



May 2024

Grand Strand Astronomers
Monthly Events

General Membership Meeting:
Every Last Thursday @ 7:00 pm
Meeting: VIA Zoom.

Please see email or Facebook for link

Observing Session: May 4, 2024 @ 8:00 pm
Location: Hampton Plantation
Gates open @ 6:00 pm



ASTROGATOR

Grand Strand Astronomers

An Astronomical Journal of the Grand Strand Astronomers of the Greater Myrtle Beach Area
GSA Founded on September 24, 2020



Full Solar Eclipse
Photography by Julie-Ann Farrell

Grand Strand Astronomer's Social Media

[Grand Strand Astronomer's Website](#)



[Grand Strand Astronomer's Facebook](#)



GSA Leadership



Executive Officer
Ian Hewitt

Treasurer
John Defreitas

Photograph
not available
at this time



Secretary
Gerald Drake

**Social Media
Corrodinator**
Denise Wright

Photograph
not available
at this time



**Newsletter
Corroridorinator**
Tim Kelly

In This Issue

Photograph of the MonthPage 3
 Thoughts from Ian Page 3
 Call for Volunteers Page 3
 GSA Membership Page 4
 GSA Loaner Telescope Page 4
 GSA April 2024 Meeting Recap Page 4

Seeing and Transparency Page 4
 Solar Eclipse Over Ennis Texas Page 5
 Solar Eclipse Over Snowball Arkansas Page 6
 Partial Solar Eclipse Over Myrtle Beach Page 7
 Partial Sloar Eclipse Over Pawley's Island Page 8
 Heavens Above Sky Chart for May 2024 Page 10

Photograph of the Month

By Julie-Ann Ferrell

My set up:

Nikon D500

Nikon 200-500 lens with a 1.4 adapter on a Sirui tripod

Most photos taken at ISO 100 f8 700mm

Shutter speeds varied

See Julie-Ann's story on Page 6

Insights From Ian

The 2024 eclipse is now in the books. I hope everyone got a chance to view at least the partial eclipse and I hope some of you managed to get to totality. It is always quite a show! The green menace of pollen season is now behind us and galaxy season is here. Some of our members got a chance to get out in April and enjoy some very good views at Hampton State Park, which always offers dark skies. Looking forward, we are hoping to get out more as we head into summer season.

There is still time to see comet 12P/Pons-Brooks as it get closer to the Sun. Look for it in the west right after Sunset. You will need binoculars, a small telescope, or a camera, but if you have good low western view, you should be able to see it!

Thx. -I

Call For Volunteers

Grand Strand Astronomers are looking for volunteers to help with the social media platforms such as Facebook, YouTube and Twitter if the need arises. Presently Facebook needs a new face lift and be brought up to present time activities. Our website can also use some TLC and someone responsible to keep it updated with club activities and astronomy related items. If anyone would like to help in these categories, please contact Ian Hewitt at the email address below.

We are looking for new and older club members to help contribute articles for the GSA Newsletter. You can be a novice level, medium level, or a experienced level astronomer. Knowledge such as types and location of numerous stars, nebula or galaxies to share with other club members. GSA would like to provide topics for all level of members and non-members that are both hands-on projects and educational sharing. You can either write you own or use one already written and published. See Megan's, Chris' and Gerald's contributions for self written articles. See Tim's contributions for an example of non-written subject matter or from a written artical from another person. Please provide the title, name of the originator and website link that the original article can be found. You will not be required to submit articles every month, however every second or third month would be nice and a benifit to all members and non-members. Please send articles to t.m.kelly349@outlook.com

Grand Strand Astronomers - Membership

Grand Strand Astronomer's welcomes new member Tomas Bagdas.

GSA Telescope Loaner Program

Did you know our club has telescopes available for loan? They are Dobsonians that were donated to the club when we first started. These are available for club members to use at no charge. All you have to do is take care of them and return them if someone else wants to borrow one. The first one is an Orion XT 8. It's in great shape. It gives beautiful views of the moon, planets, and galaxies. Comes with accessories that include a 2X Barlow, 25mm eyepiece, 9mm eyepiece, and laser collimator tool. The other one is an Orion Skyquest XT 10 with Orion's IntelliScope computerized object locator. It includes more than 14,000 objects in its database so you'll be able to locate those dim galaxies. Should be hours of fun. Accessories are included. Both of these are begging to be used. Send us an email if you're interested in borrowing one.

