

Total Lunar Eclipse April 15, 2014

From Flagstaff, Williams and other Arizona Locations

Information provided by the Coconino Astronomical Society – Compiled by BDM

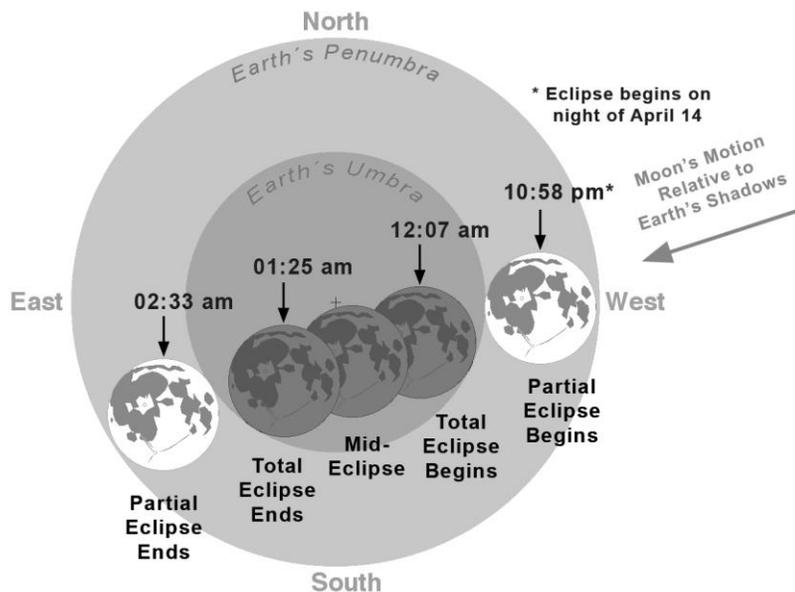
During the early morning hours of April 15, 2014, the Moon will pass through the southern part of the Earth's umbral shadow in the constellation Virgo. The bright star Spica will be only 2° to the south-west with Mars about 8° west. This total lunar eclipse is easily visible from Arizona and actually begins on the evening of April 14.

During a total lunar eclipse, the Moon's disk can take on a dramatically colorful appearance from bright orange to blood red and more rarely dark brown to very dark gray.

Eclipse Times for Mountain Standard (AZ) Time

Partial Eclipse Begins (U1)	10:58 pm*
Total Eclipse Begins (U2)	12:07 am
Mid Eclipse	12:47 am
Total Eclipse Ends (U3)	01:25 am
Partial Eclipse Ends (U4)	02:33 am

* Evening if April 14, 2014



One of the great things about lunar eclipses is that they are completely safe to view with the naked eye. No special filters are required to protect your eyes like those used for solar eclipses. You don't even need a telescope to watch the eclipse, although a good pair of binoculars will help.

An eclipse of the Moon can only take place at Full Moon, and only if the Moon passes through some portion of Earth's shadow. The shadow is actually composed of two cone-shaped parts. The outer shadow or penumbra is a zone where Earth blocks some (but not all) of the Sun's rays. In contrast, the inner shadow or umbra is a region where Earth

blocks all direct sunlight from reaching the Moon.

When only part of the Moon passes through the umbra, a partial lunar eclipse is seen. If the entire Moon passes through the umbral shadow, then a total eclipse of the Moon occurs.

Times and Phases of April's Total Lunar Eclipse

From start to finish, April's lunar eclipse lasts about three hours and thirty-five minutes (not including the penumbral phases which are very difficult to see). The partial eclipse begins as the Moon's eastern edge slowly moves into the Earth's umbral shadow (U1 to U2). During the partial phases, it takes just over an hour for the Moon's orbital motion to carry it entirely within the Earth's dark umbra.

Information and diagrams are from Fred Espanak's Website and Wikipedia

