IAAS Monthly Astronomy Newsletter November 2025

The International Association for Astronomical Studies provides this newsletter as a service for interested persons worldwide.

This newsletter is published on the World Wide Web at The Home of KIØAR - and is received nationally and internationally. Download the PDF formatted version of the newsletter.

An Open Invitation - For amateur radio operators and scanner enthusiasts around the world, please join the Colorado Astronomy Net on the Rocky Mountain Radio League's **K1DUN** repeater on **449.450 MHz** or other digital and analog repeaters, Allstar nodes, Echolinks, DMR and internet links connected to the SKYHUBLINK system. The net meets on Tuesday nights at 7 P.M. Mountain Time (US) (Wednesday at 0100 GMT). Connecting to the SkyHubLink system has expanded our coverage in the U.S., Canada and internationally. All Amateur radio operators worldwide are welcome. Anyone may listen to the net. The RMRL provides a "Live Audio Feed" using Broadcastify.

The Colorado Astronomy Net is now on YouTube!! All are welcome to join us Tuesday evenings!

Obtain your Amateur Radio (Ham) License or your General Radio Operator's License (GROL)! Visit the South Metro VE Team website for more information. The South Metro VE Team provides test sessions by appointment only. Check the website for current information. All others interested in Amateur Radio, check out the Amateur Radio Relay League website to find out more information about becoming an Amateur Radio operator.

The Colorado Astronomy Net and the IAAS are on Facebook page. Be sure to "Like" us.

Donate to the IAAS!
Your contributions are tax deductible.
Thank you for your support!

Excerpts from JPL mission updates are provided as a public service as part of the JPL Solar System Ambassador / NASA Outreach program.


This month, Mercury
and Venus will
re-create this Nov. 1
2001 scene in the
predawn sky. Here,
Venus is the brighter
object, with Mercury to
its upper left. Note that
this month, Mercury
will require binoculars
to spot.
NOVEMBER 2025

In This Newsletter...

The Month At-A-Glance

The current month's calendar displaying the daily astronomical events.

The Moon

Phases:

- Full Moon occurs on the 5th.
- Last Quarter Moon occurs on the 12th.
- New Moon occurs on the 20th.
- First Quarter Moon occurs on the 28th.

- The Moon is at perigee (221,726 miles from Earth) on the 5th.

AI Search - The supermoon, also known as the Beaver Supermoon, will be visible on the evening of Wednesday, November 5, 2025. This is the biggest and brightest full moon of the year because it will be at its closest point to Earth (perigee) at the same time it's full. To see it, look toward the eastern horizon just after sunset.

What to know about the November 5, 2025 supermoon

- ✴ Peak illumination: The peak of the full moon will occur at 8:19 a.m. EST on November 5, but the moon will appear full and bright throughout the evening of November 5 and the night of November 4.
- ✴ Closest supermoon of the year: This is the closest supermoon of 2025, and it will appear larger and brighter than other full moons of the year.
- ✴ Why it's called the Beaver Moon: This is a traditional name for November's full moon, named by Native American tribes and colonists because it was the time to set beaver traps before the swamps froze.

- The Moon is at apogee (2252,706 miles from Earth) on the 19th.

Moon/Planet Pairs:

- The Moon passes 4° north of Saturn on the 2nd.
- The Moon passes 3° north of Neptune on the 2nd.
- The Moon passes 5° north of Uranus on the 6th.
- The Moon passes 4° north of Jupiter on the 10th.
- Mercury passes 1.3° south of Mars on the 12th.
- The Moon passes 1.0° north of Regulus on the 12th.
- The Moon passes 1.2° south of Spica on the 17th.
- The Moon passes 6° south of Venus on the 19th.
- Mercury passes 1.1° north of Venus on the 24th.
- The Moon passes 0.4° north of Pluto on the 25th.
- Jupiter passes 7° south of Pollux on the 26th.
- The Moon passes 4° north of Saturn on the 29th.
- The Moon passes 3° north of Neptune on the 29th.

For reference: The Full Moon subtends an angle of ~0.5°

Calendar of All Astronomical Events 2025

Weekly Rocket Report

Courtesy of "The Rocketman" Ed W6RDZ
Updated Weekly on Tuesday evenings
prior to the Colorado Astronomy Net

The Planets & Dwarf Planets

Planetary Reports are generated by "TheSkyX" software. These reports provide predicted data for the planets on the first of each month for the current year. The rise and set times for the Sun and the Moon for each day of the month as well as meteor shower radiants are also included in the reports. These reports have been optimized for the Denver, Colorado location, however, the times will be approximate for other locations on Earth.

