Astronomy Club of Asheville April 2024 Highlight A Daylight Lunar Occultation of Venus

This article and illustration are courtesy of the folks at **SKY & TELESCOPE**

APRIL IS A BUSY MONTH for the Moon. The day before it eclipses the Sun, the Moon serves as its own warmup act by covering the planet Venus on the **7th** for viewers across the eastern third of North America, much of Mexico and the Caribbean, and Central America. The occultation occurs in broad daylight with the crescent Moon just 1.8%-illuminated and located 15° from the Sun. That combination will make spotting the Moon a challenge.

Your best bet is to find Venus first by using a Go To telescope or one on an equatorial mount fitted with setting circles. Attach a solar filter to the telescope, center, and focus the Sun; then offset to Venus's position in R.A. and Dec. Finally, remove the filter and view — the planet should be obvious, with the Moon faintly visible nearby. From Atlanta, Georgia, Venus's gibbous disk will take about 26 seconds to completely disappear behind the advancing illuminated limb of the Moon, starting about 12:17 p.m. EDT. Venus reappears at 1:28 p.m. on the Moon's invisible dark limb, where the planet will seem to materialize from nowhere into a blue sky!



This simulated view shows Venus mere moments before it's occulted by a thin, waning crescent Moon on April 7th, as seen from Asheville, NC.

For more details about this occultation, visit the International Occultation Timing website at www.lunar-occultations.com/iota.

Additional comments from the Astronomy Club of Asheville:

Venus Occultation Timings for this 1-hour, 11 minute event in the Asheville, NC region:

12:21 p.m. EDT	1st contact and beginning of Venus' disappearance
1:32 p.m EDT	2 nd contact and the beginning of Venus' reappearance