## **EYE SAFETY SHEET**

Looking directly at the Sun is unsafe **except** during the brief total phase ("totality") of a **total solar eclipse**, when the Moon entirely blocks the Sun's bright face, which happens only within the narrow path of totality.



The only safe way to look directly at the **uneclipsed**, **partially eclipsed**, or **annularly** eclipsed Sun is through special-purpose solar filters, such as "eclipse

glasses" (rated ISO 12312-2) or handheld solar viewers. Homemade filters or ordinary sunglasses, even very dark ones, are not safe for looking at the Sun; they transmit thousands of times too much sunlight.

## Instructions for safe use of solar filters/viewers:

Always inspect your solar filter before use; if scratched, punctured, torn, or otherwise damaged, discard it. A responsible adult should always supervise children using solar filters.

If you normally wear eyeglasses, keep them on. Put your eclipse glasses on over them, or hold your handheld viewer in front of them.

Stand still and cover your eyes with your eclipse glasses or solar viewer before looking up at the bright Sun. After looking at the Sun, turn away and remove your filter — do not remove it while looking at the Sun.

Do *not* look at the uneclipsed, partially eclipsed, or annularly eclipsed Sun through an unfiltered camera, telescope, binoculars, or other optical device.

Similarly, do *not* look at the Sun through a camera, telescope, binoculars, or any other optical device while using your eclipse glasses or handheld solar viewer — the concentrated solar rays could damage the filter and enter your eye(s), causing serious injury.

Different rules apply when viewing or imaging the Sun through camera lenses, binoculars, or telescopes; consult an expert astronomer before using a solar filter with any type of magnifying optics.

If you are inside the path of totality on **April 8, 2024**, remove your solar filter only when the Moon completely covers the Sun's bright face and it suddenly gets quite dark. Experience totality! Then, as soon as the bright Sun begins to reappear, replace your solar viewer to look at the remaining partial phases. Note that this applies only to viewing without optical aid (other than ordinary eyeglasses).

Outside the path of totality, and throughout a partial or annular solar eclipse, you must **always** use a safe solar filter to view the Sun directly.

Partial Eclipse
Glasses ON
Glasses OFF!
Partial Eclipse
Glasses ON
Glasses ON

This safety information has been endorsed by the American Astronomical Society, the American Academy of Ophthalmology, NASA, the American Academy of Optometry, the American Optometric Association, and the National Science Foundation.