Idaho 2017 Total Solar Eclipse

A total solar eclipse will occur on Monday, August 21, 2017. The event has been described as the "Great American Eclipse" as it will be visible in totality within a narrow band across the entire contiguous United States.

- **Begins**: Oregon at 9:06 AM PDT
- **Ends**: South Carolina at 4:06 PM EDT
- **Last total solar eclipse in the US**: February 26, 1979
- **Next total solar eclipse in the US**: April 8, 2024 (Texas to Maine)

SAFE VIEWING

The ONLY time it is safe to look at an eclipse without eye protection is in the brief time of totality – the 1 minute and 49 seconds when the sun is completely blocked.

During the partial phase, which will last for almost three hours, you will need appropriate protection to look at the sun without risking either temporary or permanent loss of visual function. The best protection is a pair of special glasses made out of aluminized mylar made specifically for solar eclipses. Be sure to take the glasses off ONLY during totality for best viewing. You can also use #14 welder’s glass. Regular sunglasses, smoked glass, and many welders masks are not sufficient.

The safety portion of NASA’s eclipse pages lists the following directions:

- Always inspect your solar filter before use; if scratched or damaged, discard it. Read and follow any instructions printed on or packaged with the filter.
- Always supervise children using solar filters.
- 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 or partially eclipsed sun through an unfiltered camera, telescope, binoculars, or other optical device.
- Similarly, do not look at the sun through a camera, a telescope, binoculars, or any other optical device while using your eclipse glasses or hand-held solar viewer — the concentrated solar rays will damage the filter and enter your eye(s), causing serious injury.
FUEL UP

The Idaho Department of Commerce encourages filling vehicles up with fuel well in advance of visitors arriving in the area.

TRAVEL PREPAREDNESS:

Long travel delays are anticipated. Plan ahead. Pack sufficient food, water and emergency supplies. The Idaho Office of Emergency Management published this travel checklist in their Summer 2017 Newsletter:
Road condition updates: 511.idaho.gov.

Travel alerts: [https://visitidaho.org/storylines/travel-alerts/](https://visitidaho.org/storylines/travel-alerts/)

United States Path of Totality

<table>
<thead>
<tr>
<th>State</th>
<th>Time (PDT/CDT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>9:04 AM - 11:48 AM PDT</td>
</tr>
<tr>
<td>Idaho</td>
<td>10:10 AM - 12:59 PM MDT</td>
</tr>
<tr>
<td>Wyoming</td>
<td>10:16 AM - 1:14 PM MDT</td>
</tr>
<tr>
<td>Nebraska</td>
<td>10:25 AM MDT - 2:32 PM CDT</td>
</tr>
<tr>
<td>Kansas</td>
<td>11:39 AM - 2:34 PM CDT</td>
</tr>
<tr>
<td>Missouri</td>
<td>11:40 AM - 2:46 PM CDT</td>
</tr>
<tr>
<td>Illinois</td>
<td>11:51 AM - 2:49 PM CDT</td>
</tr>
<tr>
<td>Kentucky</td>
<td>11:54 AM - 2:52 PM CDT</td>
</tr>
<tr>
<td>Tennessee</td>
<td>11:57 AM - 3:59 PM CDT</td>
</tr>
<tr>
<td>North Carolina</td>
<td>1:05 PM - 4:01 PM EDT</td>
</tr>
<tr>
<td>Georgia</td>
<td>1:06 PM - 4:01 PM EDT</td>
</tr>
<tr>
<td>South Carolina</td>
<td>1:07 PM - 4:10 PM EDT</td>
</tr>
</tbody>
</table>

Weather

According to greatamericaneclipse.com “Idaho will be a desirable state to view the eclipse because of good weather prospects.” Local weather forecasts are available at:

**Websites:**
- Weather.com
- NOAA.com
- Forecast.io

**Apps:**
- Weather underground
- DarkSky
- RainAware
- The Weather Channel

Additional Resources:

**General Eclipse Resources:**
We have cited many of the below sources throughout this document, but encourage you to navigate through them on your own. There is a plethora of information at each of these sites, and we’re certain you’ll find items that will help your planning in anticipation of the August eclipse.

