# **ASTROGATOR**



# February 2025



### **Grand Strand Astronomers**

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

### Grand Strand Astronomer's Monthly Events:

General Membership Meeting: Thursday February 13, 2025@ 7:00 pm Meeting: VIA Zoom. Please see email or Facebook for link

Observing Sessions
Saturday March 1, 2025
Location: Hampton Plantation
Gates open @ 6:00 pm



Ben Abercromby provides a brief instructional course on what is in the night sky for tonight. After which the attendees went outside to find the items discussed.

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 a this time



Secretary Gerald Drake

> Social Media Coordinator Denise Wright

Photograph not available a this time



Newsletter Coordinator Tim Kelly

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# **Playcard Environment and Learning Center**

Photographer: Gerald/Ken Legal Place: 0729 SC-19, Loris, SC 29569

Ben Abercromby provides a brief instructional course on what is in the night sky for tonight.

## Call For Volunteers

Tim Kelly

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 previous articles on older issues for contributions for self written articles. See Tim's contributions for an example of non-written subject matter or from an article written 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 benefit to all members and non-members. Please send articles to t.m.kelly349@outlook.com

## **GSA Telescope Loaner Program**

Gerald Drake

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.

# **GSA Monthly Newsletter Articles**

Tim Kelly

This is our club and our newsletter. Lets help each topic to continue to grow.

Grand Strand Astronomer's is looking for individuals who would like to participate in submitting newsletter articles dealing with anything astronomy. We can not rely on the same four (4) members to write and send in articles month after month. New thoughts and ideas make for good reading and beneficial growth for the club and the public of the Greater Myrtle Beach area.

One member's simple advancement could just be what a newbie is looking for to get over a hurdle that has been impeding their progress forward. The expertise by many members can be a form of mentoring.

# **Grand Strand Astronomers - Membership**

Grand Strand Astronomer's had three new members for the month of November. GSA provides a large welcome to Paul LoGiudice and Ronald Mason. We hope you enjoy our club, which is in its infancy We have lots to learn and lots to teach. Grand Strand Astronomer's roster is now up to 32 members.

# **Grand Strand Astronomers Meeting - January 9, 2025**By Gerald Drake

Ian welcomed all to our first meeting of 2025. The meeting was lightly attended, but we had some great discussion. The planned outing with Playcard Environmental Learning Center in Loris looks to be a go. The weather looks good, and the skies are predicted to be clear. It will be cold. Ken Legal gave a presentation on the upcoming astronomical events for January. Briefly, they are as follows:

- Venus will be in elongation on the evening of the 9<sup>th</sup>. It will be 47 degrees east and set about 4 hours after sunset. On February 16, Venus will be at its greatest brilliance. It views as a crescent shape by then. By March, Venus will shift back to the mornings by March.
- Mars will be in opposition on January 16. It is not as prominent as in past oppositions, but still a good one. Ken shared a good diagram explaining opposition of planets. The next opposition of Mars will be in 2027. It too will not be as good as in past ones, but after that they will get better. Opposition for Mars occurs every two years.
- On Monday night, the moon will occult Mars.
- On the 17<sup>th</sup>, Venus and Saturn, will have a conjunction. They will be close to one another.

• From mid-January to mid-February, all 6 planets will be visible in the night sky.

This was followed by a discussion about planetary imaging since Mars is close. Suggesting starting small with a web cam. For software, there are a few suggestions such as Fire Capture, SharpCap, and AstroSurface for image processing. There is also a new free software called WaveSharp for image processing that is getting good reviews.

During our astrophotography discussion, Ian reminded everyone that Chris did a tutorial at one of our meetings on how to use AstroSurface. You can find it here: YouTube

You can try taking your old images through some of these newer programs to improve results. Telescope Live is a good source to get images so you can practice processing them. So you can practice astrophotography when the weather is bad.

Slooh is another online telescope service you can try. You can download their images to process on your own. They are a little more expensive. SharpCap's live stacking feature will take the video frames in and start filtering out the noise.

Hobcaw Barony is an historic sight we discussed at our last meeting. Ian reached out to them, and they are interested in holding an astronomy event in the spring. Will have to work out some logistical issues with access and close times, but it is dark with good horizons.

Ian hopes to have more formal presentations this year. We discussed doing some visual observing online where someone shares their telescope camera. Late March is a lunar eclipse. It will be late at night starting March 13 at around midnight and continue to 2:58 AM on March 14. This could be a good virtual event.

