Jefferson College Observatory eNewsletter

November 2026

Welcome to this month's eNewsletter. November is here, goodbye Daylight-Saving Time! On November 1, the Sun sets around 5:00pm and by the end of November sunset is at 4:45pm. This means dark skies before bedtime; it is a perfect time to check out a telescope from your local library. Visit or call your library and ask about the program. Go to the Library Telescope website to search for a library near you: https://www.librarytelescope.org/world/usa/missouri

We have three remaining Jefferson College Observatory events planned for 2026; telescope viewing events will be **Monday November 16, 2026;** Saturday **November 21, 2026; and Saturday December 19, 2026**. These events will start at sunset, so check local times. Please remember we are dependent on the weather, and we may need to cancel due to rain, or storms. In addition, the St. Louis Astronomical Society hosts other events this month! Check out their calendar page for details. https://www.slasonline.org/?Itemid=148

Thank you to everyone who attended Trunk or Treat at Jefferson College, on October 23, 2026, we setup an astronomy table, where kids played "sticky hands" games; and took photos as an astronaut, and we looked at the Moon and Saturn through a telescope. An estimated 1,400 community members came out for the event.

Other news. We added two new science instruments at the observatory this month. First, we added a camera that takes photos all night, every night to capture meteors. This camera is part of the Global Meteor Network of cameras. To see an image from the previous night, follow this link: globalmeteornetwork.org/weblog/US/US0079/latest/

Second, we added a device that listens and identifies birds and bats visiting our observatory. This is part of a global network of devices, to see data from previous day, follow this link: app.birdweather.com/stations/31292

Useful links to our calendar events and many other links are at the bottom of this eNewsletter.

What's in the Sky for November

Earth's orbit around the Sun has pointed our nighttime view of the stars away from the center of our galaxy to the Milky Way's "outer rim". Constellations like **Cassiopeia, Perseus and Auriga** are filled with stars from this area. Also, objects like the **Andromeda and Triangulum galaxies** are high in the east and are visible with binoculars and telescopes.

In October, we discussed constellations like princess **Andromeda**; hero **Perseus**; trusty steed **Pegasus**; and doting parents **Cepheus and Cassiopeia.** November brings **Aries** the ram; **Auriga** the charioteer; **Taurus** the bull, with the **Pleiades**, or seven-sisters star cluster; and **Cetus** the whale.

Aries is associated with the magical ram whose golden fleece became the goal of the famous quest of Jason and the Argonauts. The ram itself was honored among the stars as Aries. In ancient times, the spring equinox lay in Aries, which helped give the constellation a prominent role in ancient calendars and astrology. Now 2000 years later, the spring equinox has shifted into the constellation of **Pisces**.

Auriga. Look in the northeast part of the sky for **Capella**, the brilliant yellowish star, that marks the constellation Auriga, the Charioteer. Capella, meaning "little she-goat", is one of the brightest stars in the entire sky and is an excellent November landmark. Capella is the most northerly of the very bright first-magnitude stars in the night sky, and is visible from St Louis for 10 months every year, so get to know Capella.

Taurus the Bull. Rising in the east below Aries, you will find Taurus and two objects immediately stand out, first is **Aldebaran**, an orange giant star, that forms the Bull's eye and second is the **Pleiades (M45)**, the small cluster that looks like a miniature dipper. Binoculars are ideal for the Pleiades. With your unaided eye you can see 5-7 stars, but in binoculars that number increases to 30-50 stars.

Cetus is a large constellation, located south of **Aries** and **Pisces**. Although its traditional name means whale, the creature in Greek mythology was more like a fearsome sea monster than a modern whale. Last month we mentioned Cetus in our story about Andromeda and Perseus.

The **New Moon** on **November 9** provides the darkest skies of the month and makes the nights between November 8–12 especially attractive for deep-sky observing. This is an excellent time to look for the Fall Milky Way, star clusters, nebulae and galaxies. The **Full Moon** is on **November 24** is the **Beaver Moon**. This particular Full Moon occurs near perigee and is the second of three **"supermoons"** visible in 2026. On that night the Moon will be only 356,200 km from Earth and may look slightly larger than normal.

Saturn was closest to Earth on **October 4**, and remains a wonderful view through a telescope, with its rings tilted about 7 degrees, and its largest moon, **Titan**. Larger telescopes may reveal additional moons and subtle atmospheric features. Saturn always looks small through a telescope, during November, it is 1.3 billion kilometers from Earth, and light and radio signals take 72 minutes to reach the Earth. Use a telescope with at least 60X magnification. On the evening of **November 20**, the waxing gibbous Moon will appear near Saturn, separated by roughly 6 degrees.

Venus is now returning as a spectacular morning star. By the end of November, Venus can be seen to the southeast before sunrise. Venus will reach magnitude –4.7 to –4.8, making it by far the brightest starlike object in the sky. On the morning of **November 7**, the **very slender crescent Moon** will be right below **Venus** at 5 am. On the morning of **November 10**, Venus will make its closest approach to **Spica**, the bright star in **Virgo**, and you might glimpse **Mercury**, just above the horizon at 5 am.

