



Roanoke Valley Astronomical Society

Amateur Astronomy News and Views
In Southwestern Virginia



Volume 43—Number 4

April 2026

RVAS March Meeting Summary

Astrophotography - Things that make it go better

Our March 16, 2026 meeting had 19 attendees.

If you missed it, you can view it here (we are pursuing improving the LOCAL online sound quality! Our remote speakers had great audio):

Duration: 01:25:21

Shareable

link: https://us06web.zoom.us/rec/share/NYyuzCuHJ0gXTSflKyHHYgHXShf0ZevHR-y-BM4z5dGSVUy7SJ7P81hOnTcg3kNY.rR_5Z6P25yc06MNA

Passcode: nN%u#E8t

In-person we had eight (8) folks: Michael Good, Ed Dixon, John Sheffey, Mallory White, Mike Hutkin, Harry Kessler, Bill Savage, and Rand Bowden.

We had 11 online not counting myself: Michael Good, Michael Martin, Nancy Vogelaar, John Wenskovitch, Brian Bone, Greg Shaffer, Brian Jalbert, Mattox J., David Thaler, Clem Elechi, David Rachle, and Brian Moreira.

Michael discussed the passing of member Mark Hodges, who will be sorely missed.

Next we discussed the busy set of opportunities (TriStar, Craig's Dark Sky project, Kite Festival, and potential Smith Mtn outreach). These were discussed in turn.

Agenda (7:00) March 16, 2026 Meeting

- 7:00 Agenda. Gathering via ZOOM and IN PERSON
- 7:01 Member welcome
- 7:30 Announcements
 - 7:31 Feb 17: Passing of Member Mark Hodges
 - 7:33 Sat Apr 11: Annual TriStar Convention – Greensboro NC area
 - 7:34 Fri Apr 17: Preserve Craig's Dark Sky project
Newcastle Field of Dreams @ 730pm
 - 7:36 Sat Apr 18, 10-3pm: Kite Festival – Salem GreenHill Park
 - 7:37 Outreach to Smith Mtn Lake?
- 7:38 Feature Presentation by **Dr. Ed Dixon:**
Astrophotography (AP) - Things that make it go better
- 8:20 What's Up – Dr. John Wenskovitch
- 8:45 Club astro-photos



Fun Under the Stars – Harry Kessler got up and presented on the upcoming Dark Sky Awareness Community Event to be held Apr 17 at 7:30pm at the Field of Dreams in New Castle, Craig County. Contact Harry at roobay@gmail.com or by phone at (540) 520-7795, or check club emails.

Blue Ridge Kite Festival – Nancy Vogelaar described her Call for Volunteers – Sat Apr 18, 10am-3:30pm, with shifts 830-12, 12-3:30, at Green Hill Park in Salem. Contact Nancy Vogelaar at officeratlarge1@rvasclub.org or by phone (540) 239-5962.

Next up Lisa Whalen (Assistant Park Manager at Smith Mountain Lake State Park) is looking for folks who might be interested in working with the public in their dark sky location. Contact her at Lisa.Whalen@dcr.virginia.gov, or by phone (540) 297-6066.

Next we began our first talk, with Dr. Ed Dixon, speaking on

“Astrophotography – Things that make it go better” (26:20m into presentation)

Ed started with his history, looking at Saturn in a 3” reflector his dad bought him when Ed was 13. He re-engaged in 2019 with a Meade 5”, and did photography from the 1960’s on using SLRs and DSLRs. Upgraded to a Celestron 8SE.

