

The Observer

The Official Publication of the Lehigh Valley Amateur Astronomical Society

<https://lvaas.org/>

<https://www.facebook.com/lvaas.astro>

February 2026

Volume 66 Issue 02



An Open Hand

I imagined an onion—
Its layers thick and sure,
a steady core beneath its skins,
waiting to rest in the palm.

But each layer unfastened,
growing without bound,
and its fullness undiminished.

Answers morphing into questions—
questions ascending into silence,
silence carrying its own gravity,
expanding into stars.

Was it conclusion?
Only a mirage—
a horizon masquerading as completion,
a door mistaken for arrival.

Every summit reveals the next ascent.
Every silence lingers.
A heart dissolves
the nearer it is held.

The finite is only illusion:
what's real hides itself in endings
that vanish as they near,
plateaus give way to sky.

Infinity is not elsewhere—
it lives in the shedding,
in the vow to go on peeling,
in the hand that dares
remain open still.



Via Sandy Mesics, Programs Chairperson

Upcoming LVAAS General Meeting Speakers

February: **Bruce Ruggeri** will speak in person on the Europa Clipper Mission.

March: **Greg Stanos** will speak (via Zoom) on "Journey to a Comet."

April: **Deborah Skrapik** will speak on "Observatories."

May-July speaking opportunities are currently open.

August: **Dr. Becky Frank** will speak in person; topic TBA.

Please contact astrosandy@gmail.com if you have ideas for speakers, or would like to do a presentation yourself.

Via Rich Hogg, LVAAS Membership Director

Please click [here](#) to pay your LVAAS membership dues before the deadline of 03/01/2026. Our mission is to promote astronomy by making educational programs and resources available to our members and the community. Thanks for supporting LVAAS!

Via LVAAS

Congratulations Star Party Coordinator and Assistant Director of PR Observatories, Aidan Berger, who has been awarded the 2026 LVAAS Youth Sponsorship Program's first annual prize for his project outlining the design of a remote telescope to be housed at Pulpit Rock! Huge thanks to the Stabile family! Please see details on page 6.

THANK YOU, LVAAS VOLUNTEERS!

Any member wishing to volunteer please check the Contacts page of our website and join the [Buzz email groups](#) to learn what projects are being planned. Your help is needed and much appreciated. LVAAS runs on its volunteers!

Via France Kopy, Observer Editor

I'd like to thank LVAAS member and astroimager Dan Stern for sharing the eloquent poetry that accompanies his Rosette Nebula cover image this month. If you'd like to read more of his work, he has a book available on Amazon [here](#). If you are similarly inspired by the night sky, please consider sharing your work in this newsletter.

Via Earl Pursell, UACNJ Liason

UACNJ has its own YouTube channel and the schedule of videos is on its website. Check out the list of winter programs [here](#). Please visit uacnj.org to watch and/or subscribe.



Cover image: The Rosette Nebula Imager: Dan Stern

"At the heart of the Rosette Nebula, powerful young stars breathe energy into their surroundings. Their light pushes outward, hollowing a luminous center and gathering gas along the edges into a dense, glowing shell—places where new stars may one day form. Creation here is not quiet; it happens through pressure, motion, and release.

The Open Hand echoes this same gesture. Its layers do not turn inward, but unfurl outward, shaped by expansion rather than enclosure. What seems like emptiness is actually an active space—one where loss and openness give rise to new structure. In both, form emerges not despite openness, but because of it." - Dan Stern

LVAAS General Meeting Public Welcome!

Sunday February 1, 2026 3 p.m. at **Muhlenberg College**
Trumbower Science Building [map](#)
2400 Chew St., Allentown, PA 18104

Europa and NASA's Europa Clipper Mission: The Search for Habitability within our Solar System

**Bruce Ruggeri,
NASA Solar System Ambassador**



Synopsis: The search for potentially habitable worlds within our Solar System capable of harboring microbial life leads to the subsurface ocean worlds of the outer Solar System, and especially Saturn's moon, Enceladus, and Jupiter's moon Europa. These hypotheses are based upon data available from ground based and space-based observatories (Hubble, Keck, JWST) and the Cassini and Galileo Missions to Saturn and Jupiter, respectively. This presentation will have two major parts. The first will examine the available observational, radar, gravitometric, and magnetographic data and hypotheses supporting the potential for habitable conditions in the presumptive subsurface ocean of Europa, and the

energy sources and convective processes impacting the moon's geology and subsurface dynamics. The second part of this presentation will focus on NASA's Europa Clipper mission launched in October 2024 to address the fundamental questions of Europa's habitability. Europa Clipper is the largest and most technologically sophisticated mission launched by NASA. Details of the spacecraft's design, its scientific mission objectives, and instrument package to address these objectives, and the unique engineering and orbital dynamics to enable Europa Clipper to conduct its 3.5 year, 49 fly-bys discovery mission of Europa while enduring one of the harshest radiation environments in our Solar System will be discussed, along with other aspects of the mission currently en route to the Jovian system for an April 2030 arrival. If successful, the scientific discoveries of NASA's Clipper mission to Europa, and that of the ESA's JUICE "sister" flyby mission to Ganymede and Callisto launched in April 2023, will make the decades of the 2030 and beyond ones of unprecedented space exploration discovery, likely answering the fundamental question of habitability on alien worlds within our own Solar System.

