Sep 27, 2015 Lunar Eclipse Report:

In spite of broken cloud cover in Bruce/Grey, the Sep 27 lunar eclipse was observed by many. The ES Fox group of a dozen or more, watched only the undersides of clouds and a live webcast from SLOOH, until reports of clear patches elsewhere caused us to scatter looking for breaks. Some were successful, others were not. Reports were received from Massie (with cell phone images), somewhere on the road near Tara/Chesley/Allenford, Mennonite Corners, and an unknown (secret?) location where Aaron T. was located. Also Port Elgin, Big Bay, London ON, and St.Paul MN where Chris H. observed and imaged with a Classic C-8. A full gallery of his images is in the Oct 2015 StarGazerNews issue which is still available. It is also reproduced below.

A time lapse video of the partially eclipsed Moon with clouds scudding by also available on the website.

Image above: Near Annan, Julian Delf caught a break in the clouds and this image just at the start of totality.

Richard Porter took this image (above) at 10:22 pm just 25 minutes before mid-totality through an 80mm AstroTech ED refractor. ISO 200, exp. for 6 s, using a Canon 350D.

Image above by John H. was taken at 11:50 pm with the Moon well out of totality but not out of the cloud cover. Clouds plagued the view until solid overcast came back a few minutes after midnight and before the last contact of the umbral shadow heralding the end of the eclipse. ISO 2000 f/5.4, 0.10 s, 864 mm (effective fl) at prime focus of TV NP 101 refractor.

Image below: After a quick trip back to Owen Sound, John H. caught the last stages of the eclipse as clouds scudded by. Video here: ECLIPSE SEP 27 (One frame below).