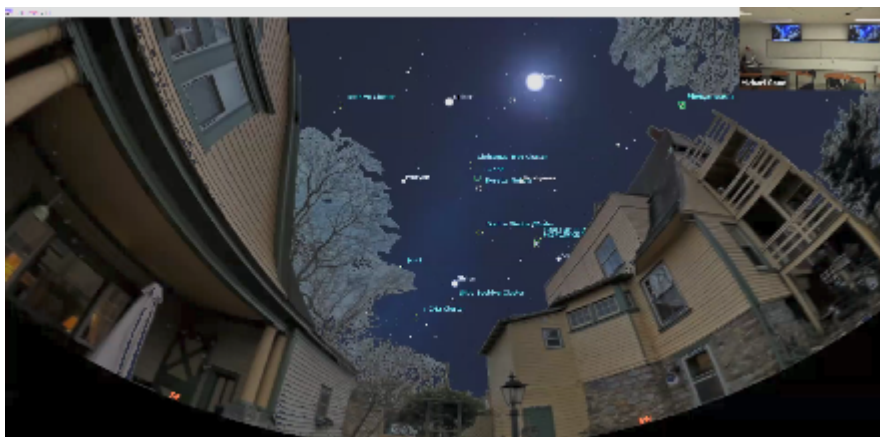
AP (astrophotography) is not one size fits all. DSO, planetary, solar, star clusters...

Areas Ed covered:

- Setup and simple things
 - o Good locations
 - o Tools like Stellarium to plan what to see
 - Great product
 - Landscape options – take photo for horizons
 - o Where and timing – Stellarium
 - o Weather tools – Astropheric
 - o Marks on driveway or bricks – set up scope in same place
 - Duct tape or paint
 - Mark tripod legs to show when in level for marked location
- Hardware and tools
 - o Simple vs full AP rig = basic tripod, rotator mounts, full EQ automated mount
 - o SeeStar
- Capturing and Processing Data
 - o SharpCap 4.0
 - o PHD2 – guiding
 - o PIPP – file conversion

- o PixInsight – stacking and processing
- o AutoStakkert – stacking especially planetary
- o RegiStax 6 – stacking
- o Gimp - layers

Ed demonstrated the value of **Stellarium** with a local photo for horizon with this slide: A key part of this product is their landscape mode. With this, one can capture images of the area around your scope setup area and then use those to see an accurate projection of all obstructions. This makes it very easy to determine what you can and cannot see for any date and time. The result is a 360 degree projection that shows clearly what is not blocked by trees, mountains, houses, etc.



Next Ed discussed using **Astrospheric** for displaying weather information. An online search shows this app receives a 4.8/5 rating. I downloaded on my iPhone from the app store, and would agree it is like the Clear Sky Clock on steroids.

On topic of AP Imaging options

- Simple camera such as with wide angle lens
- Regular tripod with iPhone held by clamp
- DSLRs mounted on scopes
- EQ works best.
- Cooled cameras (such as ZWO).

Capturing data

- Let gear cool down (an hour)
- Remote comm test
- Polar align
- Guiding
- Focusing – Bahtinov mask on bright star



- Flats (vignetting and dust donuts)

- Darks

Imaging details

- Multiple images; stack later
- Short for planetary/solar
- Rule of 500's: $500/(\text{focal length})$ (without guiding)
 - Example: Nikon full frame w/14mm lens yields 35 sec exposures

PixInsight

- Weighted Batch Preprocessing script – basic stacking
- ScreenTransferFunction, HistogramTransformation – image stretching
- CurvesTransformation – contrast, color and brightness
- Dynamic Background Processing – details from background

RC Astro Tools

- BlurXTerminator – sharpens image
- NoiseXTerminator – removes noise
- StarXTerminator – removes stars

Ed gave a before and after example of how flat frame and processing cleans up an image.

Finally Ed talking about post processing “polishing” of your image, and tools you can use.
<finished at 1:02 on recording, and folks asked questions>

Next up, **John Wenskovitch** presented our **What's Up**.

He began by noting that on today's date we celebrate 100 years of Rocketry, from Robert Goddard's first liquid-fueled rocket launch.



John gave us our monthly moon update, including a near supermoon at new moon.

He talked about our first day of spring, and what this means astronomically.

For a detailed review of John's presentation, see the separate article on What's Up highlights.

For our Astronomical League program of the month, John chose the Sketching Observing Program, where you sketch at least 75 of 141 objects from the eyepiece (not from photos), at any magnification that best represents the object.

A question was asked about observing the C/2025 R3 (PanSTARRS) comet. <John ended at 1:19 on recording>

Michael then presented the club's astrophotos, but started with Vincent St Angelo sharing "NASA's Daily Moon Guide", with a nice lunar simulation. Of note, given our speaker tonight, was the next image by Ed of Jupiter, which was simply lovely.