Bruce Ruggeri, PhD has spent his career in basic and applied oncology and cancer research for 32 years throughout his tenure in academia and the pharmaceutical industry, the latter primarily in target-directed small molecule oncology drug discovery and translational pharmacology. He has worked in this capacity for several biotech and pharmaceutical companies, including Teva, Incyte, Prelude, and ModifiBio Sciences. Although his professional career has been in the biomedical sciences and cancer drug discovery, he has been an astronomy, planetary science, and space exploration enthusiast for five decades. He organized regional speaking events and volunteer outreach activities in the past for The Planetary Society (a member since its founding in 1980) for many years. He is a member of the National Space Society, and a longstanding member and the Program Chairperson and Scholarship Coordinator for the Chester County Astronomical Society (CCAS) based in West Chester PA. In February of 2025, Bruce became a NASA Solar System Ambassador and is actively engaged in volunteer outreach and educational activities to those interested in astronomy, planetary exploration.

- Prospective new members who wish to attend, please email: membership@lvaas.org.



Minutes from the LVAAS General Meeting of January 11, 2026

The January 2026 LVAAS General Meeting was conducted electronically using an online service and in person at the Trumbower Science Building at Muhlenberg College. Approximately 72 people were in attendance. Director Benjamin Long opened the meeting at 3:02 p.m.

Tonight's presentation was "Deeper and Deeper - NASA Space Telescopes: Seeing Better and Deeper Across Space and Time" presented by NASA/JPL Ambassador John Conrad. John began with a review of red shift and the Hubble telescope, which gave us our first deep space look at early objects. Using the ultra-deep field for 11 days, staring at basically a grain of sand at arm's length, we were able to see over 5,000 galaxies. Comparatively, the James Webb telescope is much larger, and operates much colder (40 K) in order to better see the infrared field, and thereby much longer back in time.

With four different ways to view various portions of the red shift, the catalog of galaxies is quickly growing, and we are learning more about how galaxies form from their earliest moments. So far, the earliest galaxy we have found was formed only 280 million years after the Big Bang, which is very exciting! In addition to galaxies, we are seeing exoplanets, and 'Little Red Dots' - luminous objects that may challenge our models for galaxies, and even how we view the universe. Finally, the Roman, an up-and-coming project named after the 'mother' of Hubble, will be a wide view telescope working the red shift between Hubble and JWST. With this latest telescope, we are hoping to discover more dark energy items, as well as being able to perform direct imaging of exoplanets. Thank you, John Conrad, for an excellent presentation!

After a short break the meeting resumed.

Membership: Rich Hogg

- No members completed their second readings to become full members during this meeting.
- The following members have previously completed a first reading and are still eligible to complete a second reading to become full members: Andrew Howell, Barry Navarre Jr., Mahbub Rahman, and Leah Strasser.
- The following members completed their first readings today: Shivaraman Asoda, Patrick Engel (family membership with Stacie Engel), Hossam Hanno, Kyle Levin (family membership with Kaira Fletcher), and Zeke White.

General Comments:

- Tom Duff: Please feel free to join the Astroimaging group! Our io-email group is very active; experienced imagers will try to help you work out your imaging problems.. Our next meeting will be in April.
- Kyle Kramm: Our next Stargazers group meeting will be in March for those new to astronomy.
- There will be an Astronomy course offered at Muhlenberg College this summer, if anyone is interested.
- Bill Dahlenburg: If you'd like to take a look at our facilities at South Mountain, or would like to help out, we are usually there on Saturday mornings from 9 a.m. - noon. We can show you rentals and help you with your telescope. Please contact us first to make sure we'll be there.
- Our next general meeting will be February 1, 2026 at 3:00 p.m. at Muhlenberg College.

The meeting was adjourned at approximately 4:41 p.m. The January general meeting was recorded.

Submitted by Dr. Becky Frank, Secretary



2026 LVAAS Youth Sponsorship Program Proudly Administered by Astronomy in the Community



2026 First Annual LVAAS Youth Sponsorship Program

On behalf of **Astronomy in the Community**, in collaboration with the **Lehigh Valley Amateur Astronomical Society**, I am proud to announce the recipient of our first annual **2026 LVAAS Youth Sponsorship Program**.

