

DUBAI ASTRONOMY GROUP

Newsletter

INSIDE THIS ISSUE



THE SKY THIS WEEK FROM JULY 26 TO AUGUST 4

The Southern Delta Aquariid meteor shower reaches its peak around New Moon this week, delivering impressive views to those under a dark sky.

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THE TRUTH IS OUT THERE: USING VERITAS TO SEARCH FOR E.T.

Traditionally, the hunt for intelligent life in the cosmos has focused on radio signals. But now researchers are expanding the search to look for pulses of light that might indicate alien intelligence.

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PLANTING A FLAG ON THE MOON

With virtually no atmosphere on the moon – and, therefore, no wind – flags that fly freely on Earth would hang like limp cloth in the lunar environment. So Apollo 11 engineers had to rethink flagpole design entirely.

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5 MOON-LANDING INNOVATIONS THAT CHANGED LIFE ON EARTH

The technologies behind weather forecasting, GPS and even smartphones can trace their origins to the race to the moon.

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ASTRONOMY PICTURE OF THE WEEK



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HDR: Earth's Circular Shadow on the Moon

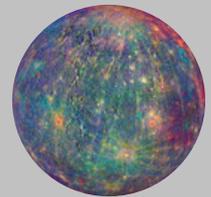
Image Credit & Copyright: Cristian Fattinnanzi

Explanation: What could create such a large circular shadow on the Moon? The Earth. Last week's full Moon -- the Buck Moon -- was so full that it fell almost exactly in a line with the Sun and the Earth. When that happens the Earth casts its shadow onto the Moon. The circularity of the Earth's shadow on the Moon was commented on by Aristotle and so has been noticed since at least the 4th century BC. What's new is humanity's ability to record this shadow with such high dynamic range (HDR). The featured HDR composite of last week's partial lunar eclipse combines 15 images and include an exposure as short as 1/400th of a second -- so as not to overexpose the brightest part -- and an exposure that lasted five seconds -- to bring up the dimmest part. This dimmest part -- inside Earth's umbra -- is not completely dark because some light is refracted through the Earth's atmosphere onto the Moon. A total lunar eclipse will occur next in 2021 May.

AUGUST CELESTIAL EVENTS

August 9 - Mercury at Greatest Western Elongation.

The planet Mercury reaches greatest western elongation of 19.0 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the morning sky. Look for the planet low in the eastern sky just before sunrise.



August 12, 13 - Perseids Meteor Shower

The Perseids is one of the best meteor showers to observe, producing up to 60 meteors per hour at its peak. It is produced by comet Swift-Tuttle, which was discovered in 1862. The Perseids are famous for producing a large number of bright meteors. The shower runs annually from July 17 to August 24. It peaks this year on the night of August 12 and the morning of August 13. The nearly full moon will block out most of the fainter meteors this year, but the Perseids are so bright and numerous that it could still be a good show. Best viewing will be from a dark location after midnight. Meteors will radiate from the constellation Perseus, but can appear anywhere in the sky.



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