



November 2025 Astronomy Report



- **Moon:**
 - Phases
 - Maginus sunrise ray (again!)
- **Planets:**
 - Evening: Mercury and Mars (*very low in west*), Saturn, Neptune, Uranus, Jupiter
 - Morning: Uranus, Jupiter, Venus and Mercury (*very low in east*)
- **Comets/Asteroids/Meteor Showers:**
 - Comets A6 (Lemmon), R2 (SWAN), 3I/ATLAS
 - Leonid meteor shower
- **Dark Sky Star Party:**
 - 22171 Cody Ct - BVS, November 15
- **Public Viewing:**
 - Cub Lake, November 29

Moon - Phases

November 5 - Full Moon (Aries)



November 12 - Last Quarter (Leo)



November 19 - New Moon

November 27 - First Quarter (Aquarius)



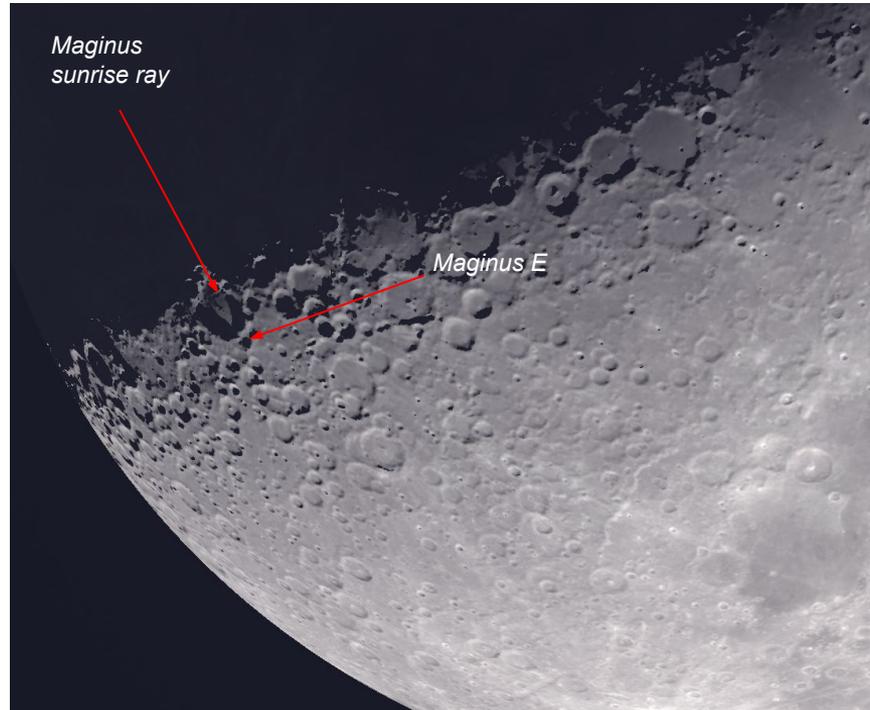
Apogee (253K miles) - 19th
Perigee (222K miles) - 5th

Moon - Maginus sunrise ray

November 27 - First Quarter Moon (Thanksgiving night)



Maginus named after Giovanni Antonio Magini - 16th century Italian mathematician and astronomer. In 1588 he was chosen over Galileo to be the Chair of Mathematics at the University of Bologna. He supported a geocentric view of the solar system.