- https://eclipse2017.nasa.gov/
- www.beingintheshadow.com
- https://www.greatamericaneclipse.com/idaho/
- http://eclipsophile.com/
- https://eclipse.aas.org/
Frequently Asked Questions

Q: What is a solar eclipse?
A: A solar eclipse occurs when the moon passes between the sun and the 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.

Q: What is so special about a total solar eclipse?
A: The 2017 total solar eclipse is special because the path of totality will cut diagonally across the entire United States beginning in Oregon and continuing all the way to Charleston, Carolina. The last time a total solar eclipse swept the whole width of the U.S. was in 1918.

The next total solar eclipse in the U.S. will be 2024 and will be visible only between Texas and Maine.

Total solar eclipses are rare. Even when they do occur on Earth, many pass largely through oceans or remote areas where few can see them. For instance, the last total solar eclipse in the continental US was 1979.

Q: The moon is so much smaller than the sun so how does the moon obscure the sun?
A: The moon is approximately 400 time smaller than the sun, but the sun is also roughly 400 times farther away. This is why from Earth the two celestial bodies appear to be about the same size.

Q: When can you see it?
A: The total eclipse only lasts about two minutes. Use the table below for approximate start times, or check out this NASA site for more detailed information.

<table>
<thead>
<tr>
<th>Location</th>
<th>Partial Start</th>
<th>Total Start</th>
<th>Total Max</th>
<th>Total End</th>
<th>Partial End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Border</td>
<td>10:10:09 am</td>
<td>11:24:56 am</td>
<td>11:26:01 am</td>
<td>11:27:06 am</td>
<td>12:48:04 pm</td>
</tr>
<tr>
<td>Idaho Falls</td>
<td>10:15:11 am</td>
<td>11:33:02 am</td>
<td>11:33:55 am</td>
<td>11:34:49 am</td>
<td>12:58:04 pm</td>
</tr>
<tr>
<td>Eastern Border</td>
<td>10:16:29 am</td>
<td>11:34:26 am</td>
<td>11:35:36 am</td>
<td>11:36:46 am</td>
<td>12:59:51 pm</td>
</tr>
</tbody>
</table>
Q: Is it safe to look at the sun during the eclipse?

A: The ONLY time it is safe to look at an eclipse is in the brief time of totality – the 1 minute and 49 seconds when the sun is completely blocked. During the partial phase, which will last for almost three hours, you will need appropriate protection to look at the sun without risking either temporary or permanent loss of visual function. The best protection is a pair of special glasses made out of aluminized mylar made specifically for solar eclipses. Be sure to take the glasses off ONLY during totality for best viewing. You can also use #14 welder’s glass. Regular sunglasses, smoked glass, and many welders masks are not sufficient.

Q: How can I photograph a total solar eclipse?

A: You will need to purchase a solar filter that will reduce the brightness of the sun so that the light intensity does not destroy your camera. If you ONLY take a photo at the moment of totality, you will not need this filter, and will be rewarded by being able to photograph the faint corona, which will not be visible if you have the filter in place. Most digital cameras with telephoto lenses of 100 mm or larger will show a disk for the eclipse that will show some detail. As a trial, photograph the full moon at night. It will be the same diameter as the total eclipse, so you can practice on the moon first to get the right telephoto lens combination.

Q: Are there solar eclipse apps for my phone?

A: Several eclipse apps are available including:

Total Solar Eclipse - a free mobile app that incorporates livestreaming and gives access to live video streams of the total solar eclipse occurring on 8-21-17 from the west to east coasts of the United States.

NASA App - Showcases a huge collection of the latest NASA content including images, videos on-demand, NASA television, latest tweets, and much more.

Smithsonian Solar Eclipse app

ADDITIONAL RESOURCES:

Fire Restrictions Hotline: 1-844-ID-FIRES or 1-844-433-4737

Idaho Fire Info: http://www.idahofireinfo.com/p/fire-restrictions.html

Provides timely, accurate information for wildland fires, fire restrictions, prevention and education across the state.

Idaho Incident Information System InciWeb: https://inciweb.nwcg.gov/state/13/

Sources:

https://eclipse2017.nasa.gov/safety

