

January 2025

Meetings at Highland Road Park Observatory and online through YouTube and Jitsi

<https://meet.jit.si/brasmeet>

Calendar:

- 6 January, 6PM: Sidewalk Astronomy.
Gonzales Library
- 7 January, 6PM: Sidewalk Astronomy,
Perkins Rowe
- 13 January:
 - 6PM: Light Pollution Committee
 - 7PM: BRAS General Meeting
- 29 January, 7PM: BRAS Quarterly Planning Meeting
- 4 February:
 - 5PM: MSA West outreach, West BR
 - 6PM: Sidewalk Astronomy, Perkins Rowe
- 21 February, 9AM: Port Hudson Outreach

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President's Message

January 1st, 2025, marks an interesting anniversary in our part of the world. Twenty-five years ago, a quarter of a century, we reached the pinnacle of the “Y2K scare”. Some of you may be too young to remember the olden days of the 1900s, but as we approached the year 2000 there was real concern about what might happen when all the world’s computers and their associated software crossed over from 99 to 00 on their internal clocks. Would the power grids fail? Would planes fall from the sky? Would international business and banking collapse? Enquiring minds wanted to know. Luckily for humanity, minds far more complex than my own had been thinking about the problem for years. Codes were re-written. Worst case scenarios were considered and response plans put into place. At the time, I was still working for our State’s environmental agency. We all had to take our work vehicles and emergency equipment home with us over the holiday weekend in the event we had to quickly respond to an incident at one of the local petrochemical facilities. The possibility that some unforeseen Y2K computer glitch would cause a safety system to fail was a big worry for us. After all, it’s not the things you plan for that get you, it’s usually the things you’ve overlooked. Of course, as you know, Y2K came and went without a major hitch. Twenty-five years after the fact, it seems almost funny to us today. Yet we need to remember that the reason the transition from one millennium to the next went so smoothly was precisely because experts saw the problem in advance and took steps to address it. At some point in the last twenty-five years, however, our society’s trust in scientific and medical and technical expertise as eroded. I wonder how effective our response to something similar to Y2K would be today? I can imagine a scenario like “Don’t Look Up” taking place. Actually, I don’t have to imagine too hard. There are vaccine skeptics and climate change deniers and flat-earthers and all sorts of “pseudoscience” internet influencers that muddle our collective responses to so many of the issues we now face. I’m just thankful their voices were not as amplified back in 1999.

Vice President's Word

Hi Everyone,

Welcome to 2025! As comedian Nate Bargatze said, "I don't even believe that's a REAL year. My movies didn't go that high in FAKE years!"

Be that as it may, it really is 2025. Still no hoverboards or flying cars (unless those are the drones everyone seems to be seeing), but there's plenty of cool stuff out there for the amateur astronomer. With that in mind, a portion of our January meeting will be a fun show-and-tell of what you may have gotten for the holidays that is astronomy related. Feel free to bring your new "toys" and show us what you got!

The other portion of the meeting will be a discussion of upcoming stuff for the club and what you (our members) would like to see us doing. This is a great chance to learn more about the club and let us know what you think is working...or what needs some work!

Finally, there also happens to be an occultation of Mars happening during our scheduled meeting so if the weather holds out (which I'm sure it won't because we're NEVER lucky with weather during our meetings, haha!) we'll step outside to see it. We'll have some binoculars available and some club scopes. Feel free to bring your own if you like!

I'm looking forward to another great year as Vice President. We'll have some great guest speakers, of course. I'd also like to have some activities-themed meetings where we actually DO some astronomy instead of just hearing about it. (Of course, we always need the weather to cooperate for that, but we'll keep trying!)

So, I hope you had a great holiday and New Year and that you're ready to continue your explorations of our universe with the club. It's going to be a great year!

