

# The Focal Point

The Atlanta Astronomy Club  
Established 1947  
October 2015

Vol. 28 No. 5

Editor: Tom Faber

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*The Deerlick Astronomy Village, located about 100 miles east of Atlanta and 50 miles west of Augusta, has some of the darkest skies in the state.*

## No October General Meeting

There will be no general meeting in October due to the Peach State Star Gaze. Please join us on Saturday November 14 at 3 PM at the Fernbank Science Center for the next general meeting of the Atlanta Astronomy Club.

## The 2015 Peach State Star Gaze

Mark your calendars for the 2015 Peach State Star Gaze which is scheduled for Sunday October 11 through Sunday October 18 at the Deerlick Astronomy Village! Our keynote speaker will be Rod Mollise. "Uncle" Rod Mollise, is a Contributing Editor at Sky and Telescope magazine, and is familiar to amateur astronomers as the author of numerous books and magazine articles on every aspect of astronomy, amateur and professional.

Friday will feature several talks on planetary imaging. Here is the tentative schedule, subject to change:

12:00PM Rich Jakiel - One Hour plus overtime - Traditional & modified DSLR Astro Imaging

1:30PM Dan Llewellyn - 45 minutes - The New Sony DSLR Revolution for Deep Sky and Planetary

2:30PM Dan Llewellyn - one hour plus overtime - One shot color Planetary Imaging / Understanding Astro Imaging

4:00PM Alan Coffelt - 45 minutes - Atmospheric Dispersion Correctors and the coming Mars Apparition

5:00PM Panel Discussion - 30-45 minutes - (all 3 speakers above) Ask any Astro Imaging question - How to get started, what to avoid, how do I use my current setup. The panel will also give brief opinions and advice on beginning, intermediate and advanced imaging - equipment and software.

Stay tuned to upcoming issues of the *Focal Point* and the AAC web sites for details on the talks, speakers, and other activities that will be held during the Star Gaze. And of course there will be lots of observing under some of the darkest skies in Georgia. The new moon occurs on Tuesday, October 13. Micki's Kitchen is also scheduled to return with meals, sandwiches, hot coffee and hot chocolate and other drinks, and her famous brownies! See you there!



*The AAC field at the DAV during the 2013 PSSG - Photo by Tom Faber.*



*The AAC field starts to fill up during the 2014 PSSG - Photo by Tom Faber.*

# September AAC General Meeting Report

Photos by Tom Faber.

September's general meeting was on Saturday, September 12th starting at 3PM at the Fernbank Science Center. There were about 50 members and guests present for the meeting. Our featured speaker was Chap Percival. He is a lifelong educator with a passion for sharing his knowledge of astronomy. Chap presented a very interesting and informative talk about the upcoming total solar eclipse on Monday, August 21, 2017. This is THE eclipse for the United States! The land portion of the path of totality is completely contained in the continental United States. Chap talked about how to see the eclipse, where to go to be in the path of totality, and what to look for and expect to see during the eclipse. Chap showed photos he had taken from previous eclipses. He has also written a book about how to see the eclipse and how it can be a teachable moment for children. His

book is titled "Go See The Eclipse: And Take a Kid with You" (ISBN-13: 978-0986197529).

After the talk, there were club announcements about upcoming events and an invitation to join the club for guests who are interested. For future speaker programs and upcoming club event details and observing programs, see the club calendar or visit the club's Facebook page at <https://www.facebook.com/AtlantaAstronomy>.





## From the President's Desk

Our peak season for public stargaze events is upon us! Please keep an eye on our calendar of events and volunteer whenever possible. You don't need to be a rocket scientist and you don't even need a telescope. Most people don't know the difference between Astronomy & Astrology. If you can just answer some very basic questions, that's more than enough to be a big help. The kids are the most enthusiastic questioners and you will get a great feeling of satisfaction knowing that you have encouraged our next generation of great Astronomers, Astronauts, Scientists, and Engineers.

**Telescope Buyers Program:** We will be having our annual "How to Buy a Telescope" program again this year at Fernbank. The program will be on Nov. 21st at 3:00PM. If you know of anyone considering buying a telescope as a gift for the upcoming holiday season, please send them our way.

### Help wanted:

Our Astronomical League coordinator, Jamie Anderson, is moving out of the area and we need someone to take over this important function. The position involves working with the Observing Awards program. You will handle the verification of observations and submit the proper documentation to the Astronomical League. The best part is when you get to give the Awards at the Club meetings. Please contact me if interested at [president@atlantaastronomy.org](mailto:president@atlantaastronomy.org).

