



M81 and Supernova in M82, Van Macatee



# “WHAT’S UP”

A presentation of “what’s up” in the  
night sky



# This Month's Sky: March 2014

- Our Solar System Tonight
- Target List
- Comet C/2012 X1 (LINEAR) at its Brightest
- Daylight Savings Time
- Moon/Mars Conjunction
- Spring Equinox
- Moon/Saturn Conjunction
- Moon/Venus Conjunction
- Monthly Lunar Features/Name
- Gee Whiz Question of the Month
- CE Observing Challenge



# Our Solar System Tonight

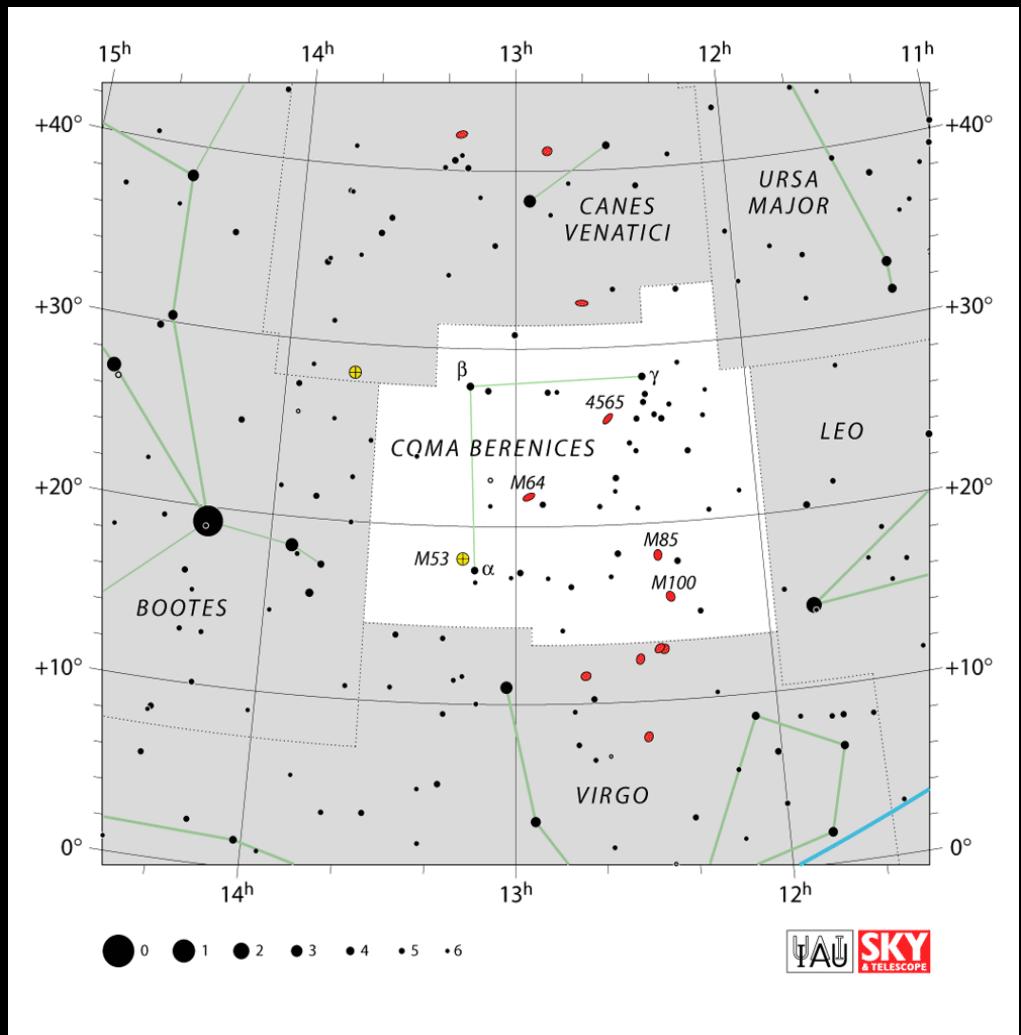
|         | Rises      | Sets       |
|---------|------------|------------|
| Sun     | 7:02a.m.   | 6:32 p.m.  |
| Moon    | 6:59 a.m.  | 7:14 p.m.  |
| Mercury | 5:53 a.m.  | 4:43 p.m.  |
| *Venus  | 4:31 a.m.  | 3:06 p.m.  |
| Mars    | 10:00 p.m. | 9:26 a.m.  |
| Jupiter | 1:33 p.m.  | 3:54 a.m.  |
| Saturn  | 12:07 a.m. | 10:42 a.m. |
| Uranus  | 8:26 a.m.  | 8:49 p.m.  |
| Neptune | 6:52 a.m.  | 6:01 p.m.  |
| Pluto   | 3:48 a.m.  | 1:59 p.m.  |

\*Venus will be at its greatest west elongation on March 23<sup>rd</sup>. This means that it will be at its furthest distance from the sun in our morning sky.

# Orion Over Charlie Elliott

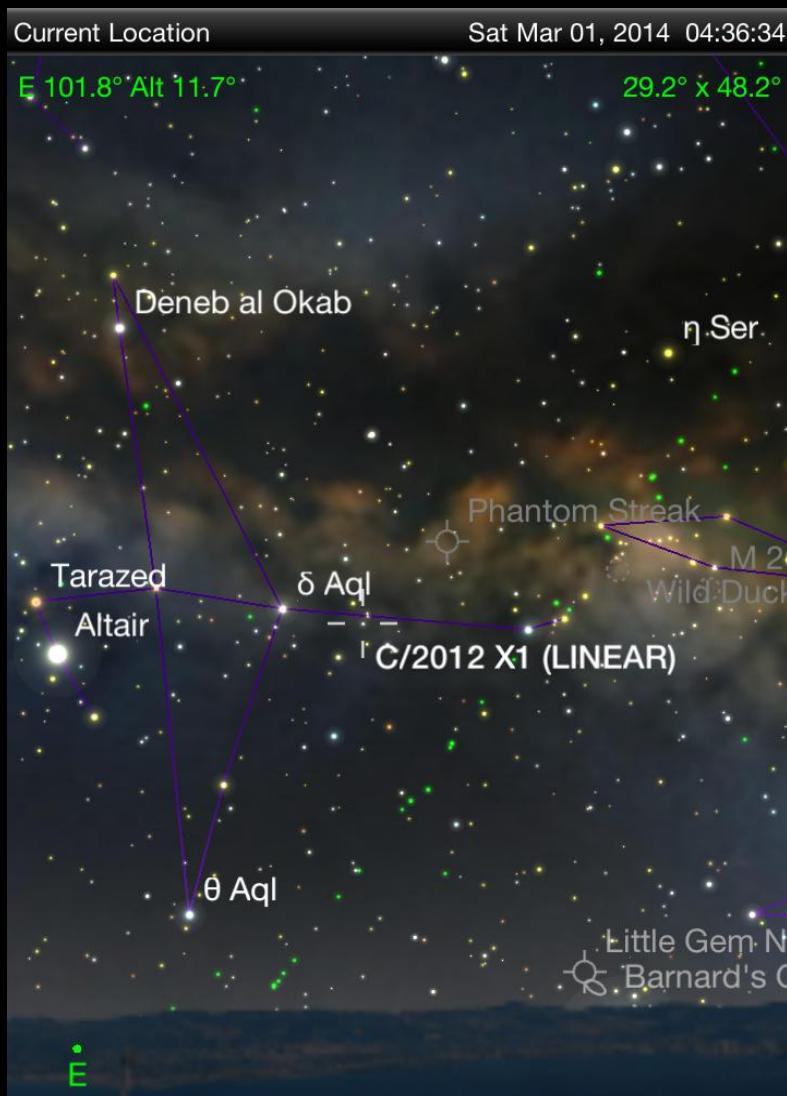
Coma Berenices Deep Sky Objects Visible this month  
(Be sure to ask for a sky map!)