(Times are Mountain Time (MST/MDT) unless otherwise noted. Times will vary slightly depending on your location.)
Note: Times on the 1st are MDT. End of month times are MST!

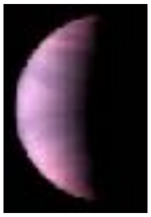
Planetary Highlights for November

"Mercury switches from the evening to morning sky this month, while the giant planets dominate the night. The moons of Jupiter and Saturn offer many events. Venus stars on early November mornings, but drops lower day by day." Astronomy Magazine, November 2025, p.28.

Mercury

Is stationary on the 9th. Mercury is in inferior conjunction on the 20th. Mercury is stationary on the 29th. Mercury sets at 6:55 p.m. on the 1st. After conjunction, Mercury returns to the morning sky, rising about 5:24 a.m. by month's end. Mercury is visible about 30 minutes after sunset, low to the west, during the first week or so this month. After that, Mercury is lost in the evening and early morning twilight glow. Mercury moves from the constellation of Scorpius into Libra shining at magnitude 0.2 on the 30th.

Mercury reappears before dawn at the end of November — use blazing



Venus

Rises about 6:06 a.m. on the 1st and about 6:18 a.m. by month's end. Look for Venus to the east about an hour before sunrise. Venus moves from the constellation of Virgo into Libra shining at magnitude -3.9 on the 1st.

Earth

Daylight Saving Time ends for most of the U.S. on the 2nd at 2 a.m. local time.

Mars

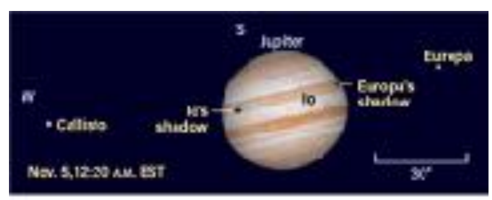
Sets at 6:50 p.m. on the 1st and about 5:10 p.m. by month's end. Look for Mars low to the west in the evening about 30 minutes after sunset. Mars moves from the constellation of Libra into Ophiuchus shining at magnitude 1.5.

Jupiter

Is stationary on the 11th. Jupiter rises at 10:43 p.m. on the 1st and about 7:42 p.m. by month's end. Look for Jupiter to the southeast in the evening, then follow it through the night sky as it sets in the early morning hours before dawn. Jupiter is in the constellation of Gemini shining at magnitude -2.4.

Saturn

Is stationary on the 28th. Saturn rises at 4:13 p.m. on the 1st and about 1:13 p.m. by month's end. Look for Saturn to the south in the evening sky, soon after sunset. Saturn is in the constellation of Aquarius shining at magnitude 0.8.



[illegible] Jupiter. Note the time and date, and make sure to convert for your local time [illegible]

Uranus

Is at opposition on the 21st, rising as the Sun sets. Uranus rises about 6:53 p.m. on the 1st and about 3:51 p.m. by month's end. Uranus is at its best and brightest for the year this month. Look for Uranus to the south in the evening. Uranus is in the constellation Taurus shining at magnitude 5.6.

The Full Moon rises just west of the Pleiades Nov. [illegible] The star cluster helps point the way to Uranus, which requires binoculars to spot (as does Neptune in Pisces).

Neptune

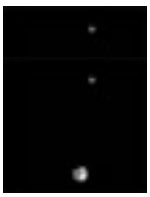
Rises at 4:17 p.m. on the 1st and about 1:18 p.m. by the month's end. Look for Neptune to the south in the evening just east following Saturn by a few minutes all month. Neptune is in the constellation of Pisces shining at magnitude 7.7.

Dwarf Planets

Ceres

Is stationary on the 27th. Ceres rises at 5:24 p.m. on the 1st and about 2:12 p.m. by month's end. Ceres can be spotted low to the south just below and east of Saturn and Neptune. Ceres is in the constellation of Cetus shining at magnitude 8.3.

Ceres follows a gently curving path through Cetus the Whale this month, bracketed by a few bright stars.



Pluto

Sets at 11:09 p.m. on the 1st and about 8:13 p.m. by month's end. The best time to spot Pluto will be in the early evening when it is highest in the sky to the southwest. Pluto is in the constellation of Capricornus shining at magnitude 15.3.

