



Roanoke Valley Astronomical Society

Amateur Astronomy News and Views
In Southwestern Virginia



Volume 43—Number 1

January 2026

RVAS December Meeting Summary

2025 RVAS Winter Social

You can view this month's Zoom recording by [clicking this link](#). The passcode to view the video is:
X+puzHD3

The December RVAS meeting was our **winter social**. 16 in-person and 2 online members attended.

We started with grazing at the food everyone brought in. Michael started recording the meeting and introduced how the evening would go.

Allowing members to show an object of interest, we started with a slide from a website **Bill Savage** shared, talking about astronomical events that could be construed as the Star of Bethlehem.

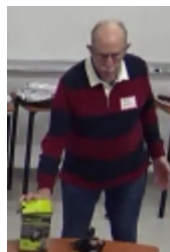
Michael then showed his Sun Seeker phone app, which can display curves of solar position at different times of day and days of the year and superimpose these curves on a phone camera image while pointing the phone from any location. Next Michael brought in solar finders created by Dave Thomas, which were taken by Hetzal at our meeting. Next, he took out a box of lenses created by the optical shop at Goddard Spaceflight Center, which he gave to our new member Brian.

Next meeting: Michael pointed out that VWCC is closed on Monday Jan 19 for Martin Luther King day, and our meeting is slid to **Jan 26, 2026**.

Our own **Dr. John Wenskovitch** then presented his **What's Up** presentation via Zoom for the next month. Please be sure to see the What's Up? Highlights presented later in this newsletter. Item of note: John pointed out the **Astronomical League** program for **planetary nebula observing**, taken from a list of 110 planetary nebulae.



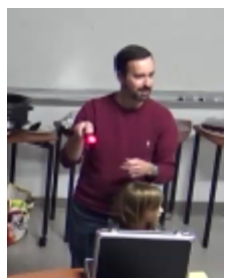
After John's presentation, the lights were turned on. **Brian Moreira** came up and showed his box of treasured eyepieces, and a nice booklet on the Apollo 8 mission.



Next up **Mike Hutkin**, who started by pointing out **Genevieve Goss** came up with the idea to use **Frank Baratta's** "Show and Tell" format for tonight. Mike then presented a new camera phone adapter he bought to securely attach a smart phone to a telescope, replete with adjustments. Drawback: unit he got is fairly heavy, so best suited for a larger scope.



John Goss brought in his 4" f/10 Dynascope Criterion reflector he purchase in 1969, using money from his paper route. Took three months to afford it.



Next **Michael & Lily Martin** gave a presentation of their rigel red flashlight, and displayed some of Lily's artwork.



Rand Bowden brought in a pair of binoculars. Took a pair of solar glasses, cut them apart, and then TAPED them to the binoculars. He can now look at the sun with his binoculars.



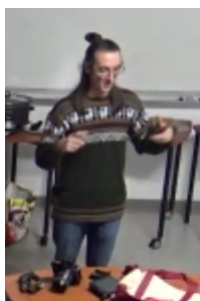
Genevieve Goss shared a photo from our VAAS in 1997 or 1998, with four of our current members present in the photo (**Michael G, Mark H, John and Genevieve G**).



Rickey Parker shared (via zoom) a new technique for aligning his telescope. He got the Sky Sense autoguider. Given he has poor visibility of the northern hemisphere, he can now track without having to find Polaris, using an internal built-in model of the sky.



Nancy Vogelaar brought in a small planetarium projector to demo, but not all lights could be turned off and were too bright to adequately view .



Caleb White brought in his head mounted light, and one of his five cameras (this one full spectrum modified). He also made an announcement that he was getting ready to give a 3 minute (max allowed!) presentation to the Roanoke County Board of Supervisors on Dark Sky initiatives.



Hetzal Hartley brought in a scope (refractor) he received at 9 years old.

Michael then switched out of show and tell mode and displayed club astrophotos for the remainder of the meeting, which can be viewed and appreciated below.