Eclipse Gallery from St. Paul, MN by Chris Hlynialuk

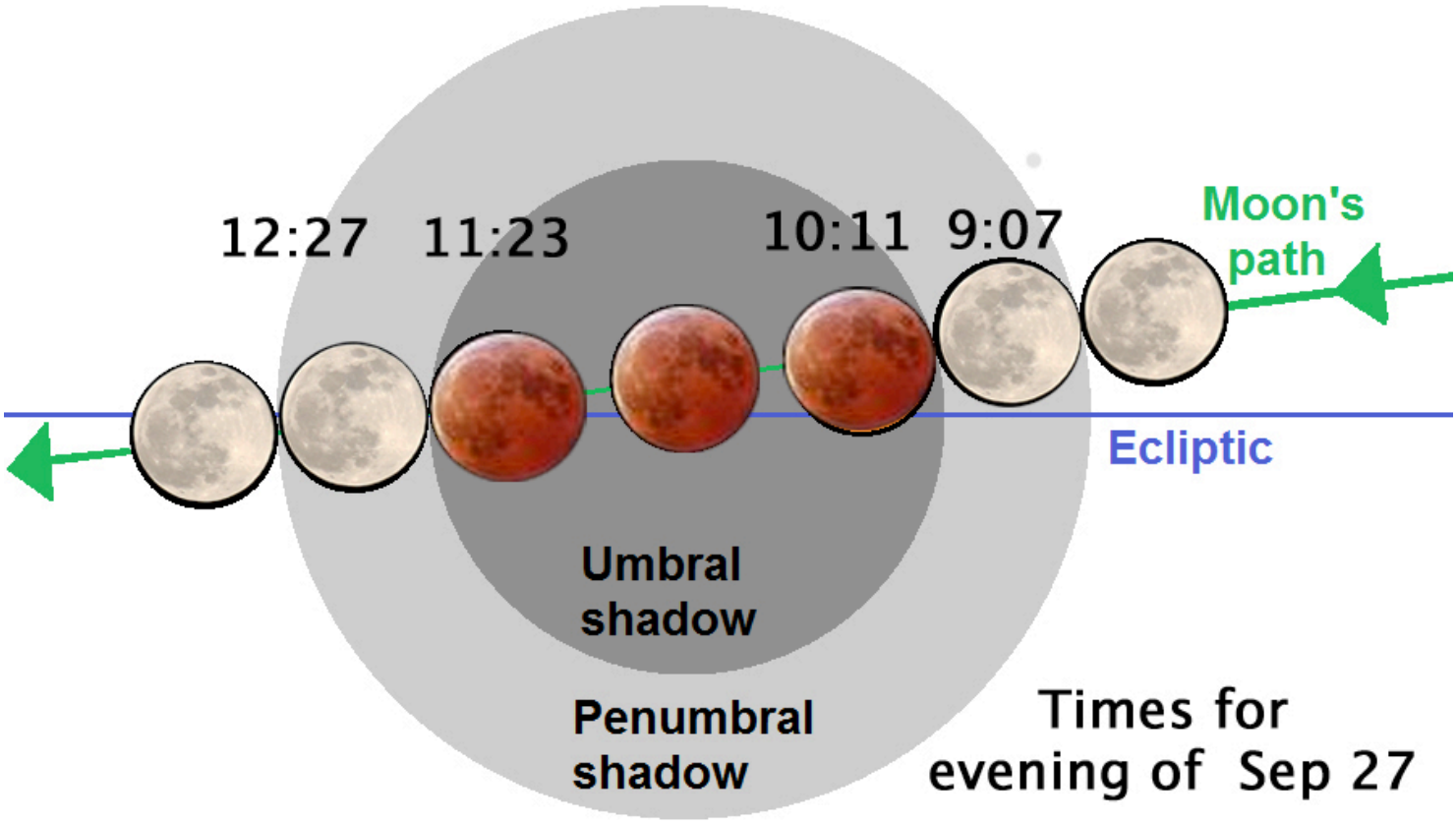
October 2015

The changes of eclipse appearance is recorded beautifully here in 17 images taken by Chris Hlynialuk through a C-8 at prime focus. Chris observed the eclipse from St. Paul, Minnesota where he is a researcher at the Grossman Centre of Memory Research at the University of Minnesota (obviously from the big "M" in image 9). He says image #9 was a focus test shot, but it looks like gratuitous advertising to me.

Below: Another (lucky!) Chris Hlynialuk image from St. Paul MN

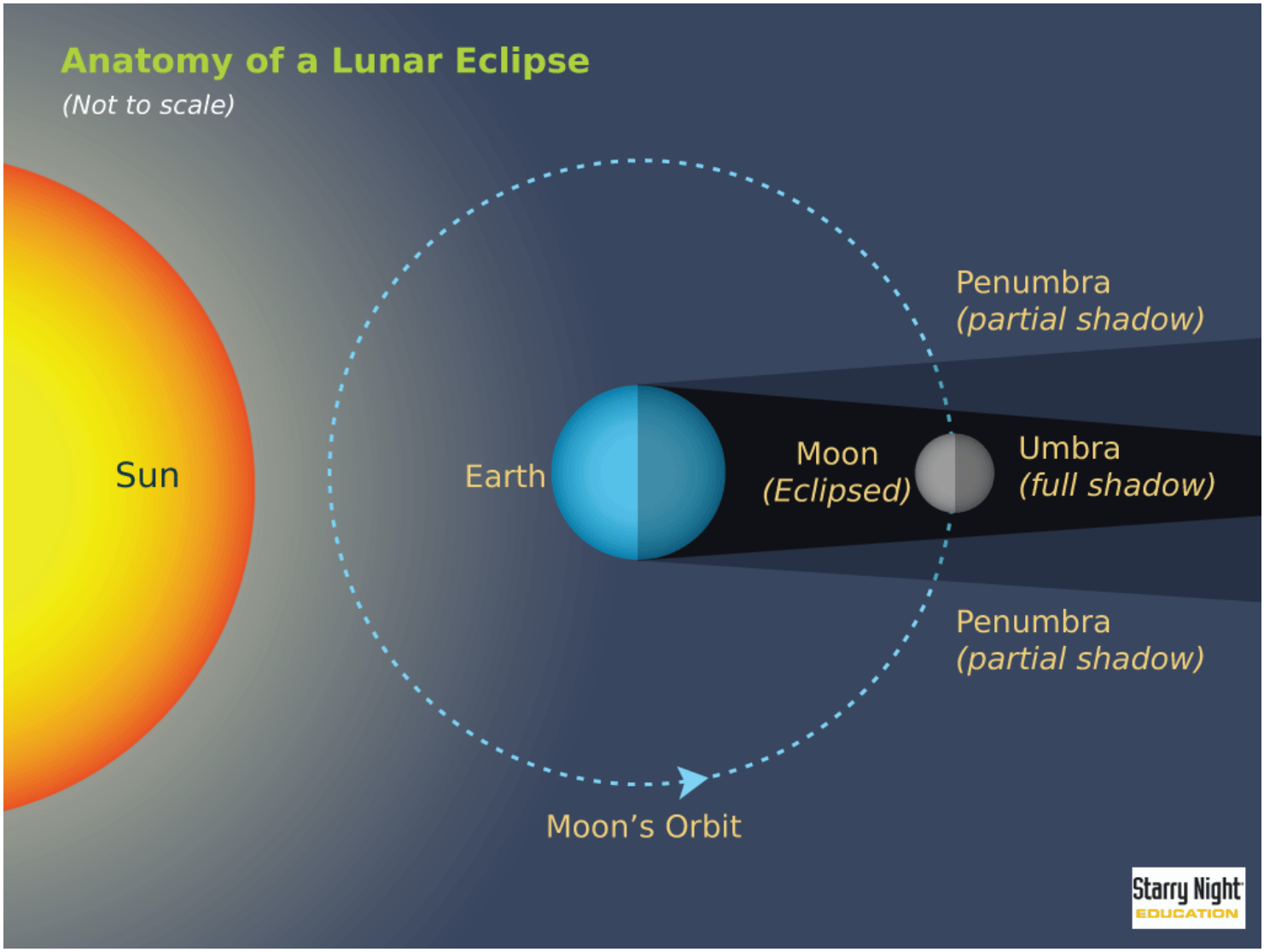
Robert Atkinson managed to get an image or two after a frustrating evening chasing clouds and giving up at least once. This image taken from his backyard in London ON.

