





April Skies over the Pinnacles

April 2025

by Jeff Hutton

April's Four Principal Phases of the Moon

April 5	First Quarter	
April 13	Full Moon	
April 21	Last Quarter	
April 21	New Moon	

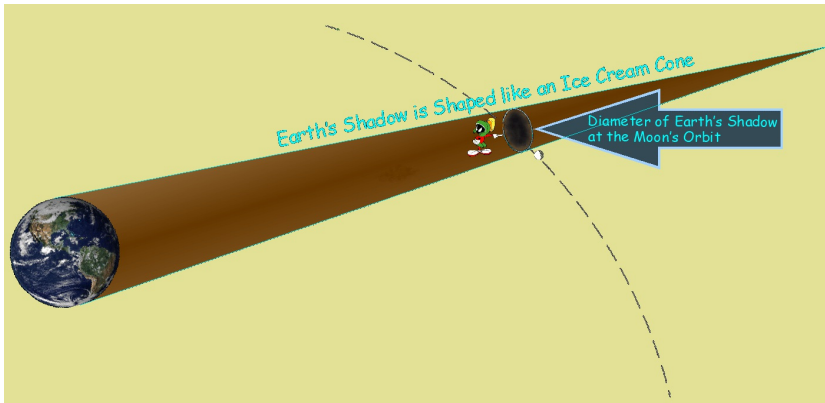
Light and Shadow



The picture above shows the **Belt of Venus** rising above the eastern horizon shortly after sunset. The dark "belt" is the shadow of the Earth on our atmosphere. Notice the first quarter Moon visible at upper right. If this had been an evening when the moon happened to be inside the Earth's shadow, we would see a scene like the one below and we'd be in the middle of a lunar eclipse.



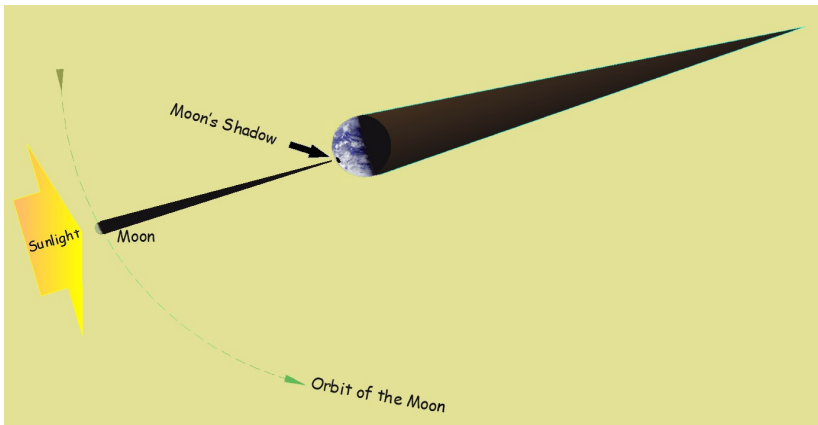
In the early hours March 14 we were treated to a total eclipse of the Moon. But this was an eclipse with a difference. (More about that, later.) Here's a quick comparison of lunar and solar eclipses. A lunar eclipse is shown below. As the Moon's orbit carries it through the large shadow of the Earth, it turns red, which is the color of our sunset.



What we see from Earth



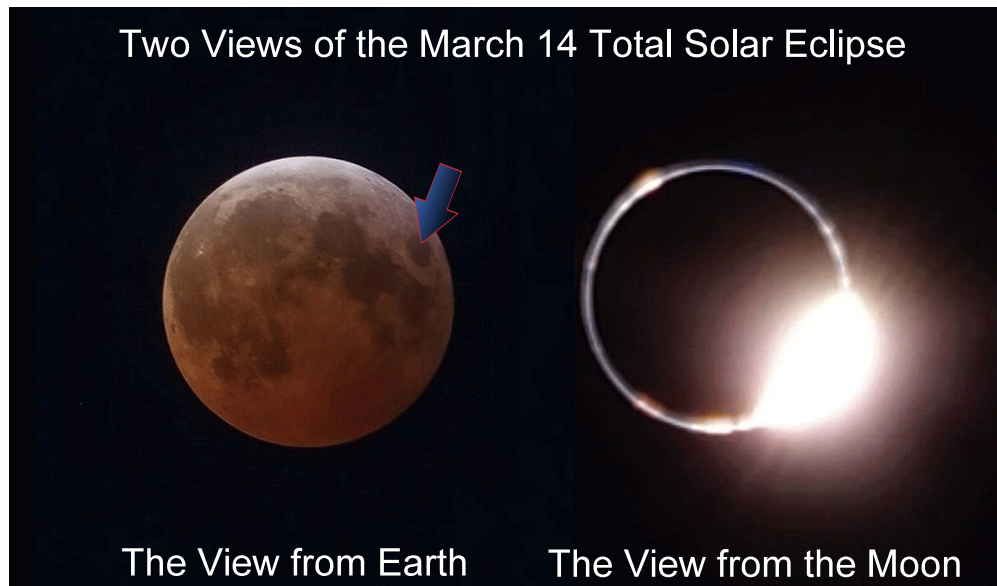
A solar eclipse happens when the Moon's orbit brings it between the Earth and the Sun. Because the moon is much smaller than the Earth, it casts a small traveling shadow, less than 100 miles across, on some strip of land or water, on the earth.