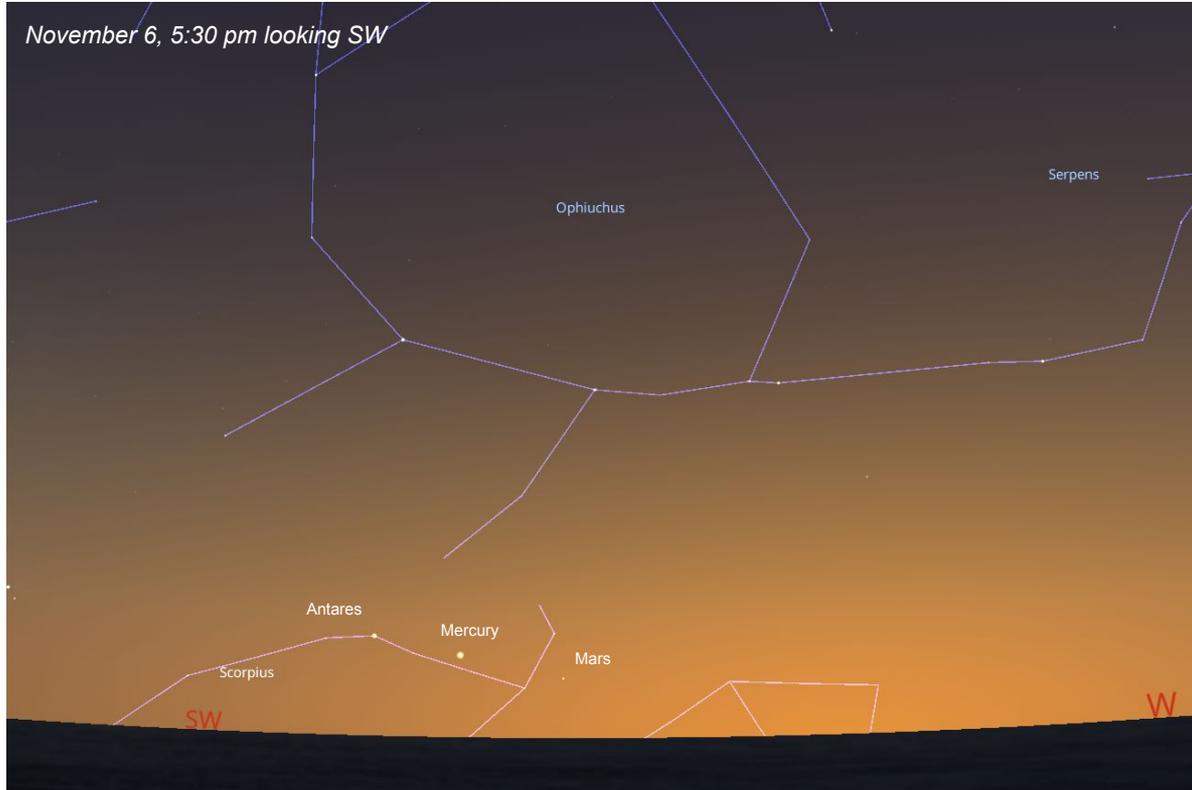
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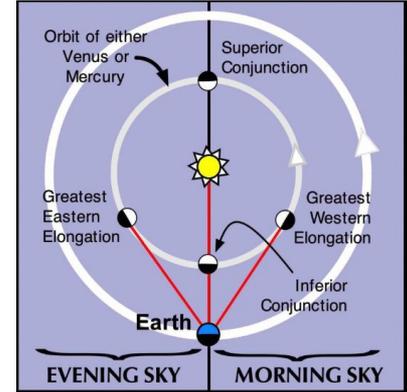
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Evening Planets: Mercury/Mars - (Scorpius)

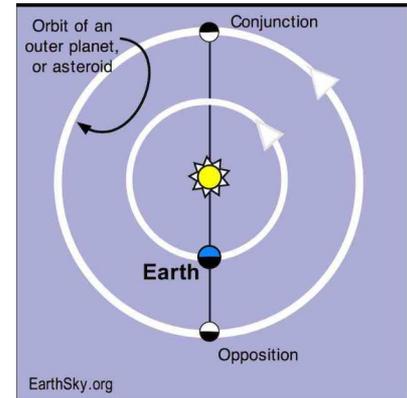
Mercury starts off November as an evening planet, then switches sides to a morning planet by the end of the month. Solar inferior conjunction on November 20th. Mars is getting dimmer and smaller as it's heading towards conjunction. Both planets present a challenge in viewing this month.



Mercury



Mars



Evening / Morning Planets: Saturn/Neptune - (Aquarius, Pisces)

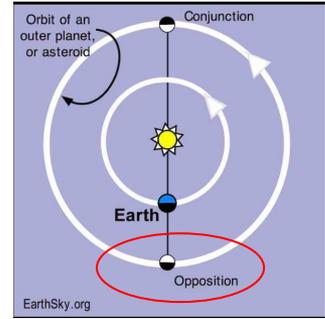
Saturn & Neptune remain close together, setting around 2 am mid-month



Saturn's ring tilt is almost flat and requires larger amateur scopes and good seeing conditions to be viewable.