Please join me in congratulating **Aidan Berger**, a 20-year-old **LVAAS member, Star Party Coordinator, Assistant Director of PR Observatories**, and an **Engineering Design student** at the **Pennsylvania College of Technology in Williamsport, PA**, whose proposal to design and construct a fully remote **20-inch Newtonian astrograph** at the **Kawecki Observatory at Pulpit Rock** has been selected for this year's award.

Aidan's project will create **LVAAS's first fully remote observatory**, allowing members to operate a research-grade telescope for imaging and observation from anywhere. The system will expand opportunities for members who live far from Pulpit Rock and open new doors for public outreach, classrooms, and live astrophotography demonstrations.

The Youth Sponsorship Program provides an initial **\$1,000 grant** to help launch ambitious, youth-led astronomy projects like this one. With an estimated total cost of **\$8,000–\$13,000**, we are now inviting the broader **LVAAS community to help bring the observatory to life**.

If you would like to support the **20" Newtonian Astrograph Fund**, donations can be made here: <https://gofund.me/ae0e586bd> or by scanning the **QR code below**.

This program grew directly out of the generosity of our LVAAS community.

In 2023, my brother, **Claudio T. Stabile**, reached out to LVAAS to support his **Eagle Scout Project** of building an **astronomy observatory** at the **Polk Township North Field**. With support from **LVAAS**, the **Charlie Bates Solar Astronomy Project (CBSAP)**, the **Joe Sommer Foundation**, the **Adam Martin Jablonski Foundation**, and contributions from **our community**, his project went live in August 2023, and **Astronomy in the Community** was born.

In 2024, I followed that path through my **Girl Scout Gold Award project**, creating a **free microscope and telescope lending program** at the **Western Pocono Community Library** with the help of **CBSAP, Celestron, Rutgers University, the Adam Martin Jablonski Foundation**, a **non-monetary LVAAS sponsorship**, and the generosity from our **LVAAS membership**.

Now, in **2026, Aidan** carries that tradition forward.

I hope you'll join me in **congratulating Aidan** and, if you're able, **supporting his project** so we can make this observatory a reality for the **entire LVAAS community**!

Ava Stabile
Youth Program Coordinator
Astronomy in the Community
LVAAS Family Member



2026 LVAAS Youth Sponsorship Program
Proudly Administered by
Astronomy in the Community



Please Contribute to Aidan's 20" Fully
Remote Newtonian Astrograph Project in
the Kawecki Observatory at Pulpit Rock!

Photograph the QR Code or Click

<https://gofund.me/ae0e586bd>



20" Remote Observatory at Pulpit Rock

My proposal is the addition of a new telescope to the LVAAS Fleet. a 20" Imaging Newtonian that will be fully remote controlled



Vision for the 20" Remote Observatory



Astronomy in the Community's Youth Program Coordinator Ava Stabile presents winner Aidan Berger with his award: \$1,000! Aidan is donating his prize to be used for this wonderful and worthy project. Thank you Aidan and Ava!

The 20" Remote Observatory aims to inspire youth by providing hands-on experience in astronomy and astrophotography. This observatory will serve as a valuable educational tool, fostering curiosity and engagement within the community, while also promoting STEM learning opportunities.

The current scope in the Kawecki Observatory is old, outdated, and underused. My proposal would convert the observatory to be fully remote and replace the 8" refractor with the 20" Newtonian Reflector used primarily for astrophotography.