Clear Skies,
Ben Toman
Vice President

Outreach Report

Hi Everyone,

Just another little recap of 2024 to finish one year and start another. Over 40 outreach events. 40! That's a LOT of outreach events!! I'm very proud of the work that we do in the community. As I've said before, we are really creating a great reputation for the club. None of it would be possible without the help of our volunteering members. Thank you all for your incredible support!

We finished out 2024 with two great Sidewalk Astronomy events. Due to some poor cloud conditions, we rescheduled the Perkins Rowe event to the same night as the Gonzales Library event. Again, thanks to our robust volunteer corps, we had no problem staffing both events sufficiently.

Even though we had small numbers at the Gonzales event, the people we did see were greatly impacted and that's the reason we do this. We had a bunch of people looking through our scopes at Perkins Rowe, though. With Santa holding court in the area, we benefitted from larger than normal Wednesday evening crowds.

Of course, we have more upcoming events and I would love to see even more faces out there to help out. No experience necessary! I've said it before and I'll say it again, these outreach events are always a fun time and a great way to share your love of astronomy and even learn some new stuff, yourself. I hope you'll consider joining us for an outing!



Happy Winter Solstice from the Outreach team at Perkins Rowe, Coy, Chad, Roz, Ben, Chris, & Scott.

Ben and Scott are showing off some DSO's for a little extra cheer (see below).

Upcoming Events

Monday, January 6th

6pm-7:30pm
Sidewalk Astronomy
Ascension Parish Library in Gonzales

Tuesday, January 7th

6pm-9pm
Sidewalk Astronomy at Perkins Rowe

Tuesday February 4th

5pm-6:15pm
MSA West in Plaquemine STEM Night
(demos and possible telescope viewing/Seestar)

Tuesday, February 4th

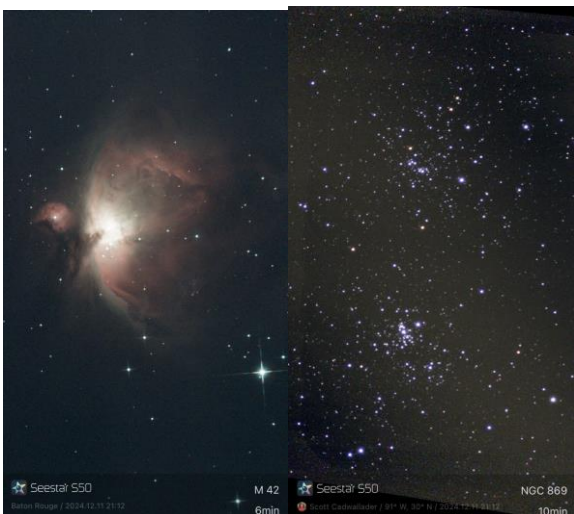
6pm-9pm
Sidewalk Astronomy at Perkins Rowe

Friday, February 21st (Pending)

9am-11:30am
Port Hudson Historic Site School Day
(demos and possible solar viewing)



From the Outreaches: Ben and Scott share live images.



From the Holiday Image: Ben share's the brightest deep sky object in the Northern Hemisphere, Messier 42, and demonstrates how to create a simple interference pattern around stars while Scott shares Caldwell 14.

Secretary's Summary

9 December: 30 people in attendance.

Notes from Merrill: Greg Guzik, founding LSU faculty member of HRPO is retiring at the end of 2024. There's an interesting new historical fiction show on Netflix that explains the math behind the move to the heliocentric model of the universe called Orb. He likes it.

The annual winter feast was had.

Officers were elected for the 2025 year: Don as President, Ben as Vice President, Scott as Secretary, Trey as Treasurer, and Thea with an appointment as a junior officer.

Chris K. is the new Light Pollution committee chair.

January is the last meeting to sign up for the Rockefeller stargaze.

Volunteers were recognized for their efforts in 2024.

The big raffle of the 8" SCT was had: the winner was, once again, Chester. Congrats.

Trey reported that the club financials are in good shape.

