



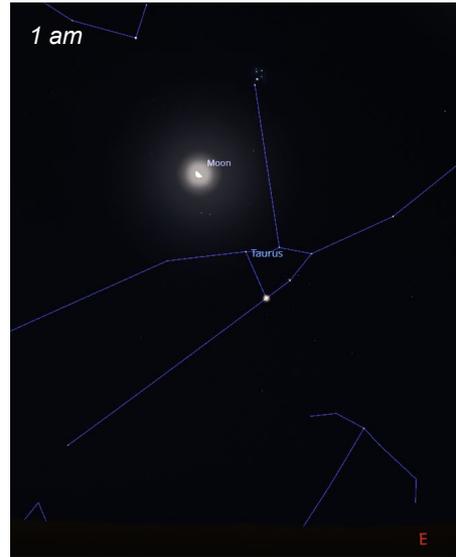
September 2023 Astronomy Report



- **Autumnal Equinox**
 - September 22, 11:50 pm
- **Moon:**
 - Phases
- **Planets:**
 - Inner planets
 - Mercury best morning view in 2023
 - Venus is lovely as usual
 - Outer planets
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 - Mars approaching solar conjunction in November, challenging to view
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 - Amberwood Court, September 16
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 - Whiting Center, September 23

Moon - Phases

September 6 - Last Quarter (Taurus)

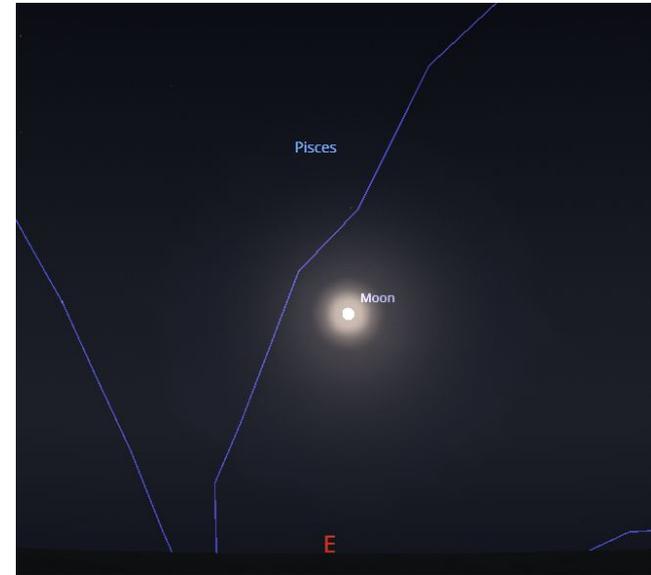


September 14 - New Moon

September 22 - First Quarter (Sagittarius)



September 29 - Full Moon (Pisces)



Apogee (252K miles) - 12th
Perigee (224K miles) - 27th



September 2023 Astronomy Report



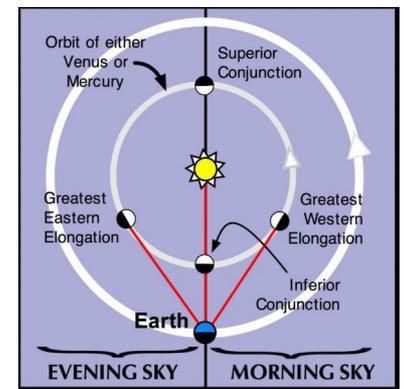
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Morning: Mercury - (Leo)

