

The Focal Point

The Atlanta Astronomy Club
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Editor: Tom Faber

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Charlie Elliott January Meeting and Observing

Join us at 4 p.m., Saturday, January 13, at the next gathering of the Charlie Elliott Astronomy Club at the Charlie Elliott Wildlife Center Campbell Aquatics Building as we embark on a celestial journey guided by Atlanta area astronomer Dennis Ruzeski's unwavering curiosity and his lifelong commitment to the stars.

His presentation, "The Basics of Astro-Imaging Techniques", is geared to those just starting out in this activity and will include a short tour of image scale, apochromatic design, sensor technology and the importance of proper backspace and why they are more and sometimes less important to your image quality than you think!

Dennis is a name synonymous with the vast expanse of the cosmos. For over four decades, he has been captivated by the wonders of the night sky. Hailing from the picturesque city of Buffalo, New York, Dennis has nurtured his celestial passion while pursuing a successful career in the world of technology. With a keen eye on the heavens and a deep love for all things astronomical, Dennis brings a wealth of knowledge and enthusiasm to our astronomy club. His dedication to exploring the mysteries of the universe, combined with his technical expertise, makes him an invaluable member of our community.

Besides his main presentation, Dennis will also provide a sky tour on what you can expect to see in the night sky in January and into February.

Following the meeting — and weather permitting — all are invited to the nearby Jon Wood Astronomy Field where club members and the public are invited to set up their scopes and observe. Even those without scopes are invited to peer through what's available for ideas on what they may get in the future.

Continued on next page



January Meeting Cancelled

Due to being unable to find a meeting location for the January AAC meeting, we have had to cancel it. Hopefully we will have a location available for a meeting in February. Check the February *Focal Point* and the web site for updates.

AAC December Holiday Potluck

Photos by Tom Faber

The Atlanta Astronomy Club held its Christmas/Holiday potluck dinner on Saturday, December 9th, at the Atlanta Freethought Society Building. The dinner started at 6:00PM. About 15 AAC members and guests were present. The AAC provided ham, bread, coffee, and other drinks. The guests brought a number of tasty side dishes and desserts. Here are some photos.



Continued on next page.

Directions:

Head south through Mansfield on Hwy 11, Turn left off Hwy 11 onto Marben Farm Road, Pass Elliott Trail (on your right). Turn right slightly further up the road onto Murder Creek Church Rd, Proceed to the Aquatic Center; parking is adjacent to the building.

A few items to note:

Plan to treat this outing like you would a camping trip and be prepared. Dress appropriately for the weather and the environment, bring snacks and drinks if needed, and plan to take your trash with you.

There is a regularly serviced Porta-Potty on the field.

The main gate on Elliott Trail closes to new entry by vehicle at 7 p.m., but will automatically open for exiting traffic at all times. If you are not a member and plan to arrive after 7 p.m., please make arrangements with a club member for access at least a day in advance.

Please refrain from using white light on the field. Red headlamps are cheap and easy to find at your favorite store. They're even cheaper to make with a spare flashlight and red nail-polish on the lens.

For more information about Charlie Elliott Wildlife Center, please visit the Charlie Elliott website.

<https://georgiawildlife.com/charlie-elliott-wildlife-center>

Observing on the Jon Wood Astronomy Field

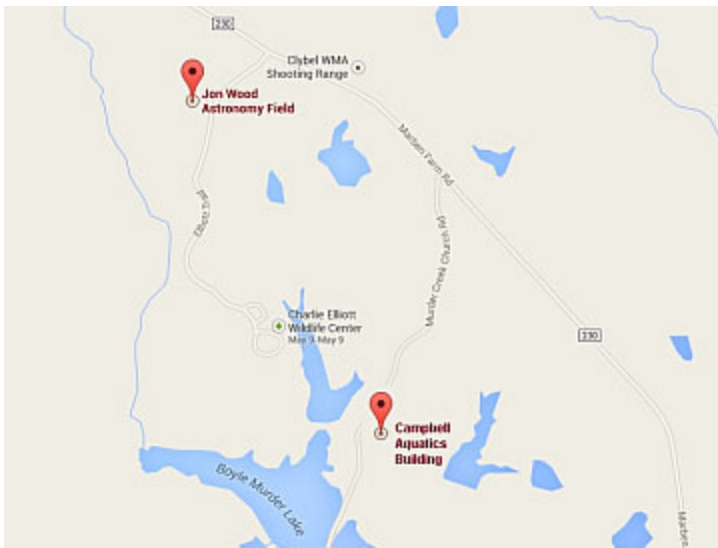
Please refrain from using white lights on the observing field to preserve night vision. Red lights are readily available at department and sporting goods stores in the Atlanta area. As stated above all are invited; however, to bring their own telescopes or binoculars or at least their interest in astronomy. For more information about Charlie Elliott Wildlife Center, visit: <https://georgiawildlife.com/charlie-elliott-wildlife-center>

