

MEDIA RELEASE

28th November 2011

Total Lunar Eclipse on Sunday 11th December



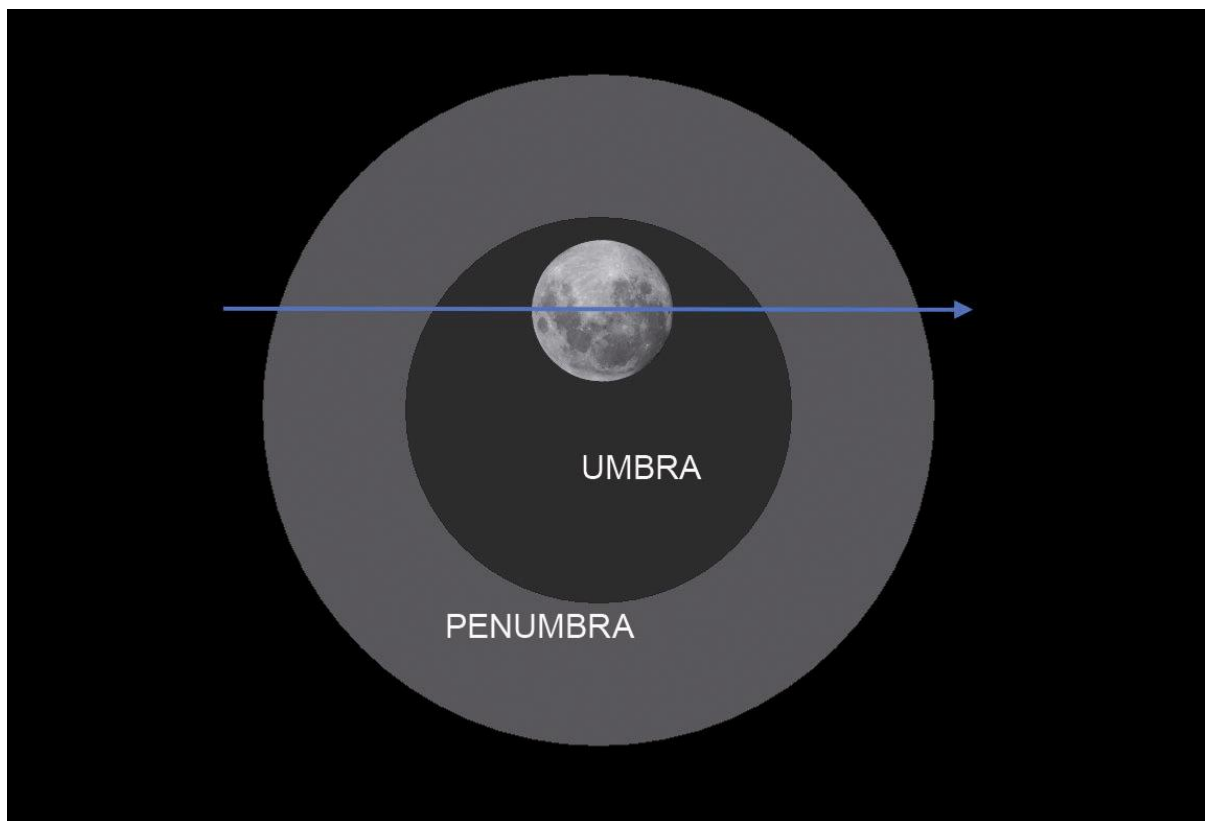
Total Eclipse of the Moon

New Zealanders will get a rare opportunity to observe a total lunar eclipse in their skies in the very early morning of Sunday the 11th of December.

The eclipse will begin just after 12:30am and be visible from all of New Zealand, where the skies are clear. The period of total eclipse lasts for less than an hour, from just after 3am to just before 4am.

Observatories around the country will be hosting special events to allow the public to observe this phenomenon through powerful telescopes. In Auckland a large crowd is expected to gather at Stardome Observatory & Planetarium where the public are invited to participate in viewing the event between 12am and 6am for a gold coin donation.

In a lunar eclipse the Moon is obscured as it passes through the Earth's shadow. There are actually two shadows, called the umbra and the penumbra. The umbra is a smaller circle of dark shadow caused by the Earth blocking all the light from the Sun to the Moon. Only a partial eclipse can be seen when the Moon is in the penumbra.



- 12:33am – First contact with penumbra (part shadow begins to creep across the Moon)
- 1:46am – First contact with umbra (full shadow begins to cross the Moon)
- 3:06am – Total eclipse starts (Moon in full dark shadow)
- 3:32am – Mid-Eclipse

Stardome Observatory & Planetarium

670 Manukau Road, One Tree Hill Domain, Royal Oak, Auckland / PO Box 24 180, Royal Oak, Auckland 1345
PH: 09 624 1246 / FAX: 09 625 2394 / info@stardome.org.nz / www.stardome.org.nz

- 3:57am – Total eclipse ends (lighter penumbral shadow only is across the Moon)
- 5:18am – Final contact with umbra (full light begins to cross the Moon again)
- 5:30am – Moon sets in NZ at this time

Stardome Astronomy Educator David Britten says, “The eclipsed Moon is likely to appear copper coloured to us. This is caused by a scattering of sunlight as it passes through the thin ring of the Earth’s atmosphere, removing the blue light and passing mainly the red, some of which weakly illuminates the Moon.”

The last lunar eclipse able to be observed in New Zealand was a total lunar eclipse in June of this year, but New Zealanders were only able to watch the first half of the eclipse before the Moon set for us. There are no total lunar eclipses in 2012. However, New Zealand is privy to prime viewing of two major celestial events next year: the transit of Venus across the face of the Sun on 6 June, and a solar eclipse on 14 November.

This eclipse of the Moon on 11 December will be visible to the naked eye, but astronomical societies around the country will be hosting viewings and the public are encouraged to take part in these.

For more information about the eclipse visit www.stardome.org.nz.

- ENDS –

For images of the Moon, interview requests with a Stardome astronomer or further information contact:

Gina Dellabarca

Marketing Manager
Stardome Observatory & Planetarium
Ph 09 624 1246 ext 203
Cell 021 427 553
gina@stardome.org.nz



Stardome Observatory & Planetarium

670 Manukau Road, One Tree Hill Domain, Royal Oak, Auckland / PO Box 24 180, Royal Oak, Auckland 1345
PH: 09 624 1246 / FAX: 09 625 2394 / info@stardome.org.nz / www.stardome.org.nz