For a complete list of our monthly images, see the separate color images. The recording ended at 1h25m.

Upcoming RVAS April 20 meeting

In addition to our monthly What's Up, our April presentation will be **Nancy Vogelaar** sharing images of Iceland, including auroral images, from the trip she and husband Bruce just took. Then Michael Good will do a sketch of the life of Percival Lowell, and share images from a trip he took to the observatory at Flagstaff, ending with several images Bill Kraus took from Flagstaff just last month.

What's Up? Highlights

April 1 to 30, 2026

This Month:

The month of April features two potentially exciting comets. The first, C/2026 A1 (MAPS), is a Kreutz sungrazer that will pass only 500,000 miles above the surface of the Sun before emerging as a possibly-bright evening sky object... assuming that it survives its close stellar approach. The second, C/2025 R3 (PanSTAARS), will be a morning sky object leading up to its April 19 perihelion, but then will disappear from northern hemisphere view until becoming an evening-sky object in early May. As the month begins, Jupiter remains the dominant planet in the sky throughout the night, remaining in Gemini and not setting until 3:07am. Venus stays above the horizon until 9:13pm and will be brightly shining throughout the evening twilight, and Uranus remains a decent sight near M45 until setting just before midnight. The remaining planets are all mostly lost in the morning twilight glare. By the end of the month, those planets (with the exception of Mercury) are getting higher in the sky before sunrise, including Saturn rising at 5:09am and Mars at 5:22am. The spring constellations are continuing their takeover of the evening sky, meaning that you have another excellent month to view the galaxy clusters in Coma Berenices and Virgo. T CrB also returns to the evening sky this month and remains above the horizon throughout the night, making it an easier object for many of us to observe... if and when it finally blazes.

Celestial Events:

- April 4: Perihelion of Comet C/2026 A1 (MAPS)
- April 6: Nearest approach to Earth of Comet C/2026 A1 (MAPS)
- April 19: Conjunction of Venus, Uranus, the Moon, and M45 (evening sky)
- April 19: Perihelion of Comet C/2025 R3 (PanSTAARS)
- April 20: Conjunction of Mercury, Mars, and Saturn (morning sky)
- April 22: Peak of the Lyrid meteor shower
- April 24: Closest approach of the conjunction of Venus and Uranus
- April 25: Occultation of Regulus (starts 8:31pm, ends 9:28pm)
- April 26: Nearest approach to Earth of Comet C/2025 R3 (PanSTAARS)

Sunset and Twilight:

- Sunset ranges from 7:43pm (1st) to 8:08pm (30th)
- Evening twilight ends from 9:10pm (1st) to 9:46pm (30th)

Lunar Phases and Apsides:

- Full Moon: April 1, 10:13pm
- Apogee: April 7, 4:30am (251,637 miles)
- Last Quarter: April 10, 12:55am
- New Moon: April 17, 7:54am
- Perigee: April 19, 2:54am (224,608 miles)
- First Quarter: April 23, 10:33pm

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.

