Total Solar Eclipse

Courtesy of your Library, the **Space Science Institute**, and the **Gordon and Betty Moore Foundation**

Monday, April 8, 2024



In an eclipse of the Sun, the Moon gets in front of the Sun and covers some or all of it. This is possible because, as seen from Earth, the Sun and the Moon are roughly the same size in the sky.

Total and Partial Solar Eclipse Visibility

The total eclipse will only be visible over a path ~115 miles wide, but all of the continental U.S. will see a partial eclipse. The total eclipse path enters the U.S. in southwest Texas and moves northeastward, leaving the U.S. at the Gulf of Maine.

Local Eclipse Times

Scan the QR code or go to scigames.org/eclipse to find out what the eclipse will be like in your area. There is also info on safe eclipse glasses and other safe viewing techniques.



Partial

Ends

The 2024 Total Eclipse

A partial eclipse of the Sun will be visible in all parts of North America on April 8, 2024, but only those on a narrow path will see a total eclipse. During a total eclipse the Sun is completely hidden by the Moon and the sky becomes dark, making for an eerie "night in the middle of the day." The Sun's faint outer atmosphere (its corona) becomes visible like a beautiful halo. As the map on the other side shows, the total eclipse can **ONLY** be viewed on a track stretching from Texas northeastward to Maine.

How Can I Observe the Sun Safely?



Whenever any part of the Sun is showing it is important to use solar-viewing glasses or to project an image of the Sun to protect your eyes. The only safe time to look at the Sun is during the 3-5 minutes of totality experienced along the narrow path when the Sun is completely covered.



When totality begins the Sun's outer atmosphere (the corona) becomes visible as a faint glow around the dark disk of the Moon. During totality, look directly at the Sun to see the beautiful corona. This the ONLY time you can safely look directly at the Sun without any viewing devices.



"Solar eclipse viewing" by <u>NCIL</u>

Regular sunglasses, swimming goggles, and most camera filters are **NOT** safe for looking directly at the Sun. You can safely protect your eyes with certified solar-viewing glasses from your library or another reliable institution (such as a local science museum or college/high-school science department). Make sure that on the back, in small print, they say that they are ISO 12312-2 certified.



Stand with your back to the Sun and use a colander or a piece of cardboard with a small hole in it to project images of the eclipsed Sun on any light-colored surface

<u>"Colander community"</u> by <u>John Lord</u> is licensed under <u>CC BY 2.0</u>

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