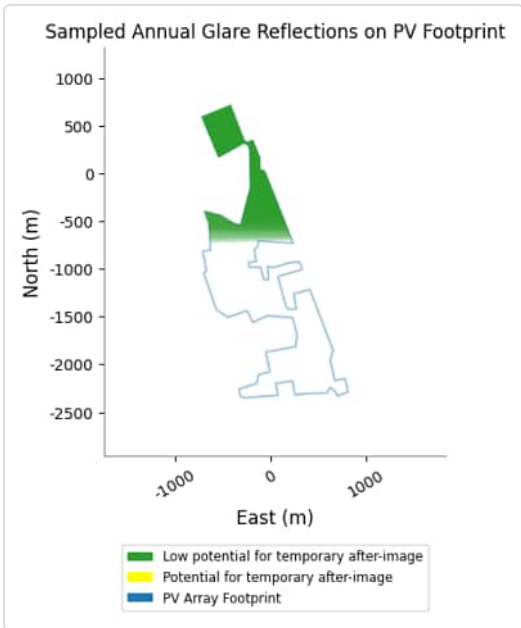
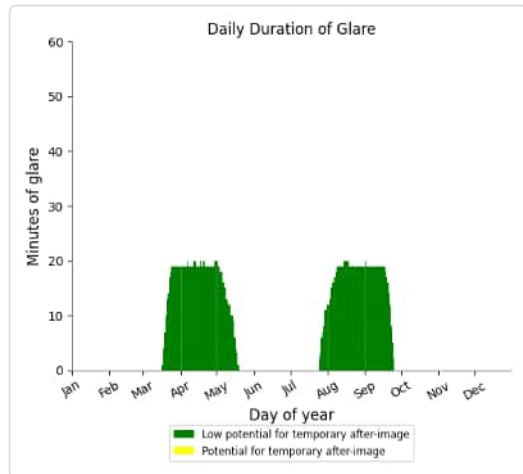
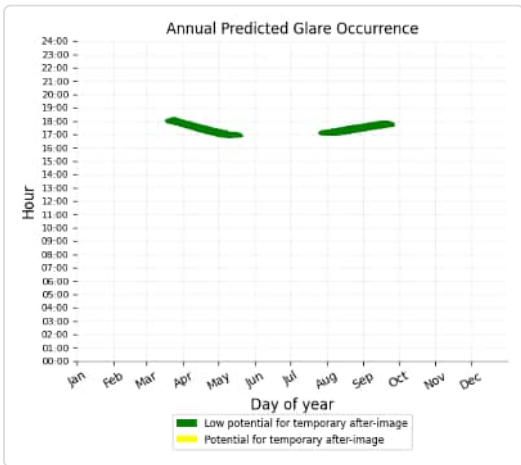




PV array 1 - OP Receptor (OP 28)

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

- 2,053 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

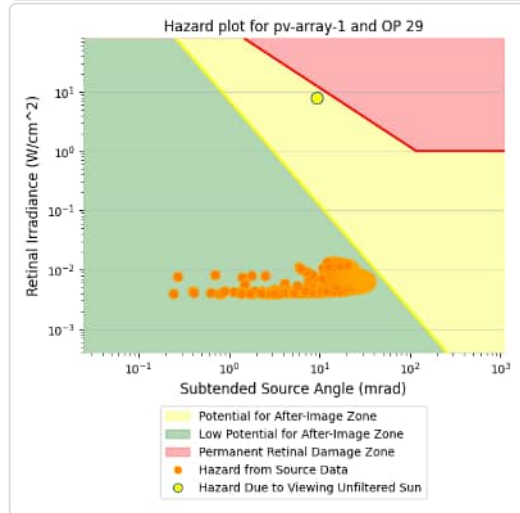
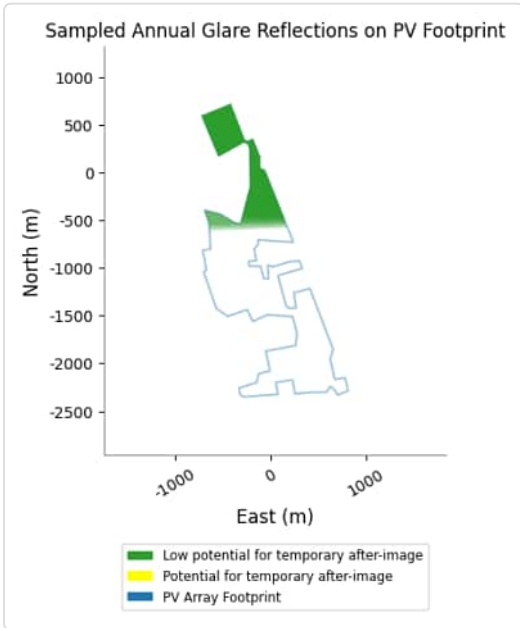
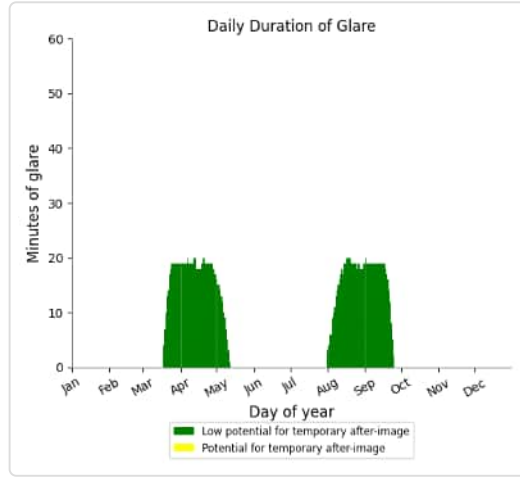
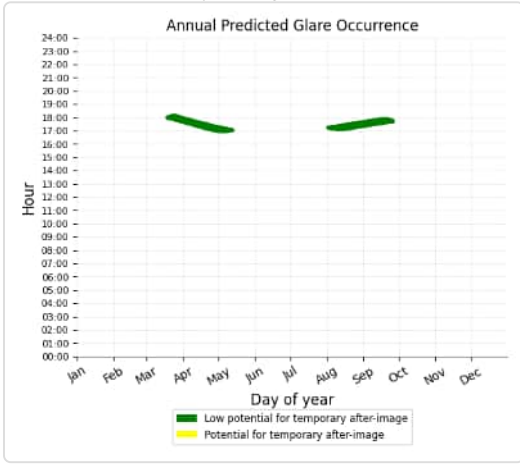


PV array 1 - OP Receptor (OP 29)

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

- 1,800 minutes of "green" glare with low potential to cause temporary after-image.

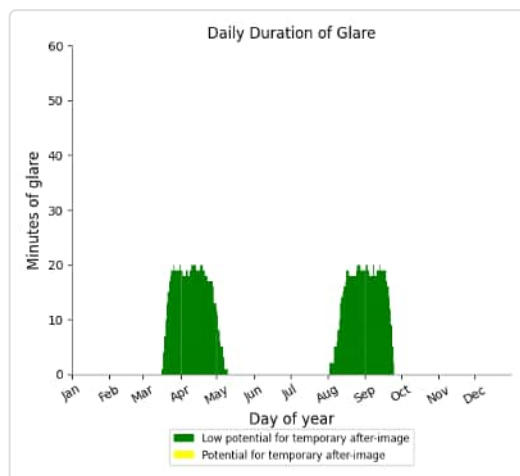
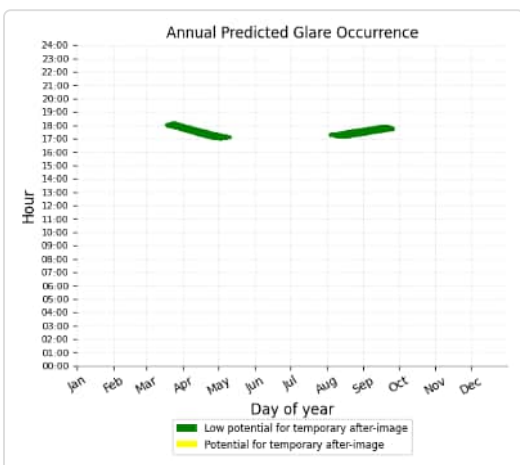
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

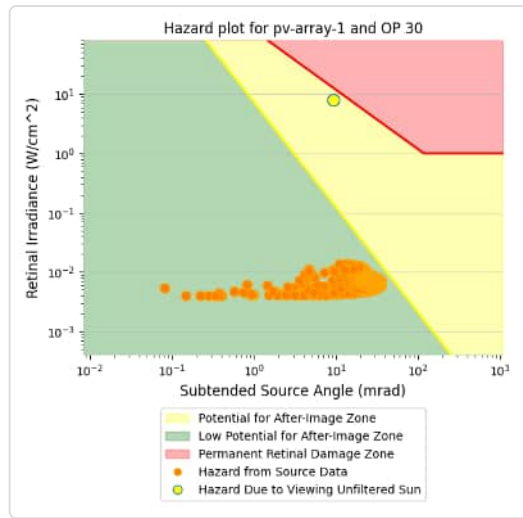
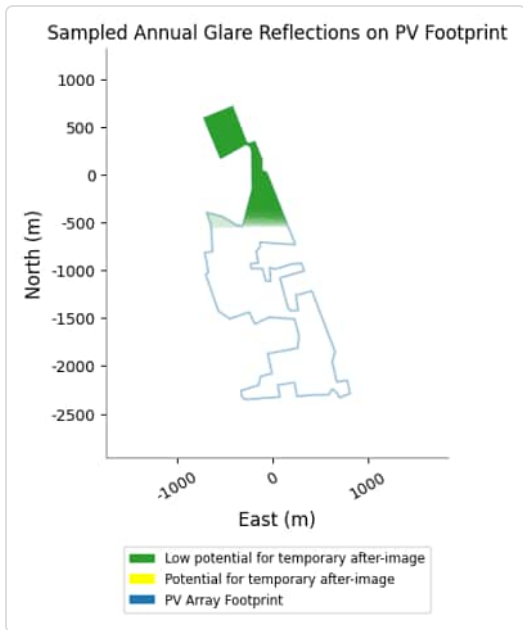


PV array 1 - OP Receptor (OP 30)

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

- 1,634 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

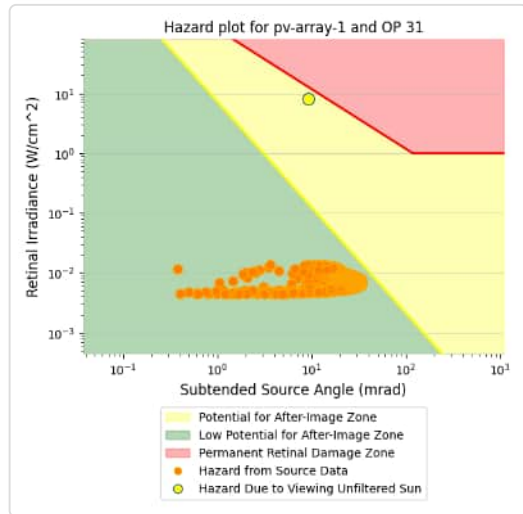
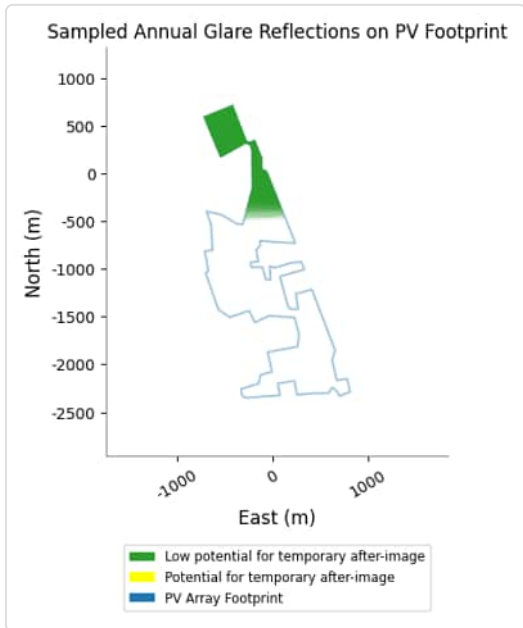
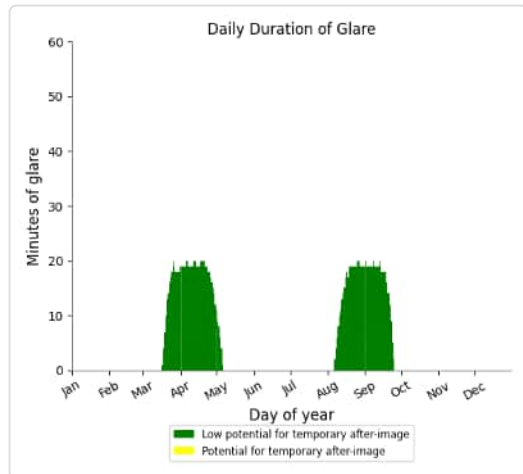
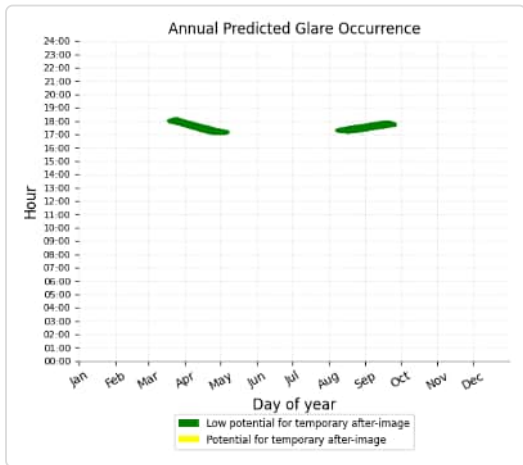




PV array 1 - OP Receptor (OP 31)

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

- 1,602 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

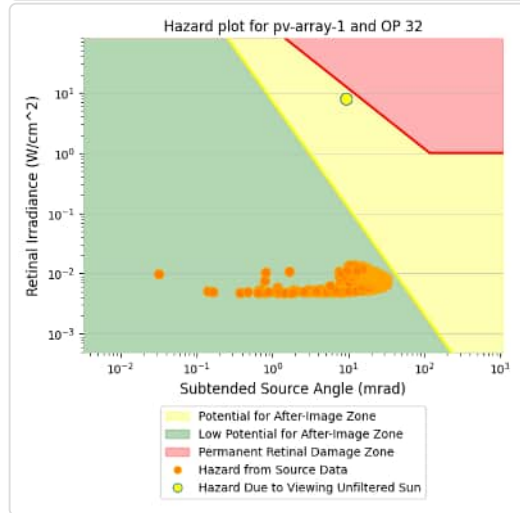
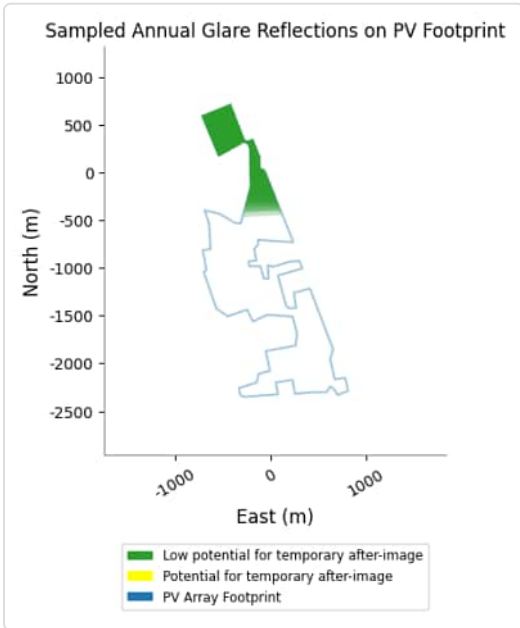
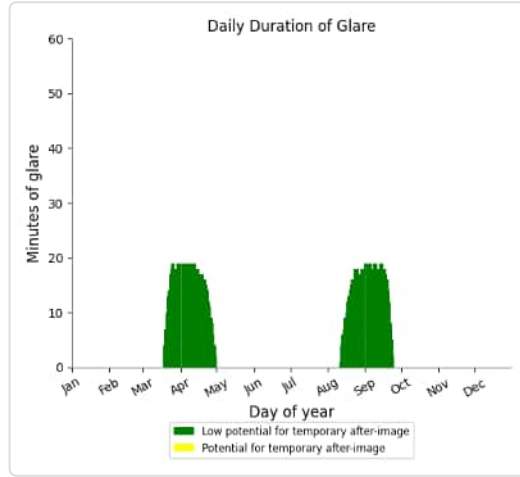
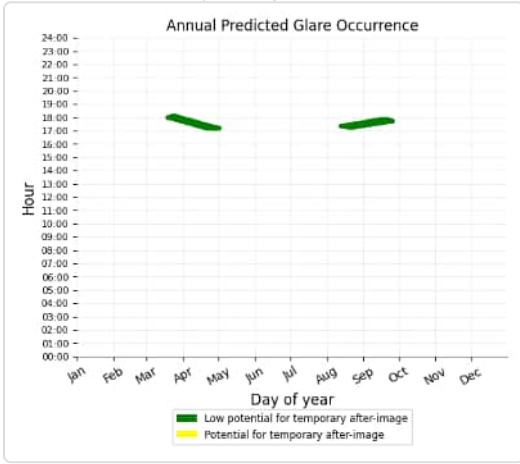


PV array 1 - OP Receptor (OP 32)

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

- 1,392 minutes of "green" glare with low potential to cause temporary after-image.

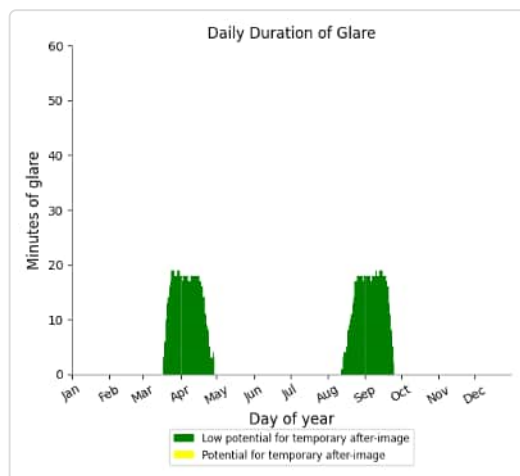
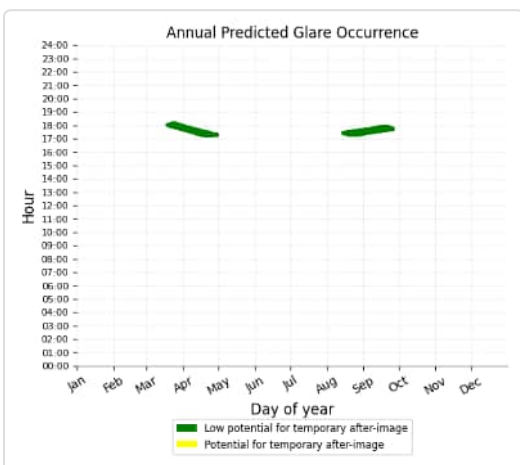
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

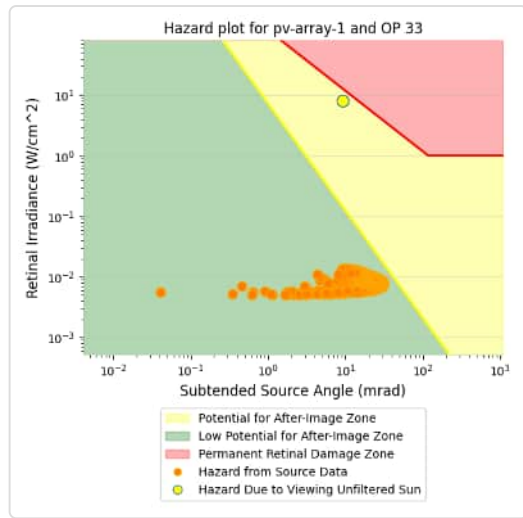
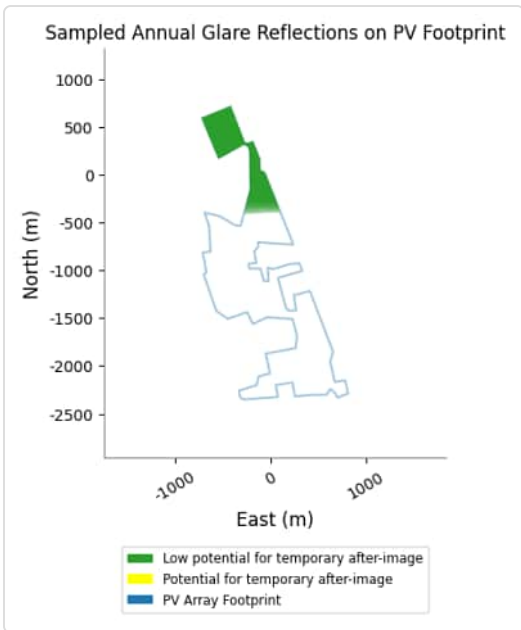


PV array 1 - OP Receptor (OP 33)

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

- 1,241 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

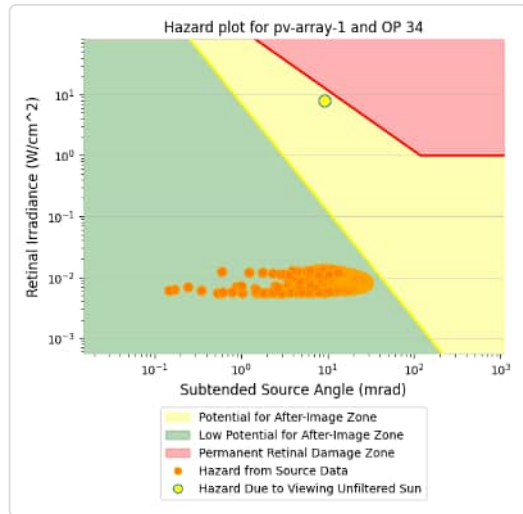
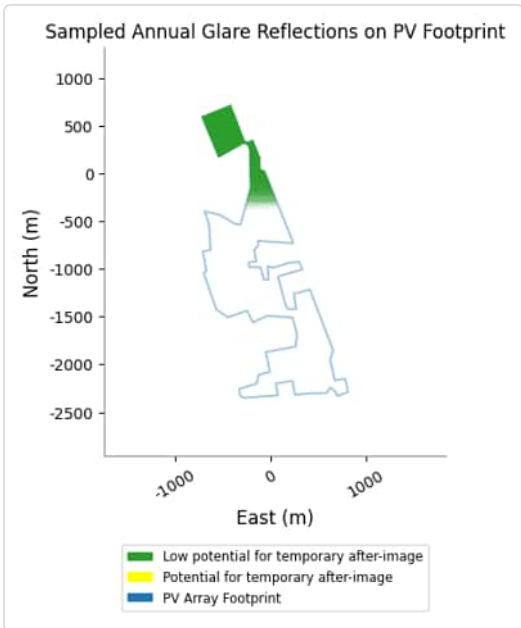
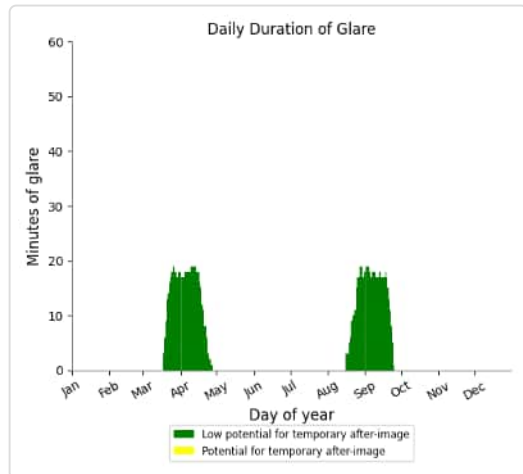
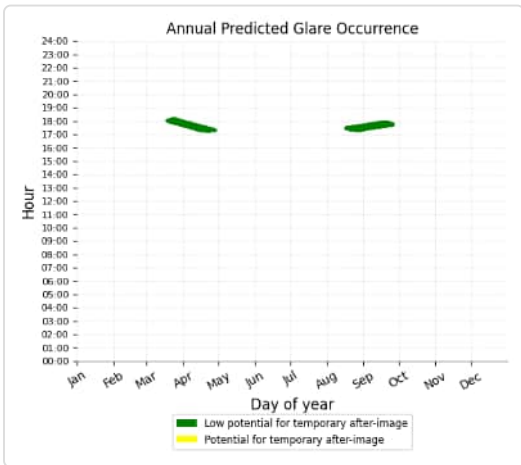




PV array 1 - OP Receptor (OP 34)

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

- 1,148 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

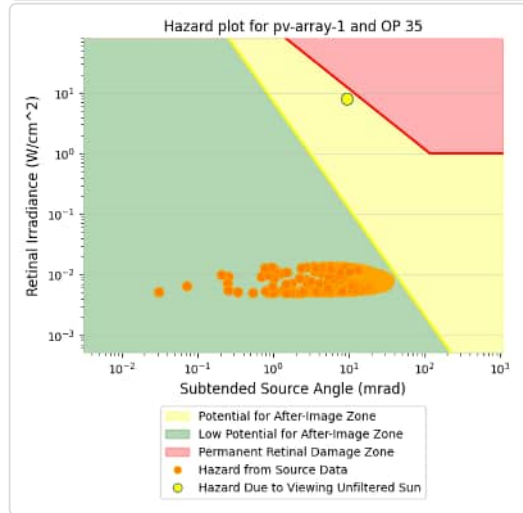
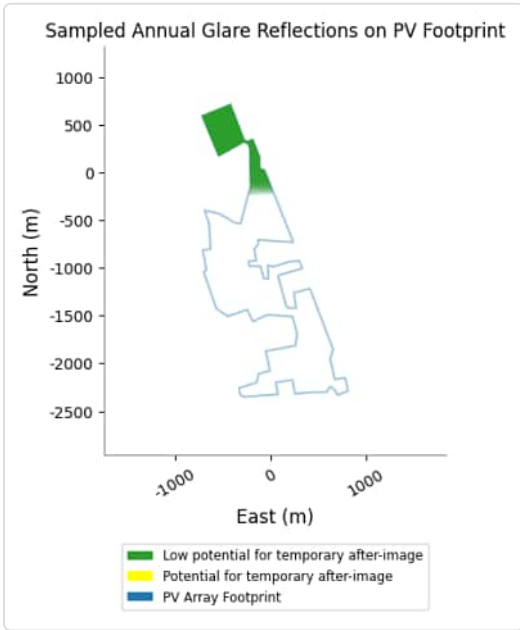
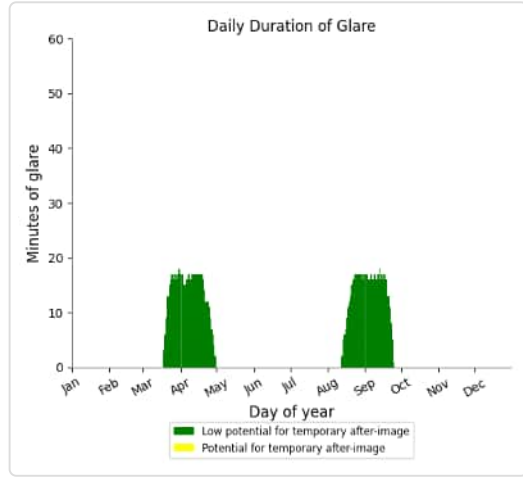
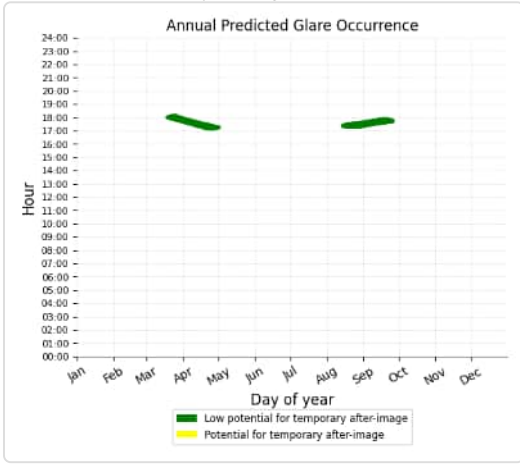


PV array 1 - OP Receptor (OP 35)

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

- 1,225 minutes of "green" glare with low potential to cause temporary after-image.

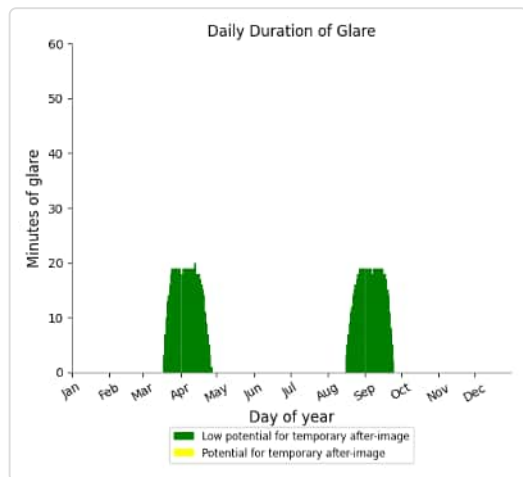
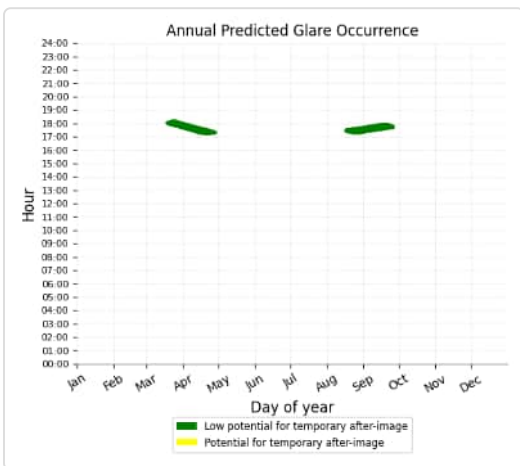
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

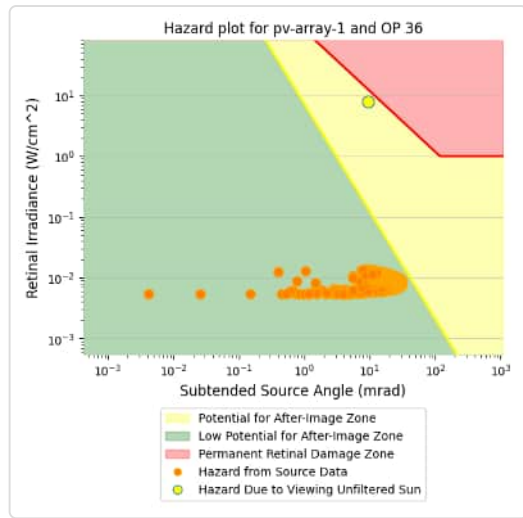
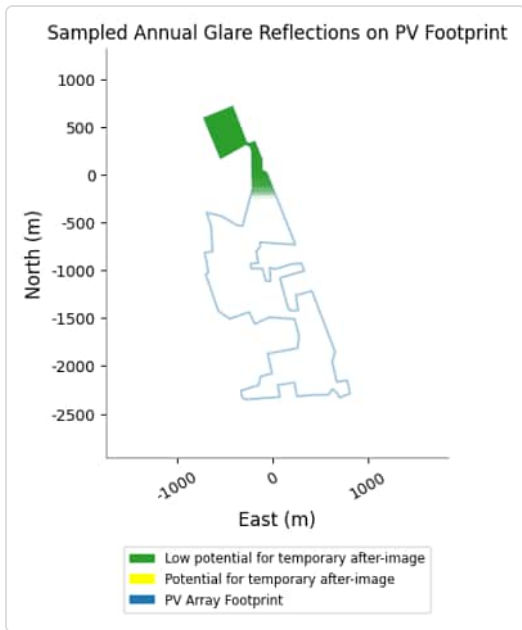


PV array 1 - OP Receptor (OP 36)

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

- 1,264 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

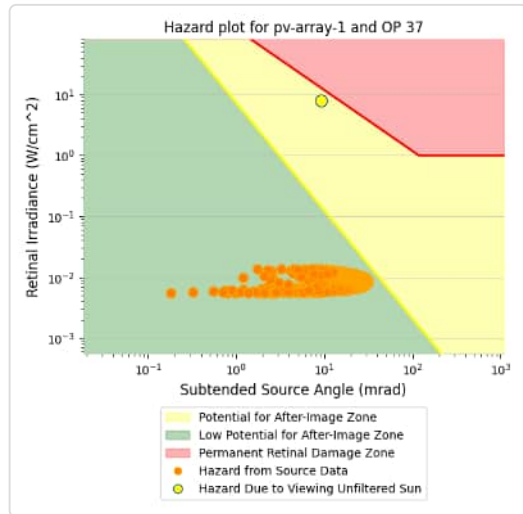
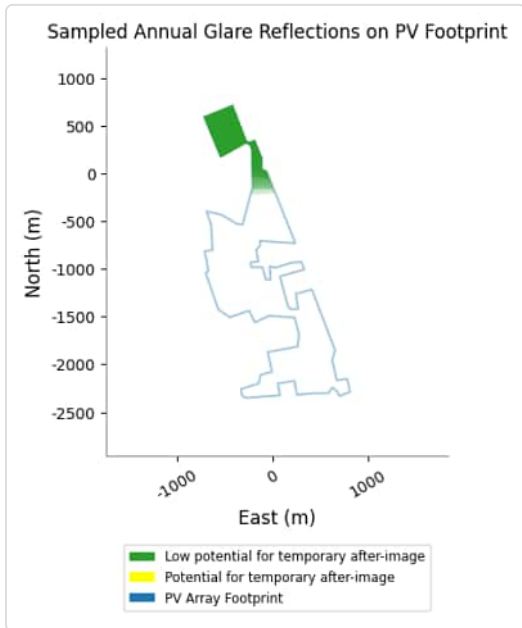
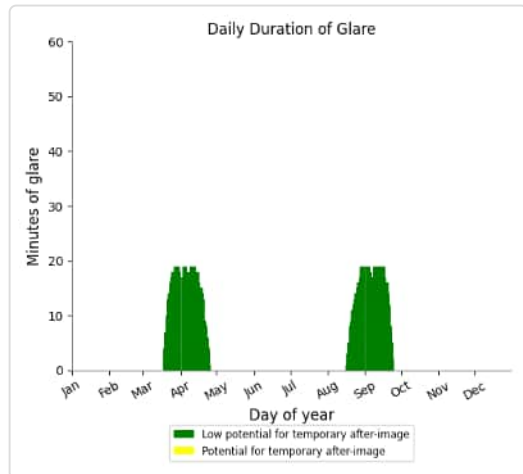
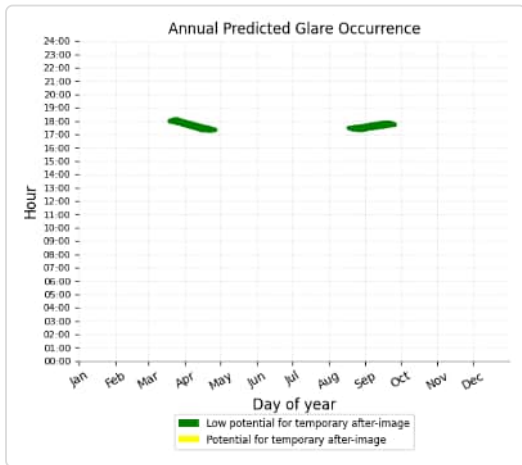




PV array 1 - OP Receptor (OP 37)

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

- 1,219 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

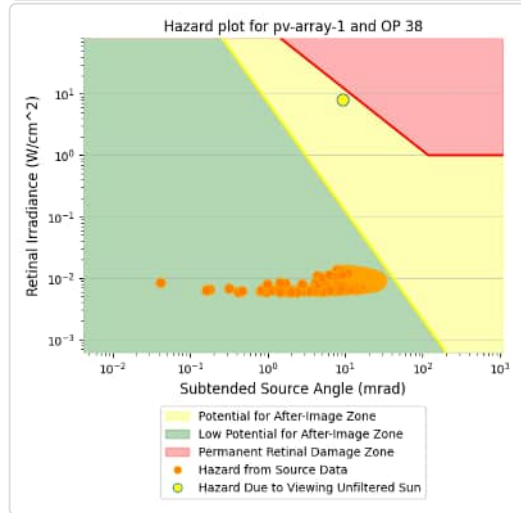
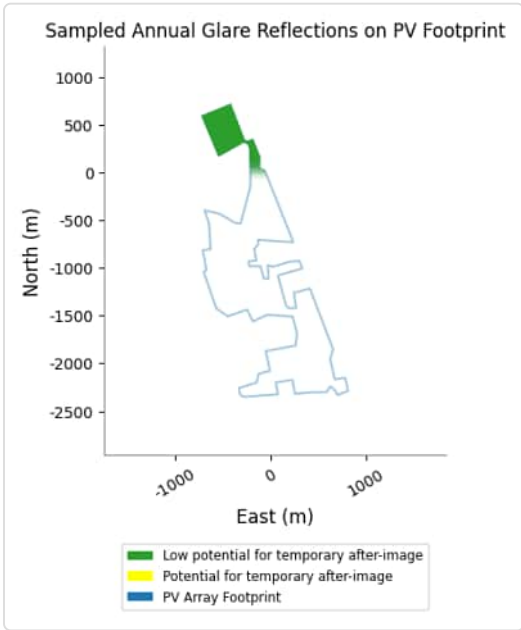
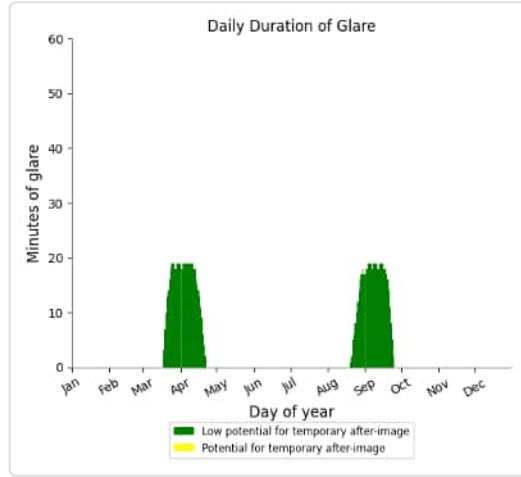
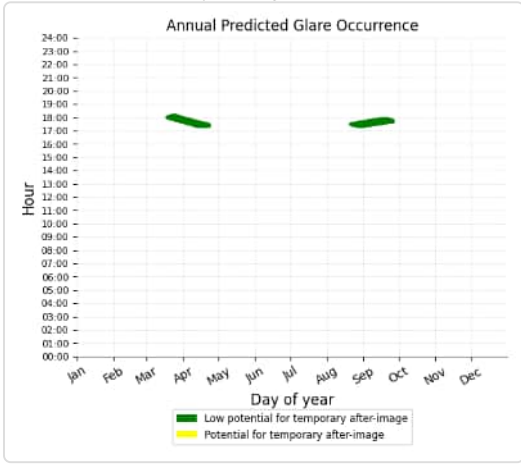


PV array 1 - OP Receptor (OP 38)

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

- 1,080 minutes of "green" glare with low potential to cause temporary after-image.

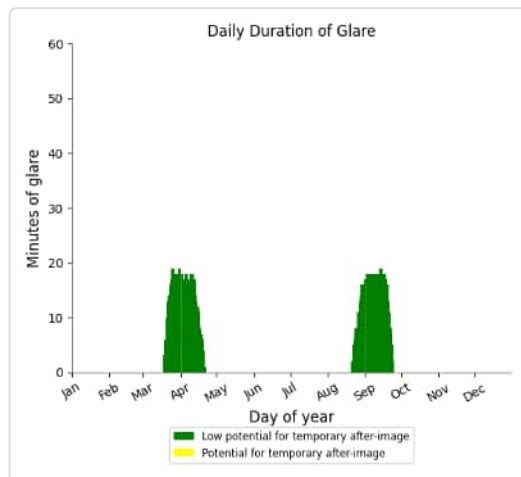
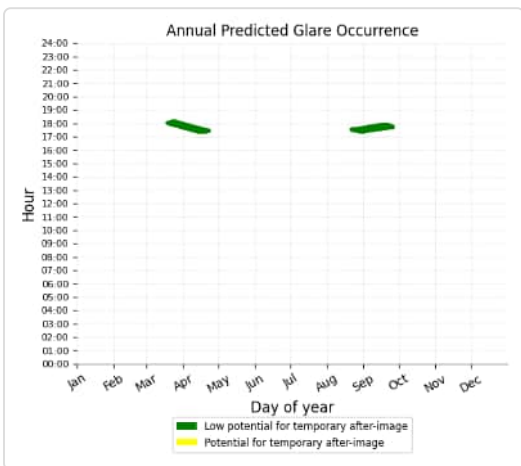
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

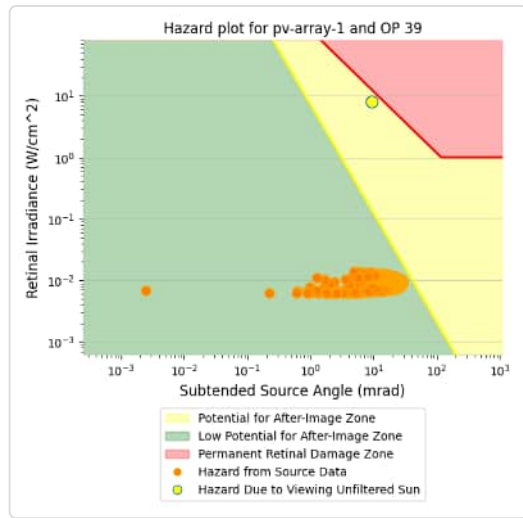
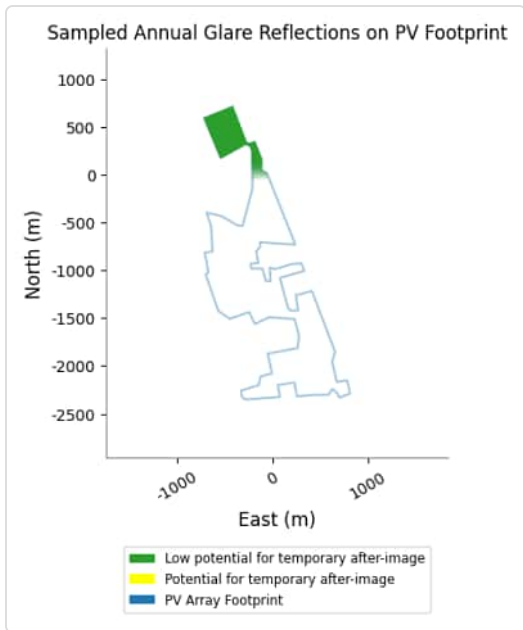


PV array 1 - OP Receptor (OP 39)

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

- 1,030 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

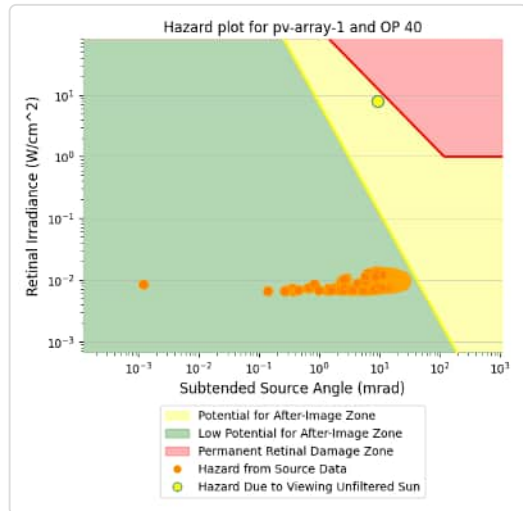
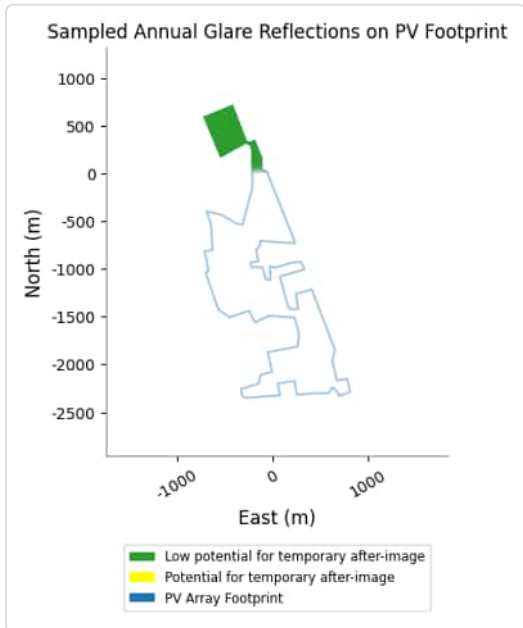
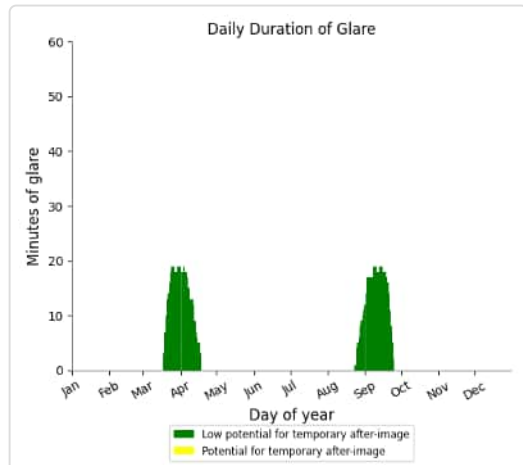
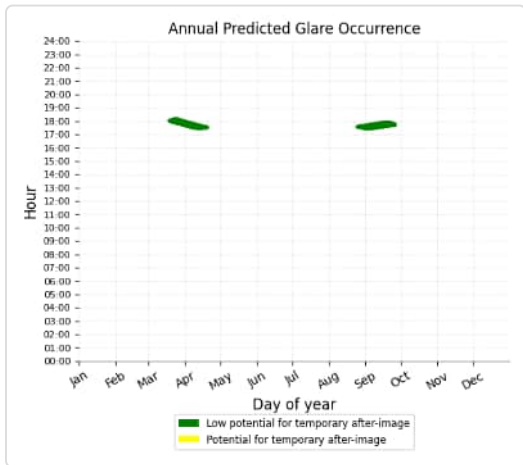




PV array 1 - OP Receptor (OP 40)

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

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

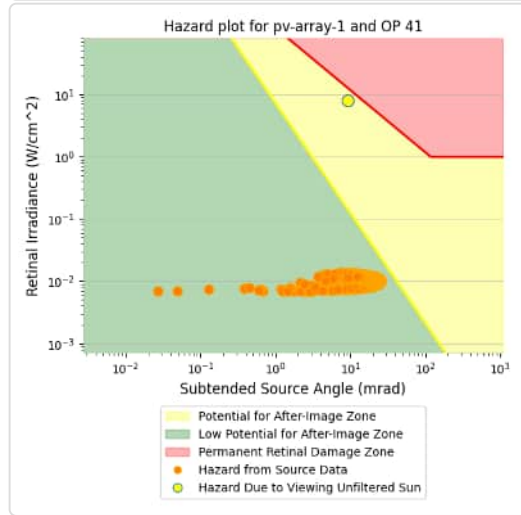
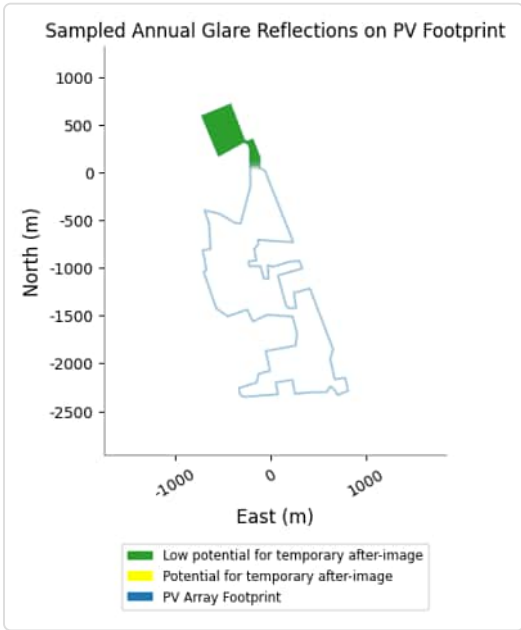
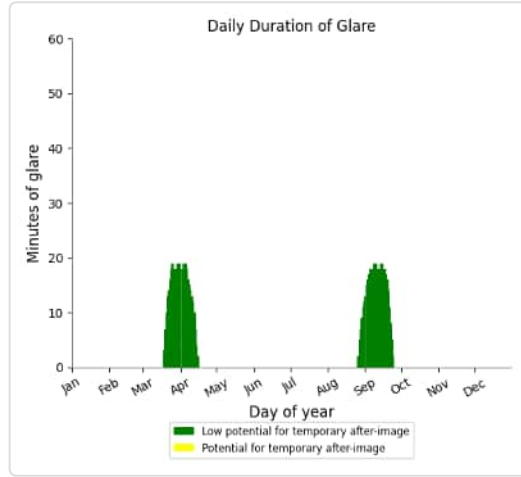
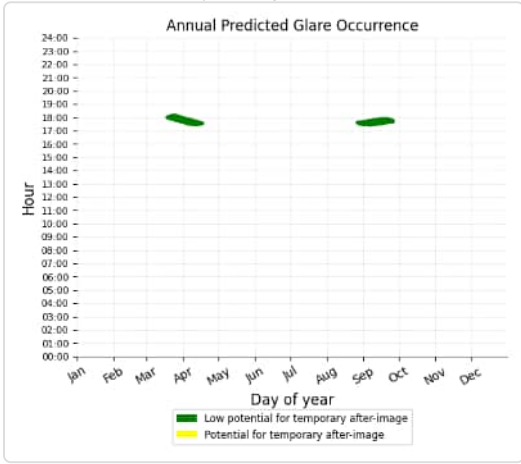


PV array 1 - OP Receptor (OP 41)

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

- 875 minutes of "green" glare with low potential to cause temporary after-image.

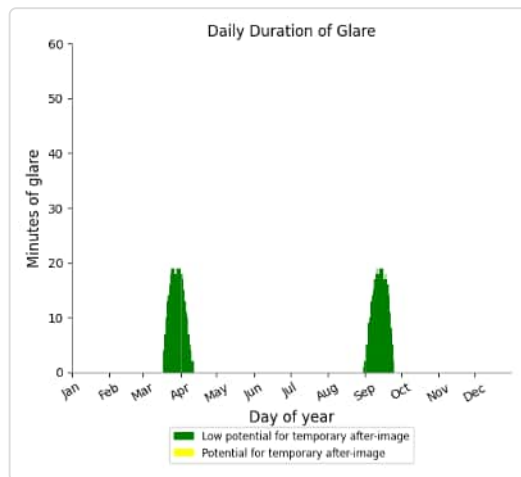
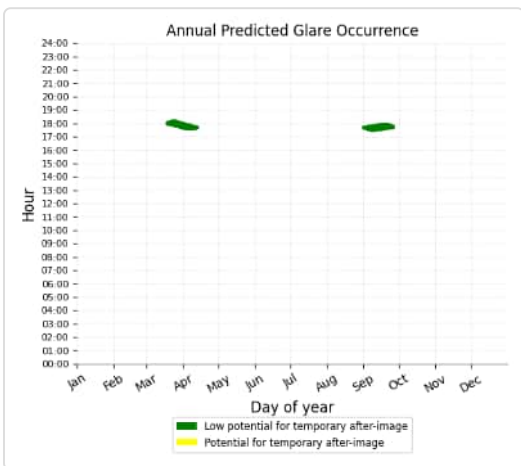
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

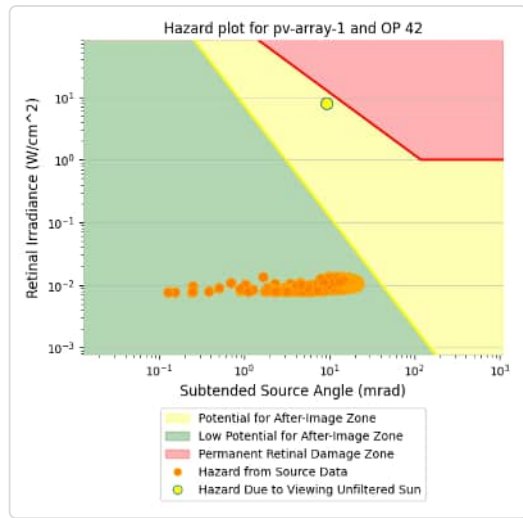
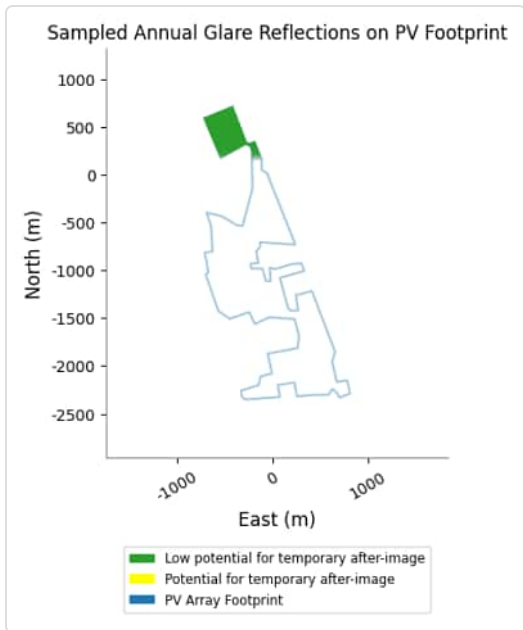


PV array 1 - OP Receptor (OP 42)

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

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

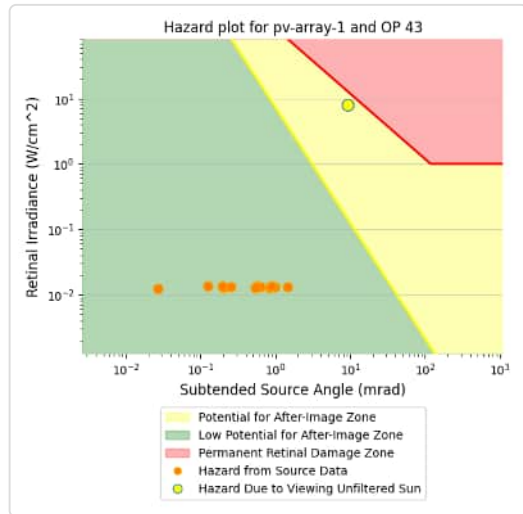
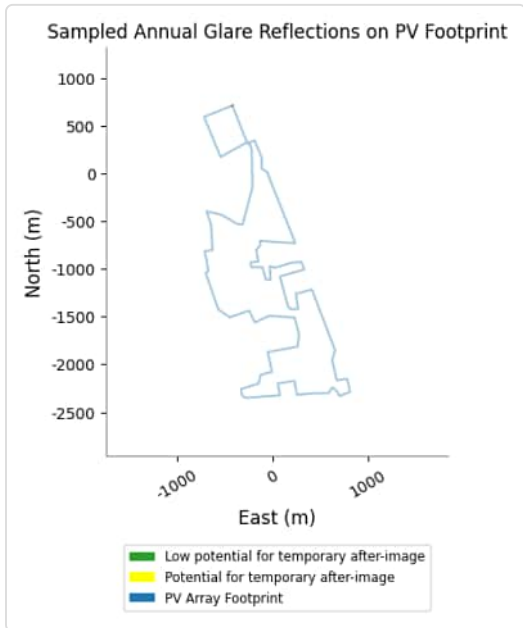
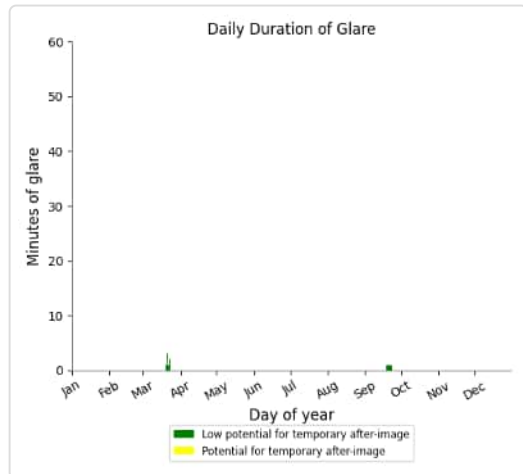
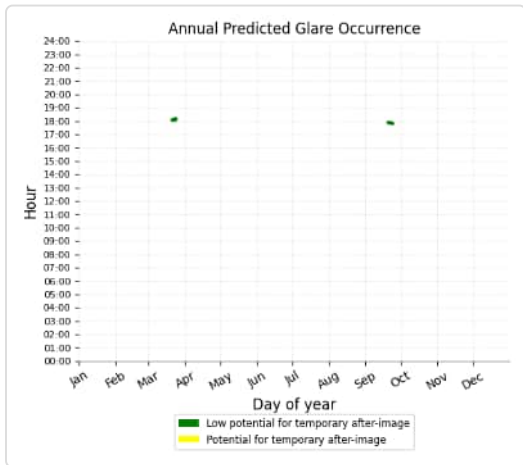




PV array 1 - OP Receptor (OP 43)

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

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

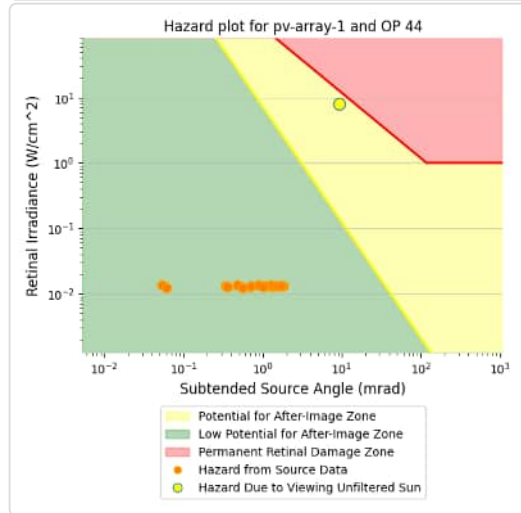
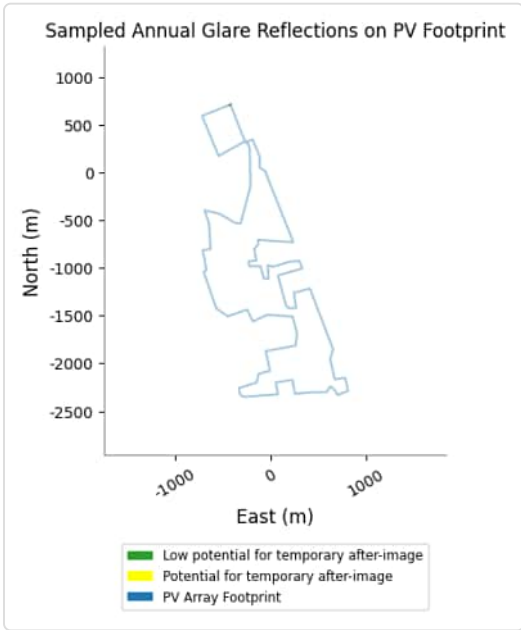
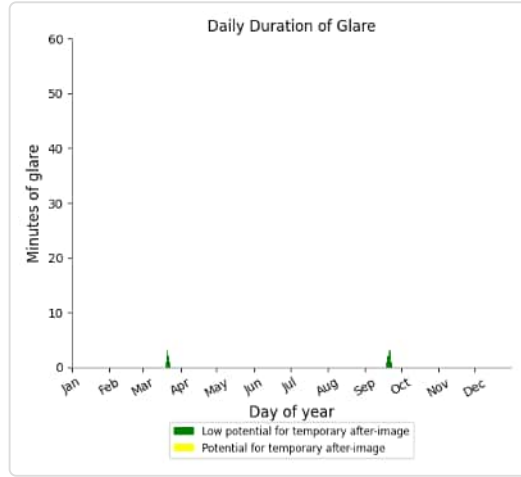
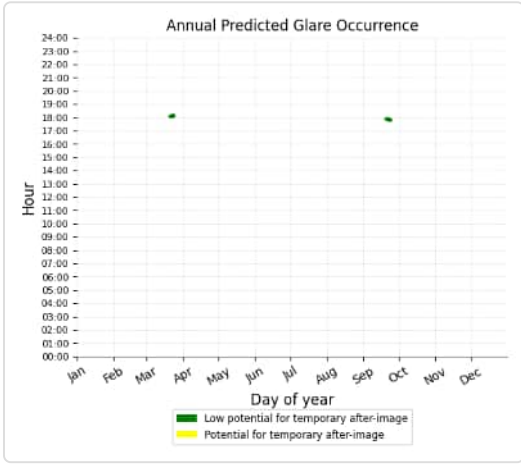


PV array 1 - OP Receptor (OP 44)

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

- 17 minutes of "green" glare with low potential to cause temporary after-image.