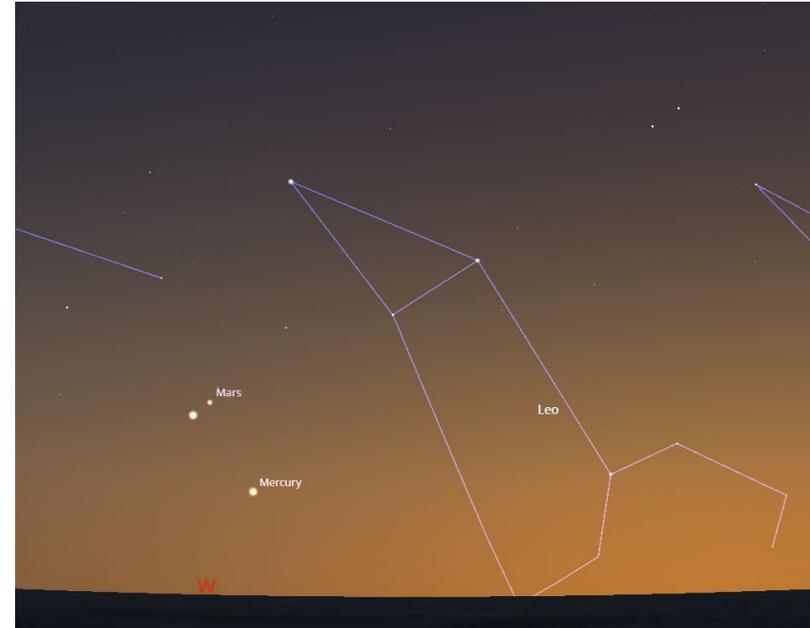
Best morning view of Mercury in 2023 - still a challenge!

Mercury reached greatest eastern elongation on August 9; inferior conjunction on September 6; r

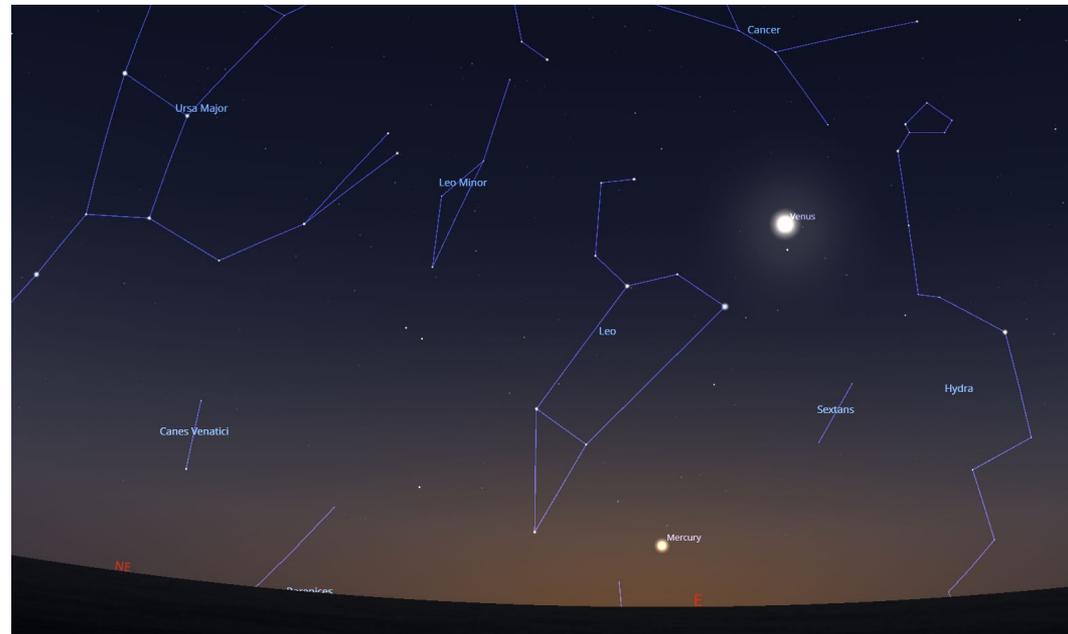
Reaches greatest western elongation on September 22



August 9, 8:30 pm



September 29, 6 am



Morning: Venus - (Cancer)

Venus dominates in early morning, by end of September crosses into Leo and becoming farther from Earth

September 11, 5 am

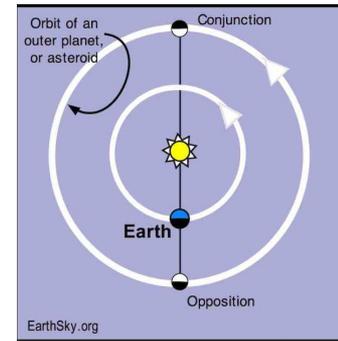


Early Evening: Mars - (Virgo)

Mars slowly approaching solar conjunction in November

Challenging to view right after sunset early in September

Near occultation with crescent Moon during the day September 16



September 7, 8 pm



September 16, 12 noon



September 16, 12 noon



Evening / Morning: Jupiter, Uranus - (Cetus, Taurus)

Jupiter rises around 10 pm at beginning of September; best views after midnight when high in southern sky

Uranus also best viewed after midnight between the Pleiades and Jupiter; 1st planet discovered by telescope (William Herschel - 1781)

September 18, 11 pm



Visible with binoculars



SPACE AND PHYSICS

ASTRONOMY

PUBLISHED 3 days ago

Something Just Smacked Into Jupiter And Amateur Astronomers Captured It

You come at the king, you best not miss.

