



The Eyepiece

SW FL Astronomical Society, Inc.
3236 Forum Blvd #1160
Fort Myers, FL 33905

NGC 7000 By Reggie Blackmon



Mike Jensen - Newsletter Editor

Hi Everyone! I want to start off by once again offering our President Brian Risley and his family our prayers and condolences for the loss of his daughter Brianna in mid July. (More on page 4)

Well, after an epic Winter/Spring season where many of us were able to put our rigs out for up to four months, it's now over 3 since I have been able to put it out. Thank you Florida rainy season! And, thank God for the rain! We needed it.

Ok, I know it's just early August but it's time to start thinking about October - March. If there's gear you've been putting off buying, buy it now so we can pay the cloud gods now and have clear skies again this Winter. Seriously though, it's a good idea to take a look at your rig/s and make sure they're in good working order. There's nothing more frustrating than setting up for the first time in a season than something that doesn't work (and you could have fixed it in rainy season).

August is a great month for "shooting stars" as the Perseids

are flying and will peak on Aug. 12-13.

Also, at the end of August, a near total Lunar Eclipse. See Brian's notes for the deets.

That's it! Great pics at the end!

CLOUDY NIGHTS Ticking off telescope owners since 1668



★ SOUTHWEST FLORIDA ASTRONOMICAL SOCIETY ★ MONTHLY GENERAL MEETINGS



WHEN:
FIRST THURSDAY OF EACH MONTH
AT 7:00 PM



WHERE:
IN PERSON & ON ZOOM



IN PERSON:
CALUSA NATURE CENTER PLANETARIUM
3450 Ortiz Ave, Fort Myers, FL 33905



zoom

MEETING ID:
982 8444 8774

PASSCODE:
910802



**CLICK ON THIS IMAGE
FOR THE LINK**



INSPIRING CURIOSITY. **SHARING** KNOWLEDGE. **EXPLORING** TOGETHER. ★



★ ASTRONOMY CLUB ★ ASTROPHOTOGRAPHER'S SPECIAL INTEREST GROUP (SIG)

CAPTURE • PROCESS • SHARE • INSPIRE



SHARE

Share your images,
gear, and techniques



LEARN

Learn new skills and
improve your workflow



CONNECT

Connect with fellow
astro photographers



INSPIRE

Be inspired by the
wonders of the universe



MONTHLY MEETING
3RD TUESDAY
OF EACH MONTH



7:00 PM
ON **zoom**



Meeting ID:
971 3383 7720
Passcode:
080023



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<https://zoom.us/j/97133837720?pwd=tbU4UzraBmSgiVxWpX5iPbtzBhG5Wq.1>

Meeting ID: 971 3383 7720 - Passcode 080023

Or you could click on the image directly above.

President's Message

Brian Risley

My family would like to thank you for your condolences and donations to animal shelters in memory of my daughter Brianna.

This really puts things in perspective. Our club is getting older and we need some new blood in the officers and those supporting events. This year we are electing a new Secretary and the Vice President position. Dan is stepping away from the Secretary position due to family health issues. I do thank him for all he has done for the group.

We need someone to fill that position. It is primarily taking meeting minutes and attending as many meetings as possible. We have some new electronic help with the minutes as part of Zoom.

This month we have the Perseid meteor shower peaking the 11-14th. Best seen after midnight. New moon this year!

At the end of the month we have an 'almost total' lunar eclipse, 96.2% on Aug 27th/28th.

Often called an "almost blood moon," 96.2% of the lunar surface enters the dark umbral shadow, turning a deep coppery-red while a tiny sliver remains bright. It starts at 9:23, peaks at 12:12 and ends at 3am.

GENERAL MEETING ZOOM LINK

This is the **General Meeting** Zoom link for 2026

Here's the Zoom link: [https://zoom.us/j/98284448774?](https://zoom.us/j/98284448774?pwd=qDhf7GCqgzVyNk8easeJfcXOB217sy.1)

[pwd=qDhf7GCqgzVyNk8easeJfcXOB217sy.1](https://zoom.us/j/98284448774?pwd=qDhf7GCqgzVyNk8easeJfcXOB217sy.1)

Meeting ID: 982 8444 8774

Passcode: 910802

Or you can click on the upper image on the previous page.

Speakers Series Schedule For General Meetings

August - Silvana Della Camera - Seeing in the Dark, Night and Milky Way Photography

Sept - Carlos Garcia - Astronomical change in culture due to smart scopes and operating them in clear sky location from home

October - Gabriel Maxwell Bowman Lunar & Planetary Lab, University of Arizona Moon Missions over the Last 20 Years

November - Greg Shanos NASA/JPL Solar system Ambassador Eclipse in Egypt & Culture Surrounding Ancient Gods for the Stars

December - Jon U. Bell - Indian River State College Planetarium Director - Constellation Connections – Guide Stars to Deep Sky Objects

Club Officers & Positions

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Newsletter/Website/Astro SIG

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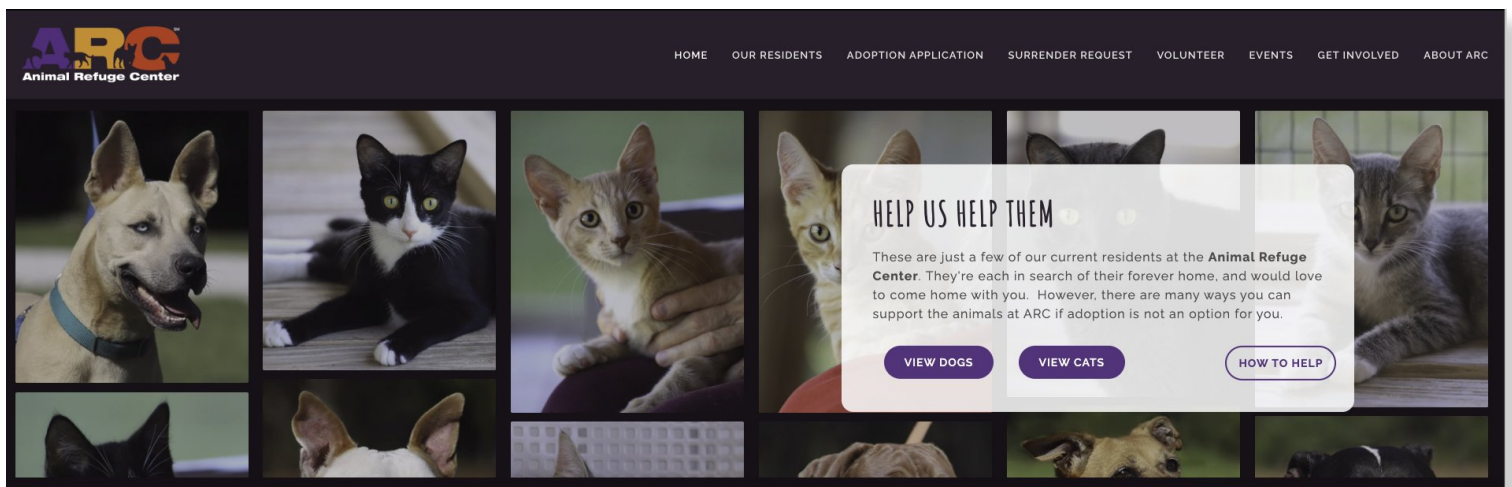
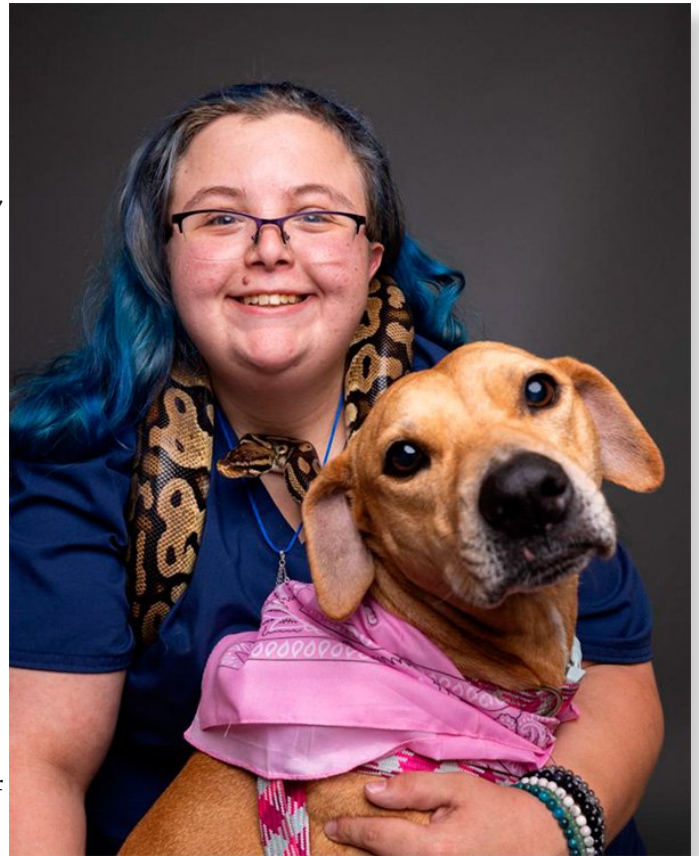
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Brianna Lynn Risley
10/7/2000 - 7/10/2026

We wanted to let you know of a tragedy that has impacted our President Brian Risley, his wife Christina his daughter Hallie and his extended family. On July 10th Brian's daughter Brianna was visiting the family and passed away unexpectedly. She was only 26. Obviously, Brian, Christina, Hallie, and the family are very devastated by this unexpected tragedy.

