New lunar eclipse video released

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(PhysOrg.com) -- In anticipation of the upcoming lunar eclipse later this month, NASA has released a new video that shows how lunar eclipses work.

The Lunar Reconnaissance Orbiter (LRO) team will release another video next week focusing on the role of LRO during the eclipse. LRO has been providing the most detailed imagery of the moon since it launched in 2009.

On June 15 2011, viewers outside of North America will be able to see the lunar eclipse. From beginning to end, the eclipse will last from 17:24 UTC (1:24 p.m. EDT) to 23:00 UTC (7:00 p.m. EDT). Totality, the time when Earth's shadow completely covers the moon, will last about an hour and 41 minutes.

A lunar eclipse occurs when Earth lines up directly between the sun and the moon, blocking the sun's rays and casting a shadow on the moon. As the moon moves deeper and deeper into Earth's shadow, the moon changes color before your very eyes, turning from gray to an orange or deep shade of red.

The moon takes on this new color because indirect sunlight is still able to pass through Earth's atmosphere and cast a glow on the moon. Our atmosphere filters out most of the blue colored light, leaving the red and orange hues that we see during a lunar eclipse. Extra particles in the atmosphere, from say a recent volcanic eruption, will cause the moon to appear a darker shade of red.

Unlike solar eclipses, lunar eclipses are perfectly safe to view without any special glasses or equipment. All you need is your own two eyes. And while we won't be able to catch this particular eclipse in the continental U.S., we will get our next opportunity on April 15, 2014, so mark your calendars!

Provided by JPL/NASA