AL – Lunar II Observation 2017-11-25

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#84-#85 and OPT-C

Create sketches or images of limb feature(s) that depict libration effect. Counts as 2 obs: #84 & #85

From Wikipedia.org: https://en.wikipedia.org/wiki/Libration

In astronomy, **libration** is a perceived oscillating motion of orbiting bodies relative to each other, notably including the motion of the Moon relative to Earth, or of trojan asteroids relative to planets. Lunar libration is distinct from the slight changes in the Moon's apparent size viewed from Earth. Although this appearance can also be described as an oscillating motion it is caused by actual changes in the physical distance of the Moon because of its elliptic orbit around Earth.

Here is a gif from the above web site (Wikipedia) that shows the affect: I have copied the GIF file over to my web site.

http://www.az-dahut.net/astronomy/obs-log-sheets/al-lunar-ll/lunar-libration-with-phase.gif

Better yet, since this is a two count observation, pleases visit the page referenced above, and check out the "UTube" video in upper right, which is a record of the phase and libration of the Moon for 2013 at hourly intervals, with music, titles, and supplemental graphics.... AND... it comes complete with music. I did NOT copy the UTube video over to my web site, as I did with the above .gif so you will have to navigate there. It is worth the trip.

Actually, since it is covered so well in the "UTube" video referenced above, and the music is so special, I shall also count this as:

#OPT-C

Create two or more images that depict the change in apparent diameter of the Moon at/near apogee and perigee. Each image should be taken with the same equipment and at the same magnification (sub for 1 OBSV)