Brianna was a real animal lover. After reaching out to Brian and Christina the board John MacLean, Dan Dannenhauer and Mike Jensen decided to make a donation of \$250 from the Southwest Florida Astronomical Society. We made the donation to the Animal Refuge Center (ARC) in North Fort Myers, near where the family lives. This is the largest non-kill Animal Shelter in Lee County and is 100% reliant on donation from the public. If you would like to make a personal donation, you can do so by going to their website at: <https://animalrefugecenter.org/donate/>

As you read this, please take a moment of time to hold all of those who are dear to you in your thoughts and mind. Take that feeling of love and kindness and send those same prayers and thoughts to Brian, Christina and Hallie. Brian has led and driven the Astronomy Club for over a decade, and his family has helped him as well as us, and the community in so many ways. We know life going forward will be very different and for that we offer our deepest sympathy.



2026/2027 FSW Observatory & Solar Observing Schedule

FSW Observatory

Sep 4, 2026
Oct 2, 2026
Nov 6, 2026
Dec 4, 2026
Jan 8, 2027
Feb 5, 2027
Mar 5, 2027
Apr 2, 2027
May 7, 2027

Solar Observing

Sep 19, 2026
Oct 17, 2026
Nov 21, 2026
Dec 19, 2026
Jan 16, 2027
Feb 20, 2027
Mar 20, 2027
Apr 17, 2027
May 15, 2027

Location (9am-12noon)

Ponce deLeon Park
Gilchrist Park
Punta Gorda Library
Ponce deLeon Park
Gilchrist Park
Punta Gorda Library
Ponce deLeon Park
Gilchrist Park
Punta Gorda Library

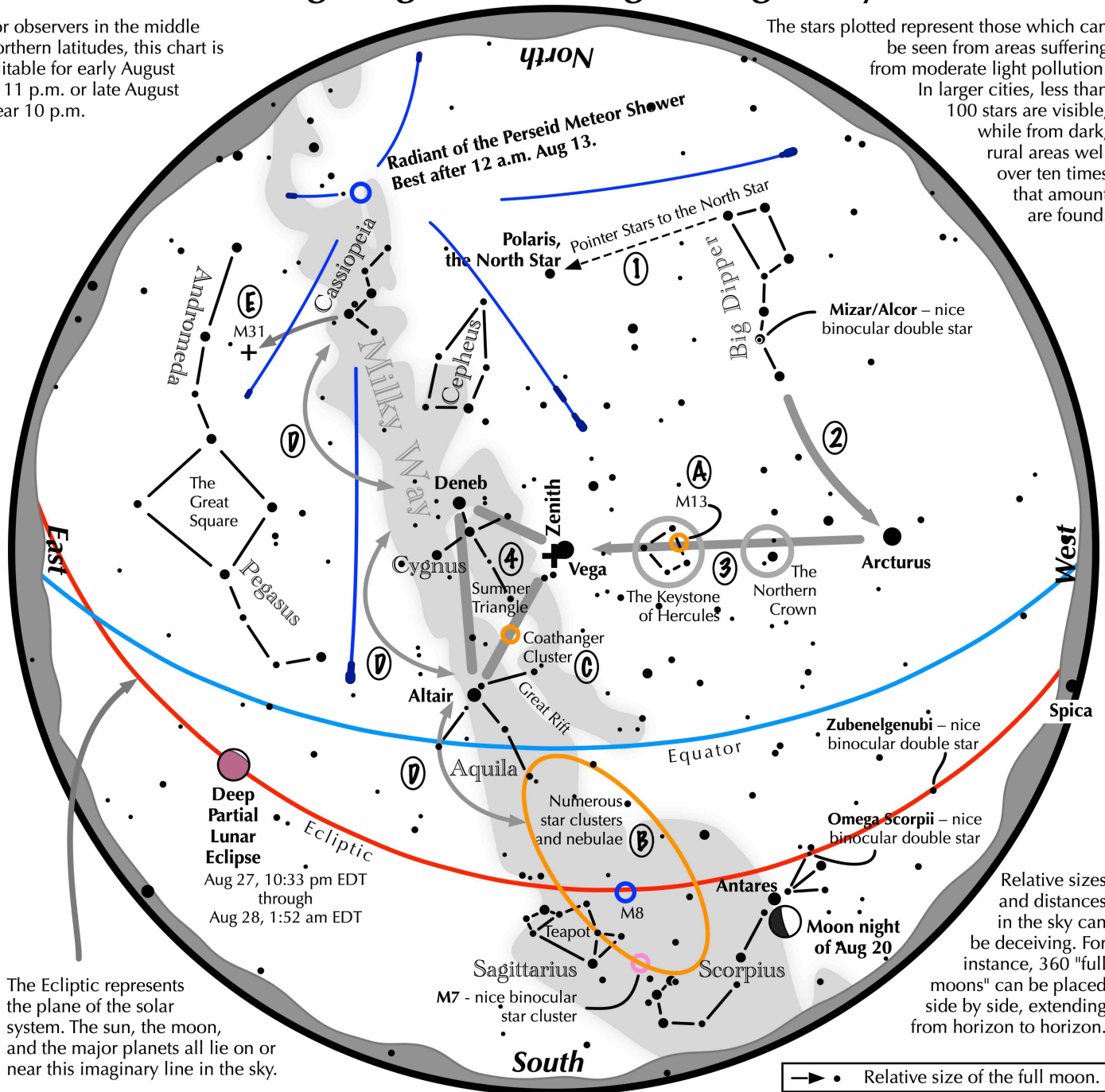


Navigating the mid August Night Sky

2026

For observers in the middle northern latitudes, this chart is suitable for early August at 11 p.m. or late August near 10 p.m.

The stars plotted represent those which can be seen from areas suffering from moderate light pollution. In larger cities, less than 100 stars are visible, while from dark, rural areas well over ten times that amount are found.



Navigating the mid August night sky: Simply start with what you know or with what you can easily find.

- 1 Extend a line north from the two stars at the tip of the Big Dipper's bowl. It passes by Polaris, the North Star.
- 2 Follow the arc of the Dipper's handle. It intersects Arcturus, the brightest star in the June evening sky.
- 3 To the northeast of Arcturus shines another star of the same brightness, Vega. Draw a line from Arcturus to Vega. It first meets "The Northern Crown," then the "Keystone of Hercules." A dark sky is needed to see these two dim stellar configurations.
- 4 High in the East lie the summer triangle stars of Vega, Altair, and Deneb.

Binocular Highlights

- A:** On the western side of the Keystone glows the Great Hercules Cluster.
B: Between the bright stars Antares and Altair, hides an area containing many star clusters and nebulae.
C: 40% of the way between Altair and Vega, twinkles the "Coathanger," a group of stars outlining a coathanger.
D: Sweep along the Milky Way for an astounding number of faint glows and dark bays, including the Great Rift.
E: The three westernmost stars of Cassiopeia's "W" point south to M31, the Andromeda Galaxy, a "fuzzy" oval.





Enhance your view of the thin crescent of Venus

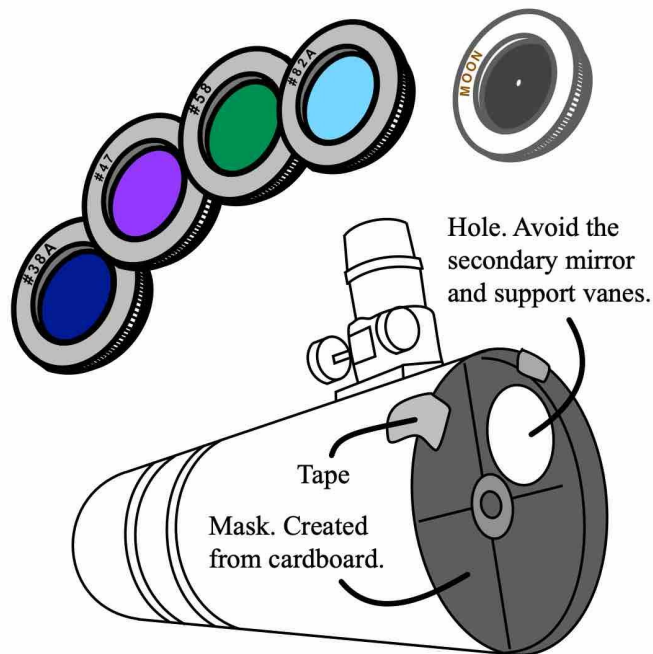
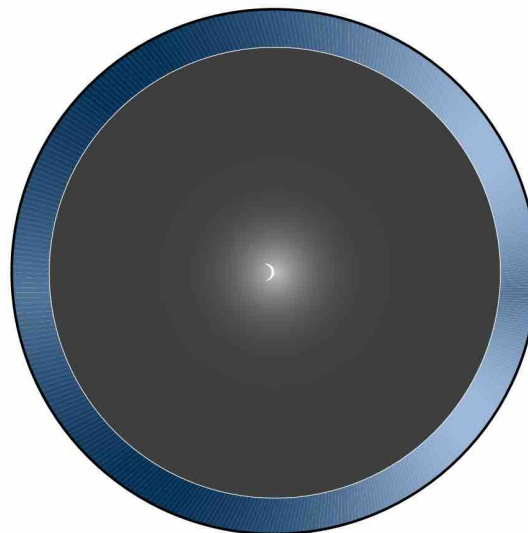


Venus is bright. So bright that's its glare becomes interfering, especially when viewed in its beautiful crescent phase. Many people see it as a bright blur.