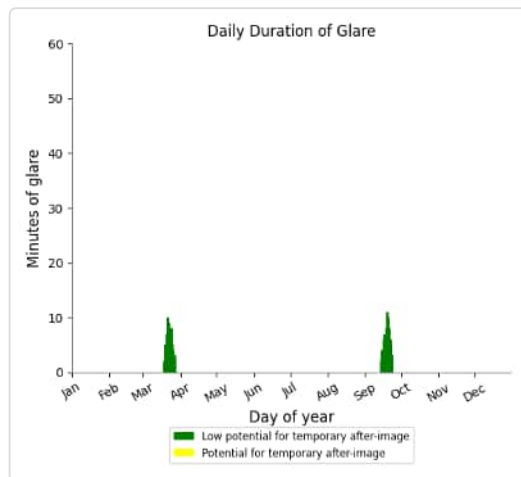
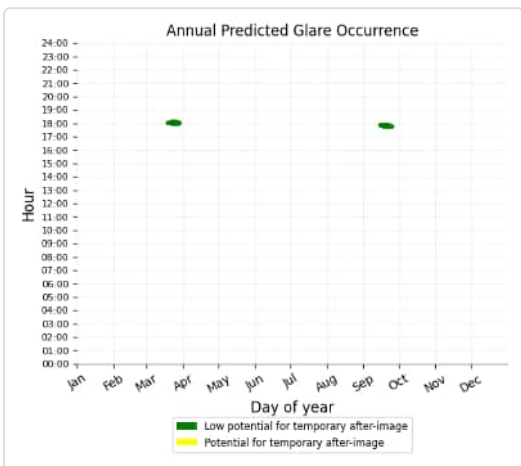
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

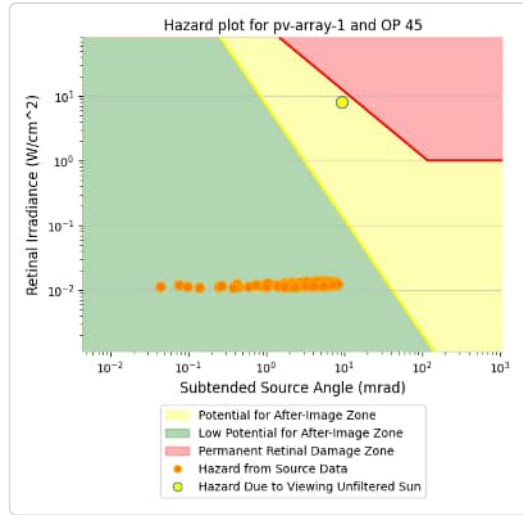
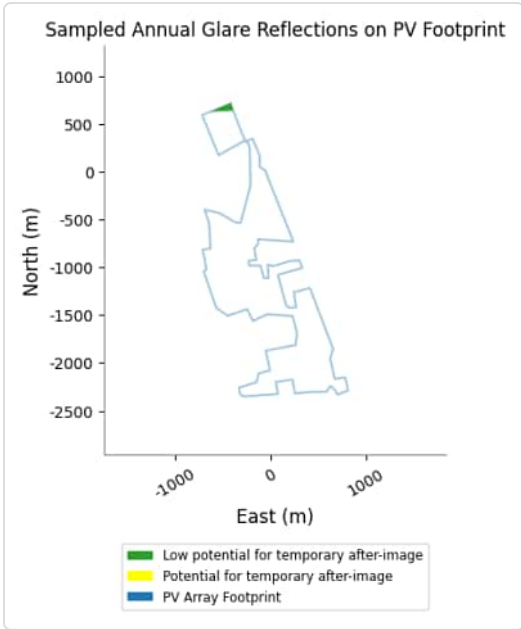


PV array 1 - OP Receptor (OP 45)

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

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

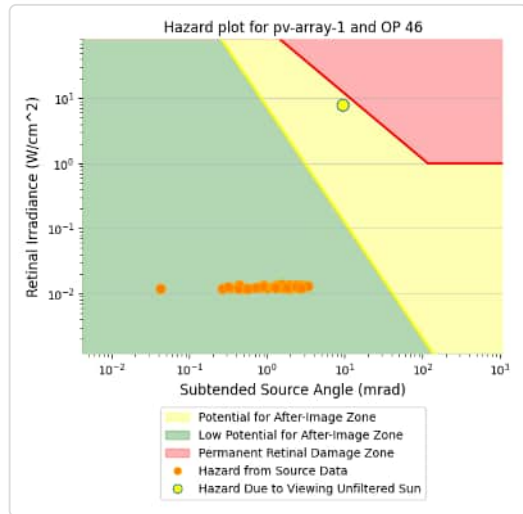
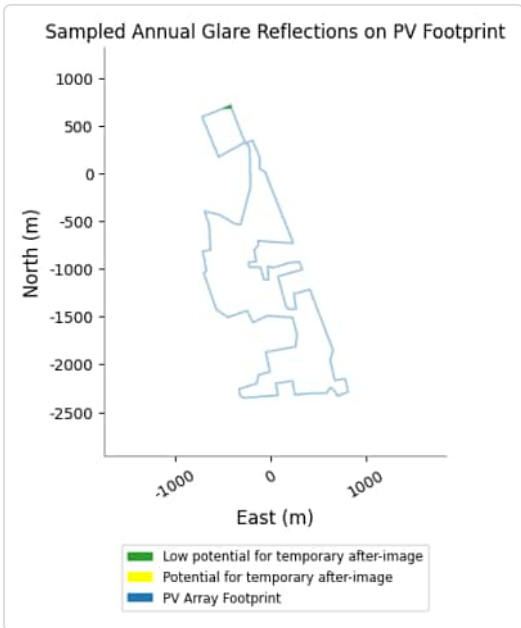
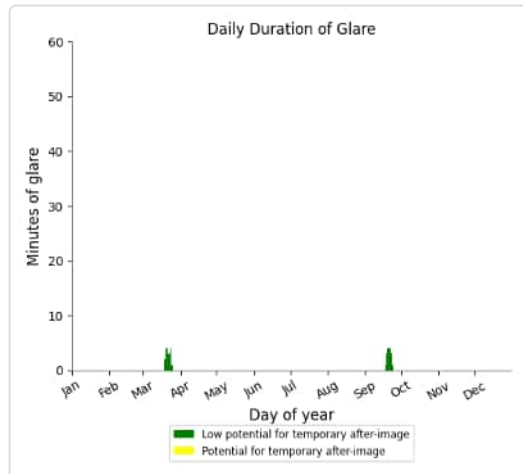
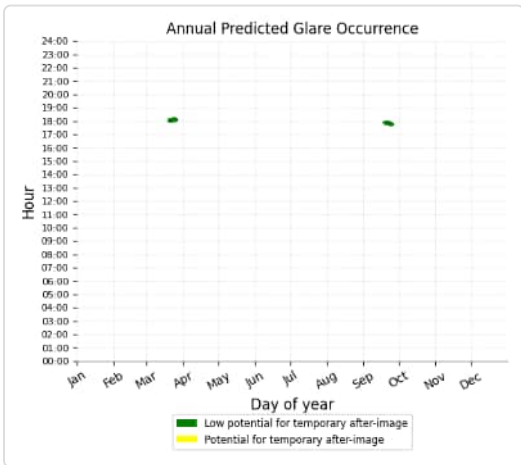




PV array 1 - OP Receptor (OP 46)

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

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

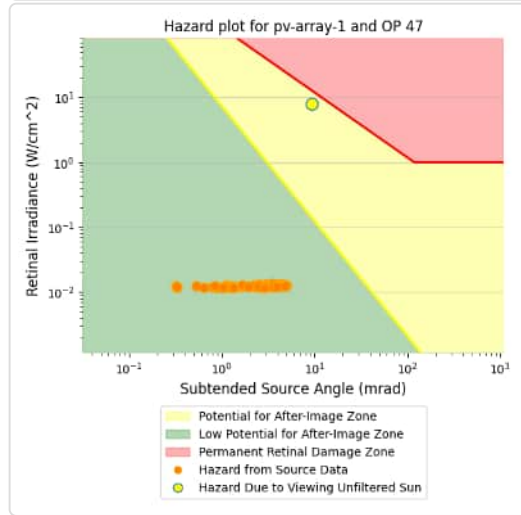
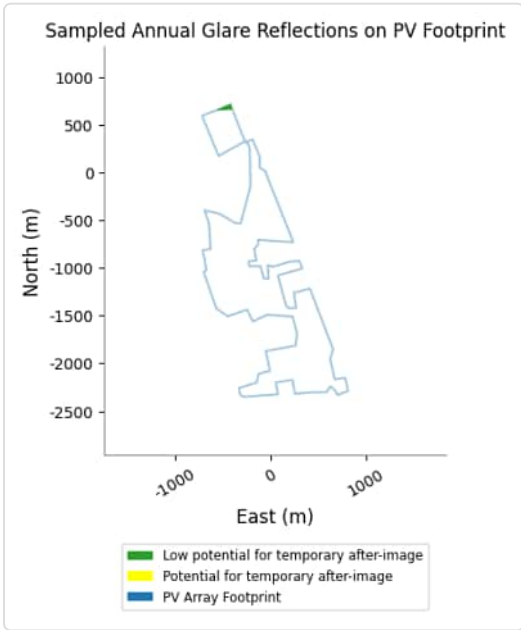
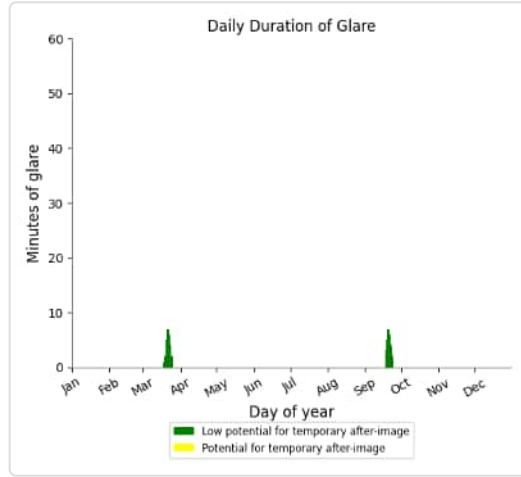
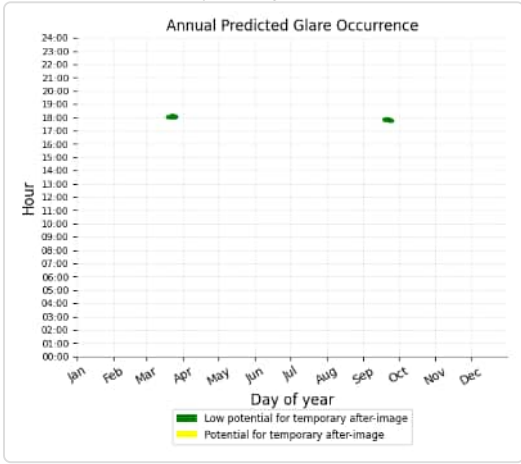


PV array 1 - OP Receptor (OP 47)

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

- 68 minutes of "green" glare with low potential to cause temporary after-image.

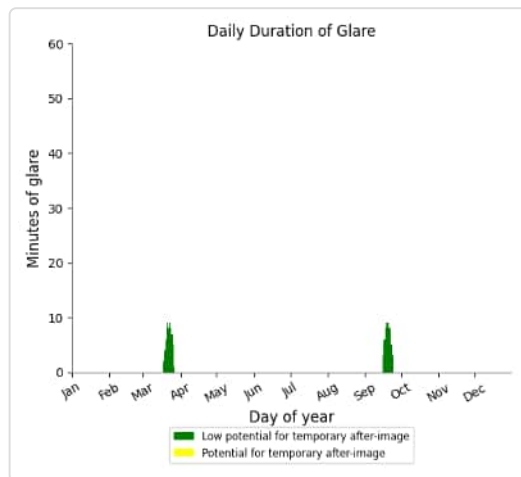
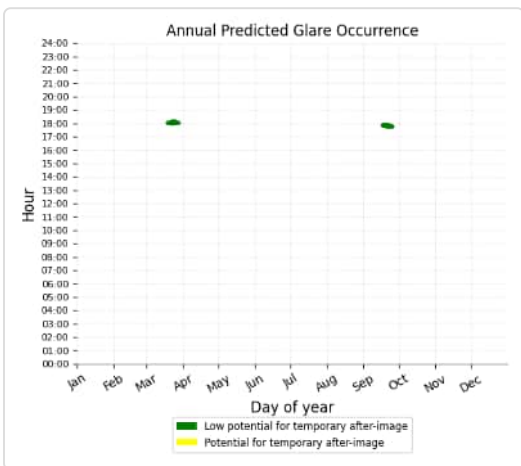
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

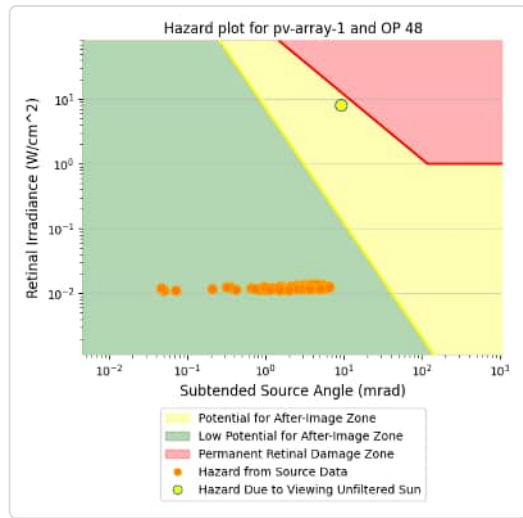
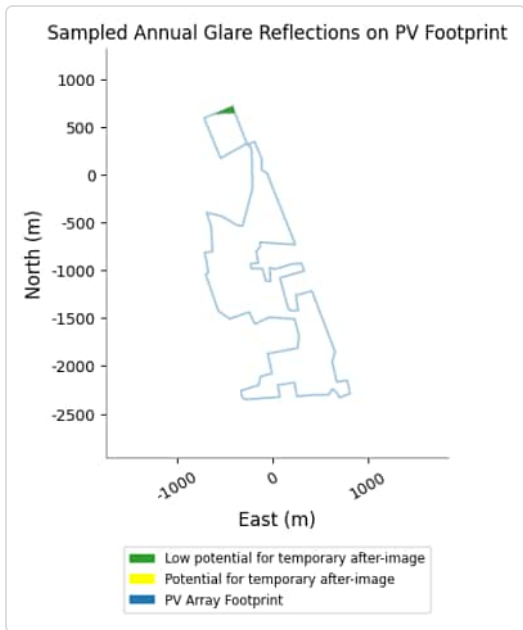


PV array 1 - OP Receptor (OP 48)

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

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

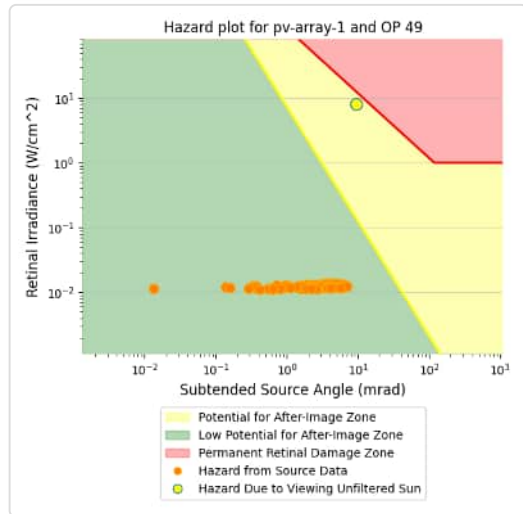
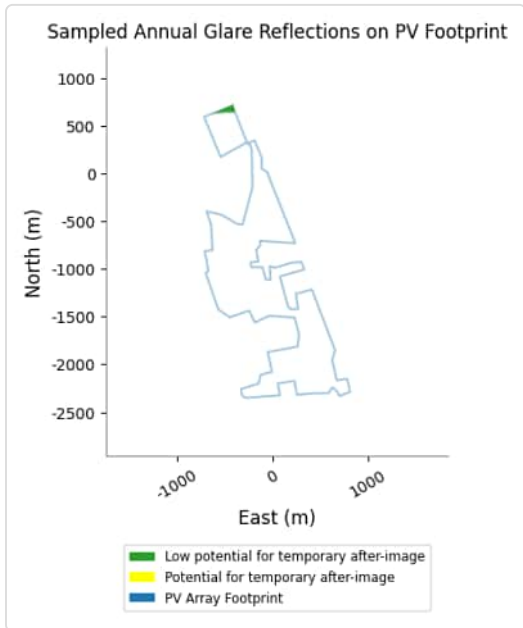
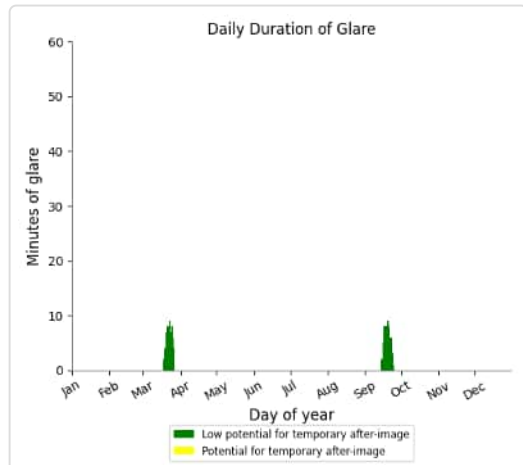
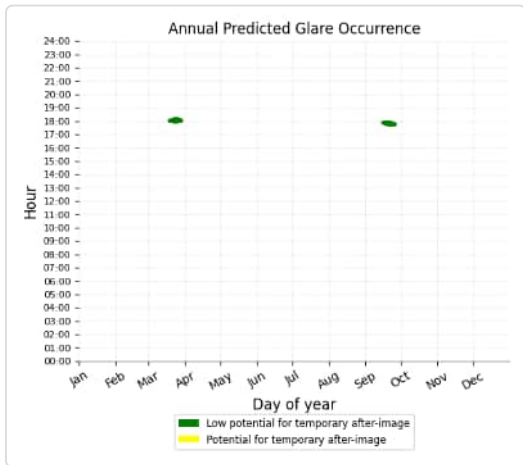




PV array 1 - OP Receptor (OP 49)

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

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

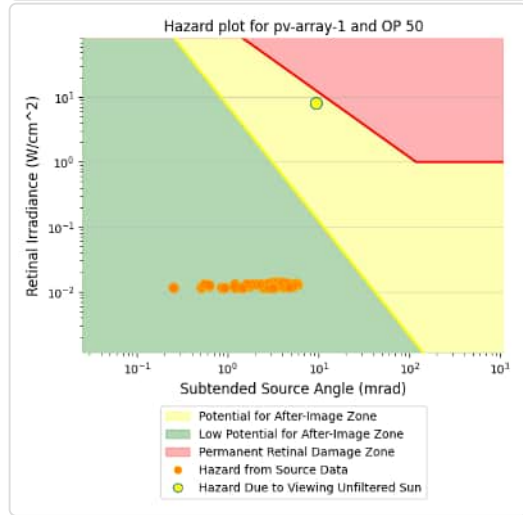
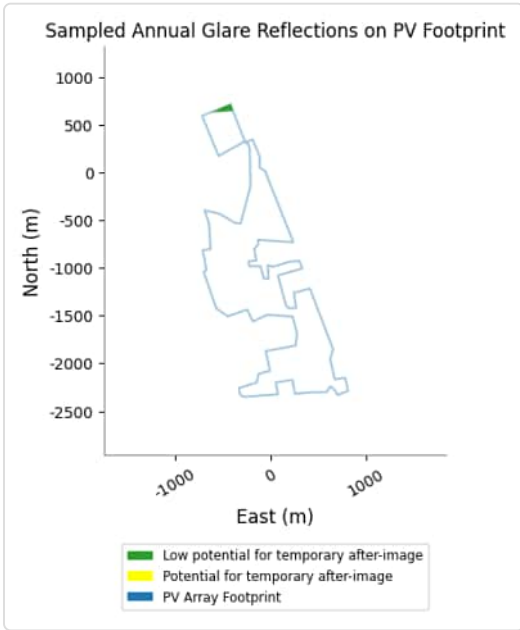
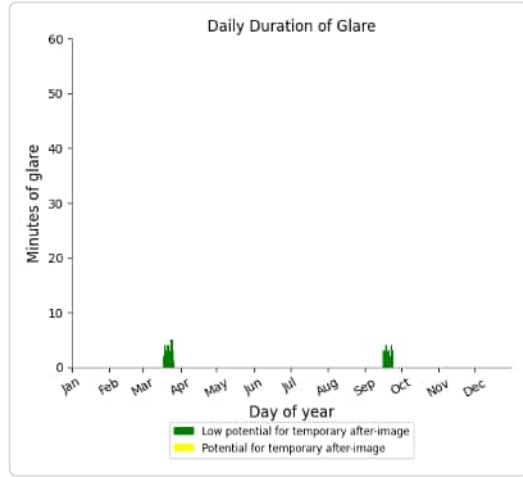
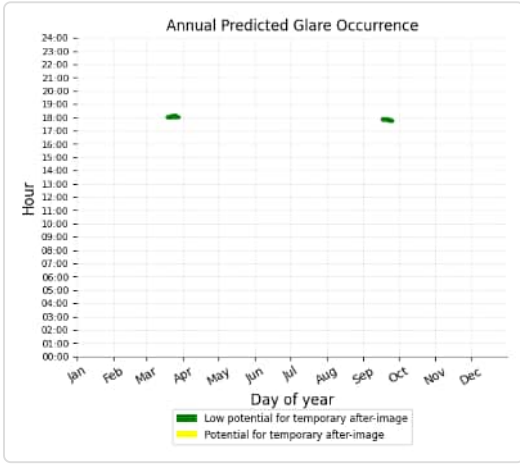


PV array 1 - OP Receptor (OP 50)

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

- 63 minutes of "green" glare with low potential to cause temporary after-image.

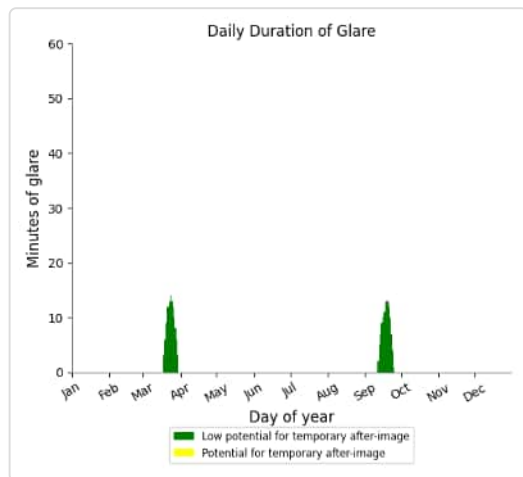
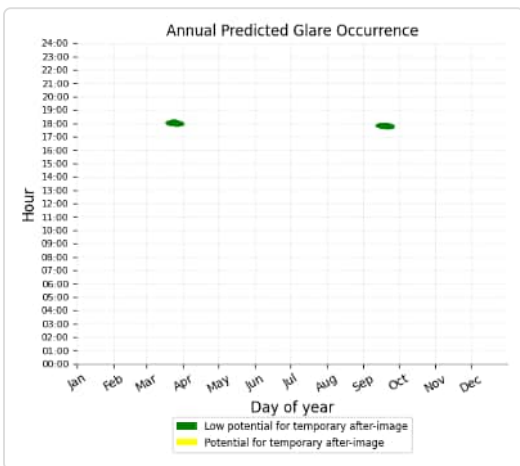
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

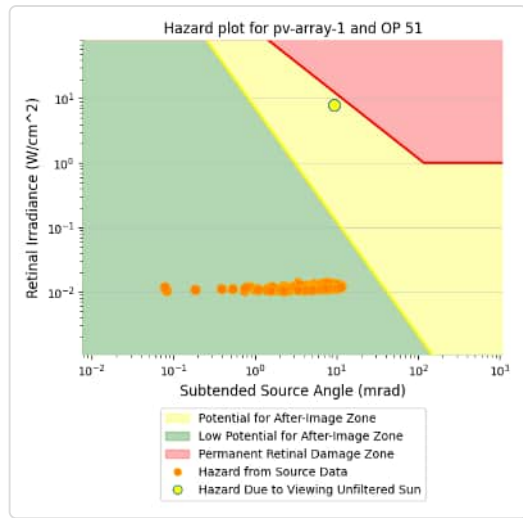
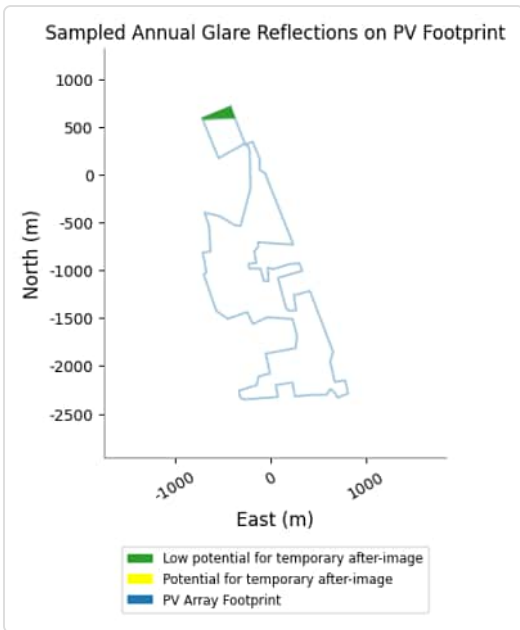


PV array 1 - OP Receptor (OP 51)

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

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

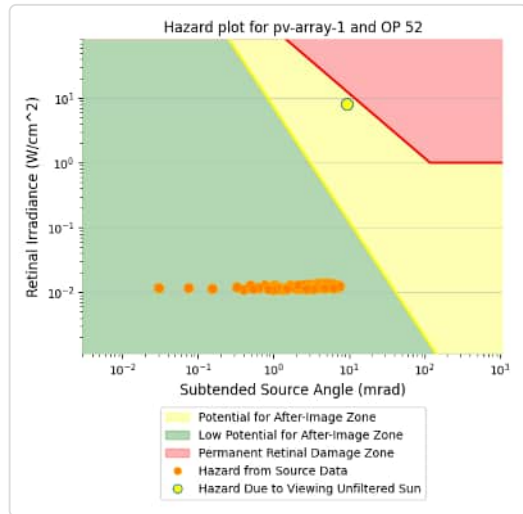
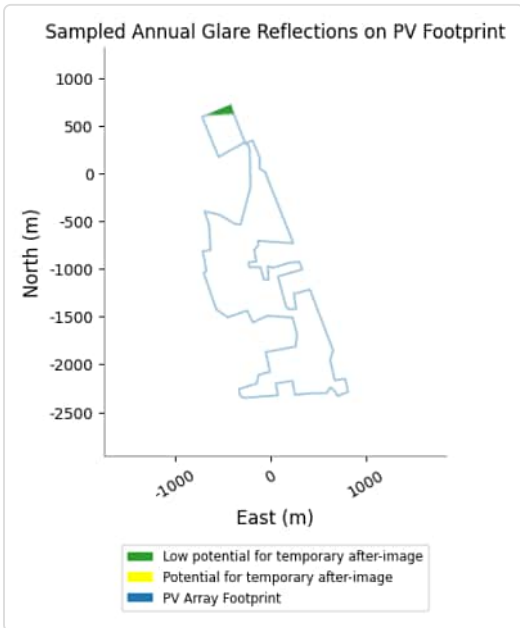
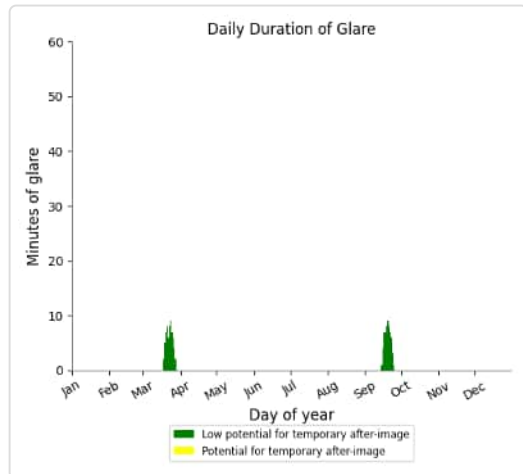
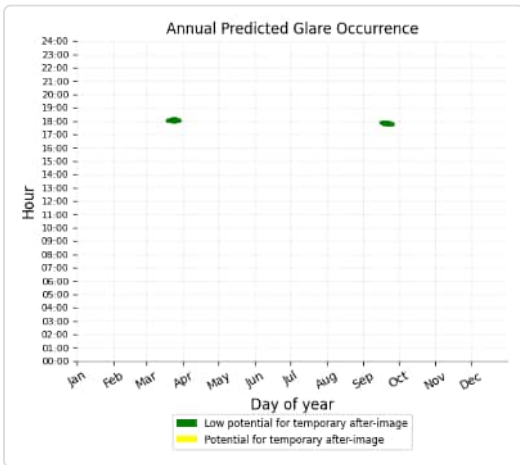




PV array 1 - OP Receptor (OP 52)

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

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



PV array 1 - OP Receptor (OP 53)

No glare found

PV array 2 potential temporary after-image

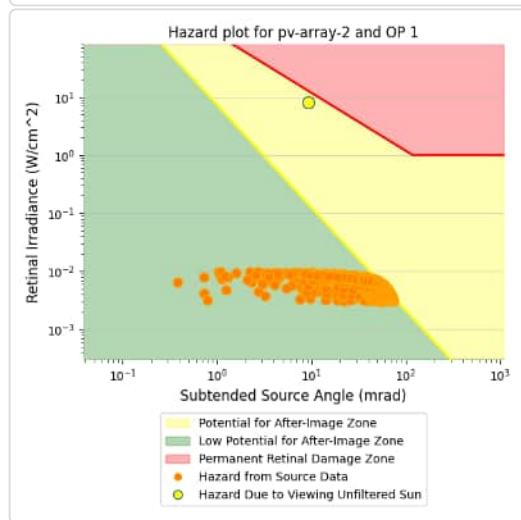
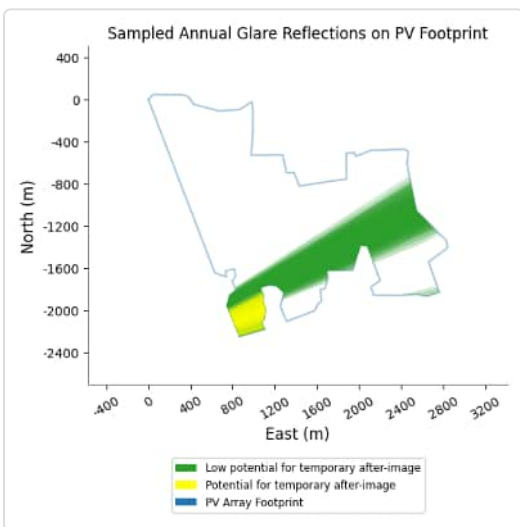
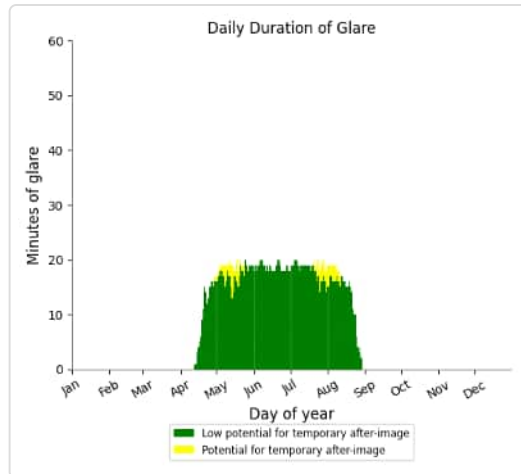
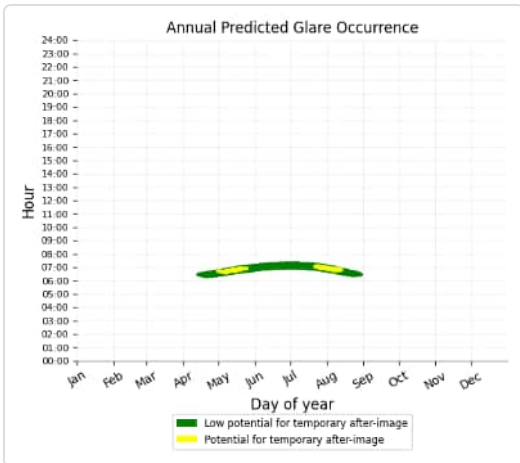
Component	Green glare (min)	Yellow glare (min)
OP: OP 1	2216	120
OP: OP 2	1539	44
OP: OP 3	1749	0
OP: OP 4	1394	0
OP: OP 5	1112	0
OP: OP 6	1997	0
OP: OP 7	2161	0
OP: OP 8	2107	0
OP: OP 9	1861	0
OP: OP 10	1611	0
OP: OP 11	4367	0
OP: OP 12	1544	4967
OP: OP 13	3422	7629
OP: OP 14	2628	7973
OP: OP 15	3035	9356
OP: OP 16	2079	1352
OP: OP 17	2536	733
OP: OP 18	2280	815
OP: OP 19	2521	690
OP: OP 20	871	23
OP: OP 21	2295	993
OP: OP 22	1296	393
OP: OP 23	1925	434
OP: OP 24	2423	1040
OP: OP 25	1255	272
OP: OP 26	945	43
OP: OP 27	596	2
OP: OP 28	1145	169
OP: OP 29	583	6
OP: OP 30	369	0
OP: OP 31	254	0
OP: OP 32	286	0
OP: OP 33	375	0
OP: OP 34	283	0
OP: OP 35	213	0
OP: OP 36	64	0
OP: OP 37	66	0
OP: OP 38	34	0
OP: OP 39	22	0
OP: OP 40	1	0
OP: OP 41	0	0
OP: OP 42	0	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	0	0
OP: OP 46	0	0
OP: OP 47	0	0
OP: OP 48	0	0
OP: OP 49	0	0

OP: OP 50	0	0
OP: OP 51	0	0
OP: OP 52	0	0
OP: OP 53	0	0

PV array 2 - OP Receptor (OP 1)

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

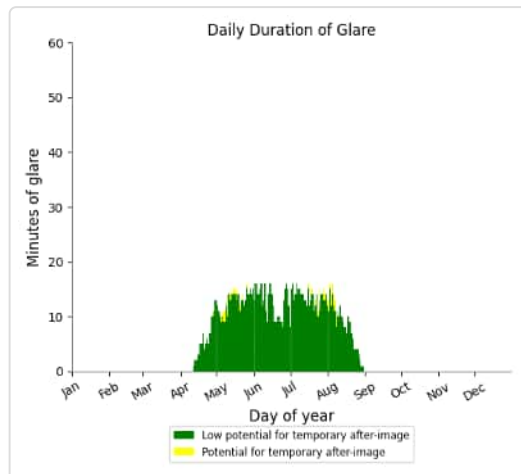
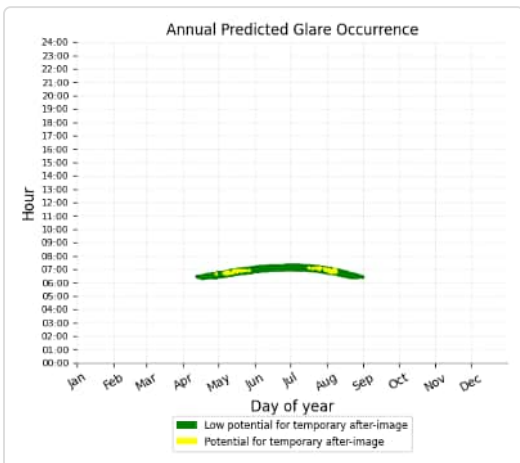
- 2,216 minutes of "green" glare with low potential to cause temporary after-image.
- 120 minutes of "yellow" glare with potential to cause temporary after-image.

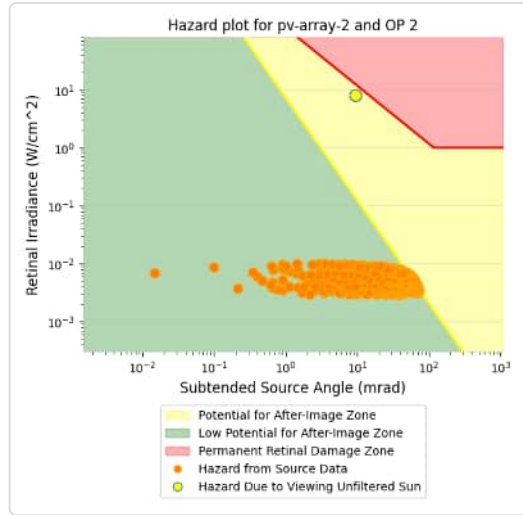
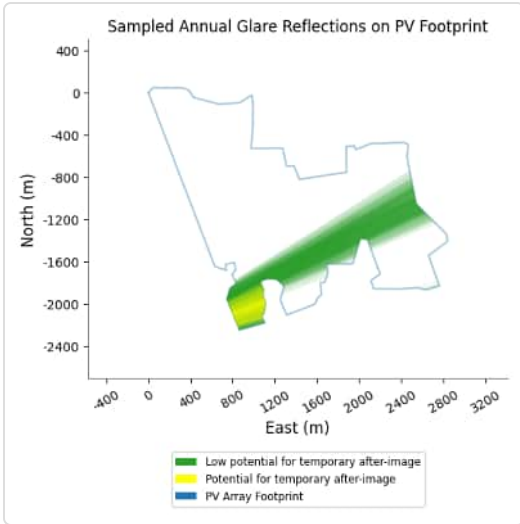


PV array 2 - OP Receptor (OP 2)

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

- 1,539 minutes of "green" glare with low potential to cause temporary after-image.
- 44 minutes of "yellow" glare with potential to cause temporary after-image.

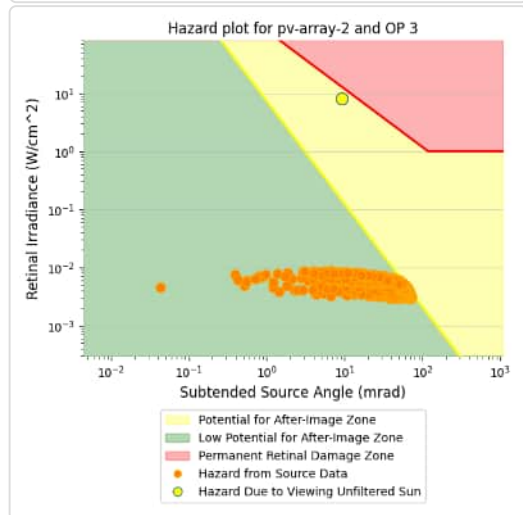
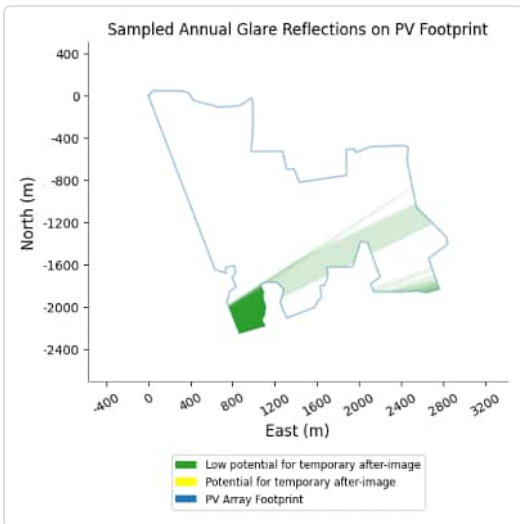
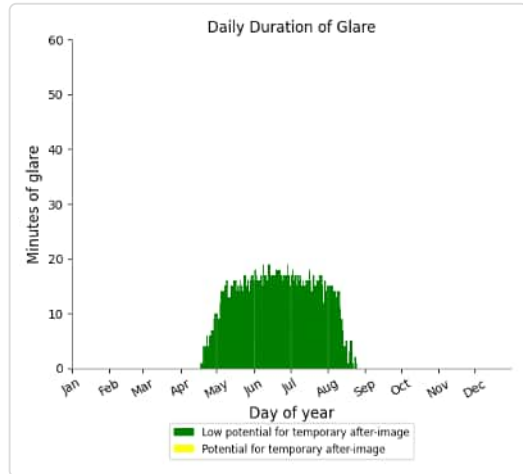
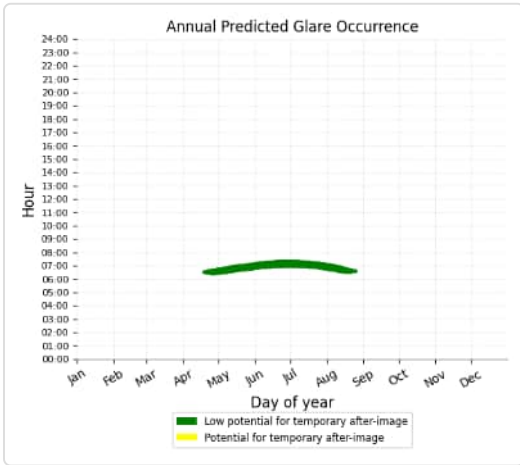




PV array 2 - OP Receptor (OP 3)

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

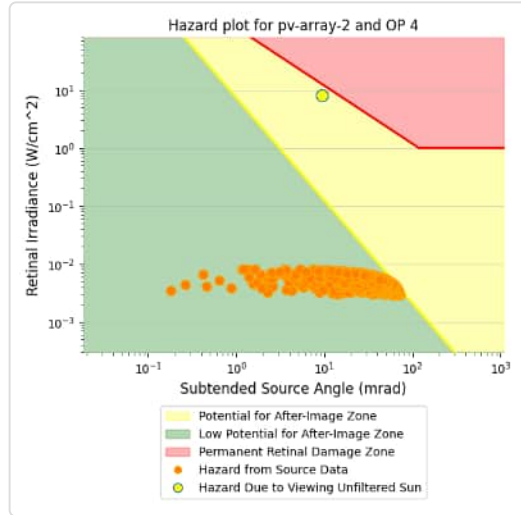
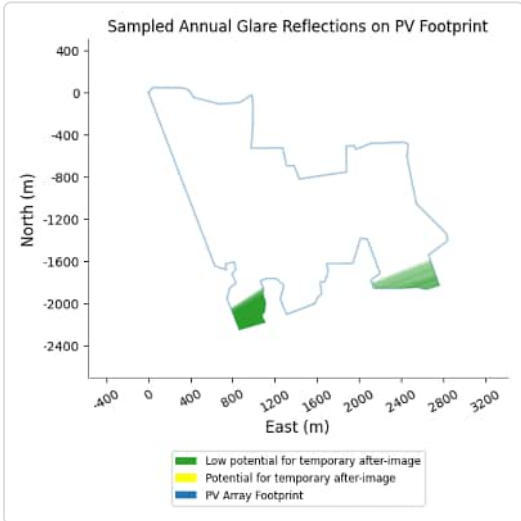
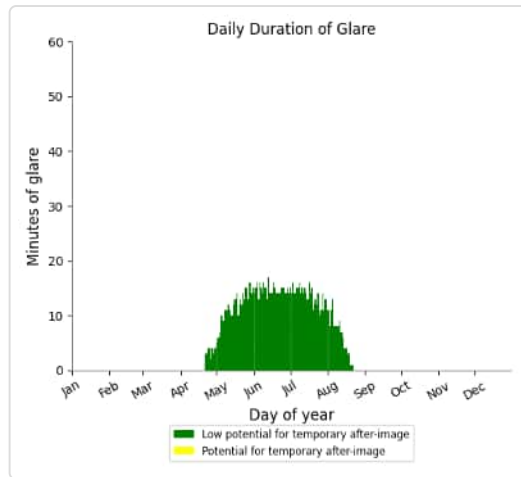
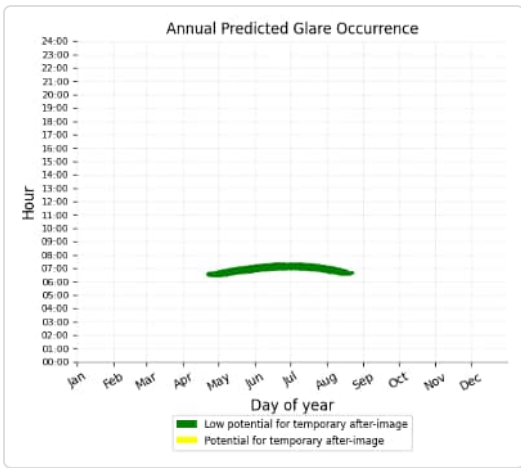
- 1,749 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 4)

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

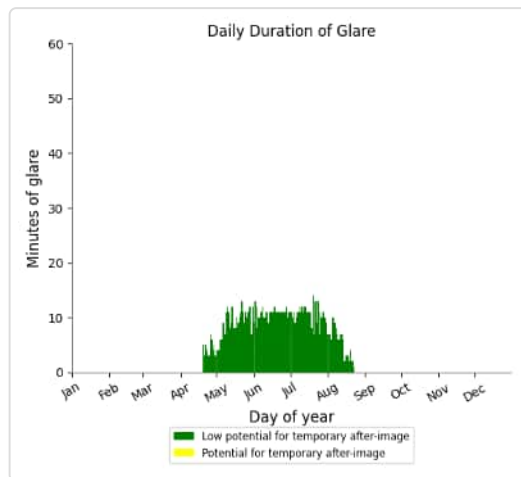
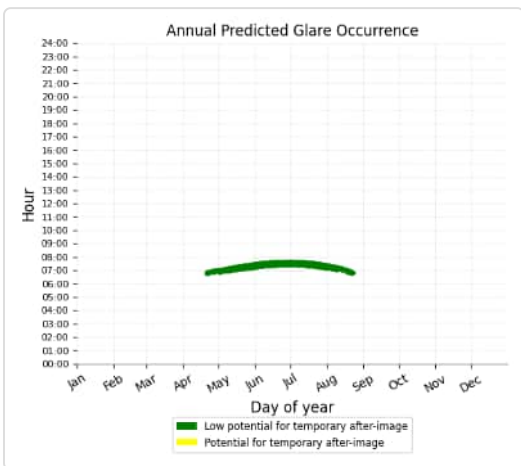
- 1,394 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

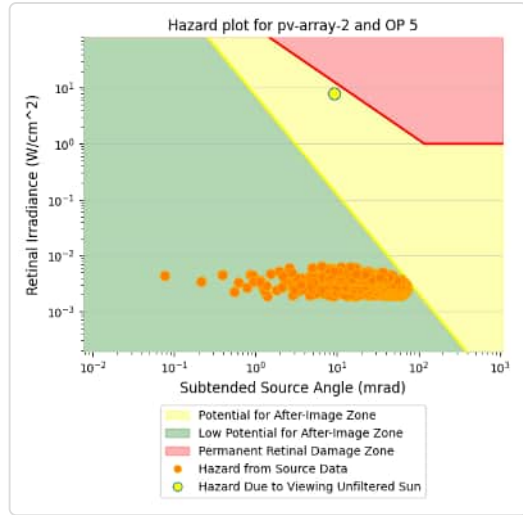
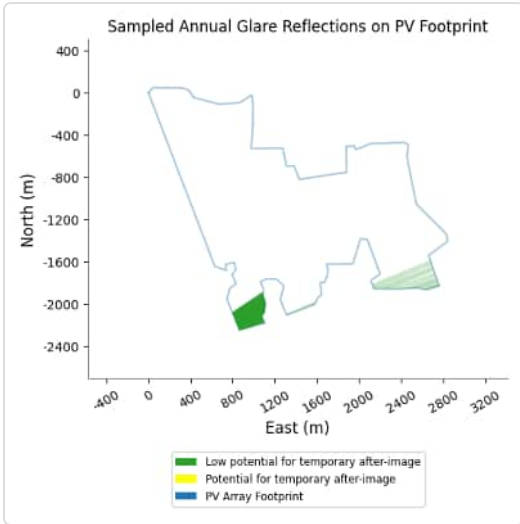


PV array 2 - OP Receptor (OP 5)

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

- 1,112 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

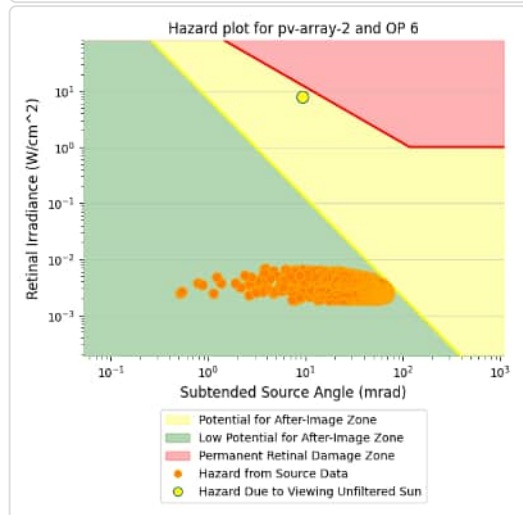
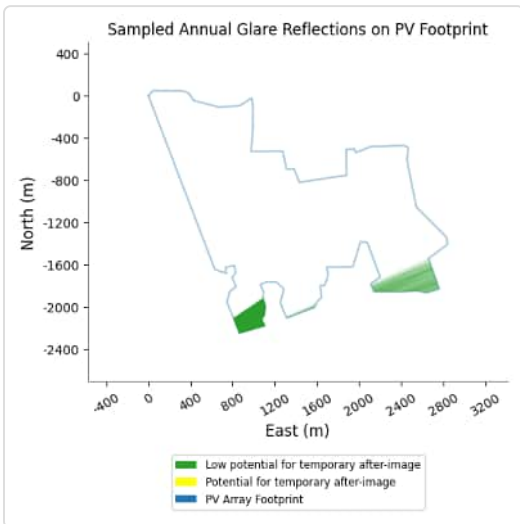
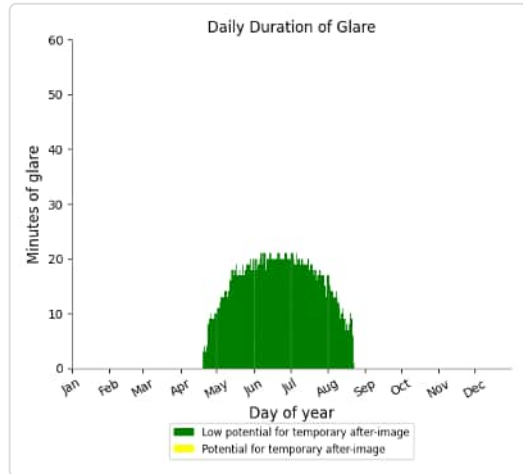
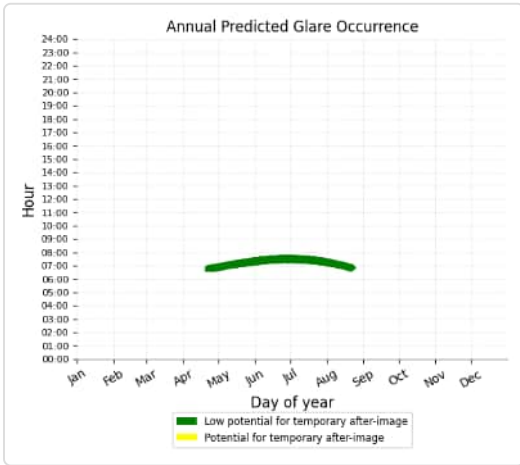




PV array 2 - OP Receptor (OP 6)

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

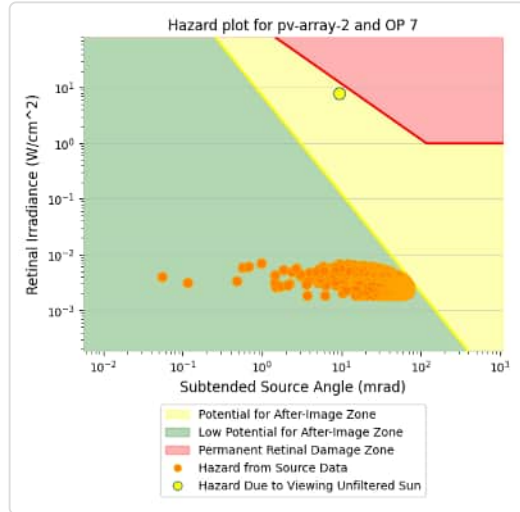
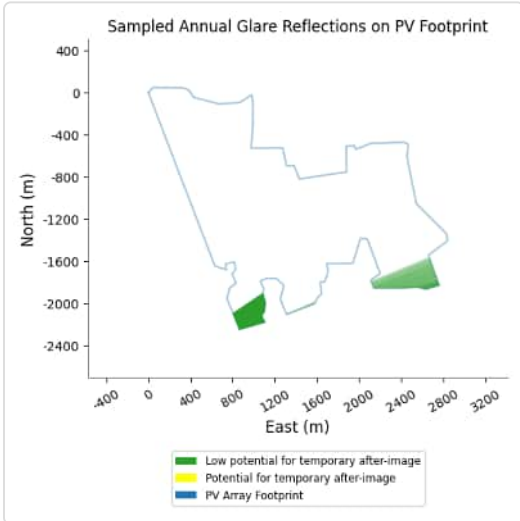
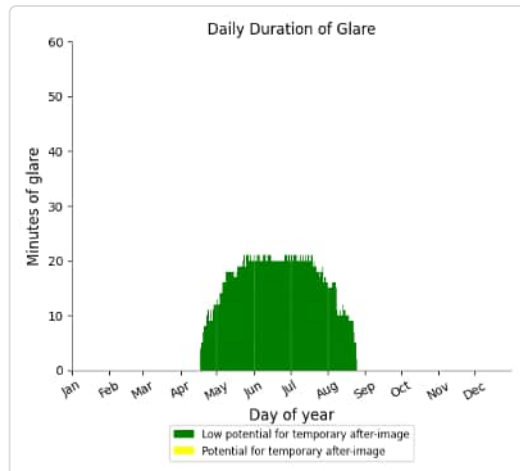
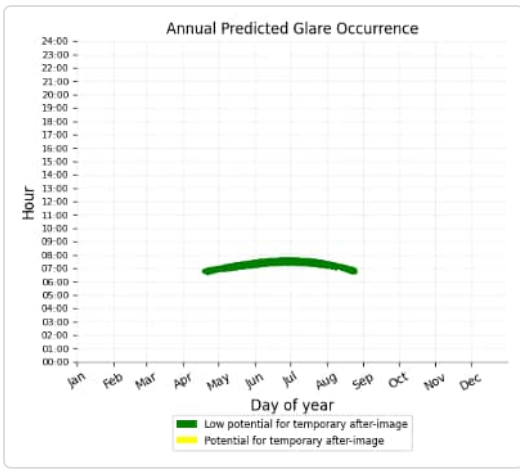
- 1,997 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 7)

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

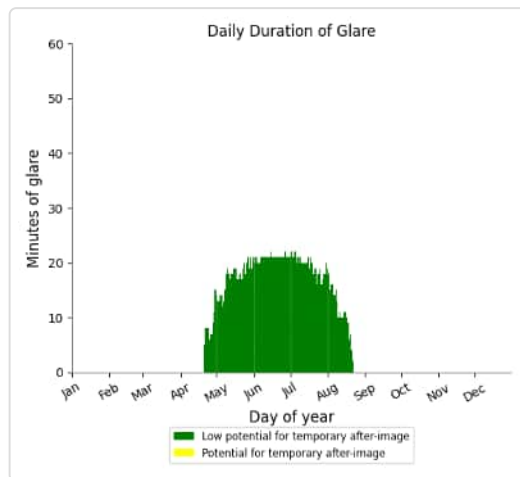
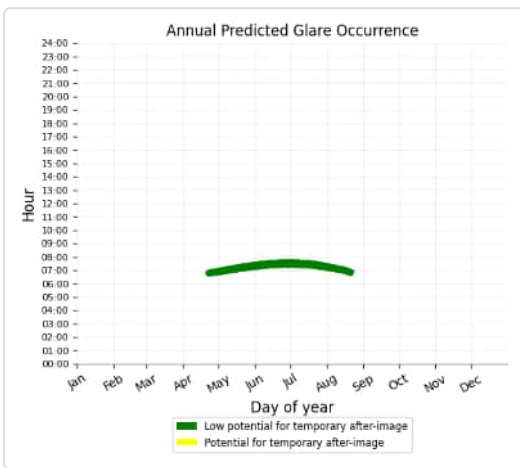
- 2,161 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

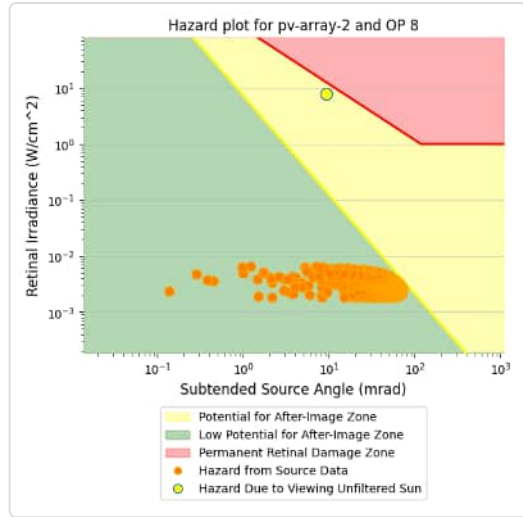
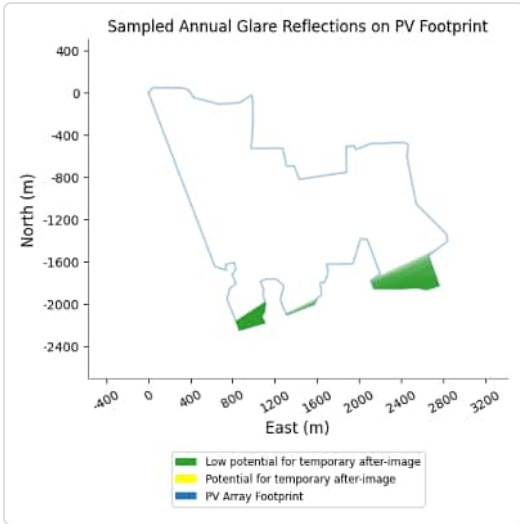


PV array 2 - OP Receptor (OP 8)

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

- 2,107 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

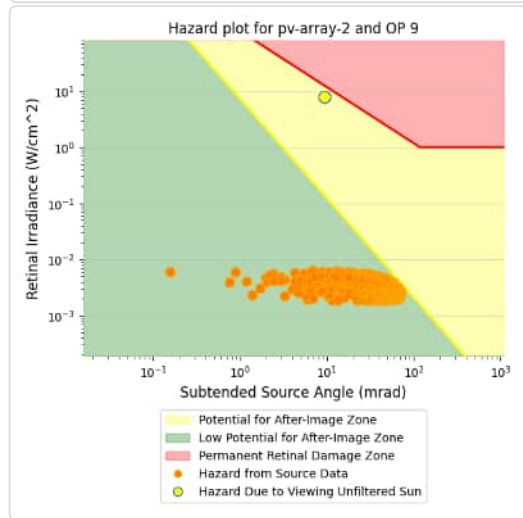
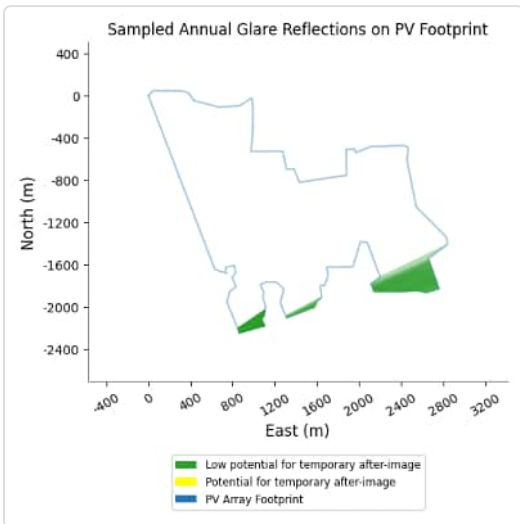
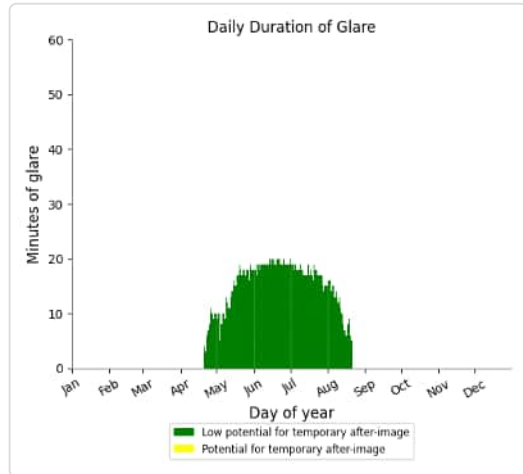
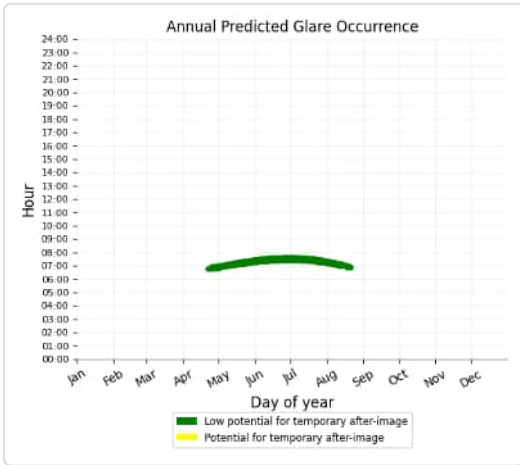