The two images below by Julian Delf summarize the hit and miss viewing due to clouds all over Bruce and Grey. Patience was often rewarded however with a nice view of the eclipsed moon. You had to be ready on the camera shutter, as well!



Eclipse times in a nutshell:
First Contact 9:07 pm
Totality Starts 10:11 pm
Totality Ends 11:23 pm
Last Contact 12:27 am Sep 28

Lunar eclipses happen when the Moon passes into Earth's shadow, which even at the Moon's distance is still 3 times larger than the apparent size of the full Moon. The sunlight hitting the Moon is dramatically reduced and only light that gets through the narrow ring of our atmosphere shines on our neighbouring world. This light is the red colour of our sunsets and so the Moon reflects back all the sunsets that are happening on Earth at the time. This colour is most noticeable during the total phase and this time around we get over an hour to watch it.



From start to finish, lunar eclipses take several hours to complete and on Sep 27, the first notch of darkness will appear on the upper left edge of the full Moon's disk at 9:07 pm DST. It will progress to cover the whole Moon by 10:11 pm. The Moon is totally in shadow until 11:23 pm and then the partial phase returns until 12:27 am DST Sep 28. Totality lasts for 72 minutes in all and during that time the Moon's colour will be quite different than the normal bright white of full Moon. It's up to you to describe the shade.

Lunar eclipses can be seen from any place on the entire dark side of the Earth and this is North America's second turn to see one this year. If the weather cooperates, you have an hour or more centered on 10:47 pm DST to see the most interesting, total part of the eclipse. A pair of binoculars is highly recommended for an even better close-up view. It is even more spectacular through a telescope!

Check our webpage www.bluewaterastronomy.com for information about the next good total lunar eclipse. Info will appear several months before the Jan 31, 2018 event. An even better one follows a year later.
Note: Not all lunar eclipse are created equal. Penumbral eclipses where the moon passes through the outer shadow are much less visible than umbral or total eclipses. We have a long series of penumbral ones in 2016 and 2017, which are poor viewing. The next good total is Jan 31, 2018. But before then is the Aug 21 SOLAR ECLIPSE which will be spectacular. Info about that is under the 2017 SOL. ECLIPSE tab on our website.