For a more satisfying view, take one or more of these steps:

1. Place a **moon filter** over the eyepiece.
2. Depending on telescope aperture, try **colored filters** such as #38A (dark blue), #47 (violet), and #58 (green). #82A (light blue) works well in general. They may bring out very subtle details in that planet's cloudtops.

Because they transmit little light, the darker filters are better suited for apertures greater than 8-inches.

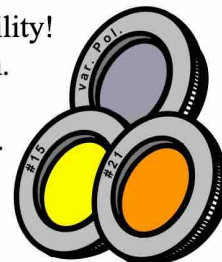


3a. Use an **aperture mask**. Since Venus is bright – really *too* bright – reducing the effective aperture won't hurt viewing. Doing so will also increase the scope's f ratio.

3b. If an SCT or reflector is used that has an aperture of 8-inches or larger, place an **off-axis mask** over the entrance of the optical tube. (Smaller apertures won't have the spacing for large enough holes.) Center the hole in the mask so that light enters the optical tube unobstructed, avoiding the secondary mirror and any vanes. The result – a dimmer, but sharper image.

4. **Daytime viewing.** Being higher above the horizon just might improve viewability!

- Place the sun behind a building. Make sure you can't inadvertently view the sun.
- Find the alt-az coordinates of Venus and its elongation from the sun.
- Scan that area of the sky with binoculars. Once you spot it, aim your scope at it.
- Consider using a variable polarizing filter, a Wratten #15 (deep yellow), or a #21 (orange) filter to improve sky contrast.



The Astronomical League

As a member of the Southwest Florida Astronomical Society, you are automatically also a member of the Astronomical League, a nationwide affiliation of astronomy clubs. Membership in the AL provides a number of benefits for you including receipt of The Reflector, the AL's quarterly newsletter, use of the Book Service, through which you can buy astronomy related books at a 10% discount. You can also participate in the Astronomical League's Observing Clubs. The Observing Clubs offer encouragement and certificates of accomplishment for demonstrating observing skills with a variety of instruments and objects. These include the Messier Club, Binocular Messier Club, the Herschel 400 Club, the Deep Sky Binocular Club, and many others. To learn more about the Astronomical League and its benefits for you, visit <http://www.astroleague.org>

Reflector Magazine

The latest – June 2026 edition of the Reflector magazine was emailed on May 26. It is also available via the web at <https://www.astroleague.org/reflector>

What's up with the Astronomical League – June 2026

In this Issue the following items are covered...

- In this Issue...
- ALCon 2026, August 12-15

Dark Skies Bill Advances in Senate

SWFAS Member Dr. Mario Motta is a key contributor in getting the bill passed

July 1, 2026

Press release from the Senate website.

Legislation seeks to address light pollution to improve public health and protect wildlife while preserving safety

(BOSTON—7/1/2026) Under a bill passed today by the Senate, known as the 'Dark Skies Bill,' cities and towns would be able to save taxpayers money on the cost of operating streetlights with a new lower electric rate.

The bill—S.3145, An Act to improve outdoor lighting, conserve energy, and increase dark-sky visibility—focuses on outdoor lights owned by local or state government, such as streetlamps, as a means for increasing municipal affordability and supporting the environment.

The legislation also takes aim at light pollution, which occurs when outdoor light fixtures unnecessarily shine up into the sky. Addressing light pollution combats a significant threat to wildlife and helps make it easier to see the stars in the night sky.

"This legislation strikes a vital balance of reducing unnecessary light pollution, conserving energy, and protecting both wildlife and the night sky," said Senate President Karen E. Spilka (D-Ashland). "By introducing a lower electric rate for streetlights, mandating fully shielded fixtures, and setting a warmer color temperature, we're helping cities and towns cut costs while improving public safety and environmental health. It's a cost-effective, science-based step to ensure future lighting installations respect our dark skies—and to ensure future generations are able to experience the natural wonder of gazing up at our starry skies. I'm grateful to Senate Majority Leader Creem for her advocacy on this issue, and all of my Senate colleagues for advancing this

proposal.”

“Light pollution isn’t just about losing our view of the night sky—it’s a public health, public safety, environmental, and fiscal issue,” said Senate Majority Leader Cynthia Stone Creem (D-Newton), lead sponsor of the legislation. “This legislation takes a practical approach to reducing wasted energy, protecting wildlife, making our roads safer, and ensuring future generations can enjoy Massachusetts’ natural night skies, all while helping municipalities save money in the process. I’m grateful to Senate President Spilka, my Senate colleagues, and to the many advocates whose persistence helped bring this bill across the finish line.”

“I am pleased to see this commonsense bill, which includes several worthwhile components, passed by the full Senate. This legislation on outdoor lighting, also known as the ‘Dark Skies Bill,’ targets light pollution that has been proven to have an adverse effect on both wildlife and human health,” said Senator Michael J. Rodrigues (D-Westport), Chair of the Senate Committee on Ways and Means. “The bill will also help cities and towns reduce their utility costs. With urban areas using excessive lighting that creates unhealthy sky glow, municipalities will experience significant electric cost savings and combat light pollution all across the Commonwealth. I would like to thank Leader Creem for this important environmental bill that also enjoys bipartisan support.”

Municipalities would be able to save on electricity costs under the legislation, which requires the creation of a new, reduced electric rate for low-wattage streetlights and parking lot lights.

The Senate proposal’s specifications also require those government-owned outdoor lights to be ‘fully shielded,’ meaning a shade is above the bulb to ensure that a streetlight shines down and out—toward the area being illuminated—and does not burn upward toward the sky.

Light pollution has been linked to damaging effects that impact a range of wildlife, including migrating birds, hatching sea turtles, and creatures of the night sky such as bats and fireflies.

Full details of the legislation are available in a fact sheet in the Senate’s press room.

The Senate Committee on Ways and Means unanimously voted on June 24, 2026 to advance the legislation to the full Senate. The bill is a redrafted version of legislation that was previously reviewed by the Joint Committee on Telecommunications, Utilities and Energy.

Having been passed by the Senate on a 39-0 roll call vote, the legislation has been sent to the House of Representatives for consideration.

Statements of Support

James Lowenthal, President of DarkSky Massachusetts

“Everybody wants to see the stars. S.3145’s commonsense standards for publicly funded outdoor lighting create a way for cities and towns to improve roadway safety and lower their energy costs while enhancing the nighttime environment for nocturnal pollinators and future generations of stargazers.”

Anna Darrow, AMC New England Policy Manager

“Light pollution doesn’t just dim the stars. It disrupts migratory birds, human sleep cycles, and ecosystems that depend on natural darkness. The Appalachian Mountain Club has spent decades conserving land across New England, and we know that a truly protected landscape includes what’s above it, not just what’s on the ground. This bill is a meaningful step toward that fuller vision of conservation, and we’re grateful to Majority Leader Creem and the Senate for championing this important legislation.”

The International Association of Lighting Designers (IALD)

"The IALD supports regulations that control light pollution, and works closely with DarkSky Massachusetts, DarkSky International, and other organizations to develop regulations that are effective, enforceable, and supportive of high-quality outdoor lighting and of the safety and security of the public. The IALD supports this legislation because it aligns with our goal of producing high-quality and cost-effective outdoor lighting with minimum negative environmental impact."

Mario Motta, MD, FACC, Former President of the Massachusetts Medical Society

"I have been waiting for this moment for 25 years, having long urged passage. This legislation is long overdue and vital for public health and the environment. I thank the Massachusetts Medical Society for its steadfast support because of adverse human health effects of excess nighttime blue light emission. It is also consistent with the advice of the American Medical Association. Many environmental groups support the bill due to the environmental damage of excess night lighting that harms animals, insects, birds, and even aquatic zones. It will save energy, and improve night vision, especially for the elderly, by diminishing glare. And yes, it will save our night skies for future generations to enjoy."

Tim Brothers, DarkSky Massachusetts Policy Chair

"S.3145's commonsense standards for publicly funded lighting create a clear path for cities and towns to improve roadway safety and lower municipal bills by ending over-lighting and over-charging while simultaneously preserving critical habitat for nocturnal pollinators and ensuring future generations can experience the wonder of a starry night sky."

Kelly Beatty, DarkSky Massachusetts Communications Officer

"We all need darkness at night for good sleep and long-term health. Light pollution is associated with elevated rates of cancer, diabetes, obesity, and sleep disruption."

S.3145 will keep the lights we need for safety and reassurance, while reducing excessive lighting, harmful blue light, dangerous glare, and light shining in our bedroom windows. When signed into law, this bill will save money for many cities and towns across the Commonwealth that are currently paying for more electricity for street lighting than they actually use."