The impact was first spotted by the Okinawa-based astronomical observation projects OASES and PONCOTS at 1:45 am Japan Standard Time on August 29 (4:45 pm UTC, August

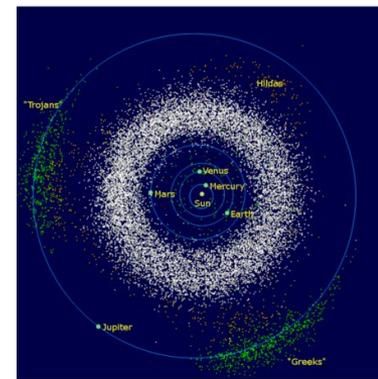
A [2013 study](#) suggested that Jupiter gets hit by objects between 5 to 20 meters (16.5 feet and 65 feet) in diameter around 12 to 60 times every year. Objects larger than 100 meters (328 feet) are likely to impact Jupiter every few years. That's approximately 10,000 times larger than the impact rate of similar objects on Earth.

Don't feel too sorry for Jupiter, though. Thanks to its giant mass and strong gravitational pull, the gas giant commands a huge number of asteroids in the Solar System. Often this protects Earth and the other inner planets from rogue objects, but it might also mean that Jupiter is [slinging the occasional asteroid](#) or comet towards us.

Astronomers have captured moments of impact on the gas giant a handful of times. The first instance occurred in 1994 when the [comet Shoemaker-Levy 9](#) collided with the gas giant, making history as the first-ever direct observation of two bodies colliding in the Solar System.

<https://www.iflscience.com/something-just-smacked-into-jupiter-and-amateur-astronomers-captured-it-70524>

Asteroid belt



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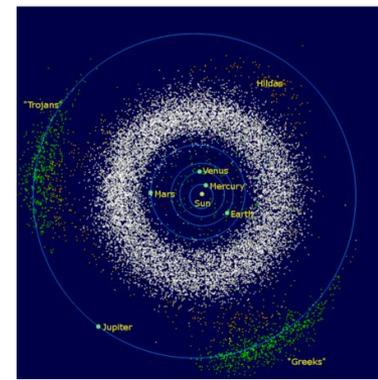
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Asteroid belt



Evening / Morning: Saturn - (Aquarius)

Saturn visible throughout the night, best viewing in late evening



September 1



September 30

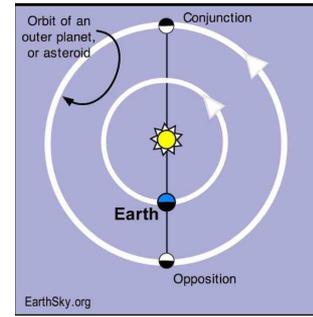
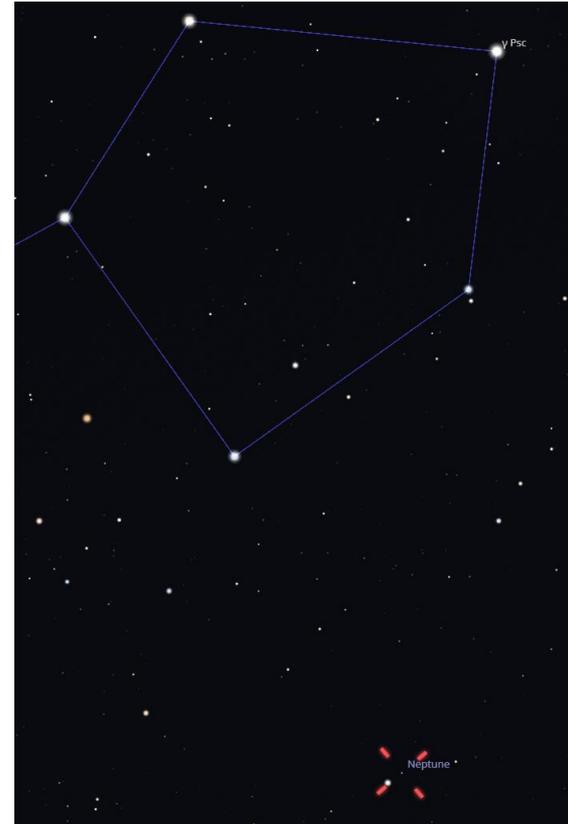


