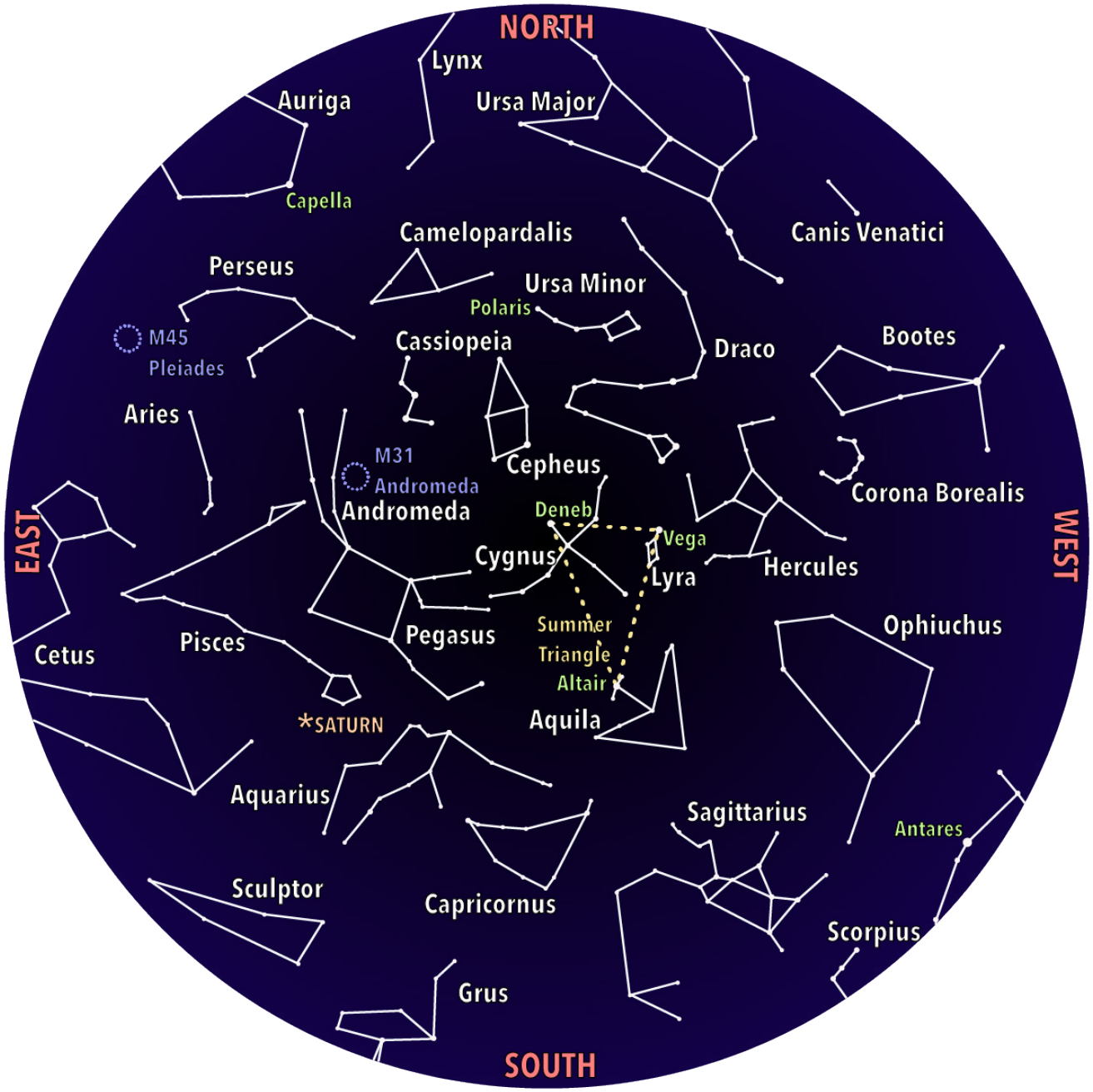
KAMIN SCIENCE CENTER

Buhl Planetarium & Observatory | Autumn 2025

ASTRONOMICAL CALENDAR & STAR CHART



Night sky from Pittsburgh, PA 8 p.m. EST mid-Oct.