Our Monthly Meetings and Public Observing Nights

Our monthly meetings and public observing nights are free and open to the public. Visit the "Our Calendar" tab at the top of the page for our 2023 meeting, observing, and outreach schedule. Start times vary through the year so please check back for details. View our Full Calendar of all meetings & outreach events here:

<http://ceastronomy.org/blog/outreach/charlie-elliott-astronomy-calendar>

It's easy to become a member of Charlie Elliott Astronomy! Pay dues with PayPal here: <http://atlantaastronomy.org/membership/>



Credit: Google Maps





Nebula IC 405 in Auriga by Richard Jakiel

This image shows the beautiful nebula IC 405 in Auriga. It is often called the Flaming Star Nebula, and it's a combination of emission (red) and reflection (blue) nebulae. This image was made using an 11-inch RASA telescope.

For more information see: https://en.wikipedia.org/wiki/IC_405

Image on Next Page: The Orion Nebula by Amy Little

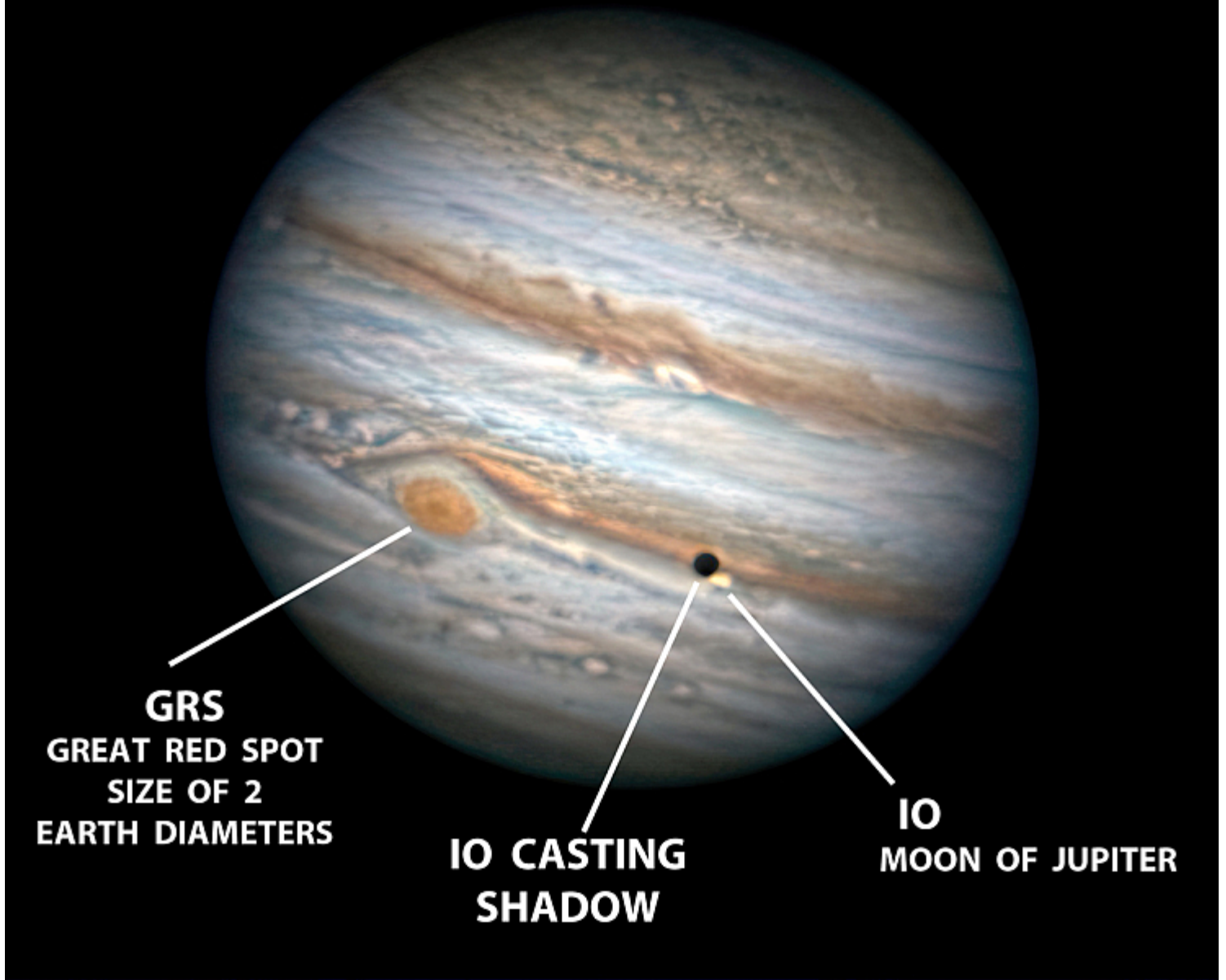
Amy collected data for this image of M42 during multiple nights and at multiple sites during October and November 2023. Amy reports that her “biggest issue was data set involved different rotations so I lost a lot of the image when it star aligned. I am really looking forward to when ZWO either makes a rotator, or will allow other brand rotators work with the ASI Air Plus. I love the unit, but miss my Nitecrawler.”

