# October Skies over the Pinnacles

October 2022

### October's Four Principal Phases of the Moon

October 3	First Quarter	
October 9	Full Moon	
October 17	Last Quarter	
October 25	New Moon	

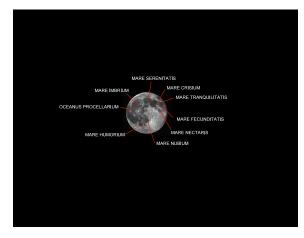
## October 1 is International Observe the Moon Night!



First question. What's so special about looking at the moon on October 1? Is it bigger, brighter, prettier than usual? Will it blow up on that date? Well, no. International Observe the Moon Night is an annual public outreach event sponsored by the Solar System Exploration Division at NASA's Goddard Space Flight Center, and other NASA and astronomical organizations that encourages observation, appreciation, and understanding of our Moon and its connection to planetary science and exploration.

Sometimes we just have to have a reason to appreciate something, even if that reason just sort of made up. This event is about taking the time to pause to take in some of nature's miracles. There is so much to appreciate about our natural satellite, the Moon. Some astronomers think that without its presence, intelligent life may never have evolved because it may have deflected just enough debris from the young and messy solar system to keep Earth safe enough for evolution to take its slow and torturous path.

So, if you have a telescope or binoculars, take them outside and take a really good look at the Moon. Many of the Moon's larger features can be identified just by looking at it. Here's a picture I took of the Moon when it was nearly full. Did you know that most of the large lunar features were named by a brewer of beer?





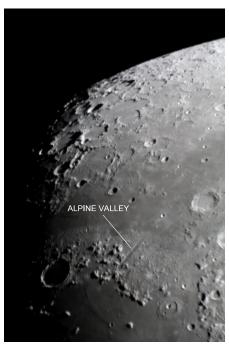
Here's a collection of pictures I've taken of the Moon over the years that you might enjoy seeing.



Here's how the full Moon appeared in July of last year. The orange color was caused by smoke from forest fires in the western United States.



Here's a wider view, showing the mountains just outside of Berea.



This is a closeup through my telescope that shows a volcanic feature called the Alpine Valley.



The crescent Moon is about to be swallowed by a cloud.



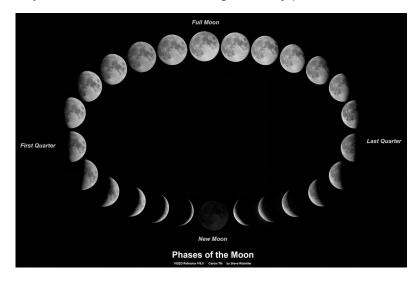


The Moon appears as a thin crescent just before a colorful sunrise.

### **Lunar Attractions in October**

October 1

International Observe the Moon Night. Enjoy the Moon all month as it makes it way around the Earth and through it many phases.



October 8

The almost-full Moon rises in the southeast right below to the planet Jupiter.



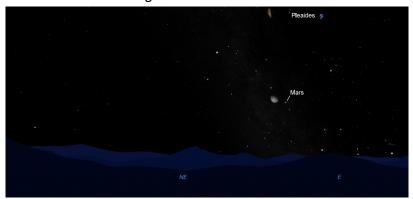
October 12

Just after 10PM, Look for the waning gibbous moon rising in the east, next to our favorite star cluster, the Pleaides.



October 14

Would you like to find the planet Mars? Our friendly Moon will show you where to look a little after midnight.



#### October 18

If you're up before it gets light this morning, grab your binoculars and find the nearly last quarter moon. Now scan down and a little right to find the pretty star cluster nicknamed the "Beehive" which is in the constellation, Cancer.



### October 21

The light of our Moon won't interfere with the annual Orionid meteor shower in the wee hours of this morning. Many astronomers consider this meteor shower to be the best, right behind the August Persieds. Plan to get up around 3AM to get the best show from a dark location.

#### October 25

If you happen to be in Europe, northeastern Africa, the Middle East or in western Asia you might be able to catch a partial eclipse of the Sun by the new Moon.

#### October 27

Just as it's getting dark, you might just catch the waxing crescent Moon setting in the southwest, followed closely by the bright orange star Antares. Antares is the heart of the constellation, Scorpius.



#### October 31

Happy Halloween!