

ECLIPSE INFORMATION

On Monday, August 21, 2017, all of North America will be treated to an eclipse of the sun. Anyone within the [path of totality](#) (which includes Greenville) can see one of nature's most awe-inspiring sights - a total solar eclipse. This path, where the moon will completely cover the sun and the sun's tenuous atmosphere - the [corona](#) - can be seen, will stretch from Lincoln Beach, Oregon to Charleston, South Carolina. Observers outside this path will still see a [partial solar eclipse](#) where the moon covers part of the sun's disk.



Furman University is hosting a free viewing of the total solar eclipse Aug. 21, at Paladin Stadium from 12-3 p.m. Most of the United States will see only a partial eclipse, but Greenville, South Carolina, falls directly within the eclipse's region of totality. Furman's spacious Paladin Stadium* offers the perfect place to view this rare sighting while enjoying live music and concessions with family and friends.

<http://news.furman.edu/features/eclipse-at-furman/>

When does it start?

In Greenville the **Partial** phase starts: **1:09:14 PM (EDT)**. **Totality** starts at **2:38:03PM (EDT)** *All times shown are accurate to within a couple of seconds, due mainly to influences of the "edge effects" at the start and end of totality. Duration of Totality*: 2 minutes and 10 seconds

What is it?

This celestial event is a solar eclipse in which the moon passes between the sun and Earth and blocks all or part of the sun for up to about three hours, from beginning to end, as viewed from a given location. For this eclipse, the longest period when the moon completely blocks the sun from any given location along the path will be about two minutes and 40 seconds. The last time the contiguous U.S. saw a total eclipse was in 1979.

Over one million visitors are expected in South Carolina during this event and the South Carolina Emergency Management Division is saying that some complications are likely to accompany the couple minutes of darkness and that residents need to have a plan and take steps in advance to avoid difficulties:

- Fill your car up with gas and buy groceries.
- Expect heavy traffic and extremely busy areas in most of South Carolina. Plan on plenty of extra travel time anywhere you go during the days leading up to and following the eclipse.
- If you plan to go somewhere to watch the eclipse, give yourself extra time to reach your destination and to find a place to park, and plan on being at that location well after the eclipse is over.
- *If you find yourself on the road during the eclipse, do NOT stop your vehicle along interstates or roadways.*
- Be prepared for extreme heat wherever you are: make sure you have plenty of bottled water, sunscreen and a first aid kit.
- Make sure your cell phones are charged and that you have a car charger available in the event you are held up in traffic or away from your home longer than you expected. **Do not call 911 for anything other than a life-threatening emergency.**

SAFELY observing THE SUN

WARNING! Never look directly at the sun without proper eye protection. You can **seriously** injure your eyes.



View the eclipse with special eclipse glasses.



Regular sunglasses are not safe to view the eclipse.

SUN FUNNEL



Inexpensive and easy to build, the sun funnel is a device that completely encloses the light coming from a telescope and projects a magnified image of the sun, large enough for many people to view at once.
<http://eclipse2017.nasa.gov/make-sun-funnel>

EYE SAFETY DURING AN ECLIPSE



It's **NEVER** safe to look directly at the sun, except when the sun is completely blocked during the period of a total eclipse known as **TOTALITY**.



1

PARTIAL ECLIPSE • GLASSES ON

The eclipse begins when the sun's disk is partially blocked by the moon. This partial eclipse phase can last over an hour.



2

DIAMOND RING • GLASSES ON

Shortly before totality, the crescent sun converges into a single brilliant "diamond" of sunlight as the last bit of the sun's bright disk shines along the edge of the moon, while the first glimpses of the faint corona create a "ring" around the moon.



3

BAILY'S BEADS • GLASSES ON

In the last little moment before totality, you may see the "diamond ring" break up into "beads" created as the sun's light shines through the low-lying valleys along the edge of the moon. These are called Baily's Beads.