Image details: 45, 300 sec images, 30, 180 sec images, 30, 30 sec images. Processed with PixInsight, Photoshop and OnOne Effects.

Equipment details: Stellarvue Triplet Apo SVX80T-3SV (borrowed from a generous friend), ZWO ASI Air Plus, ZWO EAF, ZWO ASI 294MC Cool camera, ZWO mini guide scope with ASI120mms camera, Losmandy G811 Mount.



Amy Astro 
ASTROPHOTOGRAPHER



Jupiter with Io Transit and Shadow by Dan Llewellyn

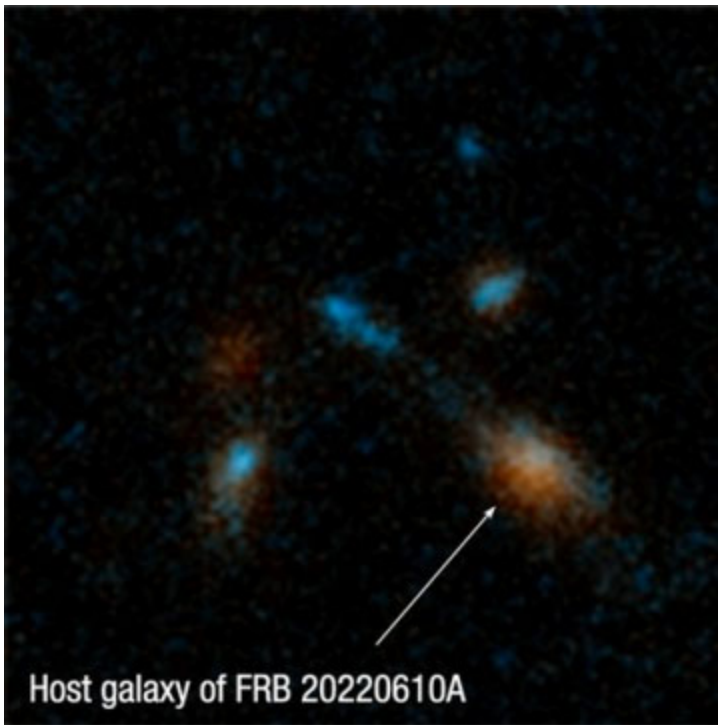
Seeing stabilized after about an hour trying to get this Io shadow transit on Jupiter with the GRS showing. Taken November 5th, 2023 with a C-14.



The Andromeda Galaxy (M31) and companions by Clay Turner

This is a stack of 150 by 30 seconds. Telescope is a RASA 11 V1. Camera is a ZWO ASI 2400 MC Pro OSC. Mount is a Celestron CGX. Capture is with NINA and PhD Guiding. Processing is with PixInsight.

For more about the Andromeda Galaxy see: https://en.wikipedia.org/wiki/Andromeda_Galaxy



Atlanta Astronomy Club Online

While this newsletter is the official information source for the Atlanta Astronomy Club, it is only up to date the day it is posted. So if you want more up to date information, go to our club's website. The website contains pictures, directions, membership applications, events, updates, and other information. <http://www.atlantaastronomy.org> You can also follow the AAC on Facebook by joining the AAC group, and on Twitter at <http://twitter.com/atlaastro>.

Enigmatic Flash of Energy Comes from Merging Galaxies

To the naked-eye, the sky looks deceptively quiet. But to radio astronomers there are powerful bursts of energy that pop off all over the sky like camera flashes at a stadium performance. The gusher of radiation released can briefly outshine an entire galaxy. The blasts come and go so fast, winking out in less than a couple seconds, they've earned the name fast radio bursts (FRBs). Though the triggering mechanism is unknown, it must involve extreme physics, perhaps the collision of black holes or neutron stars. They are hard to pin down. Astronomers using Hubble had to peer halfway back to the big bang to find the location of the farthest and brightest FRB to date. It exploded amongst a compact group of several early galaxies that may be in the process of merging. Coincidence or clue? Finding an FRB in a weird place may help astronomers unravel their mystery. Credit: NASA, ESA, STScI, Alexa Gordon (Northwestern)

See: <https://hubblesite.org/contents/news-releases/2024/news-2024-001>

The **Atlanta Astronomy Club, Inc.**, one of the South's largest and oldest astronomical society, meets at **3:00 P.M.** on the 3rd Saturday of each month at the Fernbank Science Center in Decatur, or occasionally at other locations or times. Membership fees are **\$30** for a family or single person membership. College Students membership fee is **\$15**. These fees are for a one year membership.

