

Event Horizon

ENCOURAGE. EXPLORE. DISCUSS

March 2026

Suncoast Stargazers

<https://suncoaststargazers.com/>



Image By **Timothy Milligan**

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I'd like to remind all members that on the 4th Wednesday of every month we do offer a zoom presentation. We cover club business and then turn it over to interesting speakers covering a wide variety of topics. I send this reminder for two reasons. First, based on the recent attendance, many members have perhaps forgotten about this member benefit. Next, we are always looking for interesting speakers so if you would like to give a talk, or know anyone who might want to give a talk, please let me know at edmcsky@gmail.com.

Vice President Ed McDonough



On the Cover

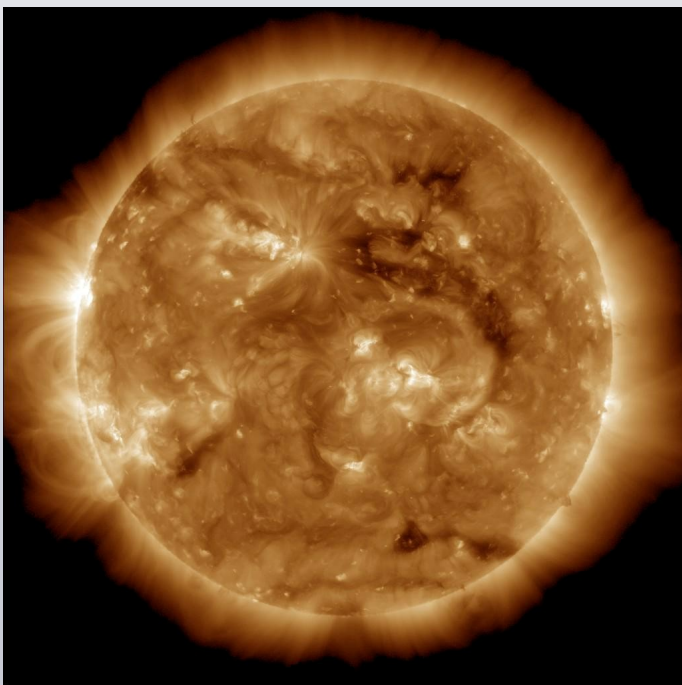
Andromeda Galaxy, also known as M31 was taken in October by member Timothy Milligan. This photo is a Mosaic of 4 panels that were stitched together and processed in Pixinsight and GIMP. The following equipment was used.

Astro-Tech 72EDII Scope, ZWO TC40 Tripod, ZWO AM5N Mount, ZWO ASIAir Mini Controller, ZWO 30mm f/4 Mini Guide Scope, ZWO ASI120MC-S Guide Camera, ZWO EAF focuser, ZWO ASI533MC Pro cooled Camera, ZWO Filter drawer (SVBONY Multiband Filter), Astro-Tech Field Flatter.

Basic Astronomy Terminology Part 2, Deep Sky Highlights

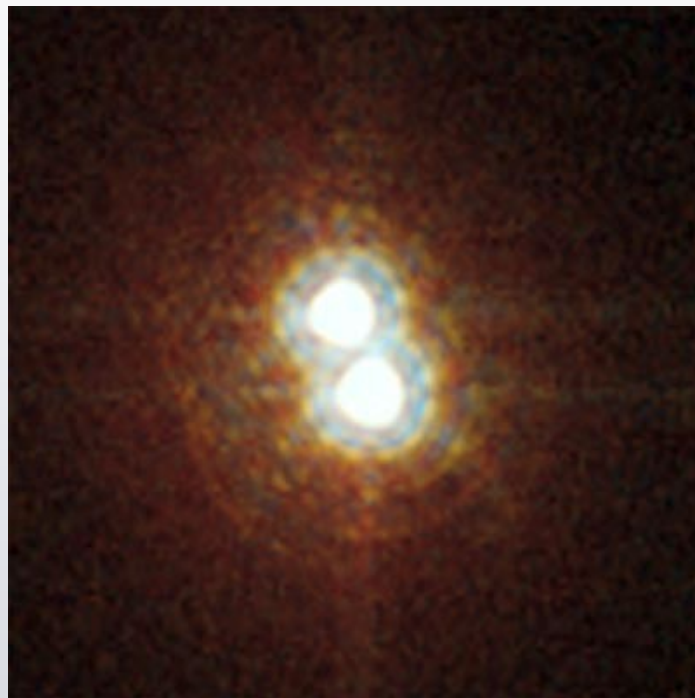
The “deep sky” refers to everything beyond our own solar system, which is almost everything! As we saw in the December issue, the distances are vast, almost beyond comprehension. When viewing through a telescope some terminology might be helpful so we will know what we are looking at.

A. Stars. Stars are suns, shining and producing their own light by a nuclear reaction process called fusion. On a clear night away from city lights up to 2,000 stars may be visible to the naked eye. Hundreds of thousands more are visible through a telescope. Stars vary greatly in size and color, largely based on their surface temperature. The Sun is considered a fairly average star. Some stars such as Antares in the constellation Scorpius are enormous. If Antares were to replace our Sun, its diameter would extend out as far as the orbit of Mars!!!



B. Double Stars. At least 70% of the stars in the sky are not single stars at all but are members of multiple star systems. These are two or

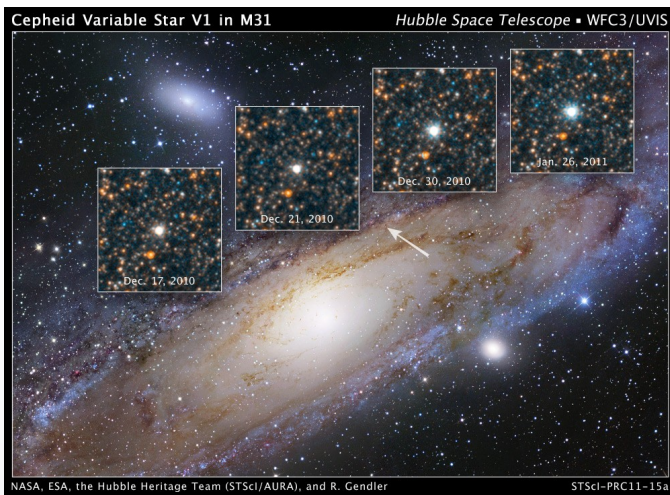
more suns gravitationally bound and orbiting about one another. To be visible in a telescope they must be at least several dozen AU apart and many are spectacular sights to behold. The star Albireo in the constellation Cygnus is generally considered to be the sky’s most impressive double star system.



