

A guide for the naked eye, binocular and telescope owners compiled by Derek Rowley

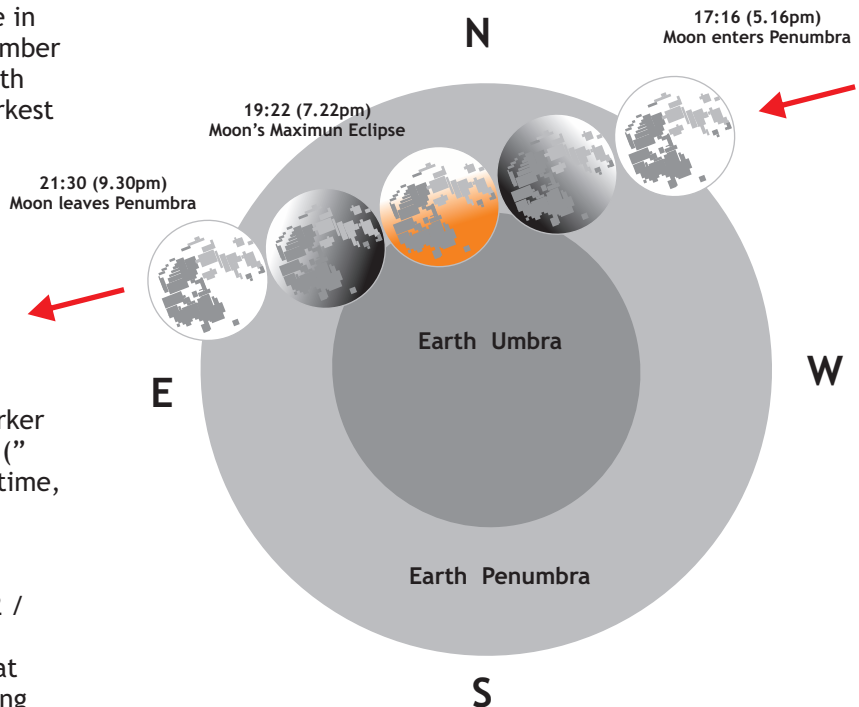
Events: New Year's Eve lunar Eclipse

International Year of Astronomy 2009 ends on a note with a partial lunar eclipse visible in the early evening on Thursday 31st December 2009 but it is not deep partial eclipse with only about 8% of the moon inside the darkest part of the Earth's shadow.

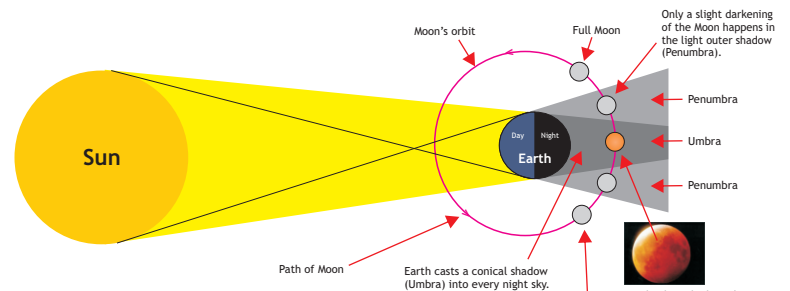
The Full Moon rises at 15:40 / 3:40pm that New Year Eve's afternoon and so by that time the Moon begins to enter the 'Penumbra' which will be already over 10 degree above the horizon in the North East.

The Full Moon will begin to enter the darker part of the shadow of our planet - Earth ("The Umbra") at 18:55 / 6:55pm by that time, the altitude is now 24 degree above the Eastern horizon.

The Moon reaches Mid eclipse is at 19:22 / 7:22pm then leave the Umbra at 19:51 / 7:51pm and finally leave the penumbra at 21:30 / 9:30pm. Prefect for you beginning your evening's New Year's Eve celebration!



How a Lunar Eclipse happens ?



Lunar Eclipses

When the full Moon moves through the Earth's shadow in a total eclipse, the entire Moon is the Umbra, the central, darkest part of the shadow - a Lunar eclipse happens. The Earth stops direct sunlight from reaching the Moon, and the Moon's face darkens or reduced to a faint red disc.

Full Moon can take up to six hours to pass through Earth's shadow completely.



Total eclipse, looks red, happens when all of the Moon is in Umbra, can last for more than an hour.