Evening / Morning Planets: Uranus - (Taurus)

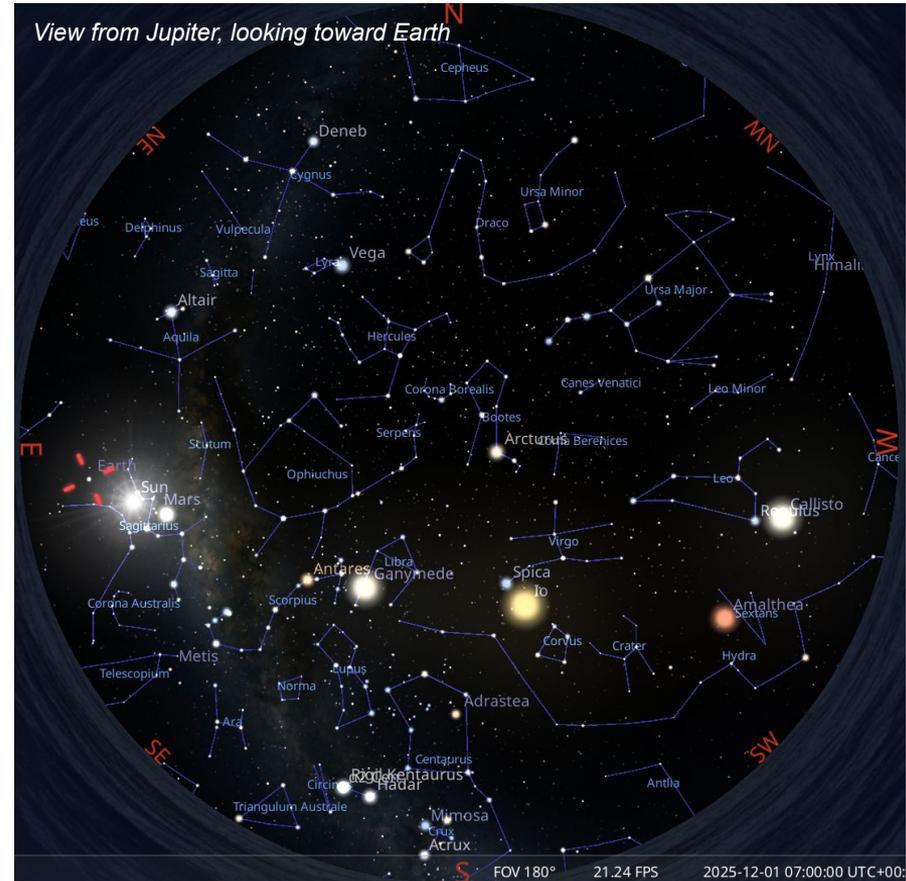
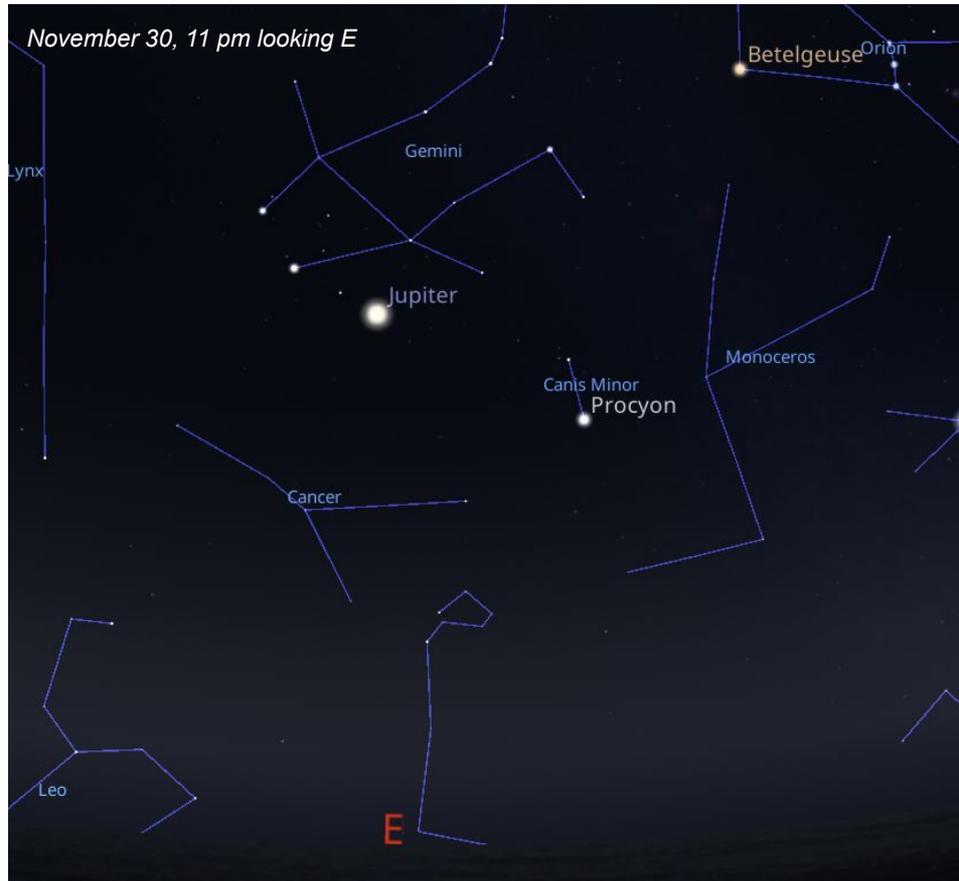
Uranus reaches opposition on November 21st.