| Object   | Description      | Magnitude |
|----------|------------------|-----------|
| NGC 4565 | Spiral Galaxy    | 9.6       |
| M64      | Spiral Galaxy    | 8.5       |
| M85      | Spiral Galaxy    | 9.1       |
| M100     | Spiral Galaxy    | 9.4       |
| M53      | Globular Cluster | 7.6       |
| Mel 111  | Open Cluster     | 1.8       |





# Comet C/2012 X1 at its Brightest





# Daylight Savings Time

March 9<sup>th</sup>: Set clocks forward 1 hour at 2am.

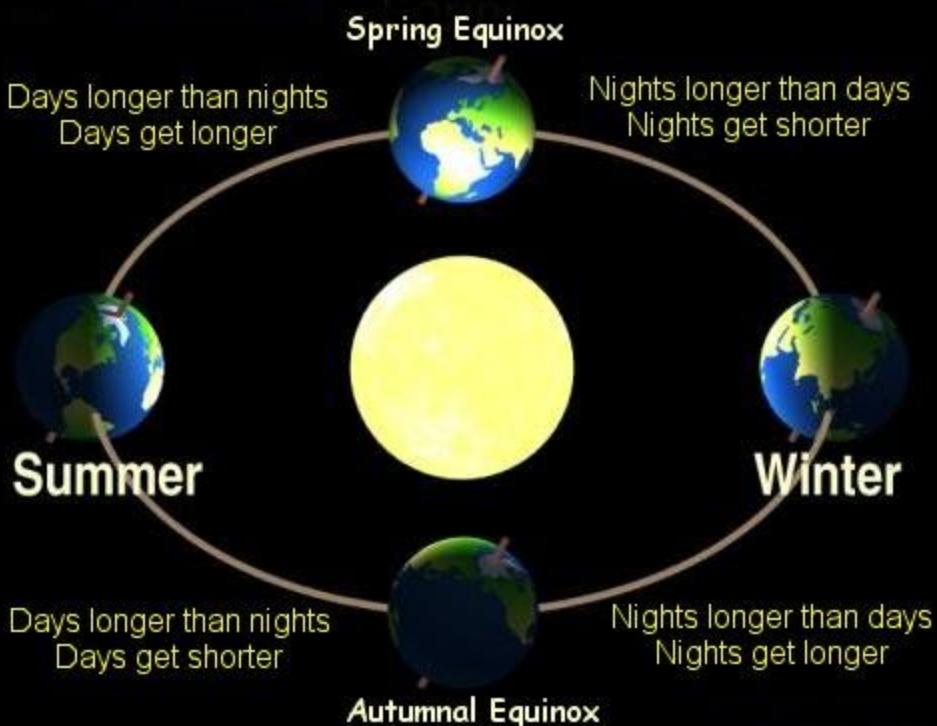


# Moon/Mars Conjunction



# The Spring Equinox

The 2014 Spring Equinox in the Northern Hemisphere occurs 3/20/2014 at 10:55 a.m. An equinox occurs twice each year. Once on or around March 20<sup>th</sup>, and again on or around September 22<sup>nd</sup>. An equinox occurs when the tilt of the Earth is inclined neither away nor toward the sun, causing the number of minutes of darkness and the number of minutes of light to be almost equal on that day. The term “equinox” is derived from the Latin words *aequus* (equal) and *nox* (night).





# Moon/Saturn Conjunction



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# Moon/Venus Conjunction



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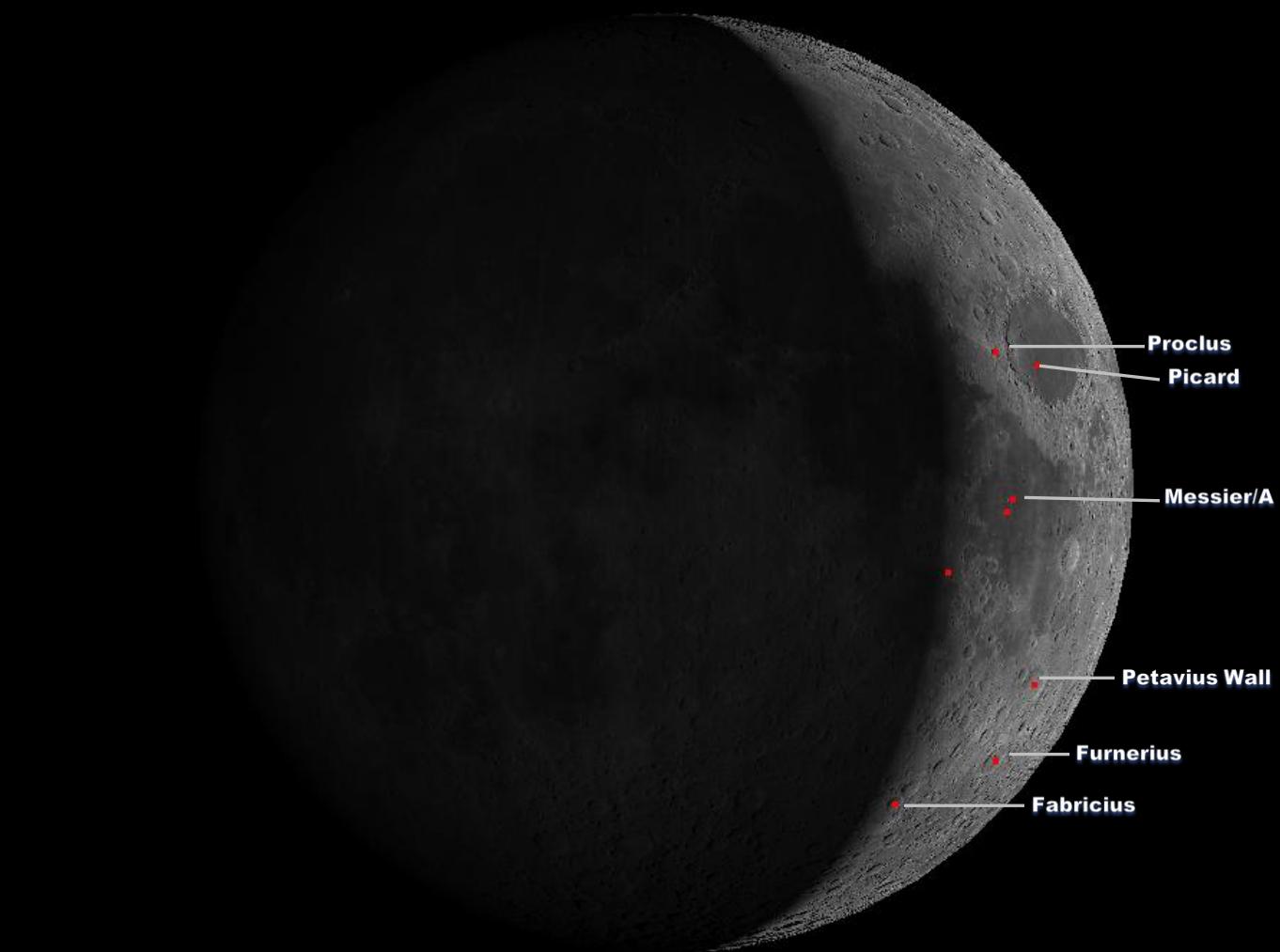
# Monthly Lunar Feature(s)