What we see from Earth



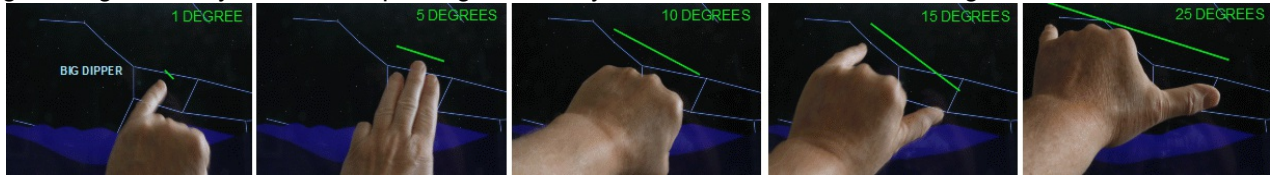
The March 14 lunar eclipse was a particularly pretty lunar eclipse: so I'm told. I was recovering from a case of COVID which caused me to miss this wondrous event. My frustration about missing the eclipse was lessened by an image (below) sent to me by a Berea College classmate. It wasn't a typical image of the lunar eclipse but of an eclipse of the Sun taken at the same time!



The lunar lander, called the 'Blue Ghost' is a joint effort by both NASA and the private company called Firefly Aerospace. It recently touched down on the lunar maria called the Sea of Crisis, indicated by the arrow. During the time we were seeing a lunar eclipse on March 14, Blue Ghost was seeing a solar eclipse of the Sun by the Earth! The image at left was taken from the Earth. The image at right was taken by Blue Ghost: from the Moon!

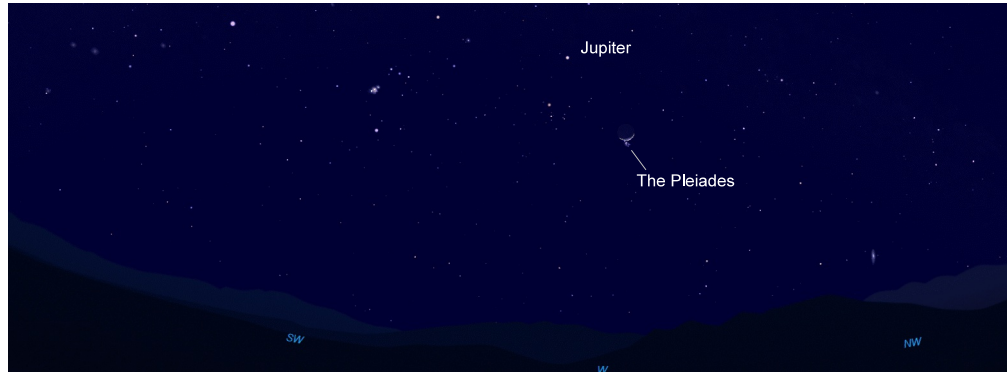
Attractions in April

When you hold your hand all the way out and hold three fingers out, like the scout's salute in panel 2, your fingers create an **angular distance** of 5 degrees, about the width of the bowl of the Big Dipper. When I talk about the angular distance between, say, the Moon or a star or planet, I'll say that they are separated by a certain number of angular degrees. Sky and Telescope magazine is my source for most of the following information.