Uranus stands about 5 degrees SE of the Pleiades (M45)

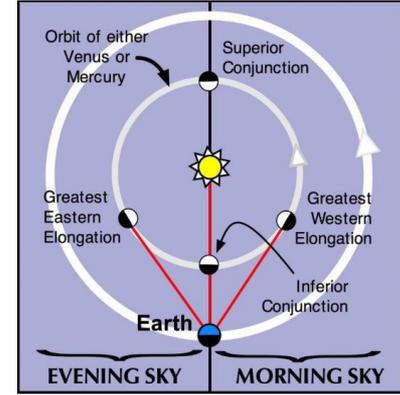
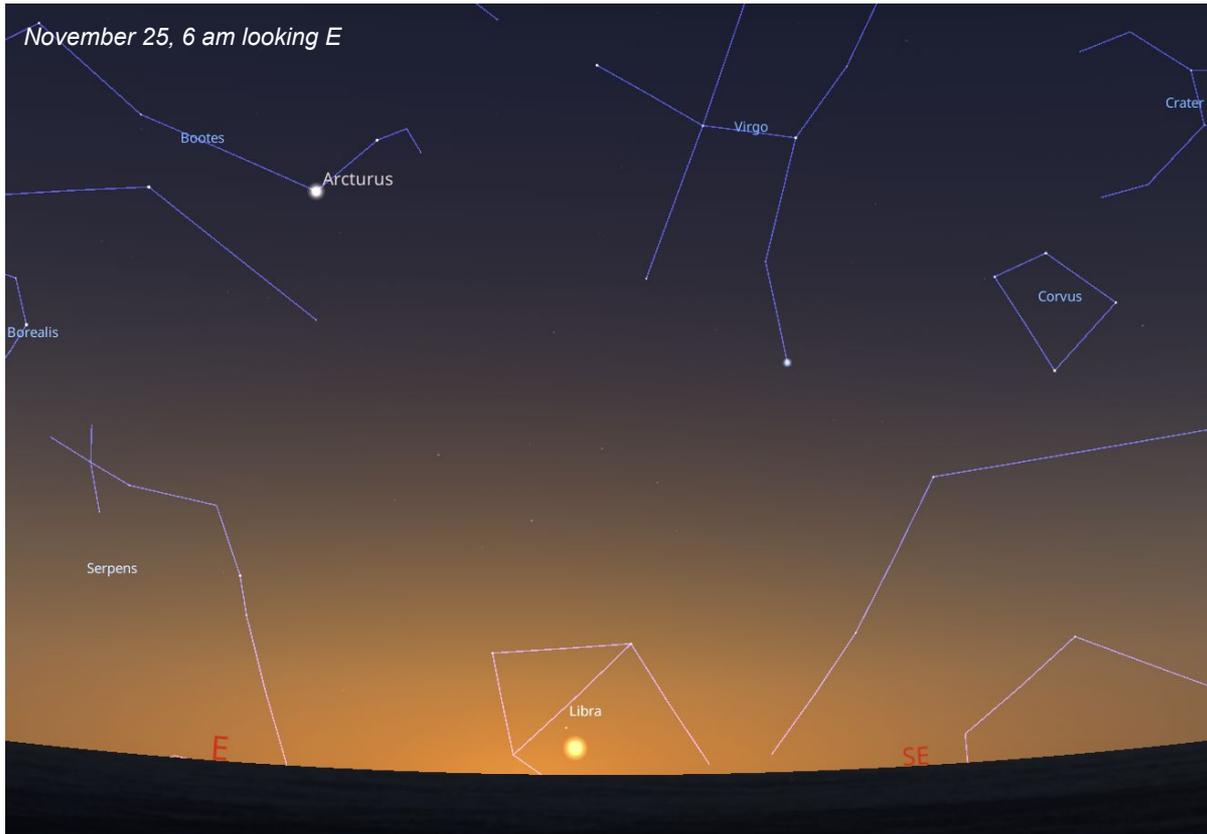
Evening/Morning Planets: Jupiter - (Gemini)