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tel +1-520-293-3198
www.darksky.org

July 9, 2026

Southwest Florida Astronomical Society
3236 Forum Blvd # 1160
Fort Myers, FL 33905

Dear Southwest Florida Astronomical Society,

Thank you for your generous gift to DarkSky International. Your support helps protect and celebrate the night sky, one of our planet's most inspiring natural treasures.

Because of you, DarkSky is strengthening advocacy, expanding education, and supporting communities around the world as they embrace better lighting and rediscover the value of natural darkness. At a time when appreciation for the night sky is growing globally, your generosity helps transform that enthusiasm into meaningful, lasting progress.

We are profoundly grateful for your belief in this work and your partnership in it. Wherever you are, we hope you'll take a moment to look up and enjoy the quiet beauty of a night sky filled with stars made brighter because of your support.

With gratitude,

Ruskin Hartley
Chief Executive Officer

Your gift of \$100.00 was received on 7/9/2026 DarkSky International, a 501(c)3 nonprofit organization in the United States. DarkSky International affirms that no goods or services were received in exchange for this donation. Our Tax I.D. is 74-2493011

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The Perseids Are Coming: A Southwest Florida Guide to a Summer Night Sky Show

By Mike Jensen

Every August, Earth gives us a reason to stay up late. Tiny pieces of space dust slam into our atmosphere at enormous speed. They heat the air around them and make brief, bright streaks of light. We call those streaks "meteors" or "shooting stars." In 2026, the annual Perseid meteor shower arrives with unusually helpful timing for observers in Southwest Florida: its peak falls on the night of Wednesday, August 12, into Thursday morning, August 13 when the Moon is new. That means the Moon will not brighten the sky and wash out the fainter meteors.



The Perseids are a favorite because they are fast, bright, and often colorful. Some leave glowing trails that hang in the sky for a second or two. NASA calls the Perseids the year's most popular meteor shower. Under a truly dark sky, people may see roughly 25 meteors an hour near peak, though the real number depends on clouds, light pollution, and how much of the sky you can see. You do not need a telescope. In fact, a telescope is the wrong tool for meteor watching because it shows only a tiny patch of sky. Your eyes, a chair, and a dark place are the important equipment.

For Southwest Floridians, this shower comes with both a gift and a challenge. The gift is that warm nights make sitting outside easy. The challenge is that August is also Florida's wettest, stormiest season. A perfect meteor shower can disappear behind one thunderstorm. The best plan is simple: learn what you are looking for, prepare ahead of time, choose a safe dark site, and use the clearest available part of the night.

What are the Perseids?

The Perseids happen because Earth travels through a wide trail of dust left by Comet 109P/Swift-Tuttle. The comet is far away most of the time, but its old grains of dust are spread along its path around the Sun. Each August, Earth plows through part of that trail. Most grains are no bigger than sand or a pebble. When they hit Earth's upper atmosphere at about 37 miles per second, the air becomes hot and glowing. From the ground, we see a quick line of light.

The name "Perseids" comes from the constellation Perseus. If you trace the paths of Perseid meteors backward, they seem to spread from a spot near Perseus. Astronomers call that spot the ****radiant****. The meteors are not actually coming from a hole in the sky. It is a perspective effect, much like railroad tracks seeming to meet far away.

For people in Southwest Florida, Perseus rises in the northeast during the late evening and climbs higher after midnight. That is why the best time is not right after sunset. In the hours before dawn, your side of Earth is turning into the direction in which Earth moves around the Sun. Think of sticking your hand out of a moving

car window: the front of the car meets more air. Before dawn, Earth's "front" is meeting more of the comet dust. That brings more meteors.

The 2026 date to circle

The main night to watch is August 12–13. The new Moon occurs in Fort Myers at 1:36 p.m. on August 12, so the night that follows is free of moonlight. This is excellent news. A bright Moon can hide many faint meteors, but in 2026 it will be out of the way at the best time.

Start looking as soon as the sky is properly dark, around 9 p.m. You may spot a few Perseids then, especially if you are patient. The activity should improve after midnight. The most rewarding window for many viewers will be roughly 2 a.m. to 5 a.m., before morning twilight gets too bright. You do not have to stay out all night. Even one uninterrupted hour after midnight can be memorable.

The shower is active for several weeks, from the second half of July into late August. That matters because weather is part of the story in Florida. If the peak night is cloudy, try a clear night just before or after it. You will see fewer meteors away from peak, but one bright fireball is still worth the trip outside. A clear, dark August 11 night can beat a cloudy August 12 night every time.

Where should Southwest Floridians go?

The best viewing site is not always the farthest one away. It is the place that combines **darkness, a wide view of the sky, legal nighttime access, a safe place to park or sit, and a plan to get home**. Do not stop along a road shoulder or walk into an unfamiliar wetland after dark just to escape city lights.

Big Cypress National Preserve: the regional standout

For the deepest darkness in the region, Big Cypress National Preserve is the best-known choice. The National Park Service says the preserve is among the darkest areas east of the Mississippi River and recognizes it as an International Dark Sky Place. Away from the glow of Naples and Miami, the Milky Way can be visible to the unaided eye. That makes Big Cypress a wonderful place for meteors, wide-field sky photography, and simply seeing more stars.

But dark places also need careful planning. Some boardwalks and day-use areas close around sunset. The preserve is open around the clock in many areas, yet overnight parking, night hiking, and stargazing can require prior permission. Check current rules, weather, closures, and access points with the preserve before you drive. Stay in designated places, respect closed areas and tribal sites, and never leave a road or developed viewing area to chase a darker patch of sky. Summer also means mosquitoes, standing water, and wildlife. Bring insect repellent, a chair, water, and a fully charged phone.

Your own backyard, beach, or club field

You do not need a famous dark-sky park to enjoy the Perseids although a darker area with less of a light dome is MUCH better. A backyard in rural Lee, Collier, Charlotte, Glades, or Hendry County may work very well if you can block nearby porch lights. A friend's open field, a farm property with permission, or an astronomy club observing site can be even better.

Coastal locations have a special advantage: a broad view of the sky. They also have a disadvantage: lights from

homes, condos, and roads can be strong. If you watch from a beach, choose a place where you are allowed to be after dark, follow local rules, and protect nesting wildlife. Sea turtles use many Southwest Florida beaches in summer. Keep lights dim and warm-colored, do not shine lights toward the water, and do not disturb marked nests. A red flashlight is kinder to your night vision and to wildlife than a bright white one.

In town, do not give up. Turn off your own outdoor lights if you can. Stand in the shadow of a house, fence, or tree so that nearby lamps are behind you. The city sky will hide faint meteors, but bright Perseids can still punch through. The most important thing is an open view above your head.

How to watch: the simple method works best

First, get comfortable. A reclining lawn chair or blanket lets you look up without hurting your neck. Dress for bugs rather than cold: long sleeves, long pants, socks, and insect repellent are sensible in a Florida summer. Bring water. A small snack is nice. If you need a flashlight, cover it with red film or use a red-light setting. White light makes your eyes lose their dark adaptation.

Next, give your eyes time. It can take about 20 to 30 minutes for your vision to adapt to darkness. During that time, the number of visible stars will grow. Put phones away or set them to their dimmest red display. One glance at a bright screen can undo much of your dark adaptation.

Then look ****wide****, not only toward the northeast. The radiant is in the northeast, but meteors near it have short trails. The longest and most dramatic streaks often appear 30 to 60 degrees away from the radiant. A good strategy is to face northeast or east with plenty of open sky above you, then let your eyes roam. Do not stare at one small spot. Meteors are surprise guests.

If you are watching with children, count meteors in 15-minute blocks, then compare totals. A slow, steady "meteor" may be a satellite. Random meteors also appear on any clear night, and that is normal.

Florida weather plan

Weather is not a side detail in August; it is part of the observing project. Check the forecast in the afternoon and again after sunset. Look for three things: cloud cover, thunderstorm chances, and lightning. A partly cloudy sky is not automatically a lost cause. A few clear gaps can still produce meteors. But if lightning is nearby, go indoors. A lawn chair, tripod, or umbrella is not a good friend of a thunderstorm.

Be flexible. If storms move away after midnight, watch later; if an overnight storm line is expected, try the night before. A site farther inland may beat a hazy coast. Tell someone where you are going, especially at a remote location.

Photographing the Perseids

Meteors are harder to photograph than they are to see because a meteor can appear anywhere. The usual plan is to photograph a large piece of sky for a long time. A camera on a solid tripod, a wide-angle lens, and many repeated exposures give you the best chance. Point away from bright lights and include an interesting foreground only if it does not block too much sky.

For a first attempt, use a wide lens, manual focus set carefully on a bright star, a fairly open aperture, and repeated exposures of roughly 10 to 20 seconds. Keep the camera running continuously. Many successful

Perseid photos come from a sequence of images, with the meteor frames selected afterward.

For a natural-looking picture, do not point straight at the radiant. Frame 30 to 60 degrees away from it, where the trails can look longer. In Southwest Florida, a north or northeast-facing scene can include the rising radiant, but be alert for distant city glow. A south-facing scene may be darker at some sites and can include the Milky Way early in the evening, though it is not aimed at the radiant. Either choice can work. The meteor decides where it will appear.

Good sky photography should leave no trace. Stay on durable surfaces and keep tripods out of travel lanes. Do not use drones in protected areas without permission; Big Cypress prohibits them unless approved in writing. Do not brighten the landscape with headlights or large LED panels. The dark is the subject.

