

2026 AUGUST | 12TH PARTIAL SOLAR ECLIPSE MADRID CITY

One of the most magnificent spectacles that nature has to offer is witnessing a total solar eclipse: the Moon positions itself between the Earth and our star, blocking the sunlight that reaches us.

On **August 12th 2026**, a **total solar eclipse** will be visible from the northern third of the Iberian Peninsula, while in our city it will be observable as a partial eclipse.

With a few simple guidelines, you will be able to enjoy the eclipse safely, and keep it in your memory for the rest of your life

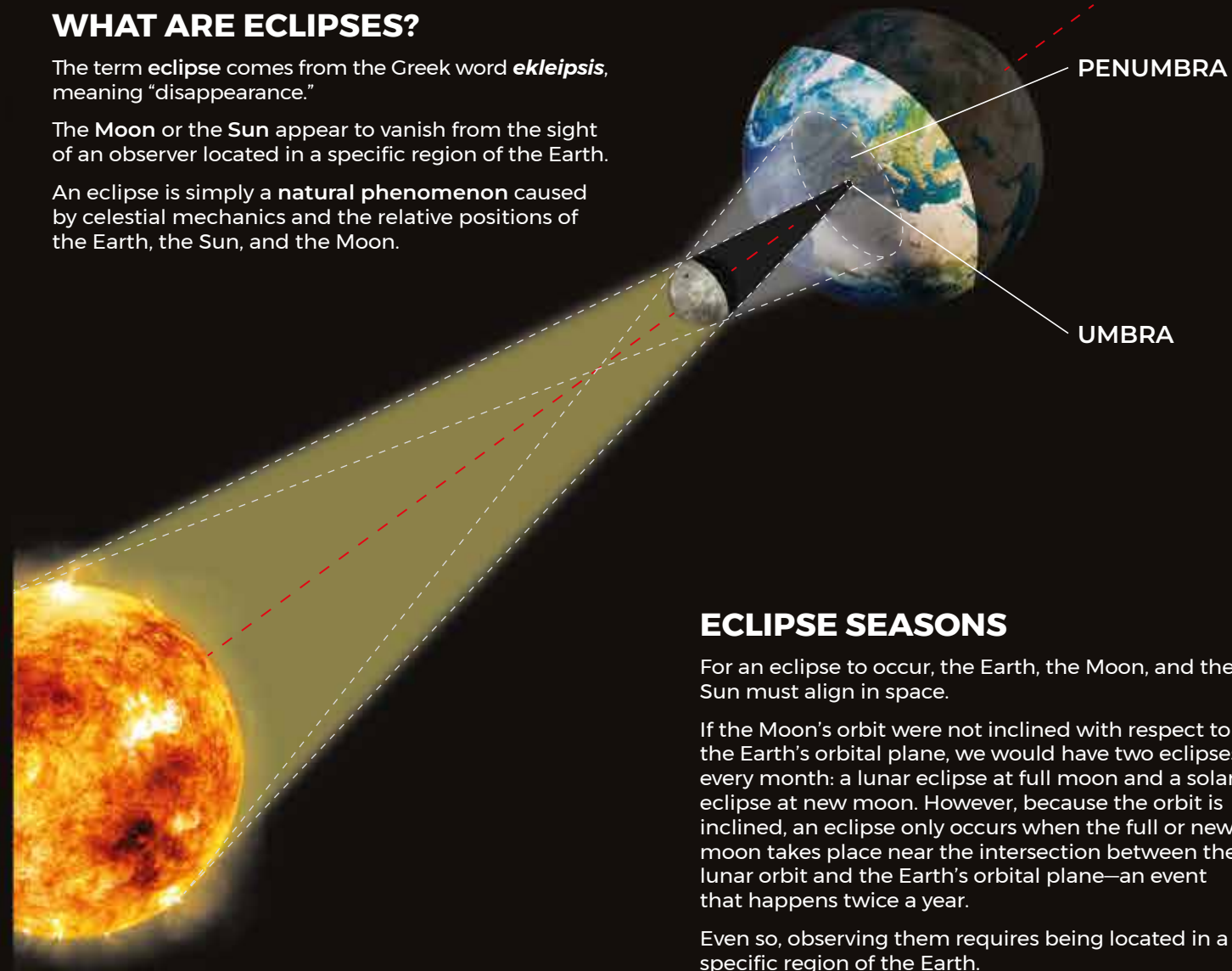


WHAT ARE ECLIPSES?

The term **eclipse** comes from the Greek word *ekleipsis*, meaning “disappearance.”

The **Moon** or the **Sun** appear to vanish from the sight of an observer located in a specific region of the Earth.

An eclipse is simply a **natural phenomenon** caused by celestial mechanics and the relative positions of the Earth, the Sun, and the Moon.