Jupiter rises around 9 pm by the end of November.



Morning Planets: Mercury/Venus - (Libra)

Mercury reappears in the morning late in the month after its solar conjunction on November 20. Venus stands next to Spica at beginning of November in morning twilight. Its elongation from the Sun is declining, so it rises later each morning during the month as it's approaching superior conjunction in January 2026.





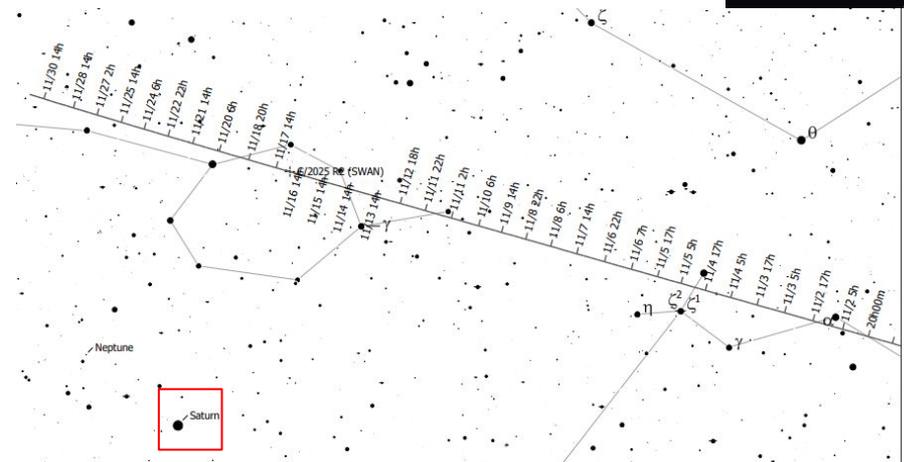
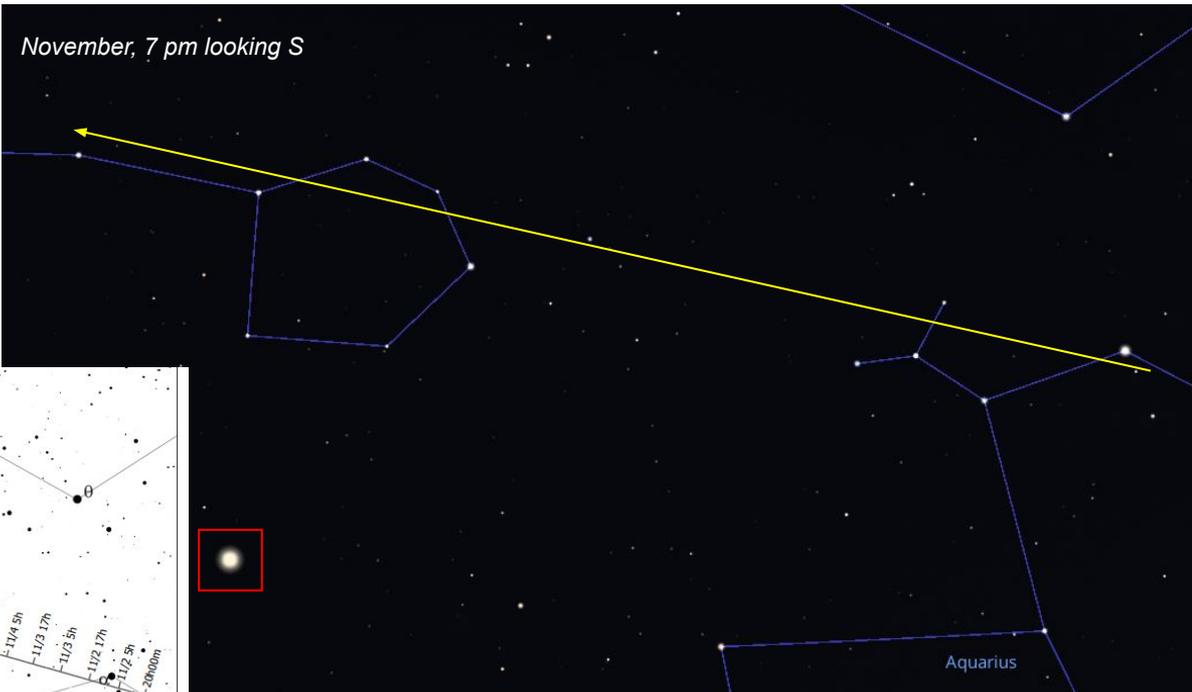
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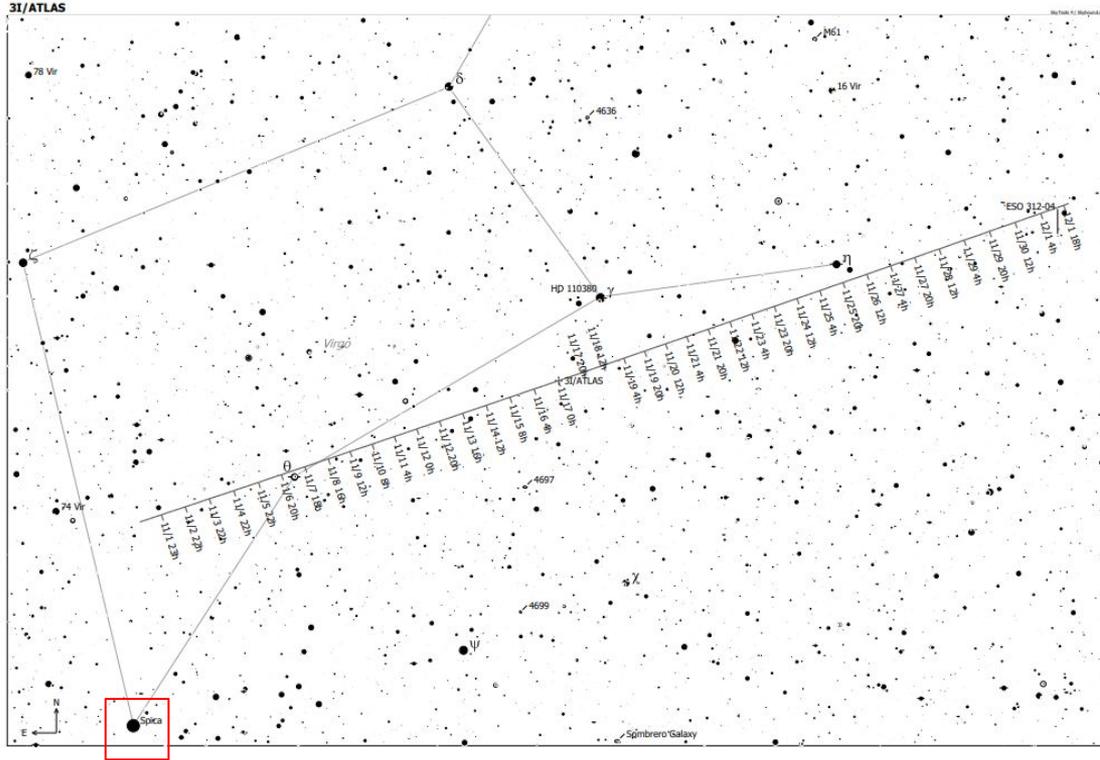
Comet - C/2025 R2 (SWAN)