We thank **William Krause, David Thomas, Ben Hartman, Noah Winslow, and Ed Dixon** for providing their work this month. Details on those can be found on the RVAS Facebook page.

To provide each image with the focus it deserves, we are sharing the submissions in a separate article in this newsletter. Do not miss checking out the rest of these images.

Next month: Nathan Tehrani will be our speaker at the January 26th RVAS meeting. His presentation is called “Nancy Grace Roman Space Telescope: Coming Soon to a Lagrange Point Near You!”.

Nathan is a contractor guidance control and navigation engineer at NASA’s Goddard Space Flight Center, currently a flight software developer for the attitude control system on the Roman Space Telescope. Nathan also maintains the spaceflight dynamics simulator that is used for testing on this mission. Before Nathan came to Goddard, he worked at NASA’s Katherine Johnson Facility, and before that, attended WVU for physics and biology in college and then aerospace engineering for grad school.

A few images from the December 15, 2025 RVAS Christmas Social

Click on the picture see a larger more detailed image



Bill Savage's astronomy item

All Overview

The phrase "500 comet is christmas star" refers to the theory that the [Star of Bethlehem](#) was a bright comet recorded by Chinese astronomers in 5 BCE, fitting descriptions in Matthew's Gospel of a new, slow-moving celestial object that guided the [Magi](#), placing Jesus' birth in the spring of 5 BCE, aligning with other historical and astronomical clues. This "broom star" appeared for over 70 days, providing a unique astronomical event that signified a new king, with some researchers linking it to earlier planetary conjunctions for the wise men's journey.

Key Points of the Theory:

Astronomical Evidence: Chinese records describe a comet (sometimes called a "broom star" due to its tail) visible for an extended period in 5 BCE.

Gospel Fit: A comet, unlike a planet or distant star, moves across the sky, matching the description of a "newly appeared star," and could appear to "stand over" Bethlehem as the Magi traveled.

Timing of Birth: This comet points to a birth year of 5 BCE, which is consistent with the "Shepherds in the Field" (suggesting spring) and other historical accounts, placing Jesus' birth around Passover.

Magi's Journey: Some theories propose a **conjunction of events (triple conjunctions of Saturn/Jupiter in 7 BCE, planetary massing in 6 BCE, and the 5 BCE comet)** provided a significant celestial sign for the Magi.

Why It's a Strong Candidate:

Uniqueness: Comets are rare, dramatic events, making them powerful signs.

Movement: The Gospel describes movement, which fits a comet's path.

Historical Records: Ancient Chinese astronomers meticulously documented such events.