### Help wanted:

We need a publicity Chairperson. Someone who can handle publicity for the club's numerous events and activities on all forms of media. We need traditional press releases going to radio, TV, and newspapers. We also need to have a strong presence on Meetup, Facebook, Twitter & various web sites. If interested please contact me at [president@Atlantaastronomy.org](mailto:president@Atlantaastronomy.org).

Mark Banks, AAC President

## The September Charlie Elliott Meeting

By Valorie Whalen, Charlie Elliott Chapter Recording Secretary

All photos by Maria Zorka

The quarterly potluck dinner meeting was held on September 19th in the Campbell Aquatic Center Building at the Charlie Elliott Wildlife Management property in Mansfield, Georgia. There were twenty-two members and guests in attendance.

Marie Lott, Interim Co-Director of the club, called the meeting to order. After the dinner, she chaired the business discussion of the meeting which included the formal election of the new officers/board members for the



club. The slate of officers put forward for the remainder of the 2015/2016 year are: Jack Fitzmier, Club Director; David Whalen, Observing Supervisor; and Valorie Whalen, Recording Secretary. Marie called for a vote for the new slate of officers. All members present voted in the affirmative. There were no dissenting votes. The new officers/board members shall hold these positions until May 31, 2016.

Also discussed was the appointment of chairpersons to various committee posts. The following list shows the club members who have volunteered to assist by leading these committees:

Outreach Coordinators: Theo Ramakers and Dan Thoman

Facilities Manager: Dan Thoman

Programming Coordinator: Marie Lott

Astronomical League Coordinator: Jack Fitzmier

Astrophotography Picture of the Month Coordinators: Van Macatee and Rich Jakiel

Potluck & Hospitality Coordinator: POSITION OPEN - If you are interested in helping out with a position, please contact any of the officers to volunteer. Any and all help is appreciated!

*Continued on next page*



Marie also noted the following upcoming events:

CE Meeting: October 10th at 5:00 p.m. in the Campbell Aquatic Building. The Speaker will be David Yenerall regarding the The Gemini Observatory in Chile.

Peach State Star Gaze: October 11th through 19th

CE Meeting: November 14th at 3:30 p.m. in the Shepherd Conference Room. The Speaker will be Daniel Herron regarding The International Space Station.

CE Meeting: December 12th at 3:30 p.m. in the Campbell Aquatic Building. This will be our quarterly potluck dinner and holiday gathering.

There were 2 Astronomical League Program Awards given out. The first one was for the Sunspotter Program and was presented to Theo Ramakers. The second was for the Constellation Hunter Northern Skies Program, and was presented to David Whalen. Dan Thoman also was due to be presented with a Sunspotter Certificate and Pin, but could not be present for the meeting.

Our new Observing Supervisor, David Whalen, gave a presentation on what we can expect to see in the sky over the coming weeks. His talk, aptly named "All of the Above" included the Fall Equinox, current weather conditions for the Jon Wood Astronomy Field, relative location of each of the planets, along with the sun and moon, and each of their respective rise and set times. He included H-alpha photos of the Sun as of 9/19/15, and two days earlier with the massive prominence that has been dubbed as "Solarsaurus". He also highlighted several spots of interest in connection with the International Observe the Moon Night for 2015. Also of note is the upcoming September 27th total eclipse of the moon. Also discussed were several deep-sky targets in the categories of "Relaxing", "Intriguing", "Taxing" and a Challenge Object.

After the meeting, we were joined on the observing field by approximately 50 students and parents from the East Newton Elementary School to observe the moon for the International Observe the Moon Night.





## The Next Charlie Elliott Meeting

“Experience the Universe at Charlie Elliott”

### *Our next chapter meeting and public stargazing*

The next regular meeting of the Charlie Elliott Chapter will be held on October 10, 2015 at 5:00 pm in the Campbell Aquatic Building on Murder Creek Church Road. We are pleased to have as guest speaker David Yenerall, Lecturer of Astronomy at Georgia Perimeter College. He will present a photographic tour of the Gemini South Observatory, located on Cerro Pachon in Chile's Atacama Desert. David is a regular guest at the observatory.

At sunset we will head over to Jon Wood Astronomy Field (33.468865, -83.735319) for a night of observing (weather permitting). All are welcome! Bring your scopes, binos, or just bring yourself – we enjoy sharing the night sky with our guests!