- Discovered in September 2025 by an amateur astronomer Vladimir Bezugly
- Starts November in Aquarius at mag 7.3 moving into Pisces by end of month, visible with binoculars from a dark site
- Long-period comet - will not return for thousands of years



Comet - 3I/ATLAS

- *Interstellar comet - older than our solar system; currently mag 10.9, closest approach to Sun on October 29 at 1.4 AU*
- *Best viewing will be in November for both hemispheres, located in Virgo, visible with small telescopes from a dark site*



Meteor Shower - Leonid

Active November 6th - 30th; peak date November 17/18th (waning crescent Moon); max rate - 15 meteors/hour
Leonids are swift and many meteors leave glowing, persistent trains. Look 40-60 deg away from Leo to spot longer trails.





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Dark Sky Viewing 22171 Cody Ct - BVS, November 15

Ps 19:2

1 - M31 (Andromeda Galaxy)



2.5 million light years from Earth
best observed Oct-Dec, (naked eye, binoculars)
on collision course with Milky Way

2 - NGC 253 (Sculptor Galaxy)



11.6 million light years from Earth
visible with binoculars, small telescopes
considered one of the most easily viewed galaxies after Andromeda

3 - NGC 281 (Pacman Nebula)

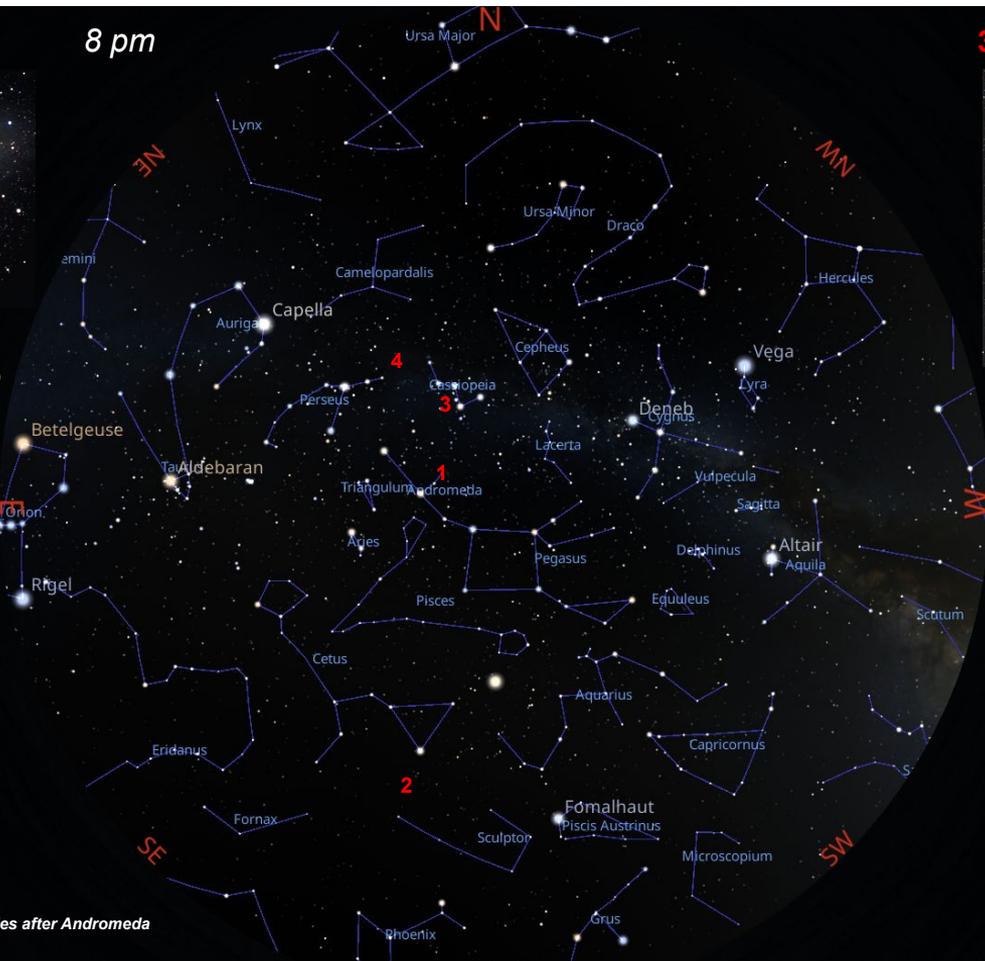


large emission nebula, 48 light years across
9200 light years from Earth
easily visible in small telescopes

