

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT
RIVER ASTRONOMY CLUB

An Affiliate of the Astronomical League

Vol. 27, No. 1 **January 2023**

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, January 12, 2023, 7:30pm at the UGA Gardens in Griffin. We will discuss officer nominations for 2023, field trip details, presentation possibilities for our meetings, and maybe have guests from the NPS to discuss their dark sky project.

Public Observing Events:

No public observing events are scheduled for January.

FRAC Observing Events:

Friday and Saturday nights, January 20-21, 2023 from sunset until whenever at Joe Kurz Wildlife Management Area.

Please keep checking your email for updates regarding club events.

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President's Message:

Hello FRAC Members,

I hope that you all had an enjoyable holiday season! The holidays were a learning experience for me. Here are a few things that I learned during my Colorado vacation over the holidays.

- Do not try to learn to snowboard at the age of 49. It does not go well.
- Never snowmobile alone. A single person cannot lift a snowmobile out of waist deep, powdery snow. I know they will not read this, but a big thanks to all the people who helped me get my sled unstuck and kept me from becoming a Sean-cicle.
- Sometimes just sitting around and enjoying a lazy day off is the best day ever!

On to club business. Coming up during the next couple of meetings, we will be discussing officer, and board positions in the club. I already have a couple of nominations and would appreciate getting some more. All positions are up for election each year, so if you want to contribute, please let me know. Elections will be held in February.

Additionally, we need a new observing coordinator. I have held the position for several years and will not be able to continue on this year. The job is relatively straightforward, and I will help to transition the responsibilities to whomever volunteers. This is a great way to expose our club to the public, and a very rewarding position.

Thanks,
Sean

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Club Projects:

Starry Skies South

The Starry Skies South meeting is on Thursday, January 5, at 8pm EST on Zoom. Link is below:

<https://uab.zoom.us/my/frizzle>

<https://www.starryskiessouth.org/>

FRAC T-Shirts

T-shirts are still available. They are \$20 at all future FRAC gatherings. They look great and make a fantastic holiday gift.

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Astronomy Trivia, Exoplanet Extravaganza:

1. When was the first exoplanet discovered?
2. How many confirmed exoplanets have been discovered?
3. What star hosts the closest exoplanets to Earth?
4. Which scientific instrument was used to detect carbon dioxide outside our solar system for the first time?
5. How many confirmed exomoons have been discovered?

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Previous Meetings/Activities:

December Events:

FRAC Meeting and Holiday Party - December 8, 2022 - 7:30pm at the UGA Gardens.

- 18 members attended our Holiday party at the UGA Gardens in Griffin. Sean and Chelsea Neckel, Alfred McClure, Carlos Flores, Wade and Carmen Simmons, Aaron Calhoun, Mark Sutton, David and Rosann Stone, Mark Grizzaffi, Nelson and Kathy Stephenson, George Ruff, John Cruickshank, and Ben, Steve, and Mercy Barker.
- The potluck dinner was the best yet. A huge thanks to everyone for bringing something to share with the group. If anyone left hungry it was their own fault.
- Thank you to Carlos Flores for handing out pocket knives to everyone.
- We had a fun and eventful gift exchange, which was coupled with an astronomy themed game of pictionary. Thank you to Chelsea for orchestrating the game and thank you to everyone who attended for sharing your artistic abilities!

FRAC Observings:

Christmas weekend was yet another extended observing weekend. I was out of town, and no one mentioned to me that they attended. If you did, I hope you had clear skies!

Public Observing Events:

No events were scheduled for December.

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Solar System Observing – January 2023

Mercury will become visible starting around January 20 in the morning sky, around 6am.

Venus is visible in the evening, starting around 6pm.

Earth made some New Year's resolutions it probably will not keep.

Mars just passed opposition and is visible from dusk until about 4am.

Jupiter is visible from dusk until just before midnight.

Saturn is visible around 6pm and sets just around 9pm.

