

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT
RIVER ASTRONOMY CLUB

An Affiliate of the Astronomical League

Vol. 26, No. 3 March 2022

Officers: President, **Sean Neckel**; Vice President, **Aaron Calhoun**; Secretary / ALCOR **Mark Grizzaffi**; Treasurer, **Steve Hollander**; Board of Directors: **Dwight Harness, Felix Luciano, and George Ruff**; Program/Observing Coordinator: **Sean Neckel**; Facebook Coordinator: **Aaron Calhoun**; Webmaster: **Tom Moore**; Newsletter Editor: **Dawn Chappell**; NASA Contact: **Felix Luciano**

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Club Calendar:

FRAC Meeting: Thursday, March 10 in person at the UGA Garden and online on Zoom. Look for the invite in your email during the second week in March.

Public Observing Events:

Sprewell Bluff Park in Thomaston scheduled for Friday 3/11/22, with a weather date of 3/12/22.

FRAC Observing:

There is no club observing weekend in March. The next club observing weekend is Friday, April 1, and Saturday April 2, 2022, at Joe Kurz WMA, sunset until whenever.

Please keep checking your email for updates regarding club events.

Dues Reminder:

Club dues collection has started. Make your \$15 checks out to FRAC or Flint River Astronomy Club. Please send your dues to:
Steven Hollander
202 Wysteria Ct.
Peachtree City, GA 30269

Or contact Sean at stneckel@gmail.com to send by PayPal.

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President's Message:

Hello FRAC Members,
Our Scale Solar System Model committee met for the first time this past Thursday. George Ruff set out stakes at the UGA Garden, representing the 8 planets and Pluto. It was seeing this that really made me realize what a great project this is. The scale is really something to see with your own eyes, and to realize just HOW FAR away the outer planets really are.

Using an 8" diameter ball for the sun, the first 4 planets are just a few steps away, each the size of a pin head. Pluto was a third of a mile away, in the cart path underpass going under US41. Every inch represents 100,000 miles. It truly does drive home the scale of astronomical distance and size. I hope that you can attend the meeting this week and spend a little time walking along the path.

The committee decided to have the model set up for the Springfest at the Garden on May 1st. Right now, we have a pretty good 'rough draft', but there is more work to do. This will be a great opportunity to have our guests at the solar observing at the Garden see our efforts. Additionally, we decided to contact UGA to see if we could make a more permanent model.

I would like to personally thank George Ruff for sticking with this project, and finally getting it kicked off. It's been over 2 years since he first brought this to me, and I'm just happy that we are finally getting it off the ground.

If you would like to be part of the committee, help set up for May 1st, or help construct the permanent version, email me, and let me know.

Thanks,
Sean

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Astronomy Trivia:

1. What two planets in the solar system have no moons?
2. Which planet has the fastest rotation in the solar system?
3. Which planet is the densest in the solar system?

4. What is the third smallest planet in the solar system?
5. Name five dwarf planets in the solar system.
6. What's the name of the largest moon in the solar system?
7. What are the only four worlds in the solar system known to have volcanic activity?

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Previous Meetings/Activities:

FRAC Meeting - February 10, 2021 - 7:30pm on Zoom.

- 10 club members joined us on Zoom for our meeting: Sean and Chelsea Neckel, Dave Mandell, John Cruickshank, Dwight Harness, Alan Pryor, George Ruff, David Stone, Elaine Stachowiak, Mark Grizzaffi, and Bill Evans.
- We received a telescope donation from Bryan Peterson, who contacted the club in January. The scope is a Celestron 11" CPC1100 GPS (XLT). The hope is to have it at our upcoming observing event at Sprewell Bluff Park.
- Dwight Harness will contact Steven Ramsden to see if we have tax status to accept the donation and write a receipt for Mr. Peterson.
- All officers and board members were re-elected for 2022.
- Chelsea Neckel will be FRAC's interim webmaster until another volunteer is found.
- Dwight Harness is going to start looking for a location for our club observatory. If you would like to help him with this project, email him at rdharness@yahoo.com
- The Scale Model Solar System project had officially been kicked off. George Ruff will lead the committee, with Dawn Chappell, Katie Nagy, Elaine Stachowiak, and Sean Neckel participating. More to come on the project!