Observatory Notes

{HRPO is closed to the public on 1, 17 and 20 January.}

FRIDAY NIGHT LECTURE SERIES

7:30pm / for ages fourteen and older / no admission fee

3 January = “2024—The Space Year in Review” Tradition continues, with HRPO’s cornerstone program returning for another calendar year with a look back at the discoveries, advances and celestial events of the previous year.

10 January = “The Red Planet” A variety of personnel will recount their personal experience with a place that has inspired science and fantasy for centuries!

24 January = “Nome Serum Run” In a record time, the life-saving antitoxin medicine reached the Alaska town threatened with annihilation from a spread of diphtheria. Education Program Specialist Amy Northrop for the 100th anniversary of this thrilling event.

31 January = “Current Status of Spaceflight” We all are following the progress of the James Webb, Kepler, Psyche and of course Artemis. What delays are coming, and why? Which ones are on schedule? Center Supervisor James DeOliveira presents.

EVENING SKY VIEWING

for ages six and older / no admission fee

Fridays (3, 10, 24 and 31 January) from 8:30pm to 10pm

Saturdays (4, 11, 18 and 25 January) from 7:30pm to 10pm

SCIENCE ACADEMY

Saturdays from 10am to 12pm

for Cadets aged eight to twelve / \$5 per Cadet per week (\$6 if non-EBR Parish)

advanced registration via WebTrac strongly recommended

[activity #531990] / parents may stay with or leave Cadet

Four Cadets minimum and sixteen Cadets maximum per session.

4 January = “Venus”

11 January = “Mars”

18 January = “Exoplanets”

AMATEUR ASTRONOMY COURSES

Saturdays from 3:30pm to 7:30pm / registration in progress [activity #531992]

Registrants must be eighteen or older. / \$15 per registrant (\$18 if non-EBR Parish)

These exciting one-day classes are tailor-made to instruct the patron in the use of a personal telescope or binocular for skygazing, or the basics of the unaided-eye Baton Rouge sky. Sign up for one or more!

“Learn Your Binocular” = 4 January

“Learn Your Telescope” = 11 January

“Learn Your Sky” = 1 February (*postponed from 21 December*)

VENUSIAN ELONGATION

Thursday 9 January from 7:15pm to 8:45pm / No admission fee; for all ages.

Periodically Venus reaches its greatest angular separation in the sky (elongation) from the Sun. This is the safest way to view Venus by amateurs. Come join us at the Burbank Soccer Complex! The planet will appear as a “half-Venus”. The waxing gibbous Moon, Mars, Jupiter and Saturn will be available!

BATON ROUGE ASTRONOMICAL SOCIETY MEETING

Monday 13 January from 7pm to 9pm

for ages fourteen and older / no admission fee / binocular recommended

During this meeting, viewing of a lunar occultation of Mars will take place. Ingress is ~7:59pm; egress is ~8:58pm. Due to the Moon’s Full status, the event may be difficult to see without a binocular.

SOLAR VIEWING SPECIAL SESSION

Tuesday 14 January from 10:45am to 1:45pm

for ages six and older / no admission fee

Weather permitting, viewing of the Sun’s image in three different manners—transferred onto a white surface, directly with safely-filtered optical light and directly in safely-filtered hydrogen-alpha wavelength—will take place for three hours. Protective clothing and sunscreen are recommended.

MARTIAN OPPOSITION

Wednesday 15 January from 8pm to midnight

for ages six and older / no admission fee / binocular recommended

The Red Planet rises as the Sun sets. Weather permitting, viewing of Saturn will take place. The waning gibbous Moon, Jupiter and Uranus will be available.

SOLAR VIEWING

Saturday 25 January from 12pm to 2pm

for ages six and older / no admission fee

Weather permitting, viewing of the Sun’s image in three different manners—transferred onto a white surface, directly with safely-filtered optical light and directly in safely-filtered hydrogen-alpha wavelength—will take place for three hours. Protective clothing and sunscreen are recommended.