SOLAR ECLIPSE

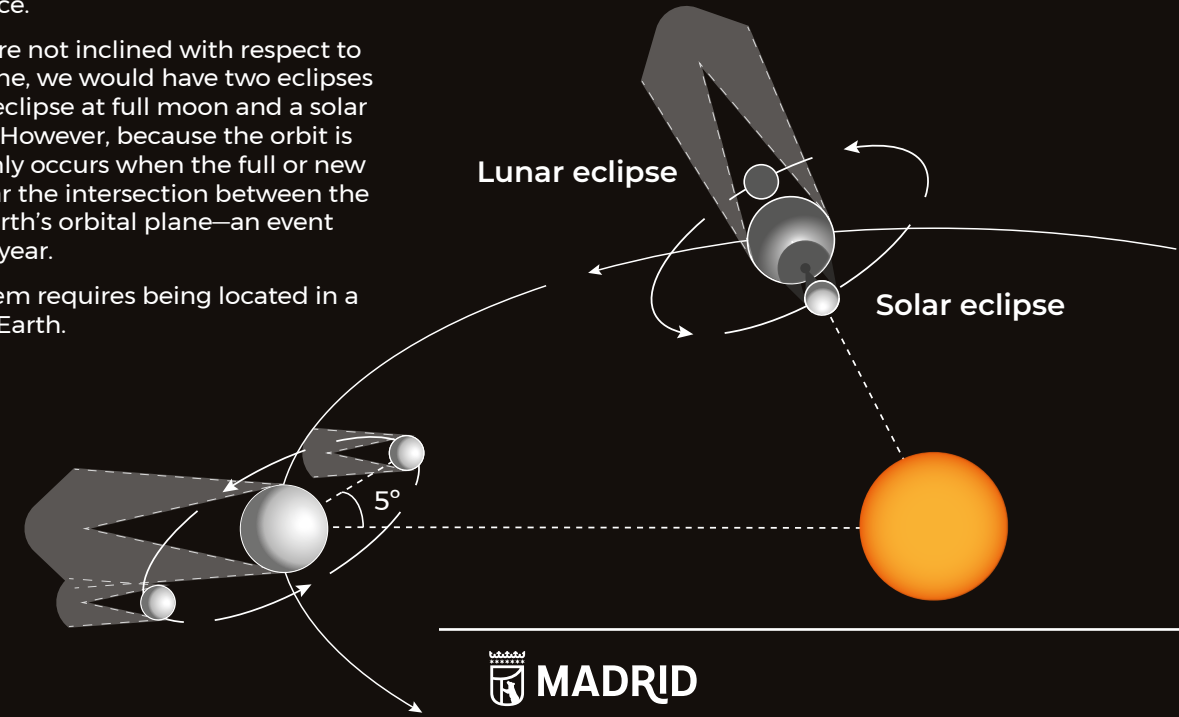
When the Moon passes between the Earth and the Sun, the shadow cast by our satellite touches the Earth's surface and moves across it at great speed. Solar eclipses always occur during the new moon phase, but not every new moon produces a solar eclipse, since the lunar disk is more likely to pass above or below the solar disk (as seen from Earth).

ECLIPSE SEASONS

For an eclipse to occur, the Earth, the Moon, and the Sun must align in space.

If the Moon's orbit were not inclined with respect to the Earth's orbital plane, we would have two eclipses every month: a lunar eclipse at full moon and a solar eclipse at new moon. However, because the orbit is inclined, an eclipse only occurs when the full or new moon takes place near the intersection between the lunar orbit and the Earth's orbital plane—an event that happens twice a year.

Even so, observing them requires being located in a specific region of the Earth.



PENUMBRA

UMBRA

PARTIAL SOLAR ECLIPSE

The Moon covers only part of the Sun.

To observe it directly, it is essential to protect your eyes with an appropriate filter (eclipse glasses).



TOTAL SOLAR ECLIPSE

When the Moon fully covers the Sun, a total eclipse occurs. It lasts only a few brief moments, causing darkness in the middle of the day.

During the totality phase, eye protection (eclipse glasses) is not required, but it must be used before and after this phase.



Lunar eclipse

Solar eclipse



SAFE WAY TO OBSERVE THE SUN WITH THE NAKED EYE

Certified solar eclipse glasses (with black polymer filters or aluminized film “Astrosolar” filters) are the safest way to observe the eclipse with the naked eye.

Eclipse glasses must comply with ISO 12312-2:2015 standard, bear CE certification, include the manufacturer’s or certifier’s name, provide warnings for safe use, clear instructions for storage, and, when applicable (in polymer models), an expiration date.



WHAT MUST NOT BE USED

Never look at the Sun with:



SUNGLASSES
Even if labeled as UV-protective, they are not designed for direct solar viewing.



OPTICAL DEVICES
Cameras, camscoders, binoculars, or telescopes must not be used without professional-grade filters specifically designed for solar observation and placed over the device’s objective lens.