PV array 2 - OP Receptor (OP 9)

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

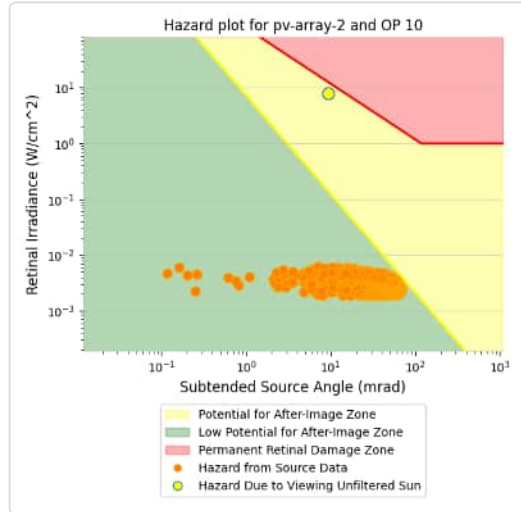
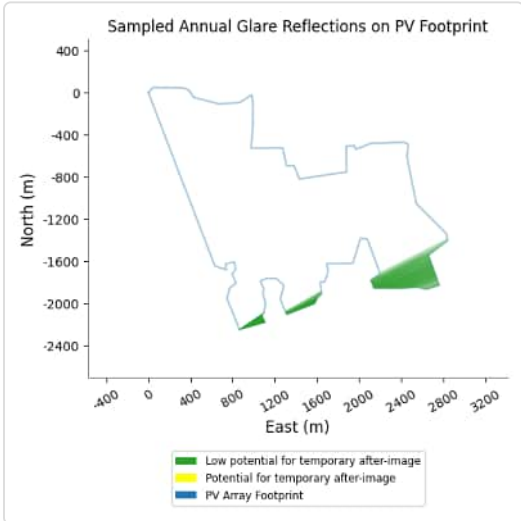
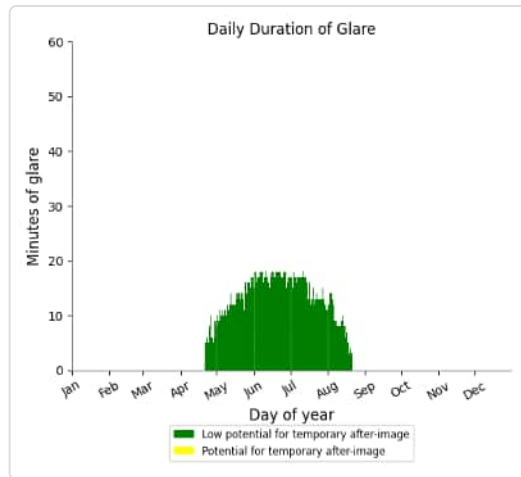
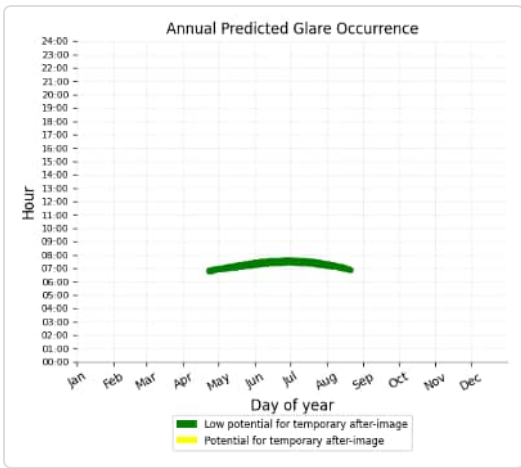
- 1,861 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 10)

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

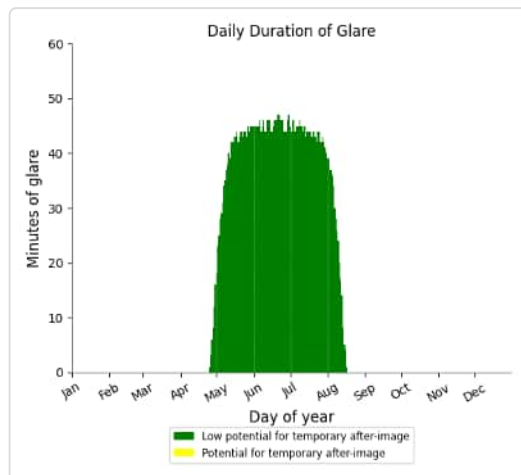
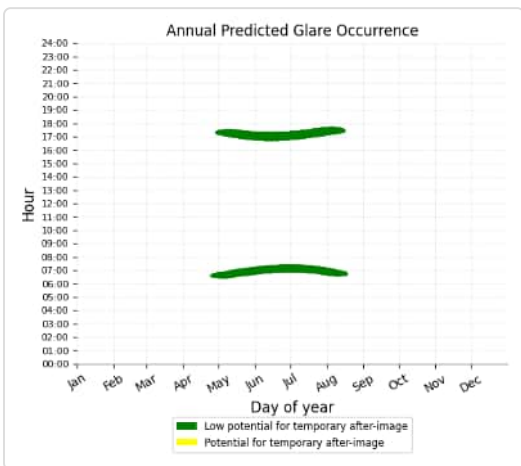
- 1,611 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

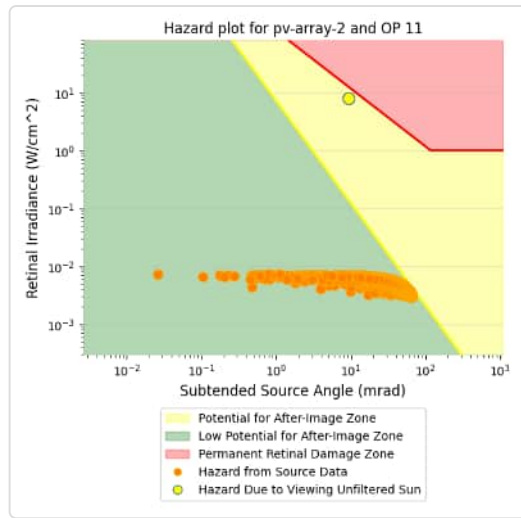
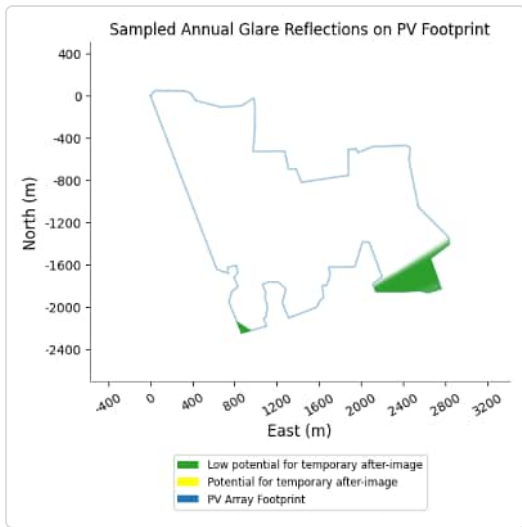


PV array 2 - OP Receptor (OP 11)

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

- 4,367 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

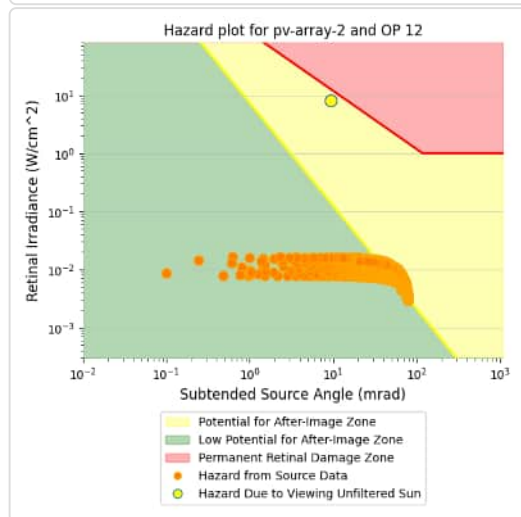
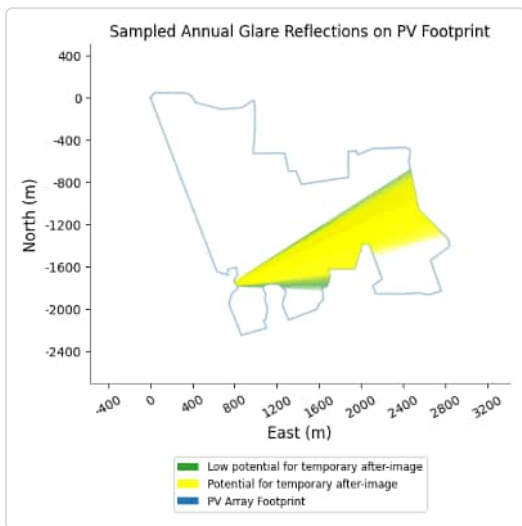
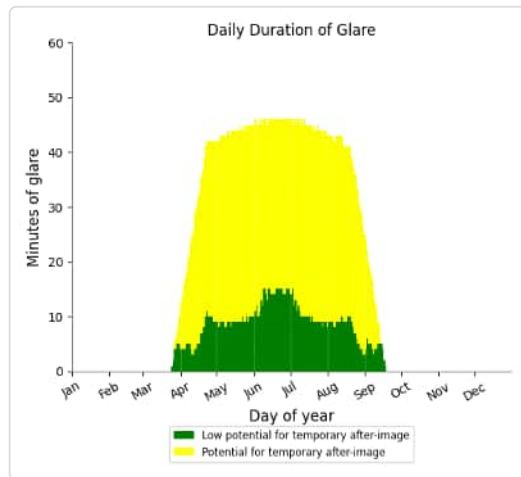
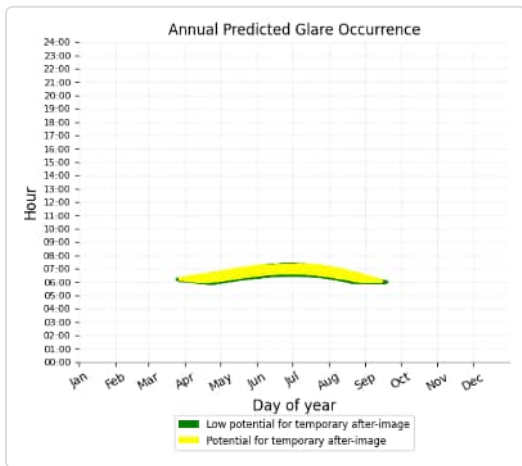




PV array 2 - OP Receptor (OP 12)

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

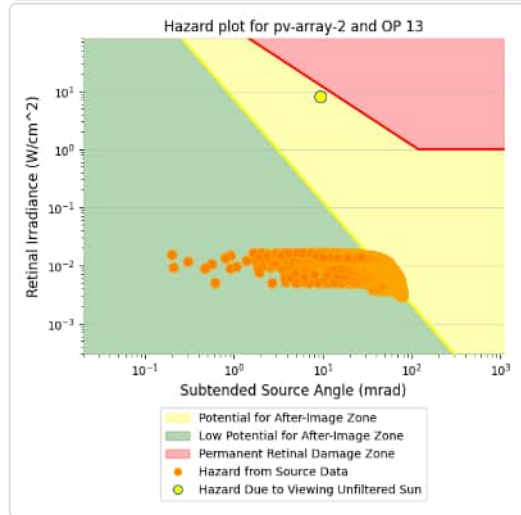
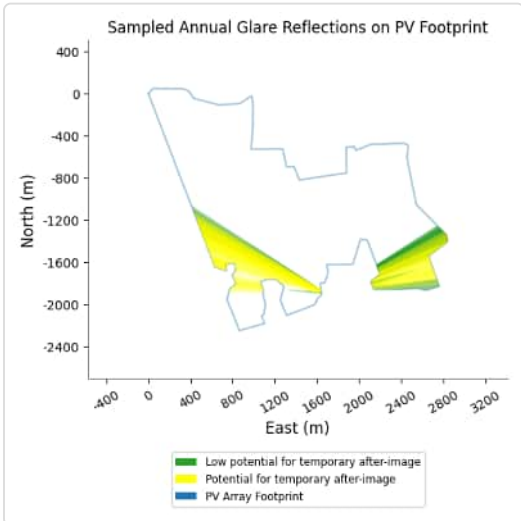
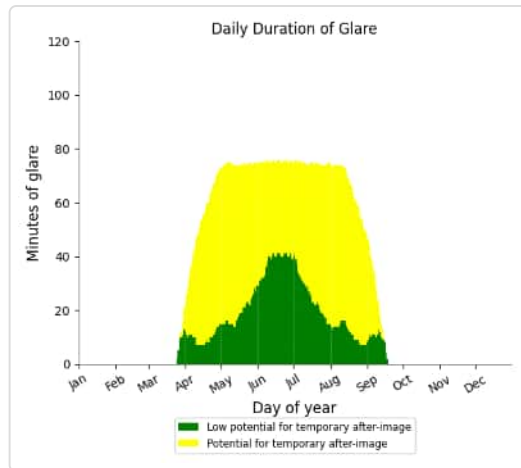
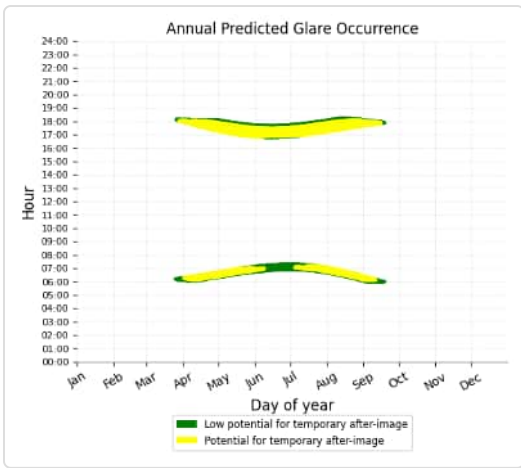
- 1,544 minutes of "green" glare with low potential to cause temporary after-image.
- 4,967 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 13)

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

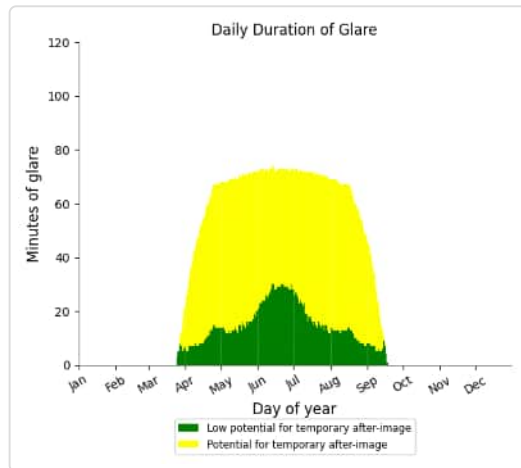
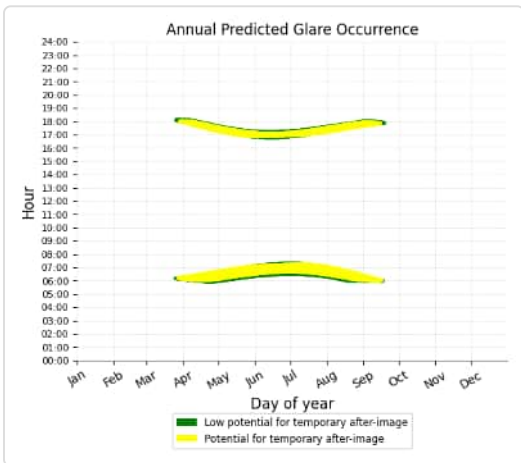
- 3,422 minutes of "green" glare with low potential to cause temporary after-image.
- 7,629 minutes of "yellow" glare with potential to cause temporary after-image.

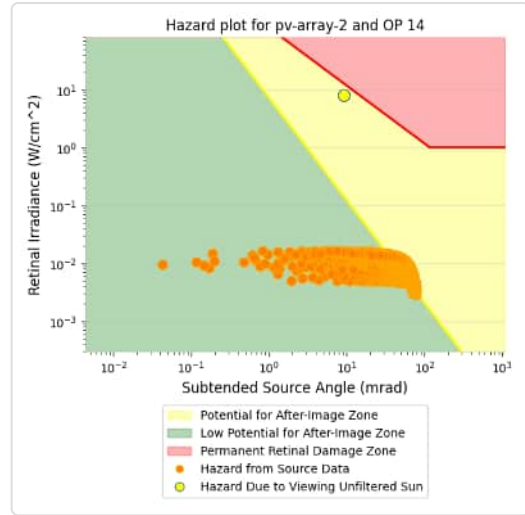
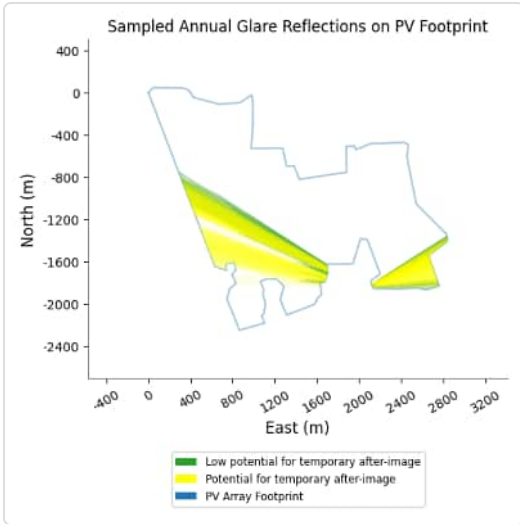


PV array 2 - OP Receptor (OP 14)

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

- 2,628 minutes of "green" glare with low potential to cause temporary after-image.
- 7,973 minutes of "yellow" glare with potential to cause temporary after-image.

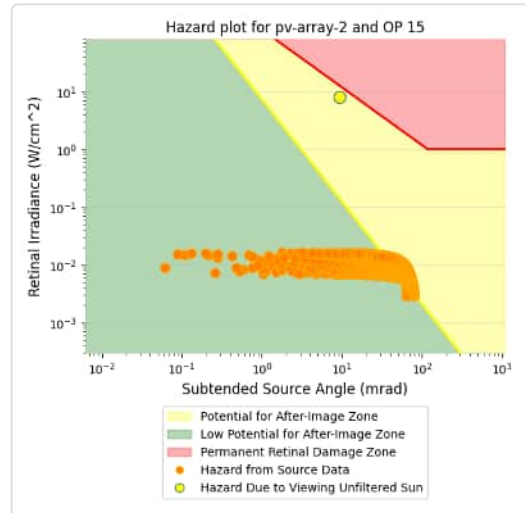
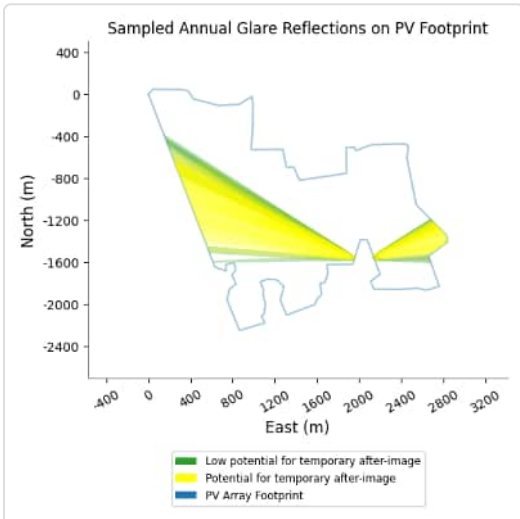
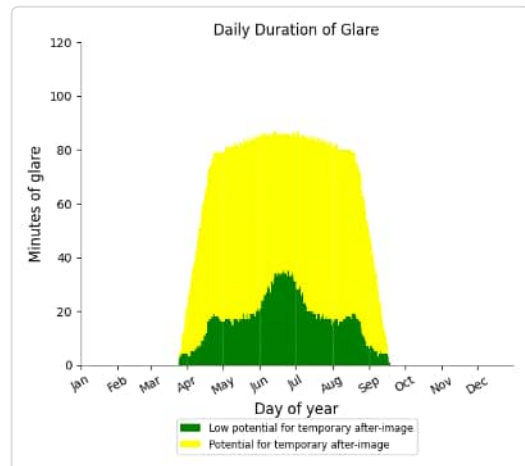
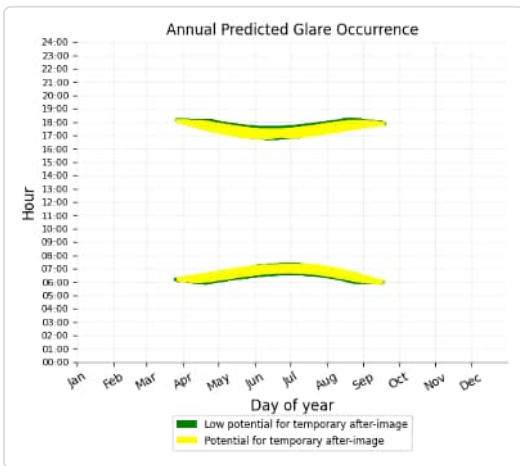




PV array 2 - OP Receptor (OP 15)

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

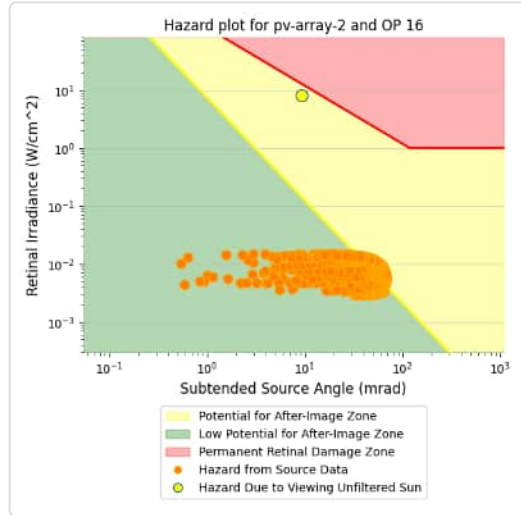
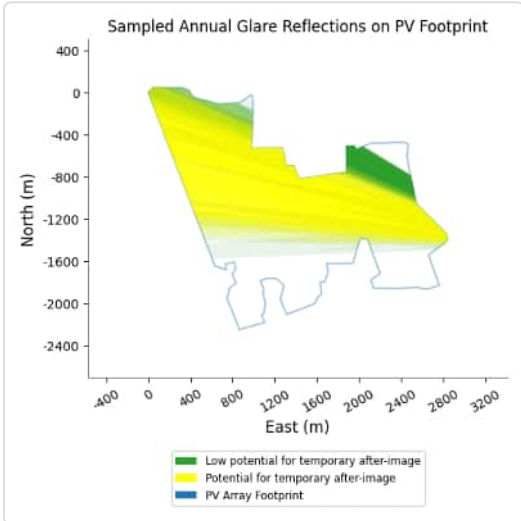
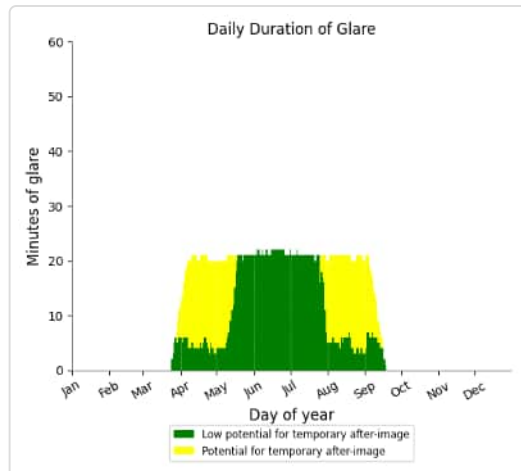
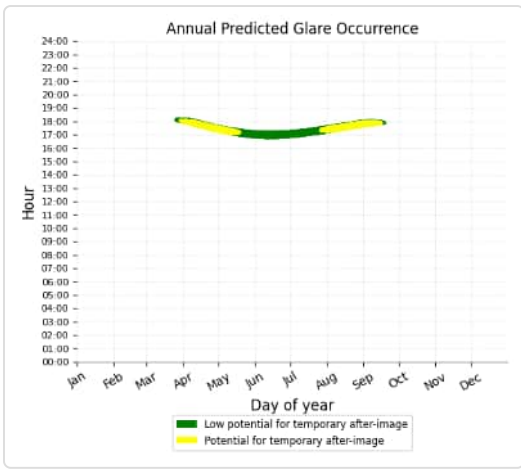
- 3,035 minutes of "green" glare with low potential to cause temporary after-image.
- 9,356 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 16)

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

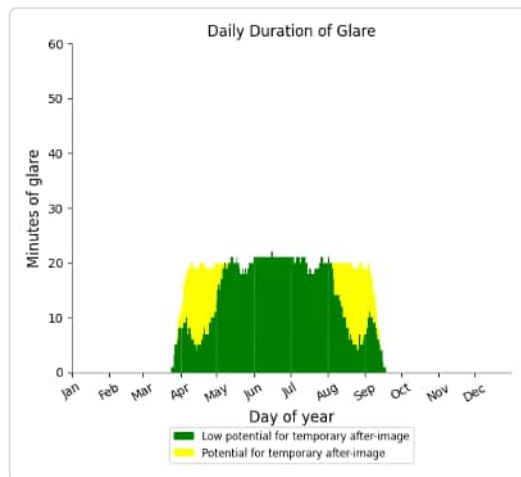
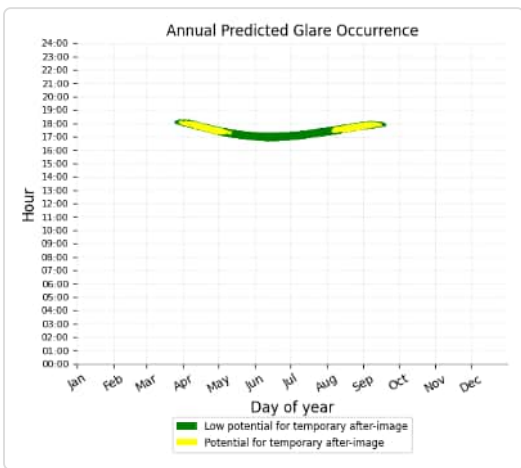
- 2,079 minutes of "green" glare with low potential to cause temporary after-image.
- 1,352 minutes of "yellow" glare with potential to cause temporary after-image.

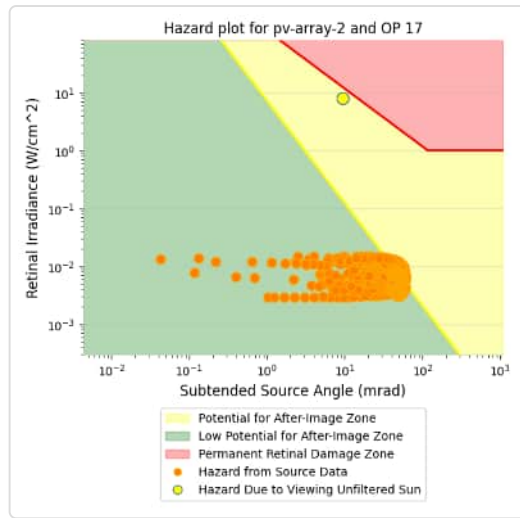
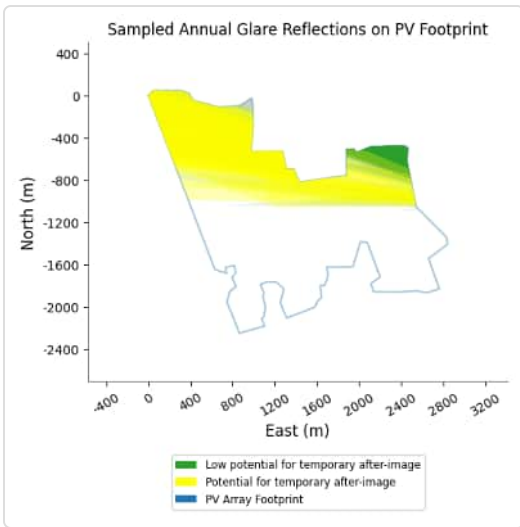


PV array 2 - OP Receptor (OP 17)

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

- 2,536 minutes of "green" glare with low potential to cause temporary after-image.
- 733 minutes of "yellow" glare with potential to cause temporary after-image.

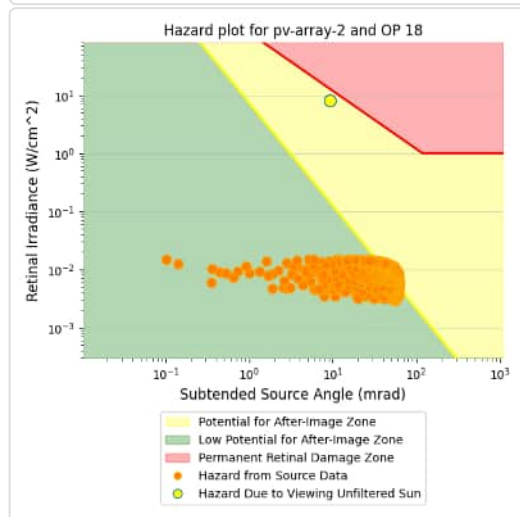
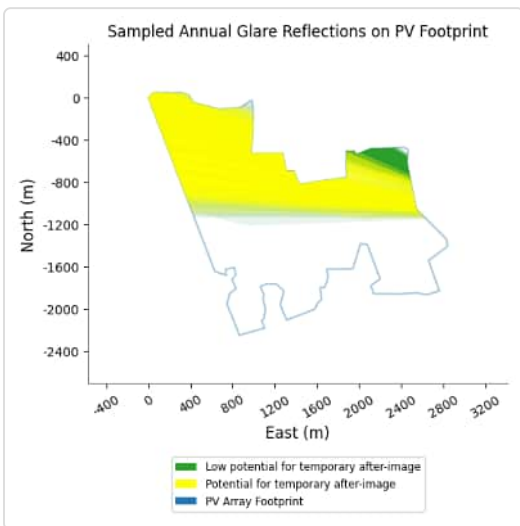
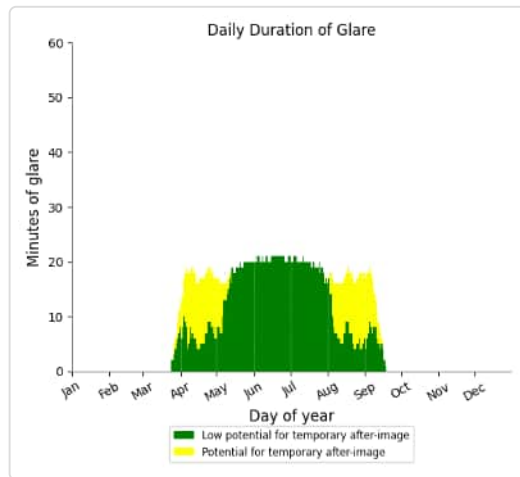
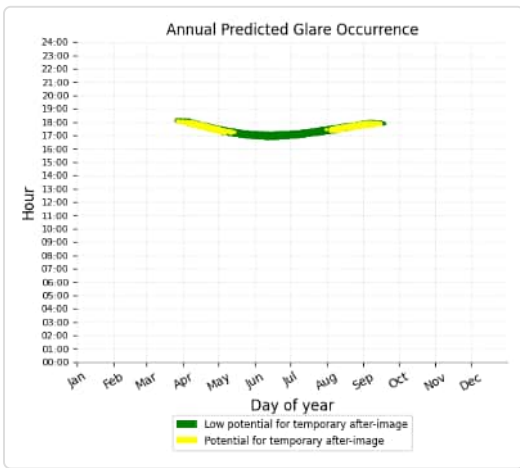




PV array 2 - OP Receptor (OP 18)

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

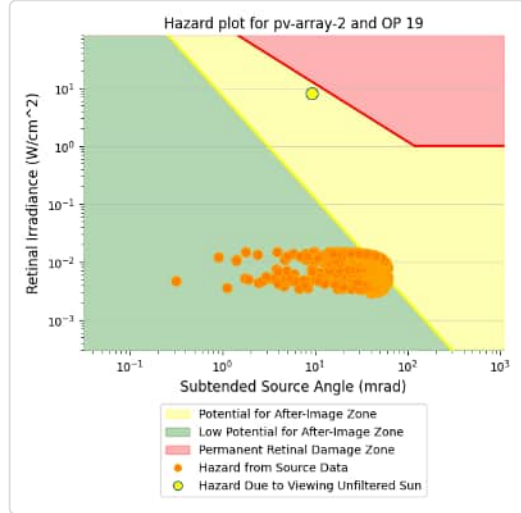
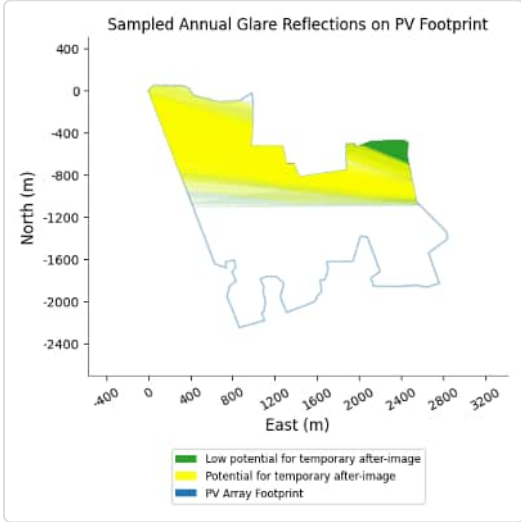
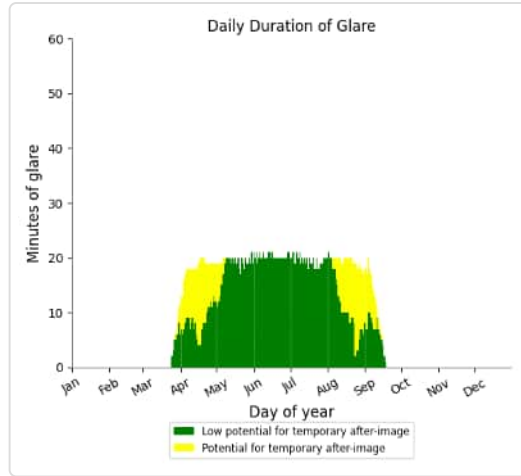
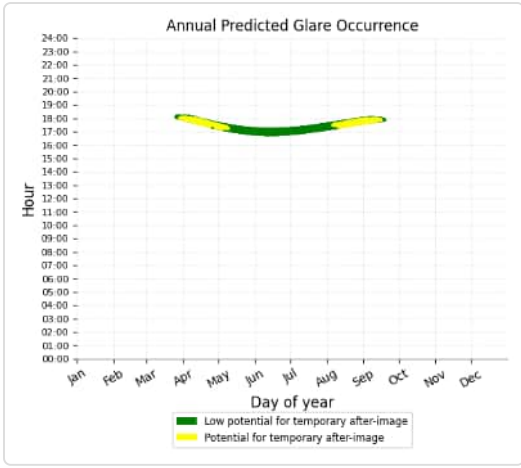
- 2,280 minutes of "green" glare with low potential to cause temporary after-image.
- 815 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 19)

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

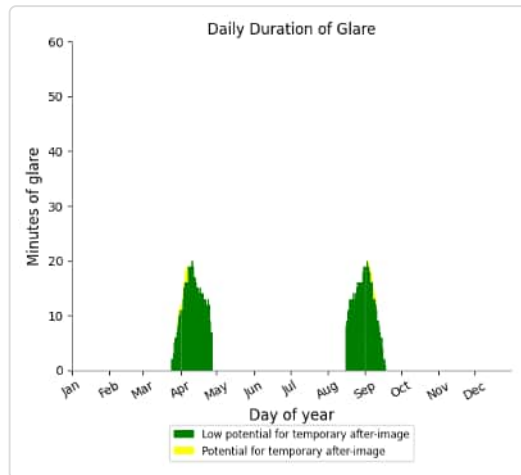
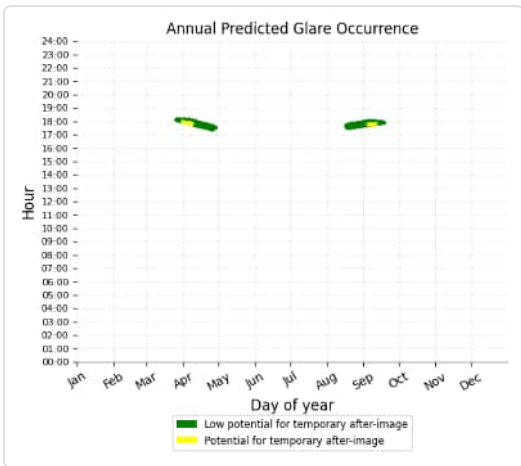
- 2,521 minutes of "green" glare with low potential to cause temporary after-image.
- 690 minutes of "yellow" glare with potential to cause temporary after-image.

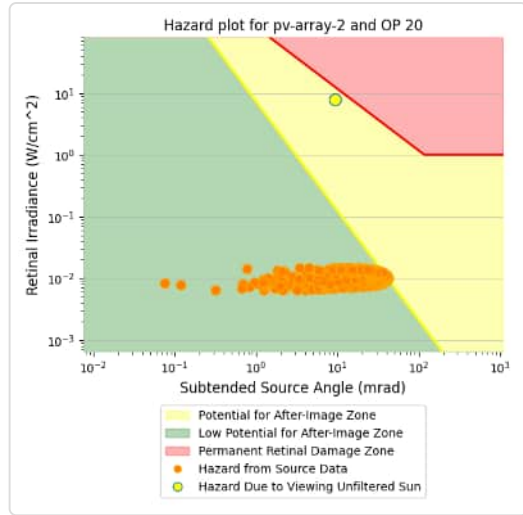
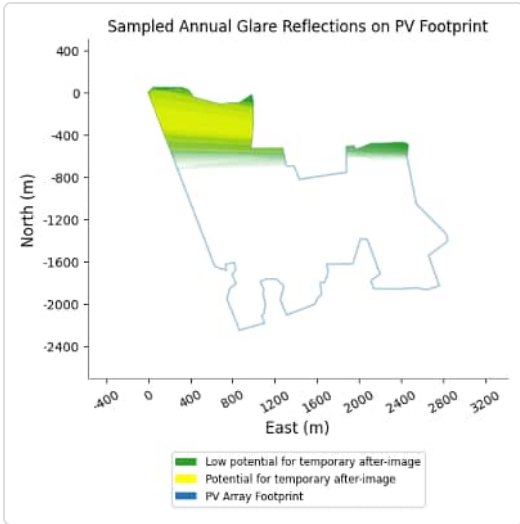


PV array 2 - OP Receptor (OP 20)

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

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

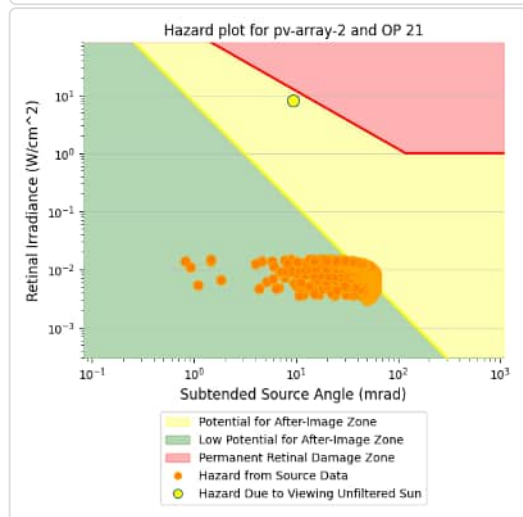
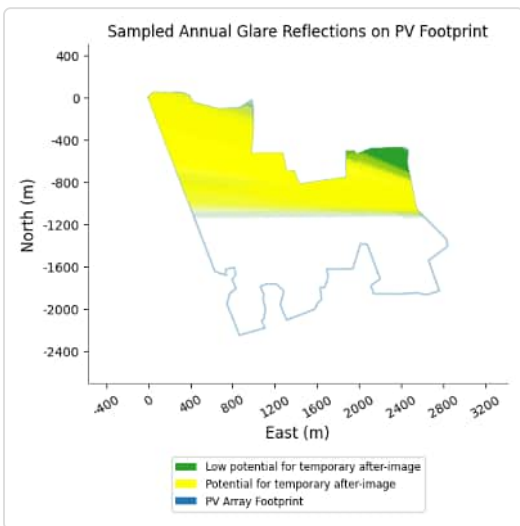
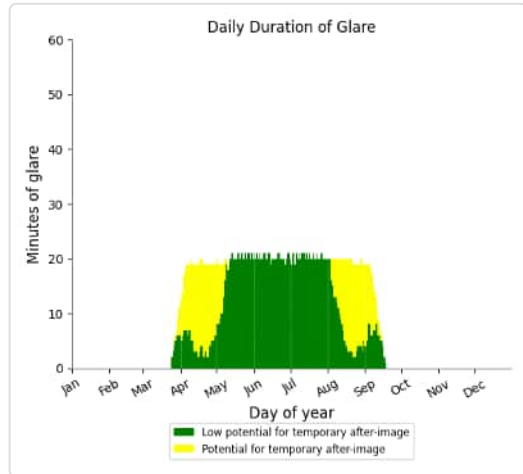
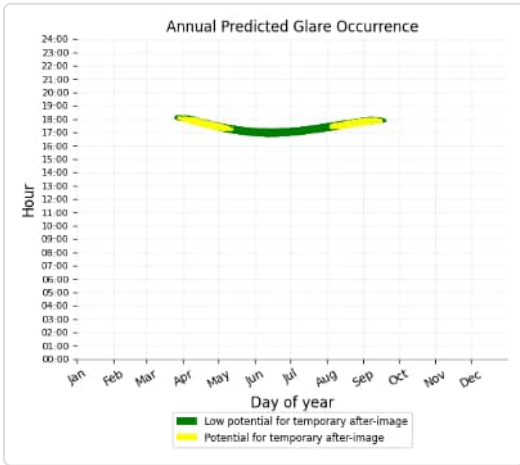




PV array 2 - OP Receptor (OP 21)

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

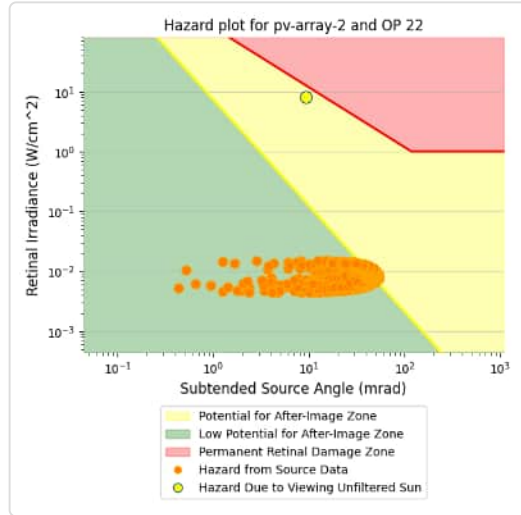
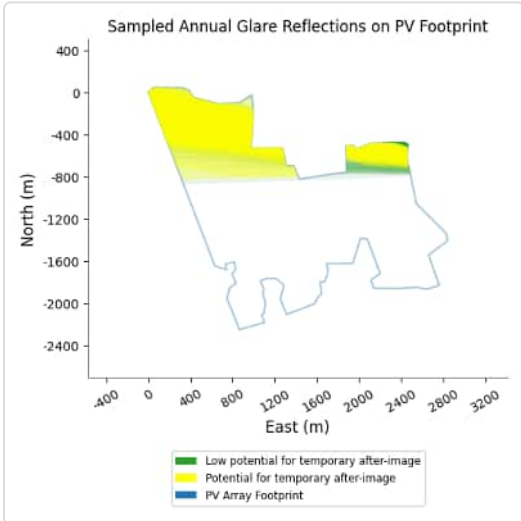
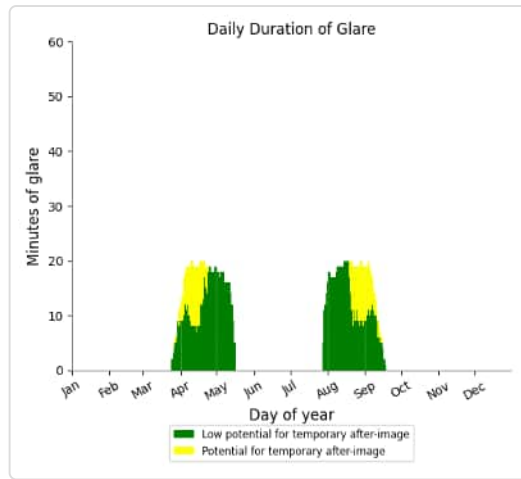
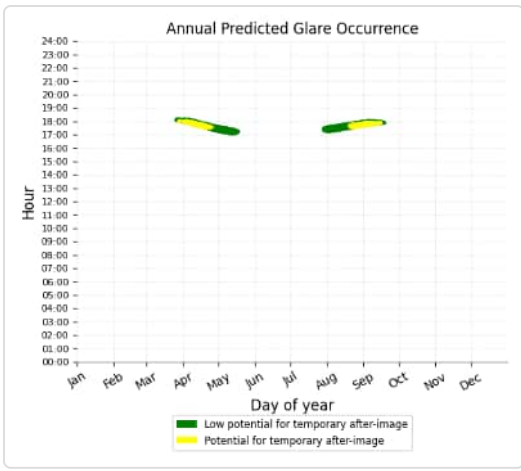
- 2,295 minutes of "green" glare with low potential to cause temporary after-image.
- 993 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 22)

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

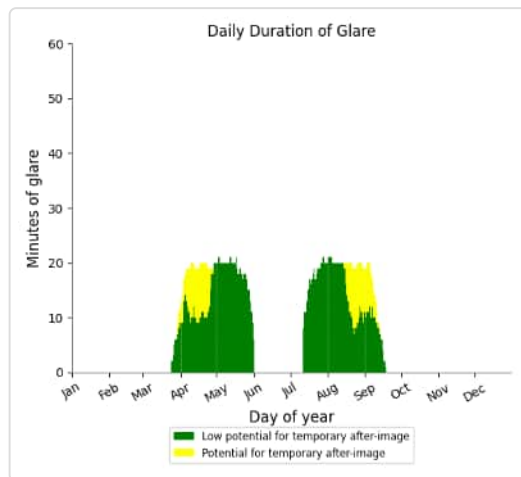
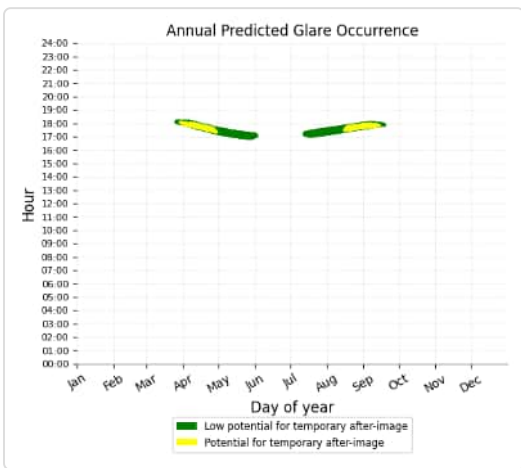
- 1,296 minutes of "green" glare with low potential to cause temporary after-image.
- 393 minutes of "yellow" glare with potential to cause temporary after-image.

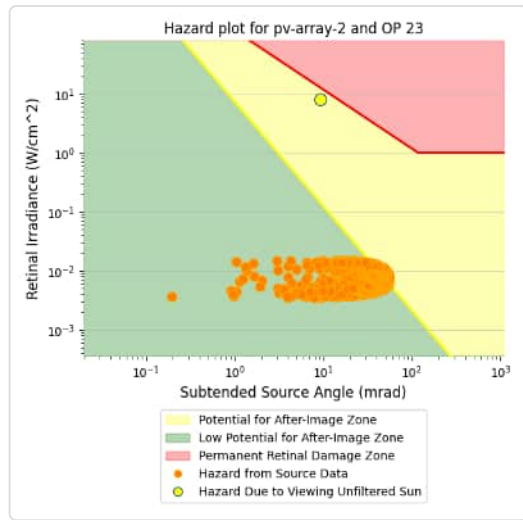
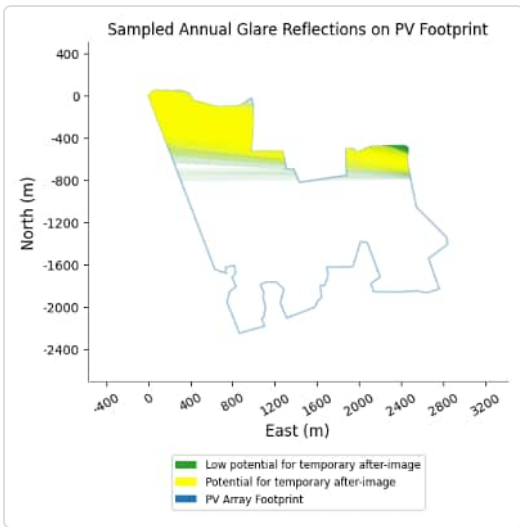


PV array 2 - OP Receptor (OP 23)

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

- 1,925 minutes of "green" glare with low potential to cause temporary after-image.
- 434 minutes of "yellow" glare with potential to cause temporary after-image.

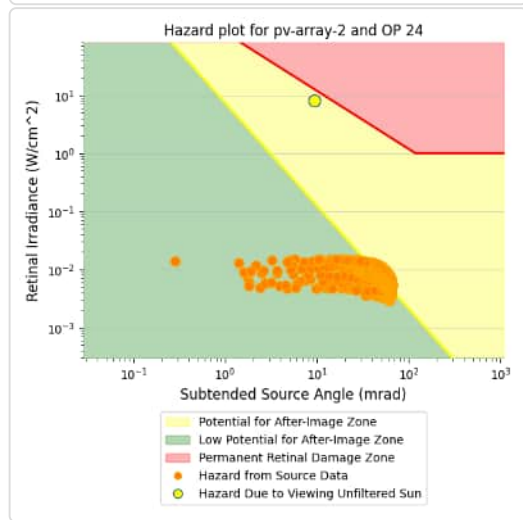
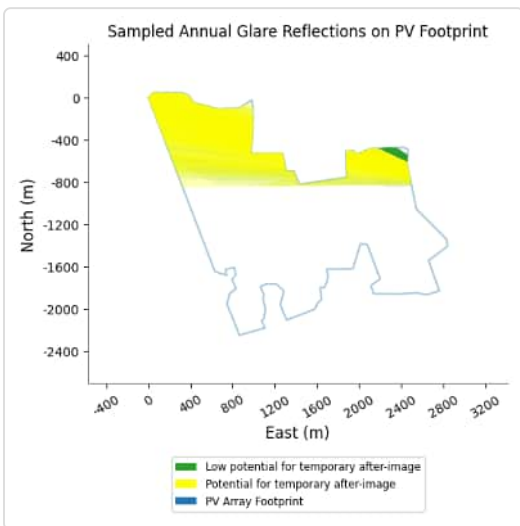
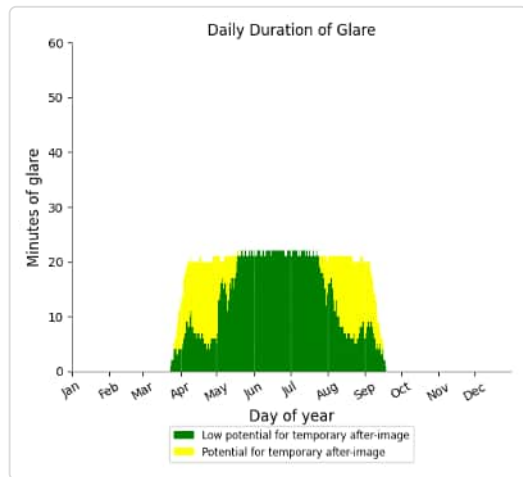
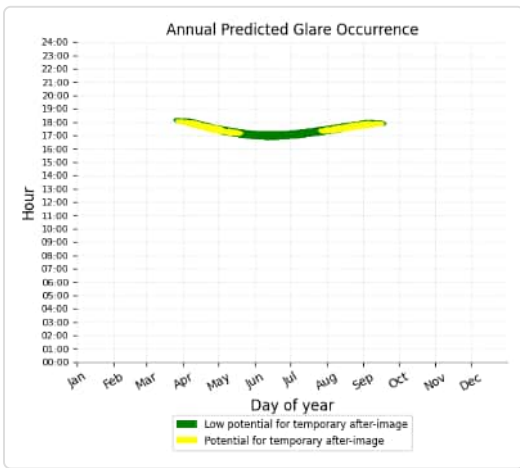




PV array 2 - OP Receptor (OP 24)

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

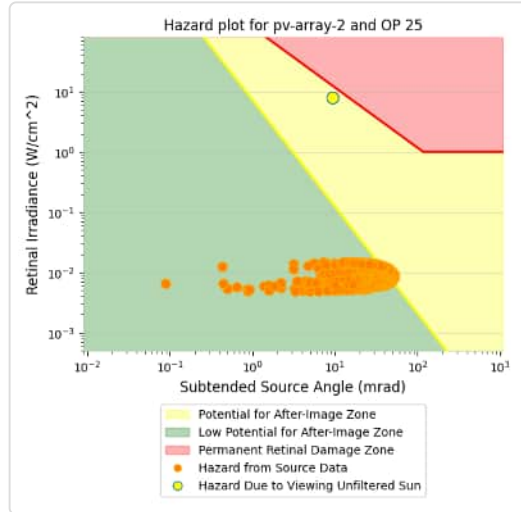
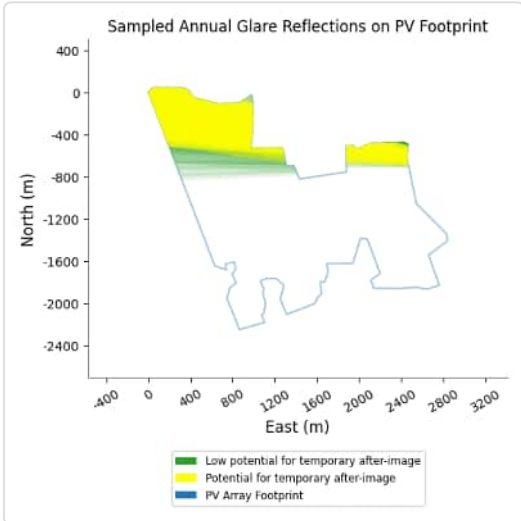
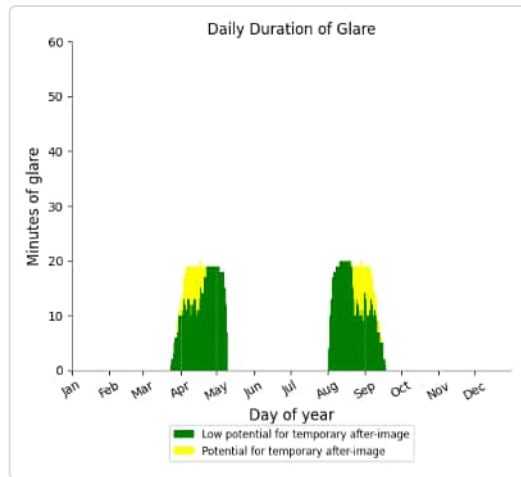
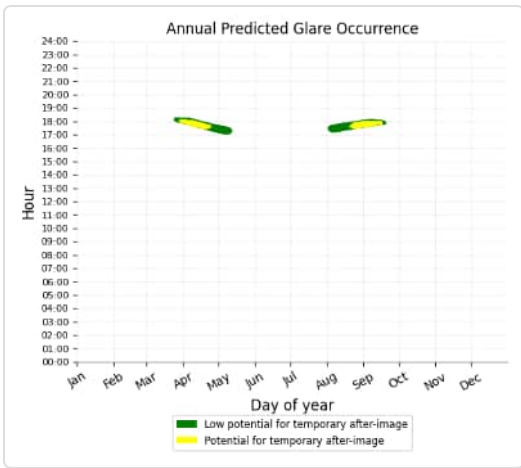
- 2,423 minutes of "green" glare with low potential to cause temporary after-image.
- 1,040 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 25)

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

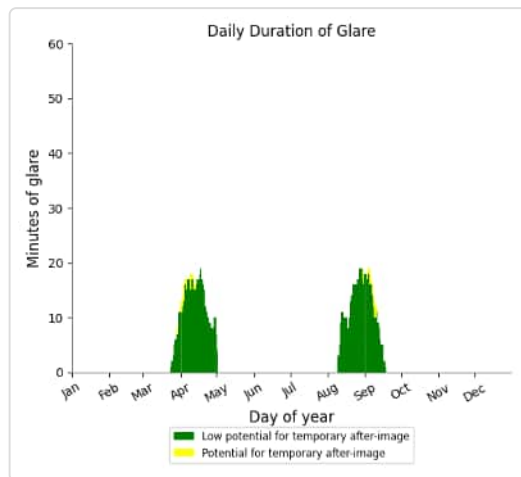
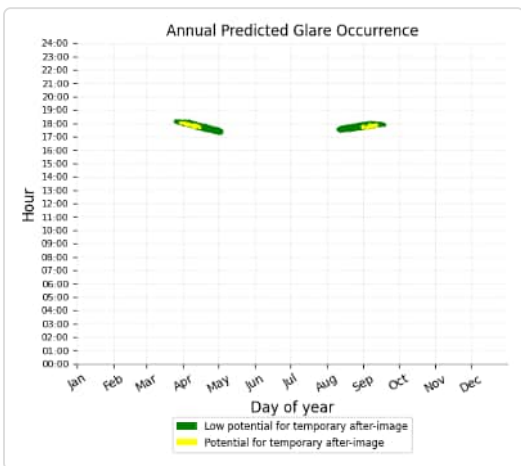
- 1,255 minutes of "green" glare with low potential to cause temporary after-image.
- 272 minutes of "yellow" glare with potential to cause temporary after-image.

