

THE SKY THIS MONTH

FEBRUARY 2008

THE FEBRUARY 20TH TOTAL LUNAR ECLIPSE

During the evening of February 20th, you will be treated to an amazing spectacle. You will literally see our Earth blocking the sunlight to our Moon. This is aptly called a “total lunar eclipse”.

Look at the full Moon at about 8:43 p.m. You might notice something strange happening. You will see darkening on the Moon’s lower left-hand corner. This is the Earth’s shadow beginning to block the sunlight to the Moon. This darkening will slowly advance to cover the Moon. By 10:01 p.m. the Moon will be totally eclipsed.

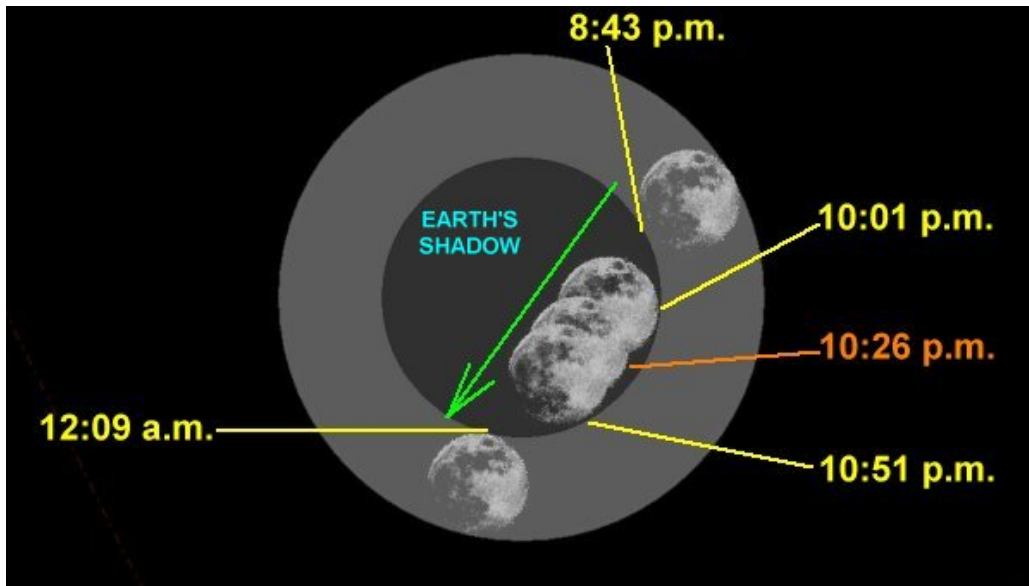
But wait! The Moon will not disappear when totally eclipsed! Why? The Earth has an atmosphere! The Sun’s light shines through the Earth’s atmosphere and splits it into rainbow colours, much like a prism does. The reddish portion of the “rainbow” will shine on the Moon during totality, thus bathing it in an eerie red-orange glow. An astronaut standing on the Moon would see the Earth as a fiery red ring; seeing all of the Earth’s sunrises and sunsets simultaneously!



The totally eclipsed Moon of January 20, 2000. February 20th's eclipse will look similar to this. Image by the author.

Totality will last for 50 minutes. At 10:51 p.m. you will begin to see a very small sliver of light near the Moon's bottom as it begins slipping out of the Earth's shadow and into sunlight again. This process takes about 1 hour and 20 minutes. Finally, just after midnight, the Moon will have fully re-emerged from the Earth's shadow; restored to its original brilliance.