Telescope Features





# Telescope Objects (4 Days)



# Telescope Objects (4 Days)



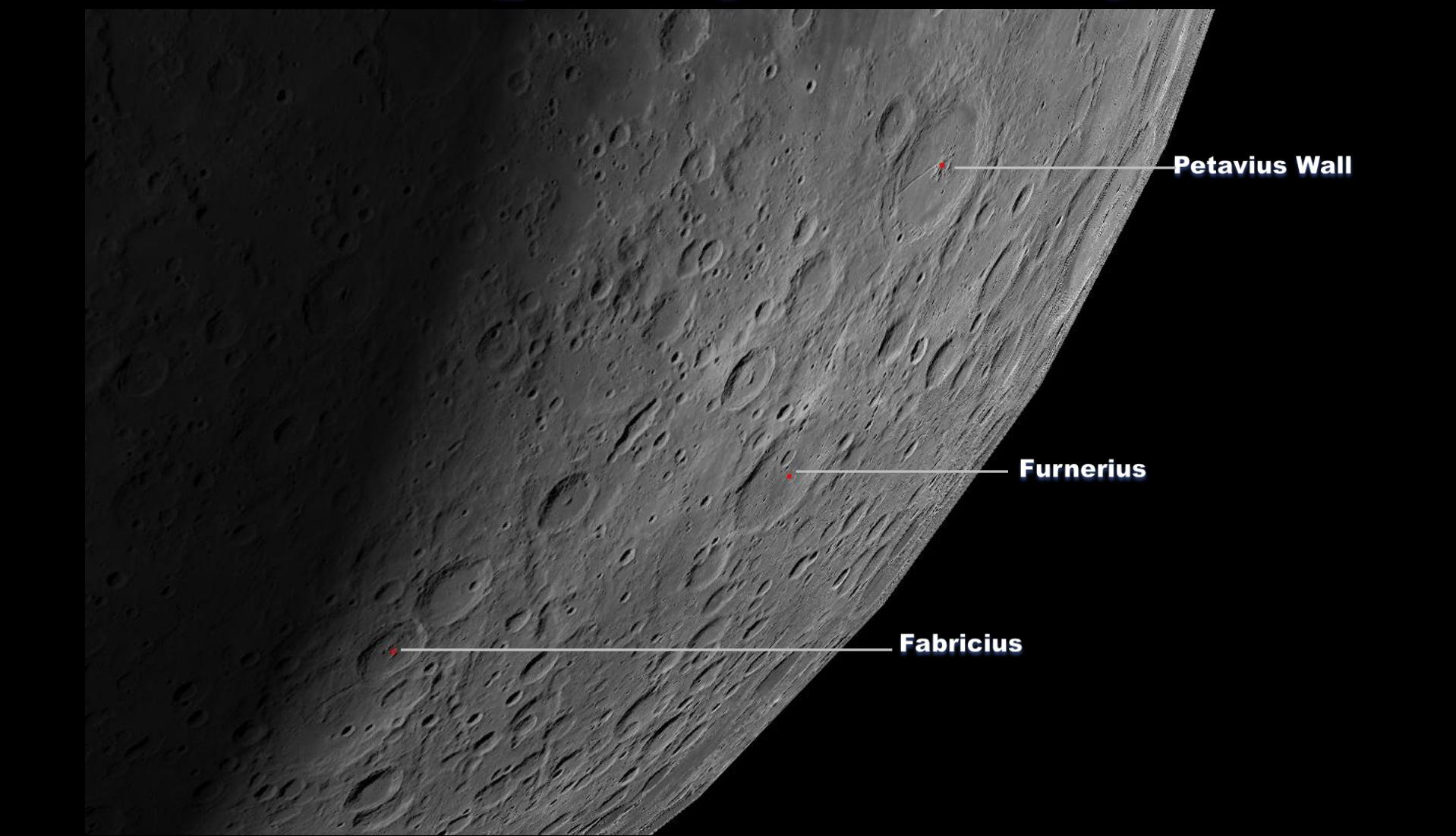