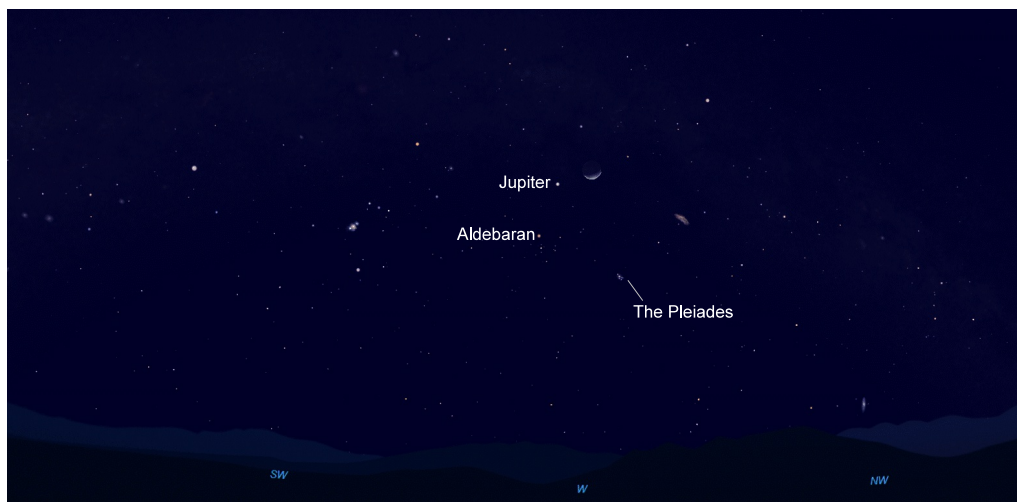
April 1

Grab your binoculars and check out the thin crescent Moon perched right over the pretty star cluster, the Pleiades. Jupiter is above and to the left.



April 2

Check out how far east the Moon has moved eastward in one day on its orbit, right in amongst Jupiter and Aldebaran, brightest star in the constellation, Taurus.



April 7

Tonight, the moon visits the constellation Leo, the lion, now in the southeast..



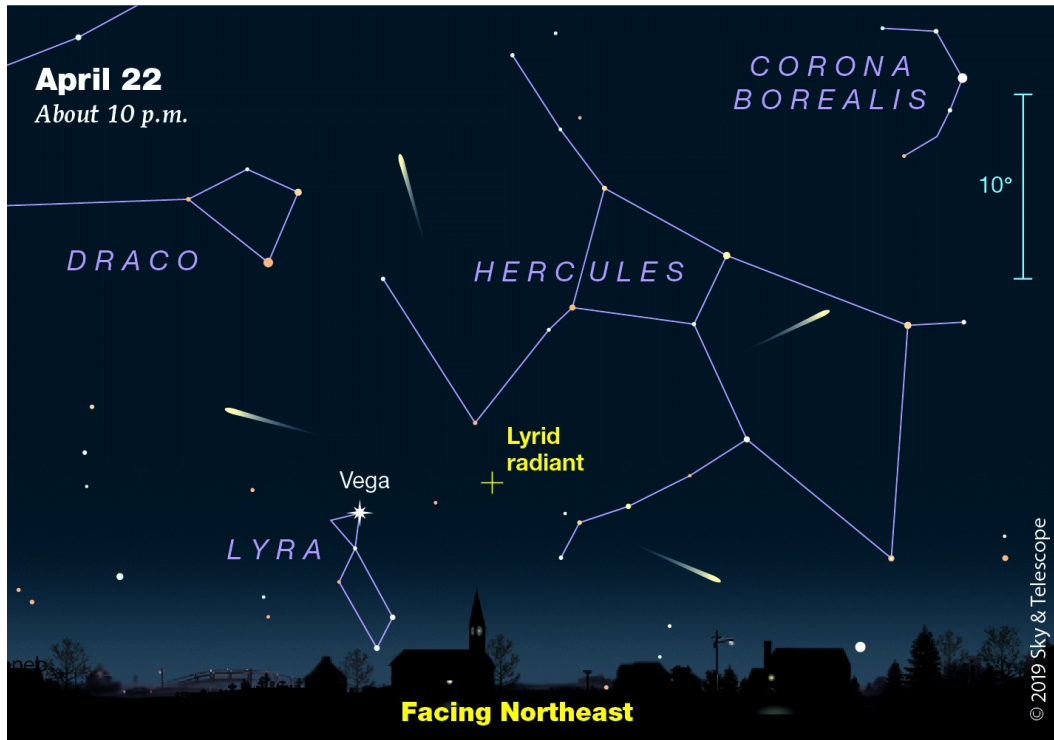
April 12

Look for the rising full Moon rising with Spica, brightest star in the constellation, Virgo. If you were in Central America at this time, the Moon would pass in front of, or occult, this pretty blue star.



April 21-22

Time for the annual Lyrid meteor shower. At this time of year, the Earth's orbit is taking us in the direction of the constellation Lyra, the harp. That's why the meteors seem to be coming from the direction of Lyra. The waning gibbous Moon will light the sky, making the Lyrid meteors harder to spot. Comet Thatcher left a trail of fine dust that gives us this meteor shower. Try getting up around 2:30AM to see of these celestial streakers.



April 28

For the second time this month, the moon pays a visit to the Pleiades this evening.

