

THE FLINT RIVER OBSERVER

NEWSLETTER OF THE FLINT
RIVER ASTRONOMY CLUB

An Affiliate of the Astronomical League

Vol. 24, No. 8 **October 2020**

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, October 8, 2020, 7:30pm on Zoom. Dr. Richard Schmude will be giving a presentation on observing afternoon clouds on Mars.

A meeting invitation will be sent out in early October. If you do not get an invite to the meeting, please email me at stneckel@gmail.com and I will reply.

FRAC Observing: Club observing weekend, Friday and Saturday, October 16-17, 2020 at Joe Kurz WMA, sunset until whenever.

Astronomy in the Park: Saturday, October 10, 2020 at High Falls State Park. Status is TBD, watch your email for updates.

Please keep checking your email for updates regarding club events

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Trivia:

1. What was the first probe to land on Venus?
2. How many earth days does it take for Mercury to circle the Sun?
3. Who described the rings of Saturn as “ears of a teacup”?
4. What is the “disk” that encircles a black hole called?
5. The planets make up what percentage of the mass in our solar system?

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President’s Message:

Hello FRAC Members,

We are looking for ideas for presentations and programs for our club meetings. This is your club, and we appreciate you sharing your input and experiences. If you have an idea about a presentation, or would like to present something yourself, please let me know.

A presentation does not have to be formal, nor does it have to be an elaborate PowerPoint! It can just be you, sharing your experiences related to astronomy. Show us your sketchbooks or observation records. Tell us how you got your latest observing program pin. Show us your best tricks and tips for setting up or maintaining your equipment. Give everyone a look at your latest astronomy purchase.

It can be any length of time and in any format you feel appropriate. If you have ideas and would like some suggestions about how to present them to our fellow club members, let me know. I’ve given more presentations than I can remember, so I likely could help jump-start the process.

Let us all hear what you have to say!!

Sean

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Aaron's Astronomy Facts:**The Crab Nebula (M1)**

The Crab Nebula is the remnant of a star that went supernova. The light from the supernova was seen in 1054 AD. When it was seen it was 4 times brighter than Venus, seen in daylight for 23 days, and at night for 653 days. The nebula was discovered by John Bevis in 1731, and rediscovered by Charles Messier in 1758.

The nebula can be seen 1 degree NW of Zeta Taurus. It appears as a gray patch in a telescope. The size of the nebula is 13 by 11 light years. The nebula is expanding 1500 km/sec!

A pulsar, a spinning neutron star, the core of the dead star is at the center of the nebula. This pulsar spins 30 times a second.

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Previous Meetings/Activities:

FRAC Meeting - September 10, 2020 - 6:45pm on zoom.us

- This month we held 2 Zoom meetings. The first was a presentation by Tom Fields of R-Spec on astrospectography. 15 Members attended from FRAC, as well as guests from a number of other local astronomy clubs. FRAC members in attendance were: Sean, Chelsea, Isabelle, and Gianna Neckel, Erik Erickson, Steve Hollander, Bill Evans, Steve Barton, Doyne Tallman (new member), Tom Moore, Katie Nagy, Alan Pryor, George Ruff, Felix Luciano, and Mark Grizzaffi.
- Our second Zoom meeting that same night was for our club only. It was a short meeting to discuss club business. Members in attendance were: Sean Neckel, Bill Evans, Felix Luciano, Tom Moore, Katie Nagy, George Ruff, Mark Grizzaffi, Doyne Tallman, and Erik Erikson.

FRAC Observing: Club observing September 18-19 was a bust thanks to the weather. Better luck next month!

Girl Scout Camporee at Camp Meriwether on September 11, 2020 was cancelled due to concerns about COVID-19

Astronomy in the Park at High Falls State Park on September 12, 2020 was cancelled due to concerns about COVID-19.

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Solar System Observing – October 2020

Mercury will be visible in the evening sky early in October. Greatest eastward elongation is 10/1. Inferior conjunction is 10/25.

Venus Visible to the east in the early morning sky all month.

Earth is mostly harmless.

Mars rises just after sunset all month, visible until dawn. Opposition is 10/13.

Jupiter will be visible until midnight all month.

Saturn will be visible until around 1am all month.

Uranus is visible with a telescope all night until sunrise. Opposition is 10/31.

Neptune is visible with a telescope all night until sunrise.

Moon: Full: 10/1 LQ 10/9 New: 10/16 FQ: 10/23
<https://in-the-sky.org/>

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Classifieds:

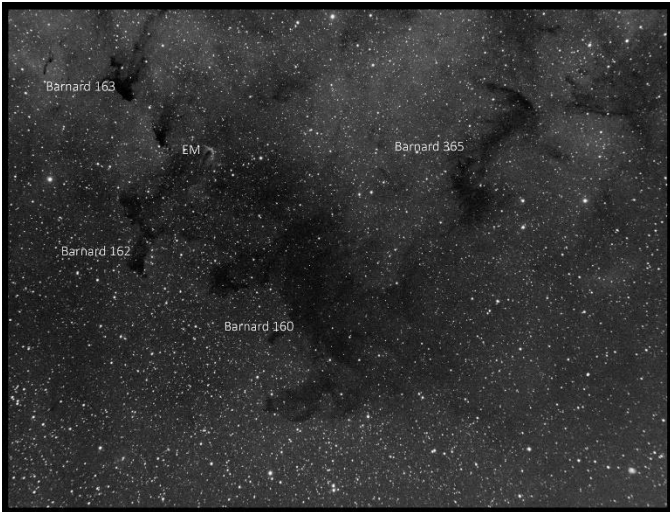
Astronomy books for sale:

- Hidden Treasures by Stephen James O'Meara - \$25.00
- Introduction to Observing and Photographing the Solar System - Dobbins, Parker, Capen - \$20.00
- Build Your Own Telescope by Richard Berry - \$20.00

Contact Felix Luciano, montb02@yahoo.com

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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Barnard objects near Cepheus. Taken by Felix Luciano

Here is my latest image (Sept 6-7, 2020) from the old backyard, under heavy light pollution and consequently imaging only in Ha.

I wanted to try imaging some of those Barnard objects in Ha, (I am a huge fan of those dark nebulas). Barnard 160 is located in the constellation of Cepheus, very close to the Elephant Trunk Nebula. The objects were located just right for an extended imaging run.

You can find several Barnard objects within the image. I like the outline, shape of Bar 160 and Bar 365. I just wonder what there might be behind those dark gas and dust clouds!

Image details: 92mm telescope @ FL612mm.
MACH1 mount. SBIG ST8300 mono ccd camera @ -10C, guided. Exposures using the Ha filter (7nm), 8 Ha subs X 900 secs each exposure

The full size photo is located here:
<https://www.flickr.com/photos/30165660@N03/50342697403/in/dateposted-public/lightbox/>

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Trivia Answers:

1. Venera 9
2. 88
3. Galileo
4. Accretion Disk
5. 0.135% (The Sun accounts for 99.86%, other factors, include satellites (.00004%) and comets (.00003%)).

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