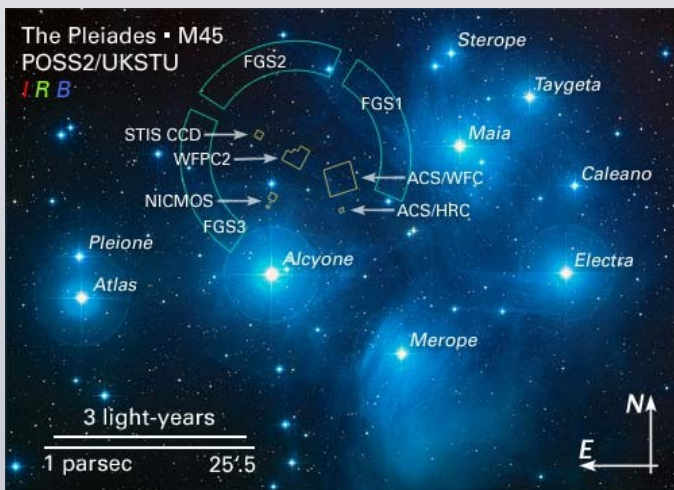
C. Variable Stars. These are stars that fluctuate in brightness over a period of days, weeks or even years. These stars are going through critical stages in their evolution and are unstable because they are producing energy by shifting from one type of fuel to another. There are many different types of variable stars but a good example of one is the star Mira in the constellation Cetus. Over a period of 330 days Mira varies in brightness from magnitude +3 and visible to the naked eye to magnitude +10, far beyond naked eye visibility!

See Page 4 for an example of a Variable Star.

[Continued on Page 4 Basic Astronomy Terminology](#)

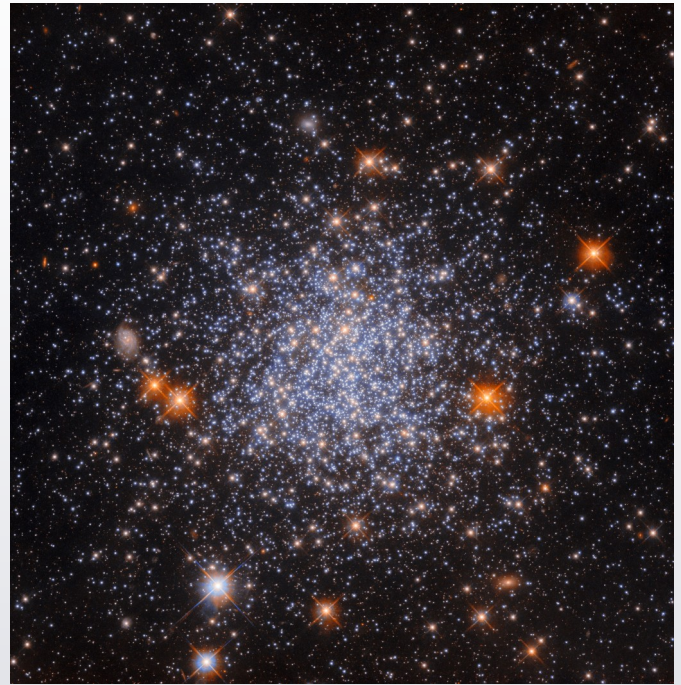


D. Open Star Clusters. These are irregular groupings of stars lying near or in the spiral arms of our own Milky Way Galaxy. They range from modest collections of a few dozen suns to enormous swarms of thousands of stars kept together by their mutual gravity. Open clusters are interesting targets for amateur astronomers because they vary greatly in size and appearance. The Pleiades Cluster in Taurus, The Beehive Cluster in Cancer and The Double Cluster in Perseus are just a few of the hundreds of awe-inspiring open star clusters visible in amateur telescopes.

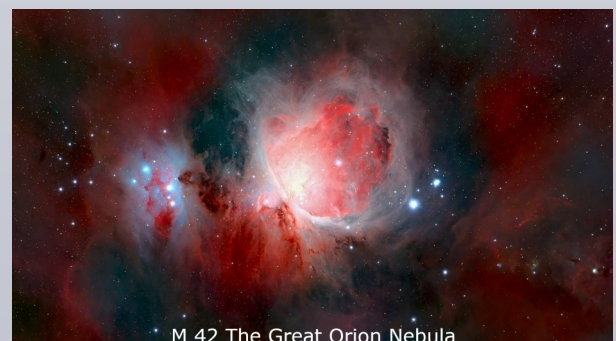


E. Globular Star Clusters. Globulars are large, spherical groups of older stars surrounding our galaxy in a “halo” like effect, satellites of the Milky Way so to speak. They are much larger and more distant than open star clusters. Some contain over a million suns and can be as large as 100 light years

across. The brighter Globular Clusters are fantastic sights in a telescope! The two best visible in the Northern skies are M13 in Hercules and M22 in Sagittarius. Many amateur astronomers consider Globulars to be their favorite telescopic targets after Saturn.