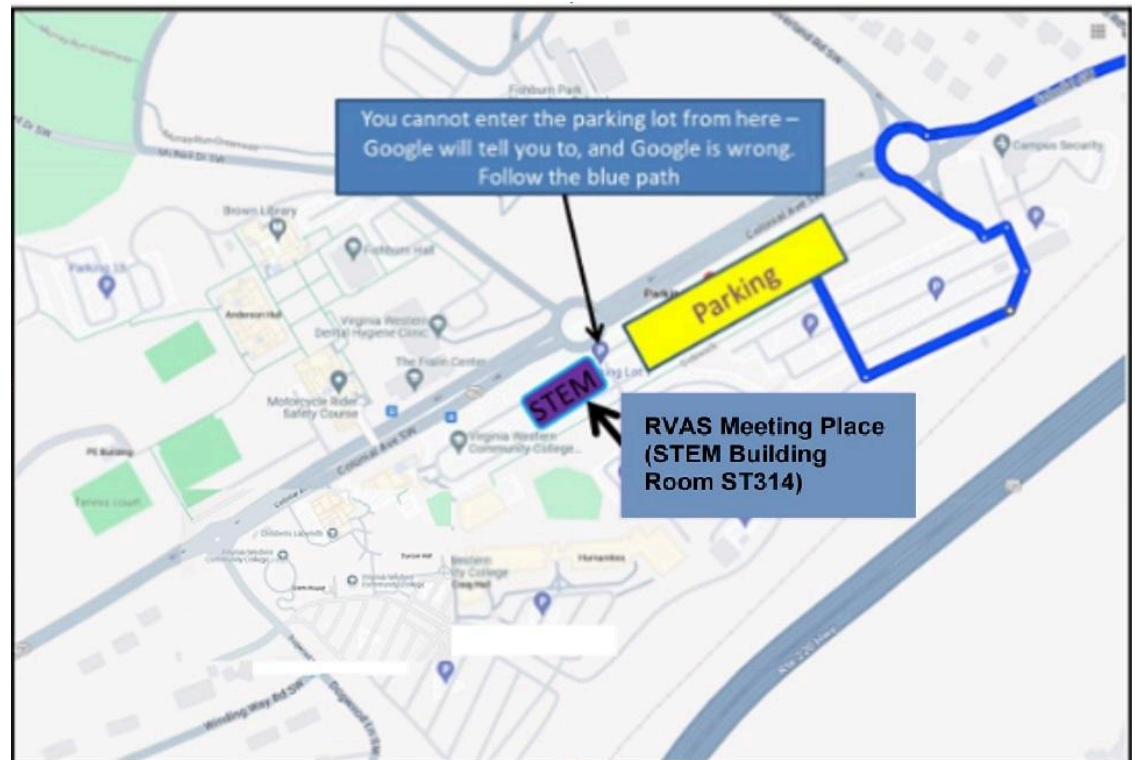
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Michael Hutkin, Past President (pastpresident@rvasclub.org)
Ed Dixon, Newsletter Editor (newsletter@rvasclub.org)
Ed Dixon, Webmaster (webmaster@rvasclub.org)

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.

FUN UNDER THE STARS!

NEW CASTLE

A Preserve Craig, Inc Community Event

Join us for an evening of stargazing and community as we discover and celebrate the beauty of Craig's dark skies.

NIGHT SKIES

 **APR 17TH**
7:30PM
 *Rain date April 24th*

 **FIELD OF DREAMS,
NEW CASTLE,
CRAIG COUNTY, VA**



ACTIVITIES

- Star gazing
- Telescopes for observing
- Tour of the night sky
- Education on value of dark skies

WHAT TO BRING

- Chair & a blanket
- Binoculars
- Red flashlight



 Preserve
Craig, Inc



Start on an Astronomical League observing program tonight!

After finally finding some time under the stars, have you ever thought, "I don't know what to observe. There are so many objects up there!"

The Astronomical League offers many, many observing programs to help in just that situation. Some are designed for the novice such as Constellation Hunters, Universe Sampler, and Lunar Clubs. Other programs are better suited for intermediate observers, including the Messier, Double Star and Planetary Observer Clubs. More experienced deep sky hunters can hone their observing skills with the tougher selections of the Herschel, Arp Peculiar Galaxies, and Galaxy Groups and Clusters Clubs. Truly, there is a program for everyone!

Upon completion of each club, the observer is presented a certificate suitable for framing and a nifty lapel pin. These lists are a low stress way to enjoy the many wonders of the night sky.

Check out which program is right for you! Visit <https://www.astroleague.org/observing-program-division/>

RVAS Club Gets New Telescope Donated

This month RVAS received a new telescope to add to the club's inventory. This was donated by a friend of a member from an out of town family that no longer had the need.


The unit is an Orion SpaceProbe 130ST EQ scope, with EQ mount, manual controls, and a very solid tripod. It also came with an eyepiece, a few other smaller accessories, and a motor drive that may be able to handle auto rotation for better viewing. It has a 650mm focal length at F/5.

It will be added to the club telescope inventory and be available for loan in the near future.




Submitted by John Goss

If you can see only one celestial event this April, see this one.



West
Perhaps the *most enchanting evenings* of 2026!



