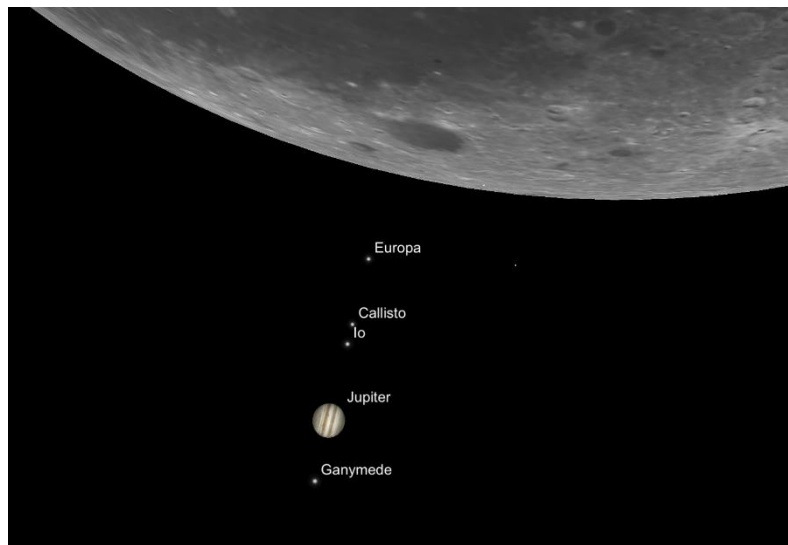


Pre-Dawn Lunar Occultation of Jupiter

- an October 2026 Sky Event from the [Astronomy Club of Asheville](#)

In the pre-dawn hours of **Tuesday, October 6th**, the 20% illuminated, waning crescent Moon will pass in front of (occult) the planet Jupiter in the constellation Leo, the Lion, for about 61 minutes here in the Asheville, NC region. Using binoculars or a small telescope will greatly enhance your observing experience. A telescope will allow you to also watch the occultation of Jupiter's 4 Galilean moons, one at a time.



Right: the view through a telescope just before disappearance.

Here are the approximate timings and info for the Asheville region:

Disappearance: 4:12 a.m. EDT; **Reappearance:** 5:13 a.m. EDT

→ Observe this occultation low in the eastern sky - about 11 degrees above the horizon at disappearance.

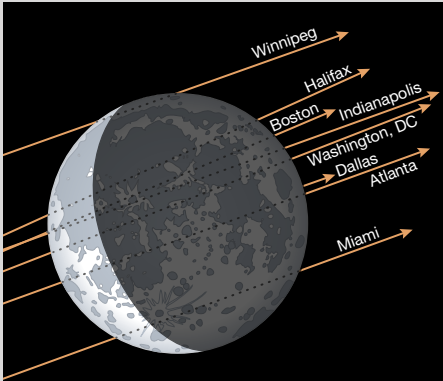
Find out more in the article below.

Spectacular Cover-Up

This Jupiter occultation is not to be missed!

Skywatchers in eastern and central North America, including parts of the Mountain states, are in for a rare treat. On **Tuesday morning, October 6th**, the waning lunar crescent covers Jupiter and its four Galilean moons in a stunning occultation near dawn. The Moon's bright limb eclipses the planet (magnitude -1.9), which reappears at the dark limb minutes to about an hour later, depending on your location. Like a row of ducklings, Europa, Callisto, and Io precede their mother planet, with Ganymede bringing up the rear. After the cover-up, each rises in succession above the Moon's semi-dark, earthlit edge.

You can enjoy the spectacular game of hide-and-seek any way you like, whether by naked eye, binoculars, or through a small telescope. Or all of the above. To make sure you don't miss it, consider changing location if the weather's bad. Apps like *Zoom Earth* (zoom.earth), *Windy* (windy.com), and *Astrospheric* (astrospheric.com) offer free versions that use up-to-the-minute satellite imagery to plot clouds and their movements.



▲ This diagram shows the entry and exit points of Jupiter at the Moon's bright and dark limbs for a selection of cities in North America. Event timings are listed in the table below.

Jupiter and the Moon are located in Leo, 9.5° to the upper right of Regulus and stand highest in the sky as seen from the East Coast. The farther west you are the lower their altitude, so be sure to scout out a location with an unobstructed eastern sky in advance. From Boston, the duo is 23° high at first contact at 4:27 a.m. local time and climbs to 35° at its conclusion at

5:30 a.m. For Chicagoans the event begins at 3:22 a.m., with the Moon's altitude at 9.5°. Farther west in Austin, Texas, the Moon rises with the occultation already underway. Observers there will witness Jupiter's reappearance at 4:10 a.m., 9° above the horizon.

The occultation's northern limit, where the planet grazes the Moon's limb, slopes across eastern and central Canada and down into northern Montana. The southern limit cuts across southern Mexico and Cuba. For more details and graze-limit maps, check out Eberhard Riedel and David Dunham's dedicated page at tinyurl.com/Graze2026.

Outside the occultation zone, skywatchers see one of the most compelling conjunctions ever of a bright planet and the Moon. This is especially true for North and Central America, which are adjacent to the region. Las Vegas, a city that never sleeps, sees the duo just 1° apart around 4 a.m. For Seattleites, Jupiter floats less than ½° above the Moon when the two reach 5° altitude.

Other sights to watch for include Io and Callisto, which pair up tightly just before their disappearance behind the Moon and open up at reappearance. After the occultation is complete, Ganymede casts its shadow on Jupiter starting at 9:37 UT (5:37 a.m. EDT). And if that's not enough frosting on the cake, the Great Red Spot transits Jupiter's central meridian at 10:36 UT and should be obvious an hour before. Clearly, the cosmos is pulling out all the stops for this event!

Visit the International Occultation Timing Association's (IOTA) special event page at tinyurl.com/IOTAJupiter for a map and listing of times for many cities. Disappearance times are when the Moon's limb *first* touches Jupiter. Reappearance times are when the first bit of the planet shows at the dark limb. The next Jupiter occultation visible in North America won't be until (yikes!) September 28, 2034. I hope you're all able to get out and see this amazing bit of gravitational clockwork. It could become one of your most memorable observing experiences.

Occultation of Jupiter on October 6, 2026		
City	Disappearance (UT)	Reappearance (UT)
Winnipeg	8:45.5	9:03.9
Halifax	8:35.0	9:36.2
Boston	8:26.8	9:29.9
Indianapolis	8:19.5	9:18.1
Washington, DC	8:20.5	9:24.5
Dallas	—	9:11.5
Atlanta	8:15.7	9:16.7
Miami	8:20.8	9:09.0