What to expect—and what not to expect

Meteor shower posters can make the sky look as if it is raining fire. Real life is gentler and better. You may see nothing for five minutes, then two meteors in ten seconds. You may see twenty in an hour, or far fewer from a bright neighborhood. The fun comes from waiting together and knowing that every real streak is a small visitor from the path of a comet.

Do not expect every meteor to be huge or colorful. Most are quick, thin lines. A few will be bright enough to make everyone gasp. Those are the moments people remember. The new-Moon timing makes 2026 especially promising, but there are no guarantees. Clouds, humidity, and local lights still matter. Go out with curiosity rather than a quota.

The Perseids are also a reminder that the night sky belongs to everyone. You can see them from a city sidewalk, a ranch road with permission, a protected preserve, or a beach where the rules allow nighttime use. Bring a friend who has never watched a meteor shower. Bring a young person who thinks astronomy needs expensive equipment. Then lean back, look wide, and wait for a grain of ancient comet dust to write a bright line across a Florida summer sky.

Quick checklist

- Best night:** August 12–13, 2026.
- Best time:** after midnight; aim for 2–5 a.m.
- Best direction:** northeast and east, but keep a wide view of the whole sky.
- Best equipment:** chair, water, red flashlight, bug protection, and patience.
- Best regional dark-sky option: Big Cypress National Preserve, after confirming current access and any needed permission.
- Safety: never watch under nearby lightning, never trespass, and use only legal nighttime locations.

Sources and planning links

- [NASA: Perseids Meteor Shower](<https://science.nasa.gov/solar-system/meteors-meteorites/perseids/>)
- [NASA/JPL Night Sky Network: 2026 Perseid peak](<https://nightsky.jpl.nasa.gov/events/askc/121636/?view=event>)
- [Fort Myers Moon phases for August 2026](<https://www.timeanddate.com/moon/phases/usa/fort-myers>)
- [National Park Service: Stargazing in Big Cypress](<https://www.nps.gov/thingstodo/stargazing-in-big-cypress.htm>)

A Dead Rocket's Final Act: SpaceX's Falcon 9 Upper Stage Is About to Hit the Moon

What to expect when a piece of American spaceflight history meets the lunar surface on August 5, 2026

On the morning of August 5, 2026, at roughly 06:35 UTC — around 2:35 a.m. Eastern time — a fifteen-year veteran of American rocketry will meet an inglorious but scientifically fascinating end. A spent Falcon 9 upper stage, adrift in space for a year and a half, is on a collision course with the Moon. It will strike the lunar surface near the eastern rim of Einstein Crater at approximately 5,400 miles per hour, roughly seven times the speed of sound, ending its silent orbit in a burst of vaporized metal and pulverized regolith.

Unlike most space debris headlines, this one comes with an unusual amount of advance notice.

Astronomers have tracked the object for months, know almost exactly when and where it will hit, and are organizing one of the most closely watched artificial lunar impacts in history.

How a Rocket Stage Ended Up Stranded in Space

The object, catalogued as 2025-010D, began its life doing exactly what it was built to do. It launched on January 15, 2025, carrying Firefly Aerospace's Blue Ghost Mission 1 lander and Japan's Hakuto-R lunar lander toward the Moon. After delivering its payloads onto a trans-lunar trajectory, a typical Falcon 9 upper stage would either burn up reentering Earth's atmosphere or, for missions with enough energy, be sent safely away from Earth and Moon alike.

This one did neither. The high-energy burn needed to send two landers moonward left the spent stage in a wildly elongated orbit, swinging between roughly 220,000 and 510,000 kilometers from Earth — deep in the same gravitational neighborhood as the Moon itself. With no fuel left to maneuver, the four-ton, roughly 12-meter-long stage became a piece of orbital flotsam, tumbling for a year and a half while the combined gravity of Earth, the Moon, and the Sun, along with the faint push of solar radiation pressure, slowly reshaped its path.

The coming impact was first flagged in September 2025 by Bill Gray, an independent astronomer who develops widely used orbital-tracking software. His calculations, refined using more than a thousand observations contributed by asteroid-survey telescopes and amateur astronomers from Mississippi to Beijing, converged on a lunar impact date of August 5, 2026. Notably, SpaceX appears to be moving away from this kind of outcome: a



Falcon 9 upper stage launched in November 2025 for NASA's EscaPADE mission was deliberately placed on a trajectory that sends it into orbit around the Sun instead — though that was a company choice, not a regulatory requirement, and it is only feasible for missions with enough leftover energy to escape the Earth-Moon system.

Will It Leave a New Crater?

Yes — almost certainly. Researchers using Los Alamos National Laboratory's HOSS multiphysics simulation code project that the impact will excavate a fresh crater roughly 20 to 30 meters (66 to 98 feet) across. That's modest by lunar standards, but the collision packs a real punch: models suggest it will throw up on the order of 1.1 million kilograms of lunar regolith — some 150 to 200 times the mass of the rocket stage itself.

This won't be the first artificial crater carved by discarded rocket hardware. A Chinese Long March upper stage from the Chang'e-5 T1 mission struck the Moon's far side in 2022, producing a surprising double crater that scientists still can't fully explain — possibly the result of an unusually heavy component, like a motor, positioned away from the stage's center of mass. Because the Falcon 9 stage's dimensions and roughly 3,900 to 4,900 kilogram mass are well documented, this impact should offer researchers a rare chance to compare a well-characterized artificial impact against the messier, better-known naturally occurring ones that pepper the Moon's surface.

Can We See It From Earth?

Possibly — with the right equipment, in the right place, at exactly the right moment. The impact happens on the sunlit near side of the Moon, close to the eastern limb, which means it is at least geometrically visible from Earth rather than hidden on the far side. The impact flash itself will likely last less than a second and is expected to be very faint, with predicted brightness ranging anywhere from magnitude +3 (potentially visible in a decent backyard telescope) to fainter than +15 (essentially undetectable), depending heavily on the composition of the surface it strikes and the angle of impact.

The more promising target for observers is the debris plume that follows. Simulations predict a curtain of ejecta spreading roughly 183 kilometers laterally from the impact site, with a central spike of debris potentially climbing 75 to 100 kilometers above the surface. That plume should stay visible for anywhere from a few minutes to tens of minutes, peaking in brightness around 90 seconds after impact — long enough, researchers hope, for both professional observatories and well-equipped amateur astronomers to catch it on high-speed video.

Geography matters enormously here. At 2:35 a.m. Eastern time, the Moon will be roughly 56 percent illuminated and well-placed for observers across the eastern United States, Canada, and much of South America, with the southeastern U.S. offering especially favorable viewing conditions. Skywatchers farther north, where the Moon sits lower on the horizon, will have a much harder time due to atmospheric interference. Researchers recommend dark skies, a telescope capable of shooting video at 20 frames per second or faster, and a steady aim at Einstein Crater along the Moon's western limb. Even so, scientists studying the event are candid that they aren't certain what, if anything, will be visible — the uncertainty is part of what makes the observation campaign worthwhile.

What Science Can Come From a Crash of Space Junk?

It might sound like an inconsequential accident, but scientists are treating this as a genuine research opportunity — for a simple reason. Deliberate impact experiments on the Moon are rare and expensive; NASA has staged only a couple, including a Lunar Prospector impact in 1999 and a spent rocket stage impact in 2009 as part of the LCROSS mission, both aimed at searching for water ice. An unplanned but precisely trackable impact like this one offers a similar scientific payoff without the cost of a dedicated mission.

Because researchers know the rocket stage's mass, size, and approach velocity in detail, this event functions as a rare calibrated experiment. Scientists plan to compare their pre-impact models of crater size, ejecta plume height, and brightness against what actually happens — a real-world check on the physics used to predict impact outcomes on airless, low-gravity bodies. That matters beyond pure curiosity: understanding how objects of known mass and speed excavate lunar material feeds directly into planning for future lunar landings, where engine plumes and debris kicked up during touchdown can pose a hazard to nearby hardware.

The event also doubles as a test for a new pipeline designed to pinpoint impact locations on the Moon precisely — a capability that would be valuable for any future lunar seismic network, since knowing exactly where and when an impact occurred helps researchers interpret the resulting seismic signal. NASA's Lunar Reconnaissance Orbiter will pass over the predicted impact site roughly a week before and a week after the collision, and mission scientists expect the post-impact imagery to help refine exactly where the crater ended up, which can then guide even more targeted follow-up observations. South Korea's Danuri orbiter is also expected to attempt a close flyby observation of the event.

Finally, the episode has become something of a case study in the growing problem of cislunar space debris. The Aerospace Corporation has warned that a single major debris-generating collision in the region between Earth and the Moon could scatter hazardous fragments that persist for thousands of years, at a time when lunar traffic is expected to increase substantially over the coming decade. That SpaceX has already begun sending some upper stages into solar orbit instead of leaving them in Earth-Moon limbo suggests the industry is beginning to take the problem seriously, even without a formal regulatory mandate requiring it.