Colin Humphries, 1958, Astronomische Gesellschaft Abstract Series, No. 14, p. 78

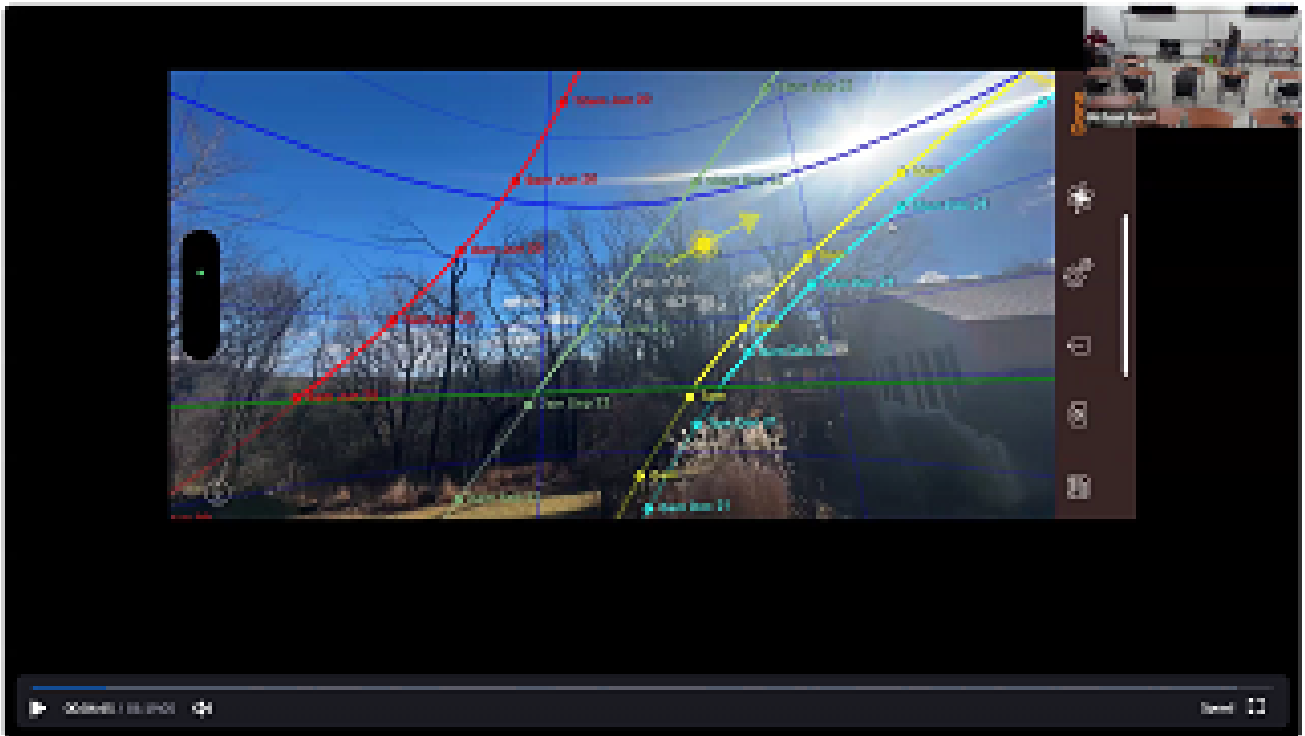
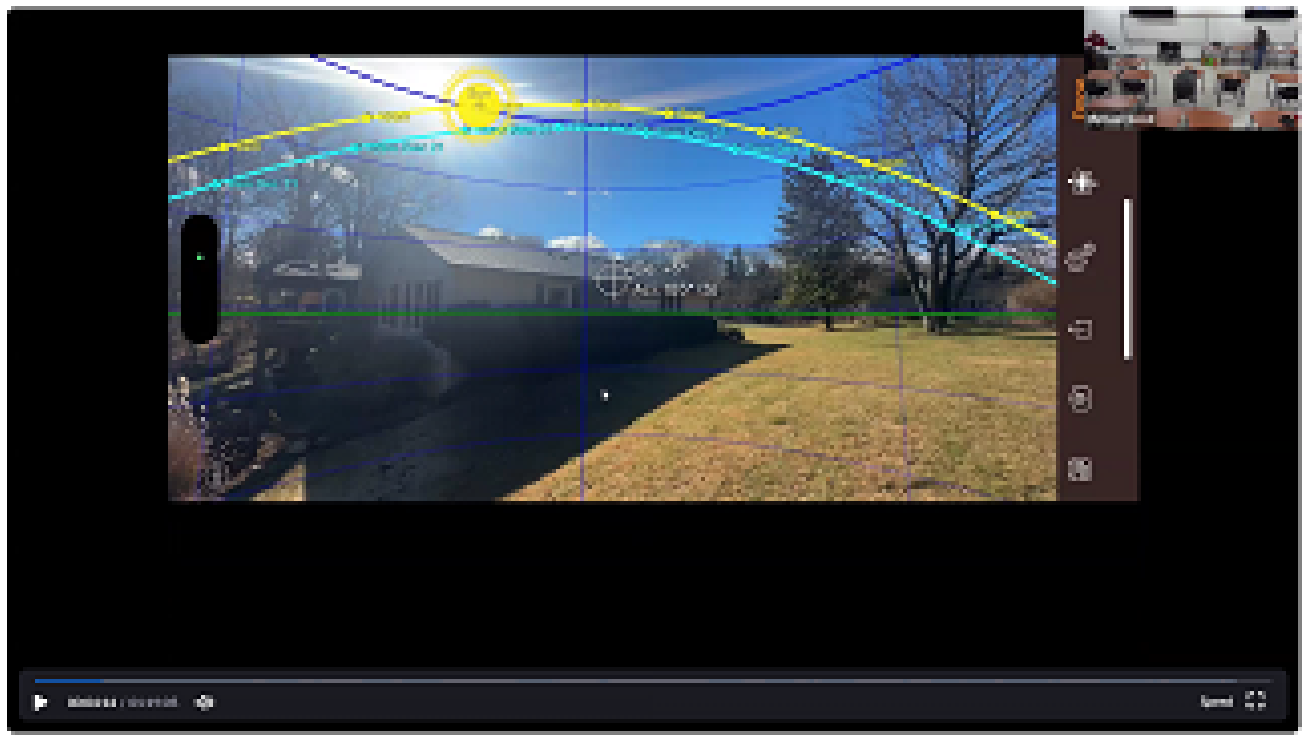
Michael Good's astronomy stuff