New Meteor Cameras Coverage

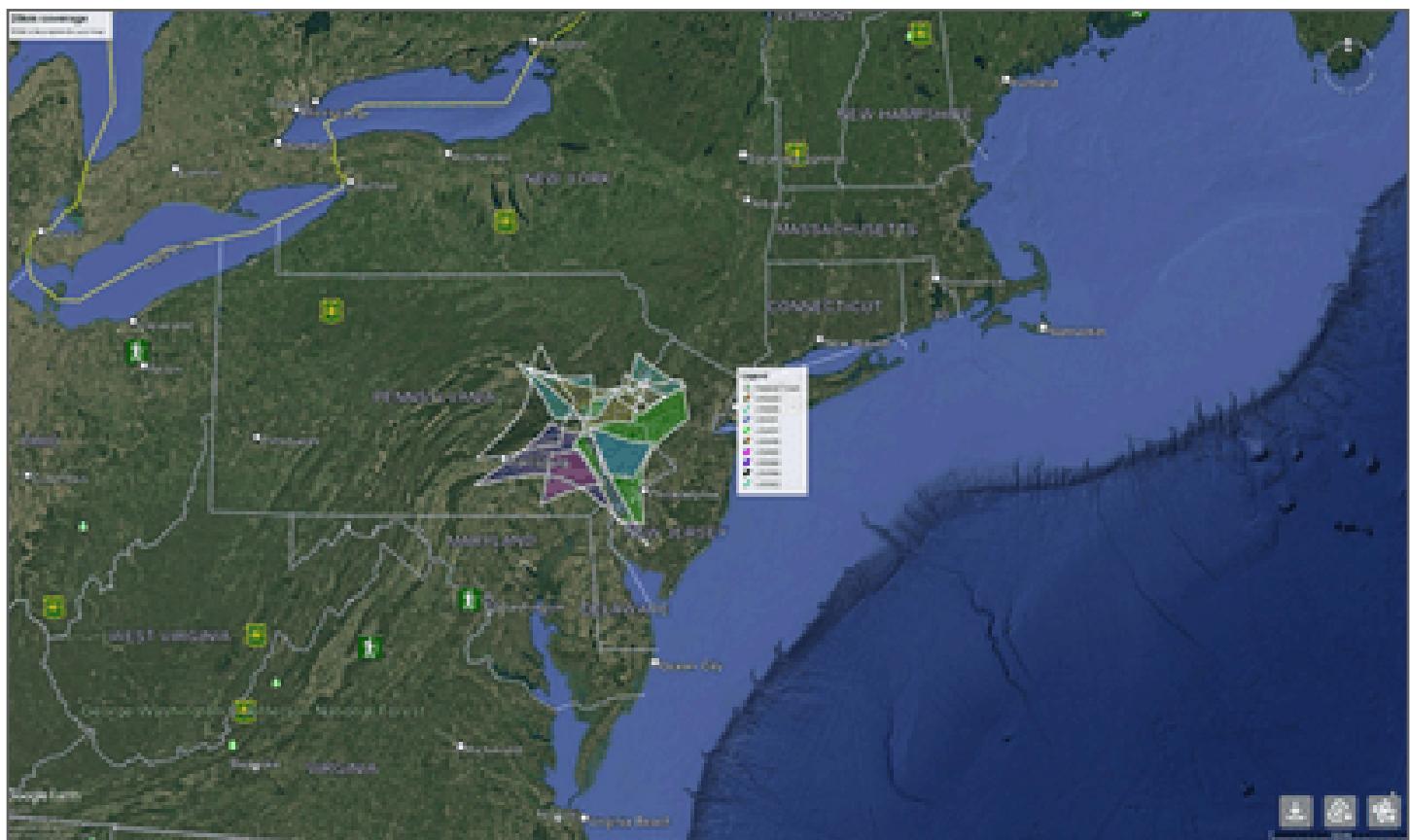
As you may have been aware, several new meteor cameras have been installed at Pulpit Rock during 2025. Our last station, US006D, was installed on December 22 and is now fully calibrated and feeding into the data stream of the Global Meteor Network (GMN). There are now a total of 9 cameras being operated by LVAAS and LVAAS members. If you wish to view the astrometric information being produced by any of these cameras, we now have a page on the LVAAS website under the 'Weather' tab:

