Eclipse Dates in 2024

The scientific point of view: An eclipse occurs when one object gets in between you and another object and blocks your view. From Earth, we routinely experience two kinds of eclipses: an eclipse of the Moon and an eclipse of the Sun.

<u>Eclipses of the Moon</u>: Sometimes, as the Earth orbits the Sun, it comes between the Sun and the Moon. When this happens, the Earth throws a dark shadow across the Moon. This is known as an eclipse of the Moon, or a lunar eclipse.

<u>Eclipses of the Sun</u>: Sometimes, the Moon passes between the Earth and the Sun. The Moon blocks the light of the Sun and a shadow of the Moon is cast on the Earth's surface. This is an eclipse of the Sun, or a solar eclipse.

There are three types of a solar eclipse: total, partial, and annular. During a total eclipse, the Moon completely covers our view of the Sun. A total eclipse is only visible from a narrow strip (about 150 km wide) of the Earth's surface at any one time. From the areas outside this narrow strip, the Sun appears to be only partially covered and a partial eclipse is seen. A partial eclipse will also occur if the Sun, Moon, and Earth are not precisely lined up. The eclipse cannot be total unless the center of the Moon's shadow is able to strike the Earth. The eclipse type that occurs when the Moon is at its farthest distance from the Earth is an annular eclipse. The Moon then appears too small to completely block out the disk of the Sun.

During a solar eclipse, the Moon actually casts two shadows toward Earth. One shadow is called the umbra which becomes smaller as it reaches the Earth. This is the dark center of the Moon's shadow. The second shadow is called the penumbra. This shadow becomes larger as it reaches the Earth. A total solar eclipse, or a complete blocking out of the Sun's light, can only be seen by those who live in the area covered by the umbra. People who live in the area of the Earth covered by the penumbra will see a partial eclipse.

A total solar eclipse can only occur when two events happen at the same time. The first event is a new Moon. This phase of the Moon occurs when the Sun is almost directly behind the Moon, and we see only a sliver of the Sun's light reflected by the Moon. During this time the Moon and the Sun appear close together. The second event that must occur is that the Moon must be in the right position, directly in the line of sight between the Earth and the Sun. These two events occur at the same time about once every year and a half.

2024 Solar Eclipse's

8th April - Total Solar Eclipse (<u>NOT Visible</u> in South Africa)

2nd October - Annular Solar Eclipse(<u>NOT Visible</u> in South Africa)

2024 Lunar Eclipse's

25th March - Penumbral Lunar Eclipse (NOT Visible in South Africa)

18th September - Partial Lunar Eclipse (Visible in South Africa)

An Eclipse Never Comes Alone: A solar eclipse always occurs about two weeks before or after a lunar eclipse. Usually, there are two eclipses in a row, but other times, there are three during the same eclipse season.

Kindly note:

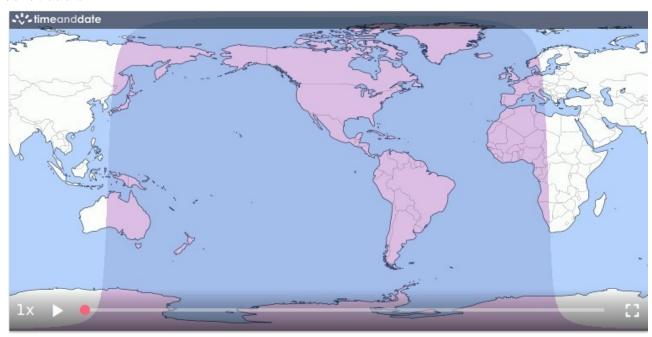
If an Eclipse is not visible in your locality during an Eclipse then nothing is to be observe.

