

Totality insanity: Eclipse frenzy hits North America

April 8 2024, by Moises Avila with Issam Ahmed in Washington



Eclipse glasses are worn by a statue of George Washington on April 07, 2024, in Houlton, Maine.

Eclipse mania is sweeping across North America as a breathtaking celestial event on Monday promises a rare blend of commerce,

science—and celebration.

The moon's shadow will land on Mexico's Pacific coast at 2:07 pm ET (1807 GMT), then speed northeast across a 15-state swath of the United States and on to Canada, exiting the continent over Newfoundland just under an hour and a half later.

Festivals, viewing parties, and even a mass wedding are planned along the eclipse "path of totality," where the moon will completely obscure the sun's light for up to a few minutes—if rain clouds don't play spoilsport, which could be the case in the southern and central US.

"Eclipses have a special power," NASA administrator Bill Nelson said recently. "They move people to feel a kind of reverence for the beauty of our universe."

This year's path of totality is 115 miles (185 kilometers) wide and home to nearly 32 million Americans, with an additional 150 million living less than 200 miles from the strip. Those further away can still enjoy a [partial eclipse](#), or follow a webcast provided by US space agency NASA.

The next total solar eclipse that can be seen from a large part of North America won't come around until 2044.



John Bills tests his camera equipment on the eve of a total solar eclipse across North America, in Cape Vincent, New York, on April 7, 2024.

Festivals, flights, romance

Businesses are capitalizing on the excitement with special events, while hotels and short-term rentals in prime viewing locations have been booked solid for months.

At the Stonehenge II park in Ingram, Texas, a replica of the prehistoric structure in England, eclipse watchers had gathered from across the world.

"This is our third solar eclipse," 62-year-old Jim Saltigerald, who was

attending with his wife and two children, told AFP. "We're all praying and hoping that we have a good break in the clouds and get to see it."

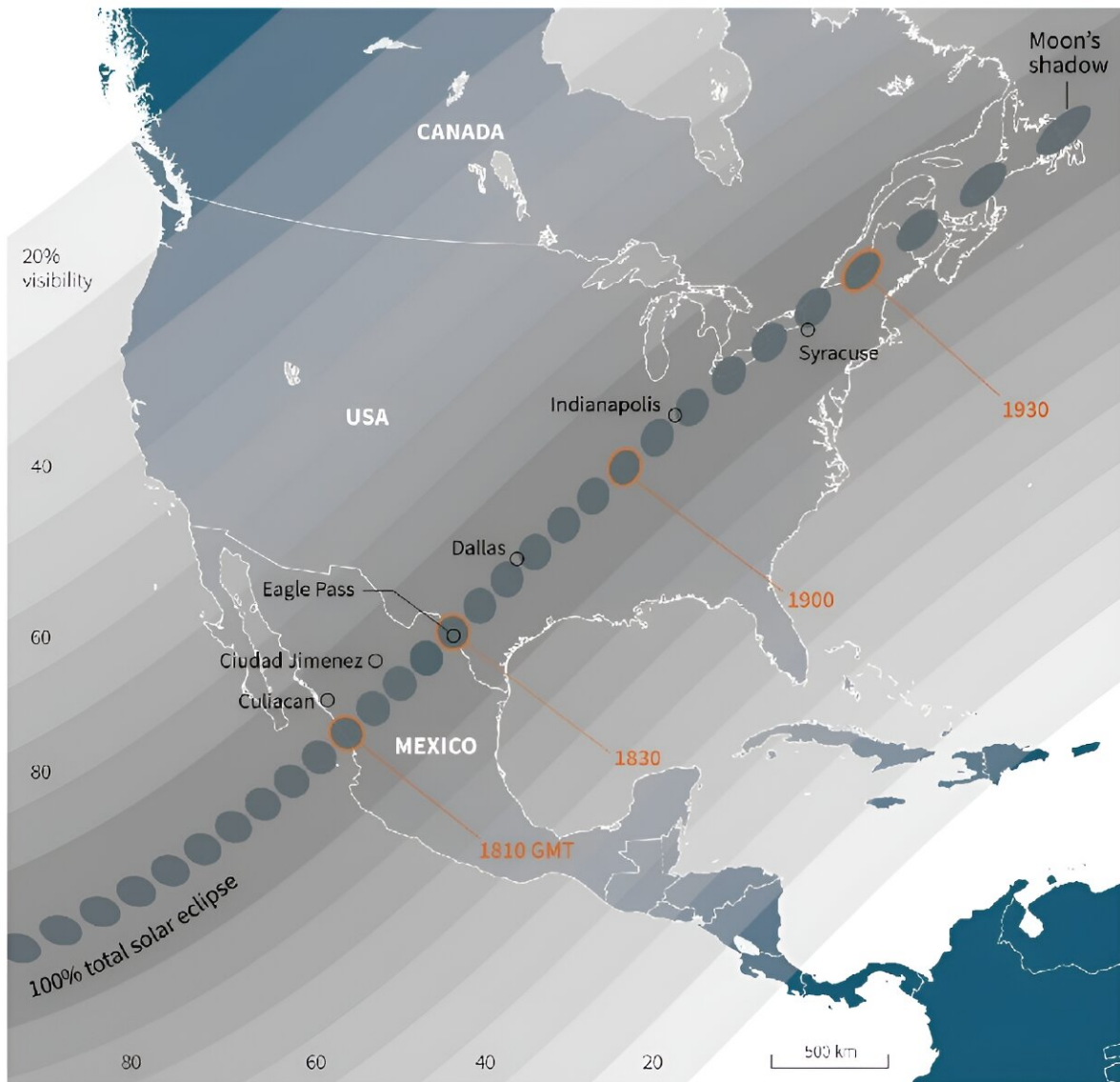
In Cleveland, where local officials expect some 200,000 visitors, the Rock & Roll Hall of Fame plans a four-day "Solarfest" of live music.