# Telescope Objects (4 Days)



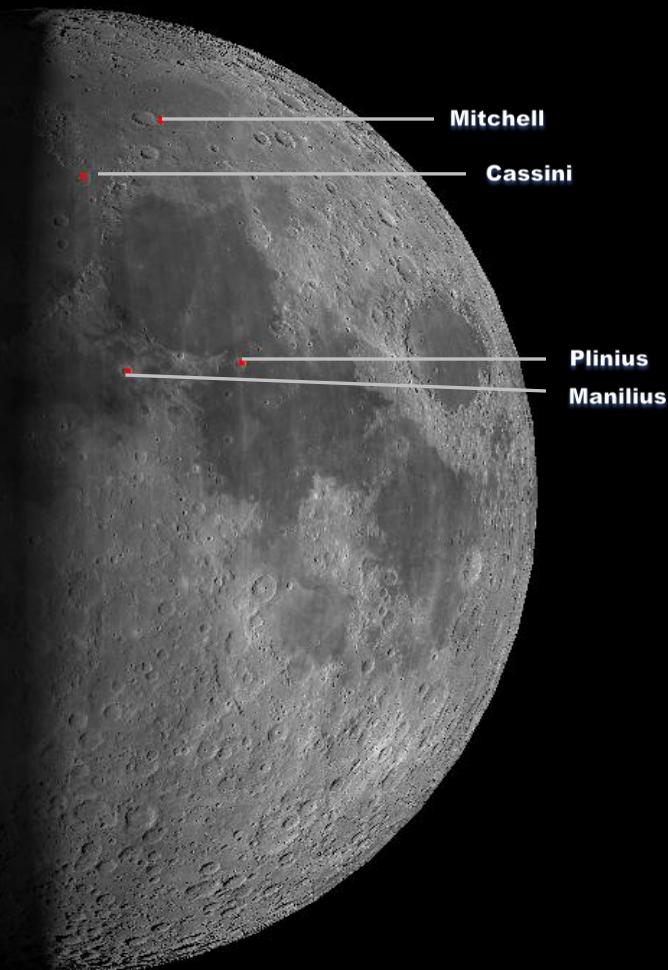


# Telescope Objects (4 Days)



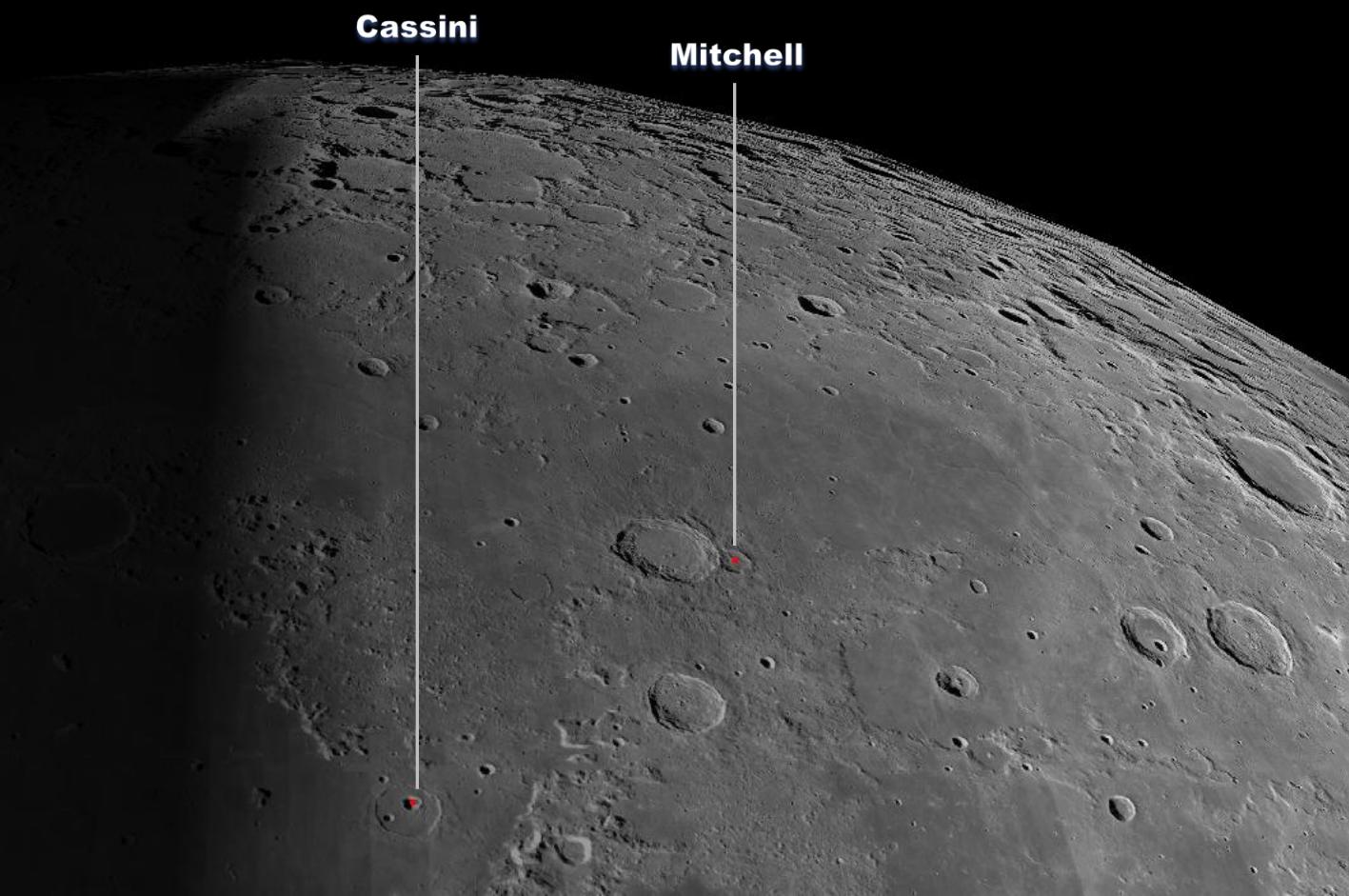


# Telescope Objects (7 