STEM EXPANSION: “Radio”

Saturday 25 January from 2:30pm to 6:30pm

for ages twelve to sixteen / \$15 per registrant (\$18 if non EBR-Parish)

advanced registration via WebTrac required [activity #531993]

This program offers advanced topics, topic extensions and all-new games and activities to an older crowd. Certificates will be earned and a section of archived experiments (some not seen in over fifteen years, some *never* performed on site) take place. There are also giveaways and door prizes.

Sky Map



<https://in-the-sky.org>

Centered on 10PM for 15 January 2025. For an interactive sky map, go to <https://in-the-sky.org>

Quick Picks—Events for January 2025

- Fri 3 Quadrantid Meteor Shower
- Fri 3 [Venus](#) 1.4°N of [Moon](#)
- Sat 4 Earth at Perihelion - Dist: 0.9833 AU
- Sat 4 Occultation of [Saturn](#) by the Moon
- Mon 6 [First Quarter Moon](#)
- Tue 7 [Moon](#) Perigee at 370,173 km.
- Thu 9 Pleiades 0.3°S of [Moon](#)
- Thu 9 [Venus](#) at Greatest Eastern Elongation - 47.20°
- Fri 10 [Jupiter](#) 5.4°S of [Moon](#)
- Mon 13 Pollux 2.1°N of [Moon](#)
- Mon 13 [Full Moon](#)
- Mon 13 Occultation of [Mars](#) by the Moon
- Tue 14 Beehive 2.6°S of [Moon](#)
- Wed 15 [Mars](#) at Opposition
- Thu 16 Regulus 2.2°S of [Moon](#)
- Sun 19 [Mercury](#) at Aphelion
- Mon 20 Spica 0.1°N of [Moon](#)
- Mon 20 [Moon](#) Apogee at 404,299 km.
- Tue 21 [Last Quarter Moon](#)
- Thu 23 [Mars](#) 2.3°S of Pollux
- Fri 24 Antares 0.3°N of [Moon](#)
- Wed 29 [New Moon](#)
- Fri 31 [Jupiter](#) 5.1°N of Aldebaran
- Fri 31 Occultation of [Saturn](#) by the Moon

Events courtesy of Telescopius.com. Check Stellarium for exact times for your location.