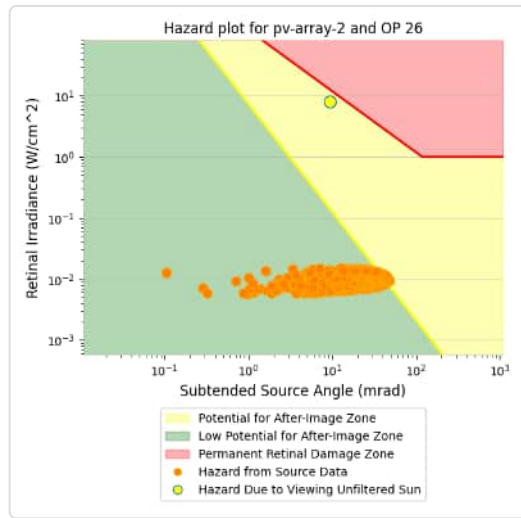
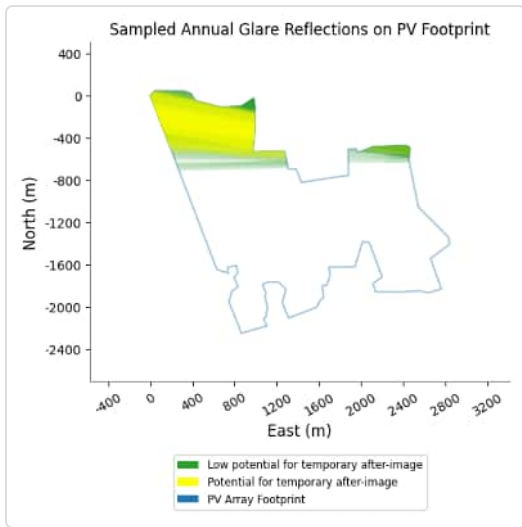


PV array 2 - OP Receptor (OP 26)

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

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

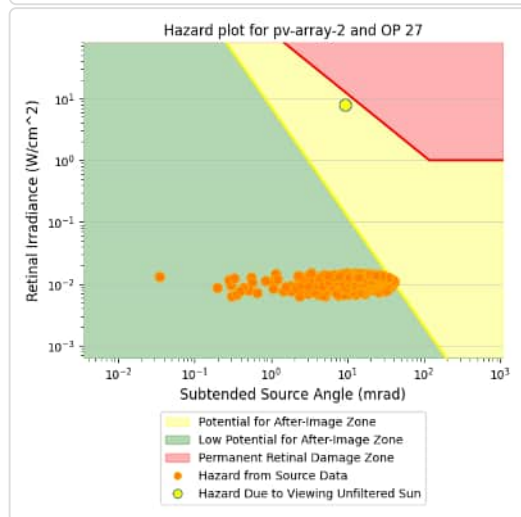
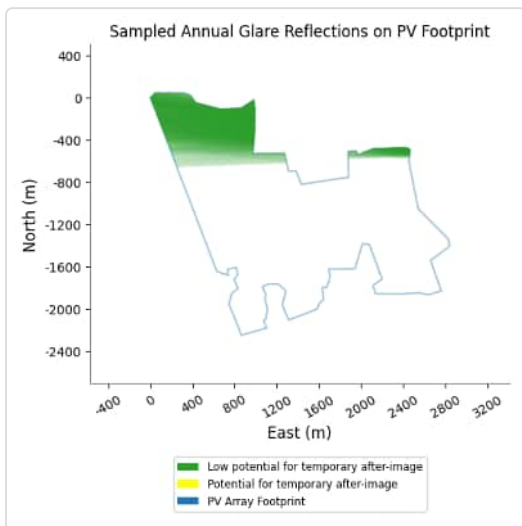
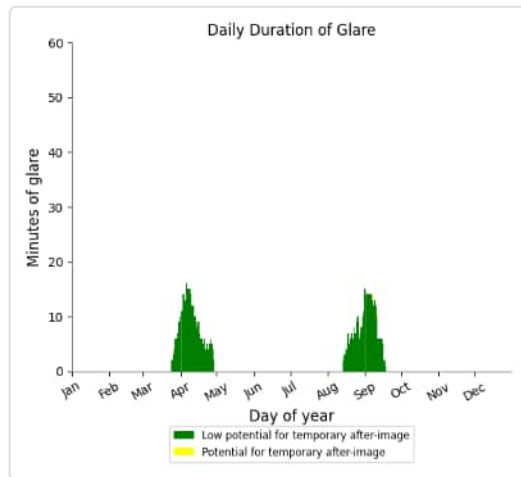
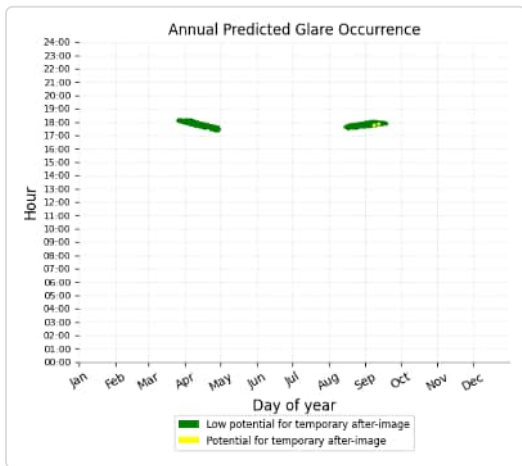




PV array 2 - OP Receptor (OP 27)

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

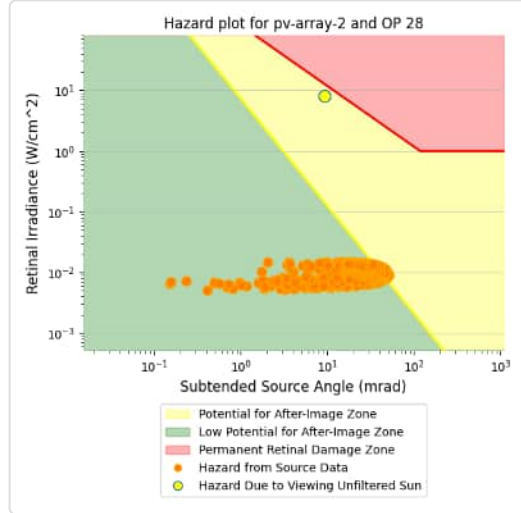
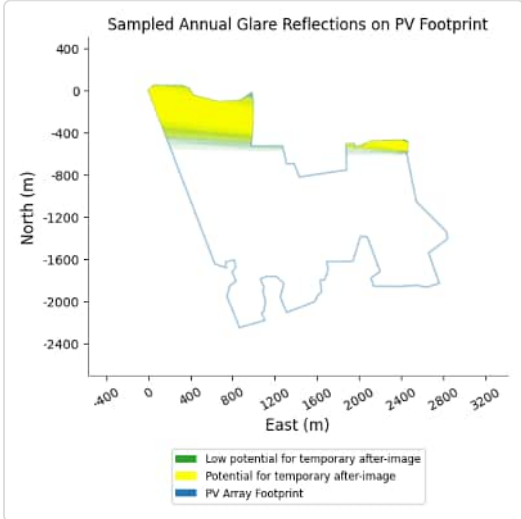
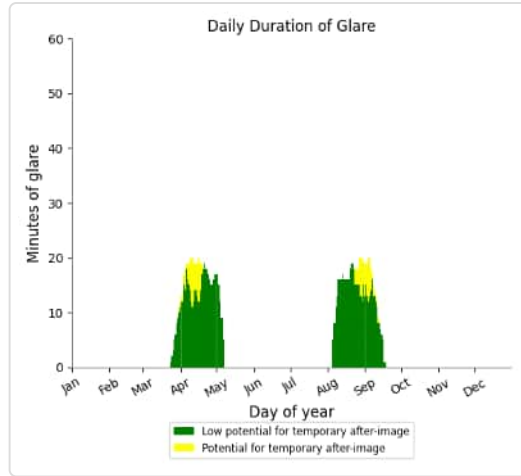
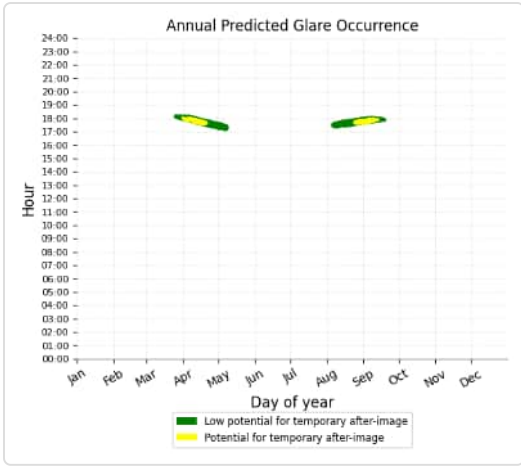
- 596 minutes of "green" glare with low potential to cause temporary after-image.
- 2 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 28)

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

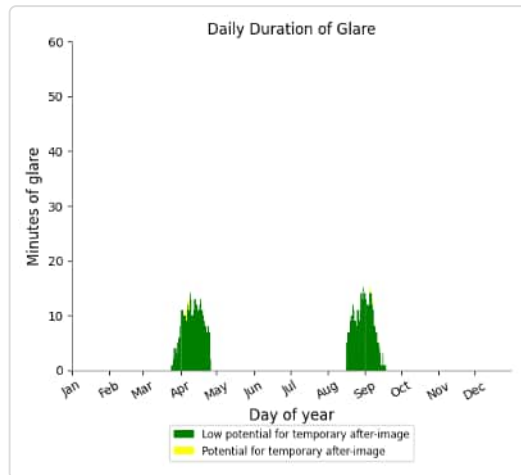
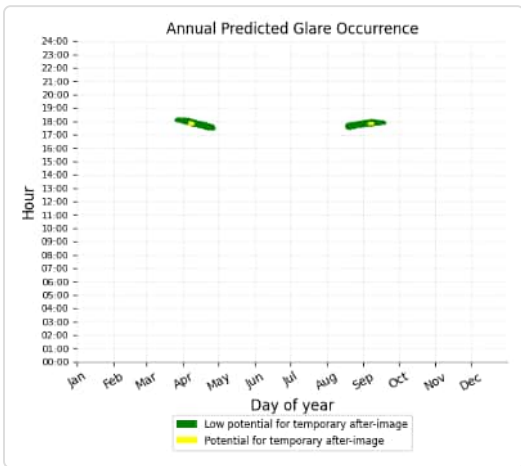
- 1,145 minutes of "green" glare with low potential to cause temporary after-image.
- 169 minutes of "yellow" glare with potential to cause temporary after-image.

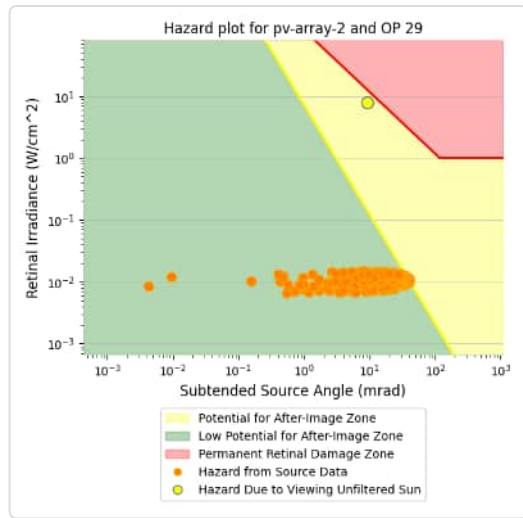
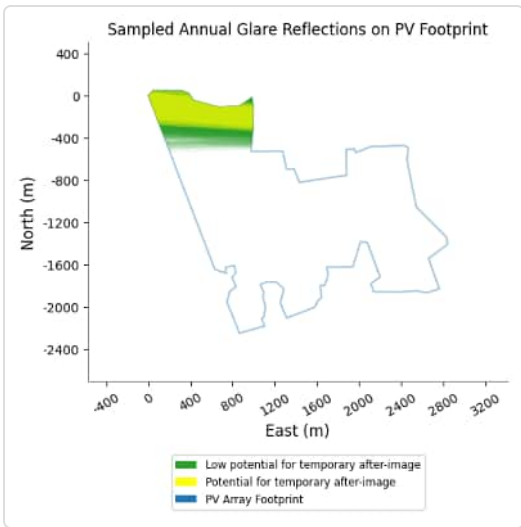


PV array 2 - OP Receptor (OP 29)

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

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

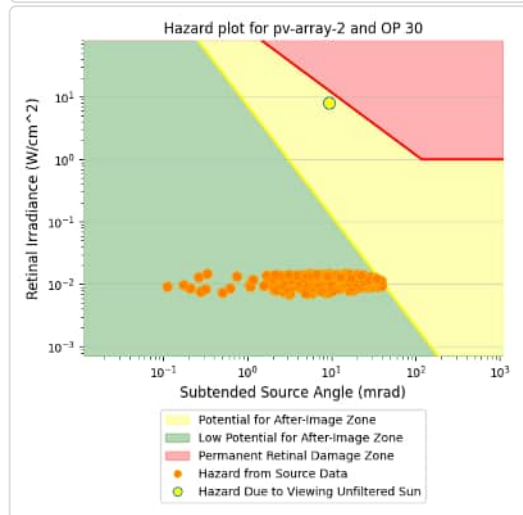
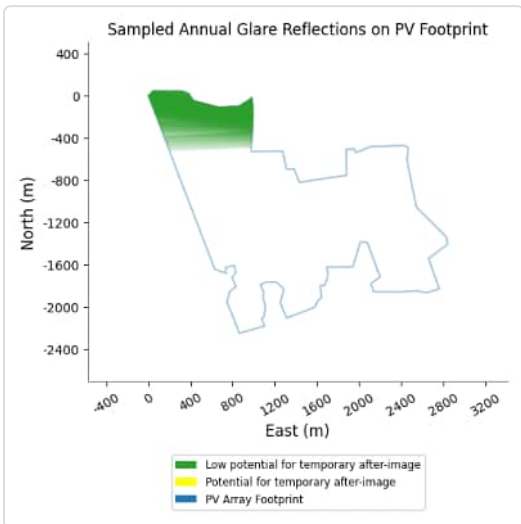
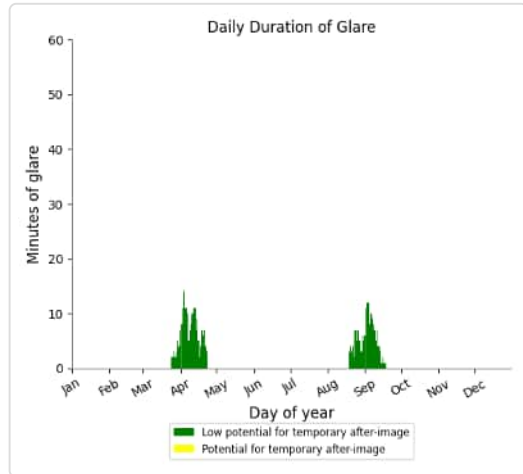
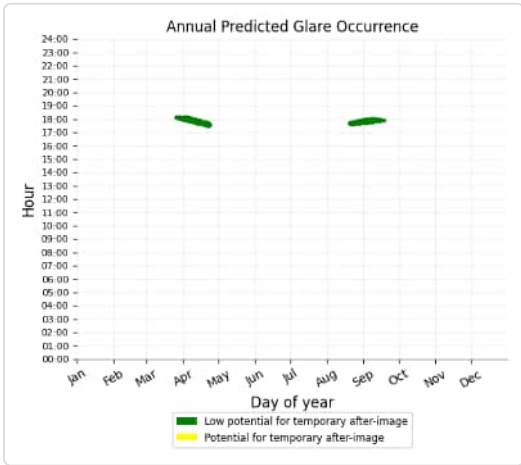




PV array 2 - OP Receptor (OP 30)

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

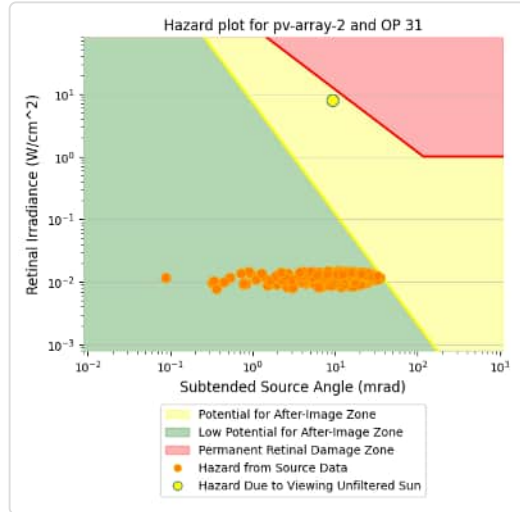
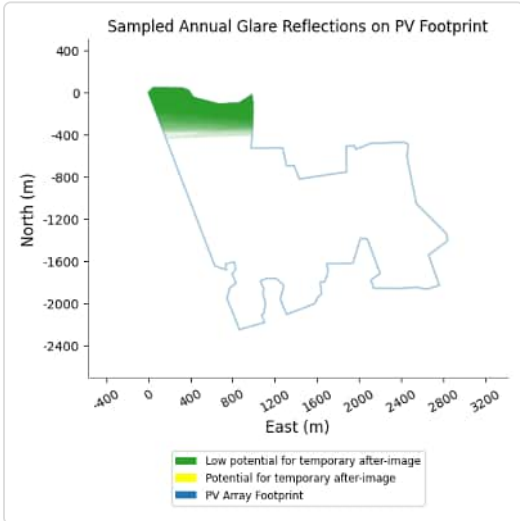
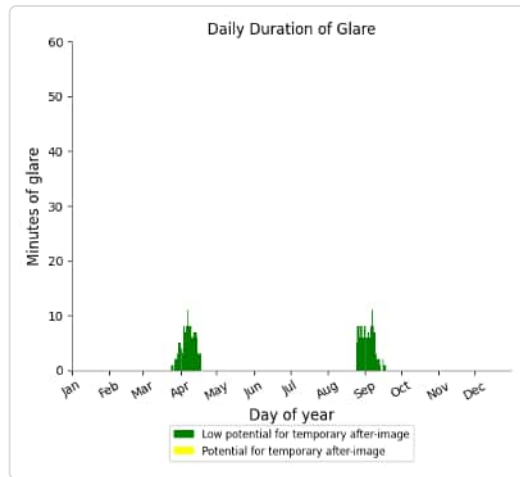
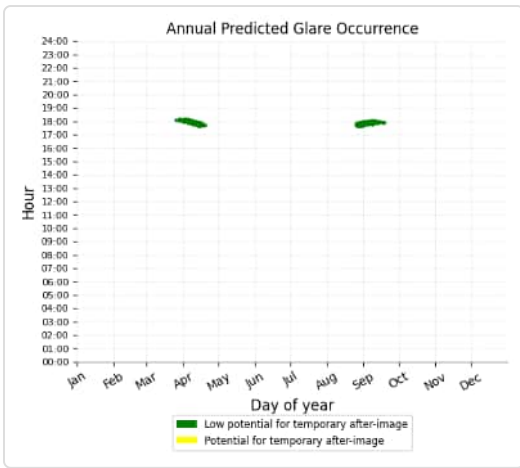
- 369 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 31)

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

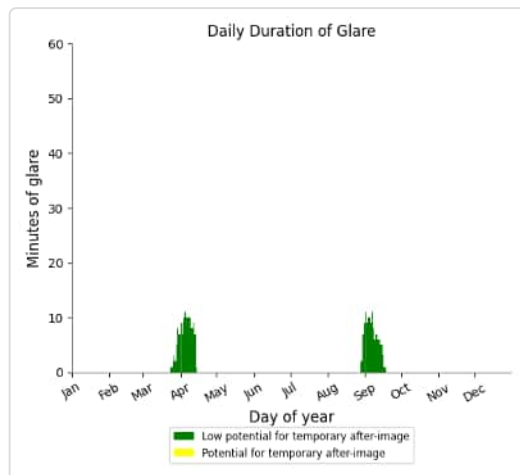
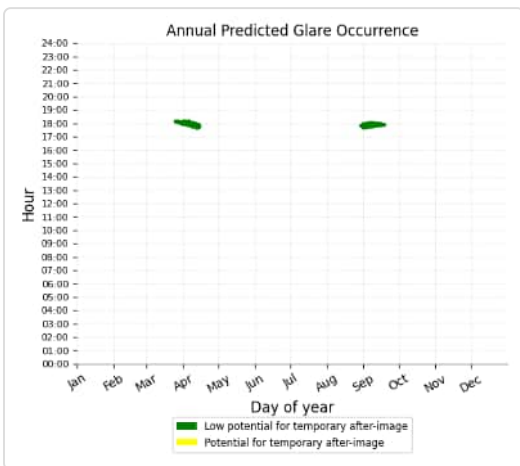
- 254 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

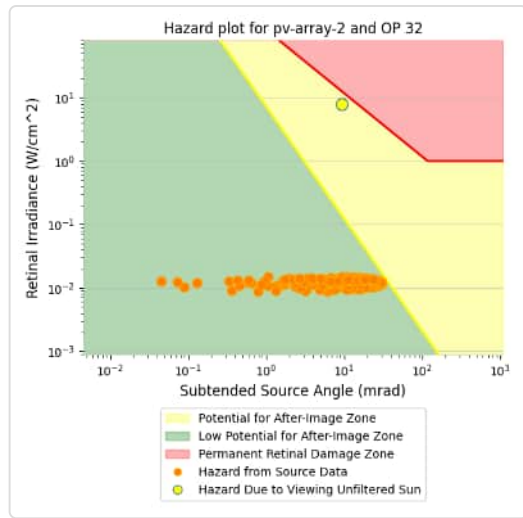
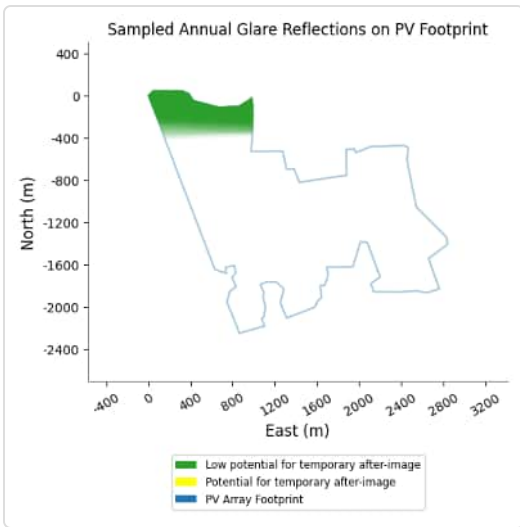


PV array 2 - OP Receptor (OP 32)

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

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

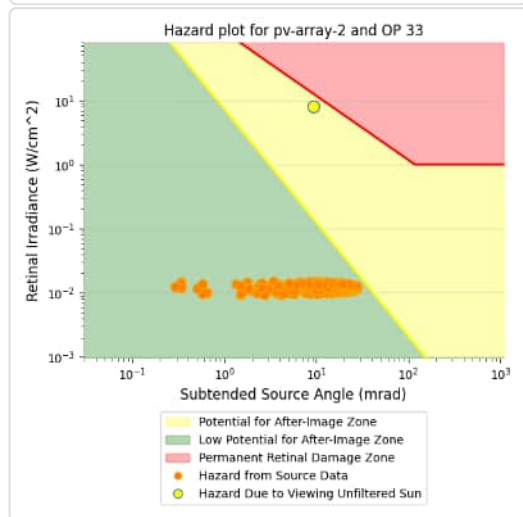
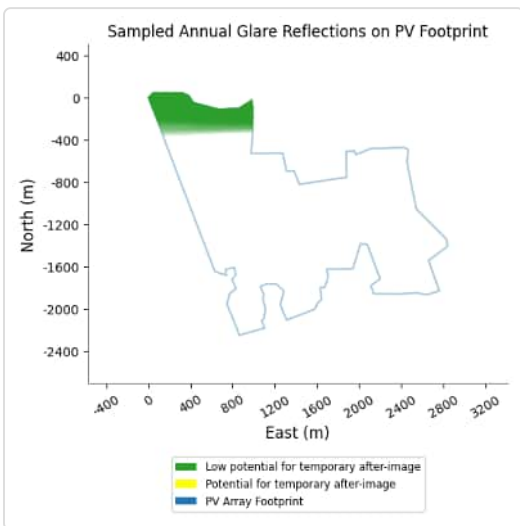
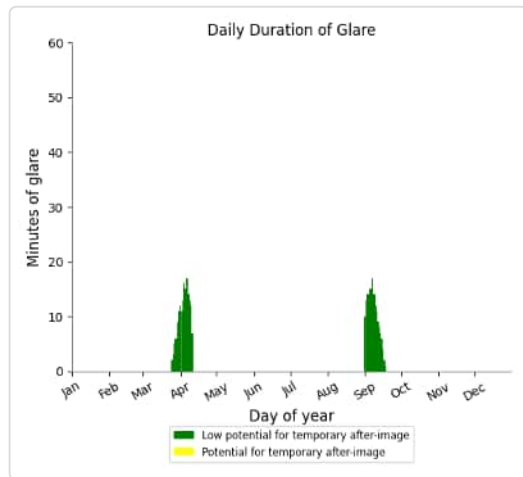
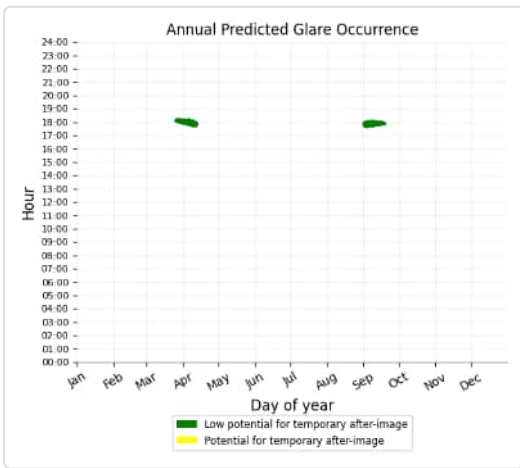




PV array 2 - OP Receptor (OP 33)

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

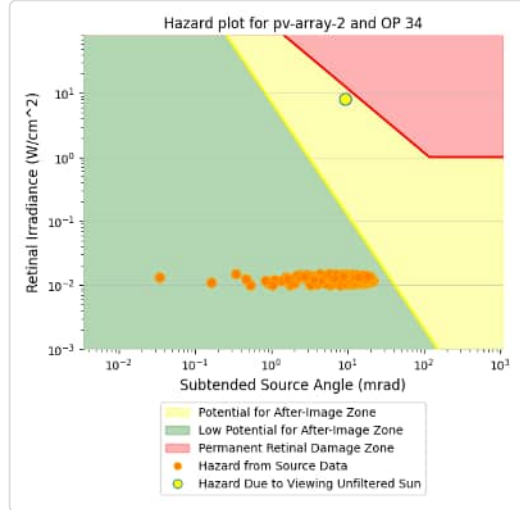
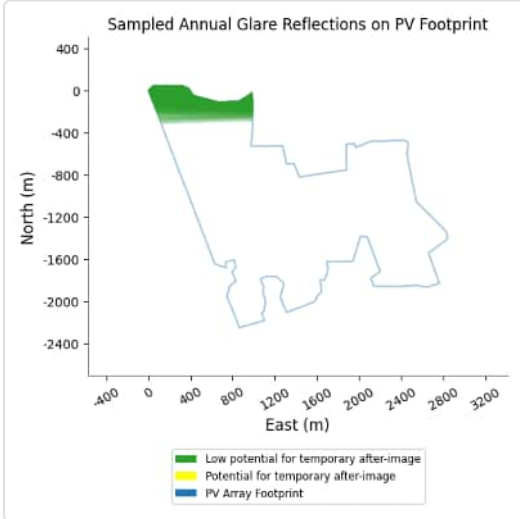
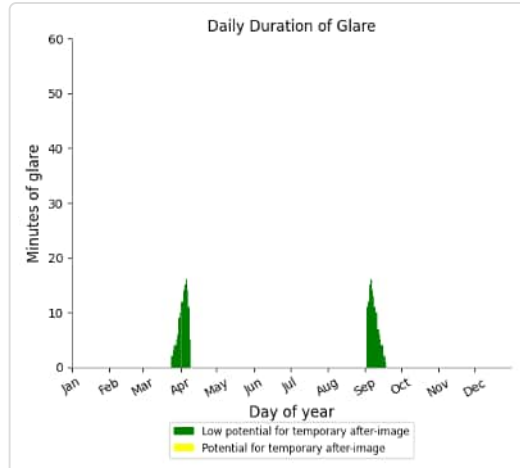
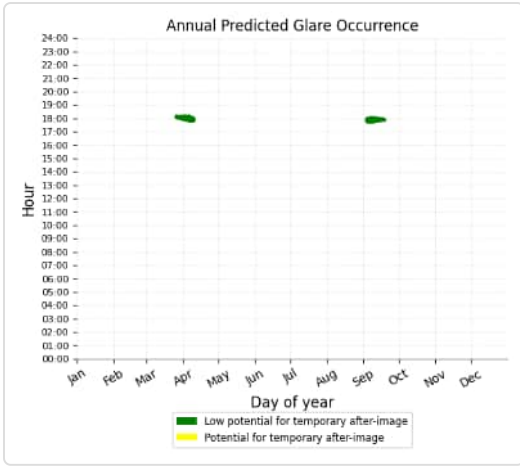
- 375 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 34)

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

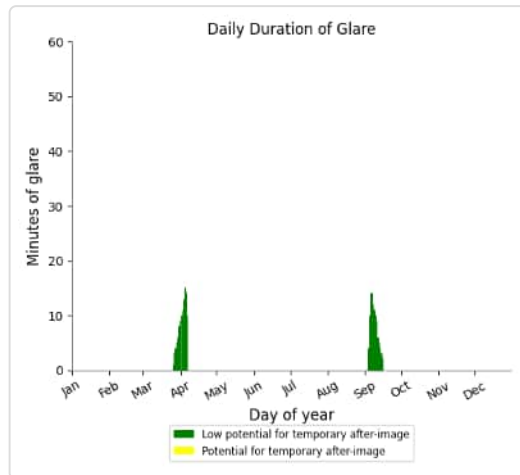
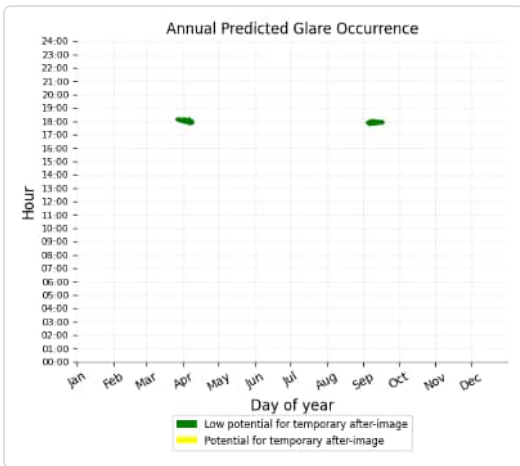
- 283 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

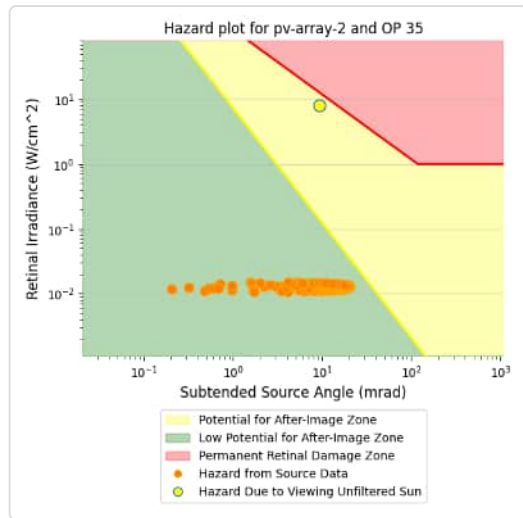
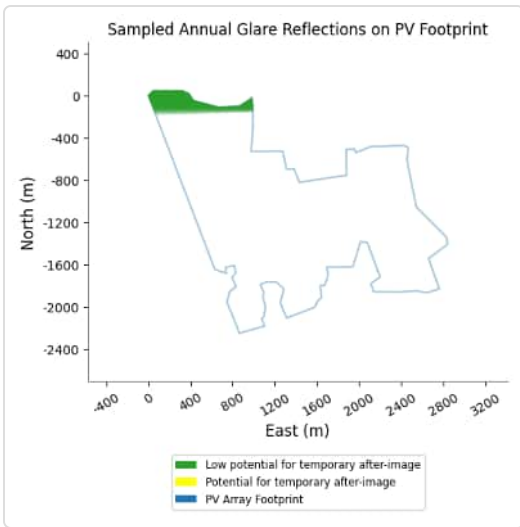


PV array 2 - OP Receptor (OP 35)

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

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

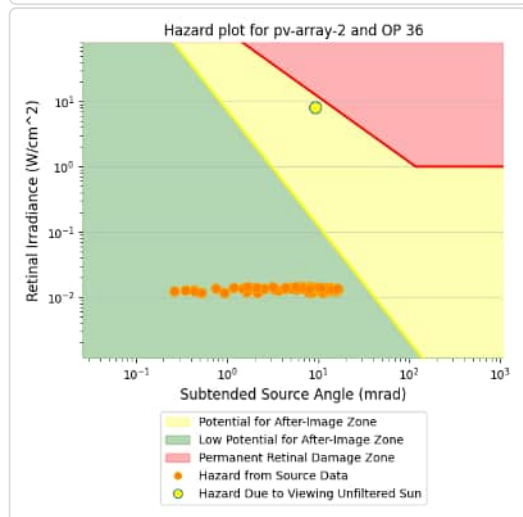
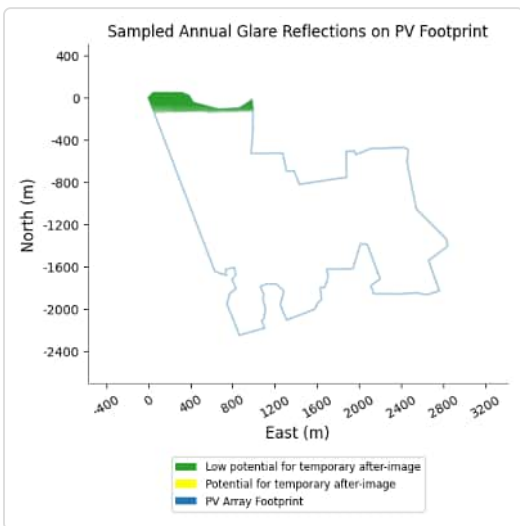
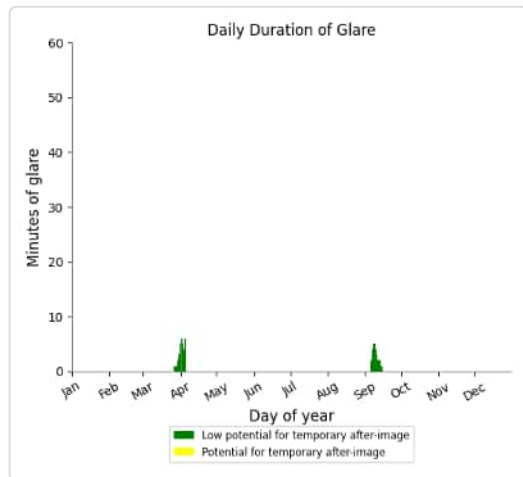
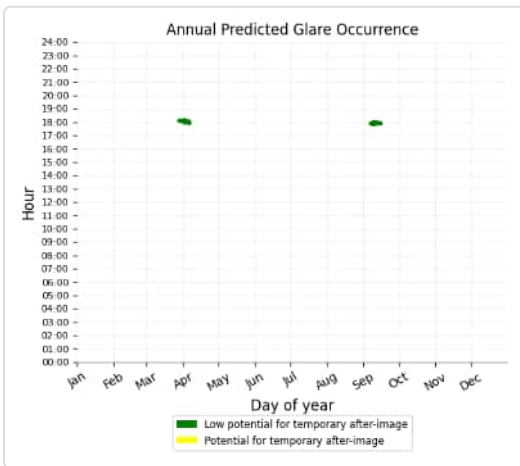




PV array 2 - OP Receptor (OP 36)

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

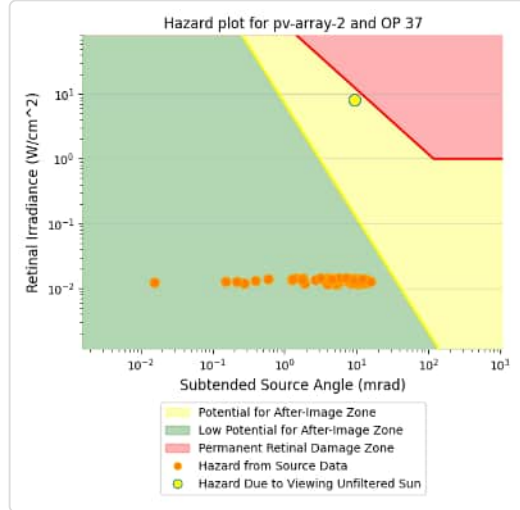
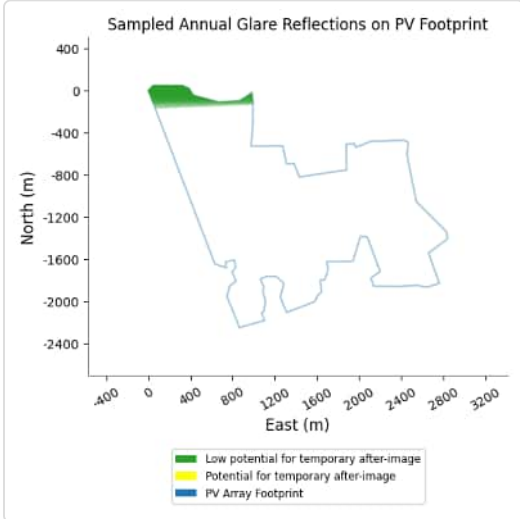
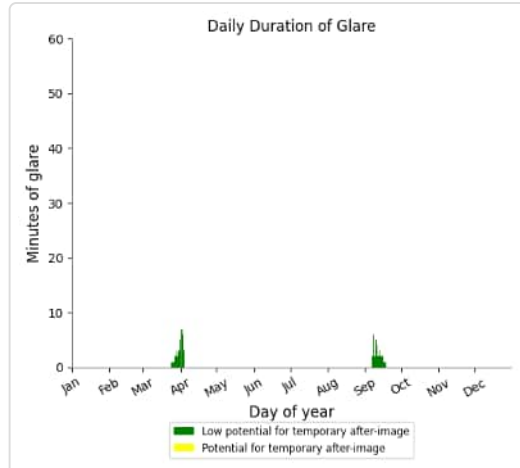
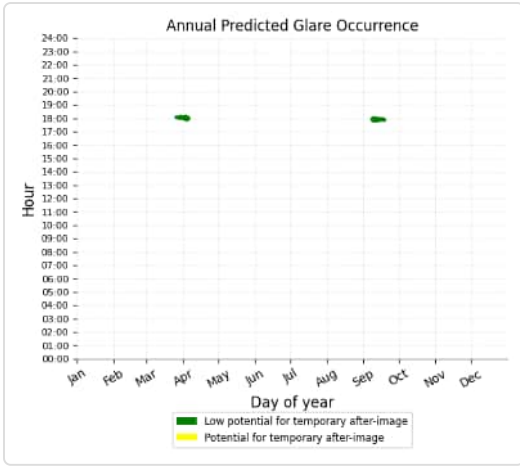
- 64 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 37)

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

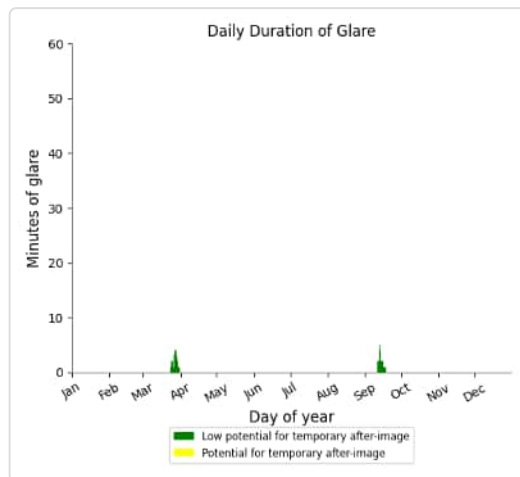
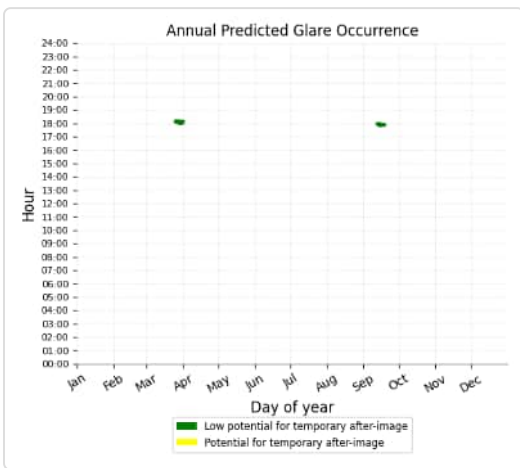
- 66 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

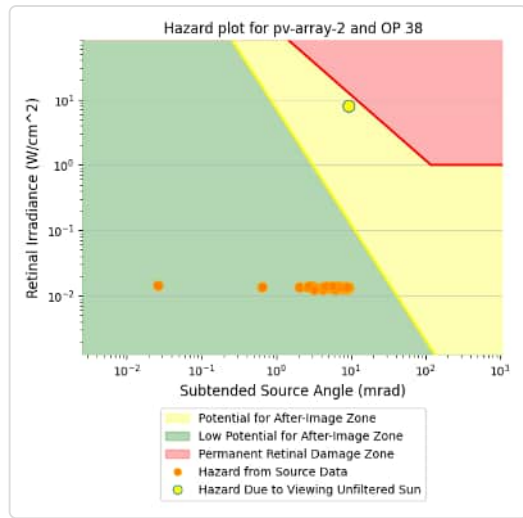
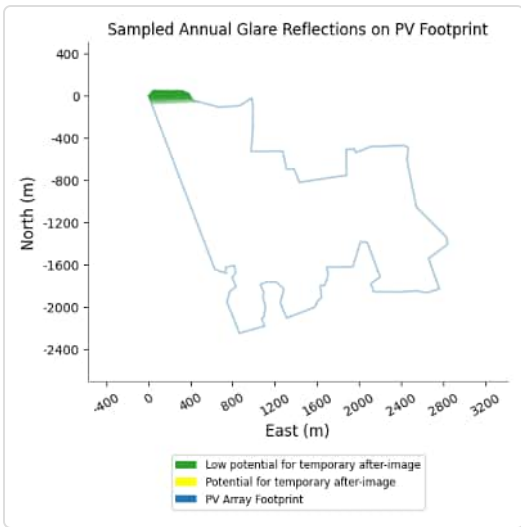


PV array 2 - OP Receptor (OP 38)

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

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

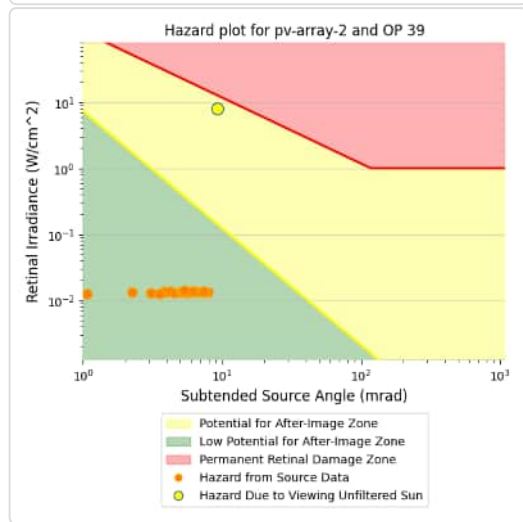
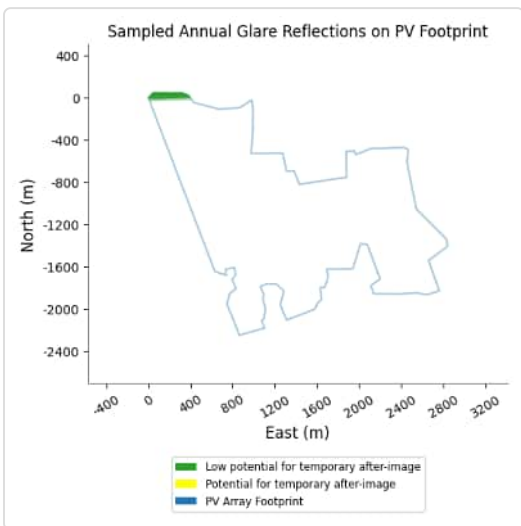
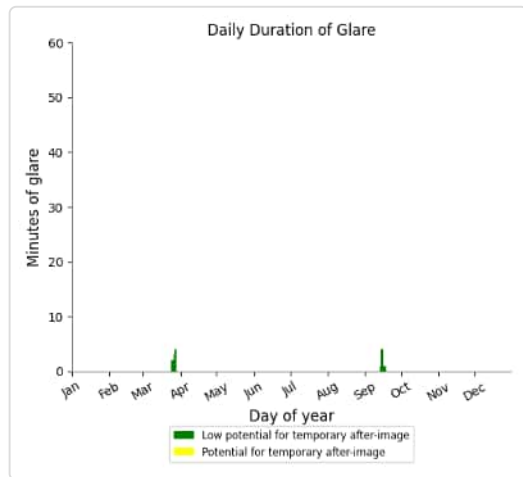
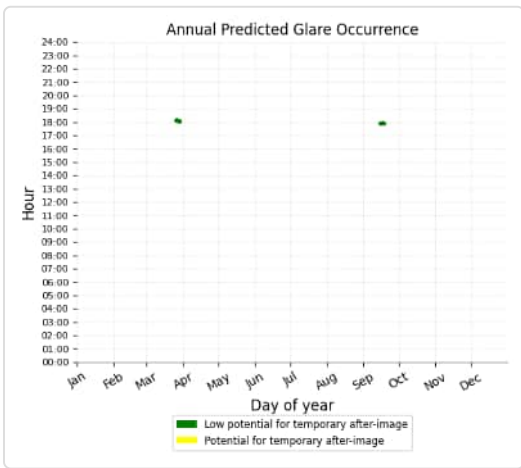




PV array 2 - OP Receptor (OP 39)

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

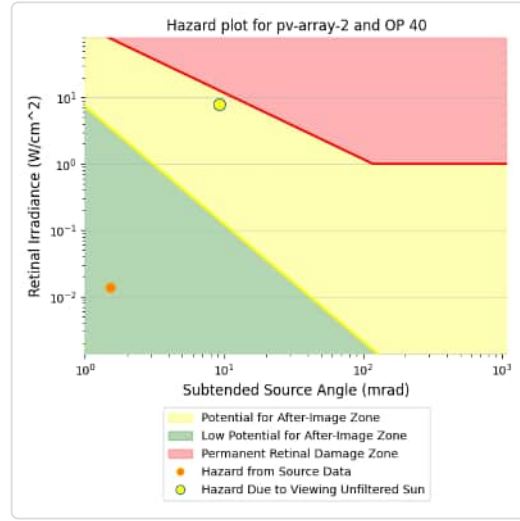
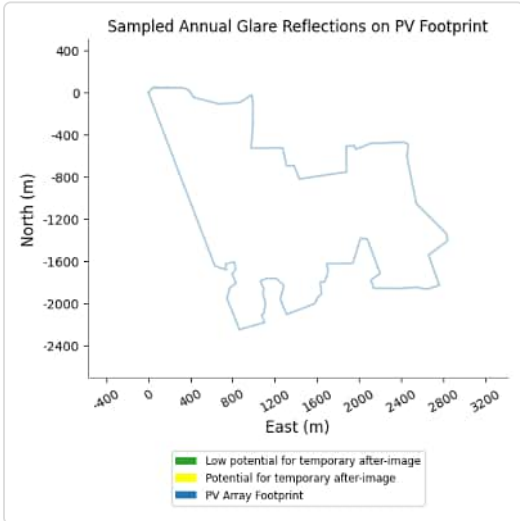
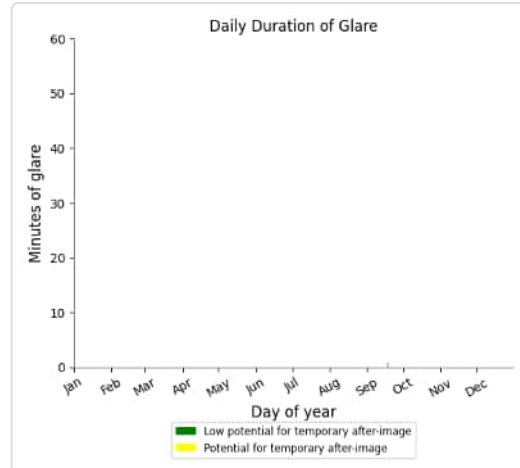
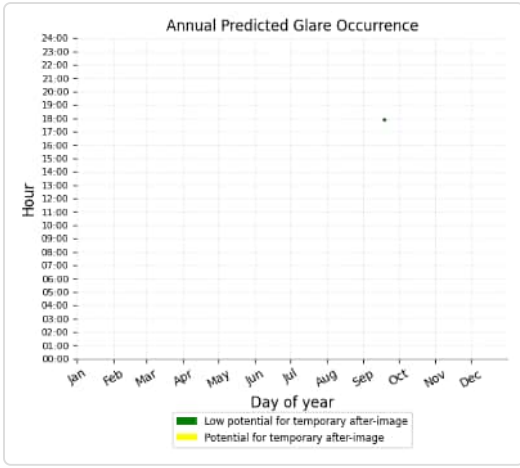
- 22 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 2 - OP Receptor (OP 40)

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

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



PV array 2 - OP Receptor (OP 41)

No glare found

PV array 2 - OP Receptor (OP 42)

No glare found

PV array 2 - OP Receptor (OP 43)

No glare found

PV array 2 - OP Receptor (OP 44)

No glare found

PV array 2 - OP Receptor (OP 45)

No glare found

PV array 2 - OP Receptor (OP 46)

No glare found

PV array 2 - OP Receptor (OP 47)

No glare found

PV array 2 - OP Receptor (OP 48)

No glare found

PV array 2 - OP Receptor (OP 49)

No glare found

PV array 2 - OP Receptor (OP 50)

No glare found

PV array 2 - OP Receptor (OP 51)

No glare found

PV array 2 - OP Receptor (OP 52)

No glare found

PV array 2 - OP Receptor (OP 53)

No glare found

PV array 3 low potential for temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	1072	0
OP: OP 17	1796	0
OP: OP 18	1655	0
OP: OP 19	1808	0
OP: OP 20	2730	0
OP: OP 21	1750	0
OP: OP 22	2253	0
OP: OP 23	2189	0
OP: OP 24	1850	0
OP: OP 25	2290	0
OP: OP 26	2454	0
OP: OP 27	2561	0
OP: OP 28	2352	0
OP: OP 29	2637	0
OP: OP 30	2700	0
OP: OP 31	2829	0
OP: OP 32	2661	0
OP: OP 33	2238	0
OP: OP 34	1994	0
OP: OP 35	3318	0
OP: OP 36	2244	0
OP: OP 37	2264	0
OP: OP 38	1948	0
OP: OP 39	1972	0
OP: OP 40	1553	0
OP: OP 41	1343	0

OP: OP 42	1072	0
OP: OP 43	0	0
OP: OP 44	0	0
OP: OP 45	571	0
OP: OP 46	0	0
OP: OP 47	10	0
OP: OP 48	83	0
OP: OP 49	110	0
OP: OP 50	62	0
OP: OP 51	520	0
OP: OP 52	87	0
OP: OP 53	0	0

PV array 3 - OP Receptor (OP 1)

No glare found

PV array 3 - OP Receptor (OP 2)

No glare found

PV array 3 - OP Receptor (OP 3)

No glare found

PV array 3 - OP Receptor (OP 4)

No glare found

PV array 3 - OP Receptor (OP 5)

No glare found

PV array 3 - OP Receptor (OP 6)

No glare found

PV array 3 - OP Receptor (OP 7)

No glare found

PV array 3 - OP Receptor (OP 8)

No glare found

PV array 3 - OP Receptor (OP 9)

No glare found

PV array 3 - OP Receptor (OP 10)

No glare found

PV array 3 - OP Receptor (OP 11)

No glare found

PV array 3 - OP Receptor (OP 12)

No glare found

PV array 3 - OP Receptor (OP 13)

No glare found

PV array 3 - OP Receptor (OP 14)

No glare found

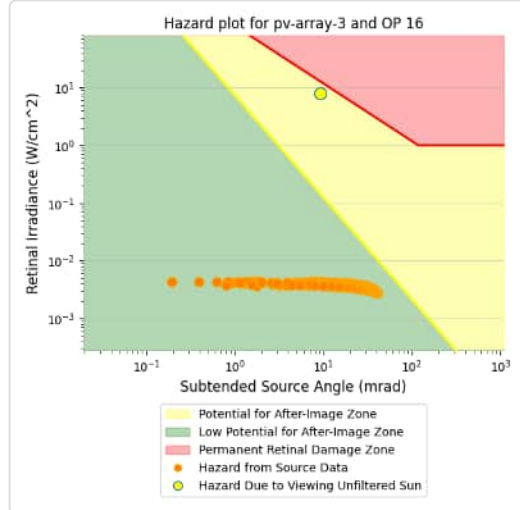
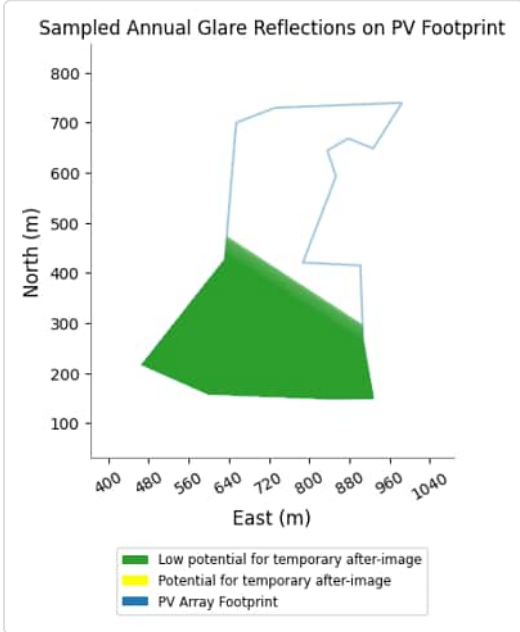
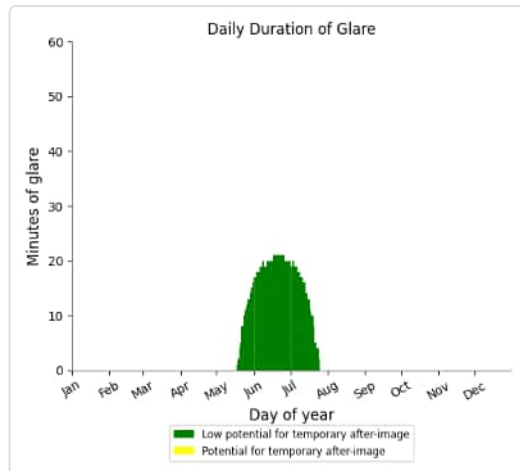
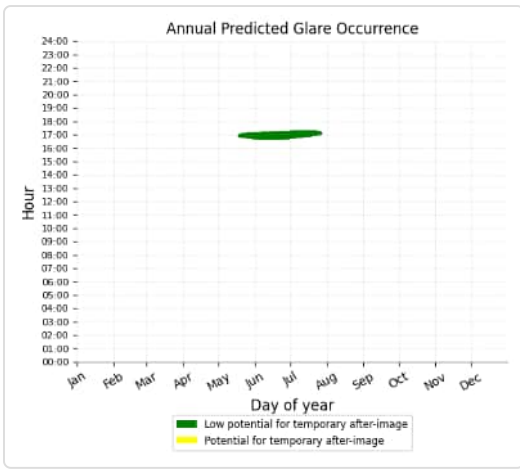
PV array 3 - OP Receptor (OP 15)

No glare found

PV array 3 - OP Receptor (OP 16)

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

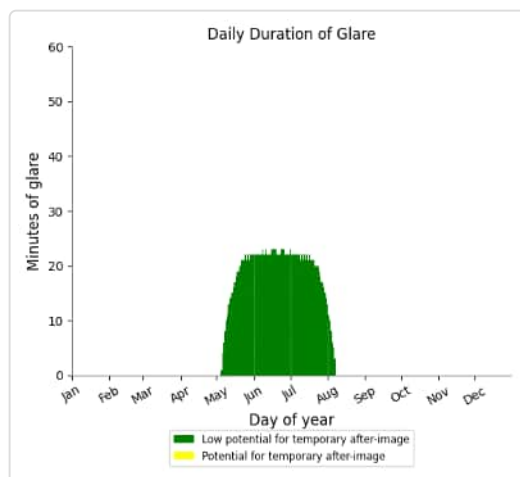
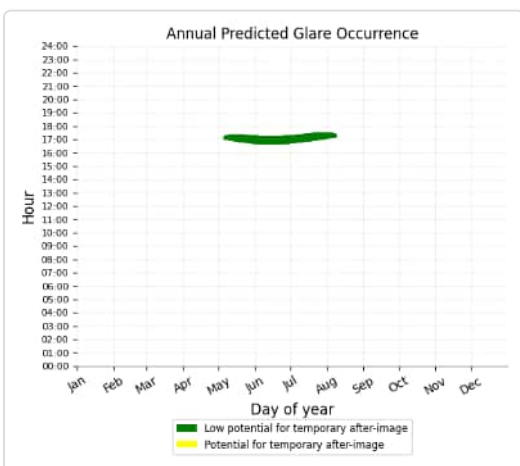
- 1,072 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

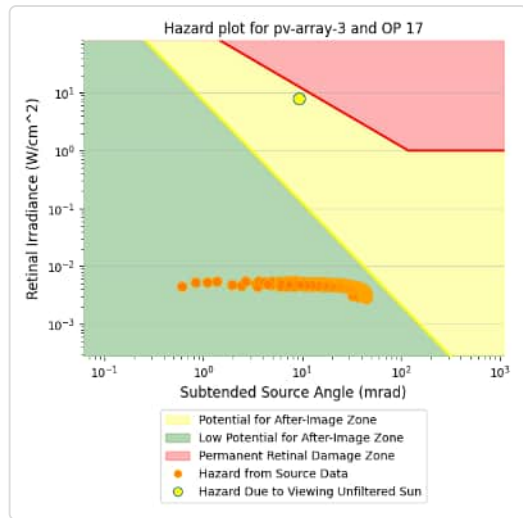
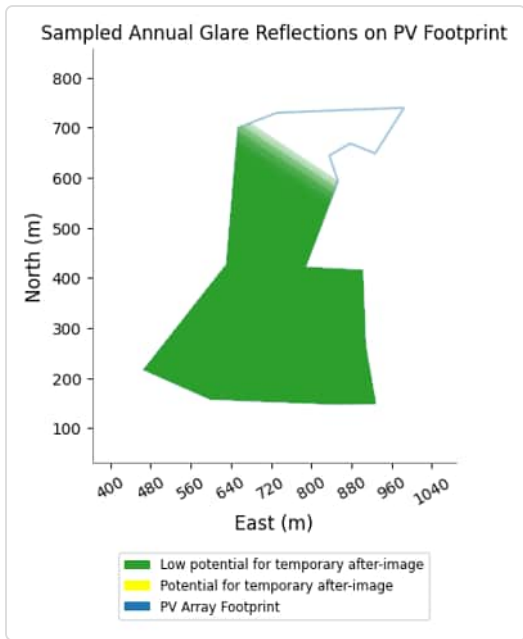


PV array 3 - OP Receptor (OP 17)

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

- 1,796 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

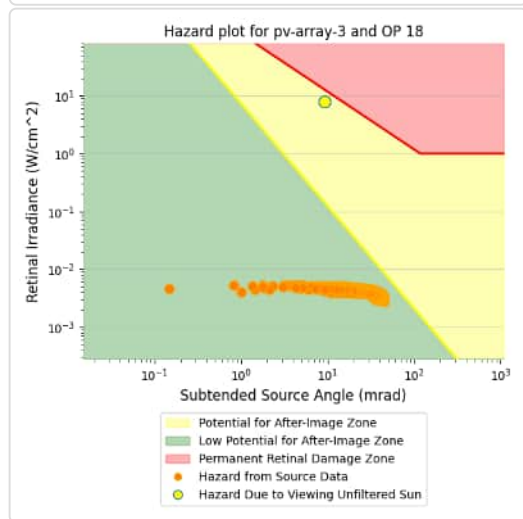
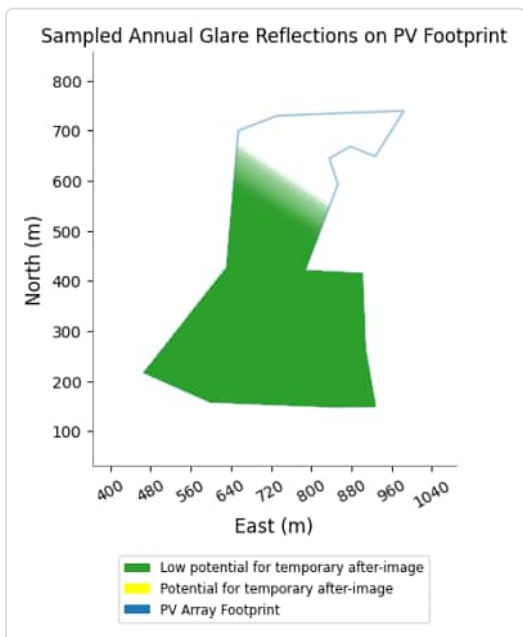
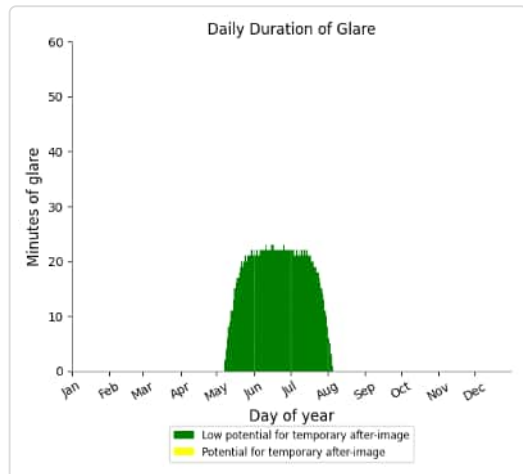
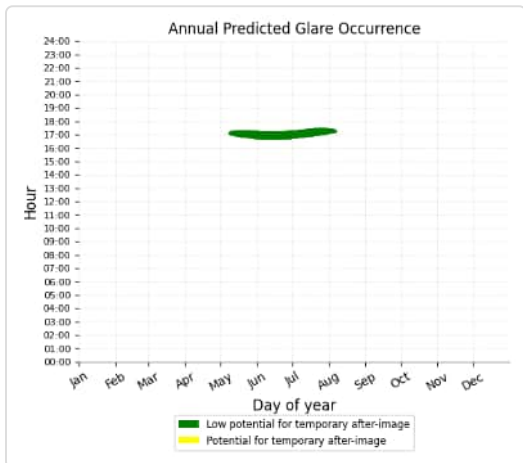




PV array 3 - OP Receptor (OP 18)

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

- 1,655 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

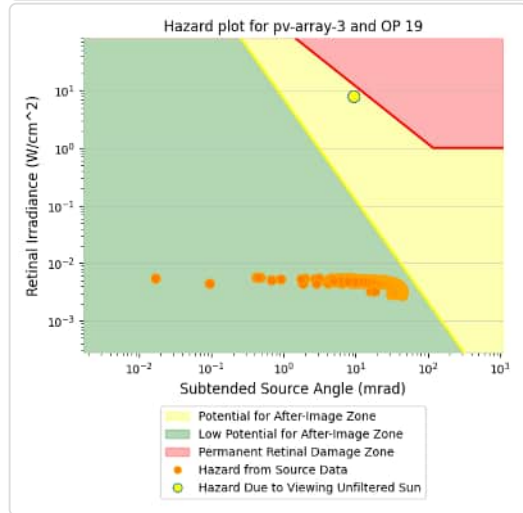
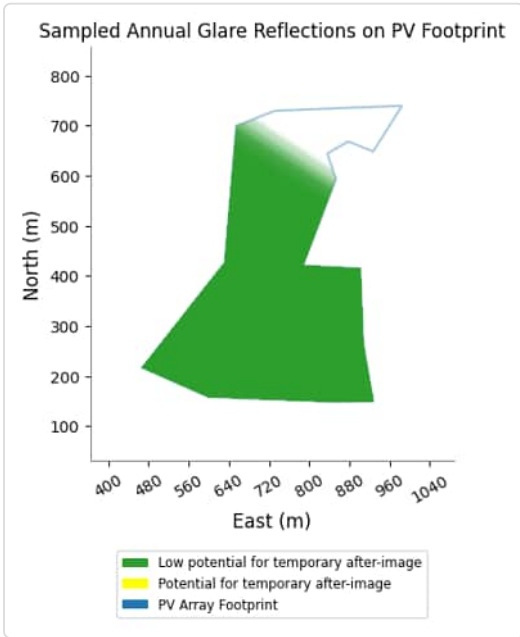
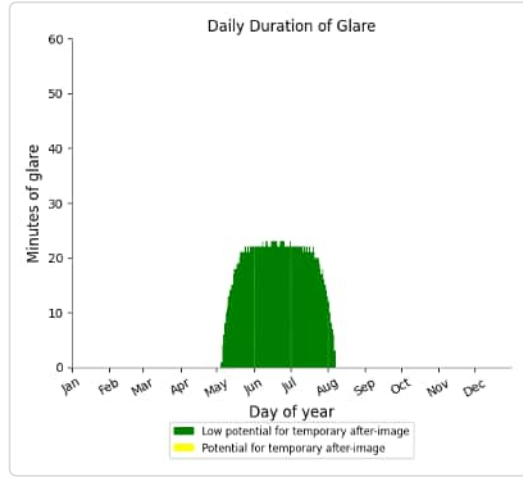
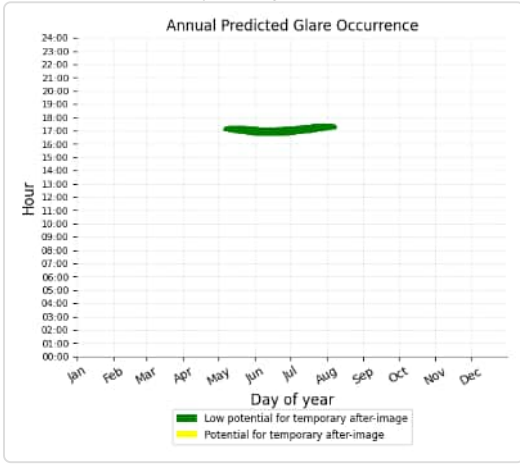


PV array 3 - OP Receptor (OP 19)

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

- 1,808 minutes of "green" glare with low potential to cause temporary after-image.