Grand Strand Astronomers April 2024 Meeting Recap

By Tim Kelly

The April 18th monthly Zoom meeting was canceled by Ian Hewitt, Executive Officer. There was a lecture at the College of Charleston on the NASA Dragonfly mission to Titan (one of Jupiter's many moons) given by one of the lead Dragonfly scientists. There was a Lecture ZOOM link for that event.

SEEING and TRANSPARENCY GUIDE

Astronomical League

Introduction

Seeing and Transparency are values that an observer uses to compare the quality of the sky from night to night. The values are very specific to an individual observer's visual acuity. Seeing is a measure of how stable the sky is. Transparency is a measure of how clear the sky is. Most of the Astronomical League's Observing Programs require the observer to evaluate these conditions for each observation and to record them in their observation log.

Here are two scales that are acceptable for all Observing Programs. They are simple to use and require no special equipment. Both of these values can be done very formally using special equipment, but for the AL Observing Programs this level of effort is not required.

Seeing:

How stable is the sky?

- E (excellent) – The brighter stars are not twinkling at all.
- VG (very good) – The stars are twinkling slightly, but the brighter planets are not twinkling.
- G (good) – The brighter planets are twinkling slightly.
- F (fair) – The brighter planets are obviously twinkling.
- P (poor) – The atmosphere is turbulent. all objects are twinkling to the points where observation is not practical.

(Continued on page 9)

Solar Eclipse Over Ennis Texas

By Julie-Ann Ferrall

As a child, I always loved the night sky, looking up at the stars on a clear cold night. The vastness of space and the unknown depths of the universe inspiring wonder and mystery. What lies beyond?

Life happens and then we retire. Time to fill life with new activities. For me those activities included learning about photography. Little did I know how hooked I would become joining photo clubs, attending workshops and spending hours learning and investing in 'gear'! I soon learned to look for dark skies for Milky Way photo opportunities.

In 2017, I was in the path for the eclipse in NC. Lots of hype and prep. [Still too new to photography to prep for photos]. Then lots of disappointment as my location was completely clouded over. A big nothing! Just grey skies.

Fast forward to 2024..... The hype was out there.... Ennis, TX was the place to be. Right in the center of totality at 4 minutes and 23 seconds. I had to be there..... Ordered all the right solar filters, glasses, and sat thru countless hours of how to videos. The RV got loaded, the route was planned, a site was booked in Ennis, TX.

Then a week before, the news hyped started: Ennis would not have clear skies.... Everyone needed to shift gears and head to Maine. I was already on the road to Ennis... Nope, I'm committed to Ennis, TX. I quietly said my prayers. Arrived in Ennis on April 7 after driving thru torrential rain storms. The weather forecasts continued to be dismal. There were over 100 no shows at our booked space.... It was overcast. More prayers.... Lowered my expectations and convinced myself... if no eclipse view, then there were the bluebonnets.

On April 8th, at precisely 12:22 pm CST, it all began. The clouds parted way and for 2 hours and 40 minutes, we watched the transition. Occasionally, a few clouds would obscure the scene and then quickly moved out. Totality happened at 1:42 pm CST and lasted 4 minutes, 23 seconds. There are no words to describe the experience. The total darkness, the crowd cheering, the diamond ring, the flares, the quietness in the darkness. The stars came out. I was so involved in the experience of totality that the photos were no longer a priority. It certainly was a spiritual experience and one that makes me want to plan for Spain - August 12, 2026.

My set up: Nikon D500, Nikon 200-500 lens with a 1.4 adapter on a Sirui tripod. Most photos taken at ISO 100, f8, 700mm. Shutter speeds varied.



Solar Eclipse Over Snowball Arkansas

By Ken Legal

Here are a few of my shots from the eclipse; these are 'as is'...no post-processing.