Looking up

January's Night Sky Notes: The Red Planet

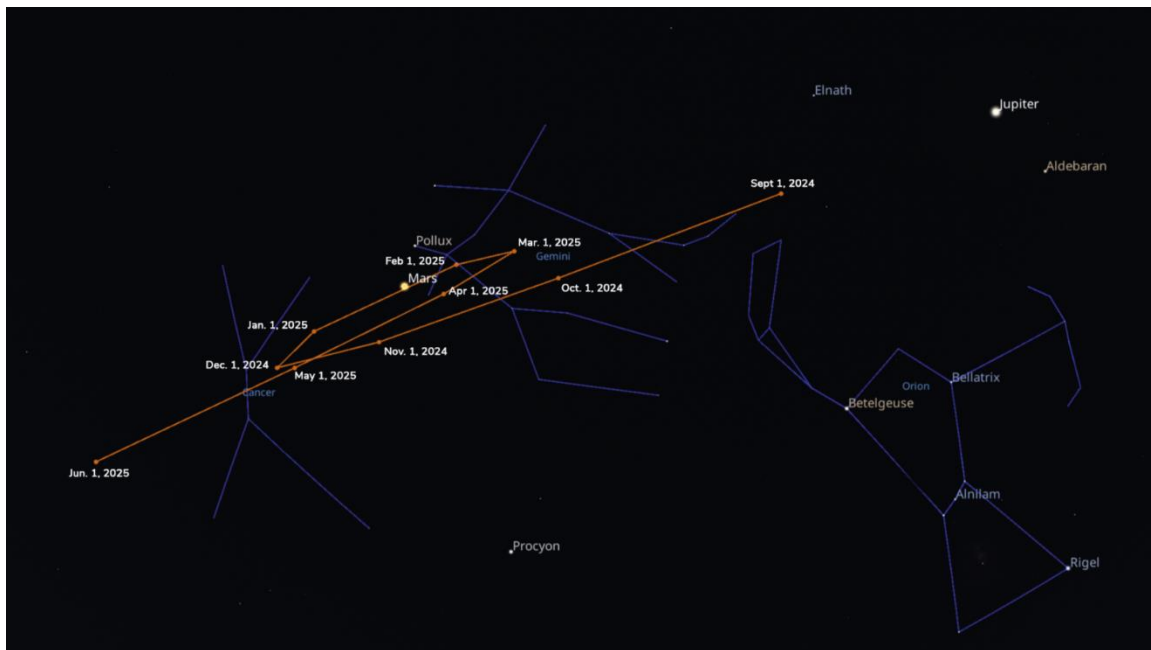


By Kat Troche

Have you looked up at the night sky this season and noticed a bright object sporting a reddish hue to the left of Orion? This is none other than the planet Mars! January will be an excellent opportunity to spot this planet and some of its details with a medium-sized telescope. Be sure to catch these three events this month.

Martian Retrograde

Mars entered retrograde (or backward movement relative to its usual direction) on December 7, 2024, and will continue throughout January into February 23, 2025. You can track the planet's progress by sketching or photographing Mars' position relative to nearby stars. Be consistent with your observations, taking them every few nights or so as the weather permits. You can use free software like Stellarium or Stellarium Web (the browser version) to help you navigate the night as Mars treks around the sky. You can find Mars above the eastern horizon after 8:00 PM local time.



This mid-January chart shows the path of Mars from September 2024 to June 2025 as it enters and then exits in retrograde motion. Mars appears to change its direction of motion in the sky because Earth is passing the slower-moving Mars in its orbit. Credit: Stellarium

Hide and Seek

On the night of January 13th, you can watch Mars ‘disappear’ behind the Moon during an occultation. An occultation is when one celestial object passes directly in front of another, hiding the background object from view. This can happen with planets and stars in our night sky, depending on the orbit of an object and where you are on Earth, similar to eclipses.



