

ASTROGATOR

Volume 1

Number 11

January 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: January 13, 2024 @ 6:00 pm
Location: Hampton Plantation
Gates open @ 6:00 pm



Inside This Months Newsletter

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Grand Strand Astronomer's Social Media

[Grand Strand Astronomers Web Site](#)

[Grand Stand Astronomers Facebook](#)

Header photograph: NASA releases ultra-HD video of the sun | GMA

Insights From Ian



Welcome to 2024! As we start to get colder weather, we are seeing some clearer nights and I hope everyone is bundling up and getting out under the stars. Our 2023 was plagued with a lot of clouds and rain, but on the few times we were able to have sessions at Hampton State Park, we had great skies.

We also held two very good public education events at Brookgreen Gardens. For the coming year, we are all looking forward to the eclipse in April, as well some good local local observing.

In 2024, we will be scheduling our observing sessions on the darkest weekend and not not keep to strict schedule (like the third Saturday of the month). The meeting will also float around the phase of the moon.

All the dates should be listed on the web site and will be sent to the email group. We also have some members working on some face-to-face meet ups and workshops for the coming year. In addition, we want to welcome all our new members to the group and hope all of you are able to make it to some of our events!

Clear Skies -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.

This newsletter needs contributions of articles related to astronomy. Send articles to t.m.kelly349@gmail.com. Please provide name of author of article to protect Grand Strand Astronomer.

Grand Strand Astronomers - Membership

Grand Strard Astronomer's welcomes our new members:

Michael Isaac
Anita Juanso

James Hoffman
Scott Murphy

For existing members, our GSA 2024 membership dues are due in January 2024 (unless you joined in October, November or December 2023. These will be considered good for 2024).

January 2024 Newsletter

The Grand Stand Astronomer's January 2024 Newsletter will be a short issue due to the holidays.

GSA LEADERSHIP

Executive Officer

Ian Hewitt

Treasurer

John DeFreitas

Secretary

Gerald Drake

Social Media Coordinator

Denise Wright

Newsletter Editors

Gerald Drake

Tim Kelly

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.

Future Meetings and Outings

The next Hampton Plantation observation night is Saturday January 13, 2024.

The next indoor Zoom meeting is January 25, 2024.

Grand Strand Astronomer's November 2023 Meeting Recap

Gerald Drake

Our virtual meeting was held on November 30, 2023, 7:00 to 8:30 PM. The agenda included updates on future events and general discussions. Ian called the meeting to order and welcomed all present and those who will watch on YouTube later. We are recording every meeting so members, or anyone wishing, can look it up and view the meeting on YouTube.

Ian shared some of our upcoming events:

- o Dec 9 is our outdoor observing session at Hampton Plantation State Park.
- o Dec 28 is our regular indoor meeting.
- o Dec 13 is the Geminids meteoroid shower. We'll try to have some organized observing events for this, maybe at Hampton Plantation.

We discussed the schedule for meetings and events for next year (2024). Ian asked the question, "Do you want to schedule our observing sessions to a specific calendar day, or on the best time based on the new moon cycle?" The group consensus was to base our outings on the best times rather than hard dates.

There was an open discussion about alternative sites to Hampton Plantation for observing. It is a bit of a drive for those in Myrtle Beach. Playcard Environmental Learning Center near Loris is not bad. It is about 40 minutes from Carolina Forrest area. They have been very accommodating and provide a good place for learning outreaches. But the road nearby and the fact that it is not as dark as Hampton Plantation, make it less than ideal. The members attending were requested to seek out other potential dark sky sites closer to Myrtle Beach.

Astronomical events in 2024 include:

- o Mercury will appear in the evening sky from late January to early February and into March. It will show up as pink to the naked eye and is surprisingly bright. It too has phases like Venus.
- o There will be a Penumbral Lunar Eclipse on March 25. Not incredibly dark.
- o Of course, the Solar eclipse is April 8, crossing central Mexico, the US, and Canada. Ian polled to group to see if anyone was going to travel to see it. Most intended to.
- o Mars is going to be in opposition on January 15, 2025. It will be much smaller than the last opposition, in the range of 14 arc seconds. It will be higher in the sky with a declination of 25 which will be good for astrophotographers.

We will plan to hold a collimation workshop in the spring of 2024. Also planning an Imaging workshop. Maybe focus on the Orion Nebula. We are also planning a face-to-face social gathering in January. Watch the website for the date.

Ian gave an update on Hampton Plantation Dark sky status. They are having a difficult time meeting the demands of the International Dark Sky Association since they are a Historic Site and have to control access. They will continue to follow the dark sky rules and have dark sky events. Meanwhile, Ian and others will try to persuade the IDA to make some allowances for Hampton to get dark sky certified. The Lowcountry Stargazers are considering making their own dark sky designation apart from IDA.

There is also a search for other lands that might be dark sky suitable. Maybe wildlife preserves.