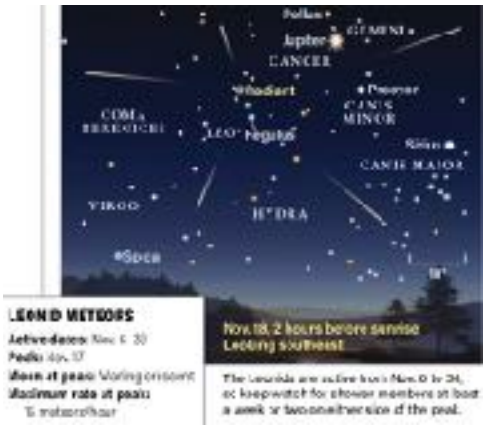
As always, good luck at spotting Neptune, Ceres and Pluto, a large telescope and dark skies will be needed.

Constellation information provided by Go Astronomy.

Astronomical Events

Meteor Showers

- **The Leonids** - The duration of this shower covers the period of Nov. 14-20. Maximum occurs on Nov. 17. The maximum hourly rate typically reaches 10-15, but most notable are periods of enhanced activity that occur every 33 years - events that are directly associated with the periodic return of comet Tempel-Tuttle. During these exceptional returns, the Leonids have produced rates of up to several thousand meteors per hour. The Leonids are swift meteors, which are best known for leaving a high percentage of persistent trains.



For more information about Meteor Showers, visit Gary Kronk's Meteor Showers Online web page.

Meteor Shower Radiant Report

Meteor Scatter (or Meteor burst communications) -- "is a radio propagation mode that exploits the ionized trails of meteors during atmospheric entry to establish brief communications paths between radio stations up to 2,250 kilometres (1,400 mi) apart." Tune your shortwave or your HF amateur radio to 54.310 MHz USB CW and see if you can hear any pings. Try other frequencies as well... 6m FT8 digital - 50.313 Mhz & 50.276 Mhz, JP-65 digital mode and the carrier frequencies of the lower VHF bands for TV channels 2, 3 & 4.

Meteor Rx How-To by Terry Bullett (WØASP).

Comets

- Comet C/2025 A6 (Lemmon) is passing through the constellation of Ophiuchus low to the west. By the end of the month, it may be too low and lost in the evening twilight glow. Comet Lemmon is visible with the naked eye provided you are away from city lights. The comet is shining around 4th magnitude at the beginning of the month but dims to about 7th magnitude by month's end, so look for Comet Lemmon early in the month. A 3-4 inch scope or greater and dark skies will still be needed to see more details.

This chart shows a portion of Comet Lemmon's path in November during the ideal observing window mid-month. You can find additional charts for comets Wierzchoś and Christensen on Astronomy.com.

- Comet C/2025 R2 Swan is passing through the constellations of Aquarius and into Pisces by month's end shining around 8th magnitude then dimming to about 10th magnitude. Comet Swan is fairly close to Saturn and Neptune, so it shouldn't be too hard to find under dark sky conditions.

For information, orbital elements and ephemerides on observable comets visit Observable Comets.

For more information about Comets, check out Gary Kronk's 6-volume series of books on Cometography.

Eclipses

- No solar eclipse activity this month.
- No lunar eclipse activity this month.

Observational Opportunities

(from evening to morning)

- Look for Mars and Pluto in the early evening to the southwest.
- Look for Saturn, Neptune and Ceres in the late evening and early morning to the south.
- Look for Uranus, Jupiter, Venus and Mercury in the morning to the east.

Asteroids

(From west to east)

- **Hebe** is in the constellation of Aquarius.
- **Papagena** is at opposition on the 10th in the constellation of Cetus.
- **Pallas** is in the constellation of Taurus.
- **Nysa** is in the constellation of Cancer.

Information about the Minor Planets can be found at the MinorPlanet.info web site.

Occultations

Information on various occultations can be found at the International Occultation Timing Association's (IOTA) web site.

Member Meteor Sightings

In this section I will post meteor, fireball, etc sightings that have been published on the American Meteor Society's web site. I want to make this an active section of the web pages and newsletter and would like to publish the links to member sightings. If you have any published sightings, please provide me with the links and I will post them here for all to enjoy.