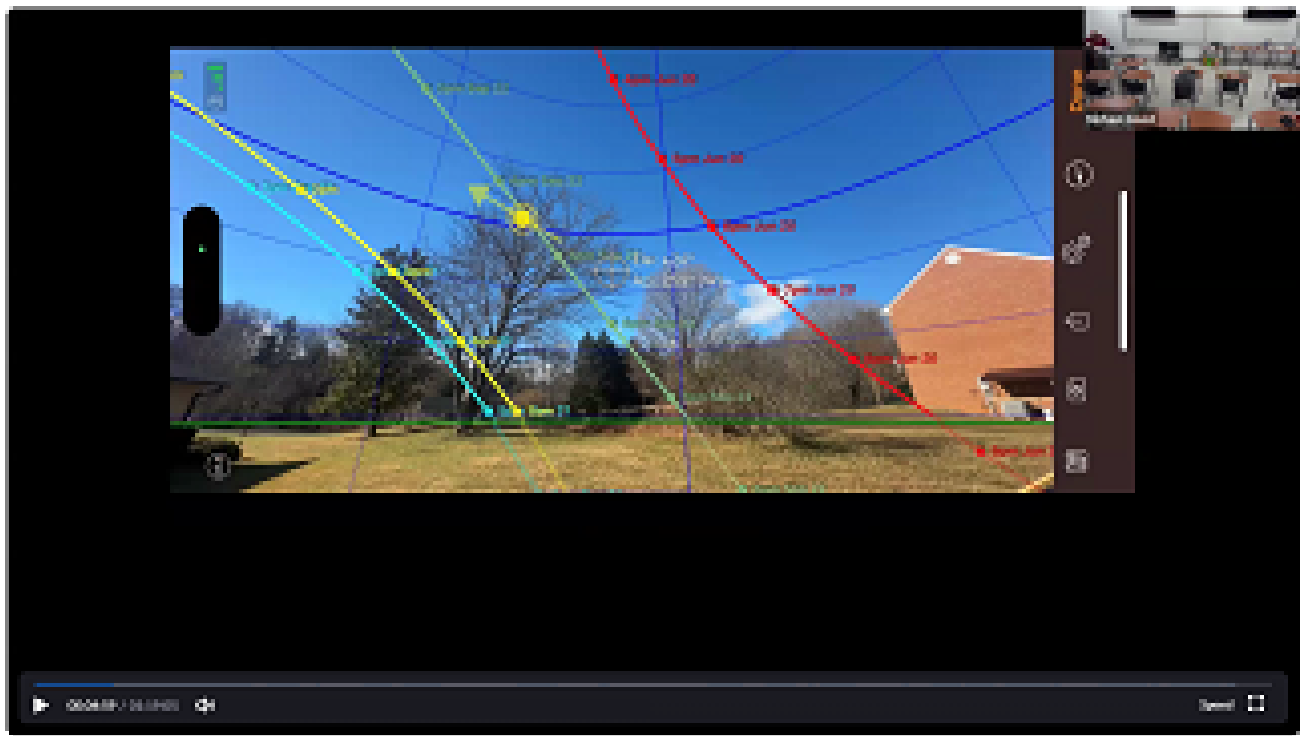
Installed free-standing solar panels. Use "Solar seeker" software on phone.



