



Total Solar Eclipse April 8th, 2024



[Official NASA 2024 Eclipse Page](#)

On Monday, April 8th, 2024, a total solar eclipse will cross North America. The eclipse will pass over parts of Mexico, the central and eastern United States, and southeastern Canada. The path of totality will first enter the United States in Texas, then pass through Oklahoma, Arkansas, Missouri, Illinois, Kentucky, Indiana, Ohio, Pennsylvania, New York, Vermont, New Hampshire, and Maine.



[A Tour of NASA's 2024 Solar Eclipse Map](#)

It is NOT safe to look directly at the Sun without specialized eye protection for solar viewing; the only time you can is during the brief total phase of a total solar eclipse, when the Moon completely blocks the Sun's bright face, .

Viewing any part of the bright Sun through a camera lens, binoculars, or a telescope without a special-purpose solar filter secured over the front of the optics will instantly cause severe eye injury.

Persons wanting to view the eclipse **need to wear special eclipse glasses;** eclipse glasses are NOT regular sunglasses

[Eye Safety - NASA Science](#)





Total Solar Eclipse April 8th, 2024 FAQs



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What does the path of totality mean?

The path of totality is where observers will see the Moon completely cover the Sun. Cities and towns in New York State within the path of totality include Jamestown, Buffalo, Rochester, Syracuse, Watertown, Old Forge, Lake Placid and Plattsburgh.

What can people expect during the eclipse?

During the eclipse, the sky will get dark as if it were dawn or dusk. Even if skies are cloudy, people will still notice a darkening of the sky. Nocturnal wildlife may awaken while non-nocturnal wildlife may think it's time for bed.

How big of a temperature drop do you get during a total solar eclipse?

You can expect the temperature to drop about 10 degrees Fahrenheit depending on the humidity and cloud cover at your location.

How might Lakes Erie and Ontario impact the weather conditions on the day of the eclipse?

Proximity to the lakes can have an effect on the weather depending on the weather patterns on the expected day. During the spring, the lakes tend to warm slower than the surrounding land areas. On a warm spring day, a phenomenon called a **lake shadow** can sometimes develop downwind of the lakes resulting in reduction of cloud cover by as much as 15 percent. However, on a cold spring day, higher amounts of **lake effect** clouds or precipitation could occur near the lakes.

When was the last total eclipse in New York State?

January 24, 1925. It was seen in New York City. It was reported that those above 96th Street in Manhattan saw a total solar eclipse while those below 96th Street saw a partial eclipse.

When will the next total eclipse be in New York State?

May 1, 2079. The path of totality will start in eastern Pennsylvania. A total eclipse will be visible along the path of Philadelphia, New York City, Boston and Portland in the United States.

When will the next total eclipse be that can be seen from the contiguous United States?

August 22-23, 2044. The path of totality will cross over Montana, North Dakota & South Dakota on the 22nd.

Why are eclipses rare? The moon's orbit tilts - Sometimes the moon's shadow is too high above the Earth - Sometimes it is too low - Other times, it is just right.

NASA Goddard Video: [What determines when we have an eclipse?](#)

What do I do if I want to use a camera, binocular, and/or telescope during the eclipse?

Do NOT use eclipse glasses or handheld viewers with cameras, binoculars, or telescopes. Those require different types of solar filters. When viewing the partial phases of the eclipse through cameras, binoculars, or telescopes equipped with **proper solar filters**, you do not need to wear eclipse glasses. The solar filters do the same job as the eclipse glasses to protect your eyes. [Eye Safety - NASA Science](#)