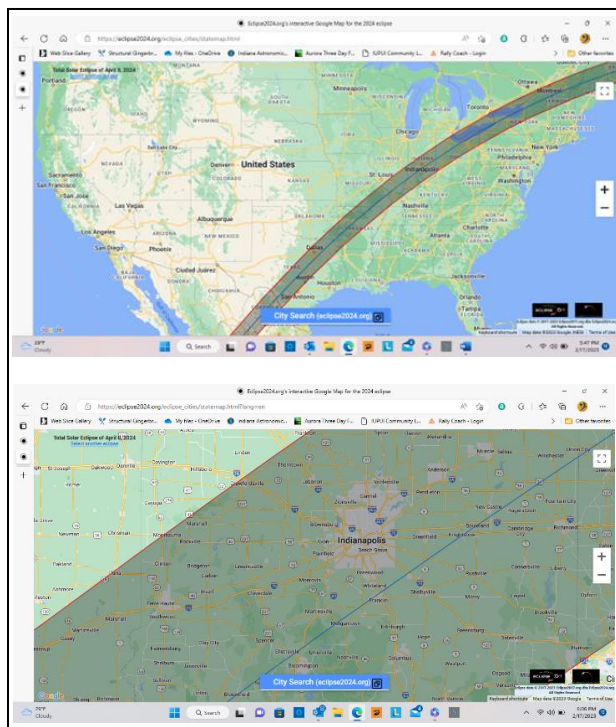


Here is an **AWESOME** Eclipse Simulator:  
<https://eclipse2024.org/eclipse-simulator/>



Totality happens at slightly different times in different locations. Visit the simulator to find out when totality will happen in **YOUR** area!

For a downloadable copy of this brochure go to:  
[www.iasindy.org](http://www.iasindy.org)

[www.iasindy.org](http://www.iasindy.org)



## Useful Links

**Eclipse 2024 (Simulator and so much more)**  
<https://eclipse2024.org>

**American Astronomical Society (Eclipse Page)**  
<https://eclipse.aas.org>

**NASA Page on Eclipses**  
<https://solarsystem.nasa.gov/eclipses/home/>

**Indiana Astronomical Society**  
<https://iasindy.org>

**Fun Animation showing how the eclipse will travel through Indiana.**  
<https://www.shadowandsubstance.com/indiana-2024/>

**Eclipse Projector for Indirect viewing (NASA)**  
<https://solarsystem.nasa.gov/eclipses/safety/>

**Top 10 Rules for Photographing the Eclipse**  
<https://www.eclipse-chasers.com/photo/Photo.shtml>

**Smartphone Photography for the Eclipse**  
<https://eclipse2017.nasa.gov/smartphone-photography-eclipse>

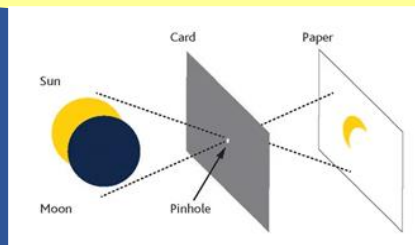
**AAS Authorized Viewing Materials: (Glasses, Solar Viewers, Solar Filters)**  
Glasses **MUST** be ISO certified to be safe. Do not rely on large online retailers to protect your eye safety!

[www.americansolareclipse.com](http://www.americansolareclipse.com)

<https://www.greatamericaneclipse.com/eclipse-viewing>

[https://eclipse2024.org/glasses\\_order.html](https://eclipse2024.org/glasses_order.html)

<https://www.rainbowsymphony.com/collections/eclipse-glasses-safe-solar-viewers>



<https://lookafteryoureyes.org>

**An Event 819 Years in the Making!**  
1205 (September 14)—The last Total Solar Eclipse visible from what was to become the Circle City.  
**Save the Date!**

# Total Solar Eclipse

## April 8, 2024



**Eclipse Day is April 8, 2024!**

Indianapolis is an excellent Place to see totality!

- The Eclipse begins around 1:50 PM EDT.
- The Eclipse reaches Totality around 3:06 PM EDT.
- People in the Indianapolis area will experience approximately 3m 45s of totality.