Enhance the scene – use binoculars!

On April 18, 19, & 20, look low in the west-northwest 60 minutes after sunset.

- On the first evening, the crescent moon, glowing full with earthshine, floats near brilliant Venus, while on the second evening, it moves just above the delicate Pleiades star cluster, and to the right of the bright star Aldebaran and the intriguing Hyades star cluster.
- On the third evening, the slightly thicker, but more pronounced crescent moon hangs above the Pleiades and the Hyades.
- Above it all, bright Jupiter plows through Gemini, shining near Castor and Pollux.

www.astrologos.org

From Sky&Earth



March 2026

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

Ed Dixon



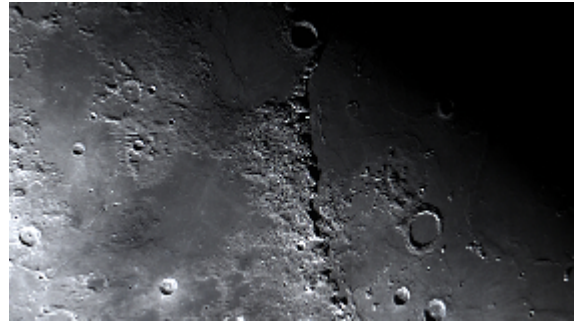
David Thomas



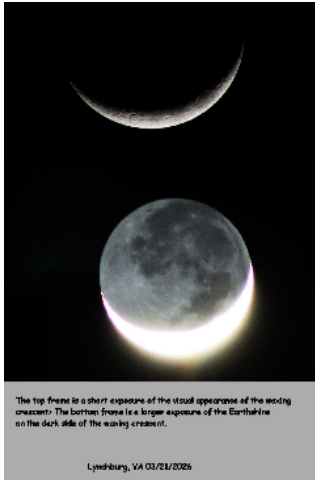
Ben Hartman



Ben Hartman



David Thomas



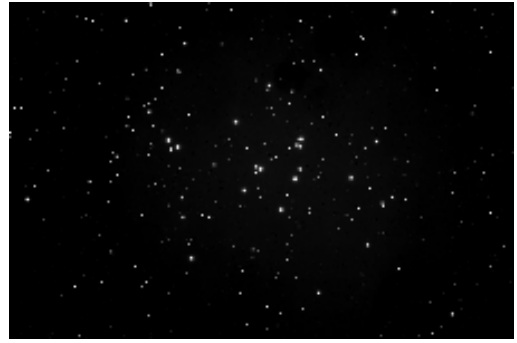
Noah Winslow



Ed Dixon



Ed Dixon



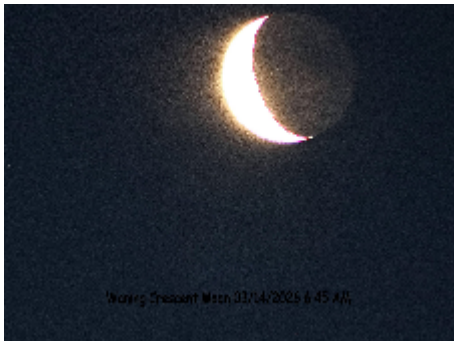
David Thomas



David Thomas



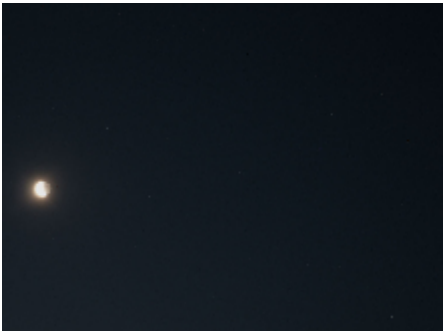
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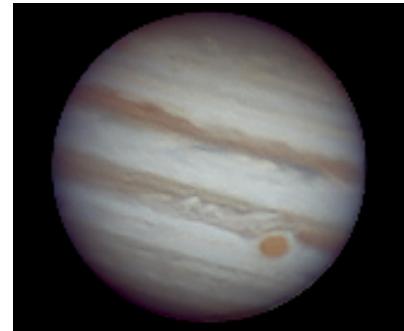
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