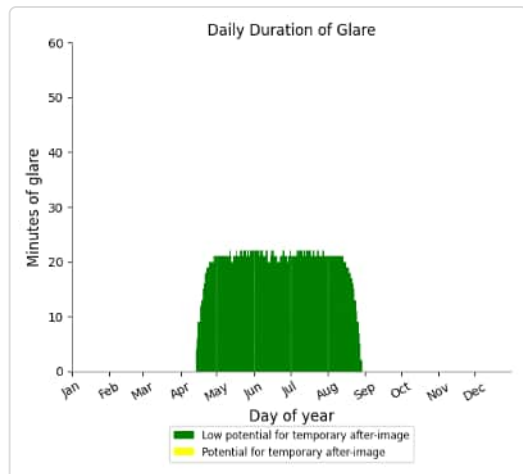
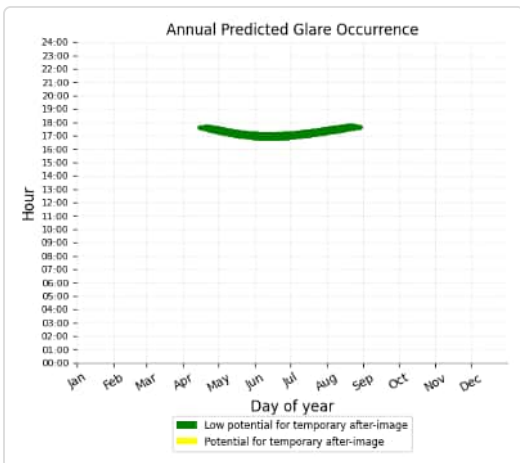
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

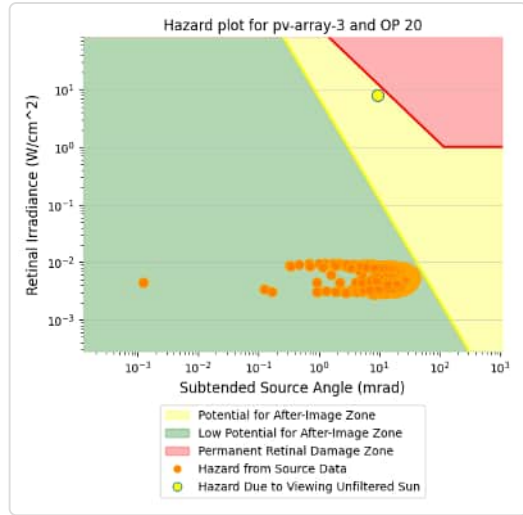
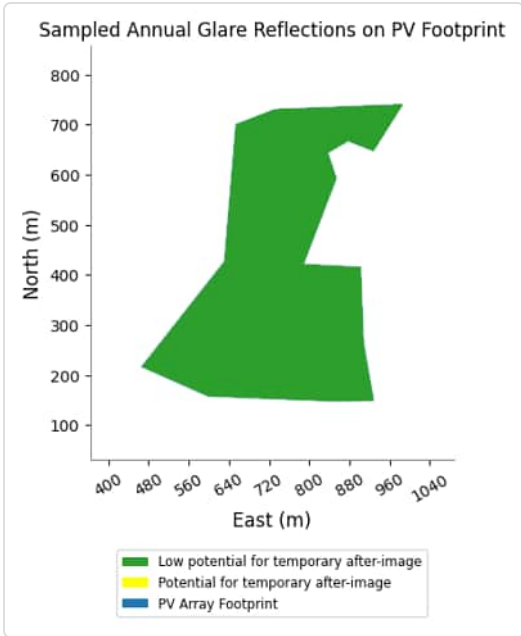


PV array 3 - OP Receptor (OP 20)

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

- 2,730 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

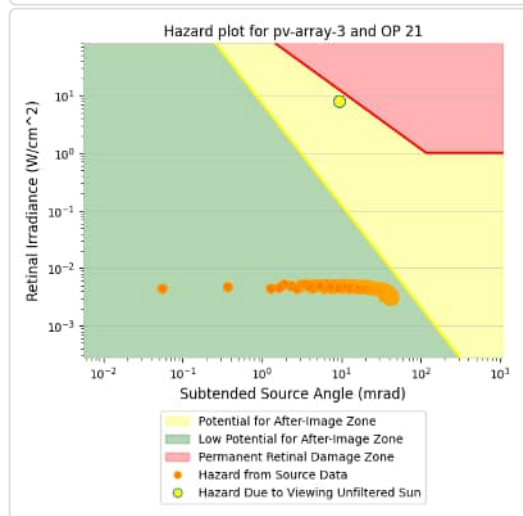
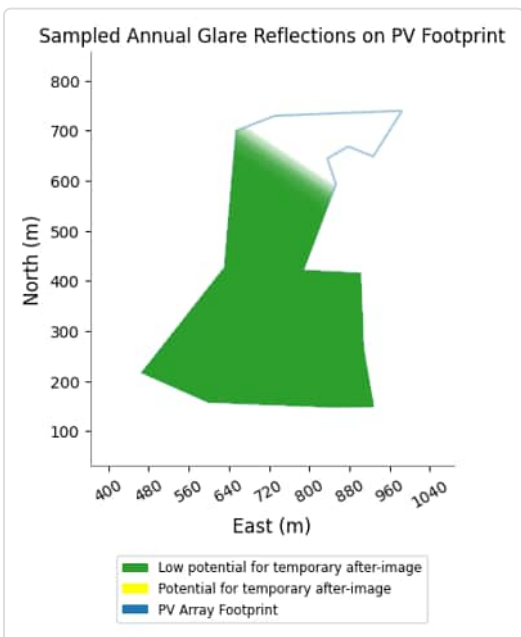
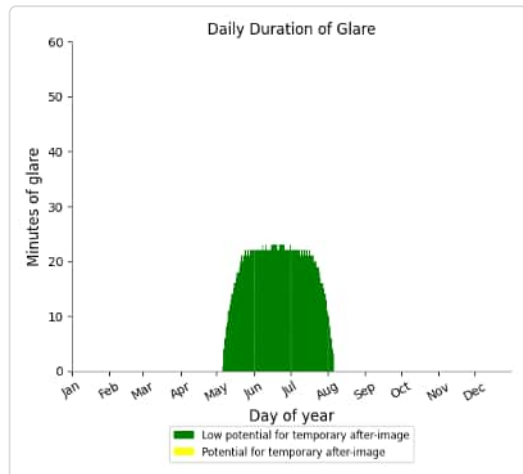
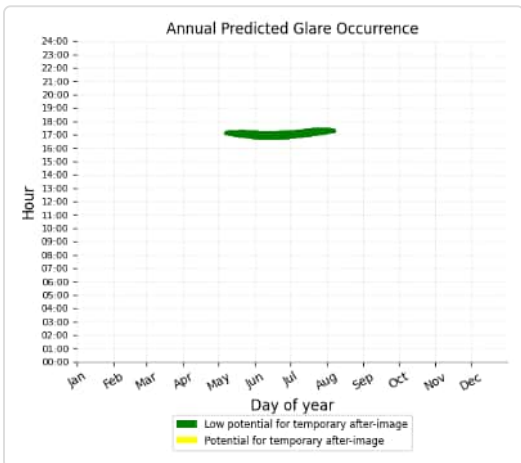




PV array 3 - OP Receptor (OP 21)

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

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

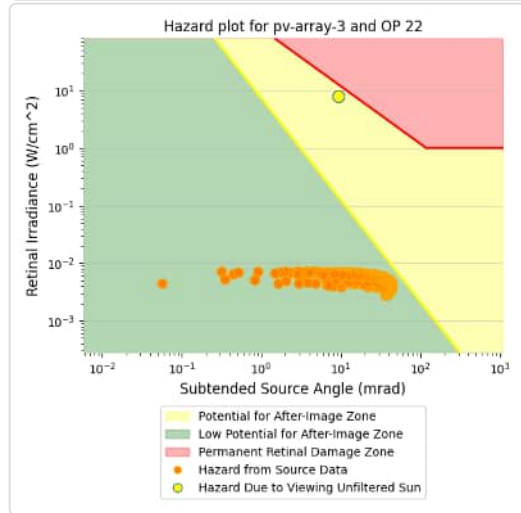
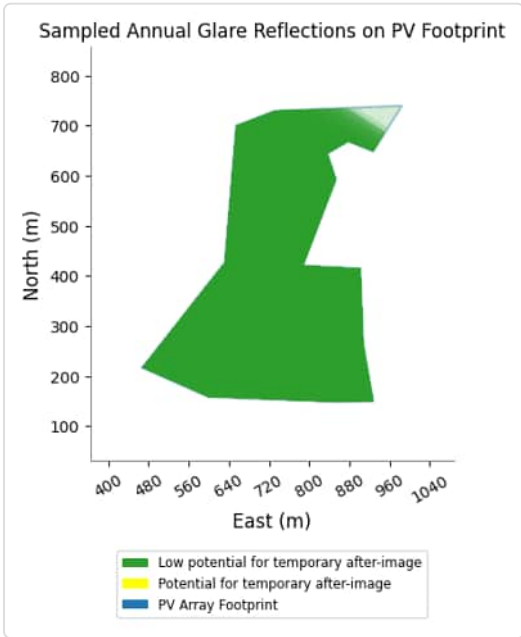
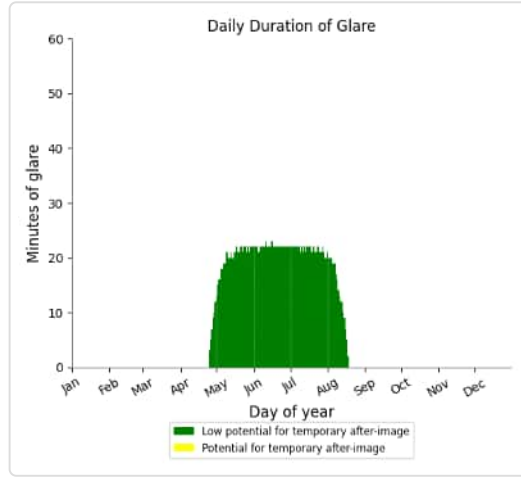
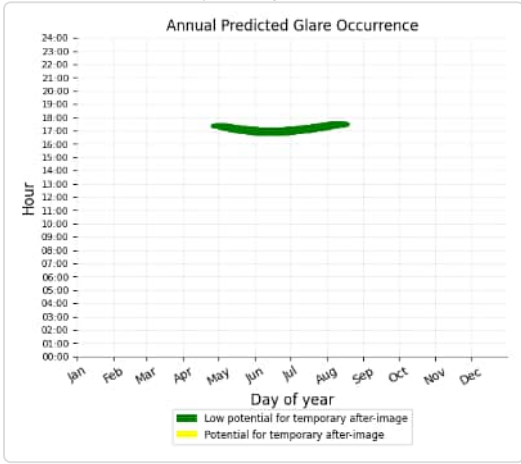


PV array 3 - OP Receptor (OP 22)

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

- 2,253 minutes of "green" glare with low potential to cause temporary after-image.

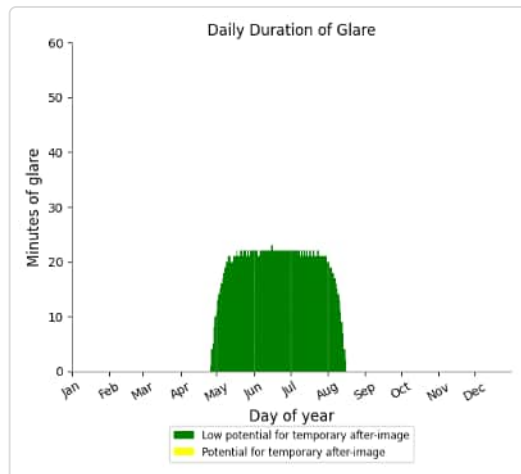
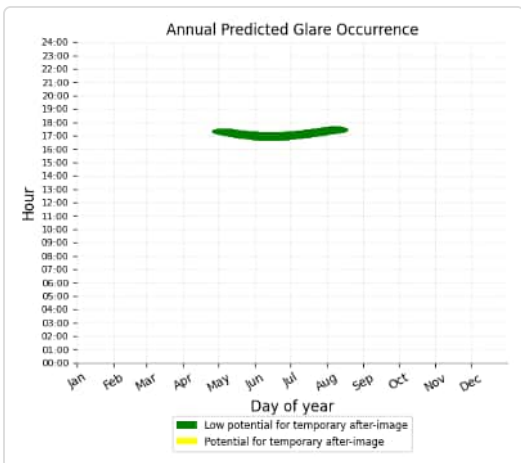
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

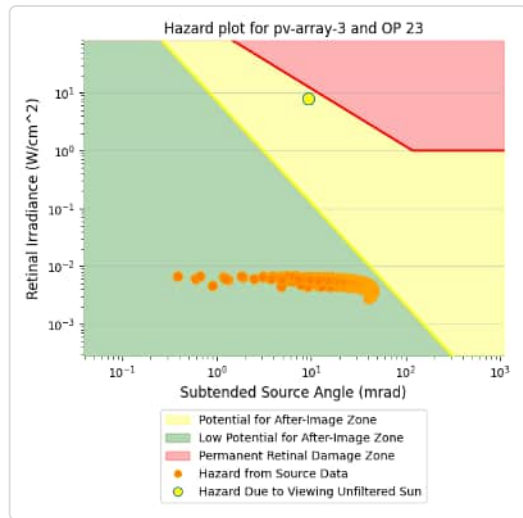
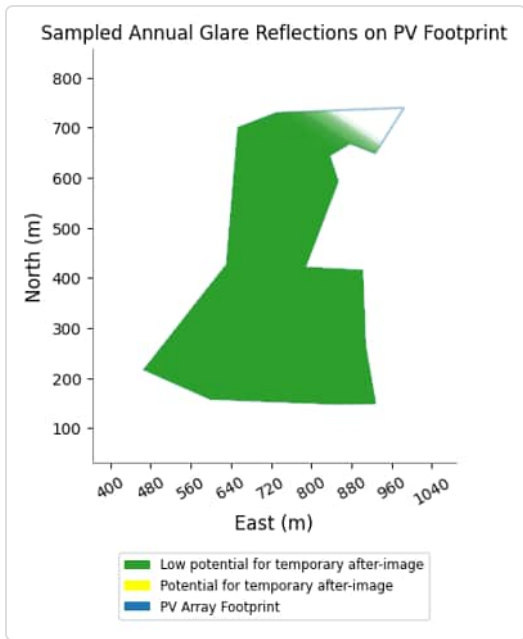


PV array 3 - OP Receptor (OP 23)

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

- 2,189 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

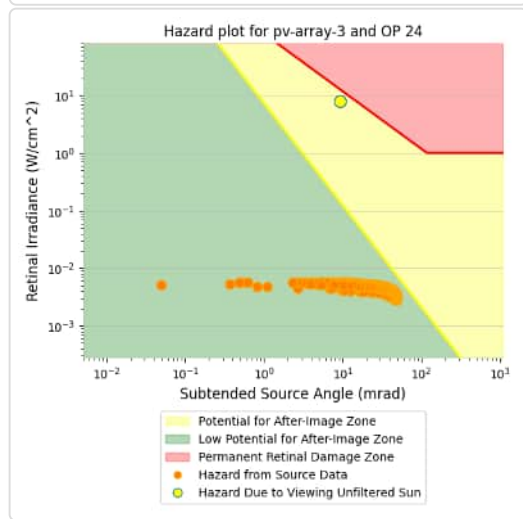
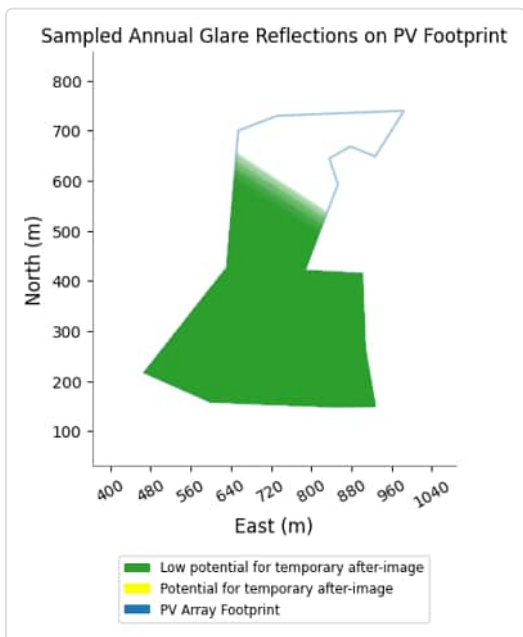
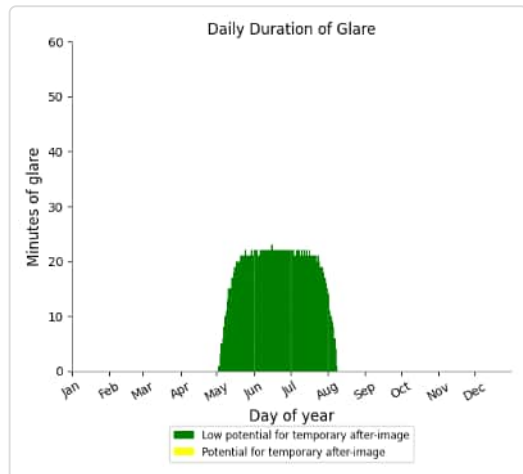
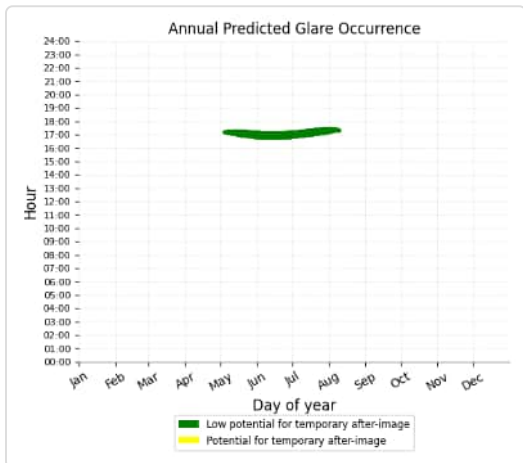




PV array 3 - OP Receptor (OP 24)

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

- 1,850 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

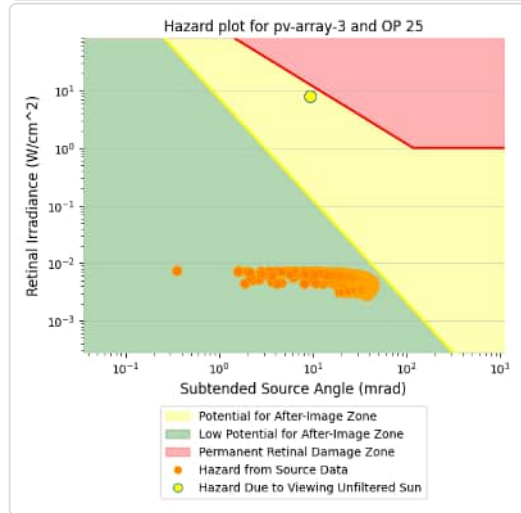
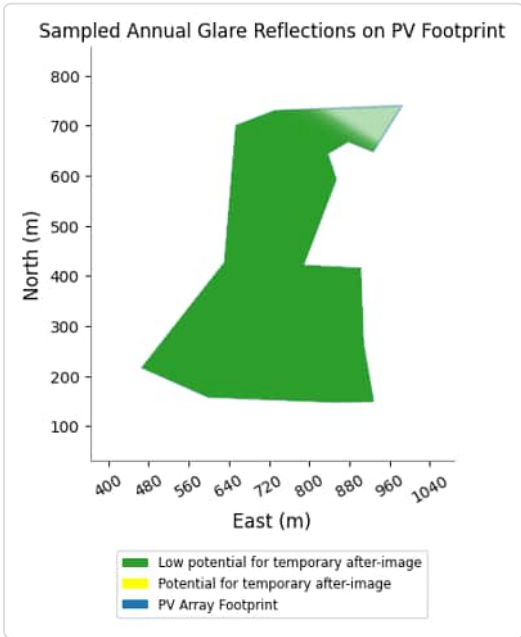
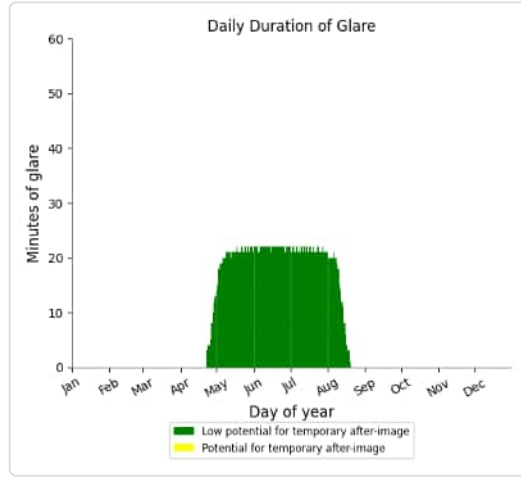
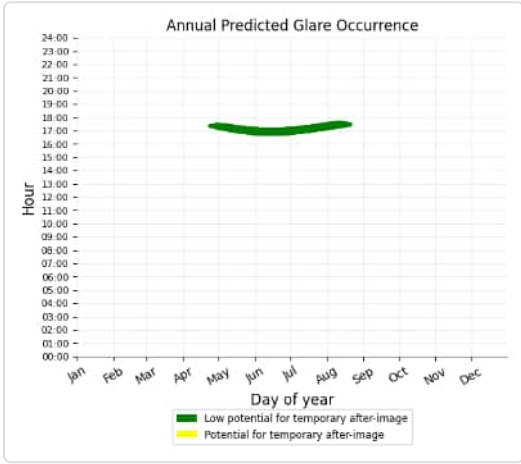


PV array 3 - OP Receptor (OP 25)

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

- 2,290 minutes of "green" glare with low potential to cause temporary after-image.

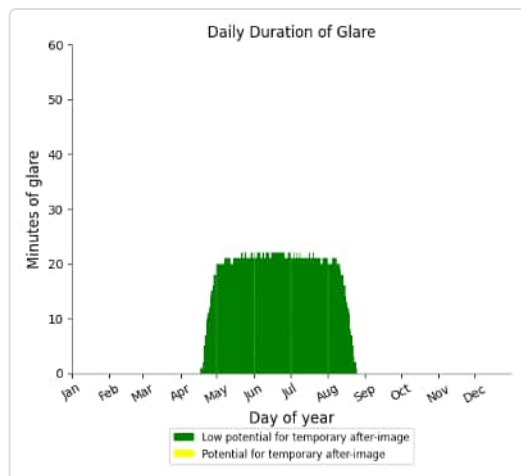
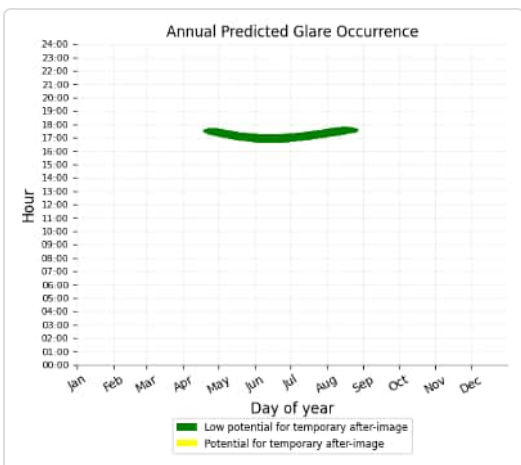
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

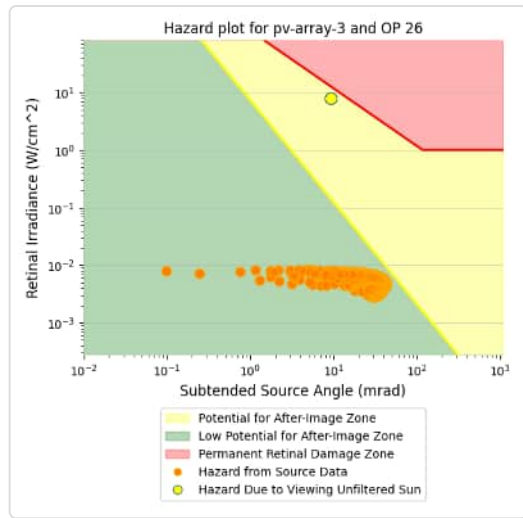
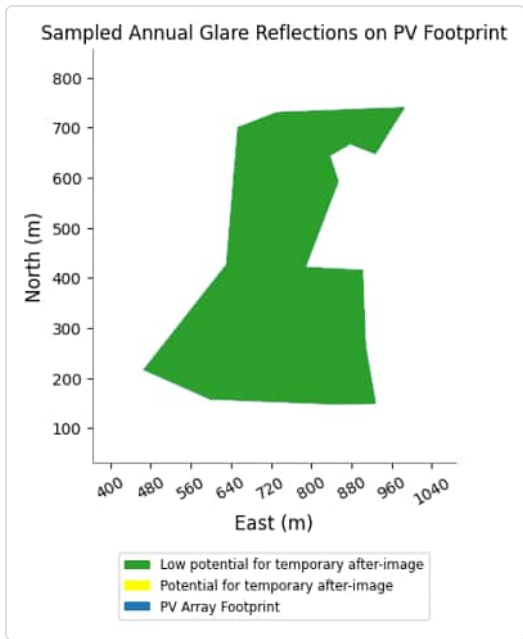


PV array 3 - OP Receptor (OP 26)

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

- 2,454 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

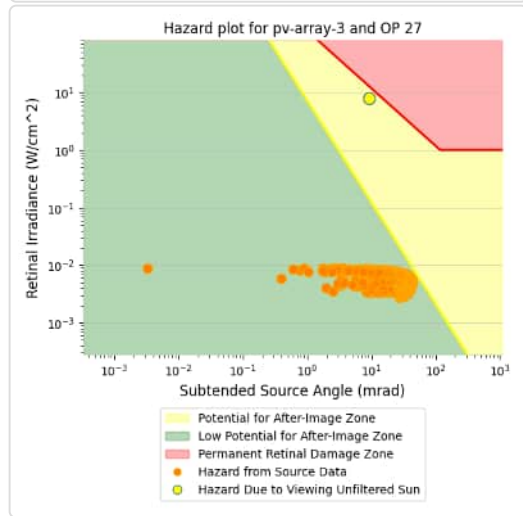
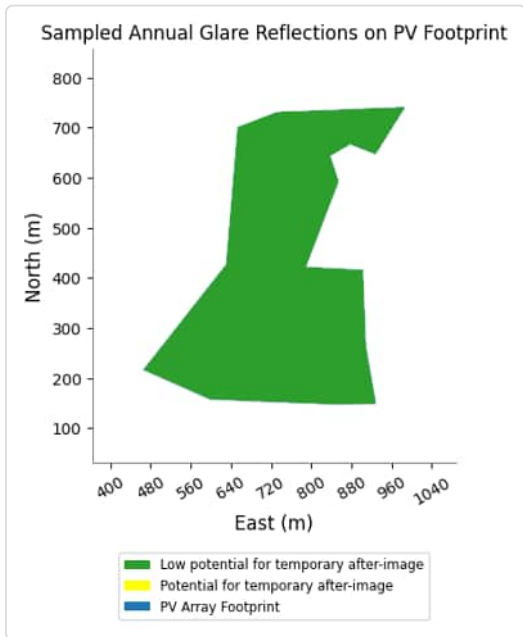
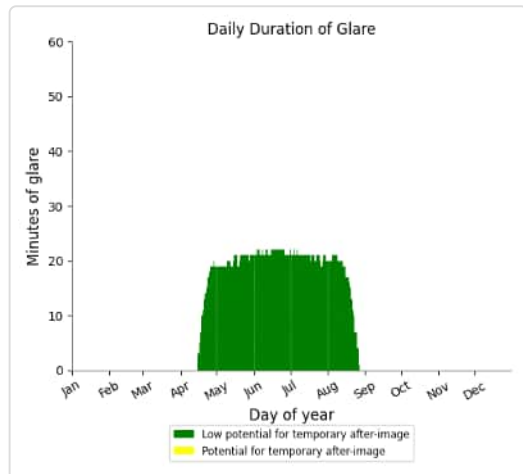
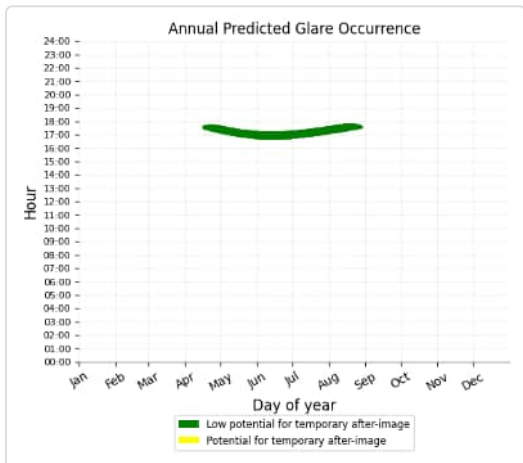




PV array 3 - OP Receptor (OP 27)

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

- 2,561 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

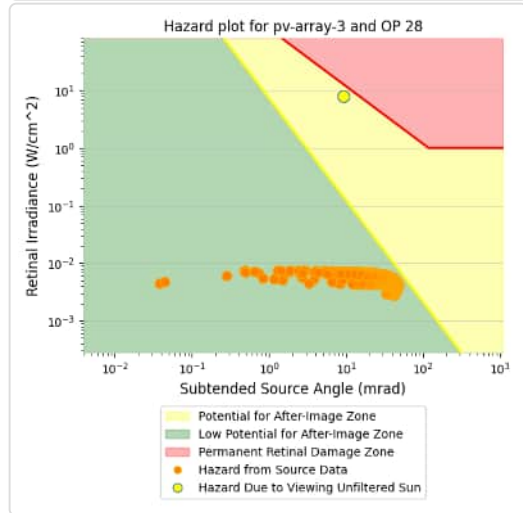
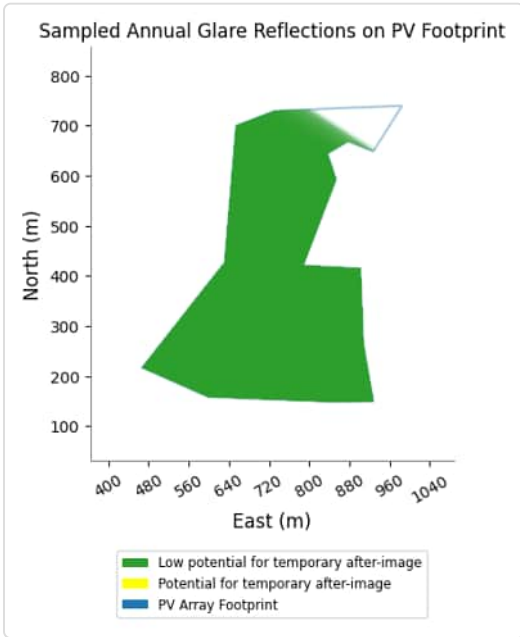
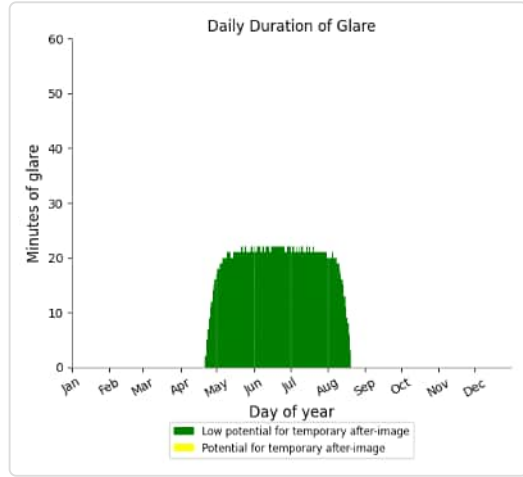
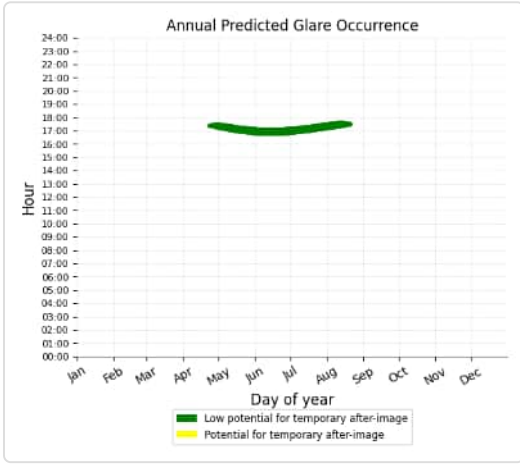


PV array 3 - OP Receptor (OP 28)

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

- 2,352 minutes of "green" glare with low potential to cause temporary after-image.

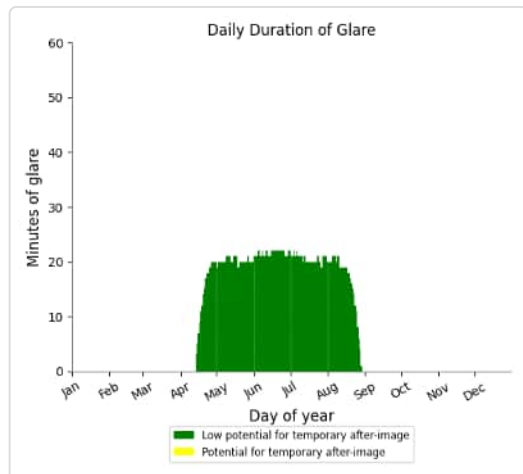
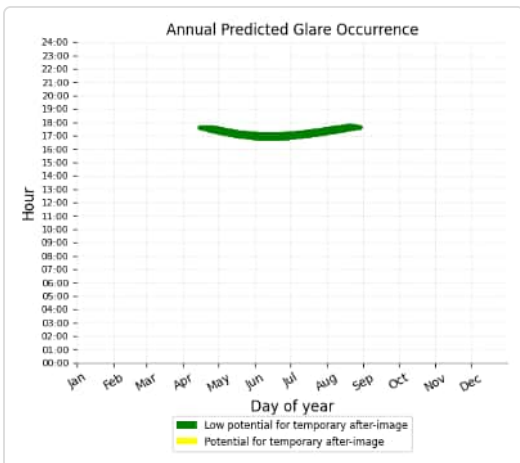
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

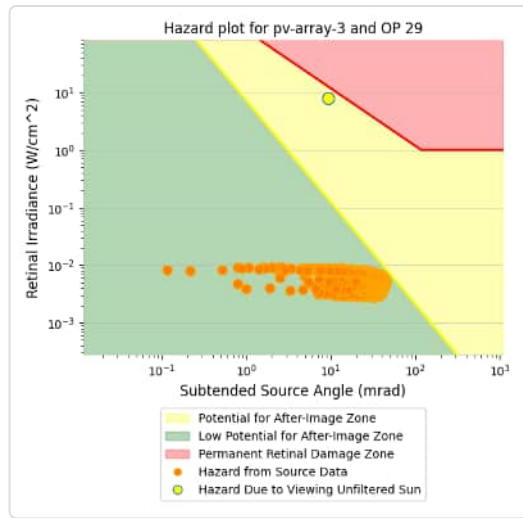
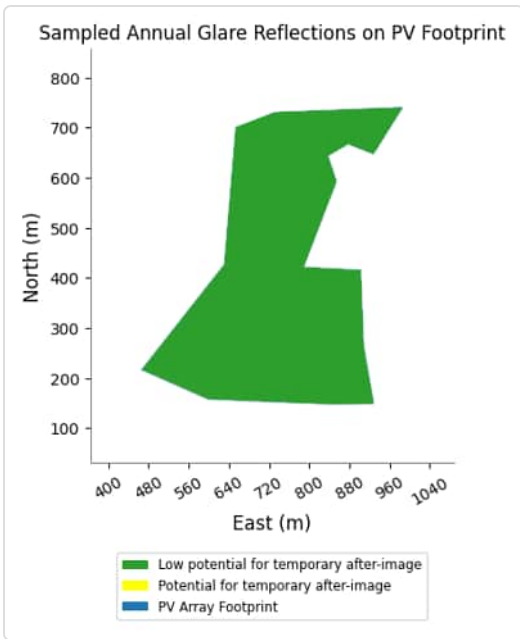


PV array 3 - OP Receptor (OP 29)

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

- 2,637 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

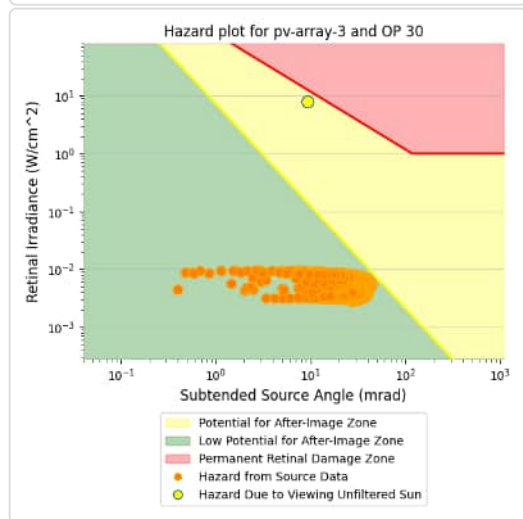
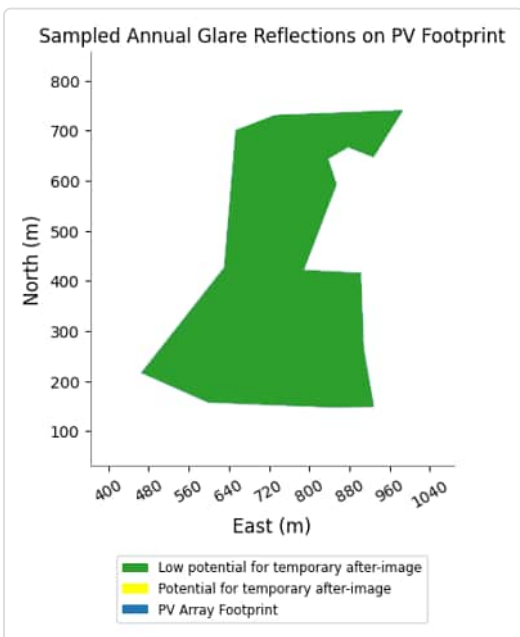
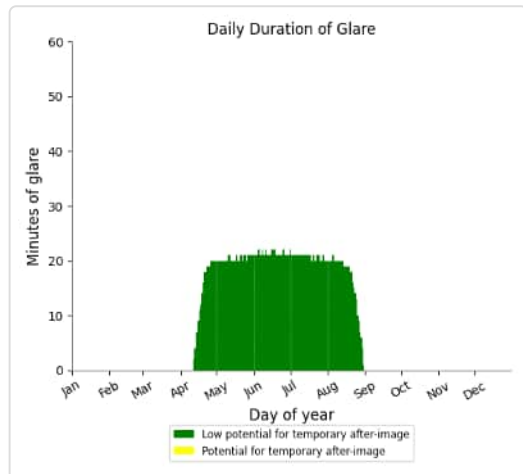
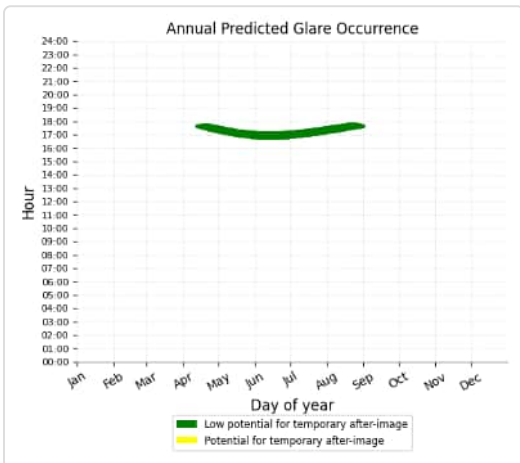




PV array 3 - OP Receptor (OP 30)

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

- 2,700 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

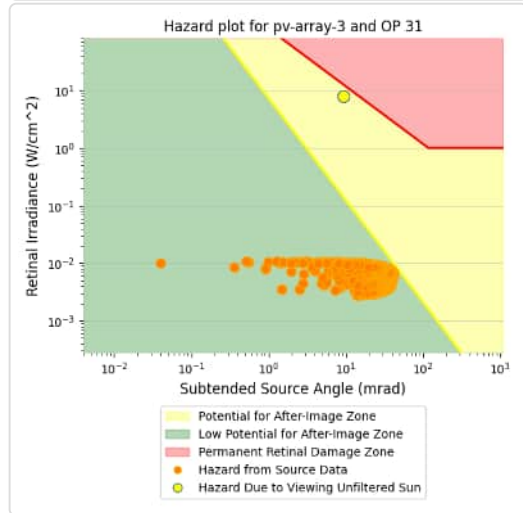
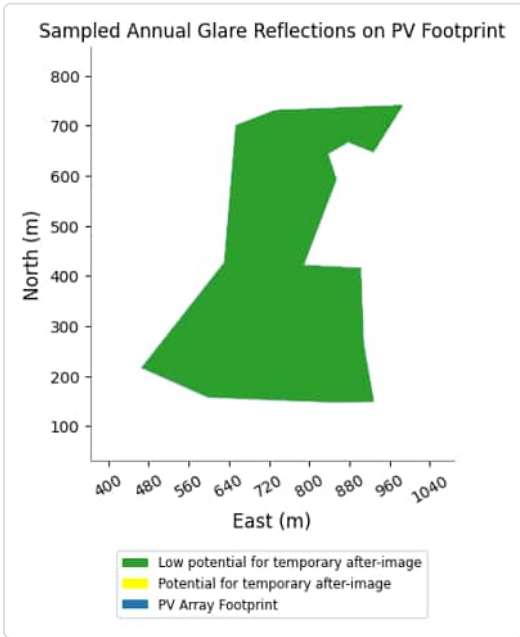
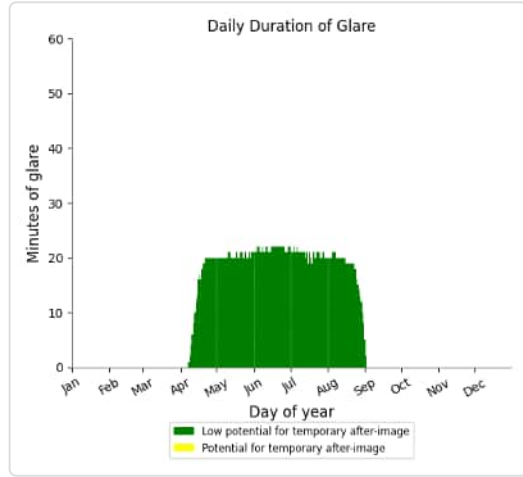
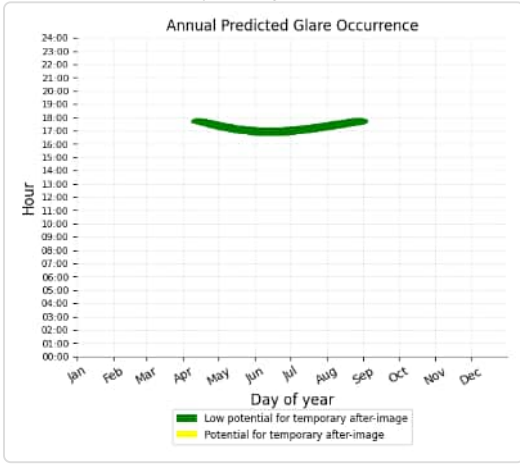


PV array 3 - OP Receptor (OP 31)

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

- 2,829 minutes of "green" glare with low potential to cause temporary after-image.

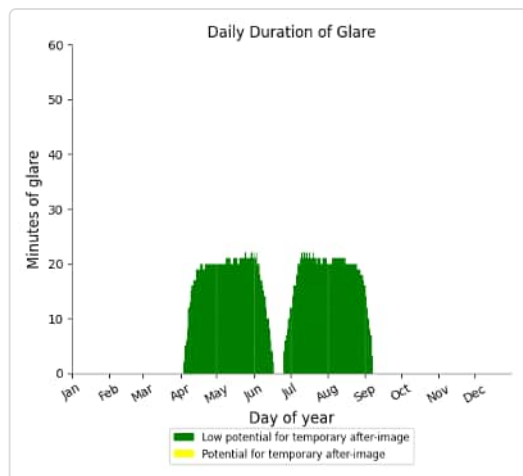
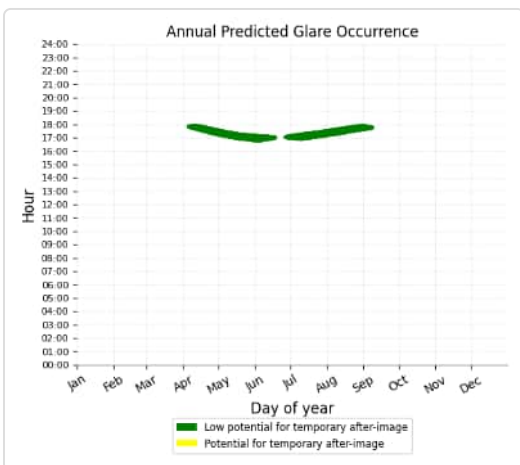
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

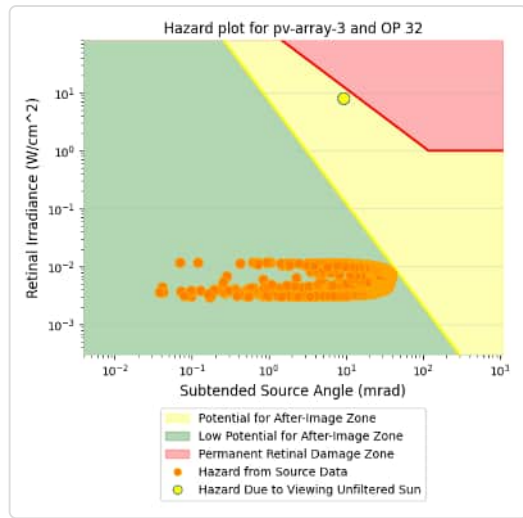
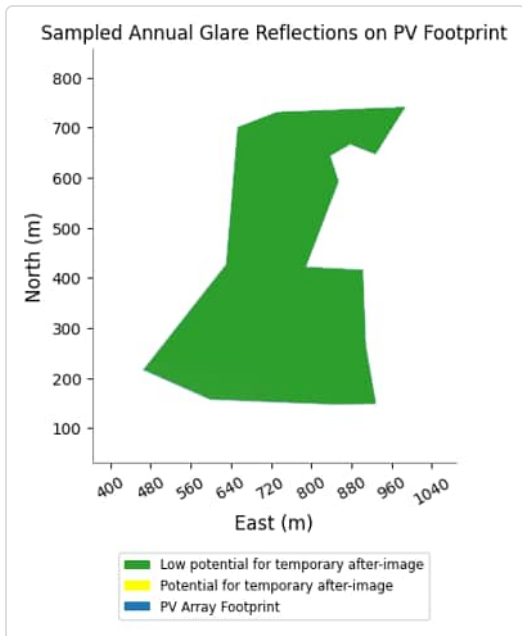


PV array 3 - OP Receptor (OP 32)

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

- 2,661 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

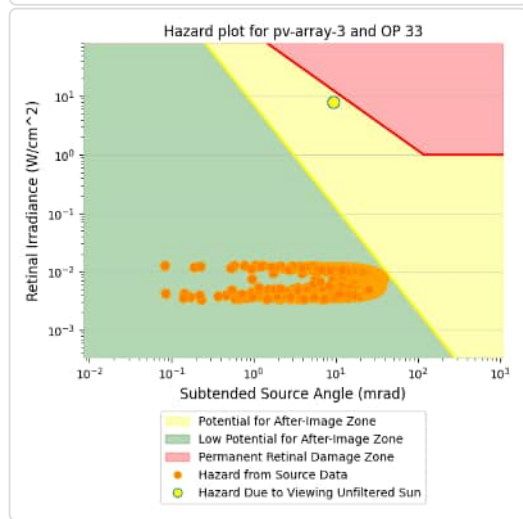
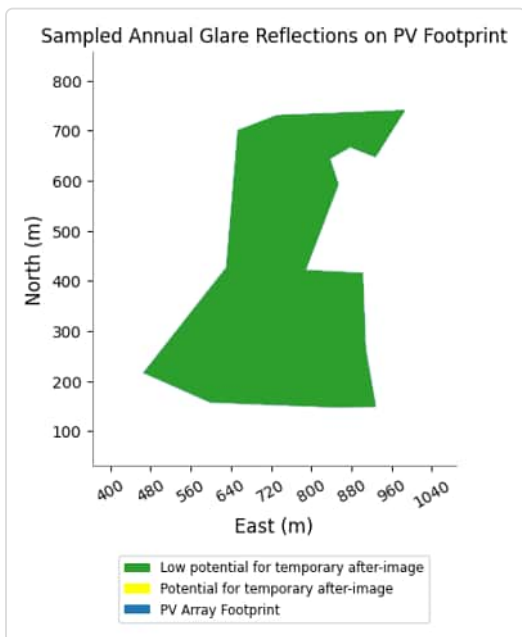
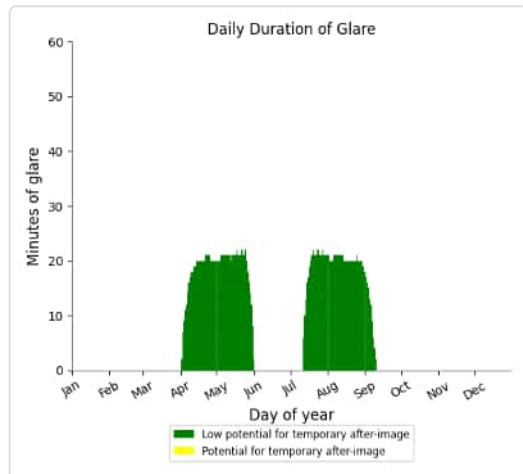
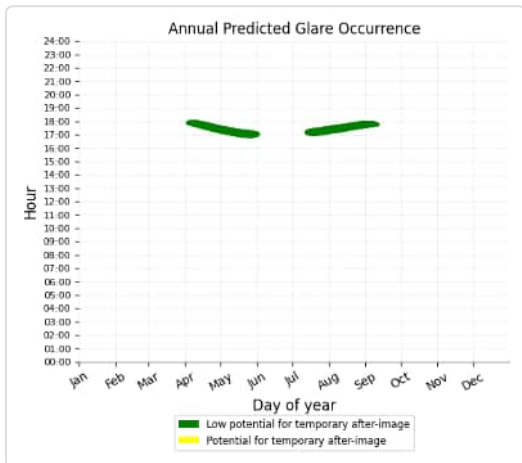




PV array 3 - OP Receptor (OP 33)

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

- 2,238 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

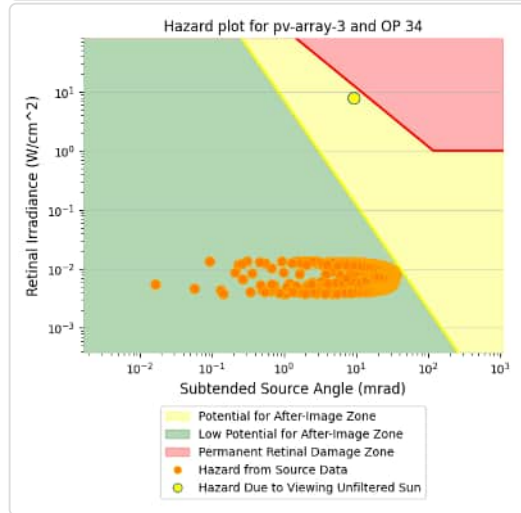
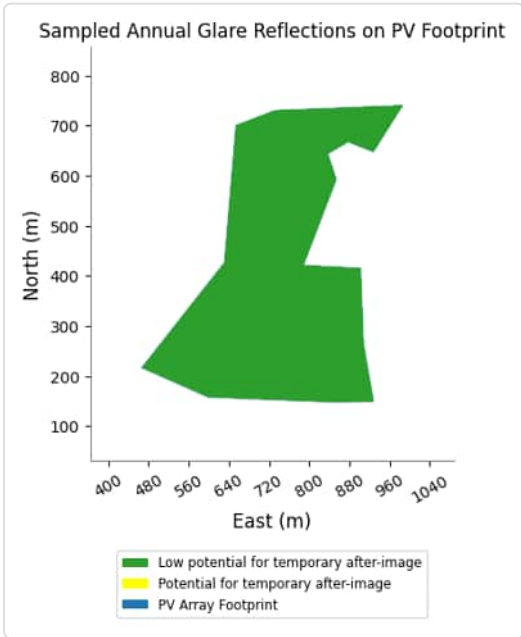
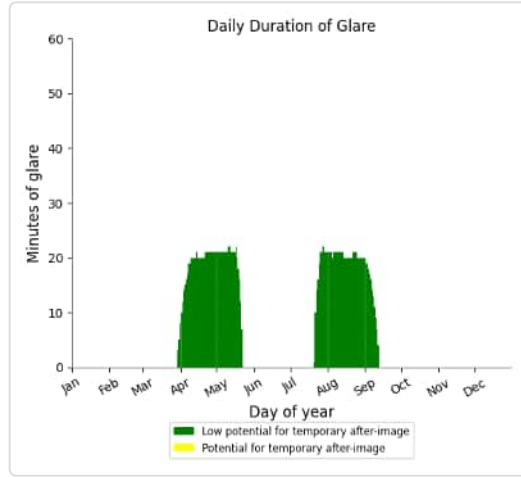
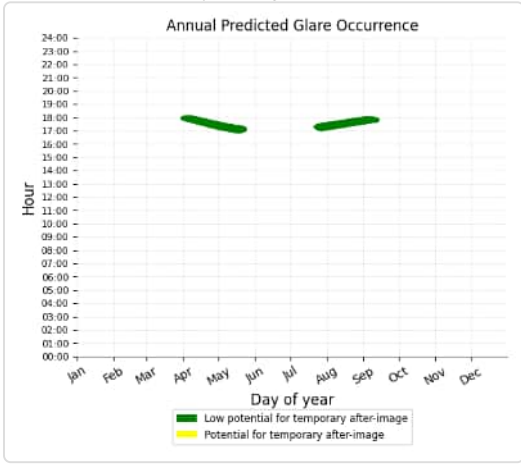


PV array 3 - OP Receptor (OP 34)

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

- 1,994 minutes of "green" glare with low potential to cause temporary after-image.