[A Small Impact With Outsized Interest](#)

In the end, the crater left behind will be modest — a scar tens of meters wide on a world already covered in millions of much larger ones. But the attention the event has drawn, from professional astrophysicists to backyard telescope owners, reflects something larger than the impact itself: a recognition that even accidental collisions can be turned into deliberate science when they're tracked closely enough, and a reminder that the debris humanity leaves behind in space doesn't simply disappear. It eventually goes somewhere. On August 5, 2026, we'll find out exactly where — and get a rare, real-time look at what happens when it arrives.

Southwest Florida Astronomical Society July 2, 2026 membership meeting minutes at the Calusa Planetarium both by Zoom and in person

President Risley opened the meeting at 7:03PM, thanked all (15 in person and 12 on Zoom) for attending and asked Dan Dannenhauer to introduce our guest speaker. Dan proudly called Mario Motta, MD a companionate individual plus a teacher and friend to all. Doctor Motta graduated Boston College, is a member of the American College of Cardiology and the American Society of Nuclear Cardiology. He has built his own observatory including a 32" F6 relay telescope. Dan read an excerpt of the July 1, 2026 MassSENATE's release highlighting Doctor Motta's supporter comments, specifically that Mario has been working for 25 years to pass this legislation which will save our night skies for future generations to enjoy.

Program: An Insider's view of the Mount Palomar Telescope.. Doctor Motto presented a slide show with Jean, the director before retiring. We witnessed Mario's most recent tour of the dome, 200" eyepiece 10 ton, Russell Porter 1948 telescope. Engineer quality "cutaway" drawings of the housing around and under the telescope, earthquake proof foundations, the rotation motor, museum, artifacts, Hartmann Screen for the 200" optical lens, and George Hale's 18" Schmidt telescope. Mario rendered a history of Russell Porter regarding the Palomar operation and also advised that Russell was the founder of the Stellafane astronomical grounds and annual convention of telescope makers. Many questions were asked and answered. Doctor Motta received multiple rounds of applause and President Risley thanked him for his professional presentation.

No scheduled events until September

Officer and Committee Reports:

President: President Risley advised the group that our February and March meetings in 2027 may be via Zoom or on a different date than the first Thursday of the month. He may schedule a social dinner in its place and said he is working on it and will let us know as soon as possible.

Vice President: Vice President Jensen stated that his upcoming Newsletter will post the Event schedules for Charlotte County, that he will attempt to schedule a social meeting in September, and that the Website is fine as is.

Secretary: Secretary Dannenhauer thanked Tom Klein for taking June's minutes and President Risley asked for approval and called the question. So moved by John MacLean and seconded by Don Palmer.....Passed unanimously

Treasurer: Treasurer MacLean stated that his board approved financials had a beginning balance of \$6,481 with an ending balance of \$6,156. That the AL dues of \$580 have been paid and our SWFAS is in financial good shape with 97 members.

Librarian: Maria Berni stated that she has received two new books, that all books have been placed in the hallway, and that members ought to take advantage of our library.

Equipment Coordinator: Brian Risley advised the group to ask for the use of any of the items in the storage room. He listed a few available.

Program Coordinator: John MacLean advised that the October speaker will be Gabriel Maxwell Bowman and the December speaker will be Jon Bell. Dan Dannenhauer stated that the August speaker will be Silvana Della Camera, the September speaker will be Carlos Garcia, and that the November speaker will be Greg Shanos. John MacLean stated that all months are scheduled until 2027.

Director of Charlotte Events: Tom Segur stated that the Charlotte FSW Moore Observatory events will be held the first Friday of the Month except for January which will be the second

Friday. He also stated that the Solar events will be the third Saturday of each month. Tom also advised that he will meet with the representative of an estate regarding various astronomical pieces of equipment and will let all know which are being donated to our Society and which are for sale as soon as practical.

Old and or new business: President Risley asked if there was any old or new business. He than talked with new member Frank Lee who stated that he was big brother to Serge and joined because Serge was interested in astronomy. Serge is in High School. President Risley offered words of encouragement and wished them both the best.

Adjournment: At 8:40PM President Risley asked for a motion to adjourn. So moved by John MacLean and seconded by Sean Dey. Passed unanimously.

Astrophotography Special Interest Group (SIG)



By Mike Jensen - Leader/Founder

Wet season is brutal on imaging plans, but it doesn't cancel them yet. I've done a bit of research, here's the scoop for the couple of months coming up. I'll update this next month.

Two new moons anchor your best dark-sky nights this cycle: August 12 and September 11. Full moons fall on August 28 and September 26 — block those off for planetary work, gear maintenance, or processing instead.

- Prime window #1: August 1–11 (waning into new moon)
- Prime window #2: August 29 – September 10 (spans the month boundary, arguably your best stretch)
- Prime window #3: September 12–19 (moon still thin enough for narrowband)

Weather Reality Check

August and September sit right in the thick of it. We're deep in wet season, and September 10 is the climatological peak of Atlantic hurricane season. Afternoon convection builds almost daily, then often clears out after 10 or 11 PM. Don't write off a night just because 4 PM looked like a washout.

Humidity is the other enemy. Dew heaters aren't optional here — they're mandatory gear, on the primary optic and the finder alike. Keep a session bag packed and ready. When a gap in the radar opens up, you'll have twenty minutes to react, not two hours.

Bortle Zones: Know Before You Drive

Most of us are shooting from Bortle 7–8 skies in Cape Coral, Fort Myers, or Naples proper. That's fine for the Moon, planets, and bright narrowband targets through an Ha/OIII filter. For anything faint and broadband, you need to drive.

- Babcock-Webb WMA — roughly Bortle 4, closest real dark-sky option for most of us
 - Picayune Strand State Forest — Bortle 3–4, open sky, minimal light dome
 - Big Cypress National Preserve (Turner River area) — Bortle 3, best true-dark option in the region
 - Fisheating Creek / Palmdale area — Bortle 3–4 if you're coming from the east side
- None of these are far — under 90 minutes from most of the metro area. Worth the drive for a Cygnus mosaic or anything faint in narrowband.



Deep-Sky Targets Worth Your Clear Nights

The Sagittarius/Scorpius core is still up but fading fast. Catch the Lagoon (M8), Trifid (M20), Eagle (M16), and Swan (M17) nebulae early in August, right after twilight — by September they're low in the southwest and buried in atmospheric muck before you've even set up.

Cygnus rides high overhead all night in both months, which makes it the workhorse target of this window. The North America Nebula (NGC 7000), the Veil Nebula complex, and the Pelican Nebula are all well-placed for long narrowband integrations without fighting the horizon.

Cepheus climbs into good position by late evening — the Elephant's Trunk (IC 1396), the Cave Nebula, and the Wizard Nebula reward anyone running dual-narrowband or full SHO sets.

And by mid-September, Andromeda (M31) clears the northeastern horizon at a reasonable hour. It won't be well-placed for a full night yet, but it's worth a few test frames to start planning your fall galaxy season.

Meteors and Planets

The Perseids peak the night of August 12–13 — the same night as new moon. That's about as good a pairing as this shower ever gets. Wide-field, low ISO, intervalometer, patience.

Saturn is climbing toward an October 4 opposition and brightens steadily through both months. The rings sit nearly edge-on this year (about 7 degrees), so don't expect the dramatic tilt of recent seasons, but it's still a solid planetary target once your seeing settles down after midnight.

Neptune reaches its own opposition on September 26 — unfortunately the same night as full moon, and it's a dim, small target regardless. If you're chasing it, do it earlier in the month during a dark window instead of waiting for the exact date.

Clear Skies

Bottom line for this cycle: front-load your Sagittarius shots in early August, lean on Cygnus and Cepheus all the way through, and keep your gear staged for those post-storm clearings. Bring your frames to the next SIG meeting — always want to see what everyone pulled off.

Finally - A New Seestar & Pier?

For those of us waiting for the new product from ZWO. Something that might reach a bit deeper than the 30 or the 50, here you go. I think this version may have been designed for a few members who are waiting for the next version. (But keep waiting, this is only a meme).





