

TOTAL SOLAR ECLIPSE



4.8.2024

On the afternoon of Monday, April 8, 2024, Western New York will experience a total solar eclipse. This is a special event. Many of us remember the August 2017 eclipse, but that was just a partial solar eclipse. During a total solar eclipse, viewers can see the sun's atmosphere, known as the corona since the disc of the sun's direct sunlight is completely blocked by the moon.

The last time a total solar eclipse could have been seen from the Western New York area was on January 24, 1925 and there won't be another one visible from this area until 2144!

Below is a list of resources that may be helpful for those interested in learning more and viewing this astronomical event.

[Eclipse Presentation](#)

Eclipse Day Weather Forecasts

As Eclipse Day approaches, check back regularly for updates.

[Astrospheric](#)

- Astrospheric is also available as a free app

[NOAA GOES East CONUS satellite cloud map](#)

- Times on this site are given in UT (Universal Time), EDT (Eastern Daylight Saving Time) is four hours behind. So relevant time frame for the eclipse in our area is 18:00 to 20:30 UT

[Make a Solar Eclipse Glasses Case](#)

Use this handy template to make a protective case for your eclipse glasses.

Resource	Description
What is a Solar Eclipse?	NASA Space Place provides a simple explanation of this phenomenon for elementary school aged children.
Total Eclipse Map	Google Map with Eclipse path plotted on it - click on any location for exact times of eclipse in that location. Find your house!
Where to view the eclipse locally	This is a list of local eclipse watching events and information on viewing the eclipse safely
Buffalo Museum of Science Eclipse Page	Buffalo Museum of Science provides information on the upcoming eclipse. - Note that the Museum will NOT be open on April 8, 2024.
Total Solar Eclipse Safety	NASA's guide to safely viewing a total solar eclipse
Solar Eclipse Timer	The data set for the April eclipse costs \$1.99. It uses your geolocation to tell you when it is safe to remove your eclipse glasses to view the sun's corona and when you should put them back on for the partial phases.
What it's like to Watch a Total Solar Eclipse	Are you wondering what all the fuss is about? Science communicator and host of YouTube's Veritasium channel, Derek Muller, documented his first total solar eclipse experience in 2019 and posted it to his YouTube channel.
2024 Solar Eclipse - What to Expect	NASA compiled this article highlighting some interesting phenomena that occur during a total solar eclipse.
NASA KSC at Niagara Falls, NY	NASA is hosting events in Niagara Falls from April 4-8, 2024
Life Advice From an Eclipse Chaser	Science writer, David Baron, received some advice 20 years ago that changed his life - Tedx
EclipseWise 2024	Fred Espenak, former NASA scientist and world

	renowned eclipse expert has a page loaded with helpful information and resources to prepare yourself and your loved ones for the April 8 Eclipse
Solar Eclipse Flyover	This short computer-animated video shows the “moon’s eye view” as its shadow moves across North America

Get Involved

The entire eclipse will last from around 2PM to just past 4:30PM on April 8, but totality will last just a little under 4 minutes. How do you keep yourself and/or your kids engaged during the time leading up to and following totality? Become a scientist!

Globe Observer Eclipse Program	The Globe Observer Program, sponsored by NASA, is one of the largest citizen science campaigns. While it is mainly focused on Clouds, Mosquitoes, Trees and Land Cover, in March they will re-activate their Eclipse Observer Program in the lead up to the eclipse.
Solar Eclipse Reporter	Conduct interviews with the people who are viewing the eclipse around you
Animal Behavior During Solar Eclipse	Humans sure make a fuss about a total solar eclipse, but what about animals?
Temperature Changes During Solar Eclipse	Changes in temperature are one of the most noticeable and easiest physical phenomena to track during an eclipse.
Sharp and Fuzzy Shadows	Explore how the changing light conditions affect the way that shadows are cast during a solar eclipse.