F. Emission Nebulae. These are vast clouds of interstellar gas and dust that are illuminated by nearby stars producing stunning telescopic views. Emission Nebulae are the galaxies “maternity wards” where new stars are being born as gravitational forces are causing the gas and dust to collapse upon itself, eventually heating up and reaching the ignition point for fusion reactions. The two most famous examples of Emission Nebulae are the Great Orion Nebula in Orion and the Lagoon Nebula in Sagittarius. When we look



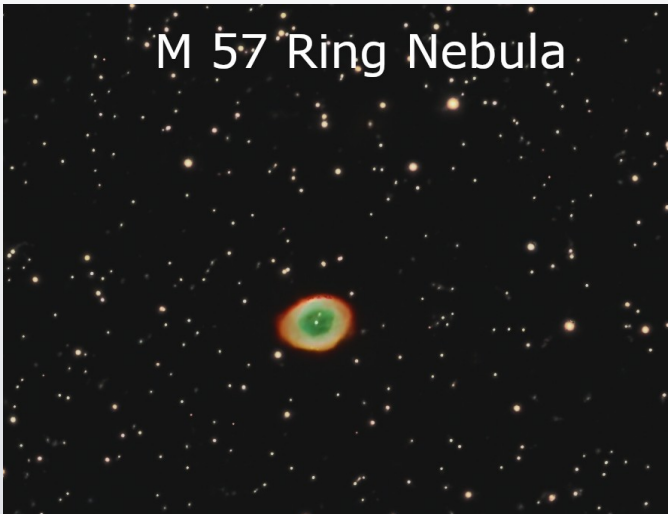
at these objects through a telescope we are watching the birth of stars!

G. Planetary Nebulae. These are enormous globes of gas surrounding very hot stars as these stars are shedding mass in a desperate attempt to achieve equilibrium. This stage means that the end is near. One can only imagine the havoc wreaked on any planetary system surrounding such a star. The most famous Planetary Nebula is the Ring Nebula in

the constellation Lyra. Sadly, astronomers believe that our sun will suffer a similar fate in a few billion years.

H. Galaxies. Galaxies are the final category of celestial objects that we will consider. Everything that we have covered to this point is confined to our own galaxy, The Milky Way. Billions of such galaxies exist, distant islands of millions or billions of stars that float in the cosmic emptiness of space out to the greatest distances that telescopes can penetrate. Because of the great distances involved, only a few hundred or so are visible in typical amateur telescopes, all contained within the Virgo Galaxy Supercluster Group of which the Milky Way is a member. M31 (in Andromeda) at 2.3 million light years, M81 and M82 (in Ursa Major) at 11 million light years and M51 (in Canes Venatici) at 35 million light years are particularly impressive in amateur telescopes.

By Ed McDonough



The First Supermoon of 2026

The first supermoon of 2026 occurred on Saturday January 3rd at 5:02am EST or 10h 02m UT. The moon was low on the horizon at this time and was best observed the prior evening when the moon was higher in the sky from the Western Hemisphere. While a Supermoon is technically bigger and brighter than a regular full moon, it only appears about 7% larger in size, an imperceptible difference to the naked eye. It is called a supermoon because the moon is at full phase close to perigee. Perigee is the closest approach of the moon to the earth in its elliptical orbit. On Jan. 3rd, the moon was 225,130 miles (362,312 kilometers) from the earth. The next such supermoon will not occur until November 24, 2026 and December 24, 2026 respectively.

Traditionally the Farmer's Almanac has referenced the monthly full moons with names tied to early Native American, Colonial and European folklore. January's full moon is called the Wolf Moon and was named because wolves were more likely to be heard howling at this time of year. Other Native American names for this full moon include the Cold Moon, the Frost Exploding Moon, the Freeze-Up Moon, the Severe Moon, the Hard Moon, the Center Moon, and the Canada Goose Moon. In Europe, it's often called the Moon After Yule, referring to an ancient festival that stretches from the winter solstice on December 21st thru January 1st.

Observing supermoons is always a delight. I encourage all ALPO members to get out there and image the moon and send their observations to David Teske at **david.teske@alpo-astronomy.org**. The Wolf Supermoon on January 2, 2026, at 9:04 pm Eastern Time or January 3, 2026 at 2h 04m UT. The moon was at 99.7% phase and 47degrees above the horizon. Weather conditions were clear skies with good steady seeing. This was the orientation of the moon in the sky at the time of this observation.

An Orion ED-80T CF carbon fiber 480mm fl f/6 triplet apo refractor was tracking the moon on an Orion Sirius EQ-G computerized GO-TO mount. A ZWO ASI 178MM monochrome camera and Baader CMOS optimized UV-IR cut filter using Firecapture v2.7.14 to acquire the video through the refractor. Computer utilized was an MSI GF65 gaming computer upgraded to 40GB of RAM. The SER video was processed using Autostakkert 4.0.13 and Registax 6.1. Further sharpening and processing in Photoshop CS4. Image by Gregory T. Shanos Longboat Key, Sarasota, Florida.

References:

1. January 'Wolf Supermoon': How to see the full moon rise with Jupiter this weekend by Jamie Carter Dec 31, 2025 <https://www.livescience.com/space/january-wolf-supermoon-how-to-see-the-full-moon-rise-with-jupiter-this-weekend>
2. The Year's First Bright Supermoon and the Colorful Quadrantid Meteor Shower Coincide This Weekend by Marta Hill Jan 1, 2026 Smithsonian Magazine online [The Year's First Bright Supermoon and the Colorful Quadrantid Meteor Shower Coincide This Weekend](#)
3. We'll get three supermoons in 2026. Jan 5, 2026 Here's how to see them all. by Iain Todd Sky at Night Magazine online [We'll get three supermoons in 2026. Here's how to see them all | BBC Sky at Night Magazine](#)

by Gregory T. Shanos

The First Supermoon of 2026



by Gregory T. Shanos

Telescope Training



Part of why the Suncoast Stargazers were formed is to help newcomers get started in the hobby. Of course, much of that starts with the proper use of your equipment. To that end, beginning with the March event at Robinson Preserve, we will attempt to accomplish this. One or more of our “experts” will be at the venue 2 hours before sunset to assist. If you need help, please come early and we will go through some basic steps. This will be limited to visual astronomy and only on entry to mid-level equipment. It will not include astro imaging training which is far more advanced, complicated and time-consuming.