And in Russellville, Arkansas, 300 couples are set to exchange vows at "A Total Eclipse of the Heart" mass wedding ceremony, with the "thin circle of light around the moon resembling a huge wedding ring in the sky!" the event's website boasts.

Many schools along the path will be closed or letting students out early.

Total solar eclipse on April 8

A rare natural phenomenon that occurs when the Moon passes between the Sun and Earth, completely blocking the face of the Sun; the sky darkens as if it were dawn or dusk



Source: NASA



Map showing the areas where the shadow of the Moon will pass during the total solar eclipse in Mexico, US and Canada on April 8.

Several airlines have advertised flights scheduled to pass under the eclipse, while Delta has even planned two special trips along the path of totality.

The Perryman Group, a Texas-based research firm, estimates direct and indirect economic impacts of this year's eclipse could reach \$6 billion.

Scientific windfall

Then there's the science. NASA plans to launch a trio of sounding rockets before, during and just after the eclipse to measure changes caused by the sudden darkness to the ionosphere, an upper layer of the atmosphere important for long-distance radio communication.

The eclipse also offers a golden opportunity to study the sun's corona, the outer layer of our star's atmosphere which is normally hidden by the blinding light of the surface.

Researchers are particularly thrilled about the sun being near the peak of its 11-year cycle.

Startling animal behavior has been noted during past eclipses: giraffes have been seen galloping, while roosters and crickets can start crowing and chirping.



Nashville High School announces it will be closed during the April 8 solar eclipse on April 05, 2024 in Nashville, Illinois.

NASA has invited the public to contribute to research through its citizen-science project Eclipse Soundscapes, by recording the sounds of nature and submitting their multisensory observations.

In humans, eclipses trigger feelings of awe and "prosocial" tendencies towards others, research has found.

Safety first

Safety is paramount, with authorities stressing people must use certified

eclipse glasses to prevent retinal injury.

Past eclipses have been followed by increases in hospital visits by people with complaints of blurry vision, changes in color perception, and blind spots, with the outlook for recovery far from certain.

Only those within the path of totality can safely remove their eye protection and admire the corona peeking out from behind the silhouette of the moon for a few precious moments.

But they must be certain of when it begins and ends and don their glasses in time, say health professionals.

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