Photography credit: Rick Galloway

## Experiencing the Total Solar Eclipse

The entire solar eclipse event is caused by the moon moving in front of the sun, casting a shadow on the earth's surface. The event is broken down into a series of "Contacts."

**First Contact:** The Eclipse begins when the moon first "touches" the sun's solar disk. Observing with a safe solar filter is an absolute must. During the next hour or so, the moon hides more and more of the sun. By about 15 minutes prior to totality, sunlight becomes noticeably dimmer.

**Diamond Ring:** very close to totality, you'll see the Diamond Ring stage. It shines like a brilliant diamond set into a pale ring created by the pearly white corona surrounding the moon's black silhouette. This is stunning to see!

**Third Contact:** the second set of Bailey's Beads appear on the other side of the sun. Totality is over and you must put your eclipse glasses or solar viewers on now. During the next hour or so, the moon reveals more and more of the sun.

**Fourth Contact:** The eclipse ends. The last tiny indentation of the moon on the sun disappears, and the moon no longer covers any part of the solar surface. The eclipse is officially over.

## Fun Total Solar Eclipse Facts

1000's of years ago, many people were terrified of eclipses and thought they were due to all kinds of monsters, bad omens, or curses. The Native American Pomo tribe of California believed that a hungry bear walking through the Milky Way ate the sun.

## Eye Safety for Total Solar Eclipse

Here are some important safety guidelines to follow during a total solar eclipse.

View the Sun through eclipse glasses or a handheld solar viewer during the partial eclipse phases before and after totality.

You can view the eclipse directly without proper eye protection only when the Moon completely obscures the Sun's bright face (You'll know it's safe when you can no longer see any part of the Sun through eclipse glasses or a solar viewer.)

As soon as you see even a little bit of the bright Sun reappear after totality, immediately put your eclipse glasses back on or use a handheld solar viewer to look at the Sun.

[https://solarsystem.nasa.gov/eclipses/safety/#otp\\_eye\\_safety\\_for\\_total\\_eclipses](https://solarsystem.nasa.gov/eclipses/safety/#otp_eye_safety_for_total_eclipses)



## Other Safety Tips

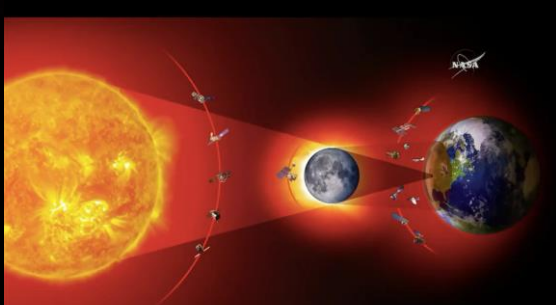
You cannot tell that you are injuring your retinas while you stare at the Sun because it doesn't hurt. This is especially true during partial phases of the eclipse. You won't know about the damage until it is too late.

Only use ISO approved solar glasses/viewers. Purchase from sources that get glasses from approved suppliers. (Hint: Avoid large online shopping sites that don't verify their suppliers). Links to several retailers are provided on the back page.

Never use glasses/viewers that have been scratched or damaged. Never touch the lenses of glasses or viewers

There are many ways to view the eclipse indirectly. We have provided links with additional information on the back of this brochure.

**NEVER look at the partial phases of the eclipse without certified eye protection**



**Baily's Beads:** just prior to totality, all that remains of the sunlight are a few shafts of light called Baily's Beads which look like a few brilliant beads at the edge of the sun that disappear one after another.

**Second Contact:** totality begins when Baily's Beads vanish, the brilliant solar surface is hidden, and the sun's corona glows around the black moon's silhouette.

The word "eclipse" is Greek for "abandonment" or "downfall."

The longest historical total eclipse lasted 7 minutes 27.54 seconds on June 15, 743 BC.

There are between 2 and 5 solar eclipses around the world each year. However, a total solar eclipse occurs every 18 months or so.

The shadow of a solar eclipse can travel at more than 2,000 mph across the surface of the earth.

When the surrounding sky is dark during an eclipse, it's possible to see constellations and even planets as if it were nighttime.

About 600 million years from now, there will be no more total solar eclipses. There will only be annular eclipses. The moon is moving away from earth at a rate of four centimeters per year and will be too far away to cast a shadow on earth.

Photography Credit: Rick Galloway