

International OBSERVE THE MOON NIGHT 2019

October
SAVE THE DATE 5TH



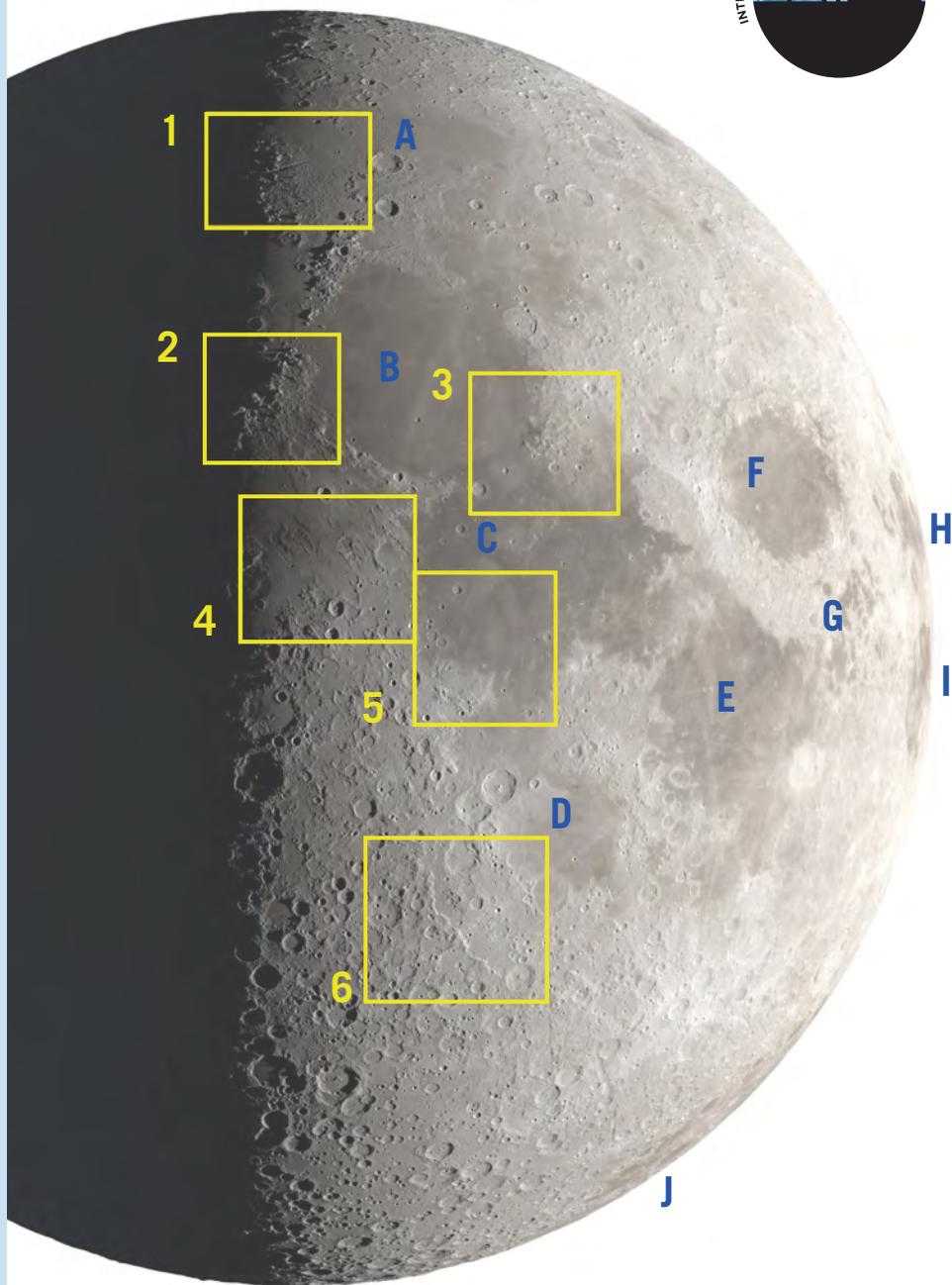
Northern Hemisphere Moon Map

This map depicts the Moon as it will appear from the northern hemisphere at approximately 9:00 PM EDT and 6:00 PM PDT on International Observe the Moon Night, October 5, 2019. Many of the best views will occur along the terminator (the line between the day and night side of the Moon).

