

PRESS RELEASE ON THE TOTAL LUNAR ECLIPSE OF 7 SEPTEMBER 2025

Issued by the Astronomical Society of India through its Public Outreach & Education Committee

On the night of 7th September 2025, the Earth will come in between the Sun and the Moon, causing a total lunar eclipse. The entire eclipse can be seen from all parts of India, and can be enjoyed with our naked eyes easily and safely. The Astronomical Society of India encourages everyone to see the eclipse for themselves and participate in this play of celestial shadows.

A lunar eclipse occurs when Earth passes between the Sun and the Moon, casting its shadow on the Moon. The inner dark shadow of the Earth is called the umbra and the faint outer one is the penumbra. As the Moon enters the umbra, we first see a partial eclipse; when fully inside, the totally eclipsed Moon turns a striking coppery-red. This happens because the red part of the sunlight passes through the Earth's thin atmosphere and illuminates the Moon, while the bluer part of the light gets scattered on Earth's sunlit part, giving the daytime sky its blue colour.

On 7 September, the penumbral phase begins at 8:58 PM, with the partial eclipse starting at 9:57 PM. The Moon will be fully eclipsed from 11:01 PM to 12:23 AM—a duration of 82 minutes. The partial phase ends at 1:26 AM, and the eclipse concludes at 2:25 AM on 8 September.

No special equipment is required to watch the eclipse, it is perfectly safe to view it with the naked eye, though binoculars or a telescope will give a much better view. Eclipses are a natural shadow play, well understood since Aryabhata's time. A shadow is just light being blocked and poses no harm to people or animals. Unfortunately, superstitions have led to tragic incidents during past eclipses, underscoring the need for scientific awareness. It is perfectly safe to go outside and eat, while enjoying this magnificent celestial spectacle.

Given the late hours, families and friends are encouraged to watch from their homes or terraces. Even though we are in the Monsoon season, we hope that most of you will have clear skies, at least for some time. Do not miss this eclipse, as the next total lunar eclipse visible from India will happen only after three years. Many astronomy institutions, amateur astronomy clubs and others are organising public viewing events and some are organising live streams of the eclipse as well. The Public Outreach & Education Committee (POEC) of the Astronomical Society of India (ASI) has collected information about the locations of public events in India, livestream links, and more, on a single webpage at <https://bit.ly/eclipseindia> for everyone's convenience.

This appeal comes to you from the ASI POEC. Established in 1972, ASI is the primary association of professional astronomers of India. The objectives of the society include the promotion of astronomy and related branches of science in India and it was with this mandate that the POEC was set up in 2014.

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