The Night Sky

Tight Grouping of Planets in the Evening Sky

Last year at this time, Venus was bright in the evening western sky and moving quickly on the sky to its June 5th transit across the sun. For the past year, Venus has spent most of this time in the morning eastern sky. Venus now re-emerges in the evening western sky after spending the last month in the solar glare. However, Venus will be very low on the sky within an hour after sunset, so you will need an unobstructed, flat western horizon to see it. As the summer progresses, Venus will get higher and higher in the evening sky.

Jupiter on the other hand is sinking lower and lower in the evening western sky as the earth races around the sun as compared to the slower moving Jupiter. As reported in these Night Sky articles, Jupiter has been dominating the evening sky for the past five months. This will be the last month to view Jupiter in the evening sky until the first of next year. During the last week of May, Venus, Jupiter, and Mercury will form a very tight grouping low in the west-northwestern sky. Unfortunately this trio sets about one hour after the sun, so you need to start looking for this trio about 20 minutes after the sun sets. This planetary show begins on May 19th, when Jupiter (top of the three), Venus (middle), and Mercury (bottom) form a straight line on the sky. From May 24th through May 27th, all three will have a triangular configuration very close together on the sky. Each night, these three planets will change their positions in the triangle as each planet moves on the sky. By May 31st, these three planets will once again form a straight line with the planets in reverse order of the May 19th grouping (Mercury being the highest and Jupiter being the lowest). This grouping takes place in bright twilight, but should still be easily visible since all three planets are very bright.

The other side of the night sky prior to midnight contains the planet Saturn. Saturn is at opposition on April 28th, and as such, will rise in the southeastern sky at sunset at the beginning of the month of May. Saturn lies east of the bright star Spica and forms a nice pairing with this star. Saturn's rings have been opening up over the past few years making an impressive sight through a telescope. Currently Saturn's rings are tilted at 18^{o} from our line of sight. The rings tilt will continue to "open up" until reaching their maximum tilt of 27^{o} in 2017.

The moon is at full phase on the night of May 24th about one-half hour before midnight. On this night of full moon, the moon will pass in front of the bright double star Beta Scorpii, where Beta Scorpii is the northern-most star (top) of the "claws" of Scorpius. This occultation begins around 9:35 p.m. E.D.T. when the moon will be about 10 above the southeastern horizon. You can easily view this occultation with your naked eye. Native Americans called the full moon of May the "Full Strawberry Moon," since strawberries are harvested during this month. Meanwhile, early Europeans referred to May's full moon as the "Rose Moon." The moon will transit the sun (a solar eclipse) on May 10th. However, this eclipse will not be visible in Tennessee and will be annular due to the fact that the moon will be near apogee (farthest point from the earth). Annular eclipses occur when the moon does not fully cover the sun due to the moon having a smaller angular size than the sun.

The ETSU Powell Observatory open houses are on hiatus for the summer. They will resume in the fall.

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