SKYWATCH

Buy tickets to upcoming SkyWatch events at
KaminScienceCenter.org/SkyWatch.

Presented by PPG

TOP SKYGAZING PICKS

Sept. 17 – Jupiter, crescent moon, and Venus. Pre-dawn.

Sept. 21 – Saturn at opposition.

Sept. 22 – Neptune, night before opposition. Telescope viewing.

Oct. 6 – Full Harvest Moon.

Oct. 21 – Orionid meteor shower.

Oct. 29 – Mercury at greatest separation from the Sun in Oct.–Nov. 2025 evening apparition.

Nov. 1 – Venus low in east near Virgo's blue star Spica.

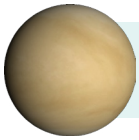
Nov. 5 – Super Full Moon. Closest approach of 2025.

Nov. 17 – Leonid meteor shower.

Nov. 21 – Uranus at opposition near Pleiades star cluster. Binocular viewing.

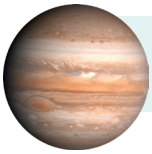
AUTUMN PLANET VISIBILITIES

Mercury: Evening — Best late October. Early evening.

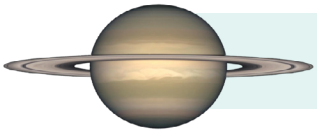


Venus: Morning — September, October, partial November.

Mars: Evening — September, October. At dusk.



Jupiter: Evening — November. Morning — September, October.



Saturn: Evening — September, October, November.

MOON PHASES KEY

New Moon ● First Quarter ◐ Full Moon ○ Third Quarter ◑

MOON PHASES

Sept.	7: ○	14: ◑	21: ●	29: ◐
Oct.	6: ○	13: ◑	21: ●	29: ◐
Nov.	5: ○	12: ◑	20: ●	28: ◐

WHAT'S UP?

Bright Planet Alert

September brings sights of planets, Saturn and Neptune, at opposition just days apart. They will appear at their brightest and very close to one another. Best viewed in a dark sky with a telescope or binoculars, this close pairing only takes place around once every 35 years. Uranus will be at opposition in November with its brightest appearance since the 1990's. In the darkest of skies, it's faintly visible to the naked eye, but best observed with binoculars. A bonus is its viewing proximity to the sparkling Pleiades.

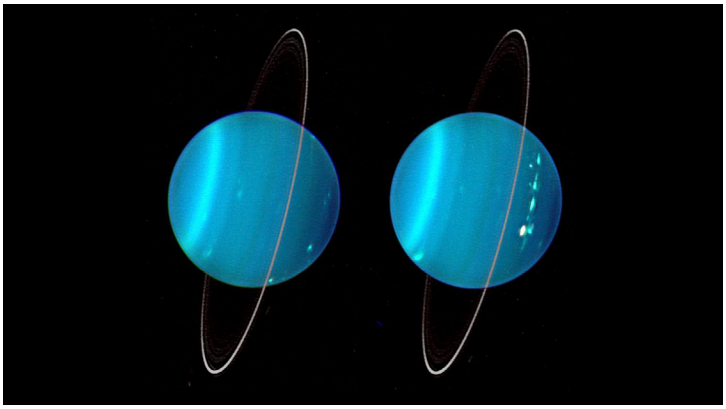


Image credit: JPL

SPACE NEWS

One of the best ways to track changes on Earth is from space. Over 8,000 satellites orbit our planet. While some get us from place to place with GPS, others like GOES (Geostationary Operational Environmental Satellites), Landsat, and Sentinel routinely monitor Earth's weather patterns and environmental conditions. High-resolution imaging can give advance warnings of severe storms. NASA-ISRO Synthetic Aperture Radar (NISAR) is the latest to be launched. With dual radar detection scanning Earth's surface twice every twelve days, the joint mission of NASA and the Indian Space Research Organization (ISRO), aims to predict natures hazards with precision technology.

Image credit: NASA, JPL

STAR CHART FAQ

How do I use the star chart?
Hold it out in front of you with the direction you're facing at the bottom of the chart. It works even better if you hold it above your head and look up at it.

Why are east and west switched?
They are only switched because you're used to looking at maps of the ground. Hold it above your head, and you'll see the directions line up just right.