# **ASTROGATOR**



# March 2025



#### **Grand Strand Astronomers**

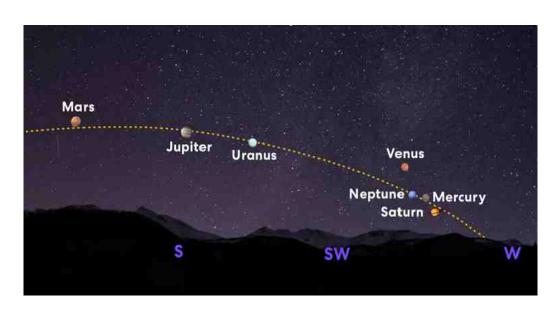
An Astronomical Journal of the Grand Strand Astronomers of the Greater Myrtle Beach Area GSA Founded on September 24, 2020

#### **Grand Strand Astronomer's Monthly Events:**

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

Observing Sessions:

Saturday March 1 & 29, 2025 Location: Hampton Plantation Gates open @ 6:00 pm



The Parade Of The Planets – February 28, 2025

**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

### Contents

Photograph of the Month	Page 3
Call for Volunteers	
GSA Membership	
GSA Loaner Telescope	
GSA Monthly Newsletter Articles	
Membership	
Parade of the Planets Photograph Information	
August 2024 Meeting Re Cap	
Parade of the Planets	
The Night Sky Is About To Light Up	
Heavens Above Sky Chart	

### Parade of the Planets

Photograph: Internet Place: Myrtle Beach, SC Date: February 28, 2025

Time:1900 hrs

Facing: Towards the West

### 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 membership did not pick up any new members for February.

### **Grand Strand Astronomers October Meeting Recap**

By Gerald Drake using ChatGPT to convert notes

Our monthly meeting was held on February 13, 2025 from 7:00 until 8:30. It was not broadcast on YouTube. Five members attended. Hoping for more to attend since the meetings are very informative and helpful for astronomers.

Ian opened the meeting and welcomed everyone. Looks like the spring cloud patterns have started early. We were rained out of the last event planed for Hobcaw Barony https://hobcawbarony.org. An alternative date of the 15th was planned, but it does not look good either. Our clubs next outing is March 1 at Hampton Plantation. This will be a Messer Marathon with other clubs joining. The purpose of the marathon is to find all 110 Messer Objects in one night. It is hard to do, but can be done. The park is allowing us to stay all night, but no campfires! A Messer Marathon is a busy night; you might be able to work in a 2-hour nap, but plan to be up all night. Ian has the Hampton Plantation skyline mapped to Stellarium so you can see if any objects are blocked by the tree line. Looks like the early objects M77 and M74 are high and above the tree line at 7:00PM. They'll not be super bright, but the altitude is good. The problem will be spotting the later objects at 6:10AM. M30 will be the last, and it doesn't pop up until 9:00 AM. You'll not see it by then, but you should be able to find most of the objects. M2, M72, M74 are not promising. Neither is M15. Still, you should be able to spot over 100 objects in one night, which is a great accomplishment. All amateur astronomers should try this at least once.

There is a lunar eclipse on March 13. It starts around midnight. This one should be reasonably dark and will be a good one to watch and image. It should produce a nice deep red moon which will be darker this year than the ones following.

In other news, there is a place in Texas that is Bortle 1 (very dark sky), and will let you set up a SeeStar or other remote imaging telescope for a small fee. See their website: <a href="https://starfront.space/">https://starfront.space/</a>

Meade (telescope manufacture) entire stock was purchased by Highpoint Scientific. They are selling these items at reduced rates. They claim everything works. They did not purchase copyrights, so Meade's will no longer be made after going out of business. You might find some great deals here: https://www.highpointscientific.com/meade-coronado-orion-sale

Seestar smart telescope is going strong **https://www.seestar.com**. There is talk of them coming out with an equatorial mode.