Full Arc Milky Way Over Namibia Red Mountains - by Mike Jensen

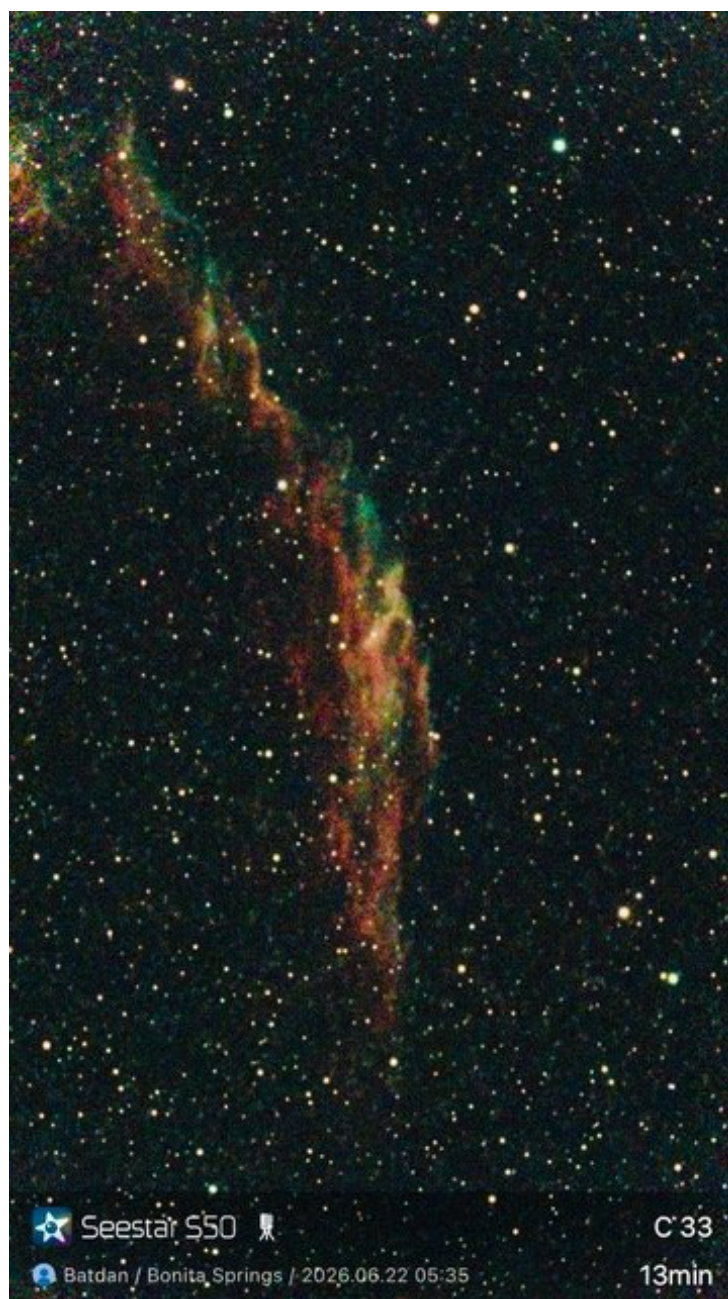
Brand/Type of Telescope/Lens: Sony 24-70 at f4 for the foreground. Rokinon 20mm f1.4 for the stars

Mount: Gitzo Tripod on RRS BH55 ball head

Exposures: Sky 9 images plus 10 darks. Foreground 3 images bracketed.

Processing Software: The sky was stacked in Photoshop and blended with the foreground in Photoshop.

Here's the story: Anything in Namibia is a GREAT target at night! This is a composited image with the foreground being shot right after sunset (about 6pm). The stars were shot about 8:30pm from the same location. I used Photo Pills and The Photographer's Ephemeris (TPE) to plan and locate this image. The planning was done several years ago when I booked the trip. To get the full arch of the Milky Way in you have to be pretty far away from your subject. Notice how it rises from left to right. That's because I'm 20 degrees south latitude in the southern hemisphere. Also of interest is the Magellan Clouds in the center of the arc. When I was in New Zealand and Australia last fall I photographed this same arc, but the clouds were to the left of the beginning of the arc.



C33 by Dan Dannenhauer

Carlos Garcia's SeeStar 50s in Zimbabwe
Africa submitted by Dan Dannenhauer



Seestar S30

C 32

EasyScopes S30.3 / Presidio / 2026.06.08 22:47

52min

Smartsopes Garcia's Seestar 30 in Redford Texas submitted by Dan Dannenhauer



NGC 4725 by Dick Cogswell

Brand/Type of Telescope/Lens: Planewave CDK14

Mount: APP 1100

Exposures: 224 5-minute exposures

Processing Software: APP, PI, PS

Here's the story: NGC 4725 is an intermediate barred spiral galaxy with a prominent ring structure, located in the northern constellation of Coma Berenices near the north galactic pole. It was discovered on April 6, 1785 by the guy who hogged all discoveries in the 18th century, German-born British astronomer William Herschel. The galaxy lies at a distance of approximately 40 megalight-years from the Milky Way. NGC 4725 is the brightest member of the Coma I Group of the Coma-Sculptor Cloud, although it is relatively isolated from the other members of this group. Like the imager, this galaxy is strongly disturbed and is interacting with neighboring spiral galaxy NGC 4747, with its spiral arms showing indications of warping. The pair have an angular separation of 24', which corresponds to a projected linear separation of 370 kly. A tidal plume extends from NGC 4747 toward NGC 4725.



NGC 6946 The Fireworks Galaxy by Dick Cogswell

Brand/Type of Telescope/Lens: Planewave CDK14

Mount: APP 1100

Exposures: 224 5-minute exposures

Processing Software: APP, PI, PS

Here's the story: NGC 6946 is called the Fireworks Galaxy because it's meant to be viewed on the 4th of July. It is a grand design, face-on intermediate spiral galaxy with a small bright nucleus, whose location in the sky straddles the boundary between the northern constellations of Cepheus and Cygnus. Its distance from Earth is about 25.2 million light-years, similar to the distance of M101 in Ursa Major. Both were once considered to be part of the Local Group, but are now known to be among the dozen bright spiral galaxies within the Virgo Supercluster.



NGC 6543 The Catseye Nebula by Dick Cogswell

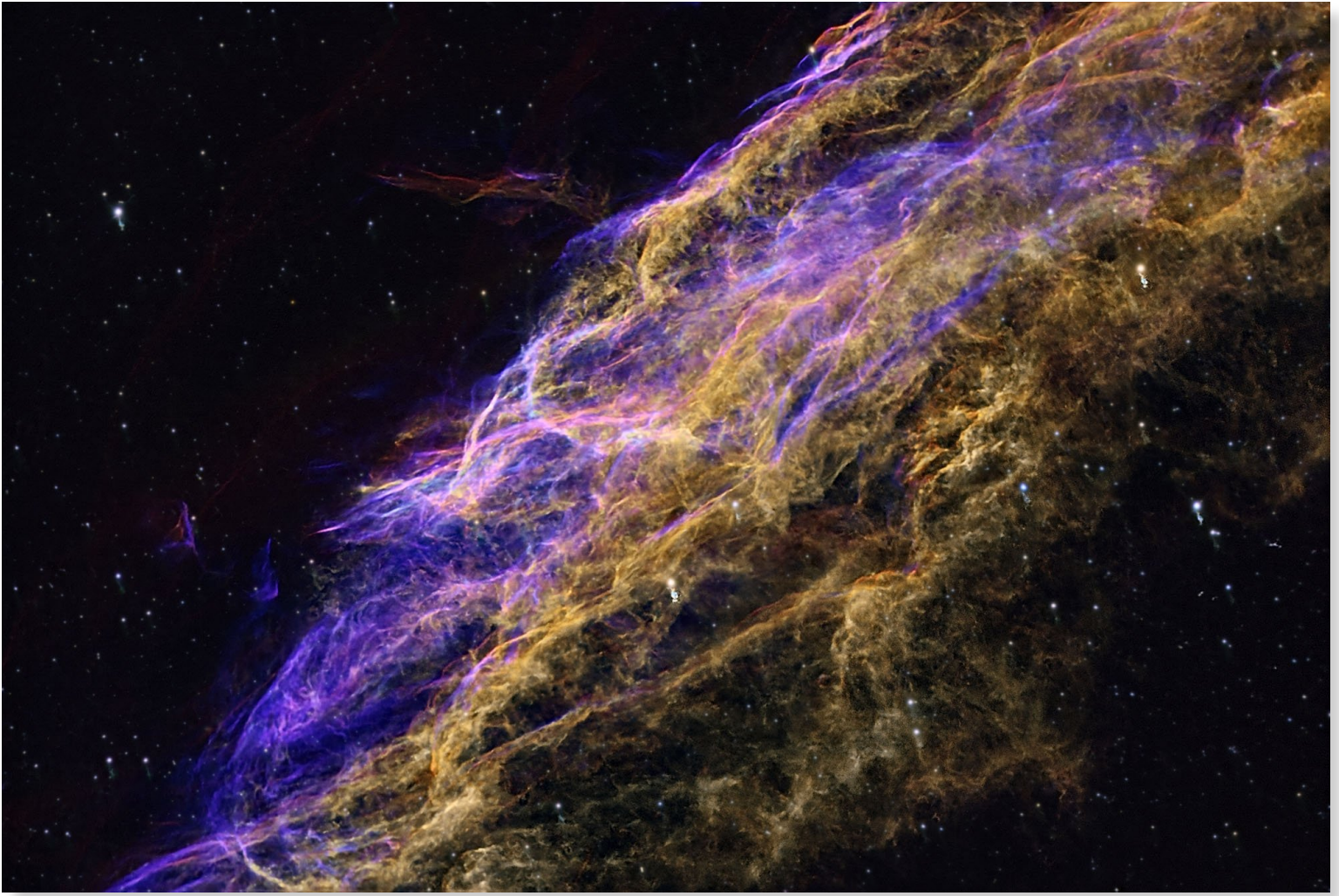
Brand/Type of Telescope/Lens: Planewave CDK14

Mount: APP 1100

Exposures: 162 5-minute exposures

Processing Software: APP, PI, PS

Here's the story: NGC 6543 is the Catseye Nebula, a planetary nebula in the northern constellation of Draco. It drew this nickname Catseye probably because it doesn't look anything like the eye of a cat. It was discovered by William Herschel on February 15, 1786, although he didn't know what it was. It was the first planetary nebula whose spectrum was investigated by the English amateur astronomer William Huggins, demonstrating that planetary nebulae were gaseous and not stellar in nature. Structurally, the object has had high-resolution images by the Hubble Space Telescope revealing knots, jets, bubbles and complex arcs, being illuminated by the central hot planetary nebula nucleus. It is a well-studied object that has been observed from radio to X-ray wavelengths. At the center is a dying Wolf-Rayet star, which shines at magnitude +11.4. Hubble Space Telescope images show a sort of dart board pattern of concentric rings emanating outwards from the center.