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Open





What's Up? Highlights

January 1 to 31, 2026

This Month:

As with the past few months, the January night sky is dominated by the giant planets. While Mercury, Venus, and Mars disappear into the twilight, Saturn and Neptune shine largely throughout the evening sky, while Jupiter and Uranus linger later into the morning. The month begins with Jupiter rising at 5:51pm, Uranus low in the east, and Saturn and Neptune already high in the sky at dusk. By the end of the month, Jupiter has passed opposition and will be setting at 6:05am, Saturn and Neptune will be setting at around 9:30am, and Uranus will be well-placed for observation in the vicinity of the Pleiades. The peak of the Quadrantid meteors on the 2nd will be mostly spoiled by the nearly Full Moon, though some of the brighter meteors from the shower should still be visible. Earth reaches perihelion on the 3rd at 12:15pm, with an Earth-Sun distance of 91,403,637 miles (give or take a few). Double (and single) shadow transits of moons on the face of Jupiter are possible throughout the month. The fall constellations dominate the evening sky with winter constellations beginning to rise high, providing excellent evening views away from the galactic core. Don't forget to have a look at some of the showpieces like M42 and M45 while they're high in the sky! The spring constellations make up the majority of the morning sky throughout the month, providing excellent opportunities to star-hop through the galaxy superclusters in Virgo and Coma Berenices.

Celestial Events:

- January 2: Peak of the Quadrantid meteor shower (~110/hr but with a Full Moon)
- January 3: Earth reaches perihelion
- January 3: Conjunction of the Moon, Jupiter, Castor, and Pollux in Gemini
- January 10: Jupiter reaches opposition
- January 18: Peak of the Gamma Ursae Minorid meteor shower
- January 23: Moon/Neptune/Saturn conjunction
- January 30: Another conjunction of the Moon, Jupiter, Castor, and Pollux

Sunset and Twilight:

- Sunset ranges from 5:12pm (1st) to 5:43pm (31st)
- Evening twilight ends from 6:45pm (1st) to 7:12pm (31st)

Lunar Phases and Apsides:

- Perigee #1: January 1, 4:44pm (223,910 miles)
- Full Moon: January 3, 5:04am
- Last Quarter: January 10, 3:52pm
- Apogee: January 13, 3:47pm (251,928 miles)
- New Moon: January 18, 2:53pm
- First Quarter: January 25, 11:48pm
- Perigee #2: January 29, 4:45pm (227,342 miles)

The Roanoke Valley Astronomical Society is a membership organization of amateur astronomers dedicated to the pursuit of observational and photographic astronomical activities. **Meetings are held at 7:30 p.m. on the third Monday of each month. We meet at the VWCC STEM building ST314. Directions are below.** Meetings are open to the public. Observing sessions may be held, weather and sky conditions permitting, at a dark-sky site. For information regarding joining RVAS, including annual dues, [click here](#). Articles, quotes, etc. published in the newsletter do not necessarily reflect the views of the RVAS or its editor.