FRAC Observings:

The club observing weekend was clear and cold. The only person I know of that was out there was Mark Sutton on Friday night, who used his binoculars.

Public Observing Events:

No events were scheduled for February.

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Solar System Observing – March 2022

Mercury is close to the sun and not observable.

Venus is clearly visible in the morning sky starting about 2.5 hours before sunrise.

Earth is a great spot for a picnic.

Mars is visible low on the eastern horizon before dawn. It rises about 3 hours before the sun and reaches 16° above the horizon at sunrise.

Jupiter is behind the sun and not observable.

Saturn is close to the sun and not observable.

Uranus is visible with a telescope from just after sunset until about 11pm.

Neptune is close to the sun and not observable.

Moon: New: 3/2 FQ: 3/10 Full: 3/18 LQ: 3/24

New: 4/1

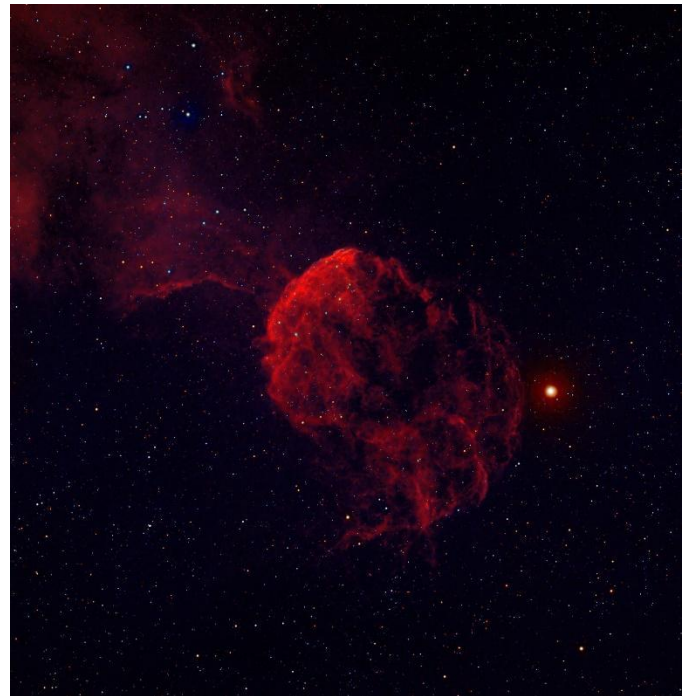
<https://in-the-sky.org/>

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Classifieds:

If you have something you would like to buy, sell, or trade, email the specifics, including your contact information to stneckel@gmail.com

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The Jellyfish Nebula – IC 443 - Courtesy of Alan Pryor.

The Jellyfish Nebula is a faint supernova remnant in the constellation of Gemini. It is also designated as IC 443 or Sharpless 2-248. It is almost overhead in February. To find it you could draw a line from Pollux to Aldebaran. Go 40% of the way from Pollux where you will see a 3rd magnitude star called Propus. Point your scope at Propus. The Jellyfish Nebula will be in your field of view if the

equipment and conditions are right. This nebula is very faint. It is probably 1500 times fainter than the Orion Nebula so you will need a 12 inch or 14-inch scope with an O-III filter and dark skies to see it.

The nebula is about 5,000 lightyears away, and the supernova that created it probably occurred over 3,000 years ago and some say even 30,000 years ago. There is also evidence that part of the nebula is the remnant of a second supernova from over 100,000 years ago. There is also evidence of a pulsar in the nebula, a rapidly spinning neutron star. The nebula has an angular size that is 50 arcminutes which is almost twice the angular size of the moon.

A full-sized photo can be seen at the following link:
[Jellyfish Nebula, IC443](#)

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Trivia Answers:

1. Mercury and Venus.
2. Jupiter. Its days are only 10 hours long.
3. Earth. A close second is Mercury.
4. Earth. (after Mercury, Mars, and Venus)
5. Pluto, Ceres, Makemake, Houmea, Eris. All but Ceres (asteroid belt) are in the Kuiper belt.
6. Ganymede (Jupiter's largest). Next is Titan (Saturn), then Callisto (Jupiter), and Io (Jupiter), all bigger than Earth's moon.
7. Earth, Venus, Io, and Triton

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