<https://lvaas.org/page.php?page=MeteorCameras>

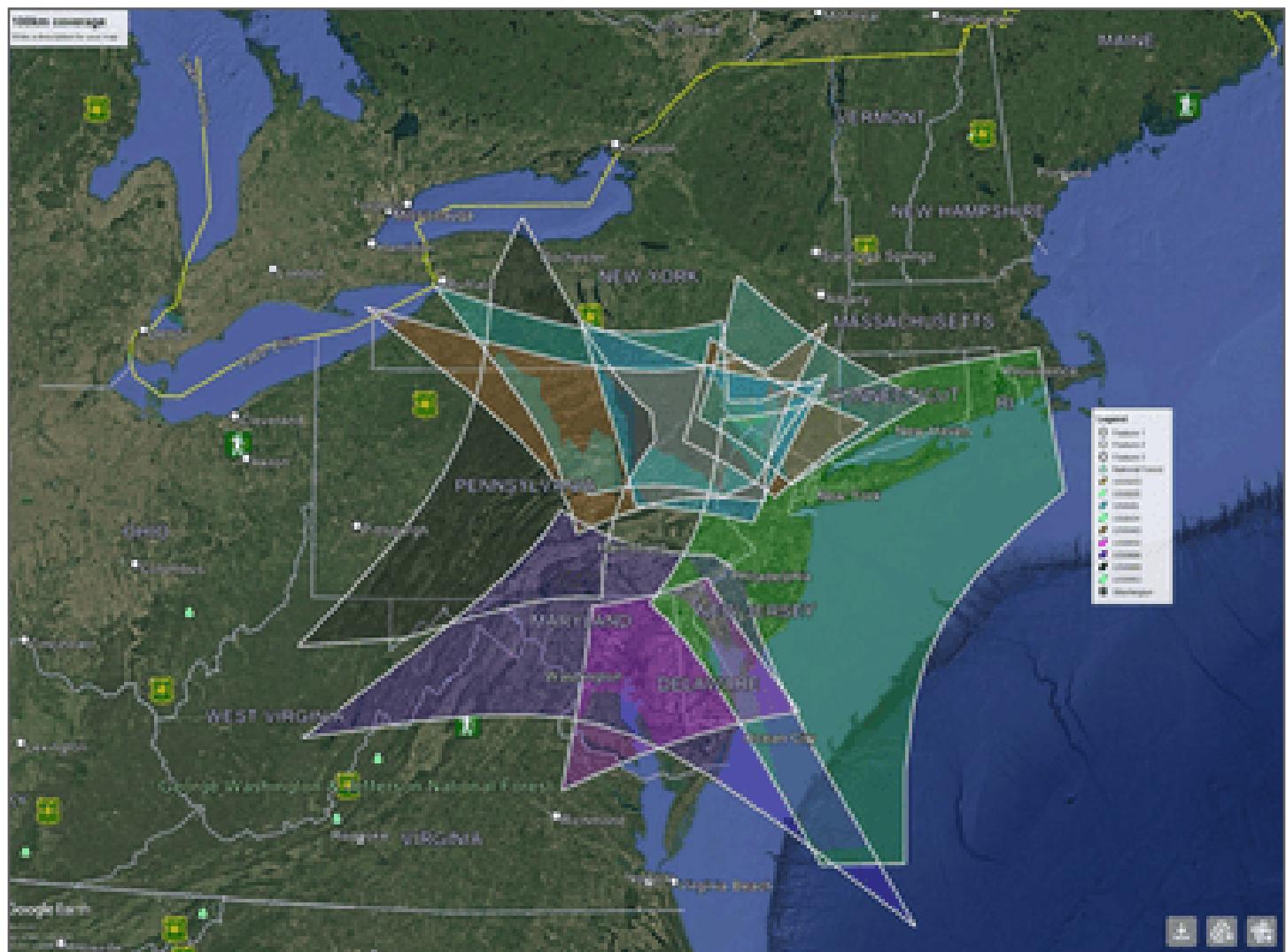
There you can see the most recent results and also the archived information by simply clicking on any of the posted link buttons for each station name. The GMN also posts the field of view for each camera around the world which can be found at:

https://globalmeteornetwork.org/data/kml_fov/

Each link will give you a download of a kml file which will show the field of view (FOV) at 25, 70 and 100 kilometer altitudes. These files can be then be opened with Google Earth and other mapping apps. Here are the composite overlays of all LVAAS cams at 25 and 100km.



As you can see, the fields now cover a large portion of the states of Pennsylvania and New Jersey. This makes our local LVAAS network the second largest cluster in the USA next to a very large array operating in New Mexico and the Southwest. If any member wishes to be involved with the ongoing calibration and operation of our local stations, please let us know. We should be able to enable a live view of each cam on our website with some Python scripts added to the Raspberry Pi control computers, and some additional webpage design.



Regards,

John Kmetz and Frank Lyter



Peter Detterline's
Night Sky Notebook
for
February 2026



Night Sky Notebook

<http://nightskynotebook.blogspot.com/>



Please remember to like and subscribe!

Musical Chairs Telescopes

By Sandy Mesics

Fifty years ago, LVAAS was making some plans for serious building at Pulpit Rock. From the February 1976 *Observer* we read, “Stan Wilkes, Ralph Schlegel, Peter Brooks, and Bill McHugh have been going slightly berserk over the construction of the two prefabricated observatories that will be erected at Pulpit Rock in the spring. They have purchased about \$300 worth of steel, and \$100 of miscellaneous materials such as welding rods, bolts, and other hardware. Another \$300 is expected to finish the projects which will house the old Kawecki 12-inch f/15 Cassegrain, Randy Warden's donated 12.5-inch f/6 Newtonian and Walter Leight's giant 19-inch scope.

The structure for the 19" will be basically a storage shed with an observing ramp. The two 12.5-inch telescopes, however, will be in a full-fledged, roll-off-roof observatory, complete with electricity and a wooden floor. Only one instrument will be mounted at a time for observing. Great pains will be taken to refurbish the instruments, and especially the mount, since both telescopes will be used mainly for astrophotography. A 12-inch diameter drive gear will be attached onto the polar axis, while the main gear for the declination axis will be 6 inches in diameter. The observatory will be placed in the next lot just south of the meteor platform with the roof rolling off towards the south.”