Eastern Veil Segment, NGC 6992 by Mario Motta

Brand/Type of Telescope/Lens: home made 32 incg F6.5

Mount: home made equitorial

Exposures: about 30 sub exposures of 300 seconds each, Ha, O3, S2 filters

Processing Software: PixInsight

Here's the story: A zoomed in view of the increadable complex of shock waves from a Supernova explosion about 30,000 years ago



NGC 5566 by Dick Cogswell

Brand/Type of Telescope/Lens: Planewave CDK14

Mount: APP 1100

Exposures: 198 5-minute exposures

Processing Software: APP, PI, PS

Here's the story: NGC 5566 is a barred spiral galaxy in the constellation Virgo, which is approximately 66 million light years away from Earth. The galaxy is the biggest in the constellation Virgo, stretching nearly 150,000 light years in diameter. The galaxy NGC 5566 was discovered on 30 April 1786 by (who else?) the German-British astronomer William Herschel, who didn't allow anyone else to discover galaxies, even though he didn't know they were galaxies. Pretty selfish.

It is included in Halton Arp's Atlas of Peculiar Galaxies as Arp 286. It is a member of the NGC 5566 Group of galaxies, itself one of the Virgo III Groups strung out to the east of the Virgo Supercluster of galaxies.

In this image, NGC 5560 is on top, NGC 5566 is the middle galaxy, and NGC 5569 is the bottom galaxy, unless you stand on your head to view it. There are quite a few faint smudges in the background.



NGC 7000 - Shock Fronts of the Cygnus Wall by Reggie Blackmon

Brand/Type of Telescope/Lens: APT/75Q/75mm quintuplet refractor/405mm FL

Mount: HEQ5 pro

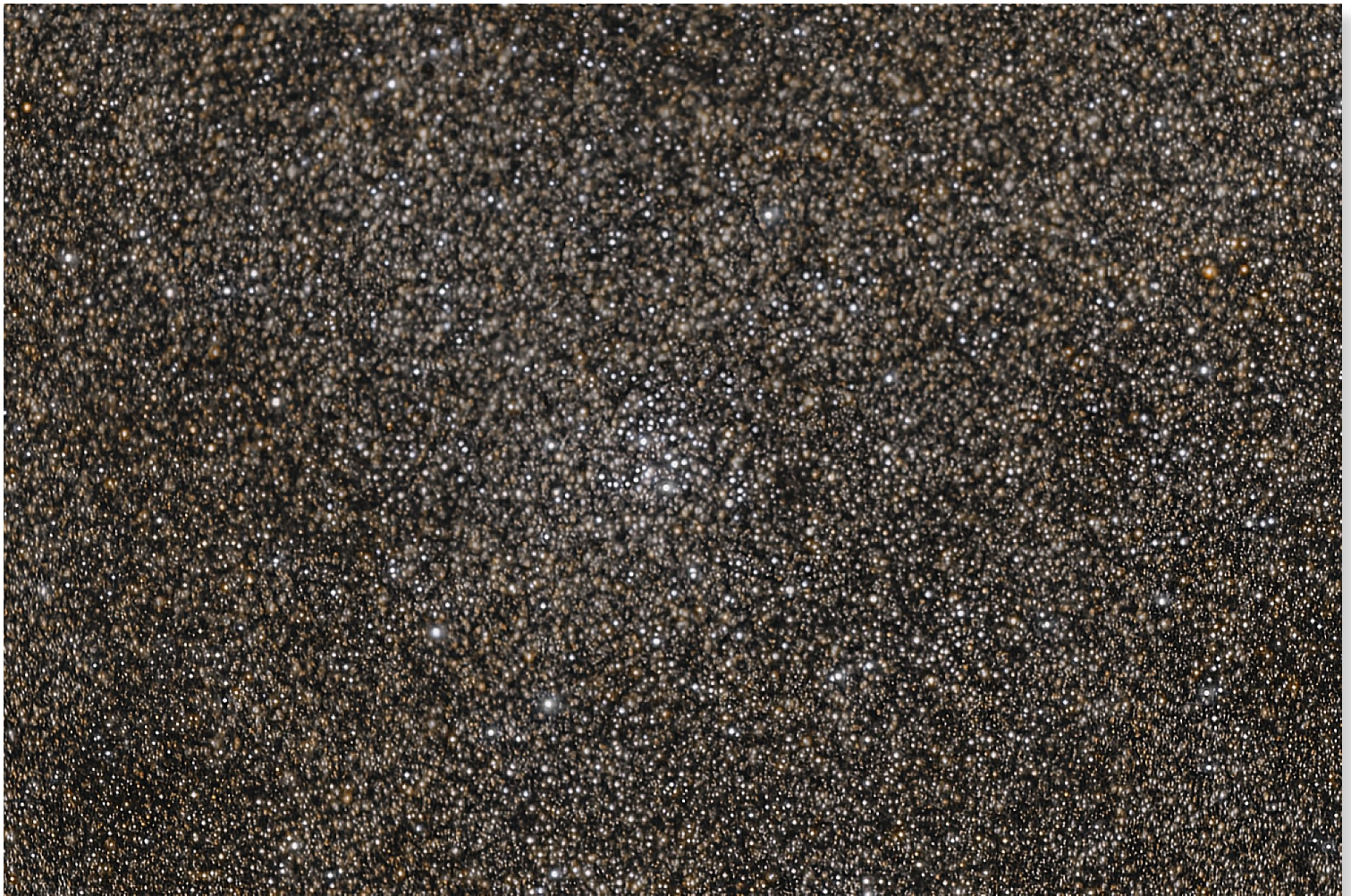
Exposures: 88x300s

7nm duo narrowband filter

ASI 2600MC pro

Processing Software: Siril and Seti Astro Suite Pro

Here's the story: This dataset targets the iconic NGC 7000 (The North American Nebula), capturing the violent, high-energy boundary where intense ultraviolet radiation from massive, hidden stars aggressively erodes and ignites a dense cliff of cold molecular gas and cosmic dust. An 11-hour total integration time is modest, but with SWFL ground humidity locked at 100% and ambient dew points hovering around a staggering 78°F, equipment management was critical. The defining success of this project was a rare window of incredible atmospheric stability. Despite thick, passing summer transparency haze, the air remained surgically still. My mount locked into a nice average guiding error of 0.49" total RMS across the entire run.



M 26/NGC 6694 by Reggie Blackmon

Brand/Type of Telescope/Lens: Zwo/Seestar S50/50mm/250mm FL

Mount: Sky-Watcher Star Adventurer in EQ setting

Exposures: 232x20s

Processing Software: Siril, Seti Astro Suite Pro

Here's the story: Messier 26 (M26) is an open cluster located in the constellation Scutum. The cluster has an apparent magnitude of 8.0. Messier 26 lies at an approximate distance of 5,000 light years from Earth. Its designation in the New General Catalogue is NGC 6694. The cluster occupies an area of 15 arc minutes, corresponding to a linear diameter of 22 light years. The brightest star in M26 has a visual magnitude of 11.9 and the spectral classification B8. The estimated age of the cluster is 89 million years.



M101: The Pinwheel Galaxy in the Void by Reggie Blackmon

Brand/Type of Telescope/Lens: APT/75Q/75mm quintuplet refractor/405mm

Mount: HEQ5 Pro

Exposures:

496 x 150s IRCUT

160 x 300s 7nm Duo Narrowband filter

ASI 2600 MC pro

Processing Software: Siril and Seti Astro Suite Pro

Here's the story: To capture the true nature of this grand design spiral, I moved beyond standard broadband imaging. This project features 13 hours of dedicated narrowband H-alpha data integrated using a precise continuum subtraction workflow, allowing the H II star-forming regions to stand out with against the galactic disk. The goal was to balance the delicate, low-surface-brightness tidal features with a clean, natural background, ensuring the final image reflects both the art and the science of the target. I've spent the final processing stages refining the deep-space luminance to preserve the three-dimensional depth of the arms without sacrificing the high SNR achieved during acquisition.



The Southern Tadpoles (Gum 37) of NGC 3572 by Reggie Blackmon

Brand/Type of Telescope/Lens: PlaneWave 20 CDK

Mount: PlaneWave L-550 Direct-Drive Mount

Exposures:

300s x67 SII filter

300s x67 Ha

300s x 59 OIII

300s x 14 R

300 s x14 G

300s x 14 B

QHY600 camera

Processing Software: Siril and Seti Astro Suite Pro

Here's the story: While the "Southern Tadpoles" name refers to the dense pillars of dust and gas, one of these specific structures has been identified as WRAY 15-764. Additionally, a small "blob" often associated with this area was historically mistaken for a planetary nebula but is now recognized as a photo-evaporating globule designated PhJa 1. The Raw dataset is part of a case study from "Astrophotography-Mastering Image Processing with Siril" by Ciril Richard. I contacted the imager and publisher directly and was given permission to post my execution of this data from the raw individual fits (lights and calibration) files.