If you want to take advantage of this, please come early. Once the crowd starts to show up our mission is to turn our attention to them.

Discovery's 39th and Final Mission



Fifteen years ago Space Shuttle Discovery flew the 133rd Space Shuttle Mission STS-133. It was Discovery's 39th and final mission. The mission launched on February 24, 2011, and landed on March 9, 2011. The crew consisted of six American astronauts, all of whom had been on prior spaceflights.

Mission duration

12 days, 19 hours, 4 minutes, 50 seconds

Distance travelled

8,536,190 kilometers (5,304,140 mi)

On March 7th 2011, I imaged the space shuttle Discovery shortly after undocking from the ISS international space station in earth orbit passing through the Little Dipper, Ursa Minor and the bowl of the Big Dipper, Ursa Major.



[Continued on Page 10 *Discovery's Final Mission*](#)

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And on March 8th 2011 roughly 24 hours later I imaged the pair passing thru the constellation of Orion, the Hyades and the Pleiades.



[Continued on Page 11 *Discovery's Final Mission*](#)

Final mission completed Discovery has landed.



The Space Shuttle Discovery is on permanent public display in the James S. McDonnell Space Hangar at the Steven F. Udvar-Hazy Center, an annex of the National Air and Space Museum in Chantilly, Virginia, near Dulles International Airport. It has been there since being delivered in April 2012.

By Jim Mack

Announcing the Augustine Telescope Adoption Program

Help us find a good home for this orphaned telescope

1. Explore Scientific FCD100 127mm (5 in) Triplet Achromatic Refractor Telescope, F/7.5
2. Optical tube soft case
3. Explore Scientific 8x50 Right Angle Erect Image Illuminated Finder Scope.
4. Extender Ring for longer necessary focal length (another is already on the scope)
5. 23mm 2" eyepiece.
6. Explore Scientific 2" Barlow Lens
7. Celestron AVX Equatorial Mount with soft case, tripod, and 2 counterweights.
8. Celestron power supply.



If you are new to the hobby and don't yet have a telescope, enter your name into our drawing for a chance to win this wonderful piece of equipment.

Email your ***name, address, telephone number*** and ***email address***

TO: suncoaststargazers@gmail.com

You will be given a ticket number by return email. The drawing will be held April 1st - - N O T an April Fool's joke - - !

You will be informed by email if you won and the winner will be announced in the June Newsletter.



Five Questions With...

Nicki Fox

Recently, I had the great pleasure and opportunity to interview Nicola "Nicky" Fox of NASA. Originally from England, her passion for science has taken her around the world. Her academic background is as impressive as her career: she holds a bachelor's degree in physics, a master's degree in telecommunications and satellite engineering, and a Ph.D. in space and atmospheric physics, with a dissertation focused on geomagnetic storms.

NASA is fortunate to have Nicky serving as the head of science, a role she has held since February 27, 2023. I feel truly privileged to have had the chance to sit down for a one-on-one conversation with her.

TIM: I am talking with Nicky Fox. And your title with NASA is?

NICKY: I am the Head of Science for NASA.

TIM: Thank you very much. What is the biggest unanswered question in heliophysics today?

NICKY: Wow. I would say that that would be really how the sun works. We've started sort of really studying it up close with the Parker Solar Probe mission. And that's sending back great data, but really answering those unanswered questions. Why is the sun's atmosphere continually streaming away from the sun? Why do we have these really, really energetic particle bursts that come out? And why is it hotter? Why is the atmosphere hotter than the surface of the sun? And working on those questions and getting the answers to those and we're getting tantalizingly close to them. And it's really exciting to see people doing different analyses, different theories and getting together in groups and discussing them so we can actually hone in on those final questions. But that's definitely still a very much an unanswered question in heliophysics. But I think if we take the sort of broader perspective of everything that we do in NASA science, the biggest unanswered question of course is, is there life elsewhere in the universe? We have many different missions that are kind of really helping with answering that question. Whether it's studying the sun so we understand the sun and the earth, and what their relationship is. So, as you then look out further into the universe to look for other star systems that have habitable planets, what is the

relationship that we have with our star that would make it so another planet could actually sustain life? That's a really big part of it. We have our Mars rovers. We just released information about one of the samples from the Perseverance rover. Finding just a sign of prebiotic life that may have been there. It's prebiotic chemistry. It's ancient maybe a sign that something there was a process that was associated with a living process that was occurring on Mars. We have Europa Clipper heading out to Europa hoping to detect to see if there's any ingredients of life in that ocean under the frozen core. We brought back samples from Osiris Rex from the Bennu asteroid finding the majority of the ingredients for life and a kind of saline atmosphere that would have been able to sustain life. We know life didn't occur on that asteroid, but why not? Why did it spark here on Earth and not there? And then of course, the mighty Dragonfly going out to Titan to measure what's in those pools of methane on Titan. And our astrophysics amazing astrophysics assets being able to look at the atmospheres around distant planets around distant stars. Putting all of that together but the big question is there life elsewhere in the universe is, for me that's the biggest unknown.

TIM: Thank you. What recent discovery in heliophysics or space science excites you the most?

NICKY: So, for me it's going to be about the sun and it's going to be about my favorite mission, Parker Solar Probe. But I think it was actually being able to see what the atmosphere of a star looks like. And when we saw those first images coming back from the Whisper camera, the white light imager on Parker Solar Probe and realizing that you're actually looking at the inner workings of a star, you're looking at how that atmosphere really looks. Until now, we've only had sort of models or theories or your imagination for what it would look like. It was kind of an emotional thing just riding along with Parker Solar Probe. Not only just you felt like you were experiencing what Parker Solar Probe was experiencing, but actually being able to then say okay, wow that's what a star looks like up close. That's my favorite thing.