4 - IC 1805/1848 (Heart & Soul Nebula)

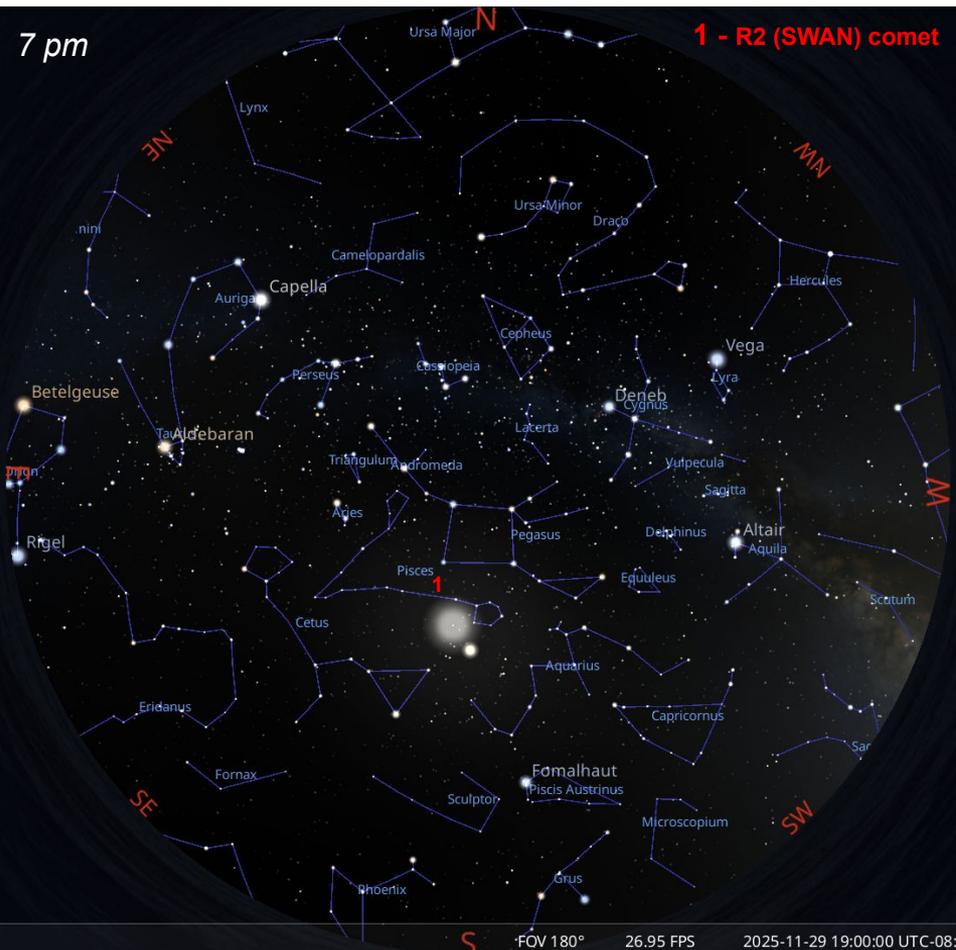


Emission nebula in Cassiopeia
2200 light years from Earth
small telescopes



Public Viewing

Cub Lake, November 29



November 2025 Viewing Chronology

- 5 - Full moon (7 pm)
- 6 - Mercury/Mars (5:30 pm)
- 12 - Last Qtr Moon (5 am)
- 15 - Dark Sky Star Party
- 18 - Leonid meteor shower (4 am)
- 19 - New Moon
- 20 - Saturn/Neptune (7 pm)
- 22 - Uranus (8 pm)
- 25 - Mercury/Venus (6 am)
- 27 - 1st Qtr Moon, Maginus sunrise ray (9 pm)
- 29 - Public Viewing
- 30 - Mercury (6 am); Jupiter (11 pm)

A6 (Lemmon), R2 (SWAN), 3I/ATLAS comets - all month

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