

Eclipse Messaging: Where, When, Why

Dr. Tyler Nordgren
SpaceArtTravelBureau



AUGUST 21, 2017



DON'T FORGET TO
GO FOR THE SUN,
& STAY FOR THE STARS!

THE ALL-AMERICAN TOTAL SOLAR ECLIPSE

PARTIAL ECLIPSE
VISIBLE FROM EVERY
PARK & MONUMENT



TOTALITY
VISIBLE WITHIN
THE NARROW BAND

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SEE SUN AND
MOON ALIGN
WITH YOU!

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Meets the Requirement
for ISO 12312-2:2015

SAFE FOR DIRECT SOLAR VIEWING

ECLIPSE SHADES

Mfg. in U.S.A. by
Rainbow Symphony Inc.
Riverside, CA 92505, USA
(951) 758-6400
eclipse@rainbowsymphony.com
www.rainbowsymphony.com

CE

"CE" certified which
meets the transmission
requirements of scale
12-16 of EN 169
1992.

Certified by: British
Standards Institute
#0086 Notified body
HP2-45Q

INSTRUCTIONS FOR USE: Wear your Eclipse Shades™ to protect your eyes from solar radiation any time you look directly at the Sun or the Sun's reflection. When looking at a solar eclipse, use your Eclipse Shades™ whenever ANY PART of the Sun, no matter how small is visible. This product should not be used with any other optical appliances such as cameras, telescopes or binoculars. This product is not a toy. Children should use only with adult supervision.

The All-American Total Solar Eclipse

On August 21, 2017 the Moon will pass in front of the Sun and create the first total solar eclipse visible from the continental United States since 1979. Every national park and monument in the U.S. will see at least a partial solar eclipse that day (see map on front). For those in the band running from Oregon to South Carolina the Sun and Moon will be perfectly aligned. When this happens the Sun will be totally blacked out for durations up to nearly two and a half minutes. For park units across the country this period of "totality" begins at approx: 10:21 a.m. PDT in John Day Fossil Beds Nat. Mon., 11:34 a.m. MDT in Grand Teton Nat. Park, 1:02 p.m. CDT in Homestead Nat. Mon., and 2:34 p.m. EDT in Great Smoky Mtns Nat. Park (while the partial phase of the eclipse may begin up to 80 minutes before and end 80 minutes after). All other parks at similar longitudes (locations east and west) will see maximum partial eclipses at approximately these times.

For your safety never look directly at the Sun with the naked eye.

A solar eclipse is one of nature's grandest spectacles, but looking directly at the Sun is not safe except during the few brief moments when the Moon entirely blocks the Sun's face and the eclipse becomes total. The only safe way to look directly at the Sun is through special-purpose solar filters (such as this card). Homemade filters or sunglasses are not safe for looking at the Sun. Always inspect your solar filter before use; if scratched or damaged, discard it. Always supervise children using solar filters. It is safe to remove your solar filter only when the Moon completely covers the Sun's bright face and it suddenly becomes dark. As soon as the bright Sun begins to reappear, replace your solar viewer to glance at the remaining partial phases. By following these simple rules, you can safely enjoy the view and be rewarded with memories to last a lifetime. For more information visit NASA's eclipse website at eclipse2017.nasa.gov and the American Astronomy Society's eclipse website at eclipse.aas.org

Go for the Sun and stay for the stars!

Since solar eclipses occur when the Moon passes between the Earth and Sun, the nights before and after an eclipse appear moonless and dark. This is the best time to see a star-filled sky at night. During August the summer Milky Way, our home galaxy of over a hundred billion stars, arches directly overhead after sunset. Staring at the spectacular array of stars in the night sky is a quintessential experience for many national park visitors. America's national parks help protect our skies from artificial light pollution and so are ideal places to see a naturally starry sky.

For the All-American total solar eclipse, enjoy the wonder of our universe by both day and night and learn more about how we are exploring the stars thanks to organizations like The Planetary Society and preserving our views of them thanks to the work of the National Park Service Night Sky Program. Go for the Sun and stay for the stars!

Sustainable Outdoor Lighting Principles

The National Park Service is charged with protecting night skies along with other park resources by reducing light pollution through the use of sustainable outdoor lighting. In addition to visitor experience, good lighting conditions are important for wildlife habitat, cultural resources, wilderness character, and human health and safety. Park friendly lighting also improves energy efficiency, reduces costs and provides opportunities for local economic growth through astronomy-based tourism. Astronomy-based activities are among the most popular visitor programs offered in parks and night sky festivals often attract thousands of participants.



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SEE THE SUN & MOON ALIGN IN A "RING OF FIRE!"

CRATER LAKE
LAVA BEDS

70% 80% 90%

GREAT BASIN
CAPITOL REEF
BRYCE CANYON
GLEN CANYON
GRAND CANYON
CANYONLANDS
NATURAL BRIDGES
MESA VERDE
CANYON DE CHELLY
AZTEC RUINS
CHACO CULTURE
EL MALPAIS
WHITE SANDS
CARLSBAD CAVERNS

BANDELIER
PETROGLYPH
SALINAS PUEBLO MISSIONS

BIG BEND

THE GREAT WESTERN ANNULAR ECLIPSE

PARTIAL ECLIPSE VISIBLE FROM ALL WESTERN U.S.

A RING OF FIRE VISIBLE TO PARKS WITHIN THE PATH

2023

Graphic: SpaceArtTravelBureau.com