The 19-inch Leight Scope in the "doghouse" under the stairs to the Knecht Observatory

Well, over time things change. The observatory housing Randy Warden's telescope was built at South Mountain instead of Pulpit Rock, while the other roll-off observatory became the Spacek Observatory at Pulpit Rock. This housed another 12-inch Newtonian telescope, while the 12.5-inch Cassegrain ended up at the Brooks Observatory at South Mountain, before it was replaced by the current Meade telescope. The meteor platform at Pulpit Rock was eventually razed. Walter Leight's 19-inch telescope languished in the “doghouse” under the stairs to the Knecht Observatory for many years. The concept for the shed with observing ramp was

utilized for the current Andrews Observatory at Pulpit Rock. The optics of the 19-inch were removed several years ago, but the author suspects that the tube and mount are still in the doghouse under the stairs.

Reference

LVAAS *Observer*, February 1976.





Michael L. Morgan

The Pleiades - M45 - Imager: Michael L. Morgan RIP

LVAAS astroimager Mike Morgan passed away on January 23, 2024. His beautiful Pleiades image is being shared with us by his friend and fellow imager, Sandra Repash. Thanks, Sandra. <https://www.space.com/pleiades.html>

The Observer Feb. 2024 has obituary details. Rest in peace, Mike.



Michael L. Morgan

The Bubble Nebula NGC 7635 Imager: Michael L. Morgan

Thanks again to Sandra Repash for sharing another of Mike's wonderful astroimages. Beauty is eternal.

<https://astrobackyard.com/ngc-7635-the-bubble-nebula/>



Apparent Magnitude: It's a Greek Thing

If a 5.5-magnitude earthquake occurs along a major California fault, and then a short time later a 6.5-magnitude event occurs in the same region, everyone knows the 6.5-magnitude event was larger than the first quake. In fact, the 6.5 magnitude quake would produce approximately 10 times more shaking amplitude based upon the logarithmic magnitude scale (base-10). In energy release, however, it would be about 32 times more potent. In astronomy, apparent magnitude represents how bright a star appears from the Earth, but the system is somewhat counterintuitive. If I look through a telescope at a double star with a 4.5-magnitude main component and an 8.6-magnitude secondary, the 4.5-magnitude star will outshine its 8.6-magnitude component by 4.1 magnitudes, or 44 times. The more negative the magnitude, the brighter the star. * The origin for this system dates back over 2000 years to the Greek philosopher, Hipparchus, who first attempted to quantify the brightness of stars subjectively. The system was based on his visual acuity, with approximately 20 stars chosen as first magnitude, the brightest luminaries, and sixth magnitude stars as the faintest that the human eye could perceive. * During the mid-19th century, an earnest attempt was made to quantify the system objectively. In one method, astronomers used an eyepiece containing a wedge-shaped filter that was moved internally until the star disappeared. The filter position provided an approximate magnitude determination. It was noted that the eye did not respond to changes in brightness (intensity) in a linear fashion. In other words, when the eye-brain subjectively perceived that one star was twice as bright as another star, the mathematics

(2.512) times brighter. * When the system of apparent magnitudes was formalized, the Greek concept of allowing more negative numbers to be assigned to brighter stars won the day. In addition, five magnitudes of difference, i.e., a first magnitude star compared to a much fainter sixth magnitude star, created an intensity difference of 100. Thus, the difference between each magnitude became the fifth root of 100 or 2.512 taken to three places to the right of the decimal. The fifth root of 100 is 2.512 multiplied by itself five times. * During the 19th century, precisions of about 1/10 of a magnitude could be obtained. Stars with magnitudes more positive than 1.5 and more negative than 2.5 were called second magnitude stars, etc. * To make the system absolute, Polaris, the North Star, was adopted in the Northern Hemisphere as a fundamental comparison star with a magnitude of exactly two. Today, we know that Polaris is a Cepheid variable with an average brightness of magnitude 1.99. Other systems used a series of fifth-magnitude stars near Polaris to calibrate a fixed visual-magnitude scale. Against this standardization, stars and planets could be assigned magnitudes of zero and negative numbers. Photographic techniques, stellar color biases, photoelectric determinations, charge-coupled devices (CCDs), orbiting satellites, atmospheric opacity, interstellar dust, and much more have all contributed to the growing accuracy of various methods for determining the visual or apparent magnitudes of stars. To paraphrase James B. Kaler, the author of *The Cambridge Encyclopedia of Stars*: Magnitude systems have multiplied like rabbits. Hipparchus lives. Ad Astra!