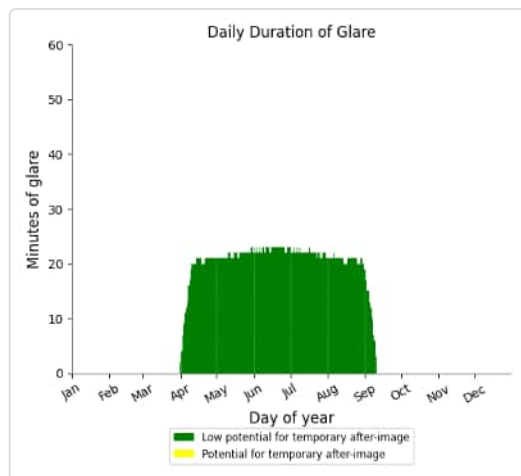
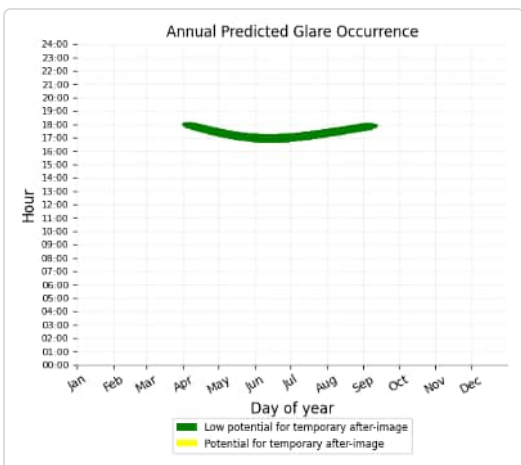
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

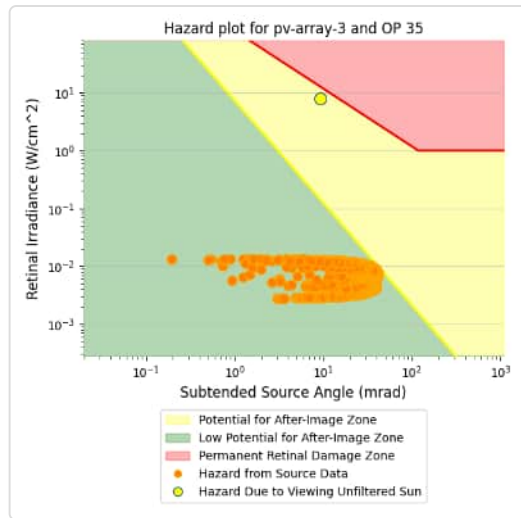
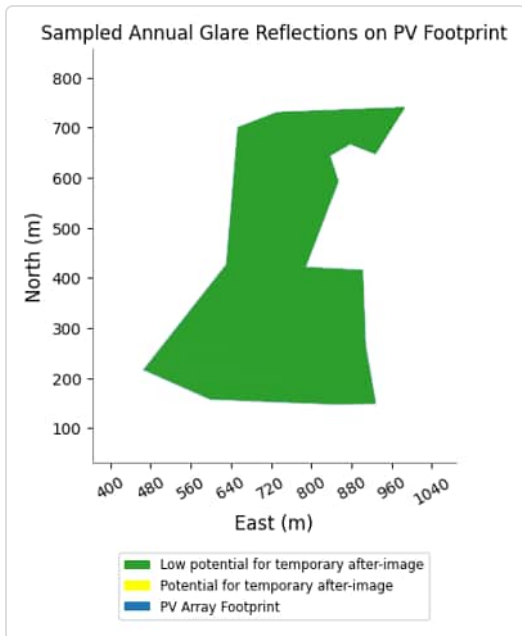


PV array 3 - OP Receptor (OP 35)

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

- 3,318 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

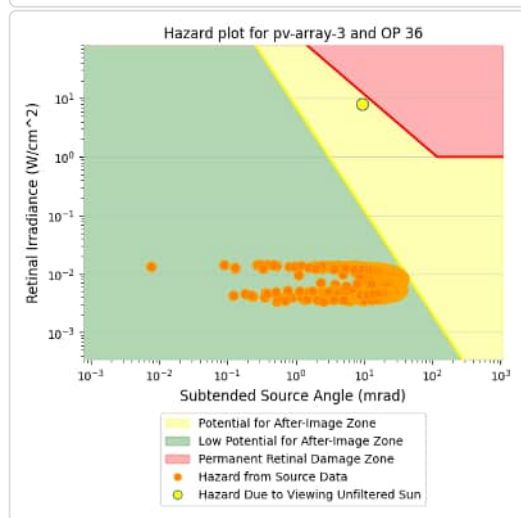
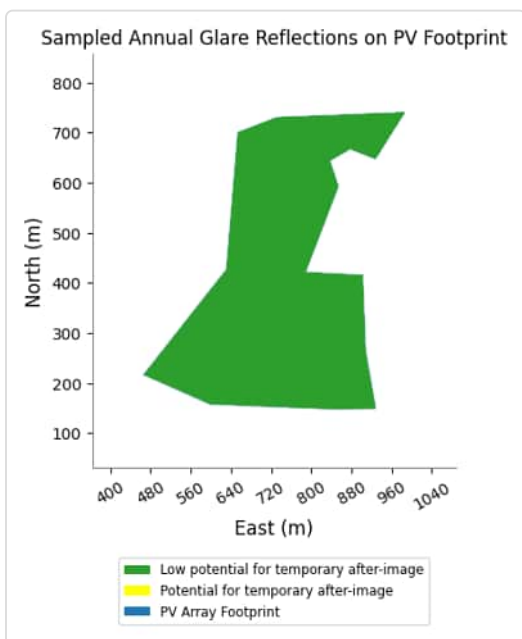
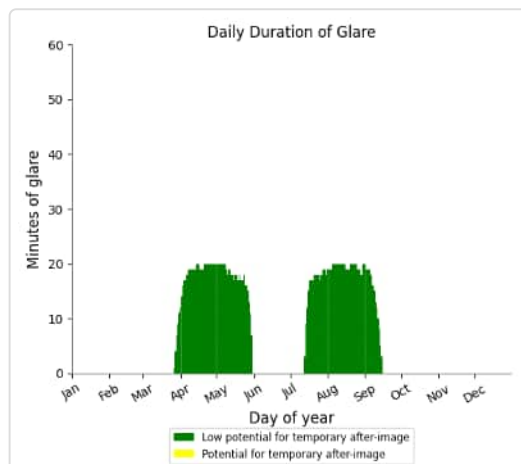
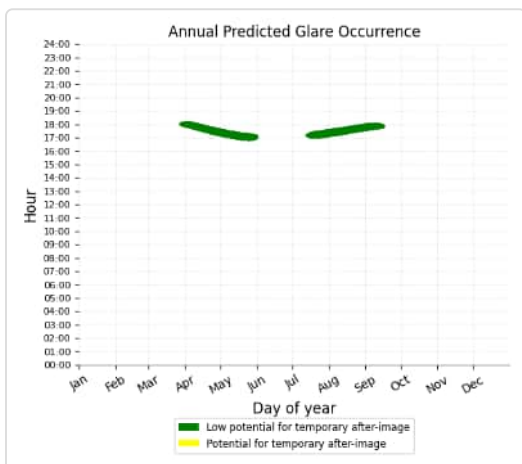




PV array 3 - OP Receptor (OP 36)

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

- 2,244 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

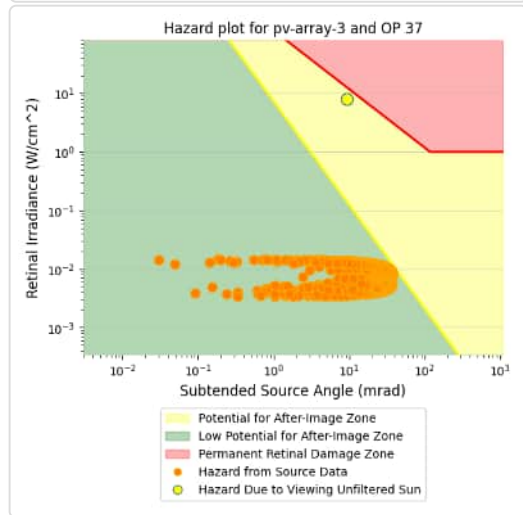
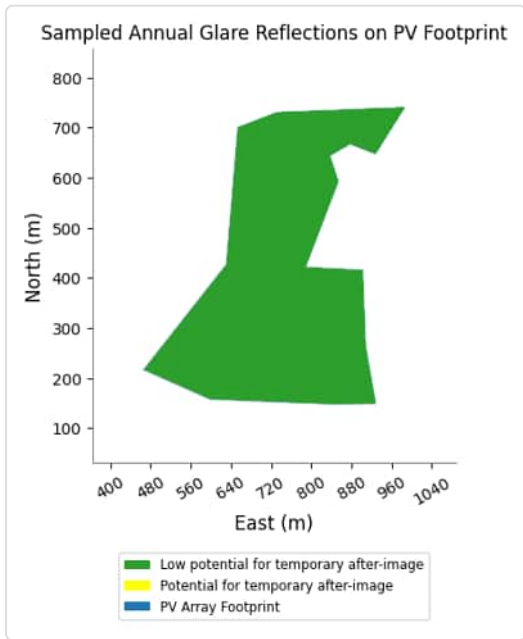
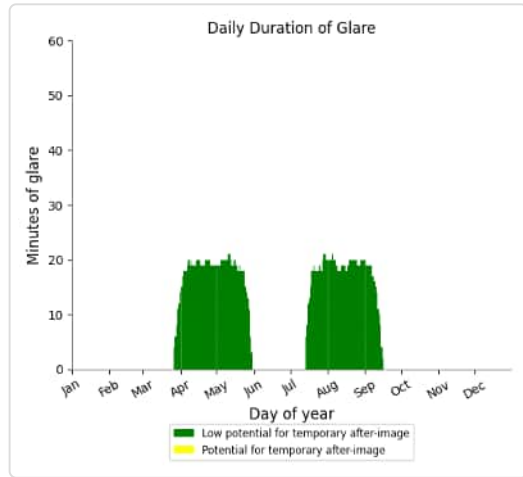
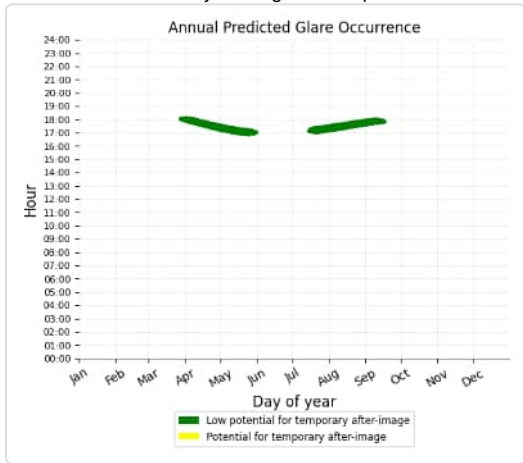


PV array 3 - OP Receptor (OP 37)

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

- 2,264 minutes of "green" glare with low potential to cause temporary after-image.

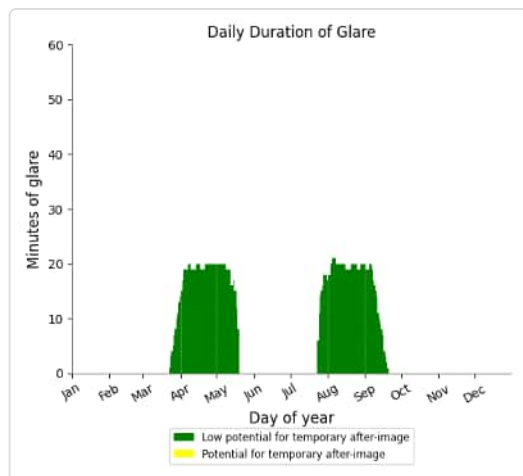
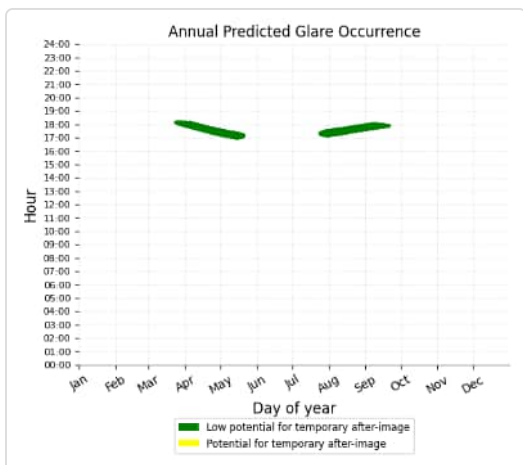
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

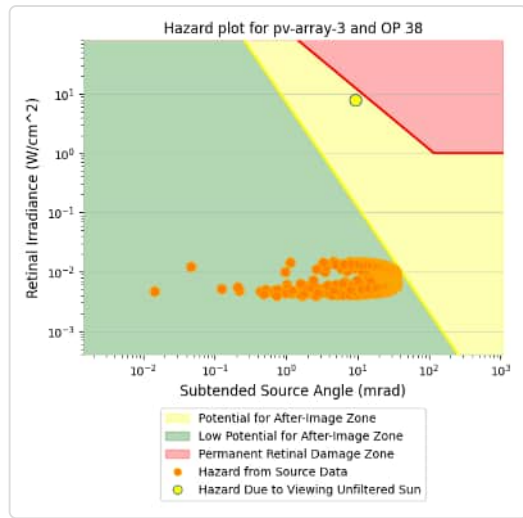
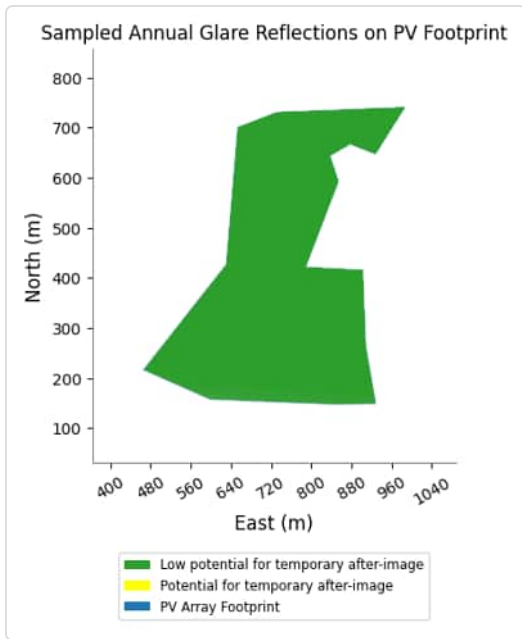


PV array 3 - OP Receptor (OP 38)

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

- 1,948 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

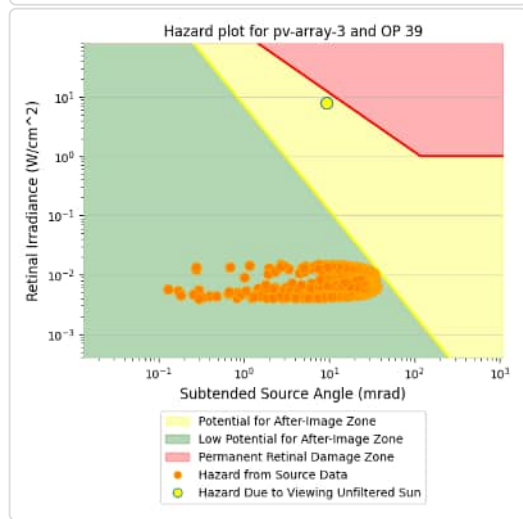
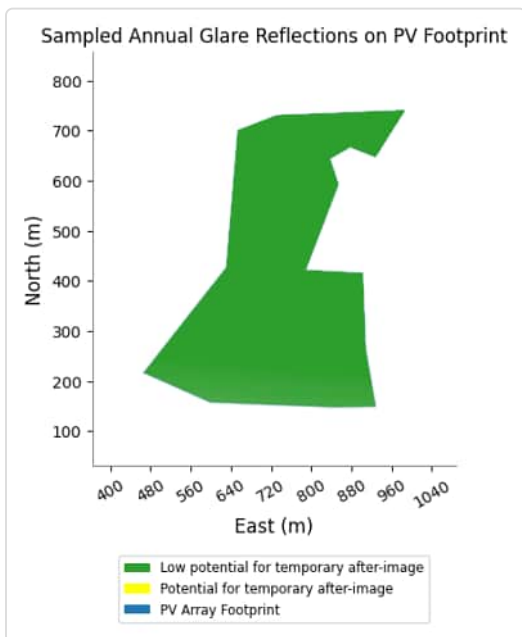
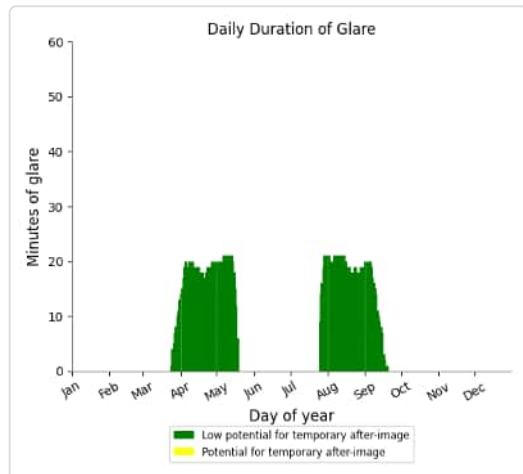
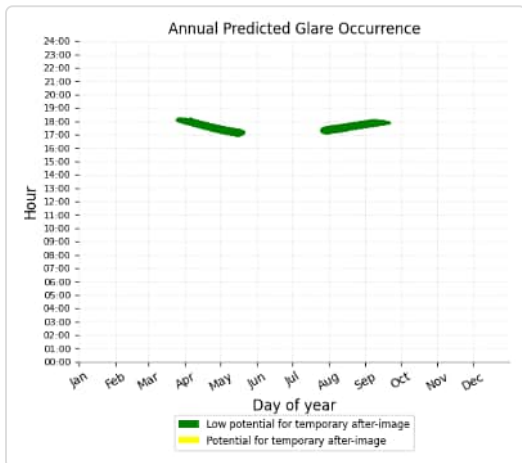




PV array 3 - OP Receptor (OP 39)

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

- 1,972 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

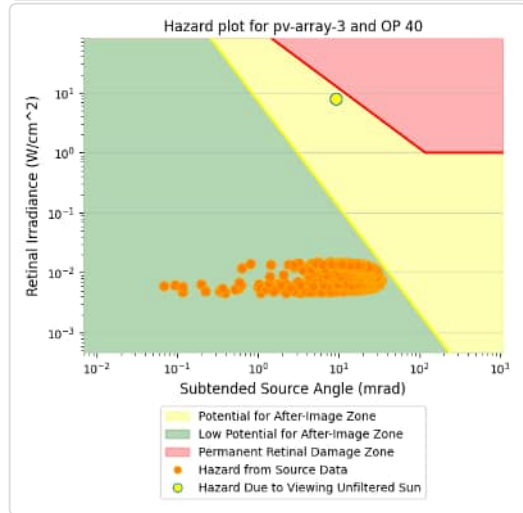
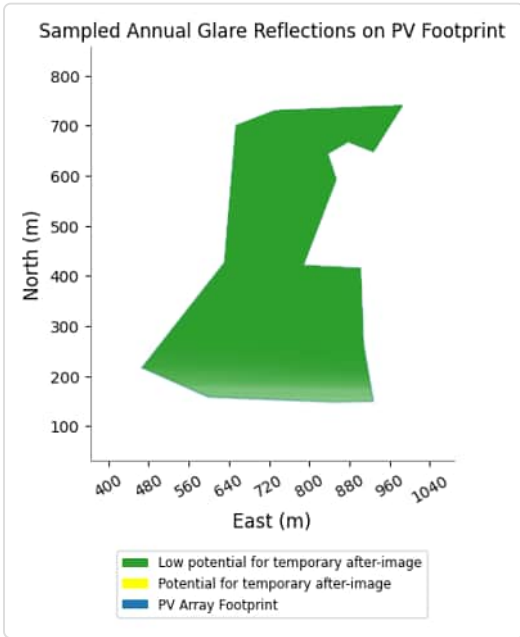
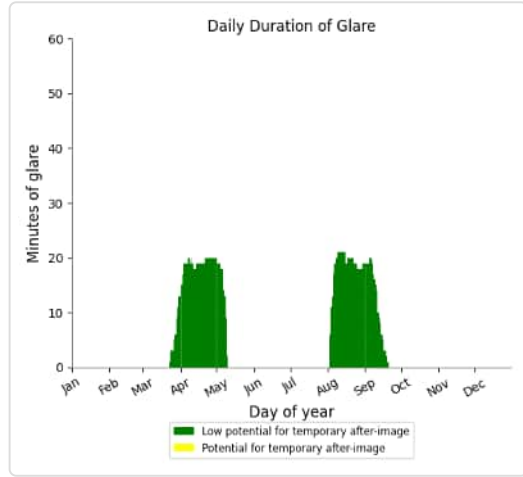
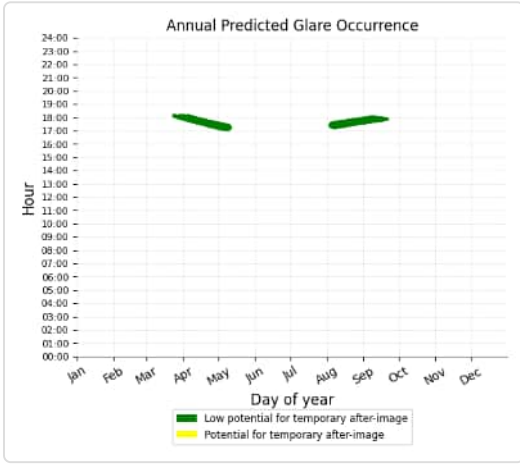


PV array 3 - OP Receptor (OP 40)

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

- 1,553 minutes of "green" glare with low potential to cause temporary after-image.

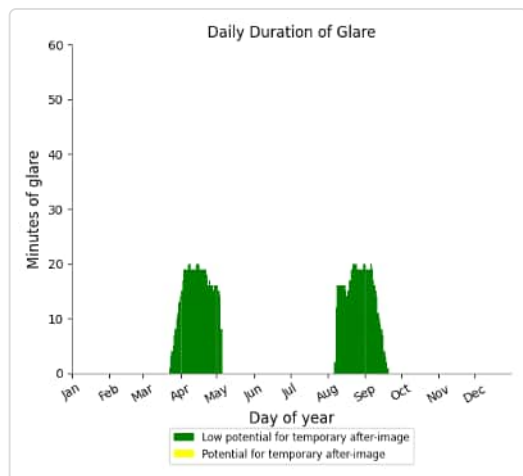
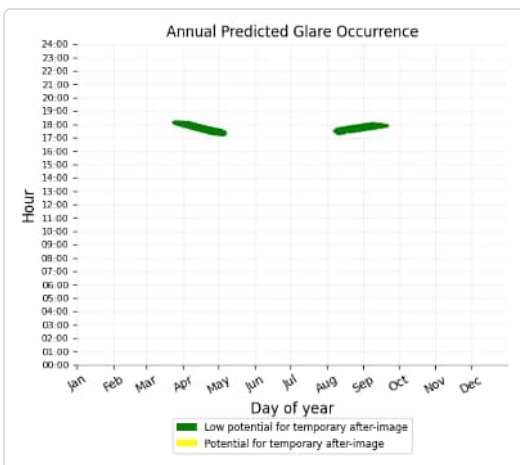
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

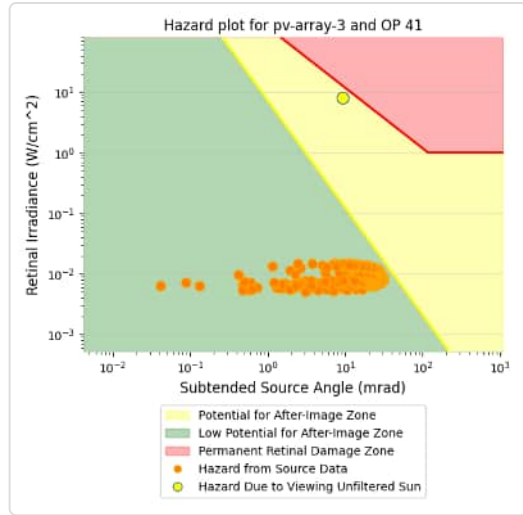
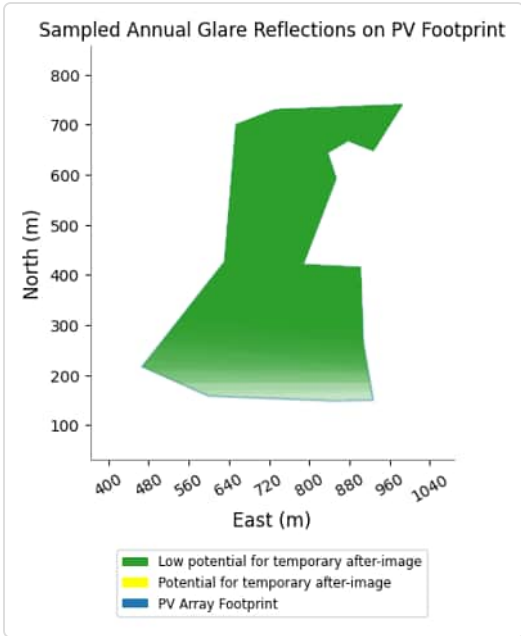


PV array 3 - OP Receptor (OP 41)

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

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

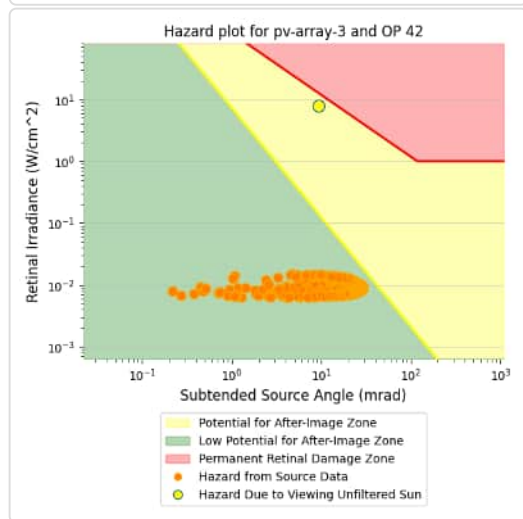
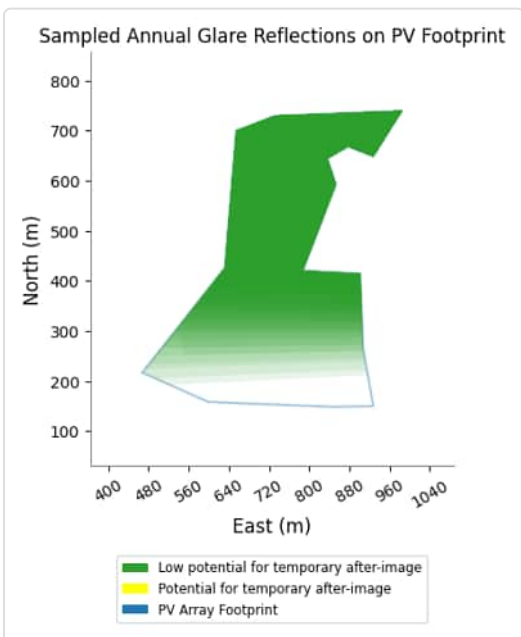
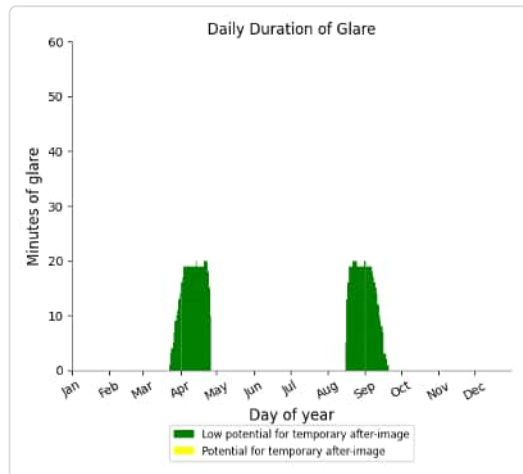
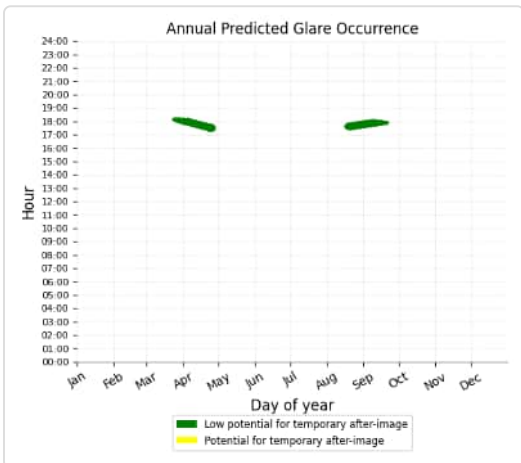




PV array 3 - OP Receptor (OP 42)

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

- 1,072 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 43)

No glare found

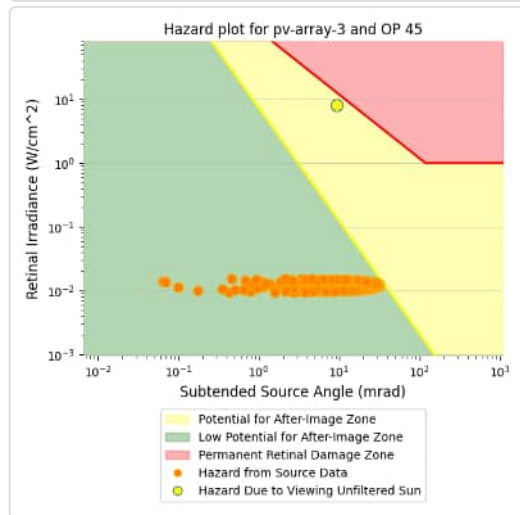
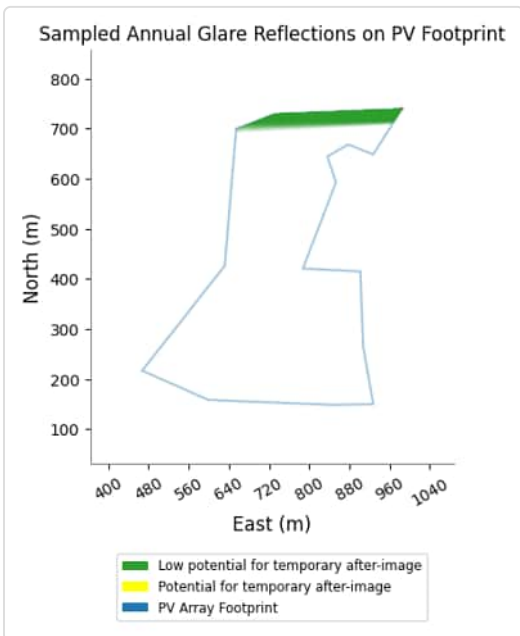
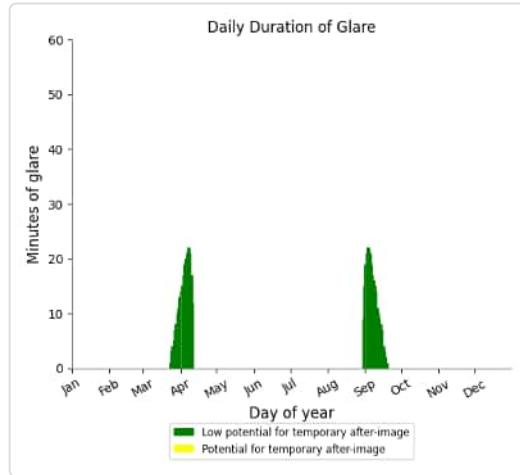
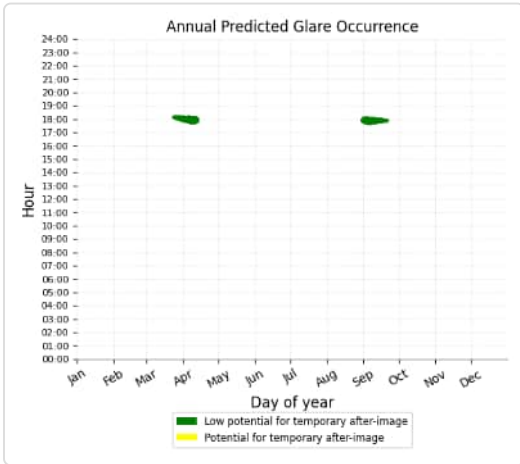
PV array 3 - OP Receptor (OP 44)

No glare found

PV array 3 - OP Receptor (OP 45)

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

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



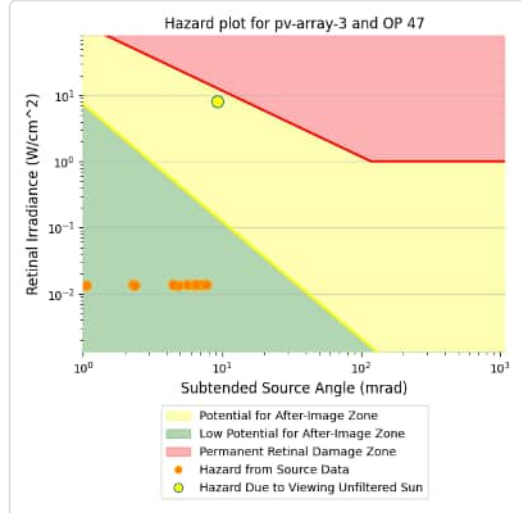
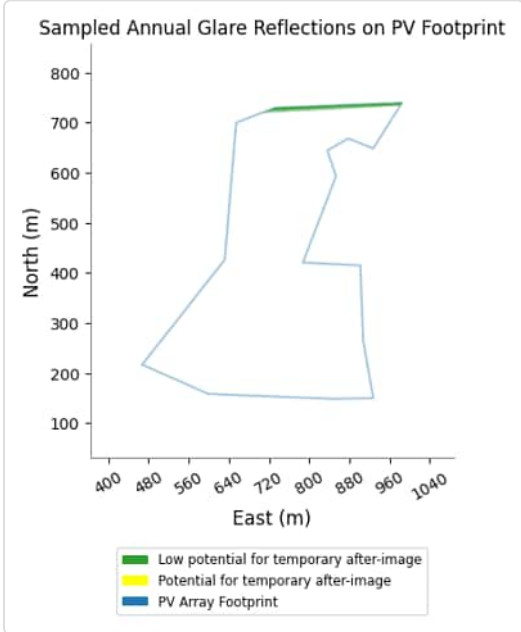
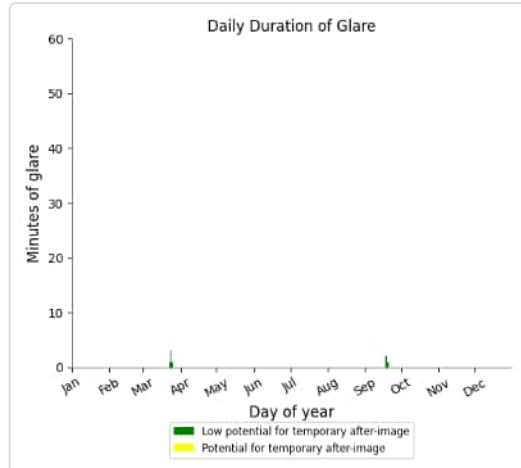
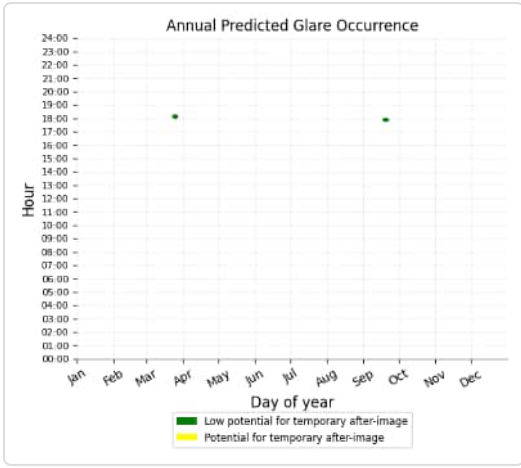
PV array 3 - OP Receptor (OP 46)

No glare found

PV array 3 - OP Receptor (OP 47)

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

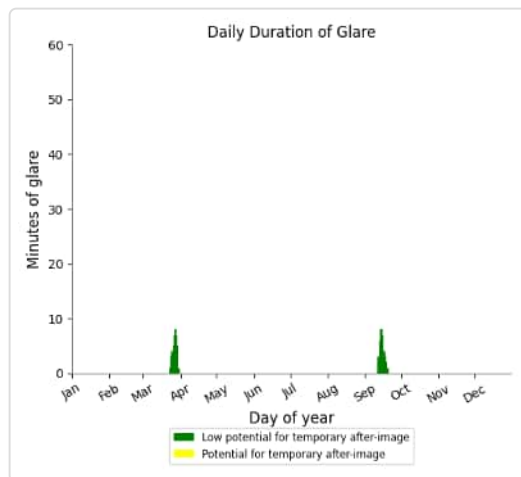
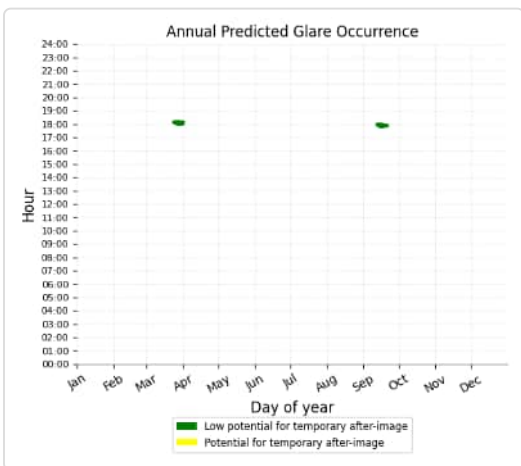
- 10 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

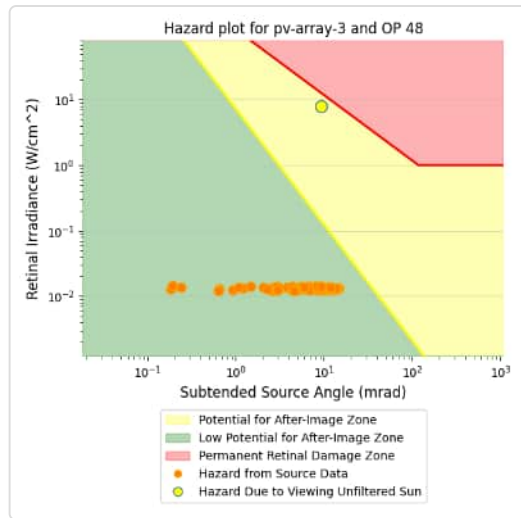
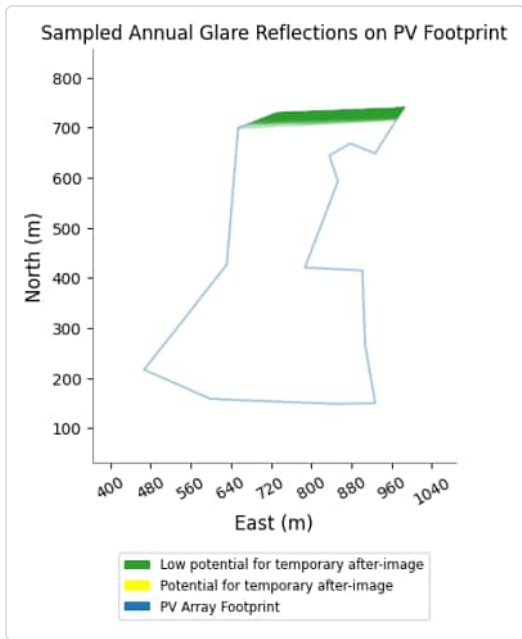


PV array 3 - OP Receptor (OP 48)

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

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

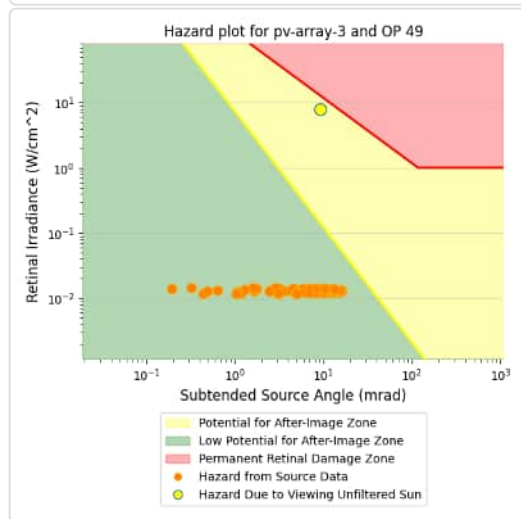
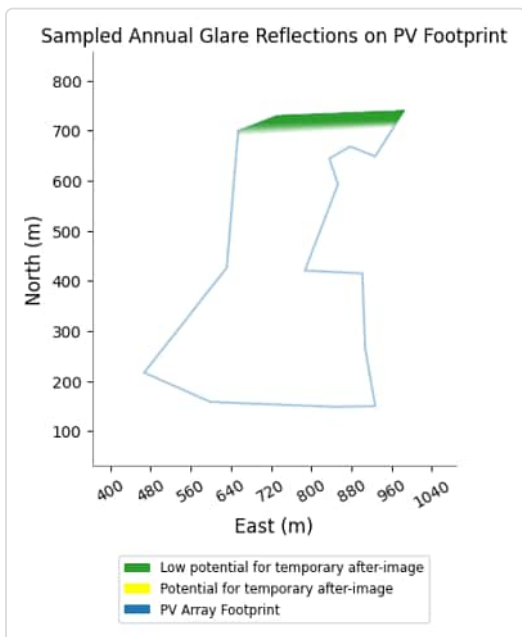
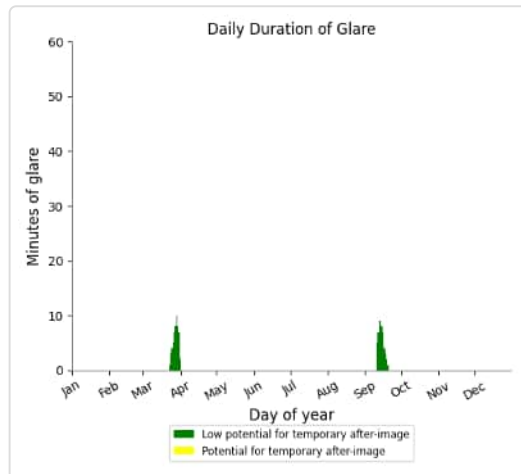
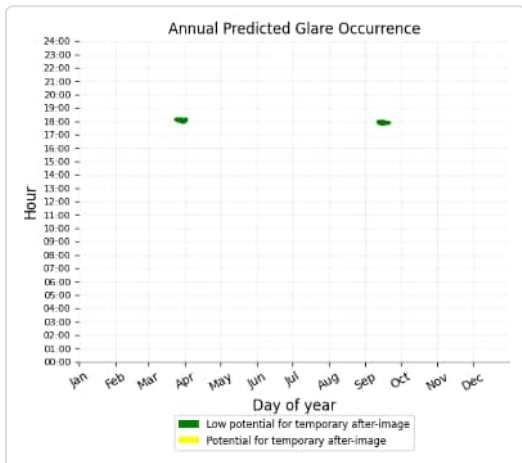




PV array 3 - OP Receptor (OP 49)

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

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

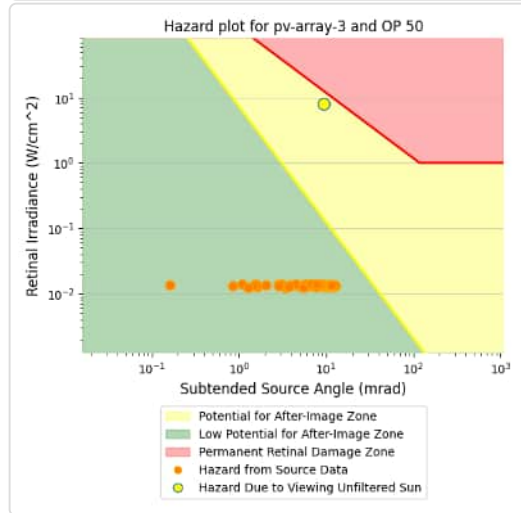
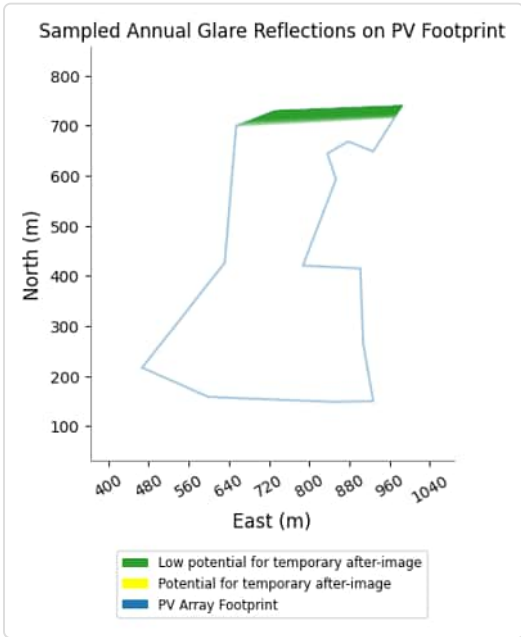
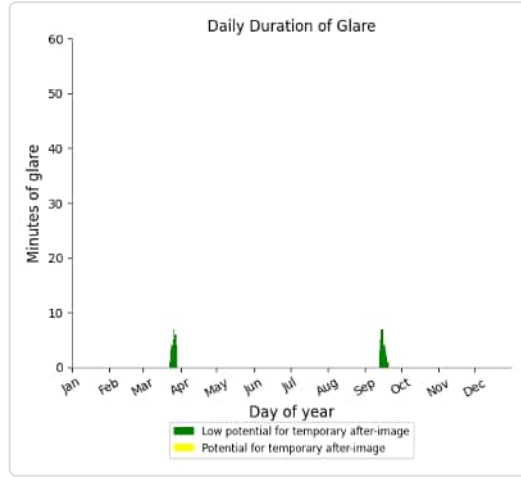
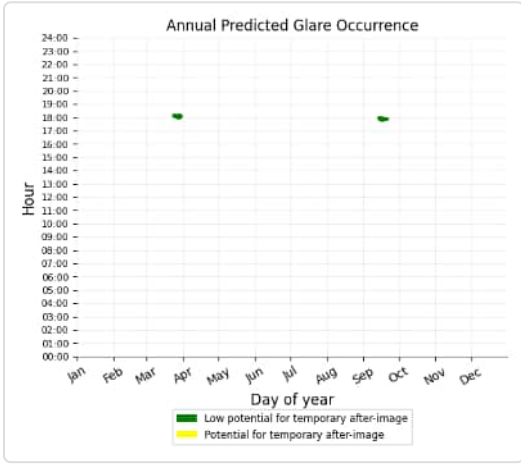


PV array 3 - OP Receptor (OP 50)

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

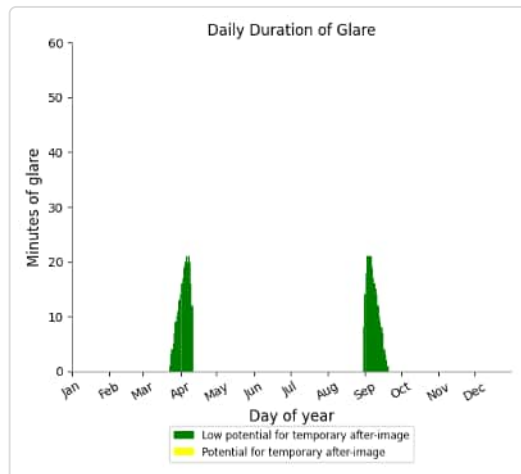
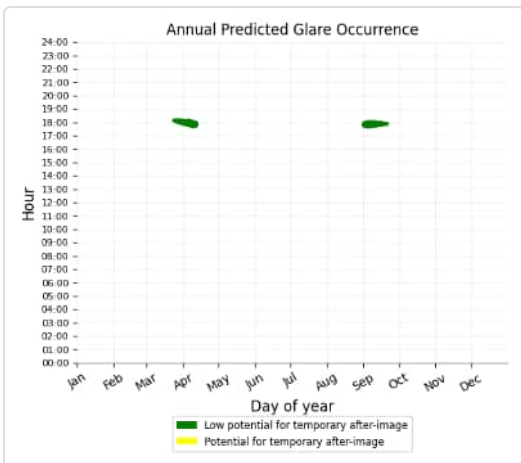
- 62 minutes of "green" glare with low potential to cause temporary after-image.

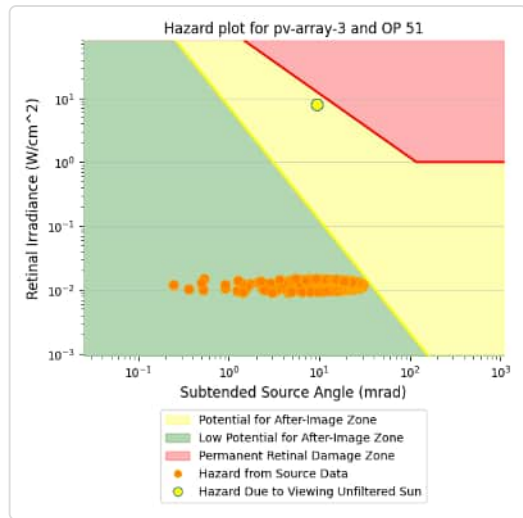
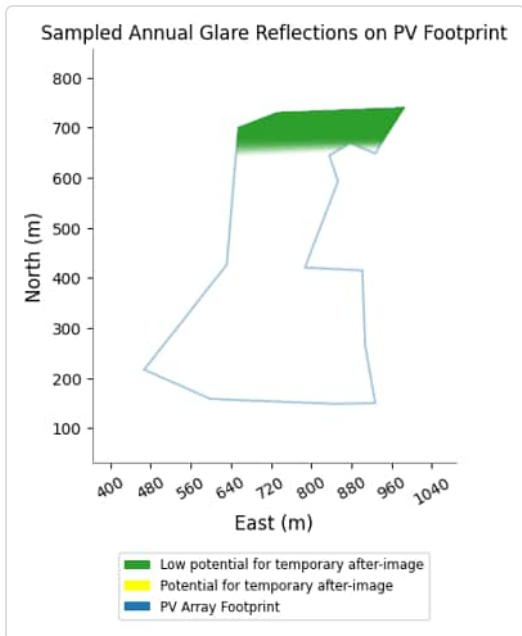
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 3 - OP Receptor (OP 51)

- PV array is expected to produce the following glare for receptors at this location:
- 520 minutes of "green" glare with low potential to cause temporary after-image.
 - 0 minutes of "yellow" glare with potential to cause temporary after-image.

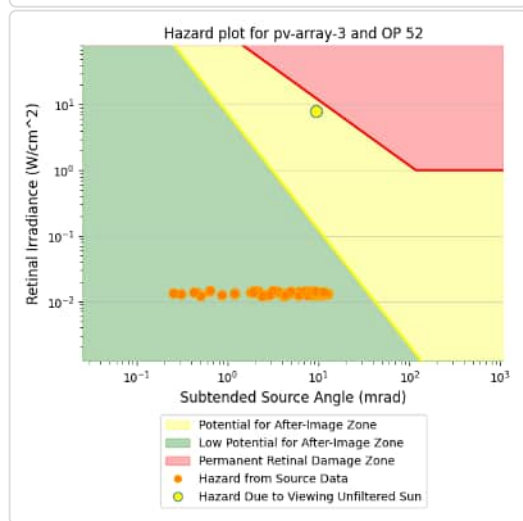
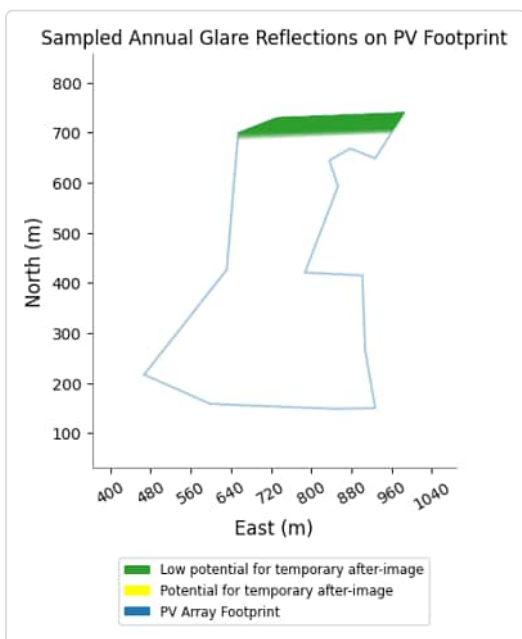
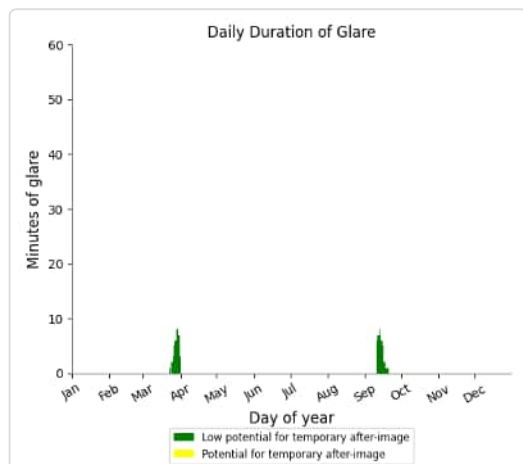
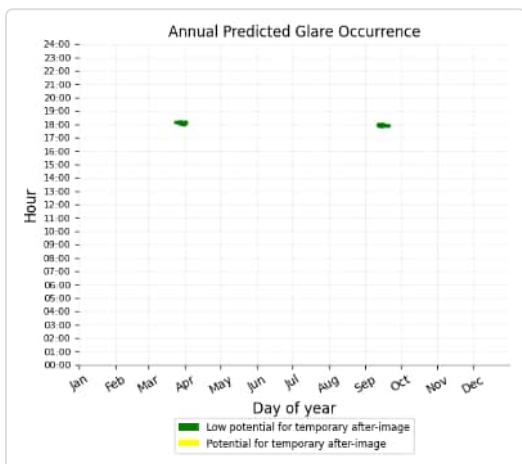




PV array 3 - OP Receptor (OP 52)

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

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



PV array 3 - OP Receptor (OP 53)

No glare found

PV array 4 potential temporary after-image

Component	Green glare (min)	Yellow glare (min)
OP: OP 1	0	0
OP: OP 2	0	0
OP: OP 3	0	0
OP: OP 4	0	0
OP: OP 5	0	0
OP: OP 6	0	0
OP: OP 7	0	0
OP: OP 8	0	0
OP: OP 9	0	0
OP: OP 10	0	0
OP: OP 11	0	0
OP: OP 12	0	0
OP: OP 13	0	0
OP: OP 14	0	0
OP: OP 15	0	0
OP: OP 16	0	0
OP: OP 17	1020	0
OP: OP 18	693	0
OP: OP 19	1026	0
OP: OP 20	2117	0
OP: OP 21	943	0
OP: OP 22	1587	0
OP: OP 23	1434	0
OP: OP 24	839	0
OP: OP 25	1627	0
OP: OP 26	1865	0
OP: OP 27	1965	0
OP: OP 28	1540	0
OP: OP 29	1954	0
OP: OP 30	2102	0
OP: OP 31	2265	0
OP: OP 32	2436	0
OP: OP 33	2477	0
OP: OP 34	2400	0
OP: OP 35	2341	0
OP: OP 36	2688	0
OP: OP 37	2671	0
OP: OP 38	2808	0
OP: OP 39	2719	0
OP: OP 40	2740	0
OP: OP 41	2544	0
OP: OP 42	1997	0
OP: OP 43	2804	910
OP: OP 44	2703	906
OP: OP 45	2951	812
OP: OP 46	2735	1202
OP: OP 47	3028	942
OP: OP 48	3072	901
OP: OP 49	3192	766

OP: OP 50	3093	784
OP: OP 51	3286	704
OP: OP 52	2567	407
OP: OP 53	1347	312

PV array 4 - OP Receptor (OP 1)

No glare found

PV array 4 - OP Receptor (OP 2)

No glare found

PV array 4 - OP Receptor (OP 3)

No glare found

PV array 4 - OP Receptor (OP 4)

No glare found

PV array 4 - OP Receptor (OP 5)

No glare found

PV array 4 - OP Receptor (OP 6)

No glare found

PV array 4 - OP Receptor (OP 7)

No glare found

PV array 4 - OP Receptor (OP 8)

No glare found

PV array 4 - OP Receptor (OP 9)

No glare found

PV array 4 - OP Receptor (OP 10)

No glare found

PV array 4 - OP Receptor (OP 11)

No glare found

PV array 4 - OP Receptor (OP 12)

No glare found

PV array 4 - OP Receptor (OP 13)

No glare found

PV array 4 - OP Receptor (OP 14)

No glare found

PV array 4 - OP Receptor (OP 15)

No glare found

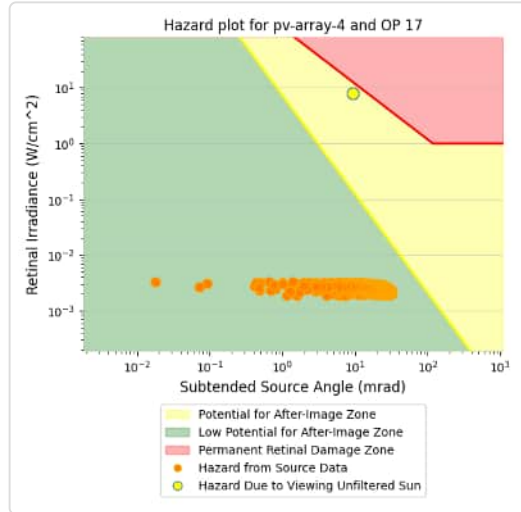
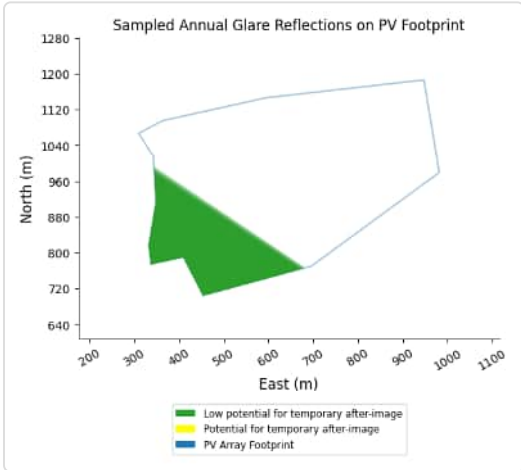
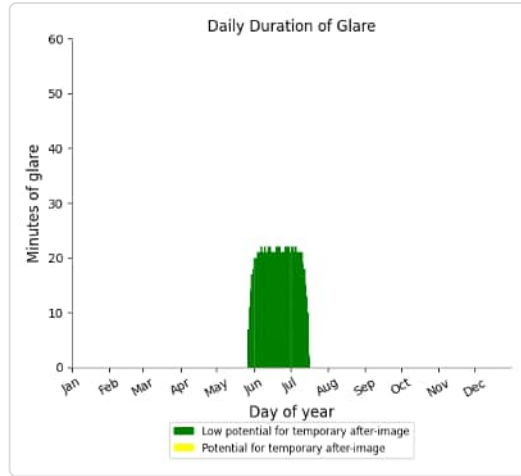
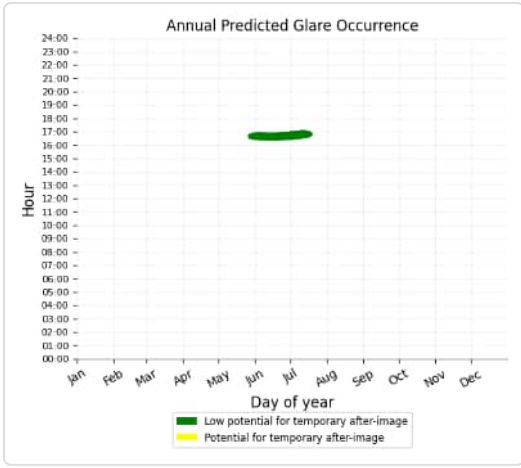
PV array 4 - OP Receptor (OP 16)

No glare found

PV array 4 - OP Receptor (OP 17)