Mars and Jupiter are both morning-sky objects. In November, Mars is more than 190 million km and Jupiter is more than 790 million km distant from Earth, light and radio signals take 11

minutes and 44 minutes, respectively to reach the Earth. **Jupiter** in the constellation **Leo** the lion, is becoming an increasingly prominent morning object during November. It rises before midnight and is high in the sky during the predawn hours. Mars also occupies Leo and is visible before dawn. It will be considerably fainter than Jupiter, but its distinctly orange color makes it easy to distinguish. On **November 2**, the Last Quarter Moon will be just to the right of Mars, with Jupiter below them, look at 6 am above the eastern horizon. The following morning, **November 3** the Moon will appear below Jupiter and to the right of the star Regulus in Leo. On **November 15** at 1 am Jupiter will pass closest to Mars, with Regulus to the right of Mars. On **November 25**, Mars passes relatively close to Regulus, the bright blue-white star marking the heart of Leo. Finally on the morning of **November 30**, the Last Quarter Moon will be just to the right of Jupiter after midnight.

Uranus reaches opposition on **November 26, 2026**, meaning Earth is approximately between Uranus and the Sun. At opposition, Uranus will be approximately 2.8 billion kilometers from the Earth, light and radio signals take more than 2.5 hours to reach the Earth. Uranus is generally visible throughout much of the night and is at its best annual observing position. Uranus is visible with binoculars or a telescope.

The **Leonid Meteor Shower** is November's most famous meteor shower. Meteors are produced by dust and debris from Comet 55P/Tempel-Tuttle. The particles enter Earth's atmosphere at roughly 70 km/s, making Leonids among the fastest meteors we see. The Leonids are active from approximately **November 6 through November 30**, with the maximum around **November 17**. The best way to observe the meteor shower is to: get away from city lights if possible; Lie back and look at a broad area of sky; don't stare directly at Leo since the meteors can appear anywhere; give your eyes at least 20 minutes to adapt to darkness; watch during the pre-dawn hours, when the Leonid radiant is highest. The Moon will be around first quarter, so moonlight will interfere until midnight, but brighter Leonids should remain visible

2026 Jefferson College Observatory Observing Events

In addition to our monthly ***"Aim for the Stars"*** observing events on Saturday nights, we have added ***"Shoot for the Moon"*** observing events on Monday nights. "Aim for the Stars" may include observing the **Moon**, but also planets, stars, clusters and nebula depending on the season. "Shoot for the **Moon**" events are scheduled to ensure the **Moon** will be visible, SO we can focus on our nearest neighbor, the **Moon**, and imagine its future exploration. As part of our "Shoot for the **Moon**" program we will also look at planets, stars, clusters and nebula, but also offer visitors a chance to learn about the **Library Telescope Program (LTP)**. Visitors can learn how to use the library telescope before they check one out from their local library.

"Aim for the Stars", Saturday dates for 2026 – November 21, December 19.

"Shoot for the Moon", Monday dates for 2026 – November 16.

You can download a copy of our 2026 schedule at this link: https://tinyurl.com/7ey9bkka

Useful Links

SLAS/JCO eNewsletter Signup Page - https://www.slasonline.org/observatory/enewsletter

SLAS Calendar Page - https://www.slasonline.org/calendar

Google Map link to Observatory: https://tinyurl.com/JCObservatory.

Monthly Sky Map Link - https://skymaps.com/

SLAS Resources Page - https://www.slasonline.org/resources

SLAS Observing Tips Page - https://www.slasonline.org/observing/tips-and-resources

Jefferson College Observatory website – https://www.jeffco.edu/Observatory

Jefferson College Observatory Facebook - www.facebook.com/JCObservatory

SLAS Facebook Page - https://www.facebook.com/stlastro/

SLAS – JCO website - https://www.slasonline.org/observatory

SLAS Library Telescope Program Page - https://www.slasonline.org/outreach/library-telescope

National Library Telescope Program Website - https://www.librarytelescope.org/

St. Louis County Library telescope webpage - https://www.slcl.org/books-emedia-more/library-of-things/outdoor-activities/telescopes

McDonnell Planetarium Telescope Viewing - https://www.slsc.org/event-overview/public-telescope-viewing/

Missouri State Parks host numerous public Dark Sky programs - https://mostateparks.com/astronomy

Download the "Winter Bright Star Challenge" - https://www.slasonline.org/images/jco/JCO_eNewsletter/Winter_Bright_Star_Challenge.pdf

Download “Observing Tips for Nova T Corona Borealis” - https://www.slasonline.org/images/markevents/T_CrB_Observing_Tips.pdf

Download “Follow in Galileo’s footsteps” and recreate his historic observations. - https://www.slasonline.org/images/markevents/Follow_in_the_footsteps_of_Galileo.pdf