

# JOIN THE SOLAR ECLIPSE

21 August 2017

**An eclipse takes place when one heavenly body such as a moon or planet moves into the shadow of another heavenly body, creating a dramatic event for the viewer. In the case of a total eclipse, the sun's light is blocked completely and replaced by a twilight darkness.**



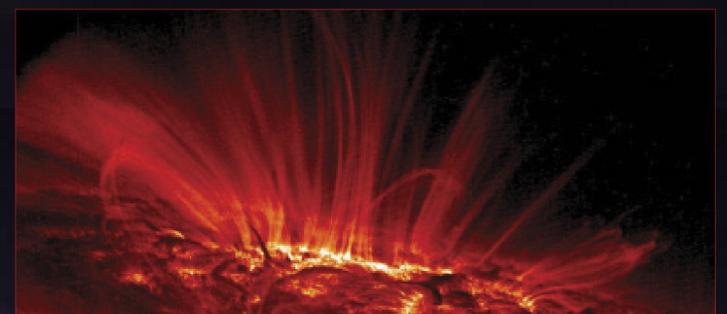
## THE PATH OF TOTALITY

The 2017 total eclipse will sweep across North America, in a 70 mile (113 KM) wide course traveled called the path of totality. It goes from the Oregon coast through Idaho, Wyoming, Nebraska, Kansas, Missouri, Illinois, Kentucky, Tennessee, Georgia, North Carolina, and South Carolina. In its path, observers will witness the complete darkening of the sun. Observers in the rest of the continental United States will have at least a 55 percent partial eclipse, in which the moon appears to take a bite out of the sun's disk. From any given vantage point, the total eclipse will last between approximately 2 minutes and 2 minutes 40 seconds. The location of the longest duration is in southern Illinois.

While total eclipses are relatively common, once every 18 months, the narrow path of totality is often inaccessible to skywatchers as most of the Earth is covered by water. A total solar eclipse that occurs over populated areas is unique, and the next events will be in 2024 and 2045.

Get more details on the eclipse here: <https://eclipse2017.nasa.gov>

## PHENOMENA TO SEE



During an eclipse, the corona of the sun is visible. The corona is an aura of plasma that surrounds the sun, extending millions of kilometers into space. The sun's corona is much hotter than the visible surface of the sun (3,000,000 K versus 5,800 K), and is quite complex with various regions and structures. Most visible during an eclipse are solar flares that are large magnetic arches that tower over the sun's surface.

For more pictures of the surface of the sun, see the SOHO project: <https://sohowww.nascom.nasa.gov/home.html>



## FOR SAFE VIEWING

Never look into the sun directly, even during a solar eclipse. For safety, use:

- Eclipse glasses or welder's goggles rated shade 14 or higher
- Specially designed solar telescopes or solar binoculars
- Telescopes, cameras, and binoculars with approved solar filters
- Pinhole projectors