4

TOTALITY • GLASSES OFF

Once the Baily's Beads disappear and the moon completely covers the entire disk of the sun, you may safely look at the eclipse without a solar filter. Be careful to protect your eyes again before the end of totality—the total eclipse may last less than a minute in some locations.



5

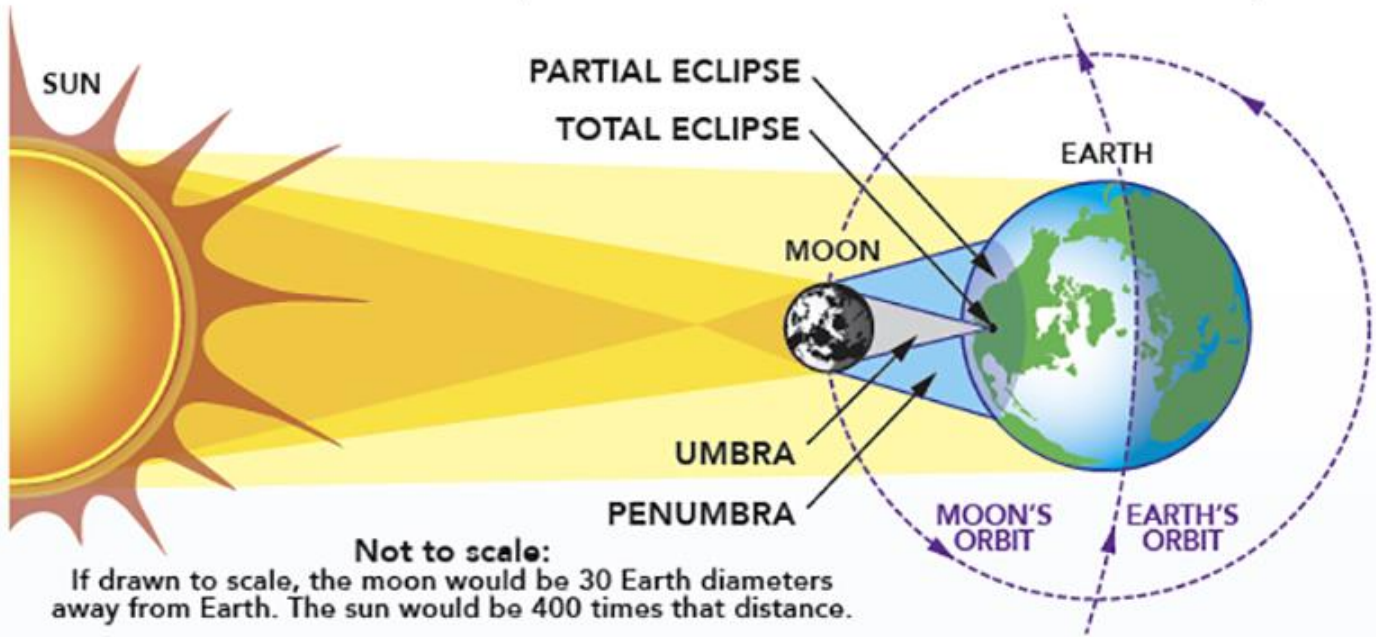
FINAL STAGES • GLASSES ON

A crescent will begin to grow on the opposite side of the sun from where the diamond ring appeared at the beginning. This crescent is the lower atmosphere of the sun, beginning to peek out from behind the moon and it is your signal to stop looking directly at the eclipse. **Make sure you have safety glasses back on—or are otherwise watching the eclipse through a safe, indirect method—before the first flash of sunlight appears around the edges of the moon.**

Images 1, 2, 4, 5 Credit: Rick Fienberg, TravelQuest International and Wilderness Travel
Image 3 Credit: Arne Danielson

TOTAL SOLAR ECLIPSE: Monday • August 21, 2017

This will be the first total solar eclipse visible in the continental United States in 38 years.



Prepared by Tim Holland, Salem Media Group and Jayne Crisp, Greenville Mental Health Center 8/2017.