There is Hasty Point Plantation that became a part of the Waccamaw Reserve. It is over 1000 acres and is an ecotourism hub and now federally owned public land. It is on the Pee Dee River and a little beyond Brookgreen Gardens. Also, near Sandy Island. This would be worth investigating as a potential viewing site.

We will try again to do the Messier Marathon in March. This will be an all-night event at Hampton Plantation. They made allowance for us last year to do this, but cloudy weather prevented us from holding the event.

One of the members suggested we reach out to the astronomers in the Florence area to see if there are any dark sky sites south of them. There is an astronomy professor at Francis Marion University who comes this way for speaking events. Maybe contact her. It seems that we will have to drive a bit to get to dark sky sites.

The group shared new equipment they are using. Discussed dollies for bigger scopes. One member shared they built a wheeled platform for theirs. Works well and is stable. Will share some pictures and maybe an article for the newsletter. Discussed Tripod spreaders that push down to stabilize your tripod. This greatly dampens vibration. The company that was selling these is no longer, but people are building their own. Doesn't look too hard.

There was a discussion on photo processing and what programs to use. One member shared how they rented telescope time online to acquire images that they could practice on. Half the battle is acquiring images so this lets you do that easily so that you can practice with imaging processing. Renting time on telescopes across the internet allows you to get images even when conditions are bad at home. It doesn't cost too much either. The images taken by this method were shared with the group. They were very good.

No Club Business this month. Reminder: dues for 2024 membership are due in January. You can pay online or mail in a check. See our website for details.

Meeting adjourned!

January 2024 Calendar Of Celestial Events

<http://www.seasky.org/astronomy/astronomy-calendar-current.html>

January 3, 4 - Quadrantids Meteor Shower. The Quadrantids is an above average shower, with up to 40 meteors per hour at its peak. It is thought to be produced by dust grains left behind by an extinct comet known as 2003 EH1, which was discovered in 2003. The shower runs annually from January 1-5. It peaks this year on the night of the 3rd and morning of the 4th. The waning gibbous moon will block out some of the fainter meteors, but if you are patient this could still be a good show. Best viewing will be from a dark location after midnight. Meteors will radiate from the constellation Bootes, but can appear anywhere in the sky.

January 11 - New Moon. The Moon will be located on the same side of the Earth as the Sun and will not be visible in the night sky. This phase occurs at 11:59 UTC. This is the best time of the month to observe faint objects such as galaxies and star clusters because there is no moonlight to interfere.

January 12 - Mercury at Greatest Western Elongation. The planet Mercury reaches greatest western elongation of 23.5 degrees from the Sun. This is the best time to view Mercury since it will be at its highest point above the horizon in the morning sky. Look for the planet low in the eastern sky just before sunrise.

January 25 - Full Moon. The Moon will be located on the opposite side of the Earth as the Sun and its face will be fully illuminated. This phase occurs at 17:55 UTC. This full moon was known by early Native American tribes as the Wolf Moon because this was the time of year when hungry wolf packs howled outside their camps. This moon has also been known as the Old Moon and the Moon After Yule.

January 2024 Star Parties

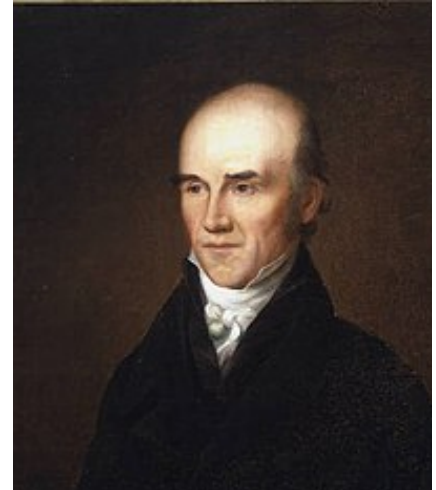
<http://www.seasky.org/astronomy/astronomy-events.html>

None scheduled for the month of January 2024.

The Caldwell Catalog

The Caldwell Catalogue is an astronomical catalog of 109 bright star clusters, nebulae, and galaxies for observation by amateur astronomers. The list was compiled by Sir Patrick Caldwell-Moore, better known as Patrick Moore, as a complement to the Messier Catalogue.

The Messier Catalogue is used frequently by amateur astronomers as a list of interesting deep-sky objects for observations, but Moore noted that the list did not include many of the sky's brightest deep-sky objects, including the Hyades, the Double Cluster (NGC 869 and NGC 884), and NGC 253. Moreover, Moore observed that the Messier Catalogue, which was compiled based on observations in the Northern Hemisphere, excluded bright deep-sky objects visible in the Southern Hemisphere such as Omega Centauri, Centaurus A, the Jewel Box, and 47 Tucanae.



Joseph Caldwell
1773-1835

In the 1980s, an Englishman named Sir Patrick Moore produced an additional list to highlight more cosmic wonders visible to amateur astronomers. Unlike the Messier catalog, which only features objects that were visible from Charles Messier's viewing location in Europe, Moore's Caldwell catalog includes celestial bodies that are found in both the northern and southern skies. The catalog consists of 46 star clusters, 35 galaxies, and 28 nebulae, or 109 objects in total. Moore intentionally avoided including any of the Messier objects in his catalog, hoping to expand his fellow amateur astronomers' cosmic horizons. From nearby clouds of gas and dust that are left over from dying stars to remote galaxies that formed billions of years ago, the Caldwell catalog is brimming with surprising celestial treats.