Days)



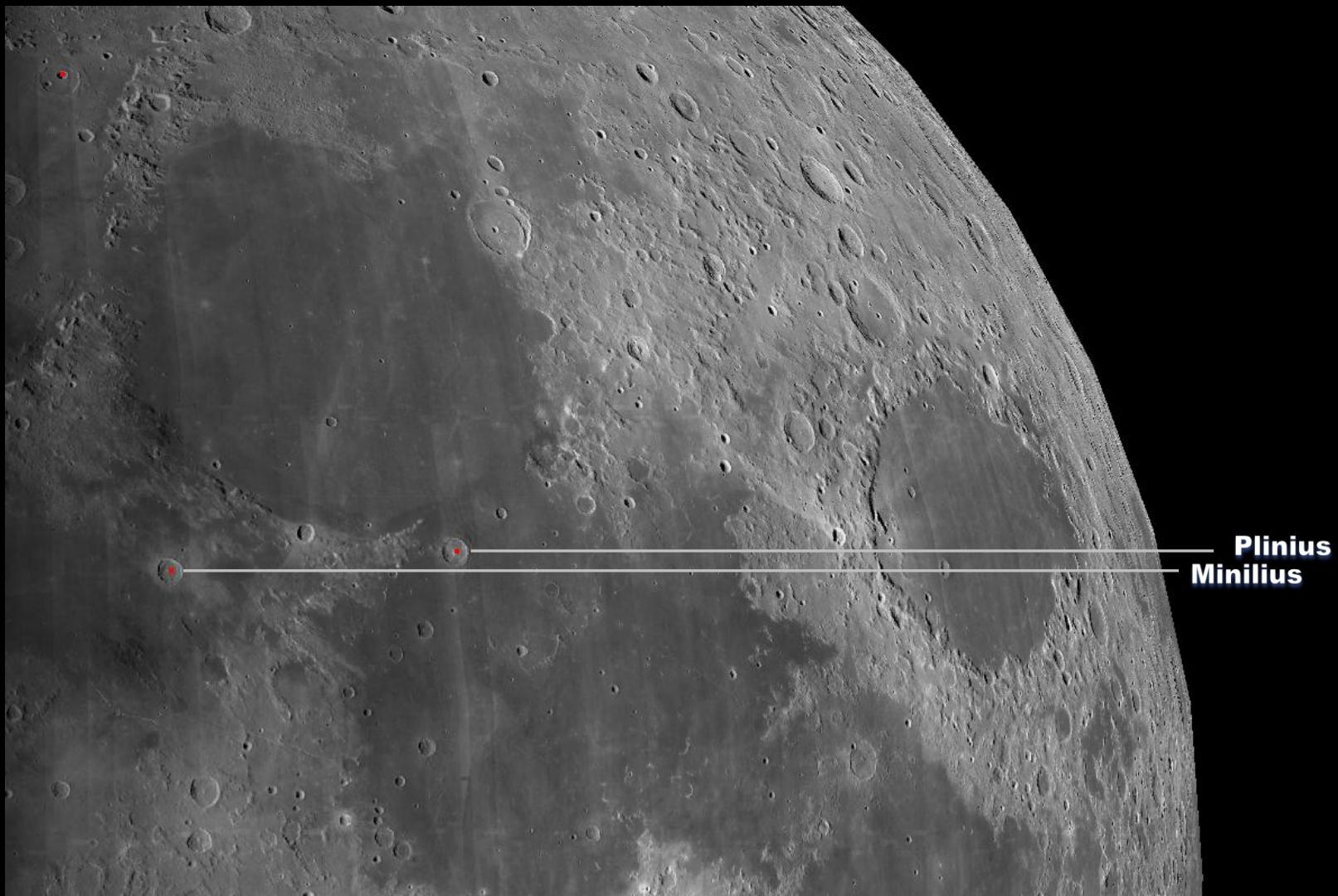


# Telescope Objects (7 Days)



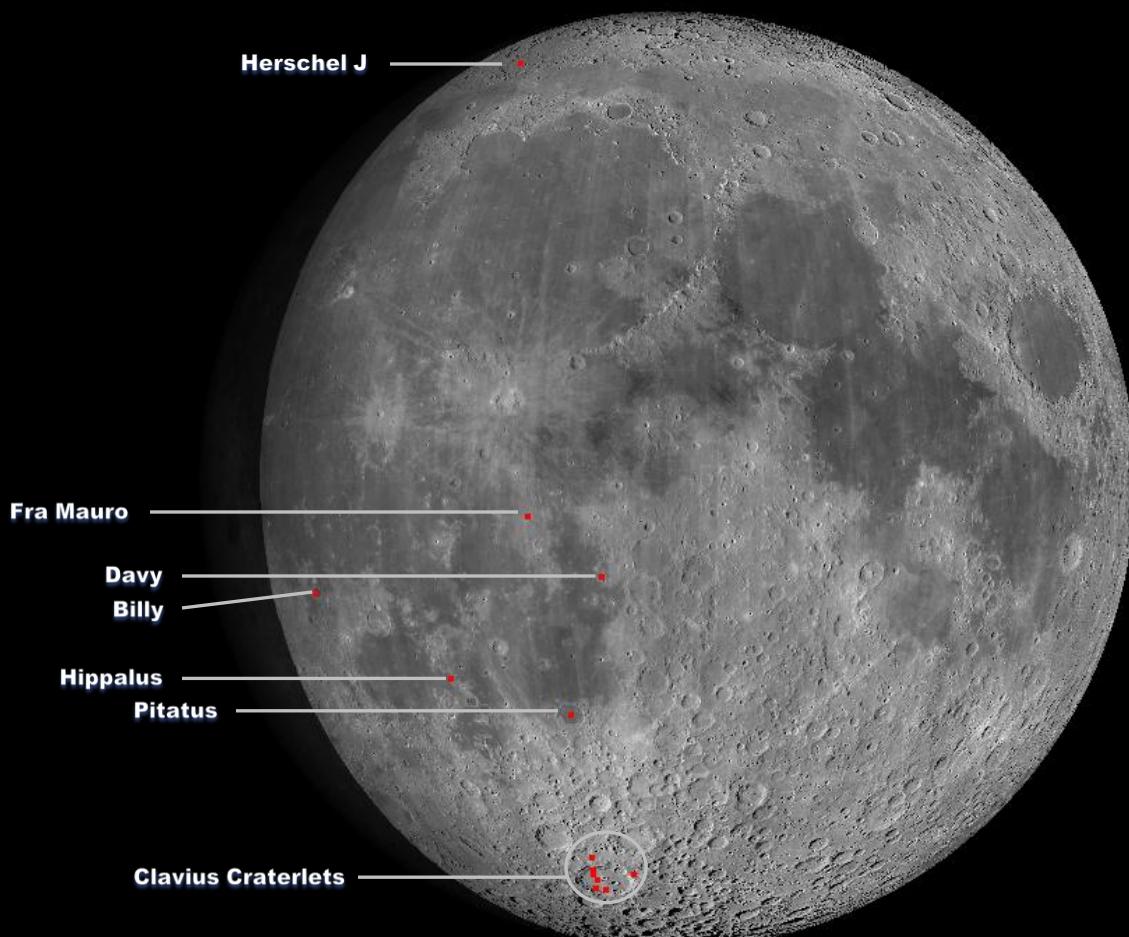


# Telescope Objects (7 Days)