We were in Snowball, Arkansas (near Marshall), and stayed at an AirBnB that did -not- charge extra because of the eclipse (nice people!)

Totality was predicted to be 3m30s there. It was just family, friends, and the neighbor and her 2 kids...12 people in all. We were in a bit of a valley, so we missed seeing the shadow coming/going, but it did get quite breezy and noticeably cooler as totality approached.

Overall, we agreed that it did not look as 'dark' as the 2017 event. Jupiter and Venus were easily visible on either side of the sun, sky was mostly clear with some slight haze to the southeast that did not interfere with our view.

Equipment: Astro-Tech 80mm f/6 Triplet refractor

Thousand Oaks solar filter on a fixed tripod

Canon 60Da camera

- First picture (IMG_0170, approx 25 minutes after eclipse started) was 1/250 sec at ISO 200, thru the solar filter.
- Second picture (IMG_0186, 1st Diamond Ring at 2nd Contact) was 1/125 sec at ISO 200, no filter
- Third picture (IMG_0192, shows more of the Corona) was 1/20 sec at ISO 200, no filter
- Fourth picture (IMG_0197, shows the prominences better) was 1/350 sec at ISO 200, no filter
- Fifth picture (IMG_0198, 2nd Diamond Ring and prominences at 3rd Contact) was 1/350 sec at ISO 200, no filter

Note: The prominences at 2, 3 and 5-6 o'clock positions; the one at 3 seemed to be separating from the sun's disk. They were stunningly brilliant red to the eye.



Photo #1



Photo #2



Photo #3



Photo #4



Photo #5

Partial Solar Eclipse Over Myrtle Beach

By G. Drake

I stayed in Myrtle Beach for the eclipse on April 8, 2024, and set up on my driveway two telescopes to observe the partial eclipse. I used the Orion XT8, Dobsonian with a homemade solar filter attachment to view the event, and I set up an Orion 90 mm refractor on a manual equatorial mount with a solar filter and an Olympus E-PM1, mirrorless camera attached.

All images of the sun were processed with Focus Stacker and GIMP on a Mac. We had several neighbors stop by and look through the XT8. Lots of ooohs and awwwhs.



My Set Up



Taken at 2:18 PM



Taken at 2:54 PM



Taken at 3:05 PM



Taken at 3:13 PM



Eclipse Through the Leaves

Neat experience. Shared these photos with the neighbors who came by. All were very appreciative of getting to share in the eclipse, even though it was only partial for us.

Partial Solar Eclipse Over Pawleys Island

By Scott Murphy

Even with less to see, Pawleys remains popular with viewers

BY CHARLES SWENSON
COASTAL OBSERVER

Connor and Selena Gould came from Burlington, Vt.

David and Cathy Whitehouse came from Rochester, N.Y. So did Dave and Patti Crean.

They watched through protective glasses as the moon edged across the face of the sun and the light over the south end of Pawleys Island became tinged with amber. In their mind's eye, they could envision the same scene up north.

"We could be in the path of the whole thing," David Whitehouse said.