TIM: Basically, that's going really quick in and out around the sun, right?

NICKY: Yeah. We have a flyby. It lasts about 20 days and that's going from a quarter AU to a

[Continued on Page 14 Five Questions with...](#)

quarter AU. So, a quarter of the distance from the Earth to the Sun and that's when it does its really close flyby. The orbits themselves are around 3 months. We get interesting data on the way in, interesting data on the way out, but everything is always focused on those really close end passes.

TIM: Thank you. What first inspired your interest in astronomy and space science?

NICKY: Literally my dad. He was fascinated by the idea of space, the idea of space travel, the idea of being an astronaut. But he was always really curious about the way the universe works. Why are we here? Why is this solar system here? Why are the planets where they are? And just that sort of curiosity driven, just delight of space was something that really came from my dad. And then just the idea that working for NASA was the best possible career you could have. I mean, he would watch launches, we would watch shuttle launches together. And he would always say, just imagine what it must be like to have played a role in that rocket. That really inspired me to go into a career in space.

TIM: Is he still alive?

NICKY: He is not.

TIM: Sadly.

NICKY: Yeah. He died the day we launched Psyche (October 13, 2023). So, I saw and I knew how much he would have marveled in the Psyche launch. And of course, we had Psyche the rocket, it was a Falcon Heavy launched and then the two boosters came down and I could just imagine. I mean, he would always marvel at the idea of a rocket going up, but the idea of seeing the boosters come down, I think it would have been really amazing for him, but he died that morning.

TIM: Yeah. It's like science fiction.

NICKY: Yes, it really is. But it's science fact. (Nicki waves her index finger for emphasis.)

TIM: What is one of the things about the universe you're most curious to understand, but we still don't know?

NICKY: I think that's something that it has such a profound... the answer to that question is, has a really profound impact on just everybody. What would you do if you knew there was life elsewhere? How would we communicate? I mean, it changes the way we think

about our planet. We're not unique. There's life elsewhere. And then also, what do we mean when we say life? Because it's probably not life as we know it, but life as we don't know it. That's something I find very interesting. Looking at those leopard spots in the rock on Mars and you start thinking, well, what exactly what was it that ate that. It's like little food for a microbe. What was it that ate it? Just thinking about what that would have been? What does early life look like? And when does life become technologically savvy? That's when you're looking for when we talk about looking for atmospheres around planets, the first thing you look for is are there particular things in the atmosphere that could sustain life. But then, is there any kind of industry? If you looked at our planet 100 years ago you wouldn't have seen the same signatures from far away that you do now because we have so much industry. You can tell when a planet becomes or you know or you could tell from the earth from looking at it from far away when we became a technologically driven world. I think there's just a lot to unpack in the idea of is there life elsewhere.

TIM: If you could visit a location in the universe, where would you go?

NICKY: I would absolutely go to Mars. There is no question. Even though, it seems why would you go somewhere that's relatively close. I think we see Mars all the time through the eyes of our rovers, and I think of it kind of like as a postcard from Percy (Perseverance). You see these incredible images of Mars. Somebody said to me the other day, it's like when you become bilingual, you dream in the other language. When you become like really obsessed with Mars, you dream about Mars. You see Mars landscapes in your dreams. You don't see the Earth. And so, I think it's so tantalizingly close compared to like, outside the solar system. But what, what would that be like to actually stand on Mars and see these things that we've only seen through the eyes of a rover? It's like watching a travel show and thinking, "Oh, I've always wanted to go to Tahiti because I've seen it on this travel show." And then you actually get to visit somewhere exotic. And so, for me, that's Mars.

TIM: It's probably a short interview, but I do appreciate your time very much.

It's not often that I walk away from an interview wishing I had more time to dive deeper into the subject

[Continued from Page 14 Five Questions with...](#)

matter—but as I left Nicky’s office, I had a huge smile on my face. She was real, open, and personable throughout our conversation.

As I walked out, her assistant, Katherine, joined me and shared her surprise. “I’ve been working with Nicky for years, and I learned things about her today that I didn’t know. I thought I knew her pretty well.”

If given the opportunity, I would gladly welcome a second interview with Nicky—not only to gather more material for my next article, but also because of the genuine connection I felt.

Thank you, Nicky Fox.



By Timothy Milligan *Editor*

BBQ Picnic and Star Party

Back in November Ed, (our Vice President), inquired if the board of directors might sponsor a picnic of some kind by way of a thank you to those loyal members who continue to show up and share their enthusiasm for astronomy with each other and the public. It was agreed and the BBQ was organized.



We settled on having a BBQ catered, with all the fixings. As you may know, the weather in January was so cold we postponed the event till February 21st.

We have to give a shout out to Aeden Stockdale, park ranger with the Manatee County Natural Resources Department, member and fellow enthusiast for providing the Nest facility for our venue. It was very kind and much appreciated.



Thanks also go out to our members, Jöel and Sophie Garcia, owners and bakers extraordi-

naire from Rendez Vous French Bakery in Sarasota for providing delicious treats for dessert.

