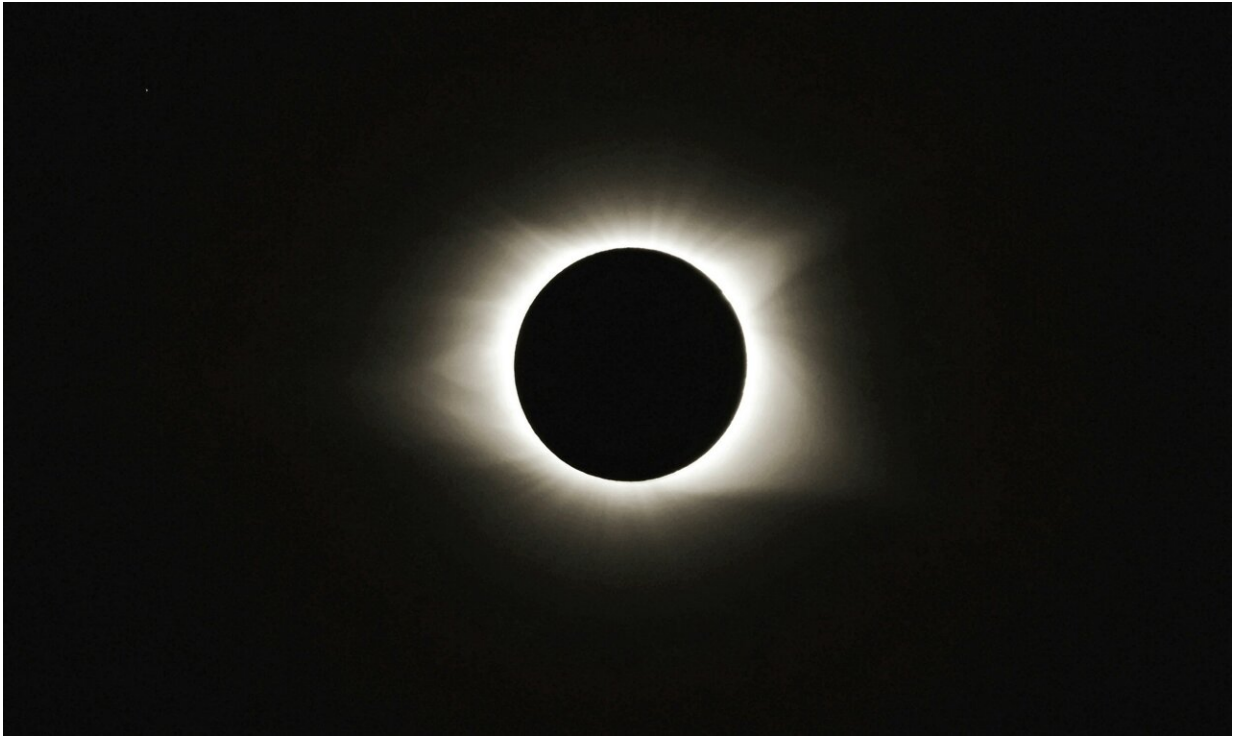


Video: Total solar eclipse seen from space

April 9 2024



Credit: Unsplash/CC0 Public Domain

A total solar eclipse swept across North America yesterday, blocking out the sun momentarily with parts of the continent plunged into darkness. Geostationary satellites orbiting 36,000 km away captured images of the rare celestial event.

These images, captured by the Geostationary Operational Environmental

Satellite (GOES-16), captured the moon's shadow moving across North America from approximately 16:00 to 23:00 CEST (15:00 to 22:00 BST.)

A [total solar eclipse](#) occurs when the moon passes between the sun and Earth and, for a short period, blocks the face of the sun, save for a visible ring of light, known as the sun's corona.

The track of the moon's shadow across Earth's surface, called the path of totality, spanned across the North American continent—from Mexico to the very eastern tip of Canada.

The GOES series is a collaborative development and acquisition effort between National Oceanic and Atmospheric Administration (NOAA) and NASA. The GOES-16 (GOES-East) satellite, the first of the series, provides continuous imagery and atmospheric measurements of Earth's [western hemisphere](#) and monitors space weather.

The Copernicus Sentinel-3 mission also [captured images](#) of the eclipse with its Sea and Land Surface Temperature Radiometer (SLSTR).

The eclipse also acts as a laboratory for researching what happens to weather when the moon's shadow passes over. The shadow makes air temperatures drop and can cause clouds to evolve in different ways. Data from GOES, Sentinel-3 and other satellites are now being used to explore these effects.

Provided by European Space Agency

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