Telescope Live

Chris Taylor

I'd like to share my experiences with Telescope Live, an online space where amateur astronomers can explore the night sky and practice astrophotography through an online experience.

What's is the Telescope Live

Telescope live have ten telescopes in Spain, Chile and Australia covering both the Northern and Southern Hemispheres to facilitate image capture of celestial objects throughout the entire night sky.

With select packages, telescope's can be directed to capture objects for your individual rental, to include calibrated images with a variety of filters to include L-R-G-B, Ha, OIII and SII at any duration you select. At a cost.

For myself, the biggest benefit – the cheapest package which includes 5 credits per month. The credits can be used to collect calibrated images shared on a daily basis from various objects in the night sky. The shared data includes both a completed jpg file, and the original FITS's files at the individual wavelengths, or colors at that they were taken. These files allow the processing by yourself to compose a final astrophotography image. A collection of data for a one-click image could be valued at, say 0.6 credits, or perhaps 1.2 credits depending on the value that Telescope Live has ascribed to the data.

Astrophotography is the combination of a number of disciplines and while the acquisition of the data requires some technical application and sometimes expensive equipment, processing the data provides a learning curve all of its own.

Telescope live offers the ability to process data that someone has already captured, allowing one to focus on one of the disciplines: Image processing – enabling you to hone this skill in parallel to the learning curve with your telescope and imaging equipment, or just allowing you to learn image processing before you take the leap into the photography bit.. It also allows the continuation of the astrophotography during periods of poor weather.

Collecting the data ultimately builds a bank of data, which you can add to, to further improve previously processed images while also allowing you to revisit an object that you had previously processed after becoming more skilled over time.

Over the last couple of years I have collected 155GB of imaging of around 90 objects and continue to collect and process when we have poor spells of weather. It has made the capture and processing of my own images better.

Telescope live has an increasing telescope network and an ever increasing image archive, from which you can draw. It also has tutorials, to help you start processing, and to help you improve. The images are already calibrated, removing the work of dark frames, flat frames and bias frames by yourself.

Benefits include:

- Skill Boost During Rainy Days: Sharpen your astrophotography skills when the weather isn't playing nice.
- Progress at Your Own Pace: Make steady strides in image processing, no rush, no fuss.
- Explore different datasets and exercise your creativity.
- Master post-processing tools.
- Filter Fun and Techniques Trials: Experiment with filters and new processing tricks.
- Build a portfolio that tracks and showcases your journey.
- Join the Astronomical Chit-Chat: Connect with other enthusiasts.
- Training video's will help you to improve.

Pricing, Packages, and Discounts

Bronze Plan (\$4/month):

5 complementary credits/month

Upvoting and auto-grabbing future observations

Access to standard tutorials

Silver Plan (\$19/month after 1-week free trial):

20 complementary credits/month

Auto-grabbing and advanced requests

Access to premium tutorials and personal image archive

Gold Plan (\$49/month):

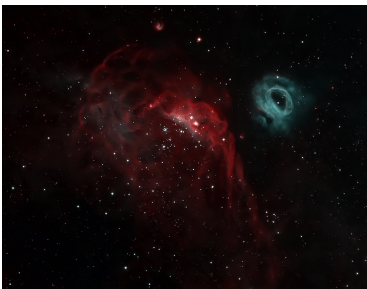
50 complementary credits/month
Upvoting for 15 future observations
20% discount on select observations
Telescope rental option

Platinum Plan (\$99/month):

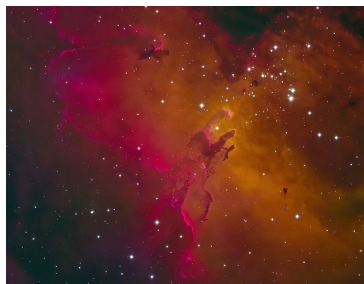
100 complementary credits/month
Upvoting for 30 future observations
25% discount on advanced requests
Telescope rental option

Diamond Plan (\$249/month):

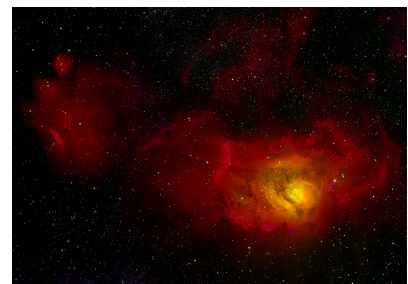
250 complementary credits/month
Unlimited auto-grabs
30% discount on advanced requests
Telescope rental option



2014 HOO Fin



M16 HOS All-Fin



M21 HOS AFF PSP_filtered

The New Home for Astrophotography and Remote Imaging | Telescope Live

Feel free to drop me a line if you need any further info!

Clear Skies

Chris