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February 2026



Full Moon
Feb. 1/17:09



Last Quarter
Feb. 9/07:43



New Moon
Feb. 17/07:01



First Quarter
Feb. 24/07:27



Full Moon
Mar. 3/06:37

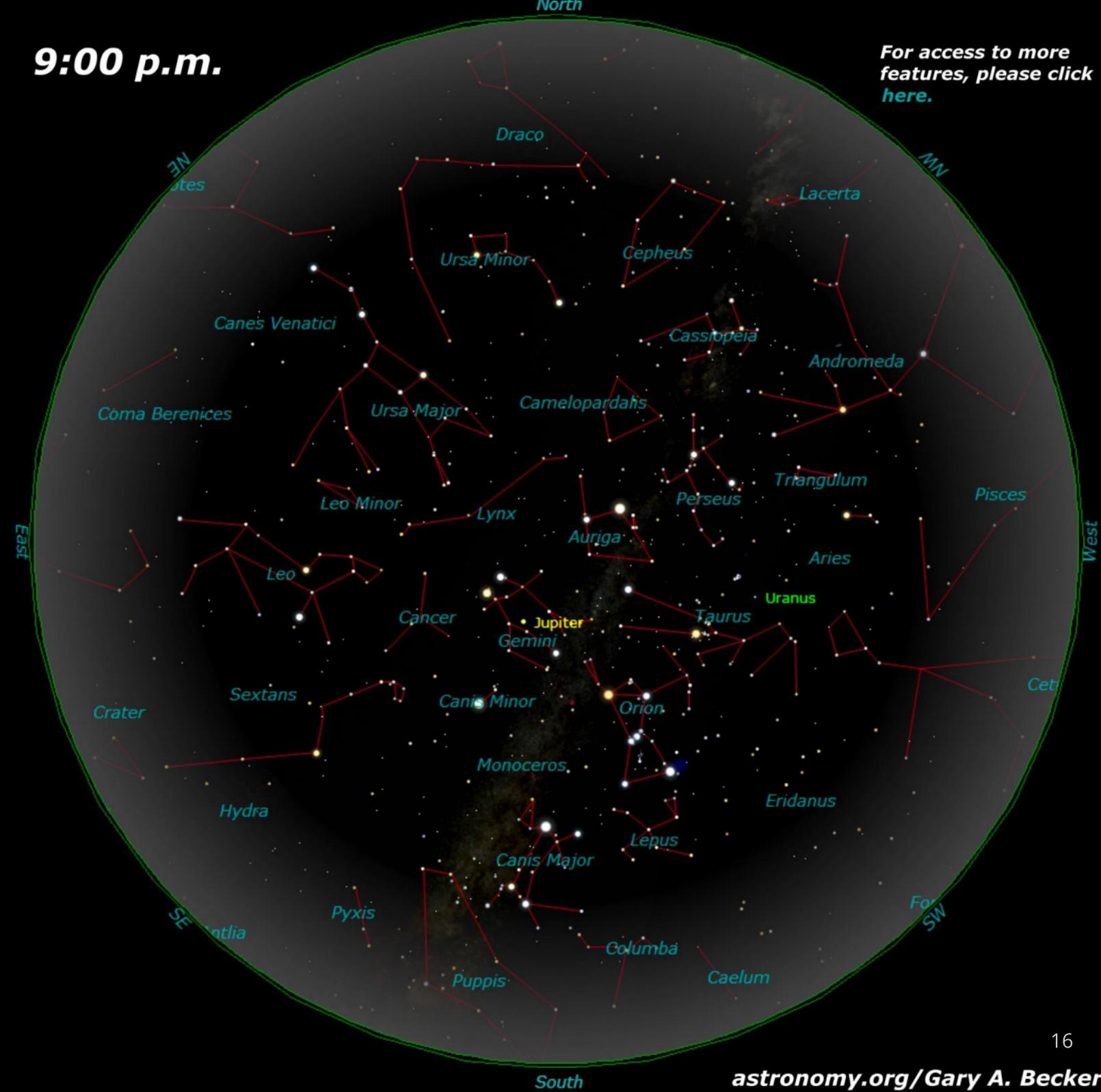


Last Quarter
Mar. 11/05:38

9:00 p.m.

North

For access to more
features, please click
[here](#).



FEBRUARY 2026

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
Full Moon <u>01</u> General Meeting 3:00 PM Muhlenberg College	Groundhog Day <u>02</u>		<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>
Super Bowl Sunday <u>08</u>	Last Quarter Moon <u>09</u>		<u>10</u>	<u>11</u>	Lincoln's Birthday <u>12</u>	<u>13</u>
Deadline for submissions to the Observer <u>15</u>	President's Day <u>16</u>	Mardi Gras <u>17</u>		<u>18</u>	<u>19</u>	<u>20</u>
Washington's Birthday <u>22</u> LVAAS Board of Governors Meeting	<u>23</u>	First Quarter Moon <u>24</u>		<u>25</u>	<u>26</u>	<u>27</u>
						<u>28</u>