The handouts and presentations from our past meetings are available for download on our Past Events page. Monthly sky maps are available from [skymaps.com](http://skymaps.com).

Upcoming meeting dates are: November 14, December 12 (our next potluck).

## The Night Sky Network (NSN)

As a member of the Atlanta Astronomy Club, you have a free membership in NASA's Night Sky Network (NSN). The Night Sky Network was started in 2004 and is a nationwide coalition of more than 400 amateur astronomy clubs that was developed and is operated for NASA by the Astronomical Society of the Pacific.

It functions to educate the public about NASA missions through local astronomy clubs by providing the clubs with information and outreach materials about NASA activities. Only members of registered astronomy clubs can become members of the NSN.

On a more practical level, the NSN provides the AAC with a website on which the AAC can maintain a club roster of members, maintain a calendar of events and send out e-mails to our members about Club activities. (In these days of anti-spam filters on most e-mail programs, this has been an invaluable resource for keeping members informed.)

When you are enrolled on the NSN you receive an e-mail from them on behalf of the AAC, with your User ID and your password. You can then go in and edit your membership information. If, for example, you do not wish to receive e-mails about upcoming events, you can check the box requesting no e-mails; or you can delete your e-mail address if you do not want ANY e-mails sent to you from the NSN.

If you do this, or make other changes (such as updating your contact information), PLEASE either forward a note to me at [Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org), or make a note in the “Notes on Membership” box, as I may think the change was an oversight when you were registered and not a deliberate choice on your part and I would re-enter the information.

Daniel Herron, Mark Banks and Sharon Carruthers are the AAC's NSN coordinators. If you have a problem or question, contact us for help.

Sharon Carruthers, [Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

## Upcoming DSO Dates and Locations

These are the dates for the next few AAC Dark Sky Observing events. All of these events are scheduled at Grier's Field at the Deerlick Astronomy Village unless noted: No October DSO due to the PSSG, Nov 14, Dec 19. The locations and dates of the DSOs may change or be cancelled due to weather - check the AAC web page for updates.



## NGC 7331 Image by Chuck Painter

Chuck Painter made this image of the NGC 7331 group, also known as “The Deerlick Group”, from his home near Alpharetta. This image was taken the weekend of September 18/19 over two nights from his driveway. Total image time is 4 hours 10 minutes (i.e. 50X5 minute exposures). Equipment was Astrotek 8-inch Ritchey-Chretien on Atlas EQ-G mount, an Orion Starshoot Pro one shot color camera, and guiding was done with an Orion Starshoot autoguider through an Orion Short Tube 80. Image was processed with Pixinsight.

## The Next AAC Board Meeting

The next Board Meeting of the AAC is scheduled for Sunday, November 8th, starting 3PM at the home of Peter and Sharon, 1057 Trestle Drive, Austell. Contact President Mark Banks or Board Chair Sharon Carruthers for more information about the meeting.

## The Astronomical League

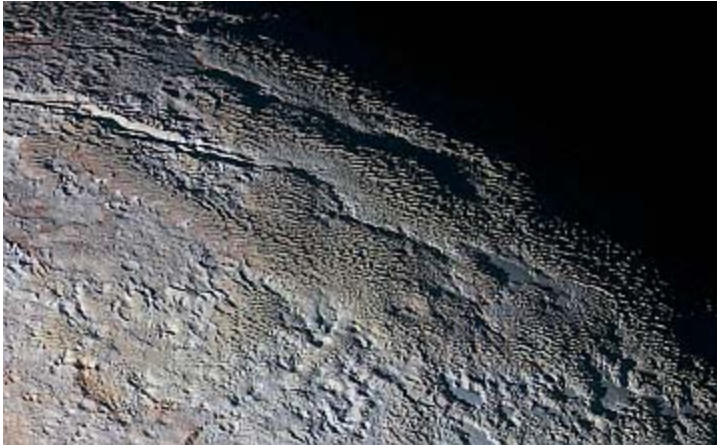
As a member of the **Atlanta Astronomy Club** you are automatically also a member of the **Astronomical League**, a nation wide affiliation of astronomy clubs. Membership in the AL provides a number of benefits for you. They include:

- \* You will receive *The Reflector*, the AL's quarterly newsletter.
- \* You can use the Book Service, through which you can buy astronomy-related books at a 10% discount.
- \* You can participate in the Astronomical League's Observing Clubs. The Observing Clubs offer encouragement and certificates of accomplishment for demonstrating observing skills with a variety of instruments and objects. These include the Messier Club, Binocular Messier Club, the Herschel 400 Club, the Deep Sky Binocular Club, and many others.