We'll continue our regular observing sessions at Hampton Plantation. Ken took some great images at our last outing there and shared with the group. He said he improved focus by using a Bahtinov mask and was able to image without auto-guiding. It truly is amazing how much better the images are when taken at a dark sky location like Hampton Plantation.

Discussion ended and meeting adjourned. We did not broadcast this meeting on YouTube.



## Public Outing at Playcard Environmental Learning Center with Grand Strand Astronomers

By: Gerald Drake Edited By Ken Legal



The Playcard Environmental Center fosters a specialized outdoor learning environment for students related to plants, animals and natural sciences. It is located at 10729 SC-19, Loris, SC 29569. Two years ago, we reached out to them when Denise, our outreach coordinator suggested they might be a good partner for astronomy outings.

Turns out they were doing astronomy education themselves and had a few telescopes at their facilities. We were able to do a couple of outings with them. Members of our club shared their telescopes and experience at Playcard's facilities. These were lightly attended.

On Thursday, January 16, 2025 we held our third outing with them and thanks to their excellent advertising our promoting, we had over 60 people come out and join with us in viewing the night sky.

Two of our members, Gerald and Ken, came out before sundown and set up telescopes. Ken has a 12.5" Newtonian and Gerald's has a 9.25" SC. We both got some great views. Gerald also brought a 90mm refractor that was was easy for the public to use. Playcard also set up three of their telescopes for people to try out.



Ben Abercromby, the facility director, presented a brief discussion of astronomy, what to expect, how to look in a telescope, how to use binoculars, and how to safely access the viewing area in the dark. Having a large crowd was new to us, but all went well. The picture only shows a small sample of the people attending. The classroom was full and people were standing outside the door.

My little 90 mm telescope got lots of use. I showed several younger people how to find objects with the finder scope or the Rigel Quick Finder and they took off finding them. One young person, whom I guess to be 6 years old or less, wanted me to show him how to use it. I did and pointed out where the Orion Nebula was with my laser pointer aimed to the sky. Less than 5 minutes later he came to me and wanted me to verify that he found. He did indeed. It was clearly in the eyepiece. He was so proud (I was proud for him). Hope he continues to be excited by astronomy. The 90 mm telescope had a 15mm eyepiece and the scope has a focal length of 900mm, so it was magnifying at 60x. That is pretty good for a small telescope.

I brought a small platform ladder for the smaller people to use to access the eyepiece on the CPC 9.25. This worked well because it provided a bar for them to grab onto. Most first timers instinctively grab the barrel of the eyepiece and hold on to it. Of course this throws off the tracking. Something you have to nicely remind people of at public events. I will continue to bring this little step ladder for public events since it worked



so well and helped with keeping hands off the eyepiece.

It was cold and the large crowd started thinning out by 7:00. The Playcard staff served hot cocoa which was a nice treat. By 8:00 everyone was pretty much gone, so we packed up. I was home by 9:00. All in all, it was a great evening. We really appreciated Ben and his staff for partnering with us for this event. I think the public got a good impression of what astronomy is about.

# February 2025 Has Some Interesting Events Happening In The Sky!

By:Tim Kelly

Here's a quick overview of key astronomical events:

- 1. Supermoon February 14

  There will be a Full Moon on February 14, and it will be a Supermoon, meaning it's closer to Earth than usual and may appear slightly larger and brighter in the sky.
- 2. Mercury at Greatest Eastern Elongation February 17
  Mercury will be at its greatest eastern elongation, meaning it will be as far away from the Sun as it gets in the evening sky. It will be visible just after sunset, low in the western sky, offering a good opportunity to spot this elusive planet.
- 3. Asteroid 4 Vesta at Opposition February 20
  The asteroid 4 Vesta will be at opposition, meaning it will be directly opposite the Sun in the sky, making it visible all night long. Vesta is one of the brightest asteroids and should be visible with binoculars or a small telescope.

#### 4. Meteor Showers

The Alpha Centaurid Meteor Shower: Peaking in early February, this isn't the biggest shower, but it's worth checking out if you're in a dark area. It's known for producing a few bright meteors.

### 5. Jupiter and Venus Conjunction - February 27

There will be a conjunction of Jupiter and Venus towards the end of the month. These two bright planets will appear close together in the sky, creating a beautiful sight in the western sky just after sunset.

That's the quick rundown of February 2025!
Are you planning on stargazing or maybe photographing any of these events?