Evening / Morning: Neptune - (*Pisces*)

Neptune reaches opposition on September 19



Visible with binoculars





September 2023 Astronomy Report

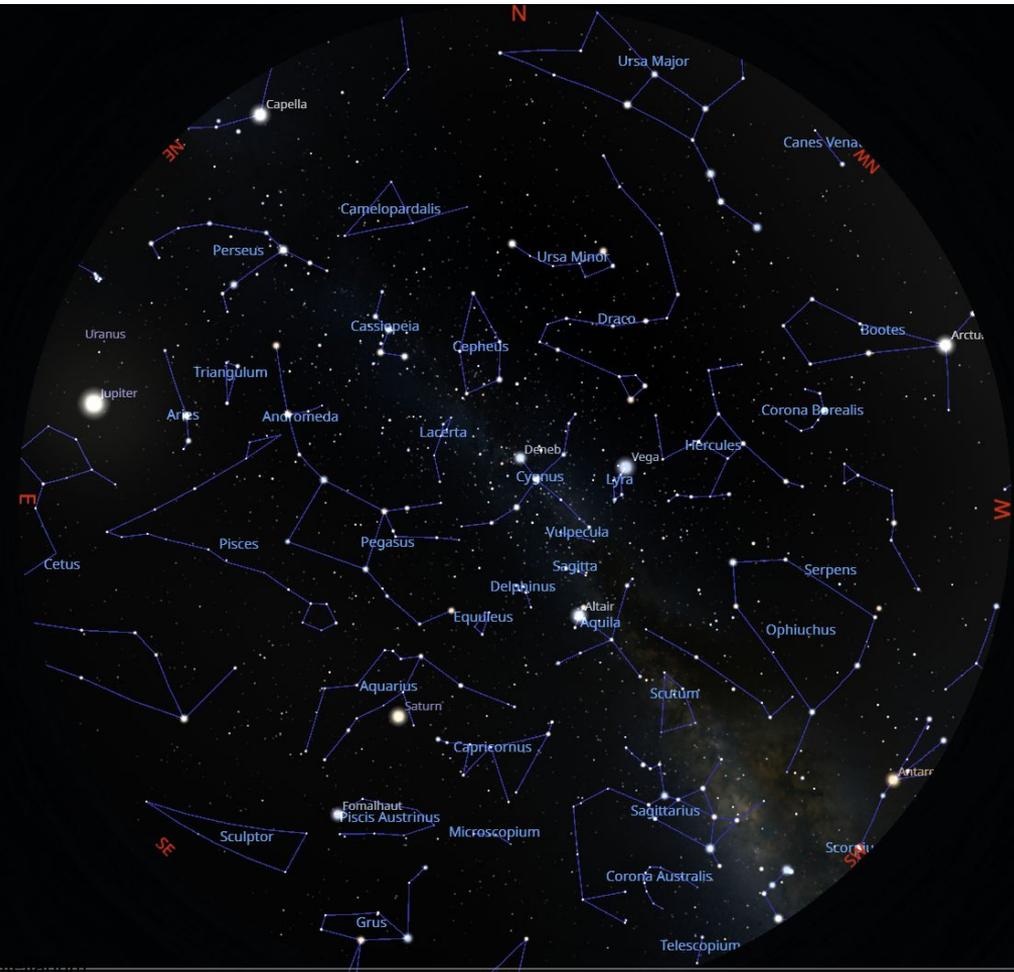


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September Dark Sky Party Amberwood Court, September 16

Ps 19:2

10 pm



September Dark Sky Party Amberwood Court, September 16

Ps 19:2

1 - Cocoon Nebula



3 - Tulip Nebula



2 - North American Nebula



4 - Veil Nebula





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September Public Viewing (Telescope Clinic)

Whiting Center, September 23



Sun sets ~6:45 pm; Jupiter rises ~8 pm