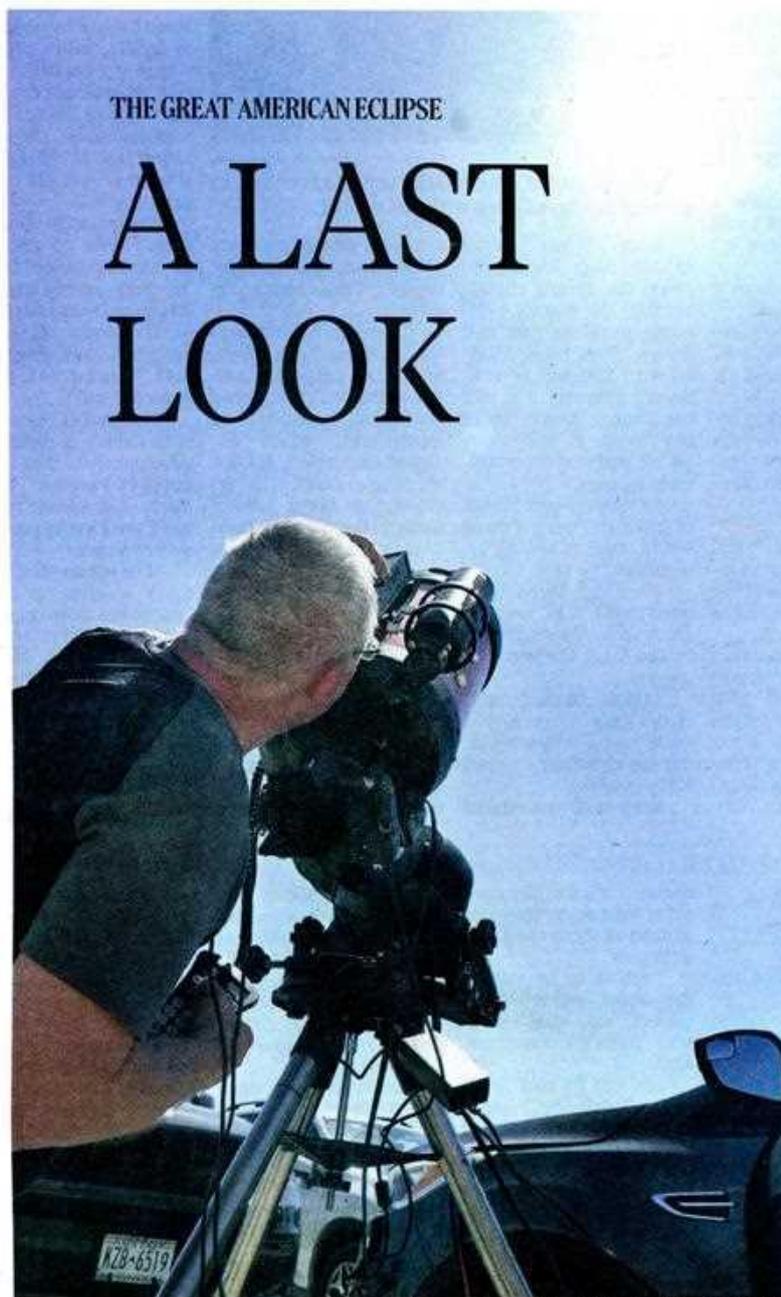
Instead, they were enjoying spring at their condo at Pawleys Plantation, as were the Creans. They didn't even consider swapping that for a look at Monday's total eclipse that was visible to the folks back home. The 70 percent view from Pawleys Island would do.

The south end parking lot started to fill up as the eclipse began a little after 2 p.m. Scott Murphy had been there since noon, setting up his Celestron NexStar telescope and tracking the sun's path.

"This is the most important part," he said, holding up the solar filter that fits on the end of the telescope.

Murphy had heard of do-it-yourself filters made from the plastic lining of snack food bags. They weren't worth the risk to

SEE "ECLIPSE," PAGE 4



Photos by Charles Swenson/Coastal Observer (above and below right) and Scott Murphy (below left)

Scott Murphy tracks the eclipse's progress, which he captured, below left, on camera. Connor and Selena Gould are among the spectators on Pawleys Island.



(continued from page 4)

Transparency:

How clear is the sky?

Transparency is a measure of what you can see in the nighttime sky in spite of dust, smoke, haze, humidity, or light pollution. An easy way to measure this is to use the magnitude of the faintest star you can see. Ideally, this would be looking straight up at zenith.