James Webb telescope is making discoveries that challenge conventional science. They have discovered what could be traces of the first stars which would be huge, massive hydrogen stars. Galaxy evolution theory says galaxies start small and build up, but what they are seeing through James Webb is some old galaxies that are much bigger and occur earlier than thought possible. 25% of the James Webb Telescope's time is dedicated to exoplanet discoveries. When an exoplanet is not in front of its star, light reflects off of it. They're hoping to spot green, because it does not occur anywhere else in the galaxy unless there is biology. When the exoplanet goes in front of its star, then James Webb can analyze the compounds in the planet's atmosphere. If there is industrialization like in our planet, that should show up. Using near infrared requires James Webb to cool down its sensor to near absolute zero. Some of it instruments are starting to see impact from heat. Question, if they can't see in infrared any longer, will the James Webb be of any use? Answer is yes, there will still be things it can do. The Hubble constant is a number that describes the rate at which the universe is expanding. James Webb discoveries are challenging some of these expansion rates. James Webb looks back in time. Astronomers are still trying to find out about early black hole growth. Seems when they get into a cluster of stars, they migrate to the center. The number of super massive black holes that occurred early is surprising. NASA has posted images taken by the James Webb telescope. You can see them at: https://www.nasa.gov/gallery/james-webb-space-telescope/

Ian will try to get a speaker on James Webb for a future meeting. Something like this could be shared in a joint meeting with other clubs as well. It would be good to hear from Patricia Craig, Ph.D. on the progress of the Mars sample return. Another possible speaker could discuss Pluto and other dwarf planets.

A question was asked about Planet X. Is that a real thing? The answer is yes! It is a hypothetical planet with a very elliptical orbit that may be the cause of observed disturbances in the Keiper Belt. The gravity of a large planet could explain these observations. It is also called Planet 9 and has been the subject of numerous papers. It is still very theoretical. But remember that Pluto was a theoretical planet until they found it. If it is there, it is very far out and very dark. At least 20 times father out than Neptune and 10 times the size of earth.

Ken shared a presentation called What's Up in the Sky. Briefly, here is what he covered:

- · Mars is fading
- Venus is brilliant
- Mercury will be appearing soon at dusk
- The Lunar eclipse is March 13/14th
- Four Planets will be visible in March
- Messier Marathon is March 1
- Even though Mars is past opposition, you can still get a good image of it. The next opposition of Mars is in February of 2027 (it happens about every two years). It will not be very optimal. The best ones will be 2033 and 2035.
- Mercury is visible February 26, but will be brightest on February 28. It is highest in the sky on March 7 at 18 degrees east of the sun. It will be visible to the naked eye, but even better with binoculars. It will have a pink hue. Once you see it, it will be like Wow!
- The lunar eclipse will begin at 11:57PM for penumbral, it will be partial by 1:03 AM, total by2:26 AM, max at 2:59, ends at 3:31 AM with the partial ending at 4:27 AM.
- Mercury, Venus, Jupiter, and Mars will be visible the first two weeks in March. Jupiter is near quadrature with lots of Galilean moon events. You will need binoculars as a minimum to spot Uranus.
- Did you know the Messier 110 was added to the list in 1967. The southern most Messier object is M7. Theoretically all 110 objects can be found in one night in early spring.

Ken shared lunar eclipse photos taken from May of 2022. Impressive. Taken with a 6" reflector. Ian shared some of his from November of 2022 which were great as well.

Looking forward to this year's lunar eclipse. Following was a discussion on how to image it and the equipment available. The Hyperstar addition to the C8 allows it to shoot at F2. Images taken through an achromatic refractor can be improved by using filters. Some astro cams can be purchased with built in filters. Newer companies are getting into the astro cam business and challenging the established one. Omega for one: <a href="https://getogma.com/">https://getogma.com/</a>

Discussed adding dolly wheels to heaver telescopes to so you can roll them out rather than lift them. Chris said he bought his at Harbor Freight. Worth checking out. https://www.harborfreight.com/3-wheel-steel-dolly-200-lb-capacity-59734.html

Hoping to see everyone at Hampton Plantation. Ian will work on getting speakers for future meetings.

Meeting adjourned.