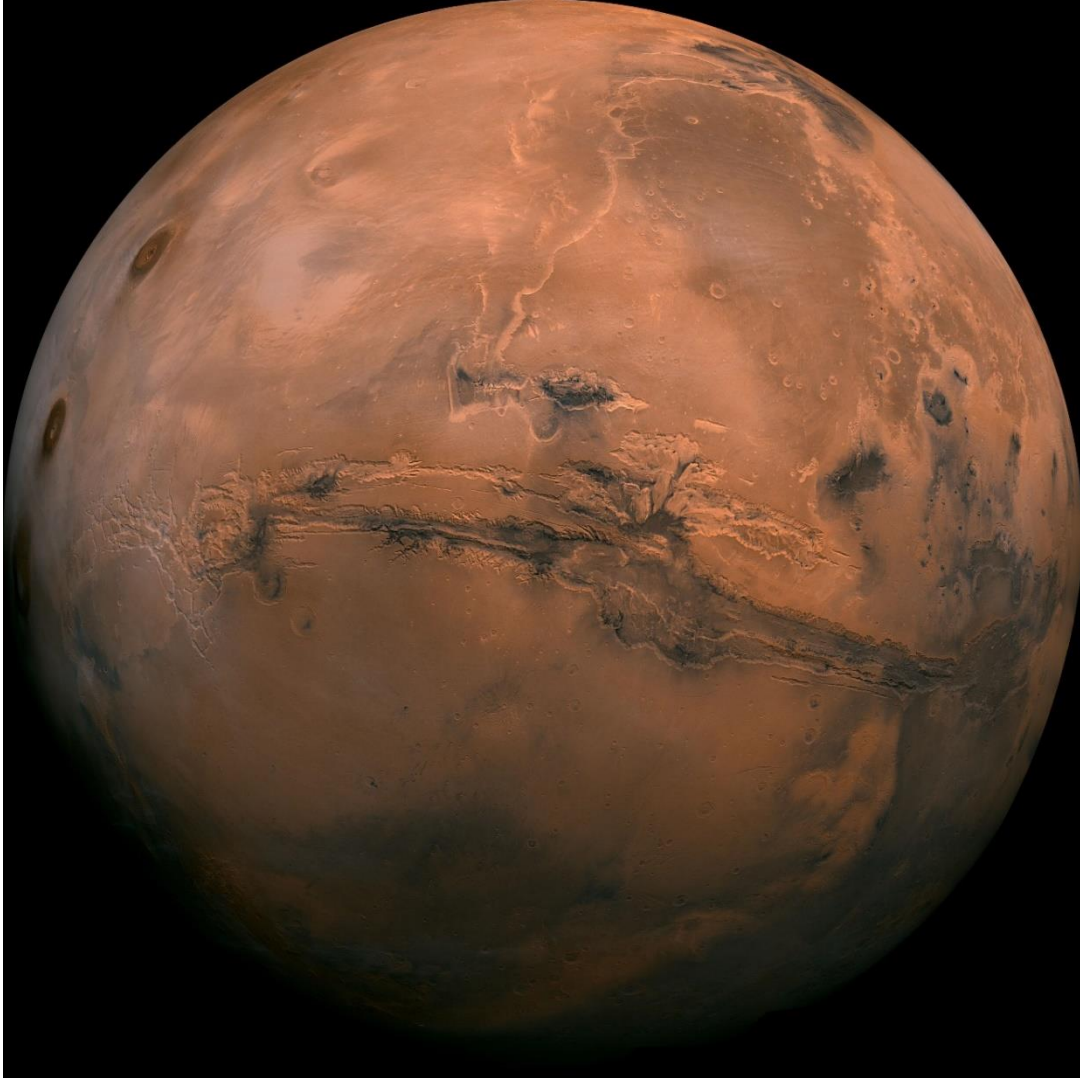
A simulated view of the Moon as Mars begins its occultation on January 13, 2025. Credit: Stellarium

Depending on where you are within the contiguous United States, you can watch this event with the naked eye, binoculars, or a small telescope. The occultation will happen for over an hour in some parts of the US. You can use websites like [Stellarium Web](#) or the Astronomical League’s [‘Moon Occults Mars’ chart](#) to calculate the best time to see this event.

Closer and Closer

As you observe Mars this month to track its retrograde movement, you will notice that it will increase in brightness. This is because Mars will reach **opposition** by the evening of January 18th. Opposition happens when a planet is directly opposite the Sun, as seen from Earth. You don’t need to be in any specific city to observe this event; you only need clear skies to observe that it gets brighter. It’s also when Mars is closest to Earth, so you’ll see more details in a telescope.

Want a quick and easy way to illustrate what opposition is for Jupiter, Saturn, Mars, or other outer worlds? Follow the instructions on our [Toolkit Hack: Illustrating Opposition with Exploring the Solar System](#) page using our [Exploring Our Solar System](#) activity!



A mosaic of the Valles Marineris hemisphere of Mars projected into point perspective, a view similar to that which one would see from a spacecraft. The mosaic is composed of 102 Viking Orbiter images of Mars. Credit: NASA/JPL-Caltech

Mars has fascinated humanity for centuries, with its earliest recorded observations dating back to the Bronze Age. By the 17th century, astronomers were able to identify features of the Martian surface, such as its [ice caps and darker regions](#). Since the 1960s, exploration of the Red Planet has intensified with robotic missions from various space organizations. Currently, NASA has [five active missions](#), including rovers and orbiters, with the future focused on human exploration and habitation. Mars will always fill us with a sense of wonder and adventure as we reach for its soil through initiatives such as the [Moon to Mars Architecture](#) and the [Mars Sample Return](#) campaign.

Contact Information

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