Lunar Maria (Seas)

You can see a number of maria tonight. Once thought to be seas of water, these are actually large, flat plains of solidified basaltic lava. They can be viewed in binoculars or even with the unaided eye.

- A. Mare Frigoris
- B. Mare Serenitatis
- C. Mare Tranquillitatis
- D. Mare Nectaris
- E. Mare Fecunditatis
- F. Mare Crisium
- G. Mare Undarum
- H. Mare Marginus
- I. Mare Smythii
- J. Mare Australe



Selected Telescopic Objects

Some of the more interesting lunar landforms that have favorable lighting for viewing tonight are identified here. Details for each are on the reverse side of this map.

- 1. Alpine Valley
- 2. Apennine Mountains
- 3. Taurus-Littrow Valley
- 4. Hyginus & Ariadeus Rilles
- 5. Tranquility Base
- 6. Altai Scarp

International Observe the Moon Night 2019 Selected Objects for Telescopic Viewing

1. Alpine Valley



Sunrise will catch the Moon's Alps Mountains as we watch tonight. The mountains are cut through by the 190 km long and 10 km wide Alpine Valley. The Alpine Valley is an example of a graben, or down-faulted block.

2. Apennine Mountains



Enjoy the lunar sunrise as it illuminates the peaks of the Apennine Mountains. This range is part of the east rim of the Imbrium impact basin, is 250 km long and reaches up to 2.4 km high. The Apollo 15 landing site is shadowed tonight on the range's western edge.

3. Taurus-Littrow Valley



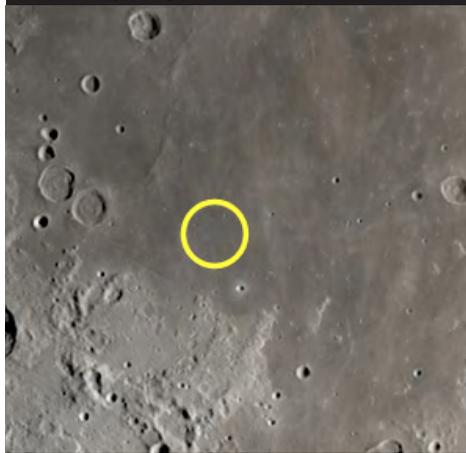
Look for the dark embayment extending east from Mare Serenitatis into the surrounding highlands. This valley is deeper than the Grand Canyon. It includes the landing site for Apollo 17, at the center of the drawn circle.

4. Hyginus & Ariadeus Rilles



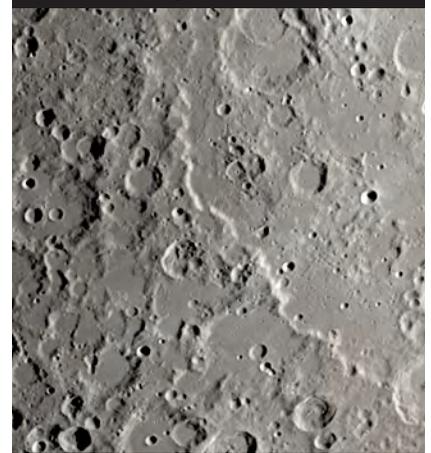
Formed by magma rising up through and widening cracks in the lunar crust. Hyginus (H) to the west and Ariadeus (A) to the east.

5. Tranquility Base



Mare Tranquillitatis includes the landing site (center of drawn circle) for Apollo 11, the first human mission to the lunar surface. The site was chosen for its smooth, flat terrain. The lunar module Eagle landed on the Moon on July 20, 1969 with Neil Armstrong and Buzz Aldrin while Michael Collins orbited above.

6. Altai Scarp



This spectacular cliff is the southwest rim of the outer ring of the Nectaris impact basin. It can be traced for nearly 700 km between the craters Kant and Piccolomini, and reaches heights of more than 7 km above the basin's center.

Detailed images are LRO WAC mosaics with north up and lunar west to the left. Find more high-resolution images of the Moon at:

lroc.sese.asu.edu
trek.nasa.gov/moon/