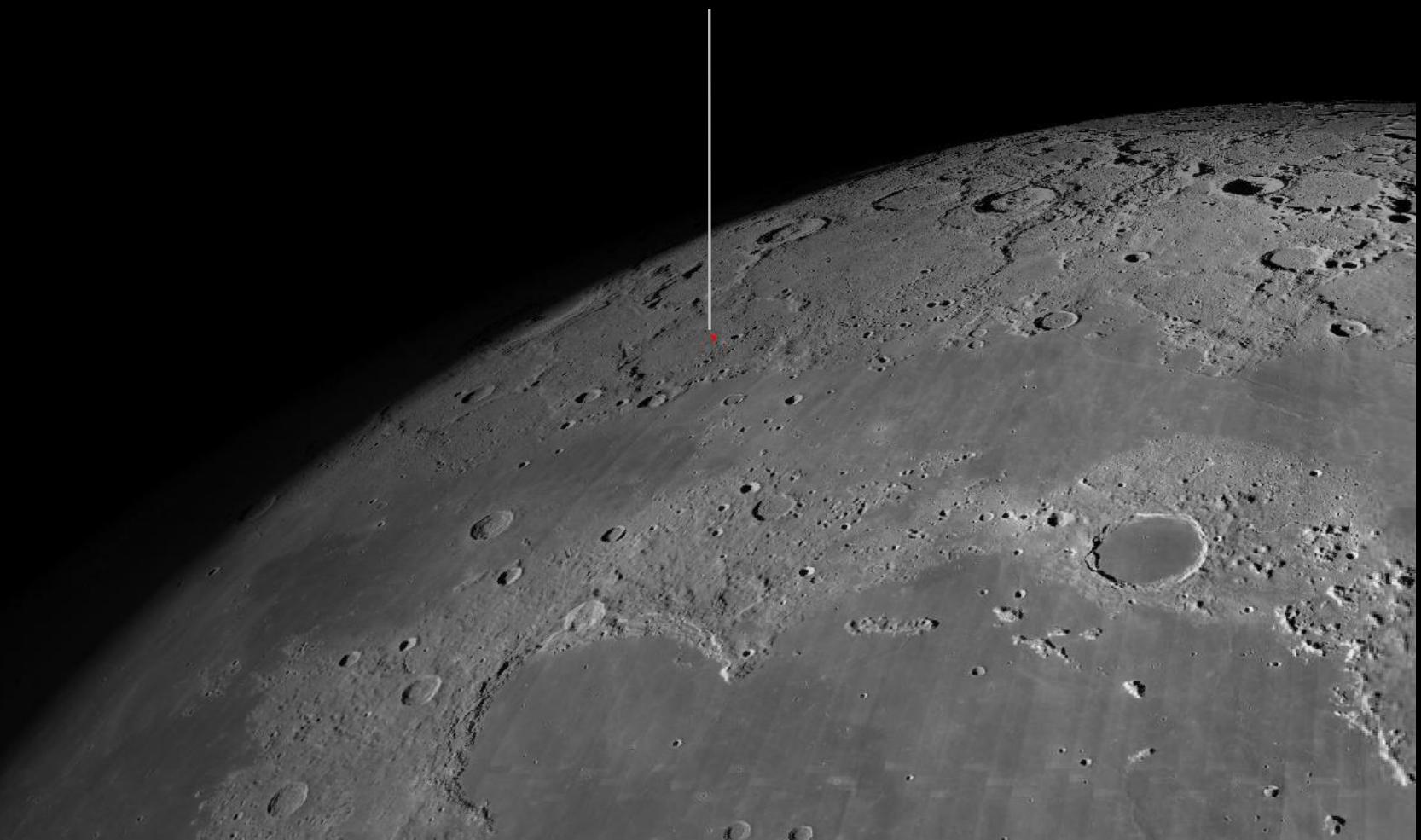
# Telescope Objects (10 Days)





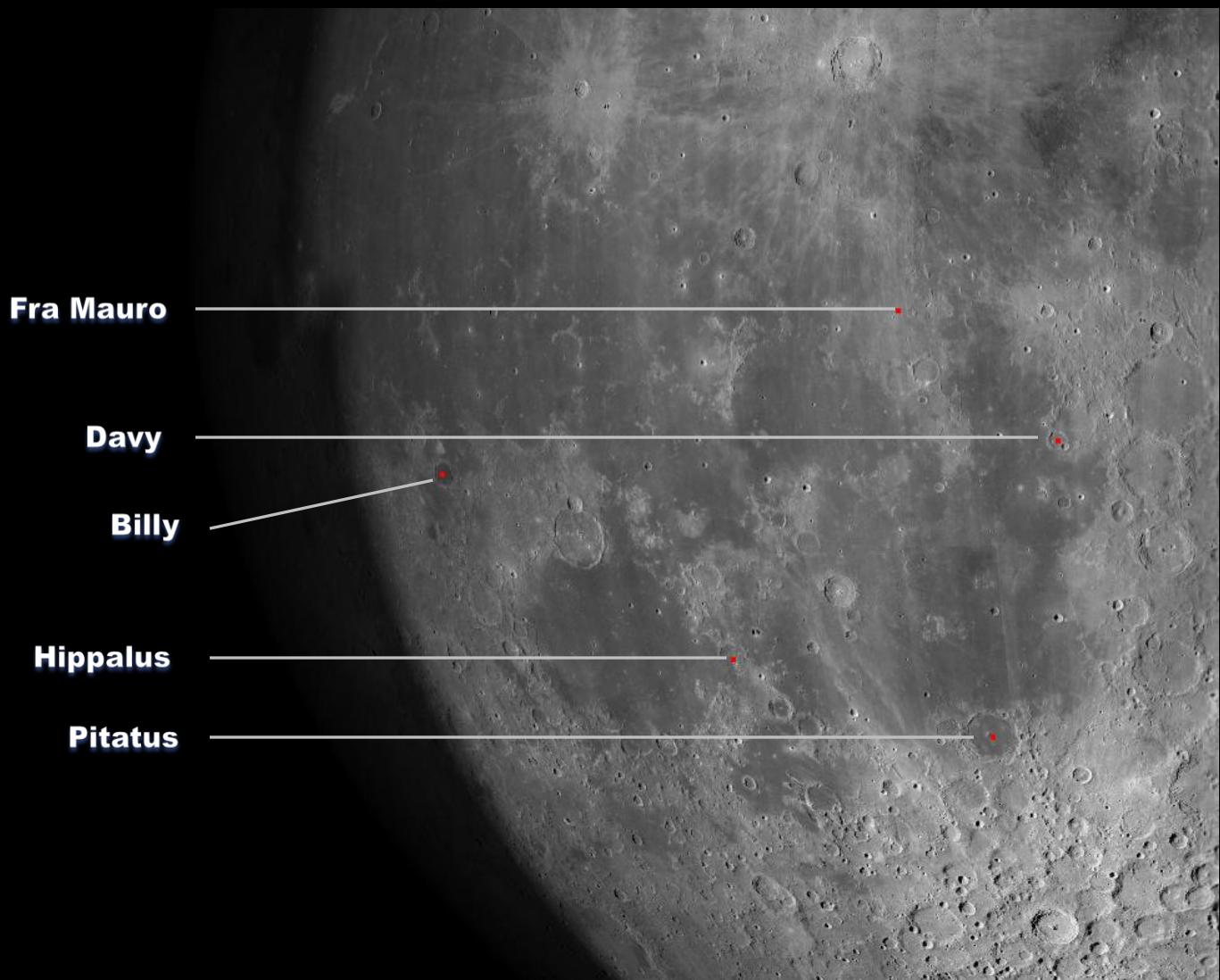
# Telescope Objects (10 Days)