Event ID	Date/Time	Location	Observer	Link
3871-2015	2015-11-13 01:55 MST	CO	Charles N	3871a
3587-2015	2015-11-22 17:38 MST	CO	Kevin S	3587aw
3829-2015	2015-12-05 18:06 MST	CO	Burness A	3829a
986-2020	2020-02-21 22:20 MST	CO	Lukas S	986
3716-2020	2020-07-24 23:22 MDT	CO	Lukas S	3716

4774-2021	2021-08-13 21:57 MDT	UT	Lukas S	4774
7044-2021	2021-10-28 20:37 MDT	CO	Burness A	249058
6763-2022	2022-10-06 05:56 CDT	OK	Mike C	6763
5300-2023	2023-09-11 22:04 MDT	CO	Lukas S	5300
578-2024	2024-01-28 23:05 MST	CO	Lukas S	578
2864-2025	2025-05-19 20:29 PDT	NV	Kenneth T	375753

Subscriber Gallery

I have created a web page containing images taken and submitted by subscribers (or special images) to the email newsletter, check-ins to the Colorado Astronomy Net and readers of the online newsletter and some of my own images. Anyone wishing to submit their images to the gallery, please send me an email. The images must be taken by the submitter and be astronomy related. Please include a description and your information so that I can give proper credit to your work. I will post the most recent submissions here.

NGC-6888 - The Crescent Nebula

Courtesy of Roy Murray (KI7PKL)
Astrophotography with the SkyWatcher HEQ-5
and SVBONY SV550 80mm Refractor
Image taken October 2025

"The Crescent Nebula, in the constellation of Cygnus, is located in an area not only rich in stars, but also gas and dust. Seven hours of exposure time."

Planetary/Lunar Exploration Missions

(Excerpts from recent mission updates)

JPL Latest News

The Latest from Space

The Origin of JPL (a Youtube video-1 Hour 29 minutes).

James Webb Space Telescope

Information on the James Webb Space Telescope mission is available at The James Webb Space Telescope website.

The public can follow the mission on Facebook, Twitter and YouTube.

Juno

Information on the Juno mission is available at Juno and Mission Juno.
Images from NASA's JunoCam.
The public can follow the mission on Facebook and Twitter.

TESS

Information on the TESS mission can be found on the Latest Tess News page.

Past, Present, Future and Proposed JPL Missions

For special JPL programs and presentations in your area visit the JPL Solar System Ambassador web site.

Mars Missions

Be A Martian

Mars website mobile version is here!
Simply type
http://mars.jpl.nasa.gov
into your mobile browser.

Mars on the Go! NASA Be A Martian Mobile App

If you want the latest news as it happens, try out the "Be A Martian" app.
Download on Mobile Devices
Android | iPhone | Windows Phone

JMARS

JMARS is an acronym that stands for Java Mission-planning and Analysis for Remote Sensing. It is a geospatial information system (GIS) developed by ASU's Mars Space Flight Facility to provide mission planning and data-analysis tools to NASA's orbiters, instrument team members, students of all ages, and the general public.

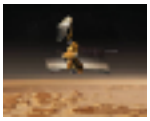
Laboratory for Atmospheric and Space Physics
"The Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado Boulder (CU) began in 1948, a decade before NASA. We are the world's only research institute to have sent instruments to all eight planets and Pluto.

LASP
Visit the LASP website for latest news and information.

MAVEN
Visit the MAVEN website for latest news and information.

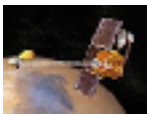
Mars 2020 - Perseverance
Visit the Mars 2020 (Perseverance) mission website for mission information and news updates.

Mars Science Laboratory - Curiosity
Visit the Mars Science Laboratory website for mission information and news updates.



Mars Reconnaissance Orbiter Mission

Mars Reconnaissance Orbiter HIRISE Images
View all of the archived HiRISE images.
More information about the MRO mission is available online.



Mars Odyssey Orbiter
Daily Mars Odyssey THEMIS Images
Thermal Emission Imaging System (THEMIS) web site.
Visit the Mars Odyssey Mission website for mission information and news updates.

Mars Missions Status
New Mars missions are being planned to include several new rover and sample collection missions. Check out the NASA Mars Exploration web page.

Astronomy Links and Other Space News

(If you have a link you would like to recommend to our readers, please feel free to submit it.)

Colorado Astronomy Links

Radio Astronomy Links

More Astronomy Links

Acknowledgments and References

Much of the information in this newsletter is from "Astronomy Magazine" (Kalmbach Publishing), JPL mission status reports, "Meteor Showers - A Descriptive Catalog" by Gary W. Kronk and other astronomical sources that I have stashed on my book shelves.

The author will accept any suggestions, constructive criticisms, and corrections. Please feel free to send me any new links or articles to share as well. I will try to accommodate any reasonable requests. Please feel free to send questions, comments, criticisms, or donations to the email address listed below. Enjoy!

Subscription Information

- Email Newsletter archives.
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- The latest version of the newsletter.

Keep looking UP!

73 from KIØAR
Created by Burness F. Ansell, III
Email

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JPL Solar System Ambassador, Colorado
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