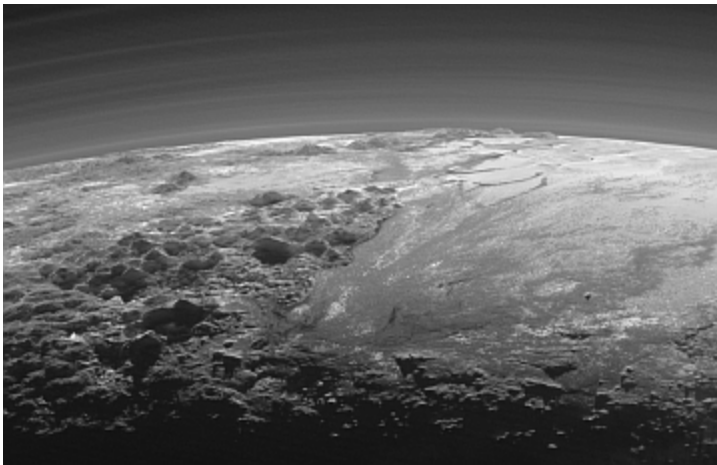
To learn more about the Astronomical League and its benefits for you, visit <http://www.astroleague.org>

## Revealing the Realms of the Underworld

In mid-September the New Horizons spacecraft began downlinking its full treasure trove of images and other data collected during its high-speed pass through the Pluto system. The images are revealing landscapes strange and wonderful; bizarre and mysterious. Here is a sampling of the recently returned images. All images credit: NASA/Johns Hopkins University Applied Physics Laboratory/Southwest Research Institute.

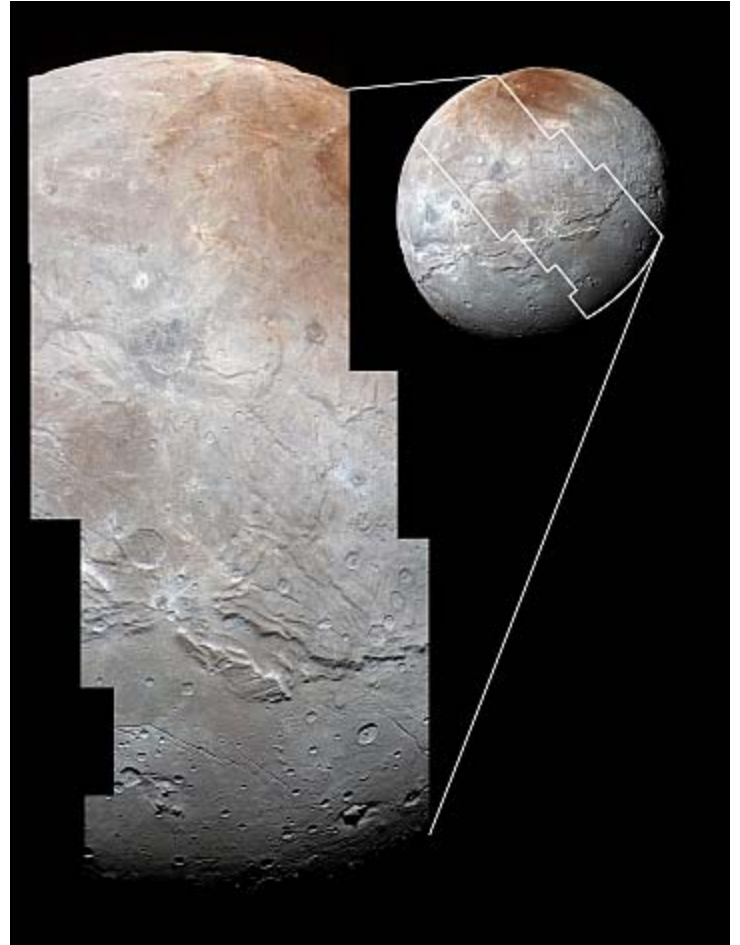


In this extended color image of Pluto taken by NASA's New Horizons spacecraft, rounded and bizarrely textured mountains, informally named the Tartarus Dorsa, rise up along Pluto's day-night terminator and show intricate but puzzling patterns of blue-gray ridges and reddish material in between. This view, roughly 530 km across, combines blue, red and infrared images taken by the Ralph/Multispectral Visual Imaging Camera (MVIC) on July 14, 2015, and resolves details and colors on scales as small as 1.3 kilometers.