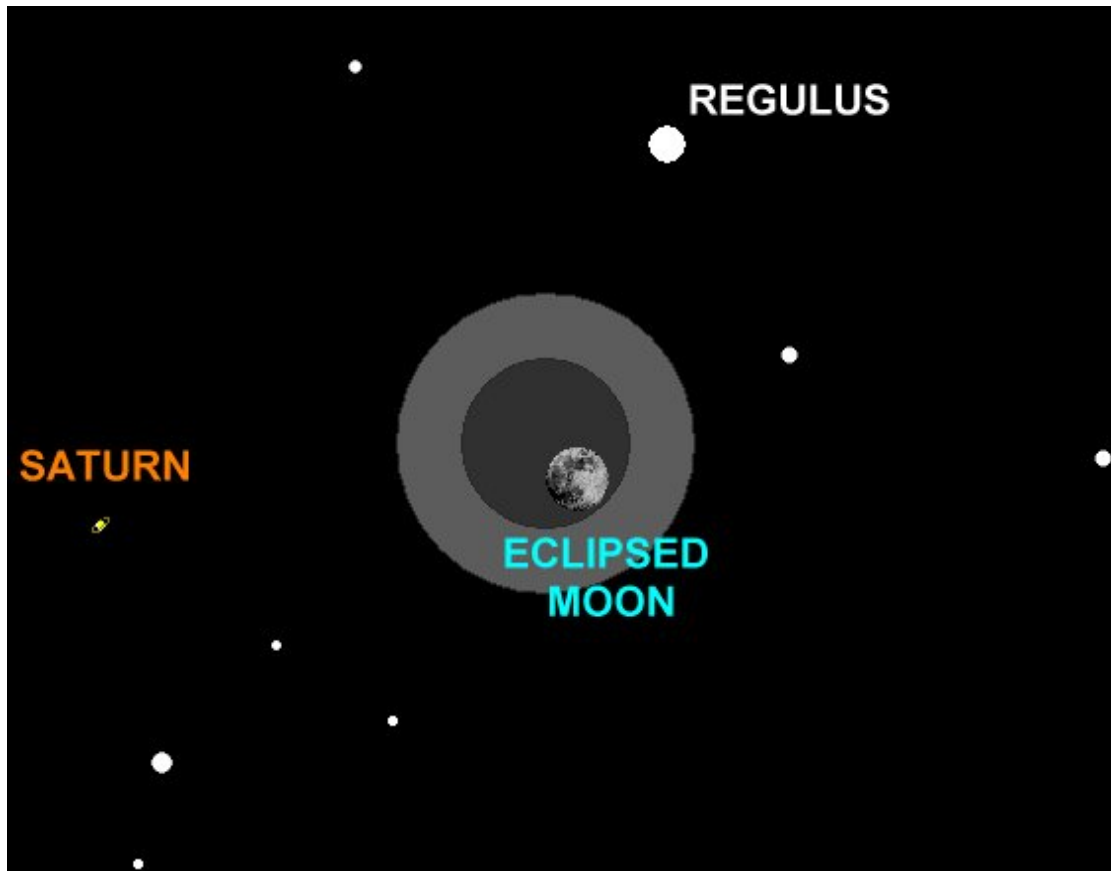
The total event, from first to final contact, will last about 3 hours and 20 minutes.



The progress of the February 20, 2008 total lunar eclipse.

During the eclipse, you might see some bright stars in the immediate area. Look to the immediate left of the Moon and you should see an orange-yellow object. That object is actually the planet Saturn! If you are observing the eclipsed Moon with your telescope or large binoculars, swing it over to Saturn and observe its rings!

To the immediate upper right of the eclipsed Moon is a bright twinkling white object. This object is the star Regulus, the brightest star in the constellation Leo (the lion).



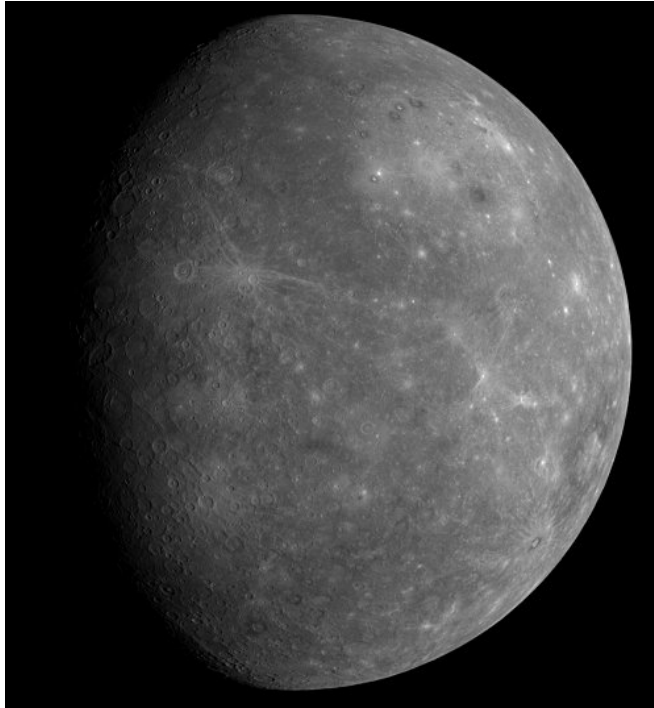
The planet Saturn and the star Regulus are easy targets in the vicinity of the fully eclipsed Moon of February 20th.

If you have a digital camera and a tripod, try to capture a few images of the totally eclipsed Moon. You will have images that you will treasure for a lifetime!

ECLIPSE EVENTS

The Mill of Kintail Conservation Area will be holding a special eclipse viewing event at the Gatehouse beginning at **8:30 p.m. on February 20th** (weather permitting). The Ottawa Astronomy Friends (OAFs) will be on-hand to share the event with you. Refreshments and a warm room will be provided. For more information, check out <http://tech.groups.yahoo.com/group/OAFs>.

THE SKY LAST MONTH – JANUARY 2008



This isn't the Moon. It's Mercury! The NASA Messenger spacecraft came to within 200 kilometres of Mercury's surface on January 14th. Image by NASA / JPL.

THE SKY NEXT MONTH – MARCH 2008

THE MILL OF KINTAIL ASTRONOMY COURSE

Visit www.castor2.ca/course for more information

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Questions, comments, observations and/or images can be sent to skythismonth@castor2.ca.