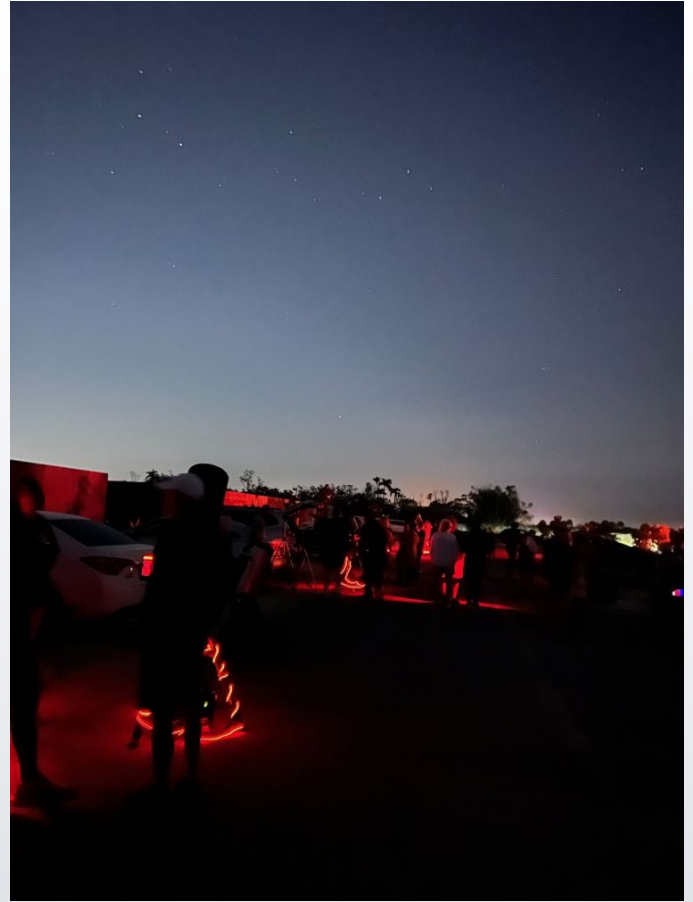
We had a slight delay in getting started as the traffic was horrendous getting to and from the restaurant due to the regatta and construction about town. The patience extended was appreciated.



Originally scheduled for January 31st, however, the cold weather required us to postpone till February 21st. This Saturday, the weather co-operated and the day was fine, the evening sky was clear and the celestial bodies were plentiful. Mercury was observed for a half hour or so, a rare treat. Other points of interest were the moon, Jupiter and the Orian Nebula. The viewing was very good but the comradery and social occasion of just “hanging out with your buddies” was the true prize.

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BBQ Picnic and Star Party



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Remembering Tim Raines

As part of the festivities, we paused to remember our past member Tim Raines.

Timothy James Raines

August 9th 1972— May 16th 2025

“Timothy James (spaz) Raines passed away on Friday, May 16 at Manatee Memorial Hospital after a long battle with cancer.

Tim was a drummer and a star gazer, as well as a proud member of the Knights of Columbus and of the Honor Guard. He loved astronomy and learning Latin and Catholicism, but his biggest love in life besides his family was being an EMT/Paramedic/Chief Paramedic for over 25yrs.

He was a people person with a big heart, who made lifelong friends anywhere he went and will be missed dearly.

May he rest in peace and shine on in the night sky amongst the stars.”





Clear Skies Forever...Timothy James Raines

Io Transit of Jupiter

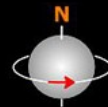
Jupiter
January 6, 2026
Shadow Transit Io

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 290MM monochrome camera
Vernonscope 1.25x Barlow
Derotated 5 minutes in WinJupos

Magnitude: -2.7
Diameter: 46.6"
Phase: 99.99%
Altitude: 34°
Seeing: 5/10 Ave
Transparency: 7/10 Clear
Slight, Haze



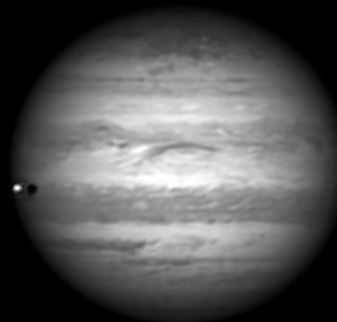
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Baader 685nm R-IR longpass filter
CMI: 350.2° CMII: 189.5° CMIII: 78.5°



Jupiter
January 6, 2026
Shadow Transit Io

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 290MM monochrome camera
Vernonscope 1.25x Barlow
Derotated 6 minutes in WinJupos

Magnitude: -2.7
Diameter: 46.6"
Phase: 99.99%
Altitude: 36°
Seeing: 5/10 Ave
Transparency: 7/10 Clear
Slight, Haze



02h 00.0m UT
Baader 685nm R-IR longpass filter
CMI: 354.2° CMII: 193.5° CMIII: 82.6°



[Continued on Page 22 Io Transit of Jupiter](#)

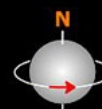
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Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 290MM monochrome camera
Vernonscope 1.25x Barlow
Derotated 6 minutes in WinJupos

Magnitude: -2.7
Diameter: 46.6"
Phase: 99.99%
Altitude: 41°
Seeing: 5/10 Ave
Transparency: 7/10 Clear
Slight, Haze



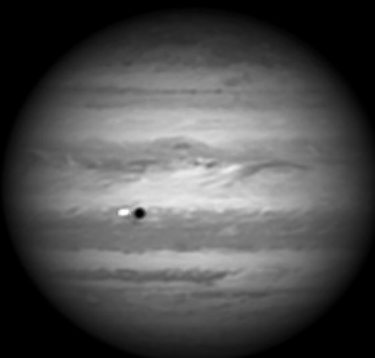
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Baader 685nm R-IR longpass filter
CMI: 6.0° CMII: 205.2° CMIII: 94.3°



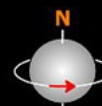
Jupiter
January 6, 2026
Shadow Transit Io

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 290MM monochrome camera
Vernonscope 1.25x Barlow
Derotated 5 minutes in WinJupos

Magnitude: -2.7
Diameter: 46.6"
Phase: 99.99%
Altitude: 45°
Seeing: 5/10 Ave
Transparency: 7/10 Clear, Slight, Haze



02h 40.5m UT
Baader 685nm R-IR longpass filter
CMI: 18.9° CMII: 218.0° CMIII: 107.1°



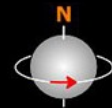
Jupiter
January 6, 2026
Shadow Transit Io

