Article courtesy of SKY & TELESCOPE

January 2025

The Moon Occults Mars

MARS HAS MORE in store. On the night of January 13–14, the full Moon occults the planet for observers in the contiguous United States, much of southern and eastern Canada, Mexico, and West Africa. Use your favorite planetarium software or google "International Occultation Timing Association Mars occultation 2025" for disappearance and reappearance times for your location.

From Chicago, Illinois, for example, the Moon and Mars are less than 2°

See the following page for the Asheville, NC occultation timings.

apart as they rise together in evening twilight. At 8:07 p.m. CST, the Moon encroaches on the planet, taking about 29 seconds to completely cover it. More than an hour later, at 9:16 p.m., Mars slowly returns to view on the opposite limb.

During the December 2022 Mars occultation, I tried to keep sight of Mars right up to the lunar limb with just my eyes. I failed miserably, losing the planet in the full Moon's glare nine minutes before it disappeared. How-

■ Associate Editor Sean Walker captured this Mars occultation sequence on December 8, 2022. "Mars drifted behind many craters for about 12 minutes or so before finally lifting away from the Moon's edge," he wrote. The Moon covers the Red Planet again this month on the night of January 13–14.

ever, it was clearly visible in binoculars right up to the moment of occultation. Viewed with my telescope, what struck me most was the compelling color contrast between the Red Planet and the gray Moon. I also vividly recall the wonder I felt watching Mars seemingly rise above the lunar horizon as the Moon inexorably drifted away.

Both objects are bright and show up well in photos taken with a telephoto lens on a tripod. Smartphone users can get excellent images when the device is aimed at the eyepiece of even a modest telescope. This method works best with a dedicated mounting bracket.

Good luck and take care not to let your fingers freeze!

Additional Information about this January 2025 Lunar Occultation of Mars

from the Astronomy Club of Asheville

This lunar occultation of Mars will take place on the night of January 13, 2025 in the Asheville, NC region. The Moon will be full that night. You can observe this occultation of Mars in the constellation Gemini. At the time of the occultation, the two solar system bodies will be about 43° above the eastern horizon. Using a telescope or binoculars will enhance your experience viewing this event!

Approximate timings for this occultation from the Asheville, NC region:

First contact	9:08 p.m. EST	Mars disappears at the bottom of the Moon
Second contact	10:17 p.m. EST	Mars reappears off the top of the Moon

The occultation is approximately 69 minutes long. Enjoy!!