### Parade of the Planets

Tim Kelly Notes Converted by ChatGPT

On February 28, 2025, a rare "parade of planets" will occur, featuring seven planets—Mercury, Venus, Mars, Jupiter, Saturn, Uranus, and Neptune appearing in alignment across the night sky. This event is notable because such an alignment won't occur again until 2040. **PEOPLE** 

### <u>Visibility and Timing:</u>

Mercury, Venus, Mars, Jupiter, and Saturn: These five planets will be visible to the naked eye. The best viewing time is shortly after sunset, around 6:00 to 7:00 PM local time.

Uranus and Neptune: These outer planets are not visible without optical aid. To observe them, you'll need a telescope.

#### Viewing Tips:

Location: Choose a location with a clear, unobstructed view of the western horizon, away from city lights, to enhance visibility.

Equipment: While the inner planets can be seen without any optical assistance, using binoculars or a telescope will provide a clearer view.

Weather: Check local weather forecasts to ensure clear skies on the evening of February 28.

#### Additional Information:

This planetary alignment is part of a series of alignments occurring throughout 2025. For instance, on April 15, Neptune, Mercury, Saturn, and Venus will align in the morning sky.

Given the rarity of such an alignment, especially involving Uranus and Neptune, this event presents a unique opportunity for both amateur and seasoned astronomers to observe multiple planets simultaneously.

# The Night Sky Is About To Light Up With Rare **Planetary Alignment**

The Event Coincides With A Moonless Sky.

By Ariana Garcia

A great alignment of all of Earth's planetary neighbors will soon take place in the night sky in a rare celestial show. The term "planetary alignment" is used to describe when several planets gather in a small area in the sky simultaneously, according to Star Walk. Just after sunset on Feb. 28, 2025, the planets Saturn, Mercury, Neptune, Venus, Uranus, Jupiter, and Mars, will line up in the sky in a so-called "planetary parade." The spectacle coincides with the new moon, meaning fainter objects in the sky will be easier to observe.

Four of the planets—Mercury, Venus, Jupiter, and Mars—will be easily visible to the naked eye, according to Star Walk. However, Uranus, Neptune, and Saturn will require a pair of binoculars or a small telescope to see.

Mars, which will appear as a reddish dot, will be the highest in the sky, located above the southern horizon in the constellation Gemini. Jupiter, the second brightest in the night sky, will be found a bit lower than the Red Planet, in the constellation Taurus. Uranus will be in the constellation Aries, near the border of Taurus.

Closer to the western horizon in the constellation Pisces, you'll find Venus, the brightest planet in the sky. Neptune, the faintest to see, will be nearby, just above the western horizon. Mercury will be even closer to the horizon in the constellation Aquarius, near the Sun. Saturn, which will be in Aquarius, will be the most difficult planet to see in this alignment as it will be located close to the Sun.

In January 2025, the planets Venus, Mars, Jupiter, Saturn, Uranus, and Neptune were all visible in the night sky. Mercury will join in late February. The last time all the planets aligned was on April 8, 2024. They were visible during the total solar eclipse.

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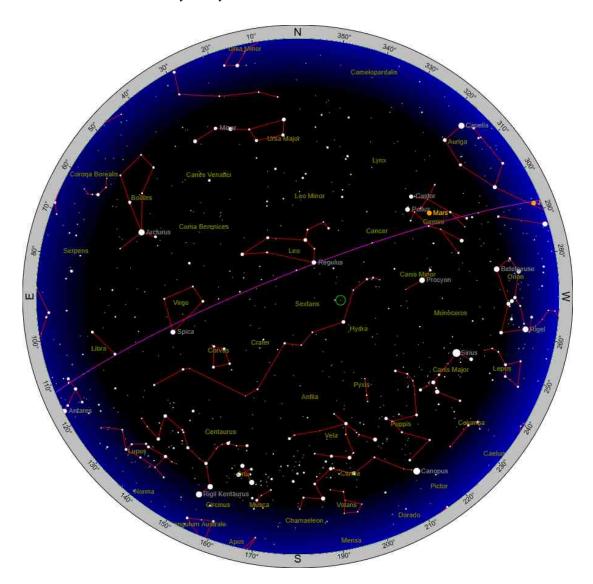
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Year: 2025 Month: February Day: 28 Hour: 00 Minute: 00



Until next Month

Remember to always look up!