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

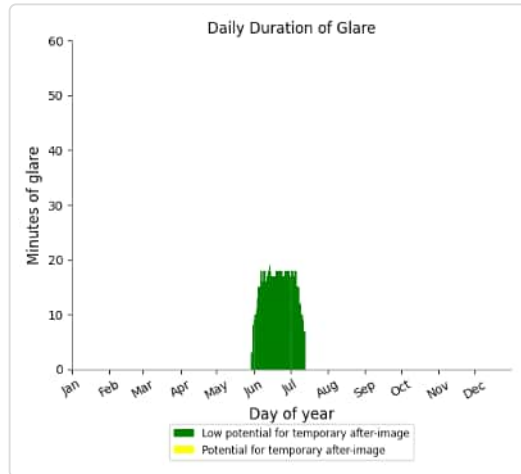
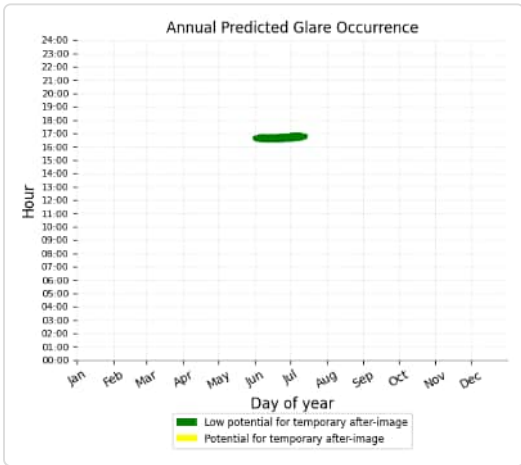
- 1,020 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

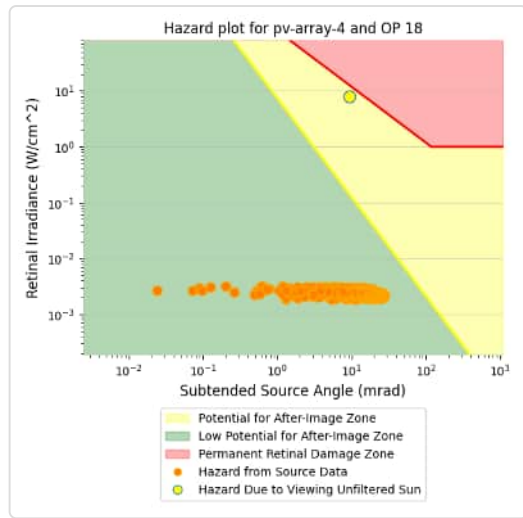
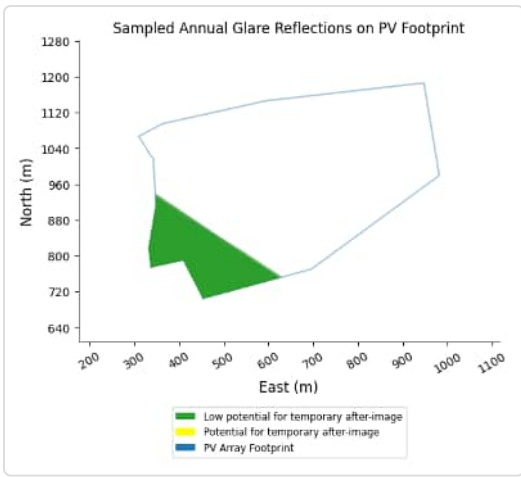


PV array 4 - OP Receptor (OP 18)

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

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

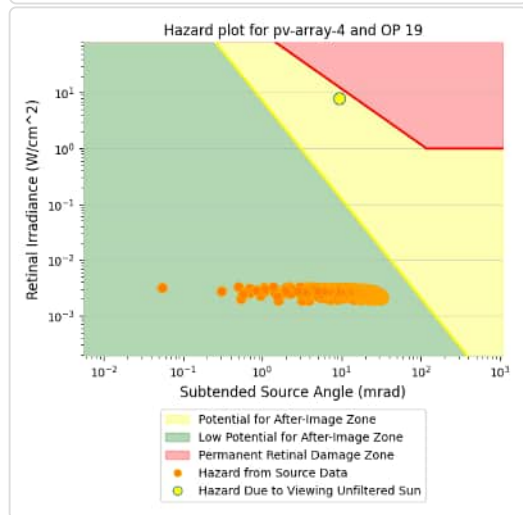
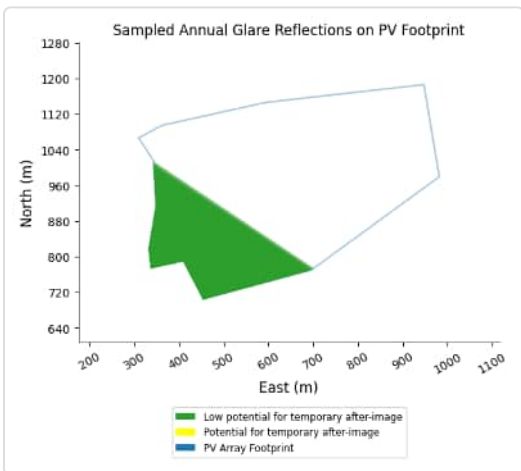
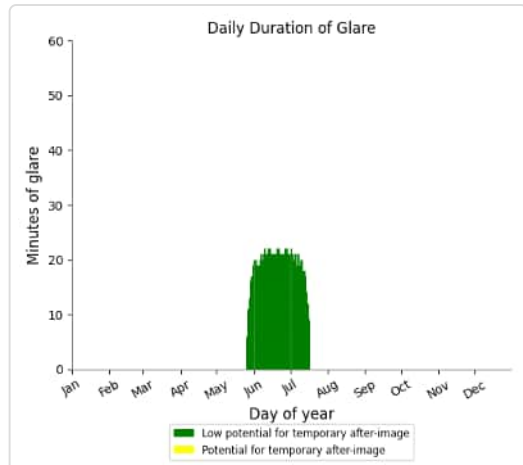
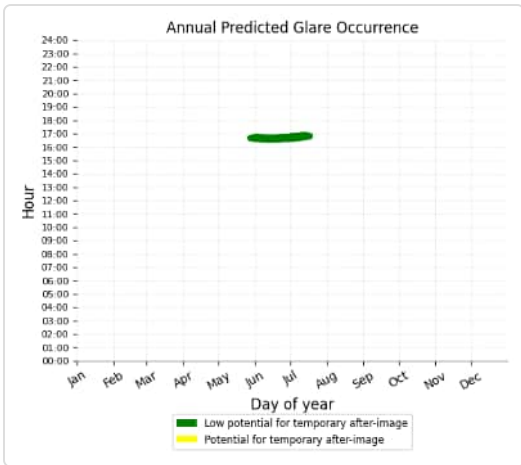




PV array 4 - OP Receptor (OP 19)

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

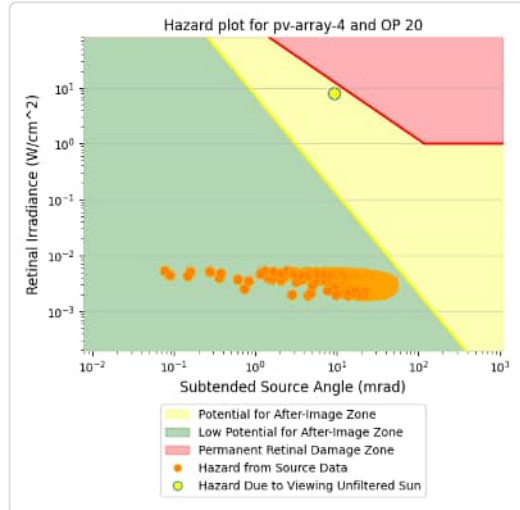
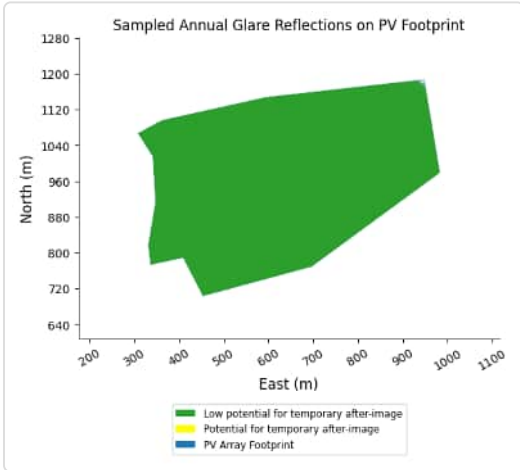
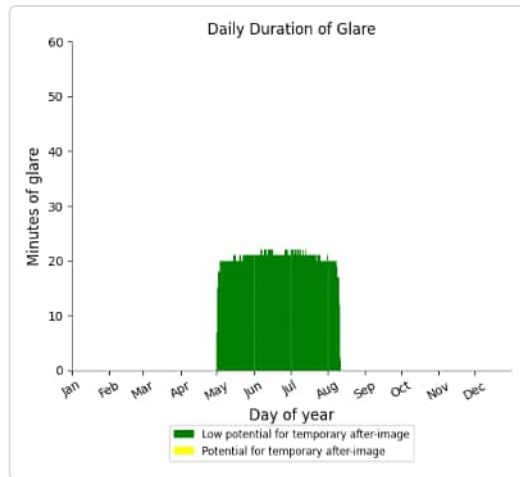
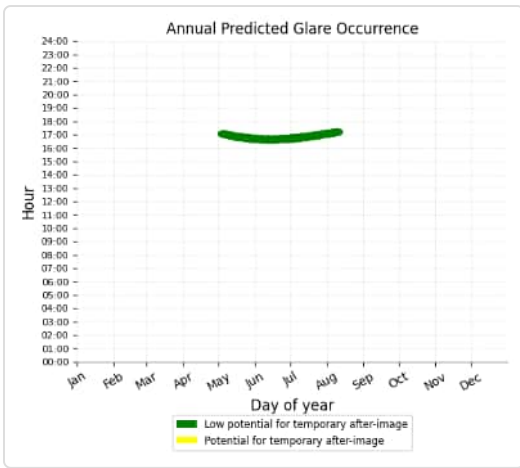
- 1,026 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 20)

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

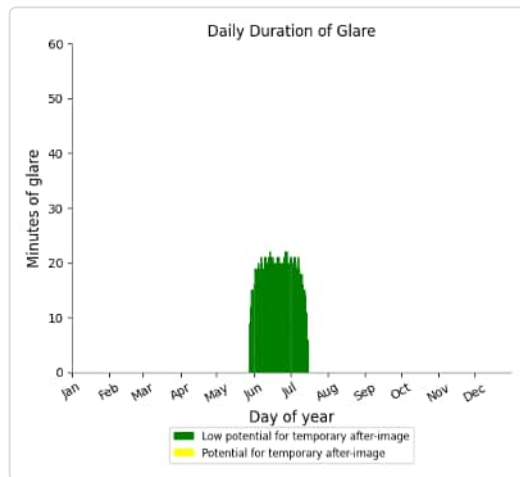
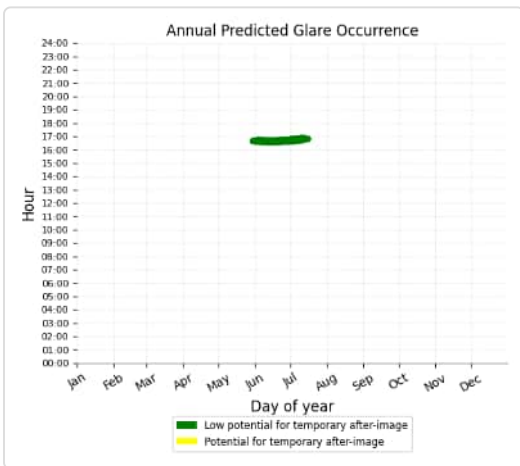
- 2,117 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

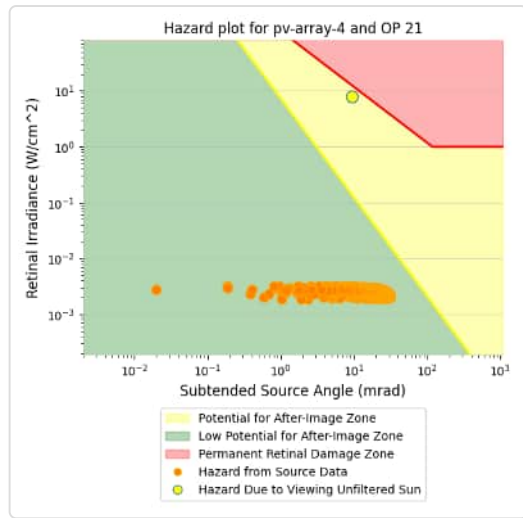
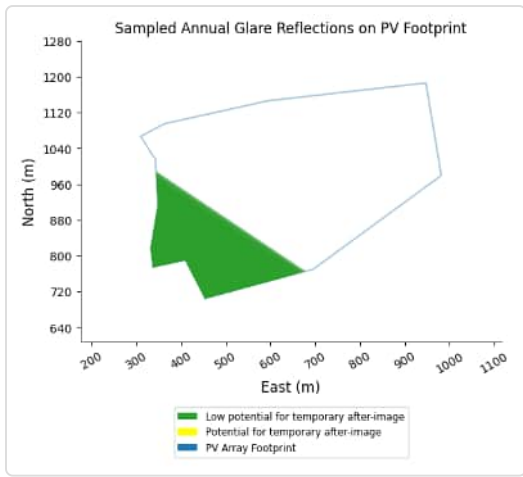


PV array 4 - OP Receptor (OP 21)

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

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

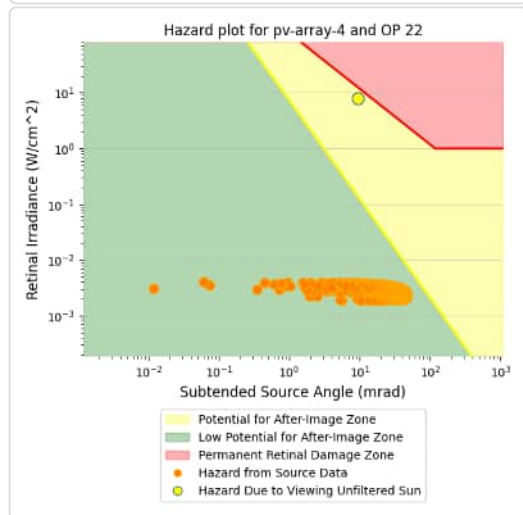
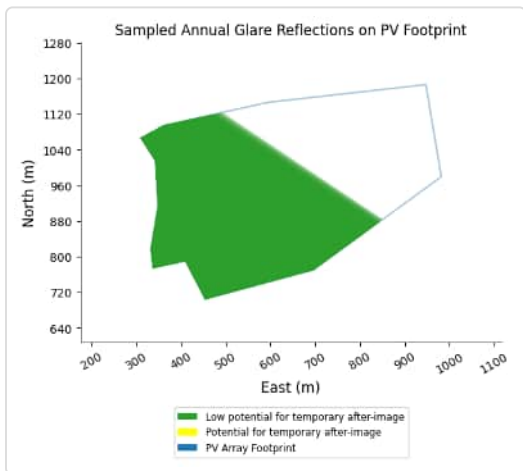
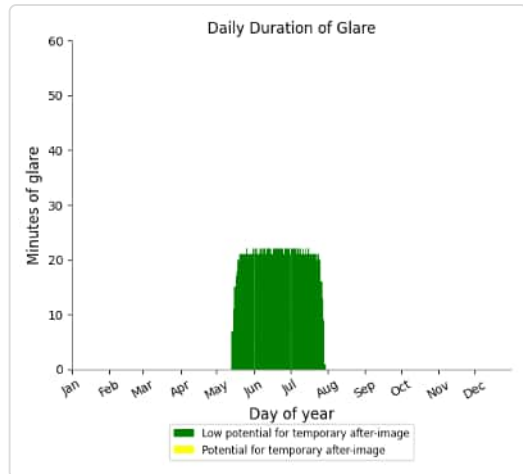
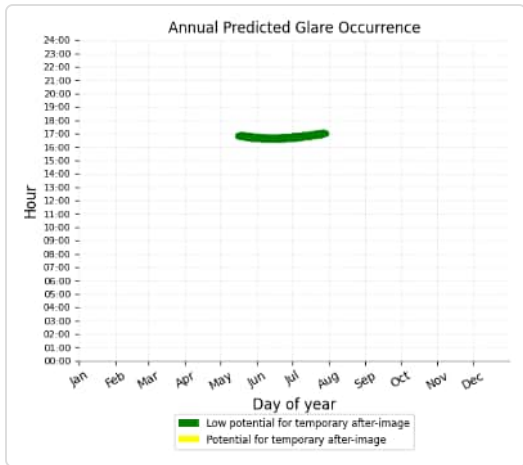




PV array 4 - OP Receptor (OP 22)

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

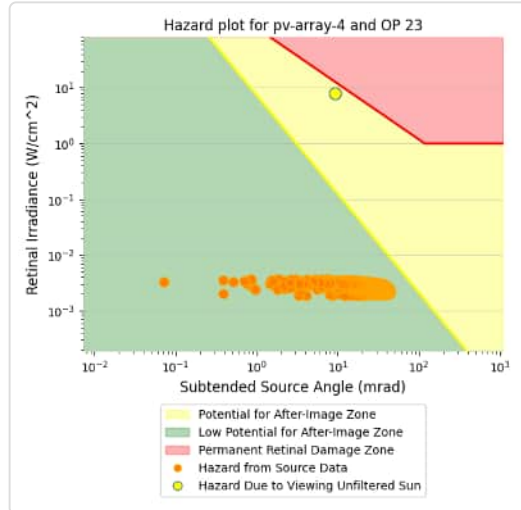
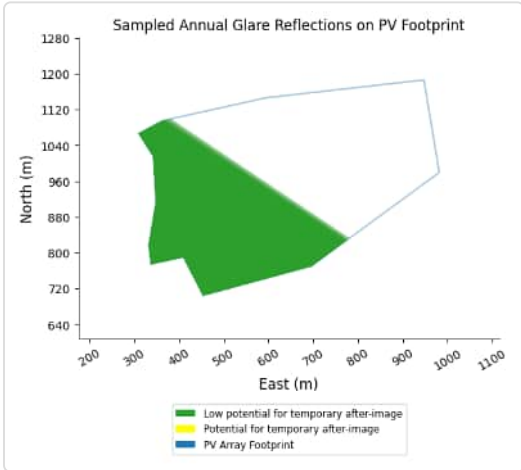
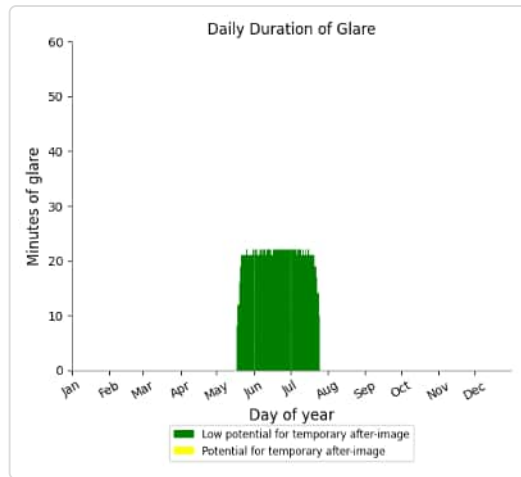
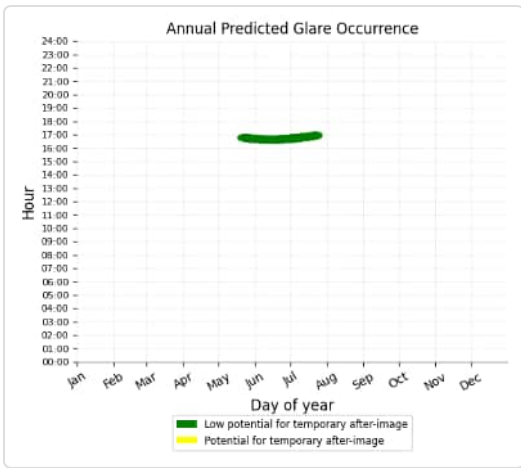
- 1,587 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 23)

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

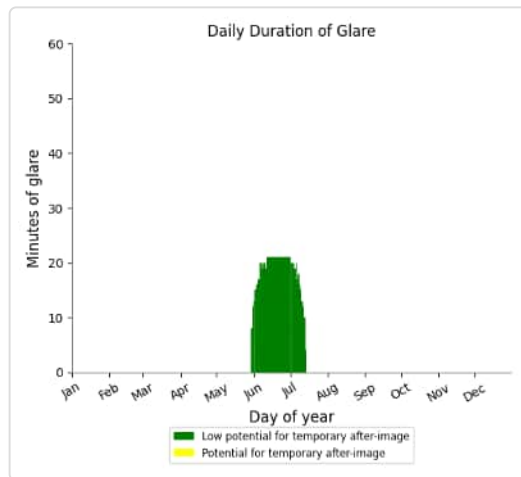
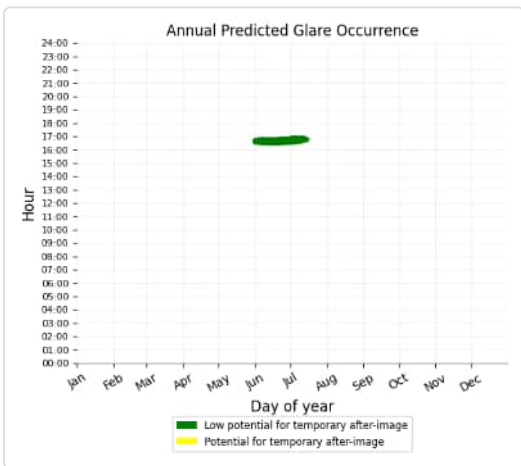
- 1,434 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

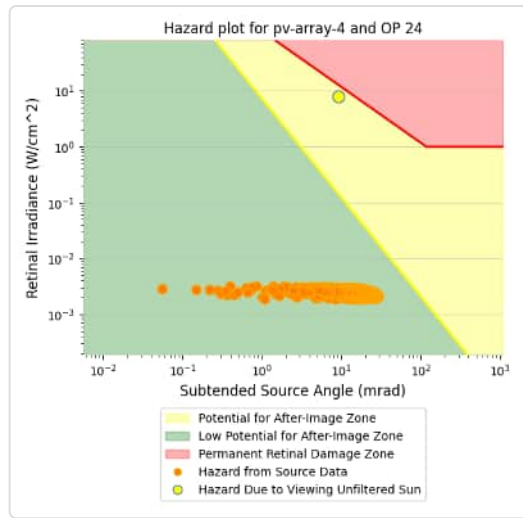
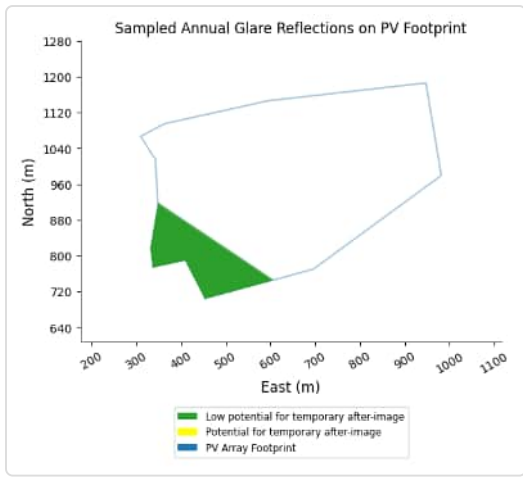


PV array 4 - OP Receptor (OP 24)

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

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

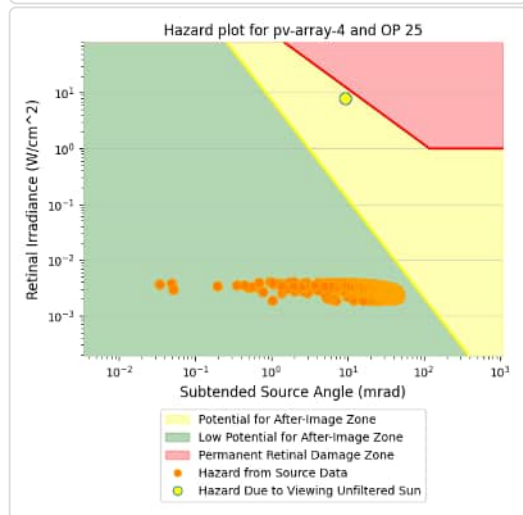
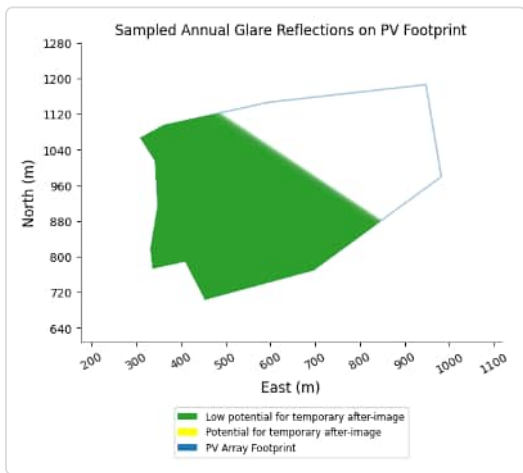
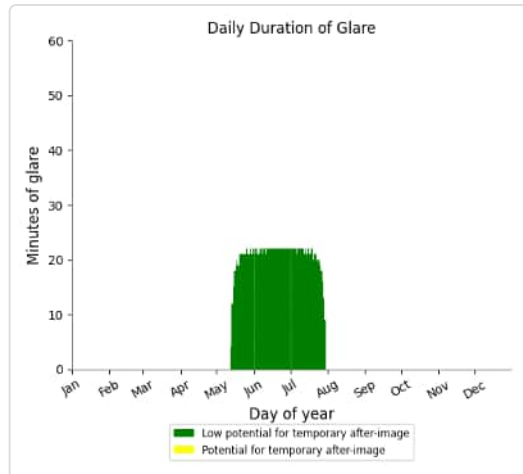
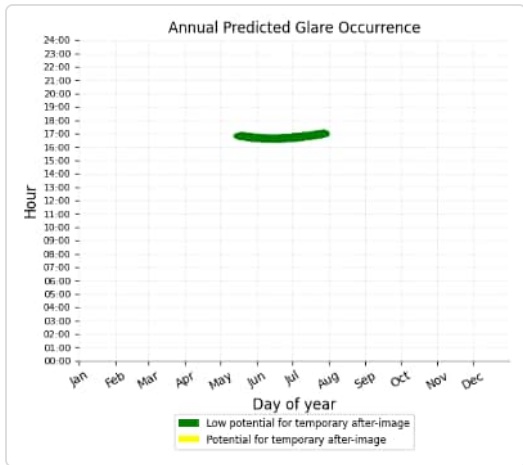




PV array 4 - OP Receptor (OP 25)

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

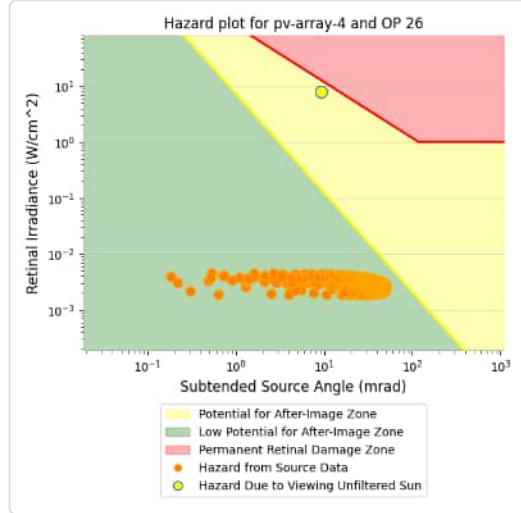
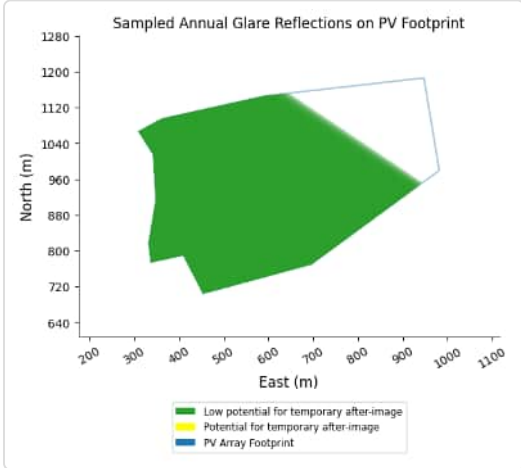
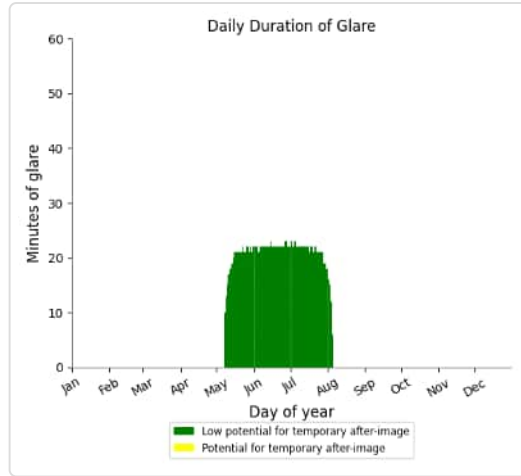
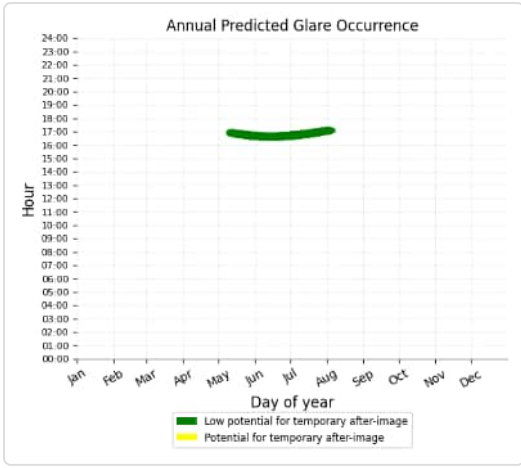
- 1,627 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 26)

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

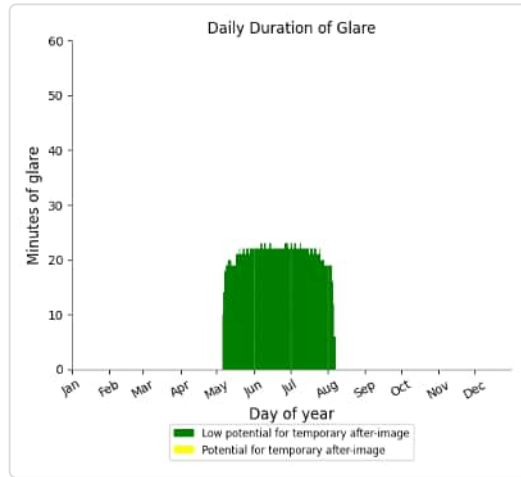
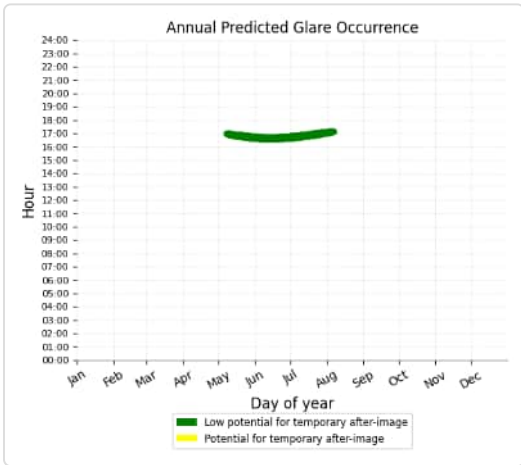
- 1,865 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

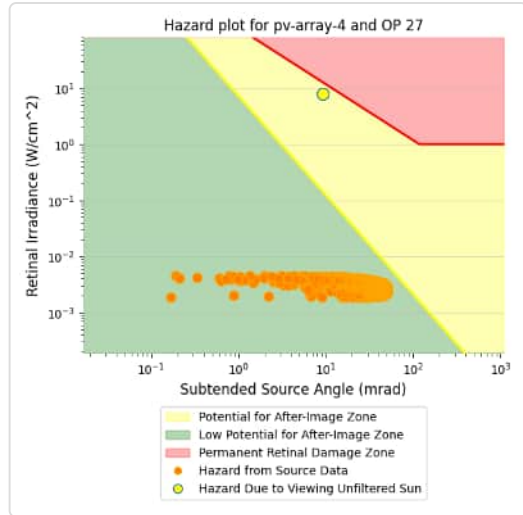
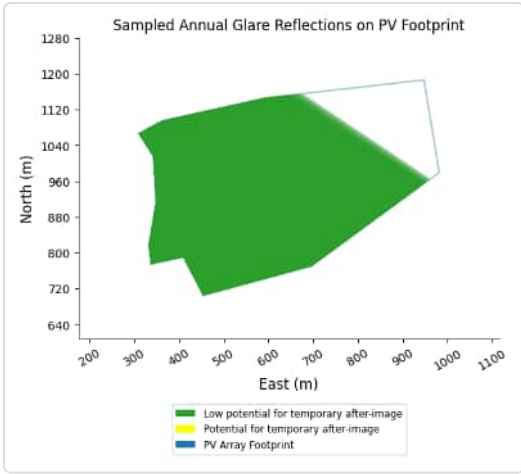


PV array 4 - OP Receptor (OP 27)

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

- 1,965 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

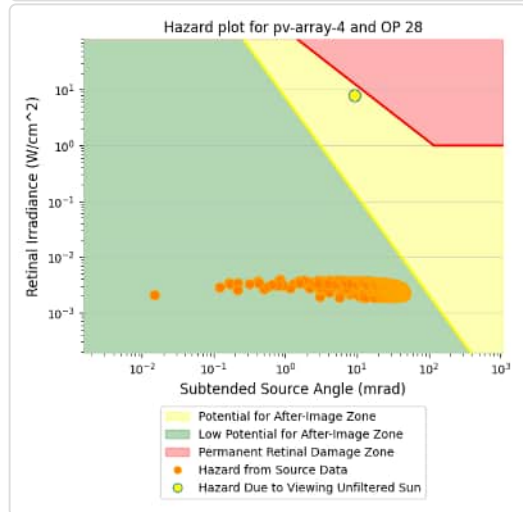
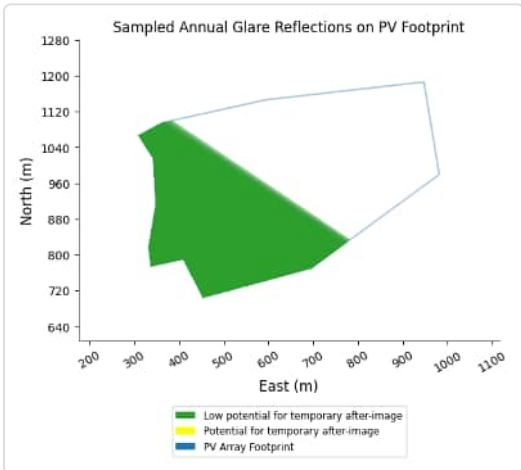
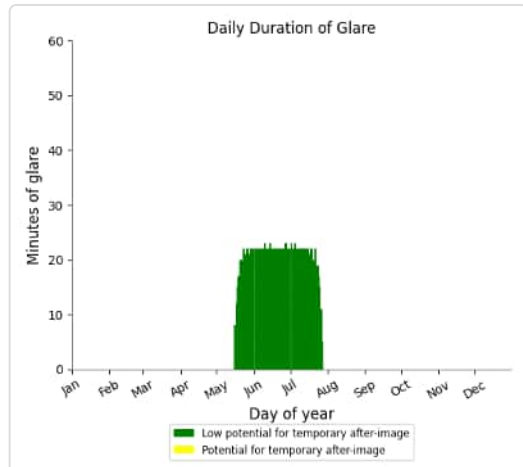
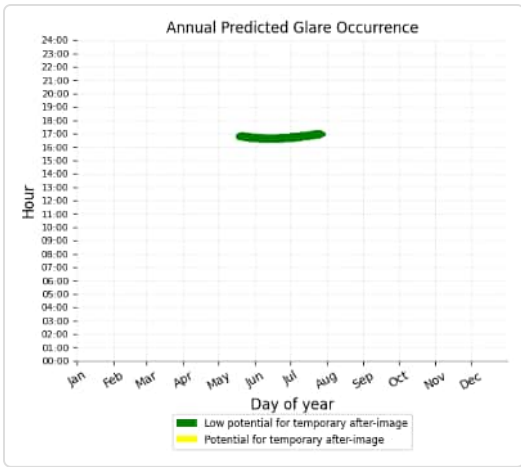




PV array 4 - OP Receptor (OP 28)

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

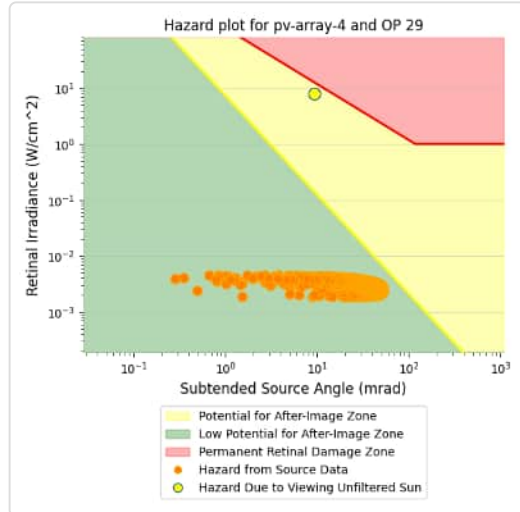
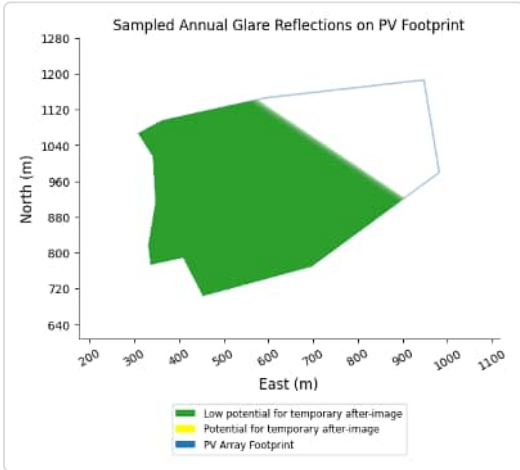
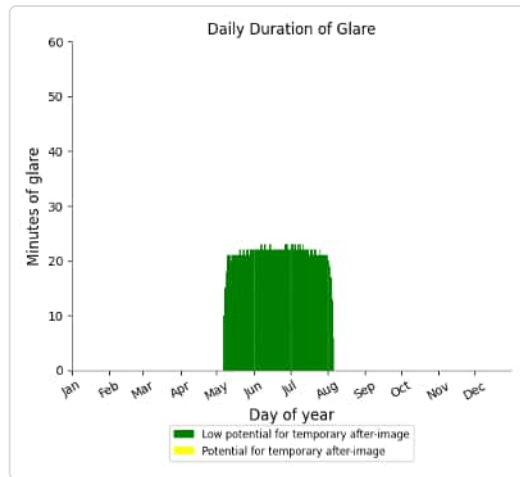
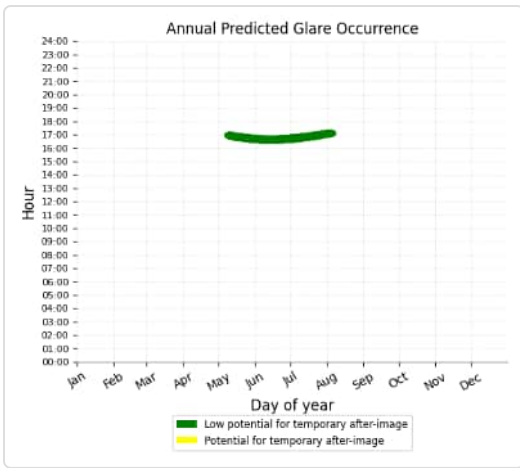
- 1,540 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 29)

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

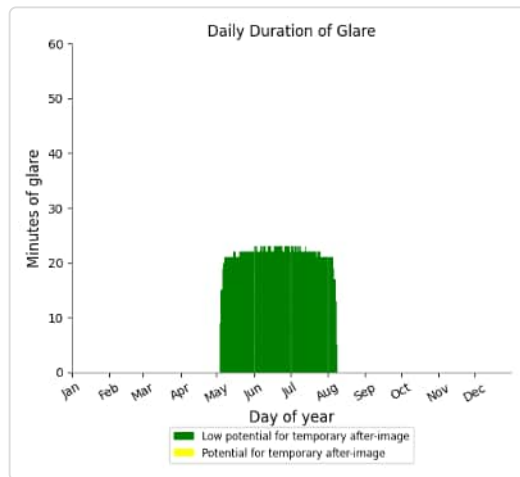
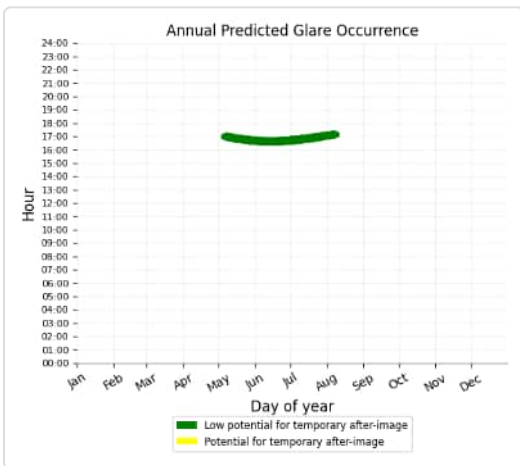
- 1,954 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

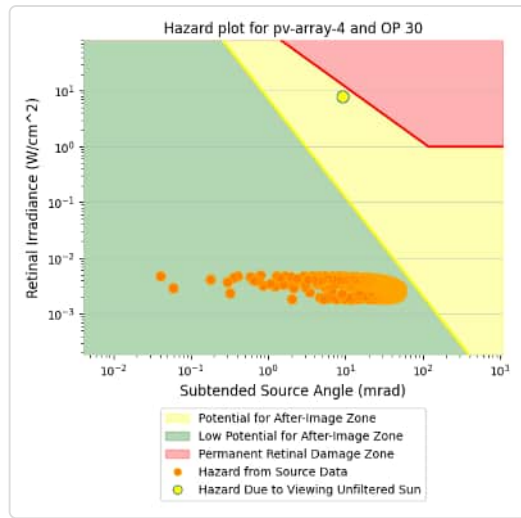
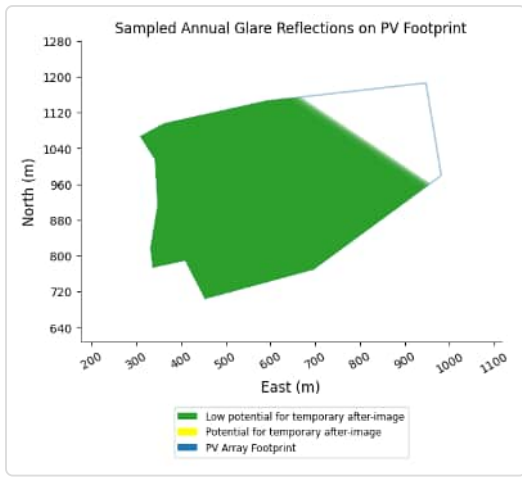


PV array 4 - OP Receptor (OP 30)

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

- 2,102 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

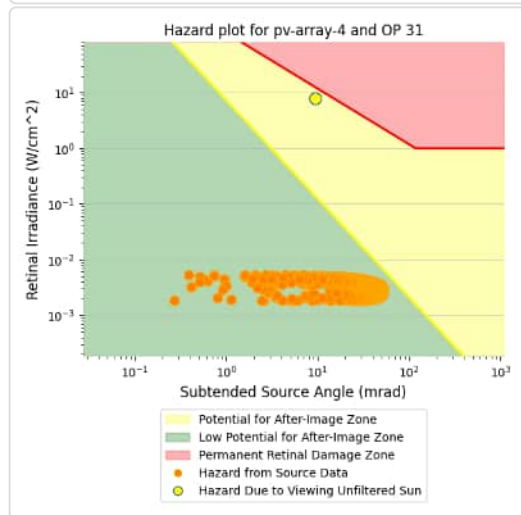
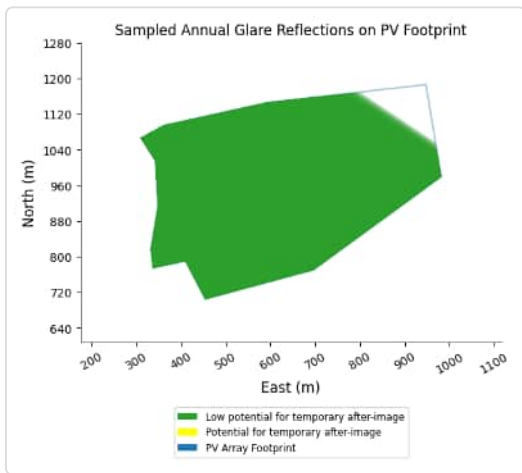
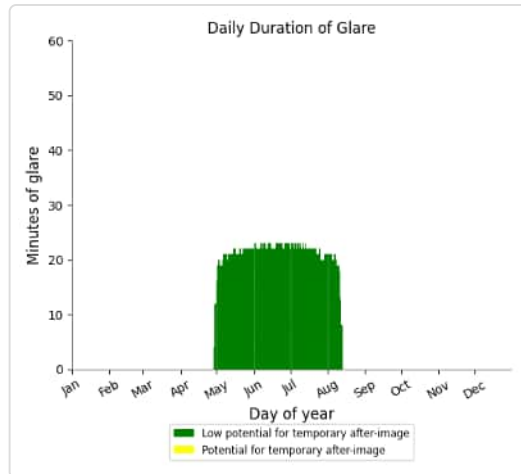
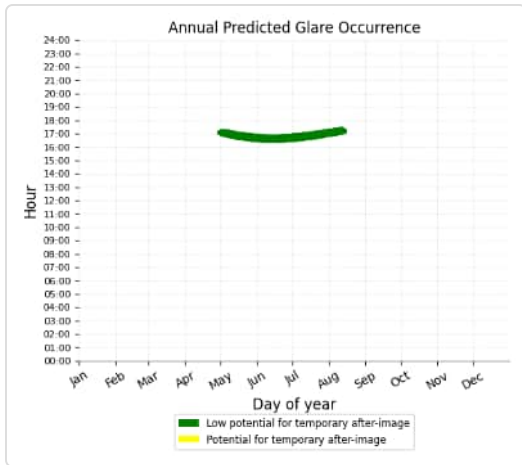




PV array 4 - OP Receptor (OP 31)

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

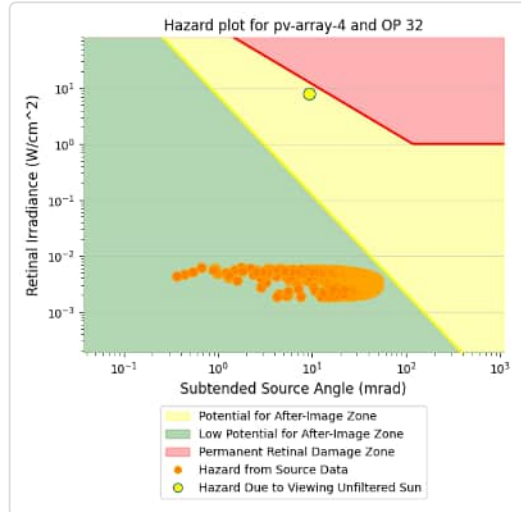
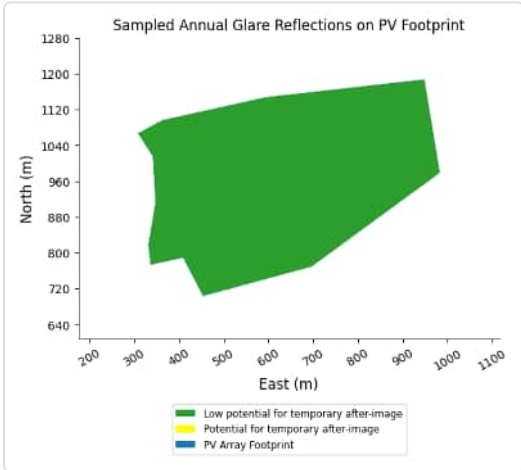
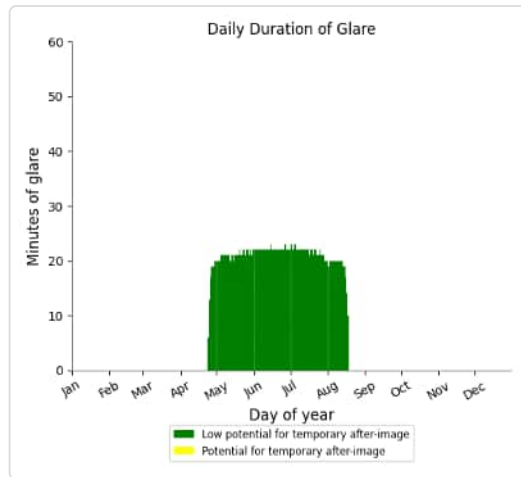
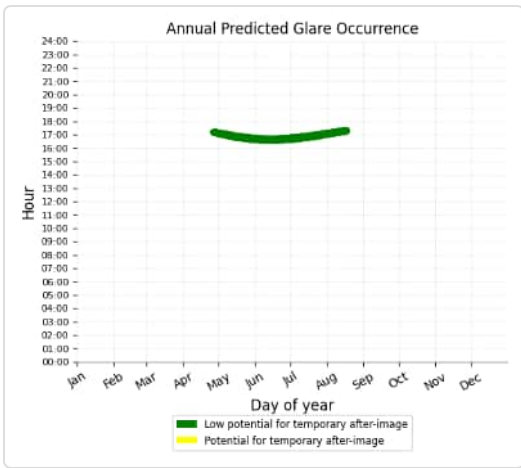
- 2,265 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 32)

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

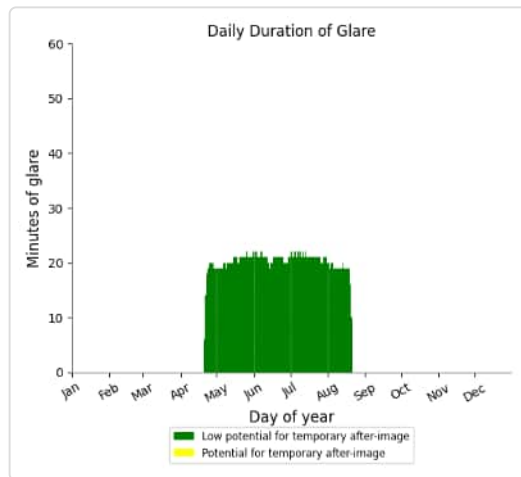
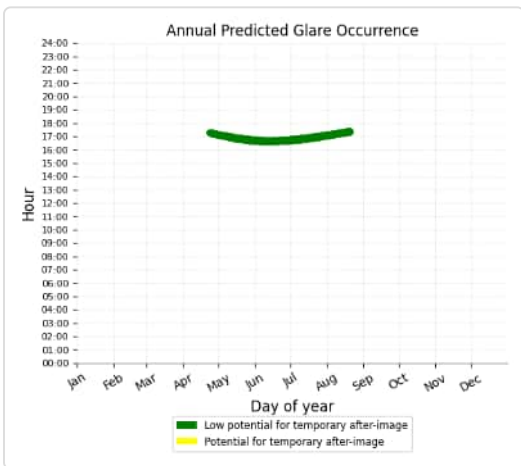
- 2,436 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

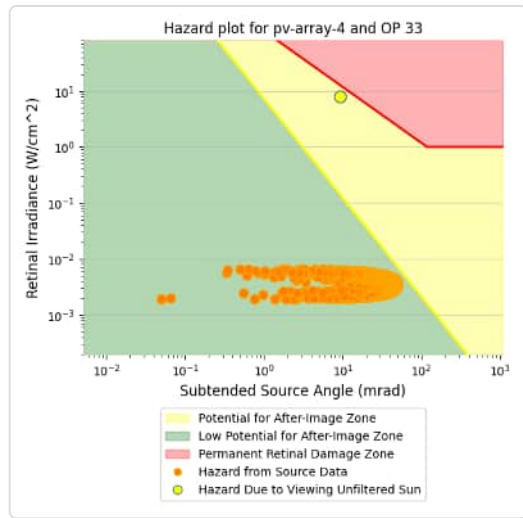
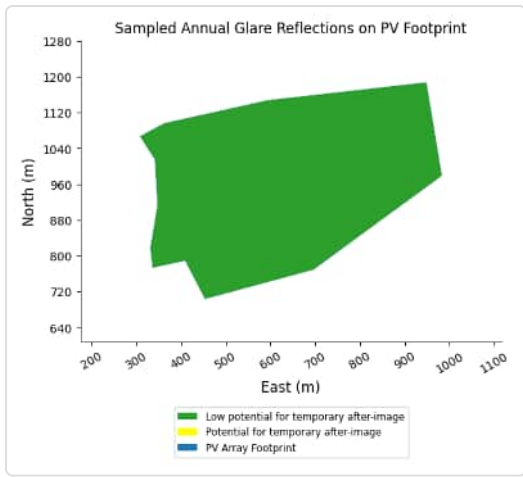


PV array 4 - OP Receptor (OP 33)

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

- 2,477 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

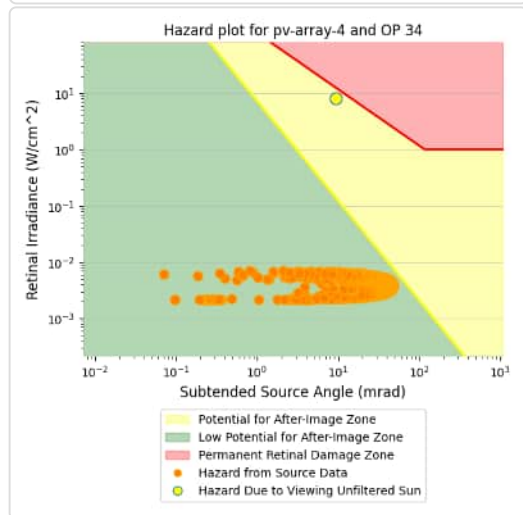
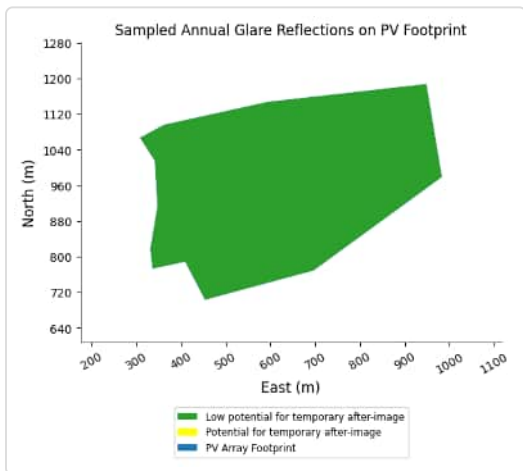
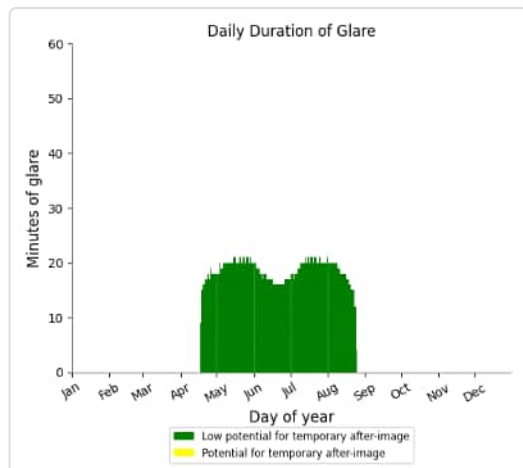
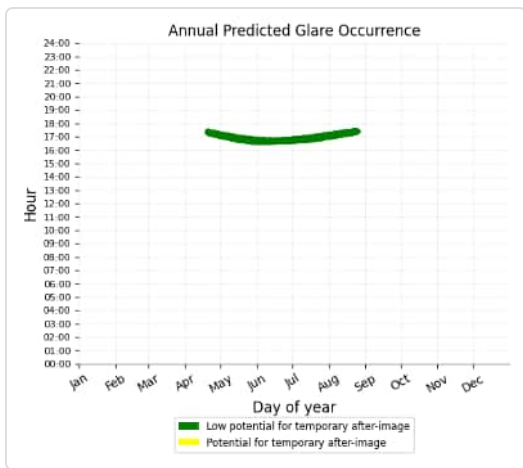




PV array 4 - OP Receptor (OP 34)

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

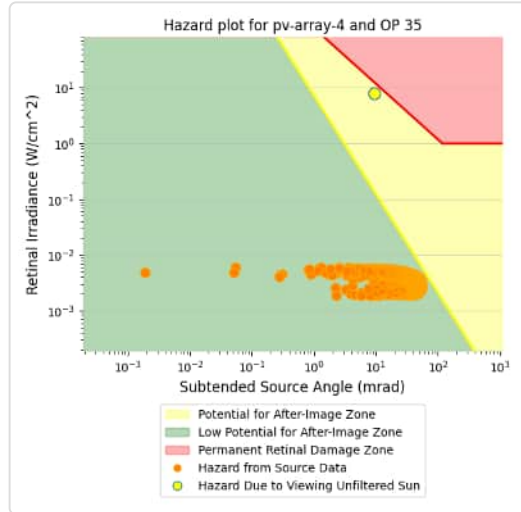
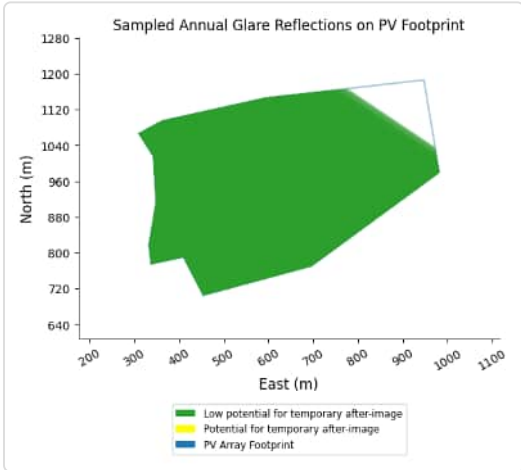
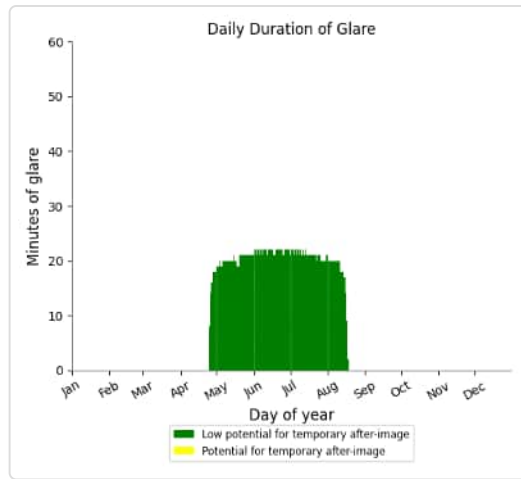
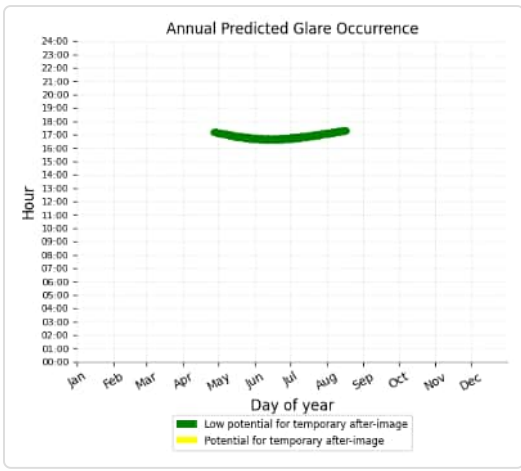
- 2,400 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 35)

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

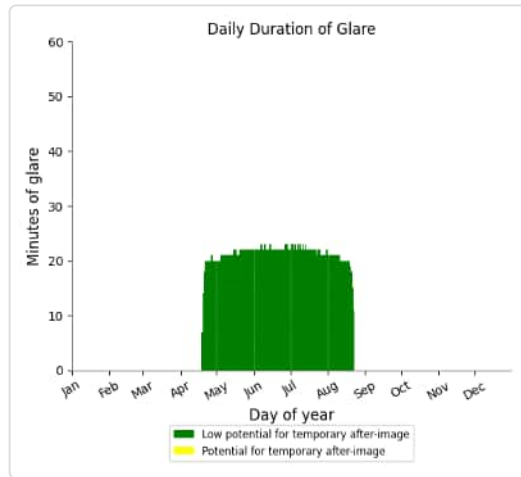
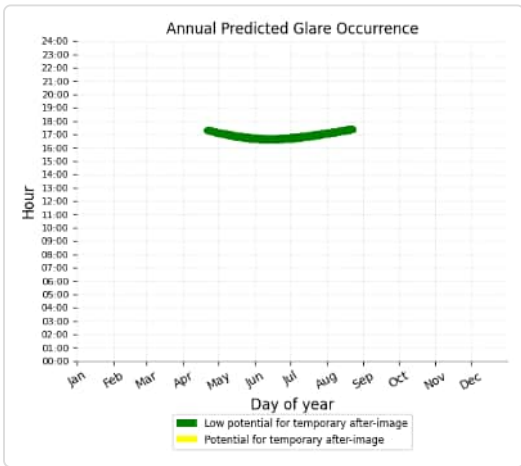
- 2,341 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

