

VIEWING THE SOLAR ECLIPSE: 5 THINGS TO KNOW

On Monday, 21 August 2017, a perfect lineup of the sun, moon, and Earth will be visible across North America from coast to coast for the first time in 38 years. One of the grandest and most fleeting natural spectacles known to humanity, this total solar eclipse is predicted to be the most viewed ever. Here are five things for Airmen and families to know for a safe viewing experience:

1. The path of “totality”—when the moon entirely blocks the sun’s face—will stretch from Salem, Oregon, starting at 1016 and reach Charleston, South Carolina, at 1448.

This means Mountain Home, F.E. Warren, Offutt, Scott, Arnold, Shaw, and Charleston will briefly experience near 100% eclipse, while the rest of the United States will see at least 70-90%.



Source: American Astronomical Society

2. Looking directly at the solar eclipse without proper eye protection is unsafe and can cause serious permanent eye damage.

At Edwards Air Force Base, there will be no point of time during which it will be safe to look at the eclipse without eye protection. There will be harmful rays for the duration of this "celestial" event.

3. Homemade filters and standard sunglasses—even dark or polarized ones—are not sufficient to prevent eye damage. This also goes for unfiltered cameras, telescopes, binoculars, and other optical devices. The only safe way to directly view the uneclipsed or partially eclipsed sun is through special-purpose solar filters (“eclipse glasses” or handheld solar viewers) that are “CE” certified and meet the ISO 12312-2 international standard. Look for these at community centers, public libraries, and through reputable manufacturers online. Always supervise children using solar viewers as young eyes are particularly susceptible to solar exposure damage.



4. Indirect viewing techniques are a safe and fun alternative. Pinhole projectors using your hands, cereal boxes, or other projection techniques are popular ways to safely observe a solar eclipse. (Note: Pinhole projectors are NOT for looking directly at the sun! They make a shadow which is projected upon another surface.) Look online for instructions on how to make a simple projector. For the safest viewing experience, NASA will host a livestream “Eclipse Megacast” with exclusive multi-platform coverage across the path of totality.

5. For more information on safely enjoying the rare solar eclipse, contact your base optometry clinic. NASA also has a safety section at <https://eclipse2017.nasa.gov>.

Remember, NEVER look directly at the sun with the naked eye. If you experience problems with your eyes or vision following the eclipse, be sure to check in with the optometry clinic.