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm f/10 2500mm f/10
ZWO ASI 662MC one-shot color camera
Vernonscope 1.25x Barlow
Derotated 5 minutes in WinJupos

Magnitude: -2.7
Diameter: 46.6"
Phase: 99.9%
Altitude: 58°
Seeing: 6/10 Above Ave
Transparency: 7/10 Clear
Slight Haze



03h 36.2m UT
Astronomik L2 UV/IR cut filter
CMI: 53.1° CMII: 251.9° CMIII: 140.9°



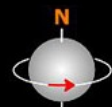
Jupiter
January 6, 2026
Shadow Transit Io

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm f/10 2500mm f/10
ZWO ASI 662MC one-shot color camera
Vernonscope 1.25x Barlow
Derotated 5 minutes in WinJupos

Magnitude: -2.7
Diameter: 46.6"
Phase: 99.9%
Altitude: 65°
Seeing: 6/10 Above Ave
Transparency: 7/10 Clear
Slight Haze



04h 01.6m UT
Astronomik L2 UV/IR cut filter
CMI: 68.4° CMII: 267.0° CMIII: 156.1°



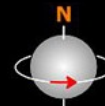
Jupiter
January 6, 2026
Shadow Transit Io

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 662MC one-shot color camera
Vernonscope 1.25x Barlow
Derotated 5 minutes in WinJupos

Magnitude: -2.7
Diameter: 46.6"
Phase: 99.9%
Altitude: 66°
Seeing: 6/10 Above Ave
Transparency: 7/10 Clear
Slight Haze



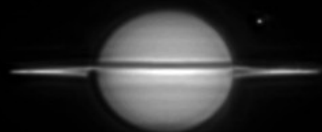
04h 08.6m UT
Astronomik L2 UV/IR cut filter
CMI: 72.6° CMII: 271.3° CMIII: 160.4°



Saturn
January 25, 2026

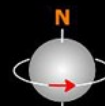
Gregory T. Shanos Sarasota, FL
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 462 MM monochrome camera
Vernonscope 1.25x Barlow
Derotated 10 minutes with WinJupos

Magnitude: +1.2
Diameter: 16.5"
Phase: 99.8%
Altitude: 40°
Seeing: 3/10 Below Ave
Transparency: 7/10 Clear, Humid



23h 53.2m UT
Baader 685nm IR longpass filter
CMI: 328.9° CMII: 104.1° CMIII: 74.4°

Moon is Titan



Titan, largest moon of Saturn over the ring system. Above and to the right.

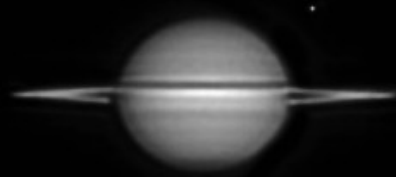
by Gregory T. Shanos

Titan Over Saturn

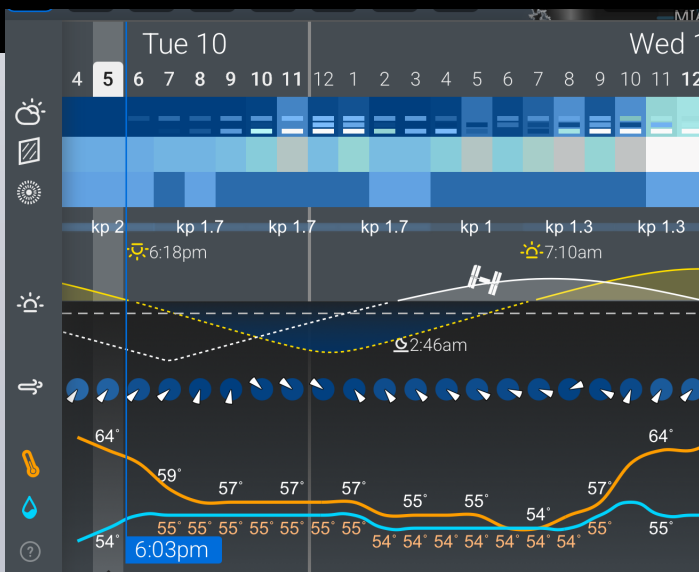
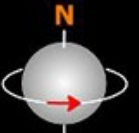
Saturn
February 10, 2026

Gregory T. Shanos Sarasota, Florida
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 462 MM monochrome camera
Vernonscope 1.25x Barlow
Derotated 14 minutes with WinJupos

Magnitude: +1.1
Diameter: 16.2"
Phase: 99.9%
Altitude: 29°
Seeing: 4/10 Below Ave
Transparency: 9/10 Clear
down to the horizon



23h 50.4m UT
Astronomik 742nm IR longpass filter
CMI: 153.7° CMII: 132.2° CMIII: 83.2°
Moon is Titan



Titan, largest moon of Saturn over the ring system.
Above and to the right.

By Gregory T. Shanos

Rare shadow transit of Callisto

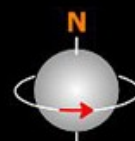
Jupiter at Opposition
January 10, 2026
Shadow Transit of Callisto

Gregory T. Shanos Sarasota, Florida USA
Meade LX200GPS 250mm fl 2500mm f/10
ZWO ASI 462MM monochrome camera
Vernonscope 1.25x Barlow Derotated 6 min

Magnitude: -2.7
Diameter: 46.6"
Phase: 100%
Altitude: 64°
Seeing: 6/10 Above Ave
Transparency: 9/10
Clear, Humid



08h 04.9m UT
Astronomik L2 UV/IR cut filter
CMI: 128.9° CMII: 295.7° CMIII: 185.9°



The monochrome image is in the infrared.

by Gregory T. Shanos

February 4, 2026 sunspots with region 4366



Seestar S50 using Baader solar film.