MARCH 2026

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<u>01</u>	<u>02</u>	Full Moon <u>03</u>		<u>04</u>	<u>05</u>	<u>06</u>
Daylight Savings Begins <u>08</u> General Meeting 3:00 PM Muhlenberg College	<u>09</u>	<u>10</u>	Last Quarter Moon <u>11</u>		<u>12</u>	Stargazers Group Meeting <u>13</u>
<u>15</u>	<u>16</u>	<u>17</u>		<u>18</u>	<u>19</u>	First Day of Spring <u>20</u>
Deadline for submissions to the Observer <u>22</u>	<u>23</u>	<u>24</u>	First Quarter Moon <u>25</u>		<u>26</u>	<u>27</u>
LVAAS Board of Governors Meeting <u>29</u>	<u>30</u>	<u>31</u>				<u>28</u>

LVAAS EVENT CALENDAR 2026

Contributed by Bill Dahlenburg

	<u>Sundays</u>		<u>Board meeting</u>	<u>Saturday</u>		<u>Stargazers Group</u>	<u>Observer Submission Deadline</u>	<u>Moon Phase</u>			
	<u>General Meeting time/date</u>	<u>location</u>		<u>Astro-Imaging</u>	<u>Star Parties</u>			<u>New</u>	<u>1st</u>	<u>Full</u>	<u>3rd</u>
January	3:00 PM 11	Muhlenberg	25	no meeting	no meeting	no meeting	25	18	26	3	10
February	3:00 PM 1	Muhlenberg	22	no meeting	no meeting	no meeting	22	19	24	1	9
March	3:00 PM 8	Muhlenberg	29	no meeting	28	13	29	19	25	3	11
April	7:00 PM 12	S.M.	26	18	25	10	26	17	24	2	10
May	7:00 PM 3	S.M.	31	9	23	8	31	16	23	1	9
June	7:00 PM 14	S.M.	28	6	20	12	28	15	22	29	8
July	5:00 PM 11	S.M.	26	25	18	10	26	14	21	29	7
August	7:00 PM 8	Pulpit	30	8	22	14	30	12	20	28	5
September	7:00 PM 13	S.M.	27	5	19	11	27	11	18	26	4
October	7:00 PM 11	S.M.	25	3	17	9	25	10	18	26	3
November	7:00 PM 8	S.M.	29	7	14	13	29	9	17	24	1
December	2:00 PM 13	?	27	5	no meeting	no meeting	27	9	17	24	1 31
July, Aug & Dec are Saturday meetings with rain date on Sunday Jan, Feb & March meetings are at Muhlenberg College August meeting is at Pulpit Rock December meeting / Holiday Party (TBD)								NEAF Mega Meet Stellafane	4/11-4/12 8/13-8/15		

Publishing images is a balancing act!

When preparing your images for publication in The Observer, please consider the following guidelines:

Put the quality in:

- ▶ Considering the "print" size of the image, make sure you have at least 150 pixels/inch.
- ▶ Use a reasonably good quality for the JPEG compression ratio.

But watch the "waistline"!

- ▶ Don't go too much above 400 pixels/inch max.
- ▶ Use the lowest JPEG quality that still looks good!
- ▶ Shoot for 400kb for a 1/2 page image or 1MB for a full page.

Tip: If you're not Photoshop-savvy, you can re-size and compress undemanding images ("human interest" not astroimages), with an online tool such as:

<https://imageresizer.com/resize/download/6779bd945d63ac1a3032f37d>

It will also tell you the pixel size and file size of your original, even if you don't download the processed copy.

The Observer is the official monthly publication of the Lehigh Valley Amateur Astronomical Society, Inc. (LVAAS), 620-B East Rock Road, Allentown, PA, 18103, and as of June 2016 is available for public viewing. Society members who would like to submit articles or images for publication should kindly do so by emailing *The Observer* editor, France Kopy, at observer@lvaas.org. Proofreader is David Moll.

Astroimaging Director, Tom Duff is the *Observer's* Astroimaging editor, and welcomes all image submissions.

Articles submitted prior to the Sunday before the monthly meeting of the board of governors (please see calendar on website) will appear in the upcoming month's issue. Early submissions are greatly appreciated. PDF format is preferred. Articles may be edited for publication. Comments and suggestions are always welcome.

LVAAS members please feel free to submit ads for astronomy equipment you have for sale, and additionally you may sponsor a maximum of three ads from non-members per year. Please submit your finished ad as a PDF, with pictures, text and contact information, by the submissions deadline, which is listed on our website calendar. Every attempt will be made to include submissions in a timely manner.

Every effort will be made to properly credit the sources of the material used in this publication. If additional credit is required, please notify the editor.

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If you are interested in becoming a member of LVAAS, please visit our [membership page](#) for information on applying. Existing members please update your LVAAS profile information by emailing the membership director at membership@lvaas.org.