**Herschel J**



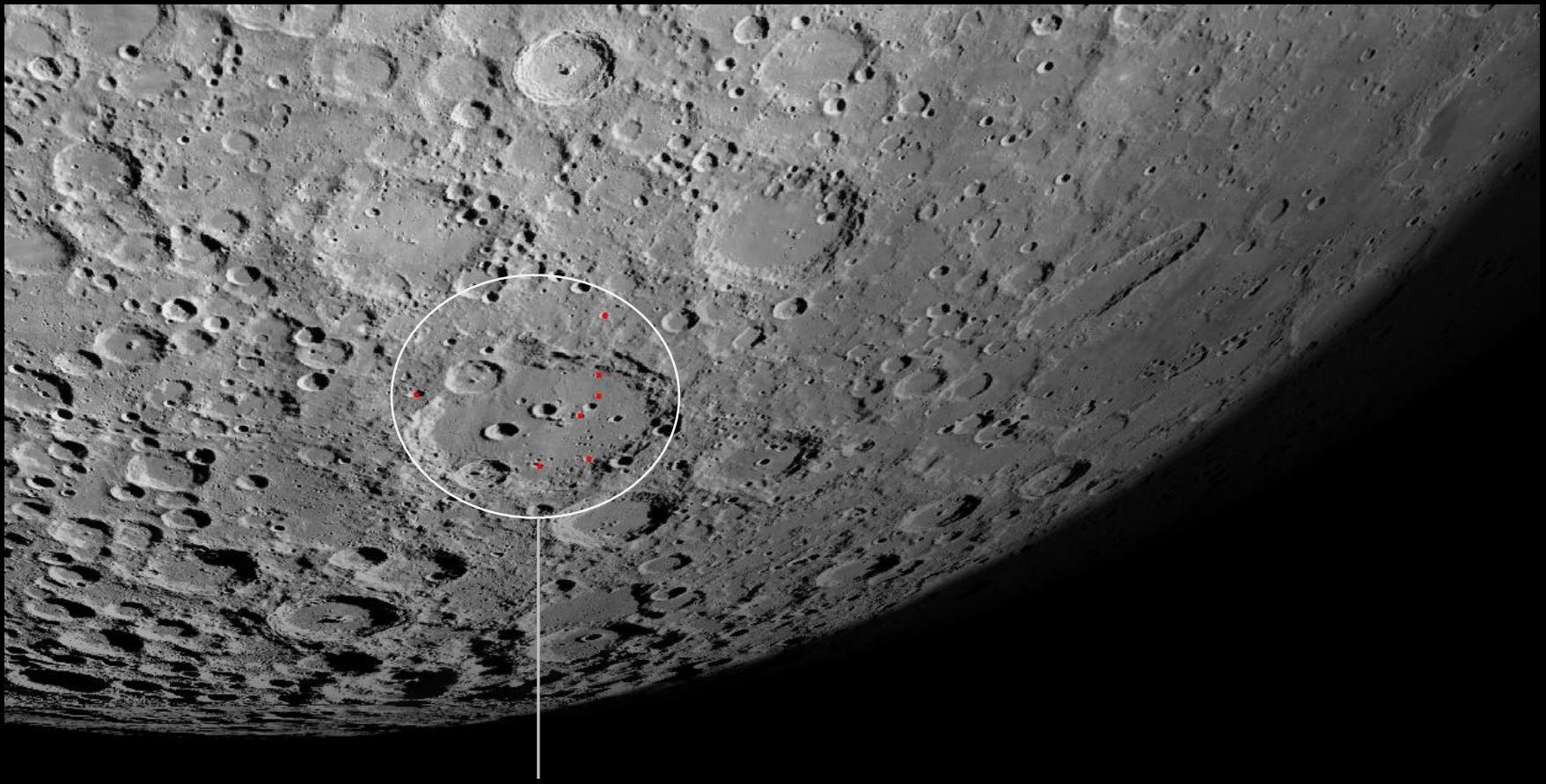


# Telescope Objects (10 Days)





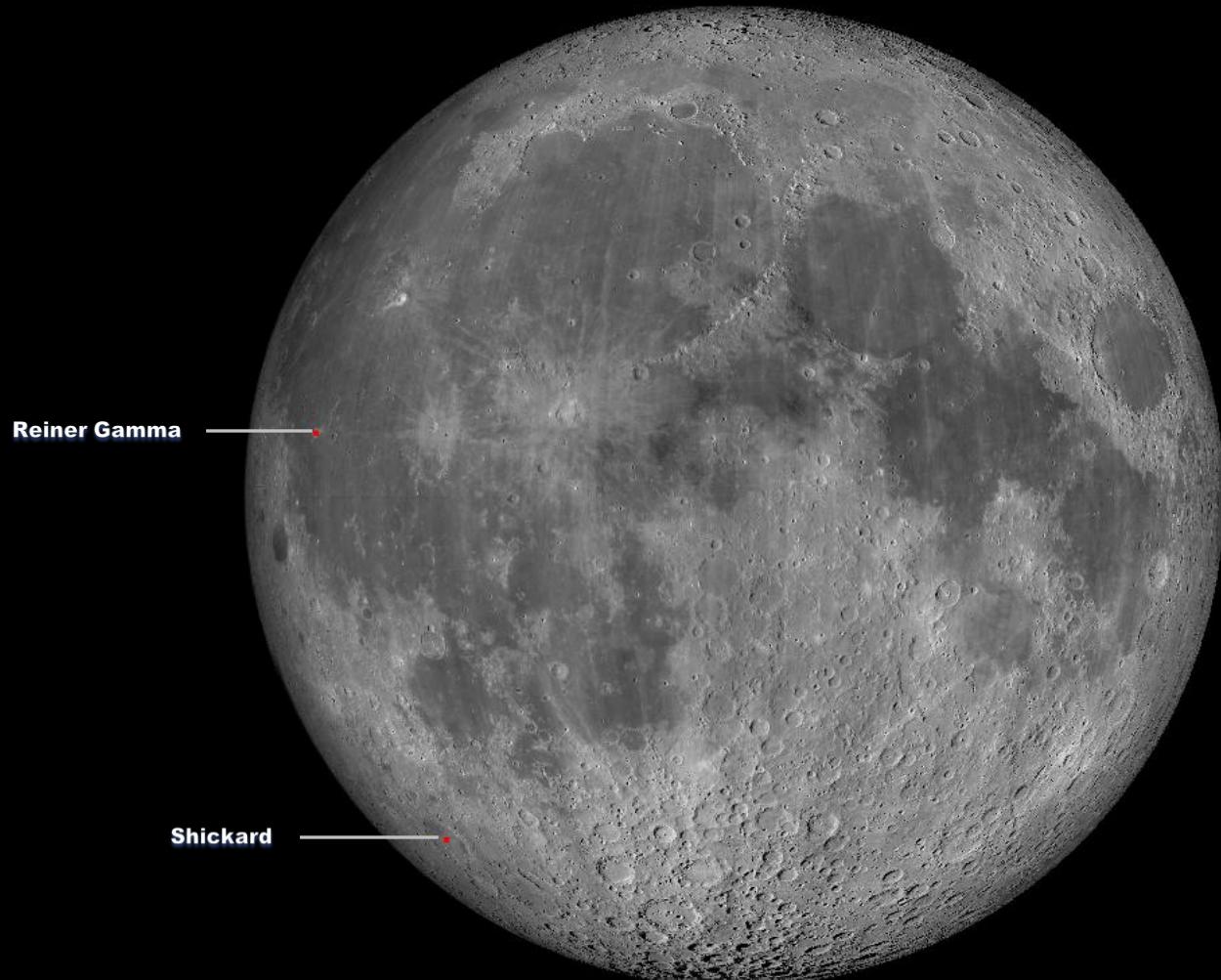
# Telescope Objects (10 Days)