If an Eclipse is visible in your locality during an Eclipse then kindly click on this link for the Do's and Don't

https://dipika.org.za/wp-content/uploads/2021/11/Eclipses-How-to-observe-an-Eclipse-if-visible-1.pdf

25th March Penumbral Lunar Eclipse (NOT Visible in South Africa)

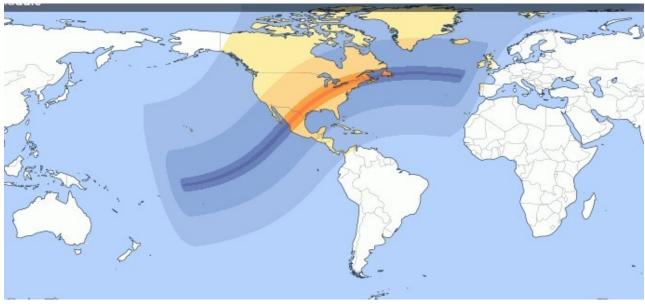
Regions seeing, at least, some parts of the eclipse: Much of Europe, North/East Asia, Much of Australia, Much of Africa, North America, South America, Pacific, Atlantic, Arctic, Antarctica.



Penumbral Eclipse begins 25 March, 04h53m16 (GMT) Maximum Eclipse 25 March, 07h12m51 (GMT) Penumbral Eclipse ends 25 March, 09h32m27 (GMT)

8th April 2024 Total Solar Eclipse (NOT Visible in South Africa)

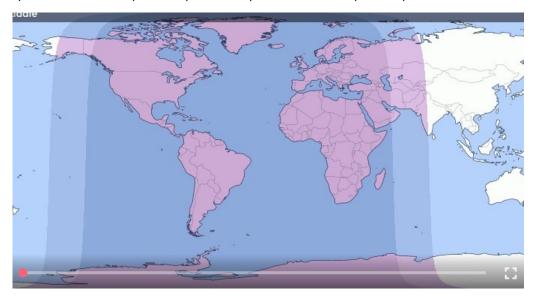
Regions seeing, at least, a partial eclipse: West in Europe, North America, North in South America, Pacific, Atlantic, Arctic.



First location to see the partial eclipse begin 15h42m15 (GMT) 8 April. First location to see the full eclipse begin (GMT) 8 April. 16h38m52 Maximum Eclipse (GMT) 8 April, 18h17m21 Last location to see the full eclipse end 8 April. (GMT) 19h55m35 (GMT) Last location to see the partial eclipse end 8 April, 20h52m19

18th September Partial Lunar Eclipse (Visible in South Africa)

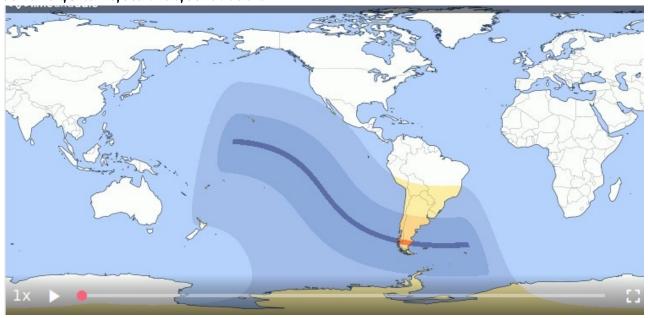
Regions seeing, at least, some parts of the eclipse: Europe, Much of Asia, Africa, North America, South America, Pacific, Atlantic, Indian Ocean, Arctic, Antarctica.



Penumbral Eclipse begins 18 September. 02h4lm07 (South Africa Time) Partial Eclipse begins 18 September. (South Africa Time) 04h12m58 Maximum Eclipse 18 September. 04h44m18 (South Africa Time) Partial Eclipse ends 18 September. (South Africa Time) 05h15m38 Penumbral Eclipse ends 18 September. 06h47m27 (South Africa Time)

2nd October 2024 Annular Solar Eclipse (NOT Visible in South Africa)

Regions seeing, at least, a partial eclipse: South in North America, Much of South America, Pacific, Atlantic, Antarctica.



First location to see the partial eclipse begin 2 October, 15h42m59 (GMT) First location to see the full eclipse begin 2 October. 16h50m38 (GMT) Maximum Eclipse 2 October. 18h45m04 (GMT) Last location to see the full eclipse end 2 October. 20h39m15 (GMT) Last location to see the partial eclipse end 2 October. 21h47m00 (GMT) DISCLAIMER: Do note that Dipika is not affiliated with any Hindu group or organization. We at Dipika choose to remain an independent repository of spiritual advice. We appreciate that there are variances between organisations and humbly request that if our views differ from yours that you respect our decision not to conform to the prescripts of your particular organisation. We remain committed to spiritual advice which is based on scripture.

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