By Scott “Sunspot” Smith

The Eastern Veil Nebula

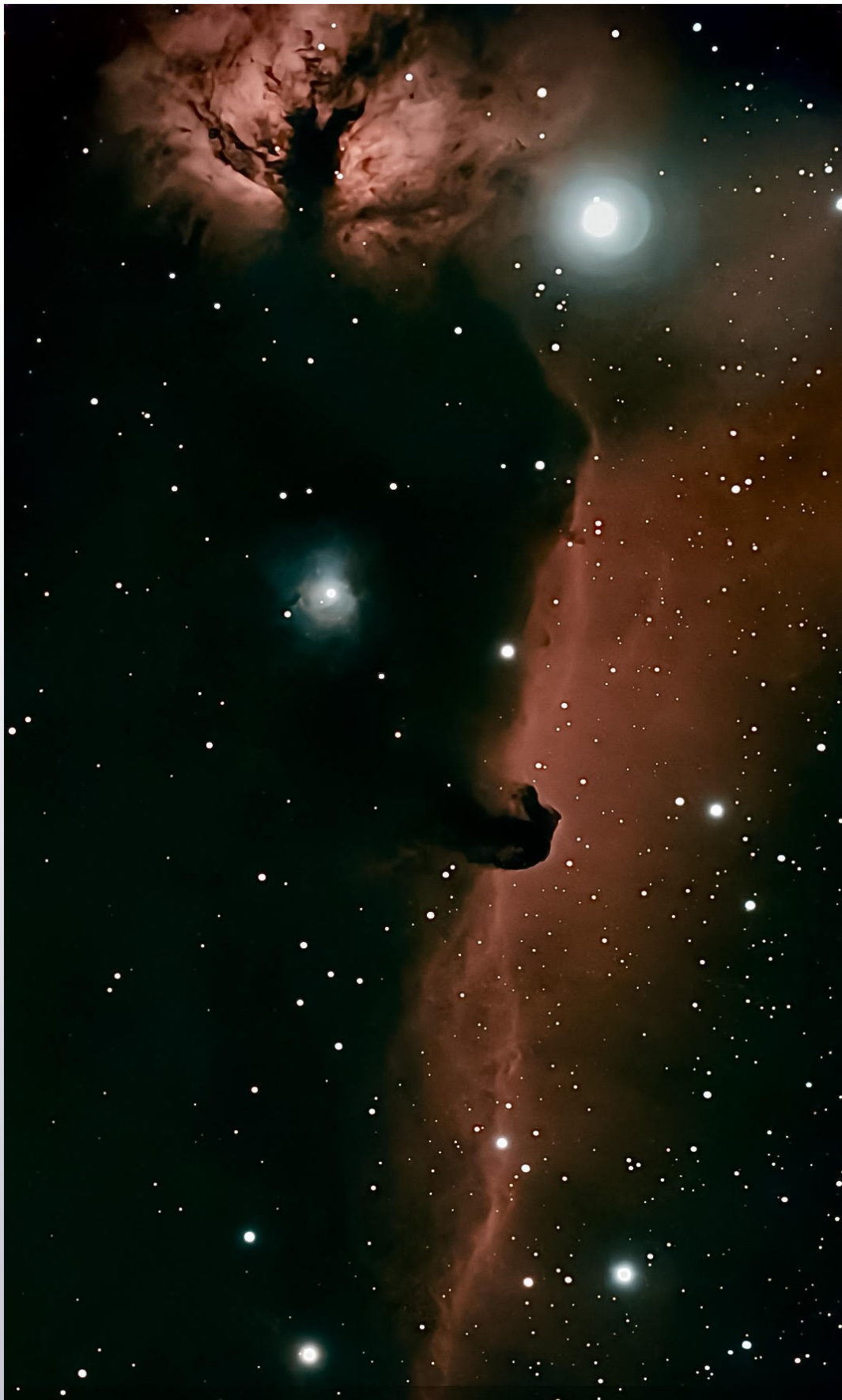


The Eastern Veil Nebula Celestron Origin

2 hours and 8 minutes of exposure. 7680 seconds, 512 subs for 15 seconds each.

Takes on December 23rd in Parrish, FL

Ed McDonough



By Scott Smith

3 for 1 in a single image.

This photo was taken over 3 evenings, from my suburban backyard, allowing me to get 4 hours of data, using the ZWO Seestar S50 smart telescope. The Horsehead Nebula, Alnitak, the easternmost star of Orion's Belt, and The Flame Nebula .

Here are some great gift ideas!



Click on any of the above 3 items to purchase them.

2025/2026 Observing Season

03/07/26 – Myakka River State Park with Friends of Myakka River

03/21/26 – Robinson Preserve

03/28/26 – The Bay Sarasota

04/25/26 – Robinson Preserve

05/23/26 – Robinson Preserve

Special Events Can be added with short notice, follow us on [Facebook](#) and our [website](#) for more information. Also watch for email updates!

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A friendly reminder

Suncoast Stargazers has NO ANNUAL DUES! So please do your part to help this 501(c)(3) Private Foundation with a tax deductible contribution. Your help no matter how big or small, goes a LONG ways. Might I even say that it goes Lightyears?

You can make your contribution by following this link:
<https://my.cheddarup.com/c/tax-deductible-contribution/items>

Who are the Suncoast Stargazers?

We are the Suncoast Stargazers, a very large, active and knowledgeable astronomy group in the Bradenton, Sarasota and Venice area of the Suncoast. We strive to showcase our members community involvement with “open to the public” star parties monthly. Our members also have access to a dark site observing complex, monthly zoom meetings, help with using your equipment, and Astro Imaging guidance. Whether you are new to the hobby, mid-tier, or advanced, you are welcome here. Join us and register as a full benefit member and/or also feel free to follow us on our FB page. Post your questions. Ask for help. Show off your images. It’s all free, no membership fees.

We are also proud affiliate members of the Science and Environment Council of Southwest Florida
<https://www.scienceandenvironment.org/>

The Best of 2025 by Scott Smith Seestar S50