**Clavius Craterlets**



# Telescope Objects (14 Days)



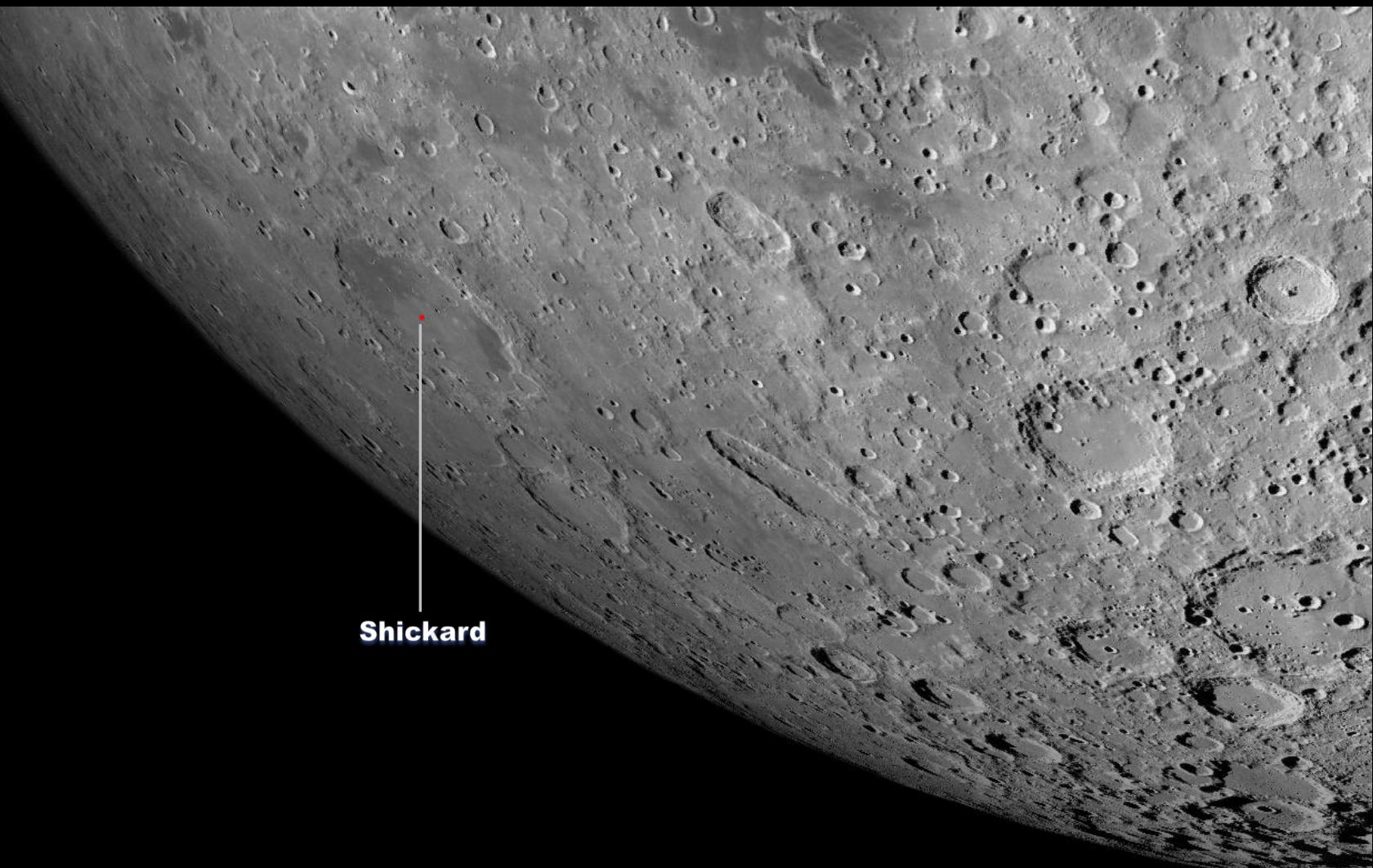


# Telescope Objects (14 Days)





# Telescope Objects (14 Days)





# Optional Lunar Activities

- **Naked Eye:**
  - Estimate first quarter phase within eight hours.
  - Estimate third quarter phase within eight hours.
  - Estimate full moon within thirty-six hours.
  - Plot moon's position against the stars for three consecutive days.
  - Compare the size of the full moon on the horizon with the full moon on the meridian using a dime held at arm's length.
  - Find the thinnest phase by which you can read newsprint.
- **Binocular:**
  - Sketch libration - use Mare Crisium or Grimaldi for examples.
  - Sketch a lunar map - use any scale for binoculars only.
- **Telescopic:**
  - Plot the moon's hourly motion against the stars for two hours or more.
  - Measure the height of a lunar mountain - need to calculate the sun's elevation at the mountain and estimate the shadow length - try Mt. Piton.



# Libration, Phases, and Supermoon

Explaining lunar libration, phases and dispelling  
Supermoon myths.



# Monthly Full Moon Name

The warm, moist Spring air returns and begins to soften the ground. With this also comes the Earthworms. Because of this, the March full moon is known as the Full Worm Moon. It is also known as the Full Sap Moon as this is also the time of year when the maple trees start to release their wonderful maple succulence!





# Gee Whiz Question(s) of the Month

What is the Sloan Great Wall?



# Gee Whiz Question(s) of the Month

The largest “structure” in the known Universe. It is a galaxy cluster that spans over 1.4 BILLION light years across !



# CE Observing Challenge

## NGC 2537 (Bear Paw Galaxy)

- Spiral Galaxy in Lynx
- Magnitude 11.7
- Right Ascension:      08h 14m 14.85s
- Declination:            45° 56' 44.2"

ENJOY!!



# Next Meeting

April 5<sup>th</sup>, 4:30 p.m.



M81 and Supernova in M82, Van Macatee



# Useful Websites

- [Stellarium for Windows](#)
- [SkySafari for Android](#)
- [Sky and Telescope:](#)  
<http://www.skyandtelescope.com>
- [Farmers Almanac:](#)  
<http://www.almanac.com/astronomy>
- [CEA Facebook page: http://bit.ly/CEAstronomy](#)
- [Virtual Moon Atlas](#)