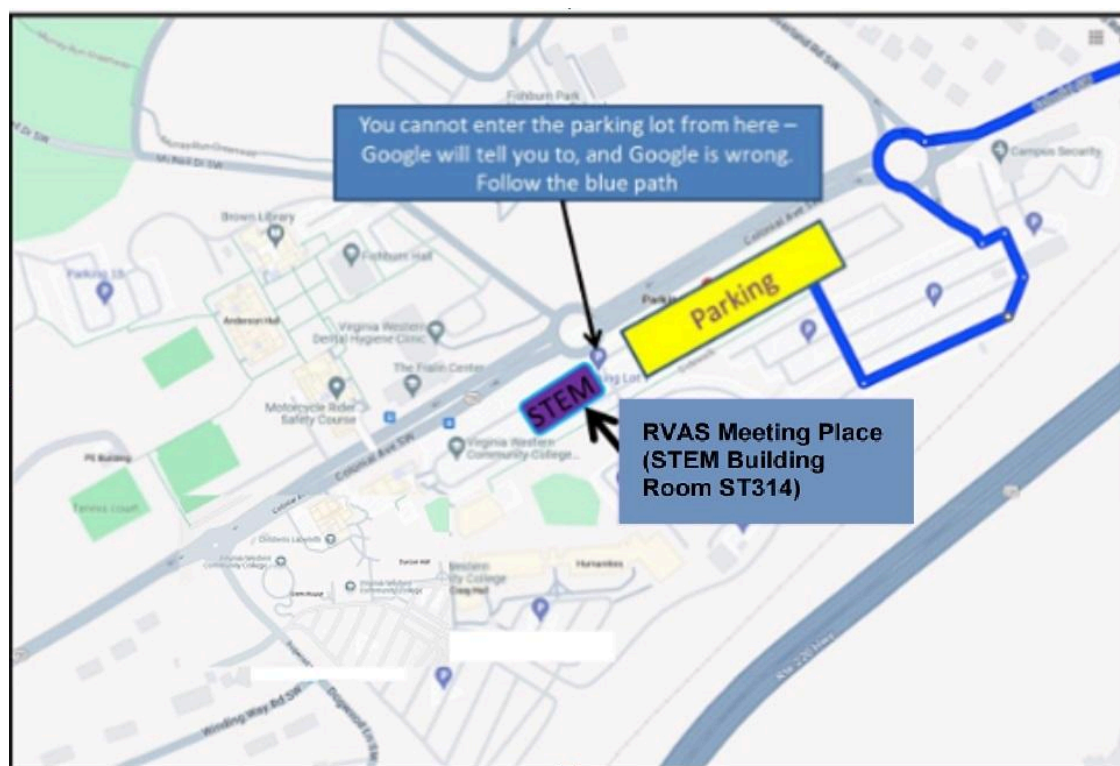
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Ed Dixon, Webmaster (webmaster@rvasclub.org)

Directions to RVAS Meeting Location

Virginia Western Community College STEM Building, Room ST314
3094 Colonial Ave SW, Roanoke, VA 24015





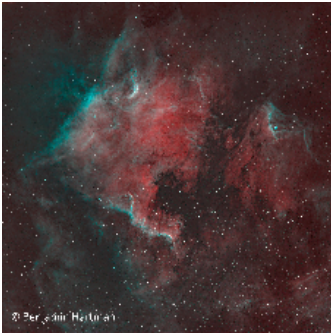



VWCC is located in the southwestern area of the City of Roanoke. The STEM Building is accessed via the roundabout at Overland Drive and Colonial Avenue, near Campus Security at the top right of the map. The STEM Building is at the opposite end of the Colonial parking lot from Campus Security. Follow the darker blue path from the roundabout and park anywhere in the lot.



Note: Google provides incorrect guidance to access the parking lot from the roundabout at McNeill Drive. That roundabout **does not** provide an entrance to the parking lot.

December 2025

Ctrl- Click on the picture see the source file and additional information

<div>David Thomas</div> <div></div>	<div>David Thomas</div> <div></div>
<div>Ben Hartman</div> <div></div>	<div>David Thomas</div> <div></div>
<div>Ben Hartman</div> <div></div>	<div>David Thomas</div> <div></div>
<div>Ed Dixon</div> <div></div>	<div>Noah Winslow</div> <div></div>

Noah Winslow



Ed Dixon



William Krause