Uranus is visible with a telescope at around 6:30pm until 2am.

Neptune is visible in a telescope starting around 6:30pm until midnight.

Moon: Full: 1/6 LQ:1/14 New: 1/21 FQ: 1/28

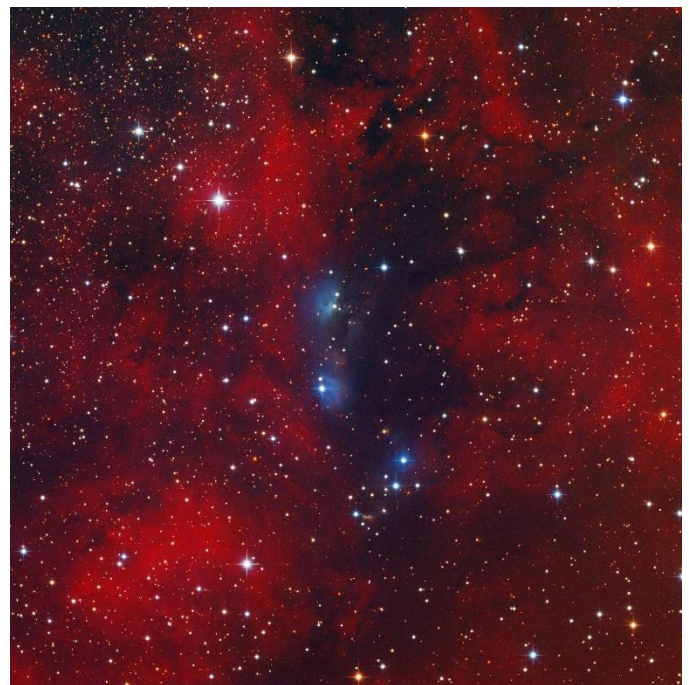
<https://in-the-sky.org/>

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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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NGC 6914, Courtesy of Alan Pryor.

This photo shows NGC 6914, two blue reflection nebulae, surrounded by a much larger emission nebula. Some dark nebulae are also present. Stars of the Milky Way show up as a nice background. The nebula is about 6,000 light-years away in the constellation of Cygnus. You will need about a 14-inch telescope to see the blue reflection nebula. You might also see the faint haze of the emission nebula that surrounds NGC 6914. Go about 1/3 of the distance from Sadir to Deneb in Cygnus, and you will be close to the nebula.

A full size image of NGC 6914 can be seen at [NGC 6914](#).



NGC 6791, Courtesy of Felix Luciano.

Details:

Telescope: AP 130GT @ FL819mm

Mount: MACH1 GTO, Berlebach Planet Tripod

Camera/Filters: ST8300M @ -10C, FW5, Baader 36mm RGB filters

Guider: OAG8300, ST-i guider

Exposures:

RGB: 15 subs per channel X 180 sec

From Wikipedia, the free encyclopedia:

“NGC 6791 is an open star cluster in the Lyra constellation. It was discovered by Friedrich August Theodor Winnecke in 1853. At roughly 8 billion years old, and with an iron to hydrogen abundance ratio that is more than twice that of the Sun, it is one of the oldest and most metal-rich clusters in the Milky Way. This is contrary to the typical rule-of-thumb where older means more metal-poor. Compounded with the fact that it has an unusually high population of stars, NGC 6791 is among the most studied clusters in the sky.”

The full size image is available at [NGC 6791](#).

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Trivia Answers:

1. 1988. It was not confirmed until 2002. The first confirmed exoplanet was discovered in 1992.
2. 5297 have been confirmed (as of January 2023), and there are thousands of other candidate detections that need further observation.
3. Proxima Centauri, 4.2 light years from Earth, has 2 confirmed exoplanets and one candidate.
4. The James Webb Space Telescope detected CO2 on exoplanet WASP-39, a gas giant, using spectroscopy. The discovery was announced in August 2022.
5. Zero. However, there are several unconfirmed candidates.

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