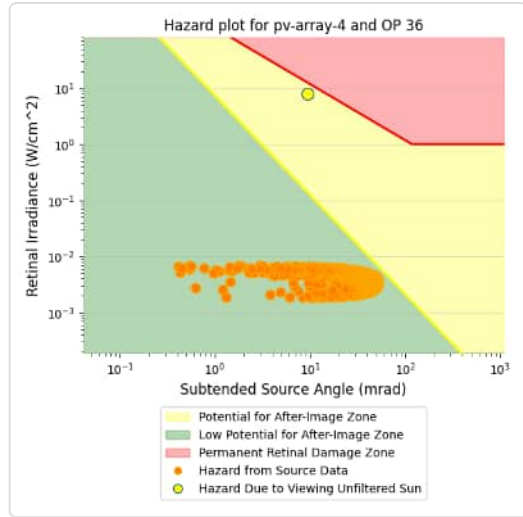
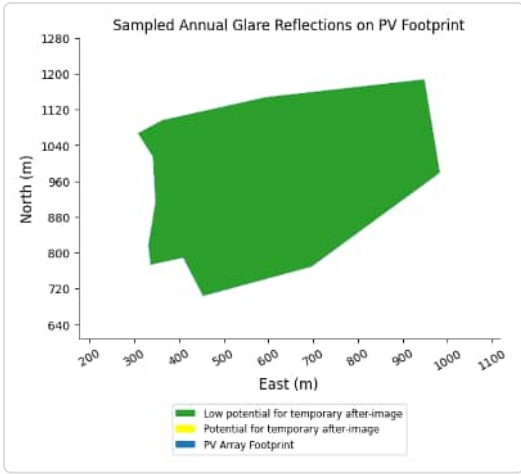


PV array 4 - OP Receptor (OP 36)

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

- 2,688 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

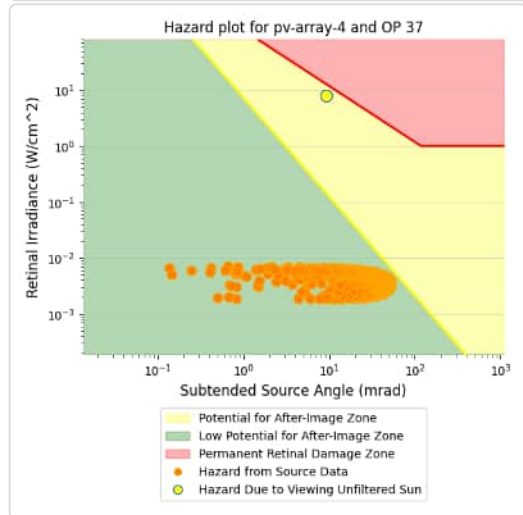
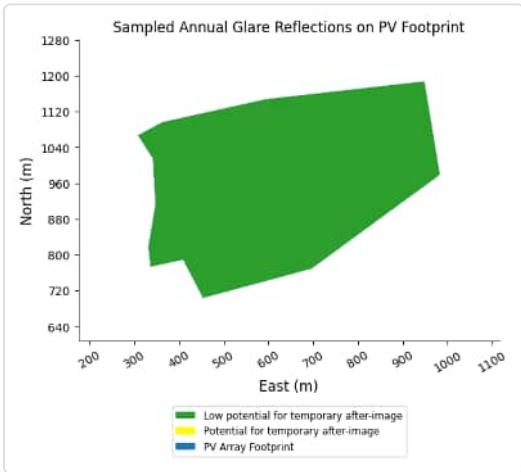
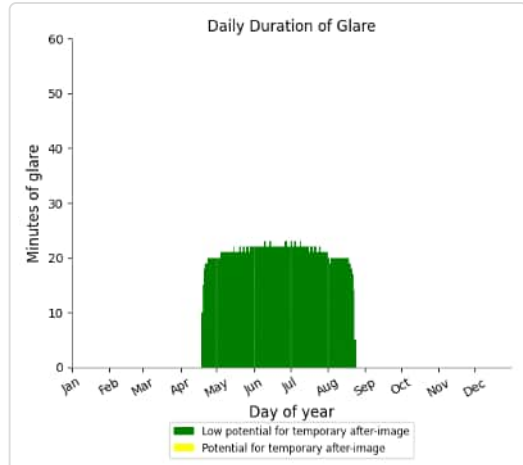
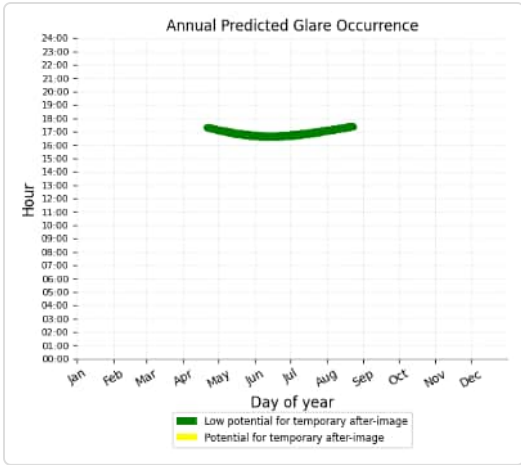




PV array 4 - OP Receptor (OP 37)

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

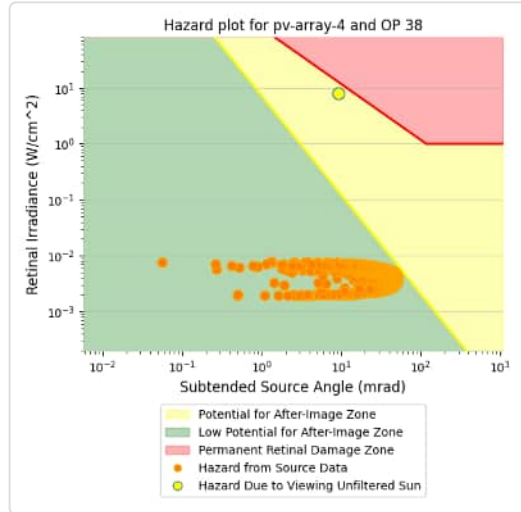
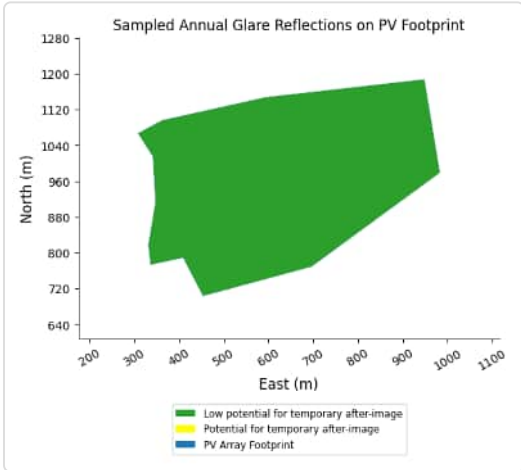
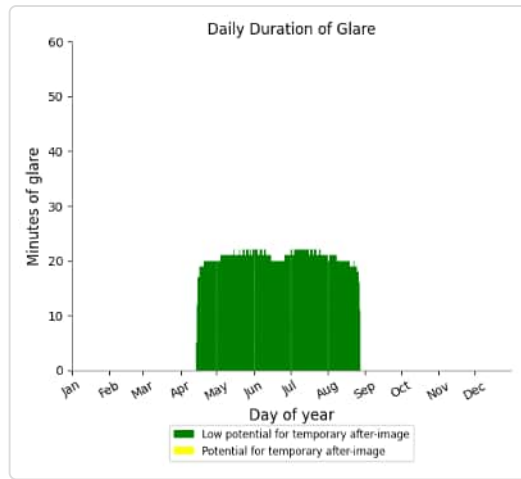
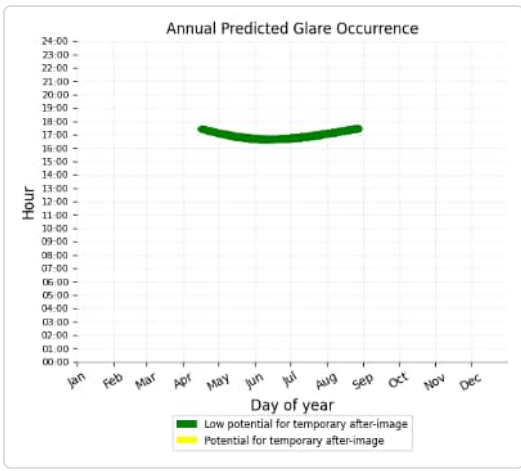
- 2,671 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 38)

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

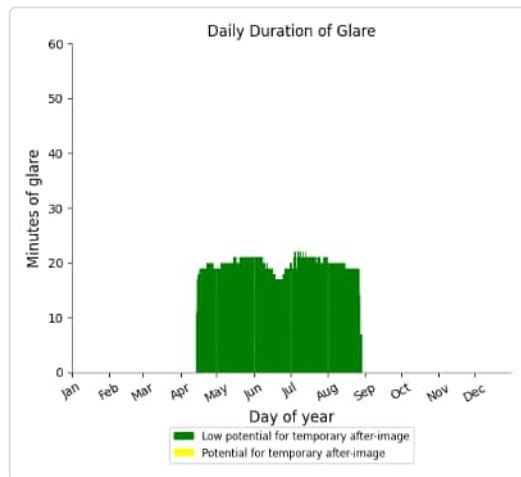
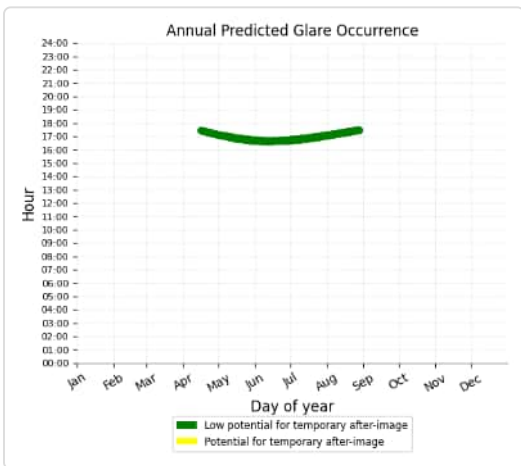
- 2,808 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

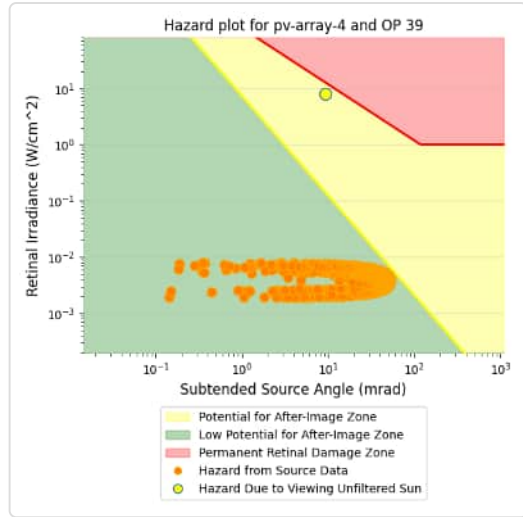
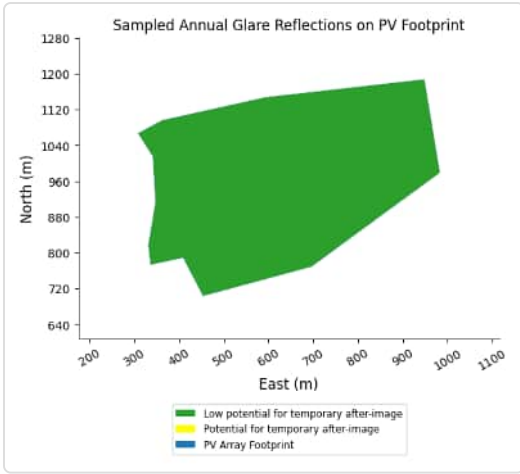


PV array 4 - OP Receptor (OP 39)

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

- 2,719 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

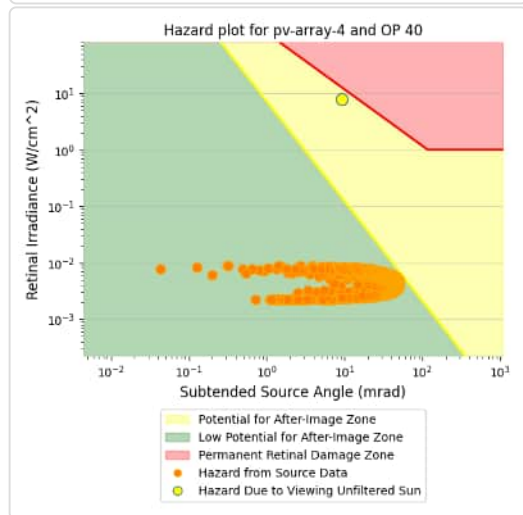
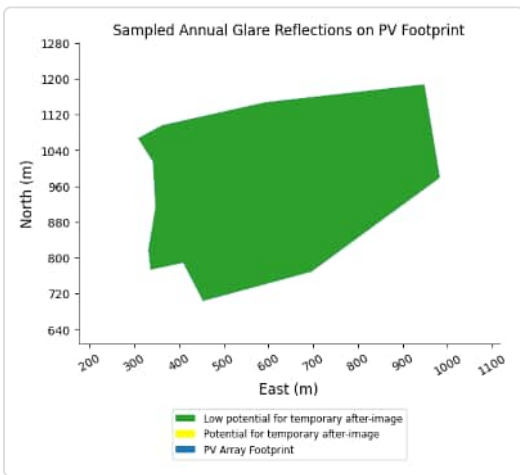
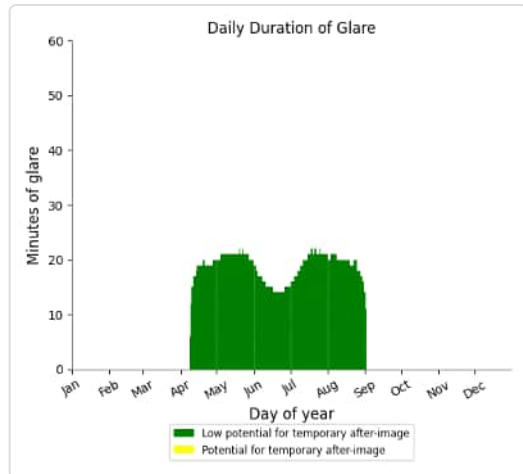
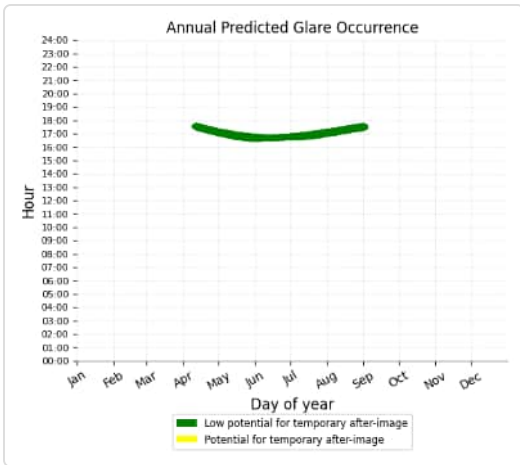




PV array 4 - OP Receptor (OP 40)

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

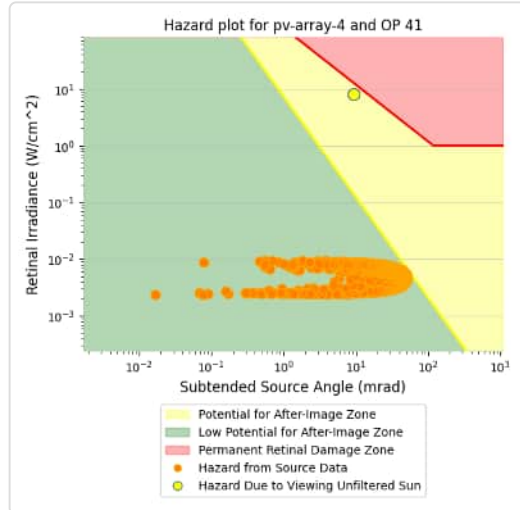
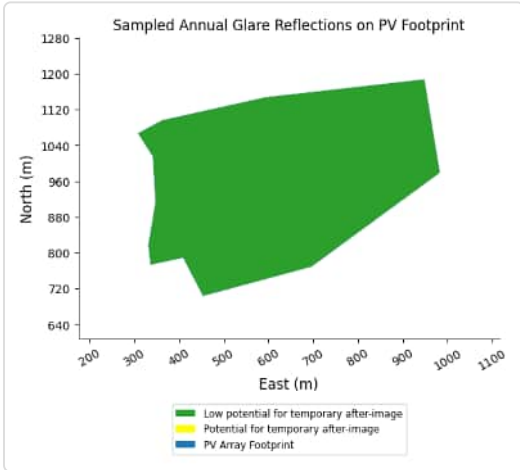
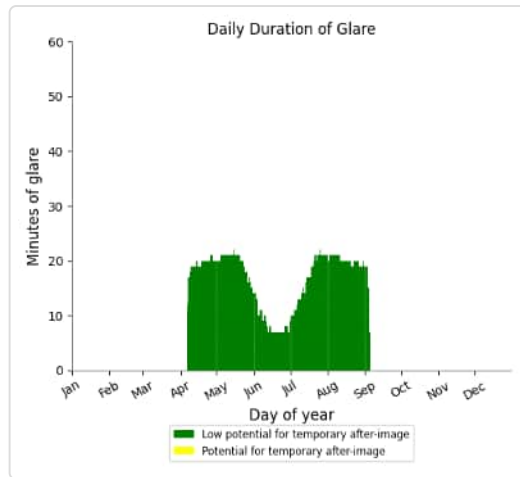
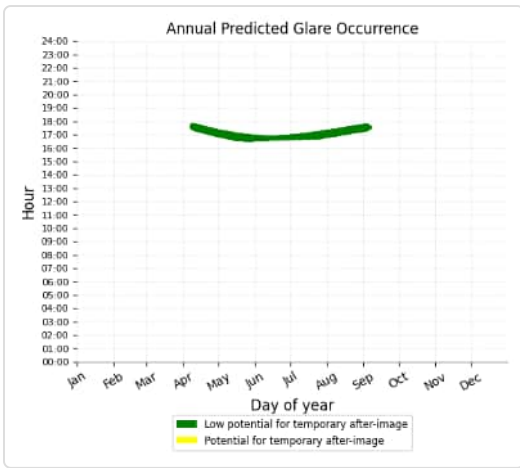
- 2,740 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 41)

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

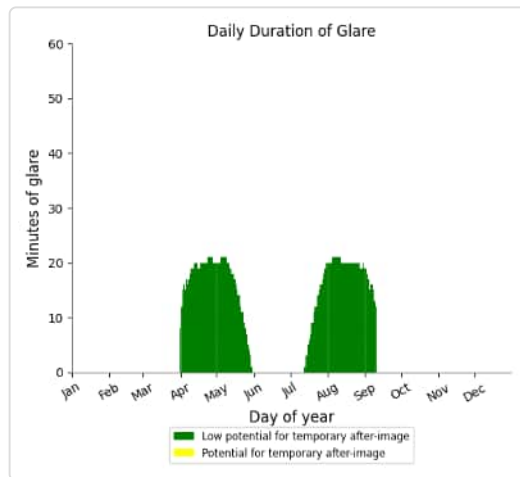
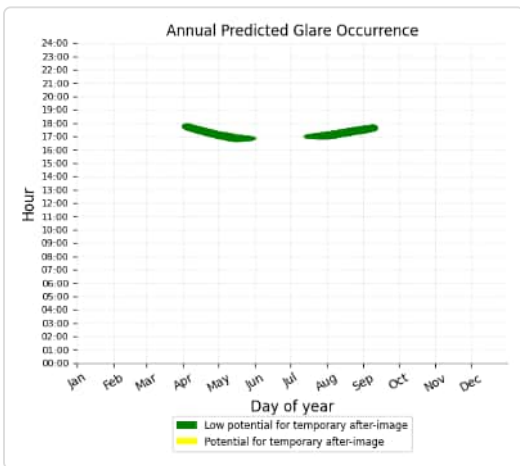
- 2,544 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

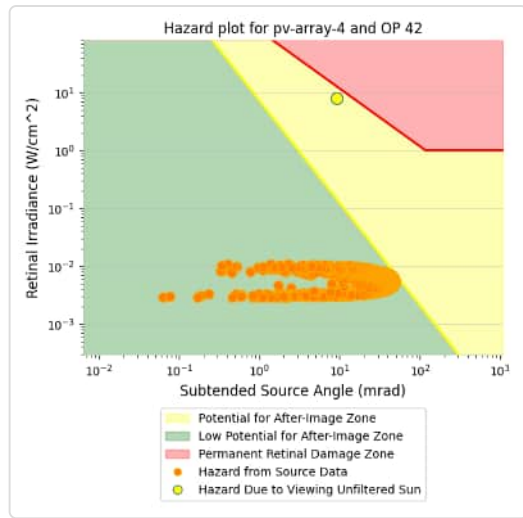
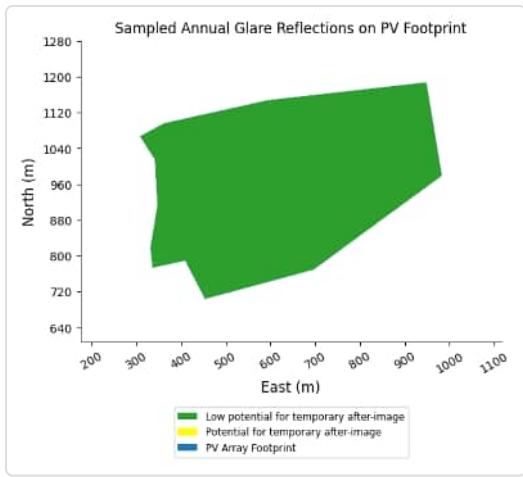


PV array 4 - OP Receptor (OP 42)

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

- 1,997 minutes of "green" glare with low potential to cause temporary after-image.
- 0 minutes of "yellow" glare with potential to cause temporary after-image.

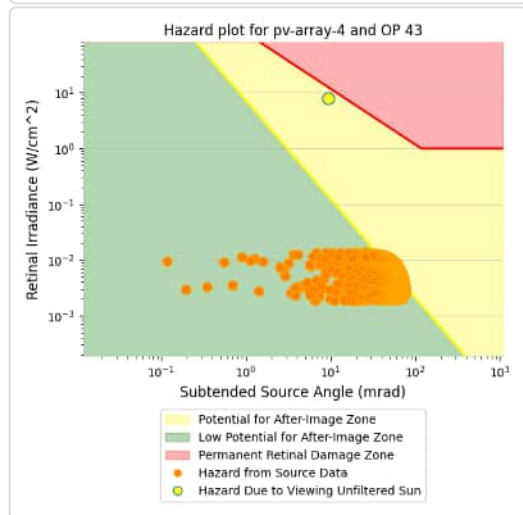
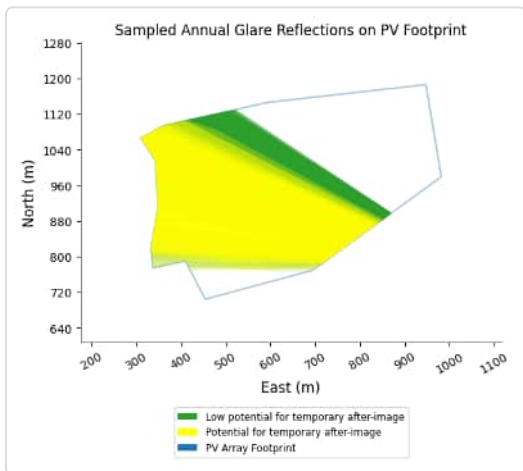
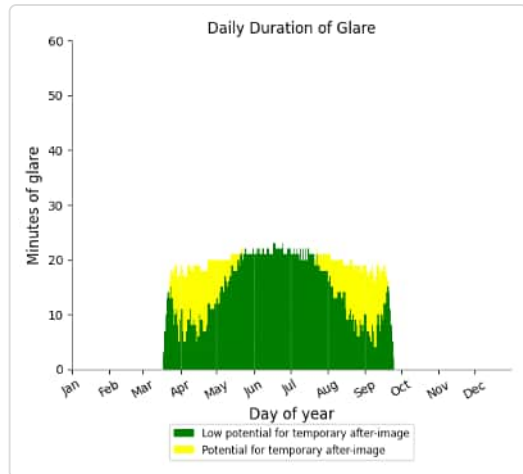
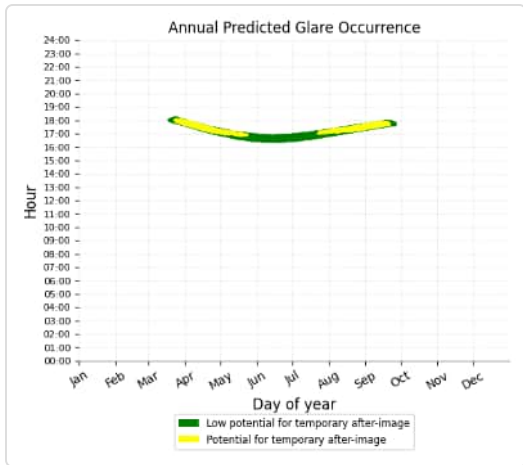




PV array 4 - OP Receptor (OP 43)

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

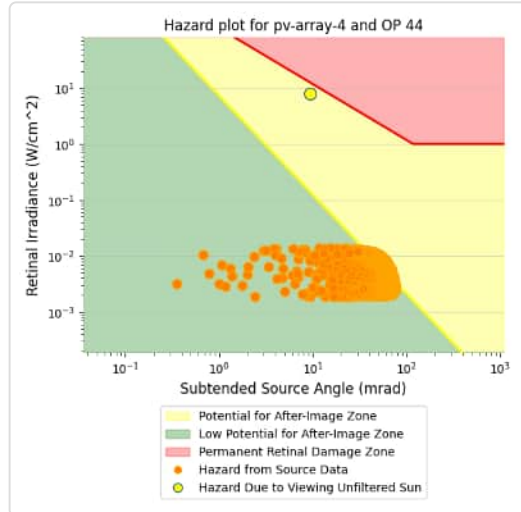
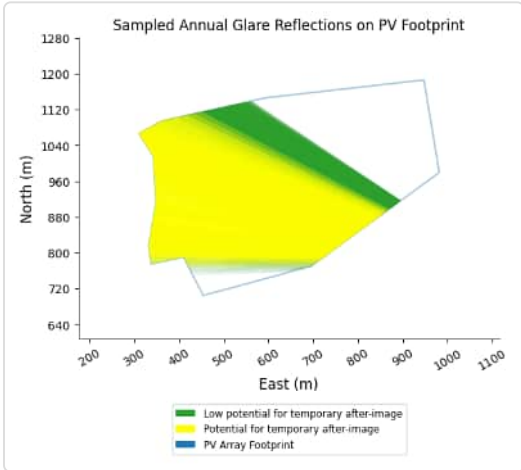
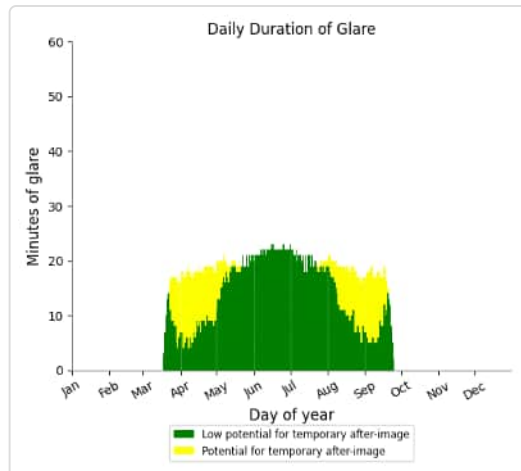
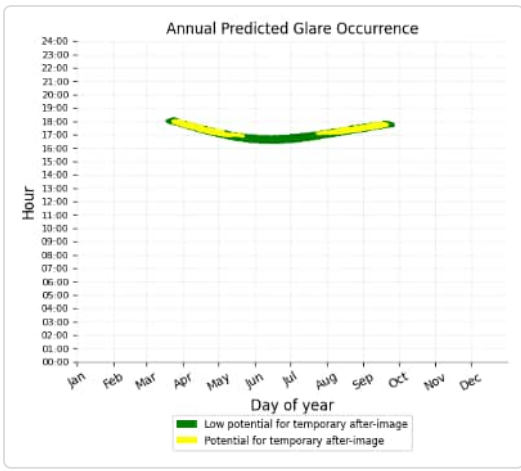
- 2,804 minutes of "green" glare with low potential to cause temporary after-image.
- 910 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 44)

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

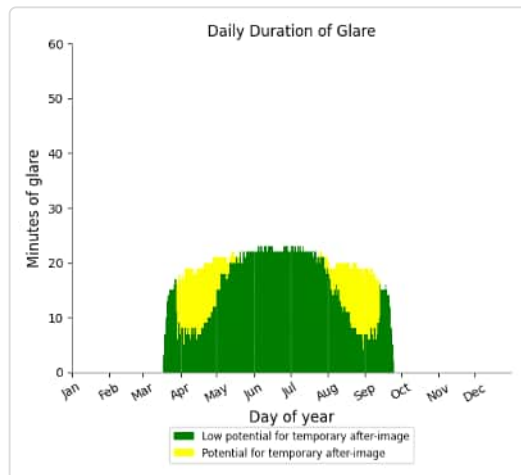
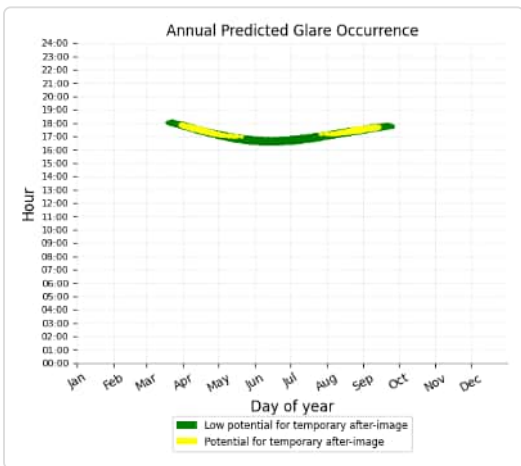
- 2,703 minutes of "green" glare with low potential to cause temporary after-image.
- 906 minutes of "yellow" glare with potential to cause temporary after-image.

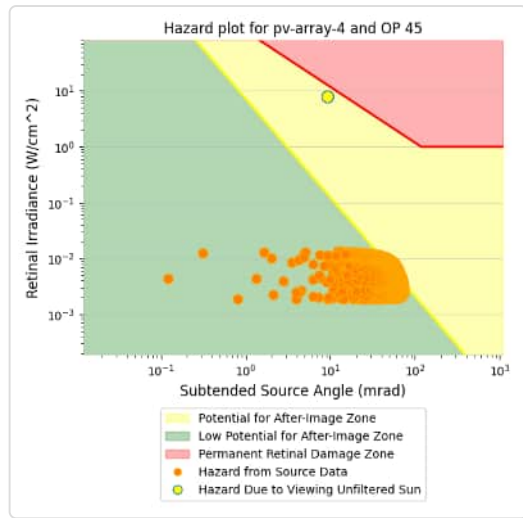
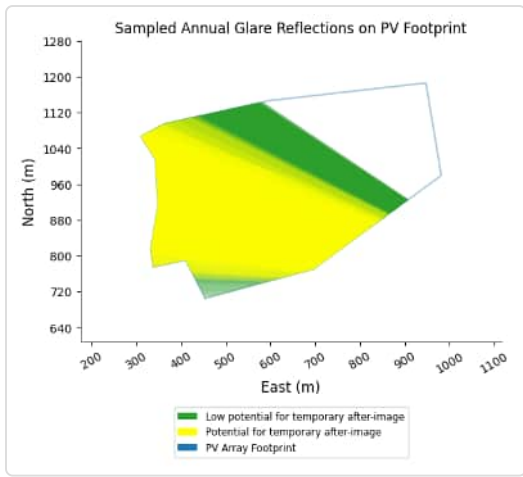


PV array 4 - OP Receptor (OP 45)

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

- 2,951 minutes of "green" glare with low potential to cause temporary after-image.
- 812 minutes of "yellow" glare with potential to cause temporary after-image.

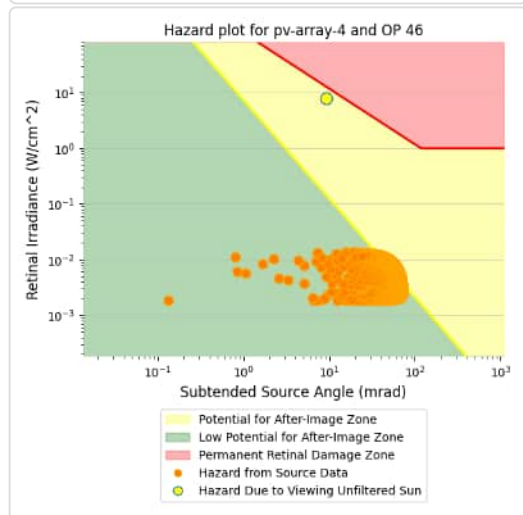
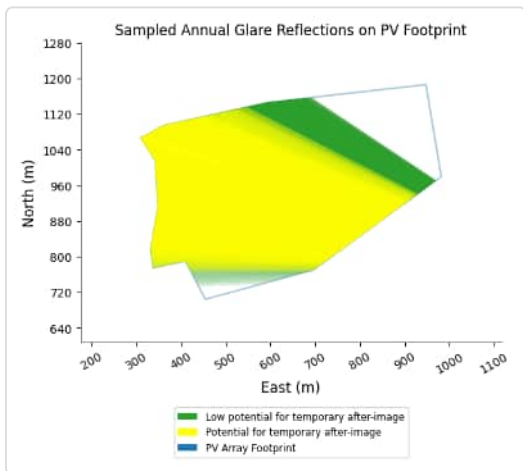
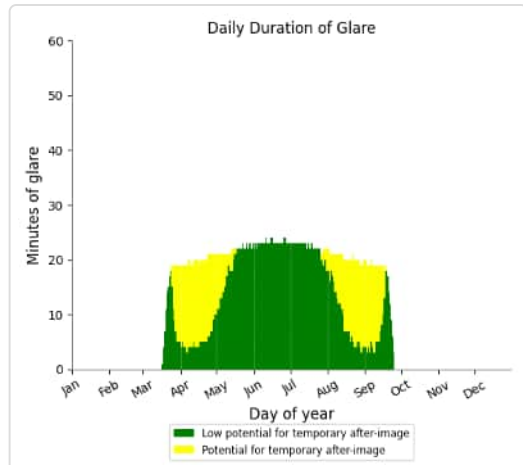
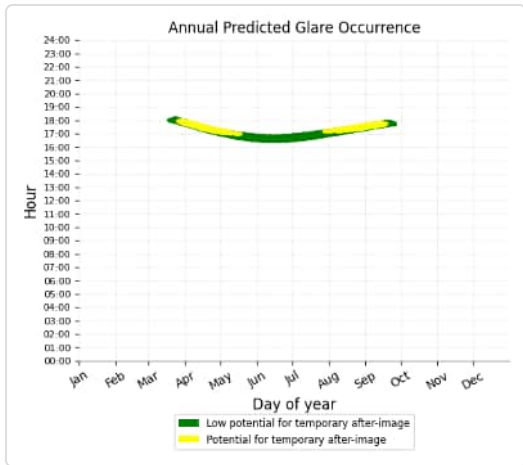




PV array 4 - OP Receptor (OP 46)

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

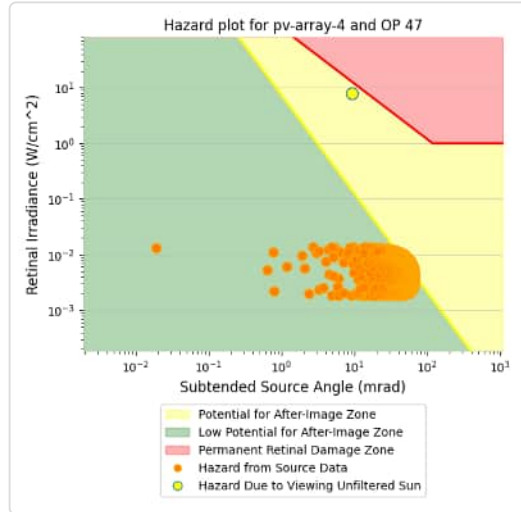
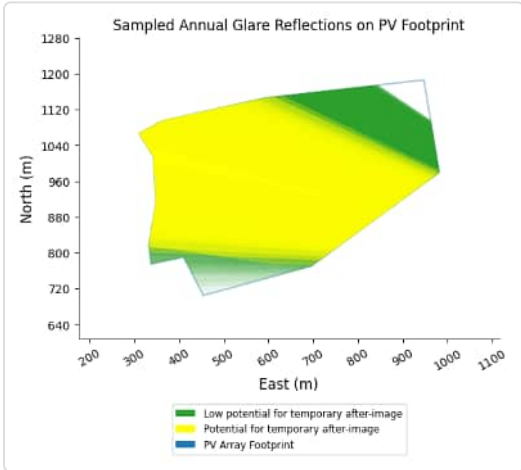
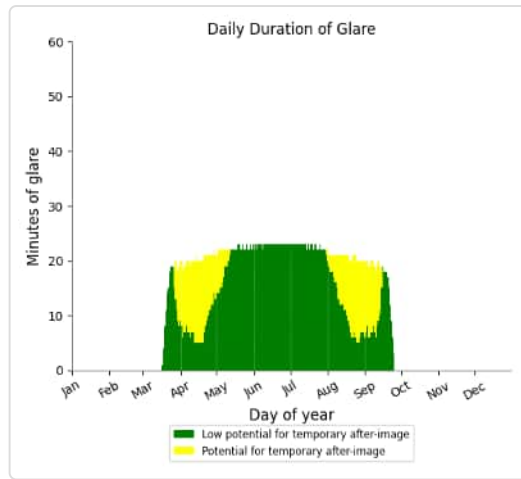
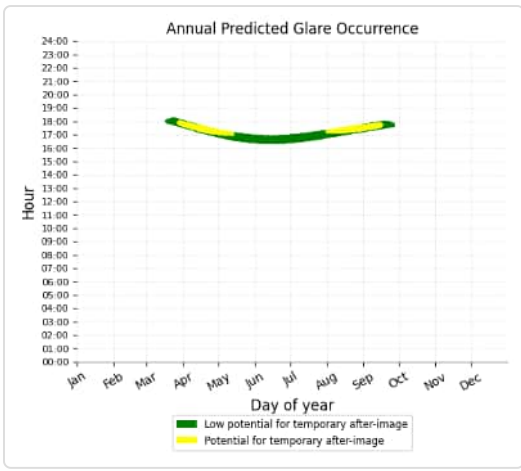
- 2,735 minutes of "green" glare with low potential to cause temporary after-image.
- 1,202 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 47)

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

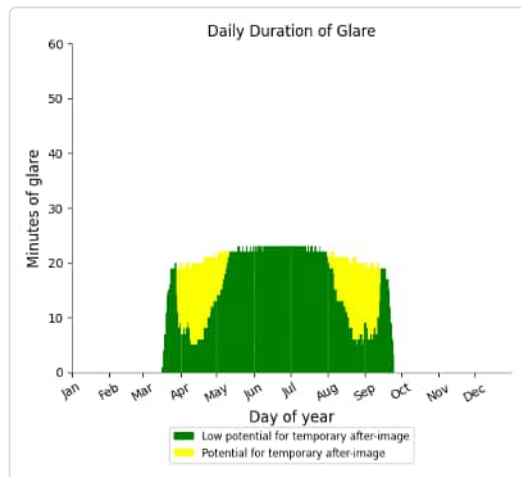
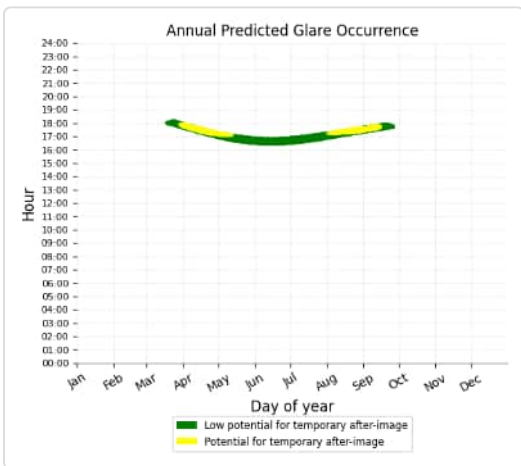
- 3,028 minutes of "green" glare with low potential to cause temporary after-image.
- 942 minutes of "yellow" glare with potential to cause temporary after-image.

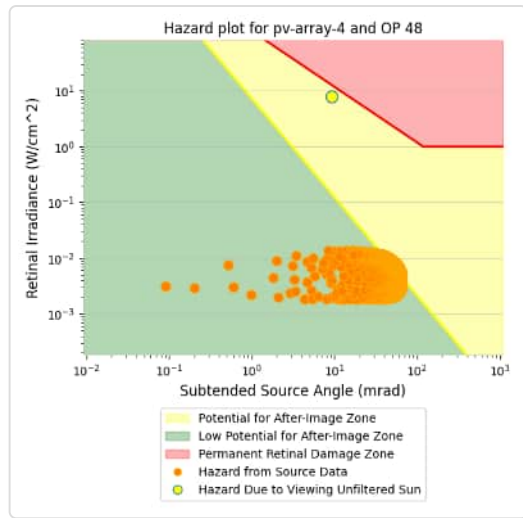
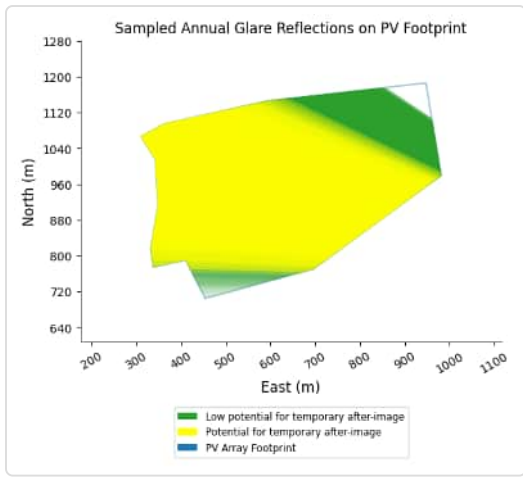


PV array 4 - OP Receptor (OP 48)

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

- 3,072 minutes of "green" glare with low potential to cause temporary after-image.
- 901 minutes of "yellow" glare with potential to cause temporary after-image.

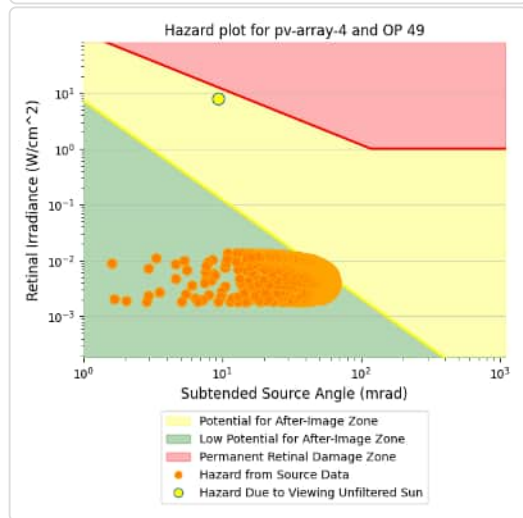
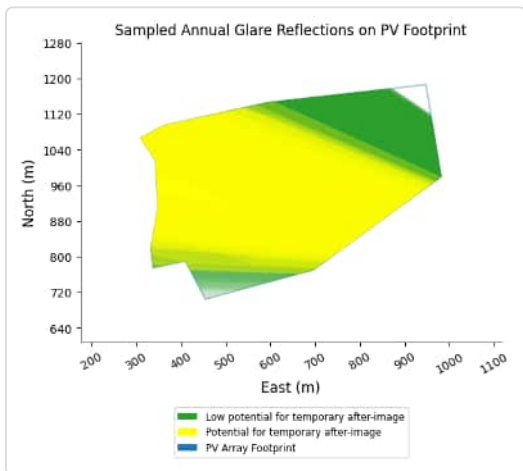
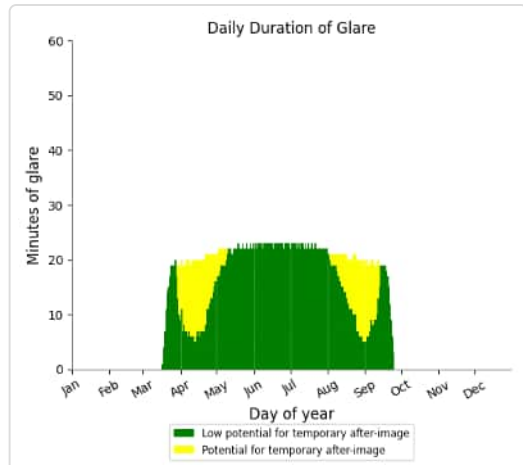
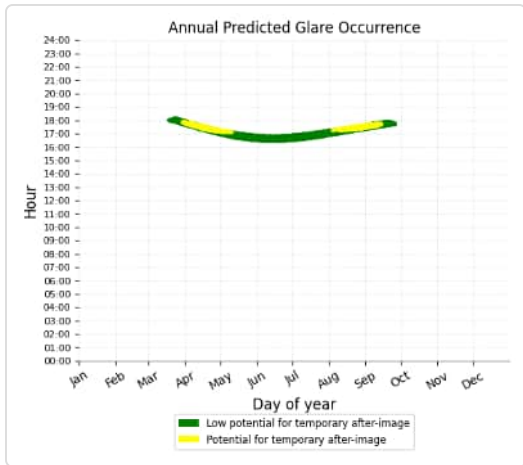




PV array 4 - OP Receptor (OP 49)

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

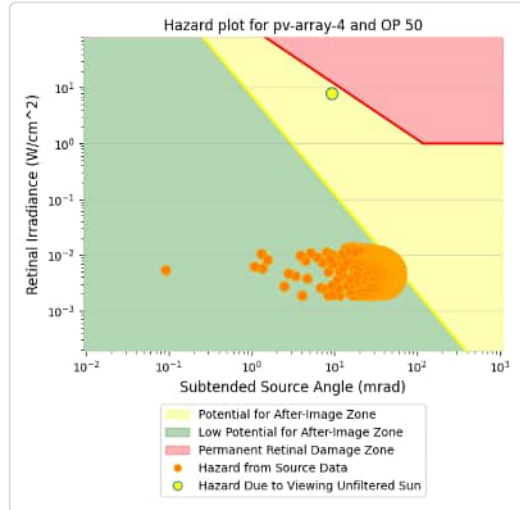
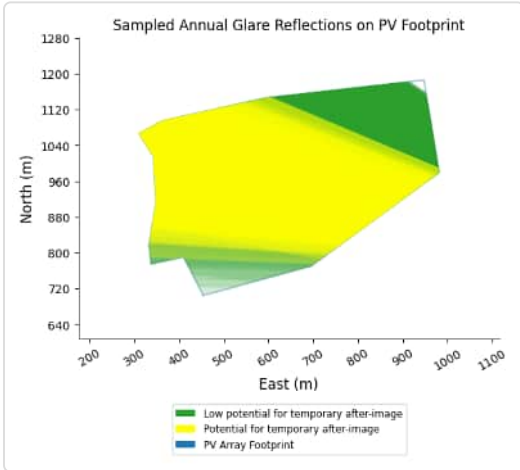
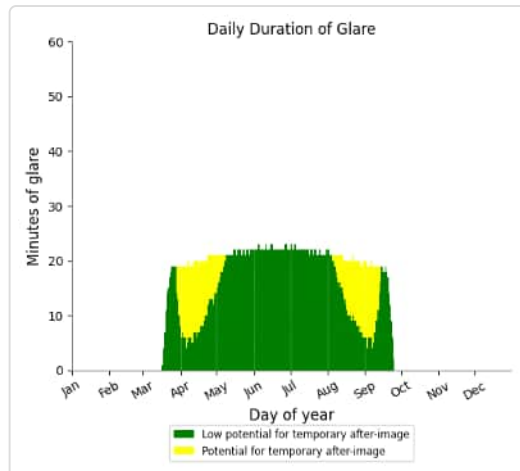
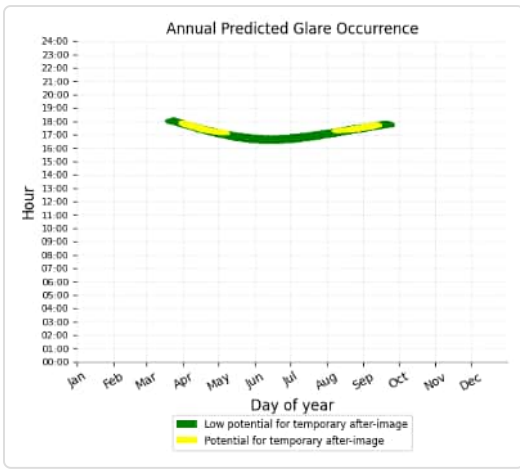
- 3,192 minutes of "green" glare with low potential to cause temporary after-image.
- 766 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 50)

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

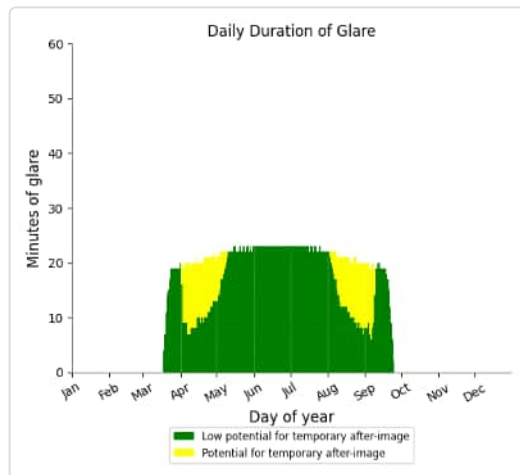
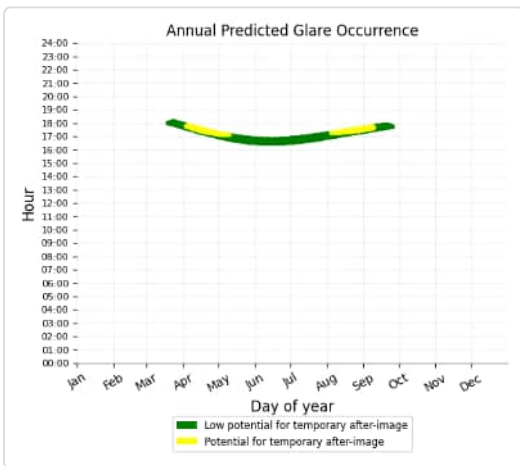
- 3,093 minutes of "green" glare with low potential to cause temporary after-image.
- 784 minutes of "yellow" glare with potential to cause temporary after-image.

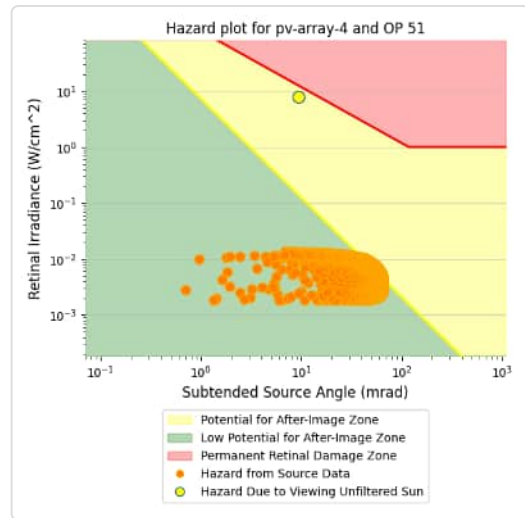
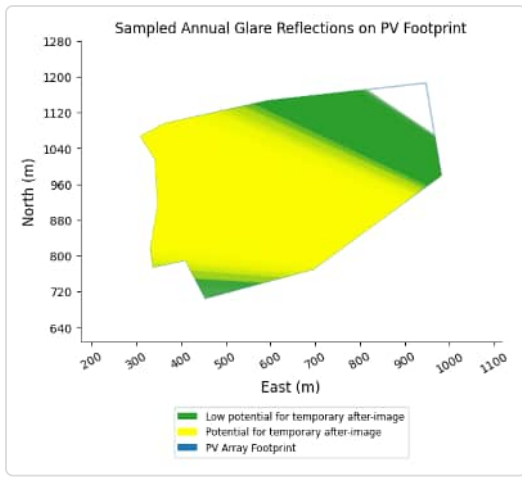


PV array 4 - OP Receptor (OP 51)

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

- 3,286 minutes of "green" glare with low potential to cause temporary after-image.
- 704 minutes of "yellow" glare with potential to cause temporary after-image.

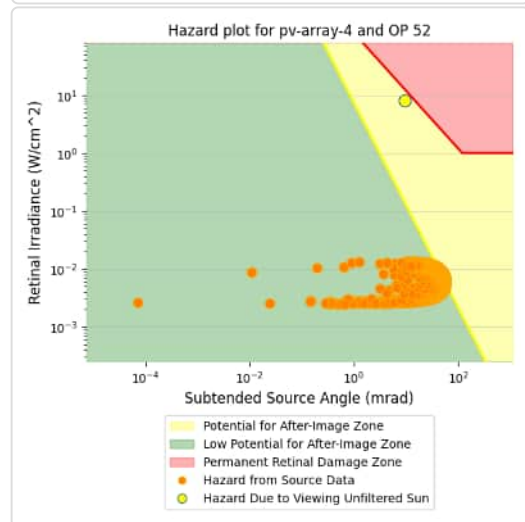
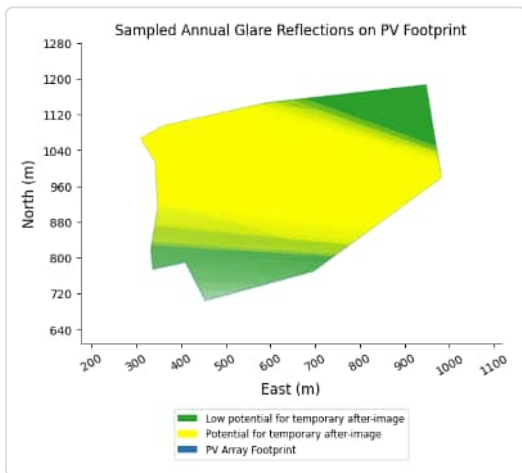
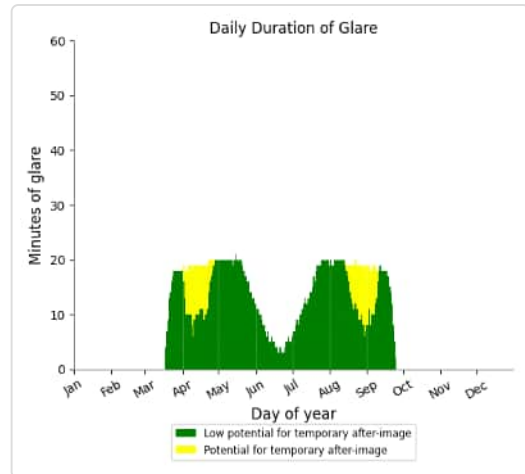
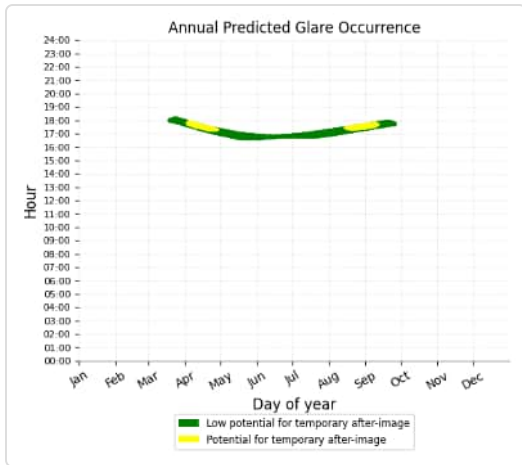




PV array 4 - OP Receptor (OP 52)

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

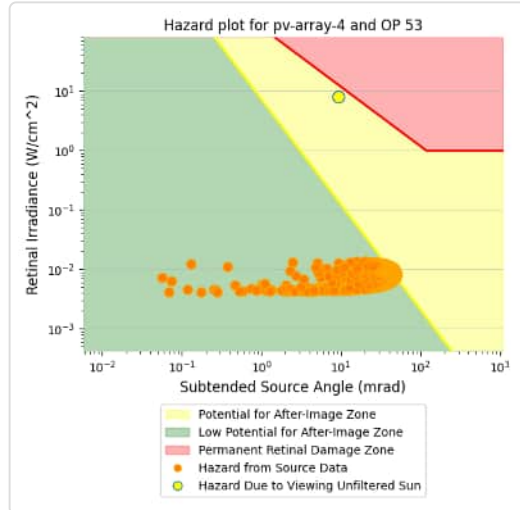
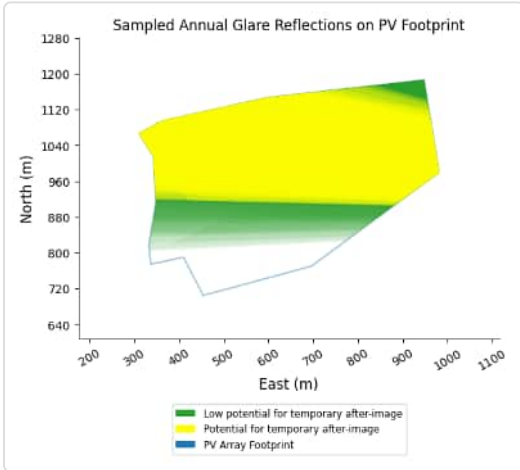
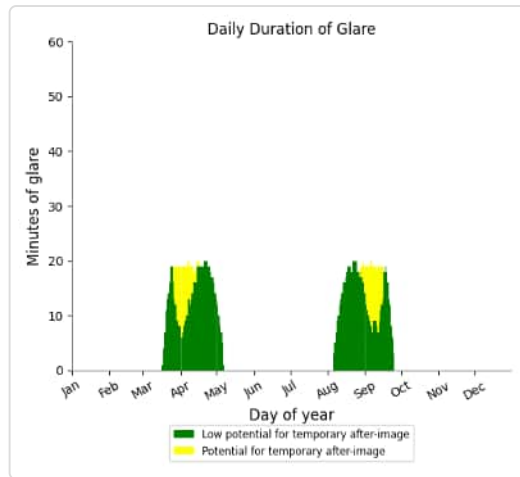
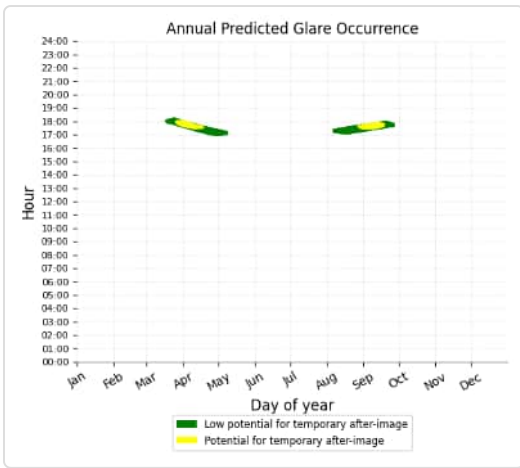
- 2,567 minutes of "green" glare with low potential to cause temporary after-image.
- 407 minutes of "yellow" glare with potential to cause temporary after-image.



PV array 4 - OP Receptor (OP 53)

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

- 1,347 minutes of "green" glare with low potential to cause temporary after-image.
- 312 minutes of "yellow" glare with potential to cause temporary after-image.



Assumptions

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