# February Nights Can Be Fantastic For Photography By: Tim Kelly

Yes, February nights can be fantastic for capturing celestial events, especially since winter skies tend to be crisp and clear. Here are a few things you might want to look for or photograph in February:

### 1. Winter Constellations:

- Orion: One of the most iconic constellations visible in February, known for its distinct "belt" of three stars. It's great for both wide-field shots and close-ups.
- <u>Taurus:</u> Look for the Pleiades cluster (also known as the "Seven Sisters"), which can be a beautiful target for astrophotography.
- Canis Major: Home to the brightest star in the sky, Sirius, which makes for a striking focal point in images.

#### 2. The Moon:

If you're into lunar photography, the Moon will be a lovely subject. In February, it will go through its various phases, with the Full Moon on the 14th. The First Quarter around the 7th and Last Quarter on the 21st are also great times to capture more dramatic lighting on the lunar surface, especially along the terminator line (the dividing line between night and day on the Moon).

#### 3. Planets:

Depending on the year and your location, you may be able to spot planets like Mars, Venus, Jupiter, or Saturn in the early morning or evening sky. They tend to appear as bright, steady points of light and can make for great subjects if you have a telescope or a zoom lens.

### 4. Meteor Showers:

The Quadrantid meteor shower occurs in early January, but there may still be a few stragglers around in February, so it's worth keeping an eye on the sky for sporadic meteors.

## 5. The Milky Way:

If you're in a location with little light pollution, the Milky Way can still be captured in February, though it's lower in the sky. A wide-angle lens and a tripod will help you get great shots of the galaxy.

## 6. Aurora Borealis (Northern Lights):

If you're located in a northern latitude, February is one of the best months for catching the aurora. The long nights and cold temperatures often result in clear skies, making it an ideal time for aurora photography.

Make sure to check the weather, light pollution, and moon phase to get the best results, and enjoy your February stargazing! Would you like tips on how to photograph any specific object in the sky?

# A Great Time To Catch Sights of Some Comets

By: Tim Kelly

February can be a great time to catch sight of some comets, though visibility depends on where you are located and the specific comet's trajectory. Here are a couple of comets that might be visible in the February sky:

## • Comet C/2023 A3 (Tsuchinshan-ATLAS):

This is a newly discovered comet that's expected to make its closest approach to the Sun in February 2025, and it's expected to be visible through binoculars or small telescopes in some areas, especially in the Northern Hemisphere. However, it will be faint, so you'll need a clear, dark sky and might need to track its movement with the help of a comet tracker or apps like Stellarium.

#### • Comet C/2022 E3 (ZTF):

This is the most well-known comet of early 2025 and was visible earlier in the year, especially in January. By February, it will still be visible in the northern hemisphere, though it will be fainter. If you're interested in catching a view, the comet will likely appear near the horizon, so a good location with minimal light pollution is essential.

#### • Other Comets:

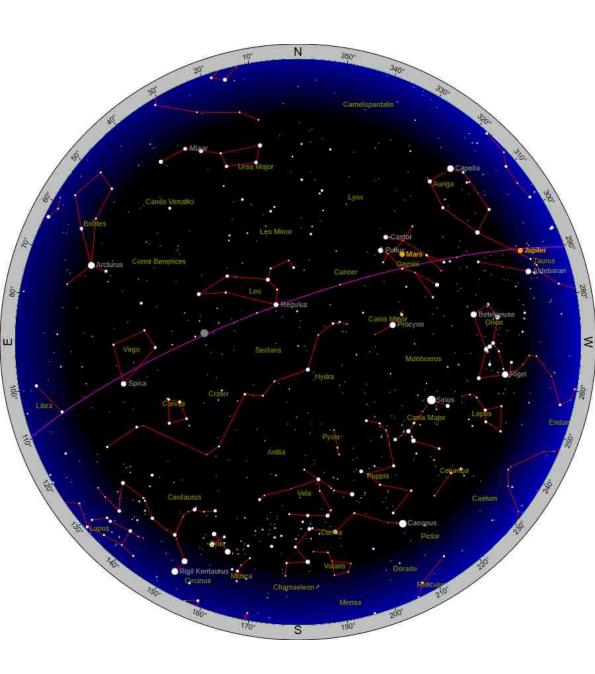
There are always other comets making their way through the solar system, but many are faint and require telescopes to spot. If you want to stay up-to-date on new discoveries or predictions for visible comets, websites like Sky & Telescope or Heavens-Above can give you real-time updates. For photographing comets, you'll need a sturdy tripod and a camera with manual settings, a wide-angle lens, and perhaps some longer exposure times, depending on the comet's brightness. Would you like tips on how to capture one of these comets, or more info about how to spot them?







Year Month Day Hour Minute 2025 February 15 00:00 0:0



Until next Month

Remember to always look up!