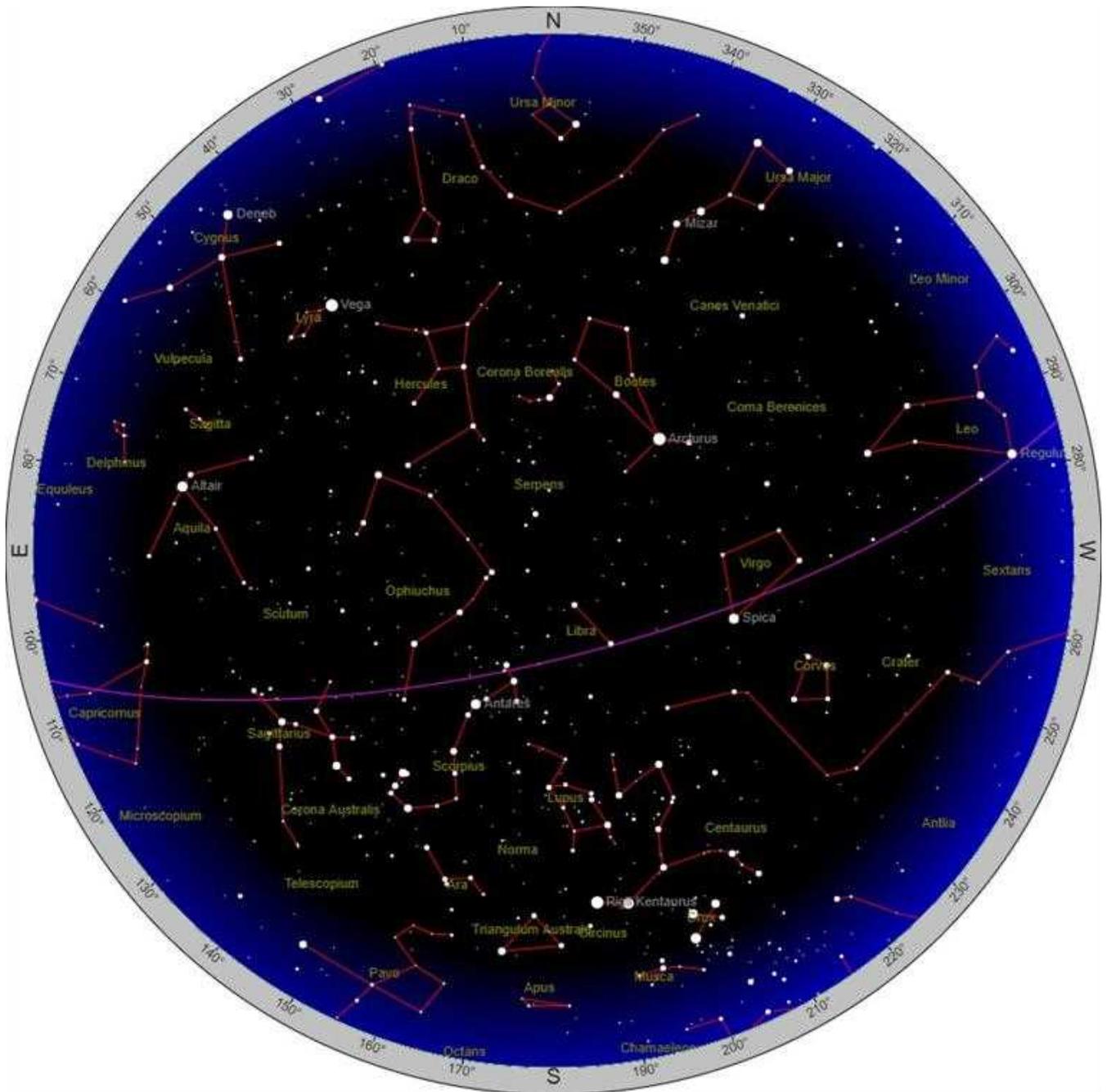
But, in the northern hemisphere, to make life simpler, you can use the Little Dipper (Ursa Minor) if you can see it. Here is the scale:

1. None	Magnitude 1 skies	
2. Only Polaris	Magnitude 2 skies	α UMi
3. ...plus Kochab or Pherkad	Magnitude 3 skies	β UMi, γ UMi
4. ... plus any stars in the tail	Magnitude 4 skies	δ UMi (Yildun), ϵ UMi
5. ... plus another bowl star	Magnitude 5 skies	ζ UMi
6. All 7 stars	Magnitude 6 skies	η UMi
7. More than 7 stars visible	Magnitude 7 skies	-

Although atmospheric extinction will vary from season to season, and from latitude to latitude, using the Little Dipper is a simple and reasonable solution.

Interactive Sky Chart

Year Month Day Hour Minute
2024 May 15 0000 0000



And remember to always look up!