“HOMEMADE” FILTERS
These are strongly discouraged: smoked glass, X-ray films, CDs, exposed negatives, magnifying lenses...



MOBILE DEVICES
Phones, tablets, and similar devices are also unsafe.

None of these items provide adequate protection, not even for a few seconds. To protect your eyes, you must NOT look at the Sun using inadequate protection.

THE ECLIPSE IN SPAIN



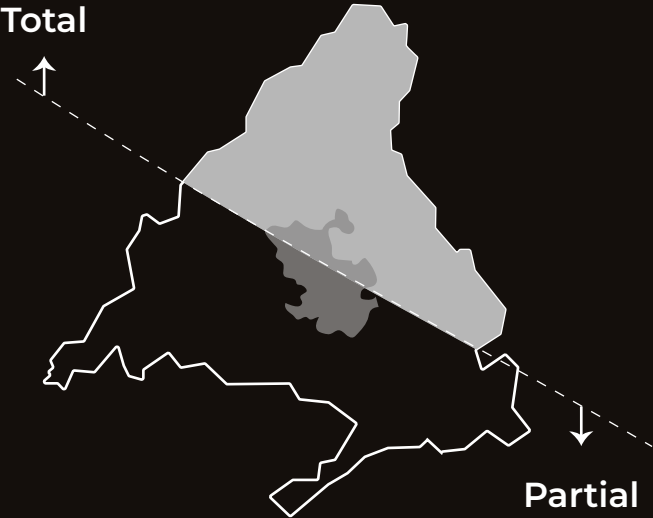
Path of the eclipse in Spain on August 12, 2026 National Astronomical Observatory (National Geographic Institute - IGN)

Spain lies at the very end of the path of totality, which spans a width of 293 km. Consequently, the moment when the Moon completely obscures the Sun is observed low over the western horizon, at sunset, with the Sun positioned very close to the horizon. It is therefore necessary to select elevated observation sites with an unobstructed view toward the west.

Only within the regions crossed by the path of totality does the Moon fully cover the solar disk, producing a total eclipse. The farther one moves away from the central line of the path of totality—either northward or southward—the more markedly the duration of totality decreases.

Outside the path of totality, the eclipse is observed as partial. The fraction of the solar surface obscured by the Moon (the obscuration) reaches at least 92% across the Iberian Peninsula and ranges between 66% and 74% in the Canary Islands.

THE ECLIPSE IN THE COMMUNITY OF MADRID



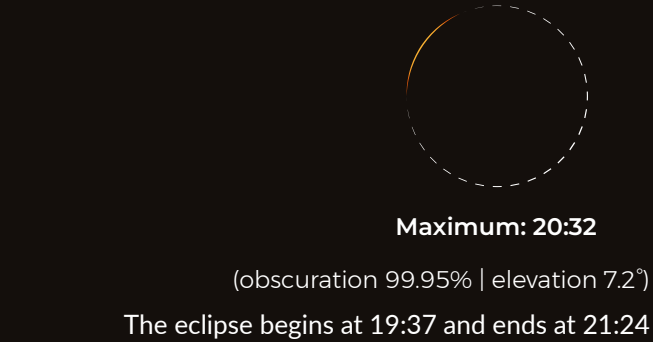
In the Community of Madrid, the southern edge of the path of totality crosses the northern half of the region. This boundary runs from northwest to east across the municipality of Madrid: the northernmost areas of the districts of Fuencarral-El Pardo, Hortaleza, and Barajas fall within the path of totality. However, this dividing line is not perfectly precise: by relying on it and positioning ourselves too close to the boundary, we may miss totality by a very small margin. For this reason, it is advisable to move several kilometres further into the interior of the path to ensure full visibility.

From the town of Buitrago del Lozoya, the eclipse is total, with the maximum eclipse occurring at 20:31 local time, lasting 1 minute and 17 seconds, and with the Sun only seven and a half degrees above the northwestern horizon.

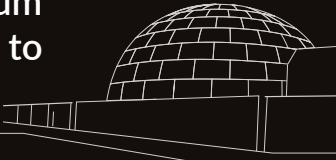
ECLIPSE IN BUITRAGO DEL LOZOYA

Start of the partial eclipse	Maximum	Solar altitude at maximum	Obscuration	End of the eclipse (sunset)
19:35	20:31	7,5°	100 %	21:17

THE ECLIPSE IN MADRID CITY



Keep in mind that from the Madrid Planetarium it will not be possible to observe totality



From the Madrid Planetarium, located within the city, the eclipse will not be observed as total but as partial, with 99.95% of the solar disk covered, making eye protection necessary throughout the entire event and being impossible to experience the magical moment of totality. Maximum obscuration occurs at 20:32 peninsular time, with the Sun at 7.3° above the northwestern horizon.



Instituto Geográfico Nacional eclipse viewer by locality for the 2026 eclipse.