Magazine subscriptions to *Sky & Telescope* or *Astronomy* can be purchased through the club for a reduced rate. The fees are **\$33** for Sky & Telescope and **\$34** for Astronomy. Renewal forms will be sent to you by the magazines. Send the renewal form along with your check to the Atlanta Astronomy Club treasurer.

The Club address: Atlanta Astronomy Club, Inc., P.O. Box 76155, Atlanta, GA 30358-1155. AAC Web Page: <http://www.AtlantaAstronomy.org>. Send suggestions, comments, or ideas about the website to webmaster@AtlantaAstronomy.org. Also send information on upcoming observing events, meetings, and other events to the webmaster.

AAC Officers and Contacts

President: David Lumpkin President@AtlantaAstronomy.org
Program Chair: Open Programs@AtlantaAstronomy.org
Observing Chair: Daniel Herron Observing@AtlantaAstronomy.org
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Board: Brigitte Fessele, bhfessele1@gmail.com
Board: Open
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Elliott Astrophotography Coordinator: Mike Mardis
Elliott Chapter AL Liaison: David Whalen
Elliott Facilities Coordinator: Matt Harvey
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Georgia Astronomy in State Parks: Sharon Carruthers
Treasurer@AtlantaAstronomy.org
PSSG Chairman: Peter Macumber pmacumber@nightsky.org
PSSG Co-Chair: Open
Sidewalk Astronomy: Open
sidewalkastronomy@AtlantaAstronomy.org
Light Tresspass: Ken Edwards, Contact info TBA
Woodruff Observ. Coordinator: Sharon Carruthers
Treasurer@AtlantaAstronomy.org
AAC Webmaster: Daniel Herron

Calendar by Tom Faber (Times EDT/EST unless noted)

AAC Events are listed in BOLD

- Jan 2nd, Tuesday: Earth at Perihelion.
- Jan 3rd, Wednesday: Moon Last Quarter. Quadrantids Meteor Shower peaks tonight.
- Jan 4th, Thursday: Latest Sunrise in Atlanta: ~7:42 AM.
- Jan 8th, Monday: Moon near Antares and Venus morning.
- Jan 9th, Tuesday: Moon near Mercury morning.
- Jan 11th, Thursday: New Moon.
- Jan 12th, Friday: Mercury greatest morning elongation.
- Jan 13th, Saturday: **CE Chapter Meeting, 4 PM.**
- Jan 17th, Wednesday: Moon First Quarter.
- Jan 18th, Thursday: Moon near Jupiter.
- Jan 25th, Thursday: Full Moon.
- Jan 27th, Saturday: Conjunction Mercury and Mars morning.
- Feb 2nd, Friday: Moon Last Quarter.
- Feb 9th, Friday: New Moon.
- Feb 16th, Friday: Moon First Quarter.
- Feb 24th, Saturday: Full Moon.
- Feb 28th, Wednesday: Mercury at Superior Conjunction.
- Feb 29th, Thursday: Leap Year Day.
- Mar 4th, Monday: Moon Last Quarter.
- Mar 10th, Sunday: New Moon. Daylight Saving Time begins 2 AM.
- Mar 16th, Saturday: Moon First Quarter.
- Mar 25th, Monday: Full Moon. Penumbral Eclipse Start: 12:53AM, Max at 3:13AM, End: 5:32AM

For more event listings and updates see the calendar at www.atlantaastronomy.org

Atlanta Astronomy Club Listserv

Because of the shutdown of Yahoo Groups, the Atlanta Astronomy Club Mailing List has been moved to IO Groups. You can visit the group, start reading messages and posting them here: <https://groups.io/g/AtlantaAstronomyClub>.

Focal Point Deadline and Submission Information

Please send articles, pictures, and drawings in electronic format on anything astronomy, space, or sky related to Tom Faber at focalpoint@atlantaastronomy.org. Please send images separate from articles, not embedded in them. Articles are preferred as plain text files with images separate but Word documents or PDFs are okay. **The deadline for February is Sunday, January 28. Submissions received after the deadline will go in the following issue.**



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www.atlantaastronomy.org
On Twitter at <http://twitter.com/atlastro>

We're here to help! Here's how to reach us:

Newsletter of The Atlanta Astronomy Club, Inc.