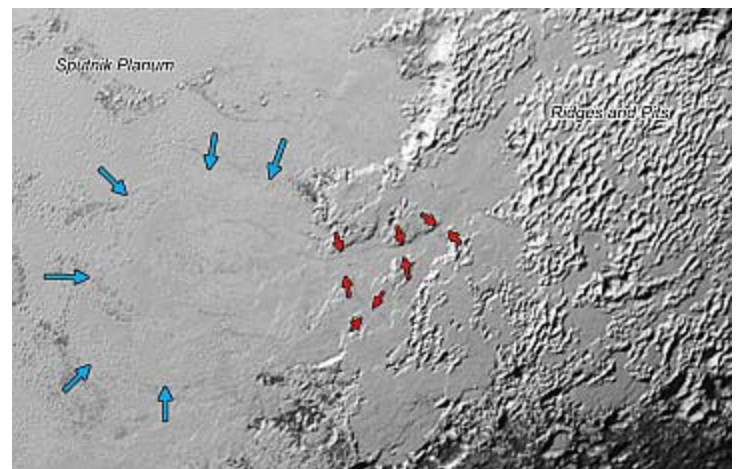


Just 15 minutes after its closest approach to Pluto on July 14, 2015, NASA's New Horizons spacecraft looked back toward the sun and captured a near-sunset view of the rugged, icy mountains and flat ice plains extending to Pluto's horizon. The smooth expanse of the informally named Sputnik Planum (right) is flanked to the west (left) by rugged mountains up to 3,500 meters high, including the informally named Norgay Montes in the foreground and Hillary Montes on the skyline. The backlighting highlights more than a dozen layers of haze in Pluto's tenuous but distended atmosphere. The image was taken from a distance of 18,000 kilometers to Pluto; the scene is 380 kilometers across.

Image Right: Ice (probably frozen nitrogen) that appears to have accumulated on the uplands on the right side of this 390-mile (630-kilometer) wide image is draining from Pluto's mountains onto the informally named Sputnik Planum through the 3- to 8- kilometer wide valleys indicated by the red arrows. The flow front of the ice moving into Sputnik Planum is outlined by the blue arrows. The origin of the ridges and pits on the right side of the image remains uncertain.

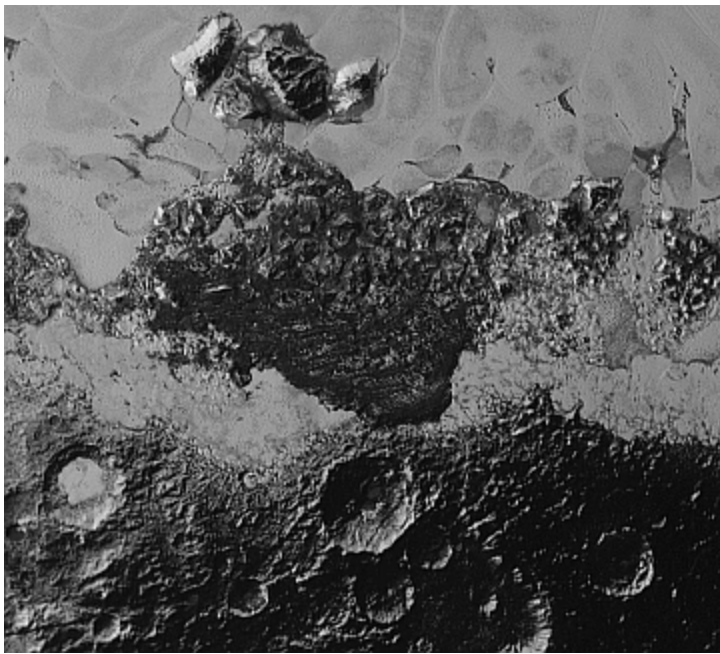


High-resolution images of Charon were taken by the Long Range Reconnaissance Imager (LORRI) on NASA's New Horizons spacecraft, shortly before closest approach on July 14, 2015, and overlaid with enhanced color from the Ralph/Multispectral Visual Imaging Camera (MVIC). Charon's cratered uplands at the top are broken by series of canyons, and replaced on the bottom by the rolling plains of the informally named Vulcan Planum. The scene covers Charon's width of 1,214 kilometers and resolves details as small as 0.8 kilometers.

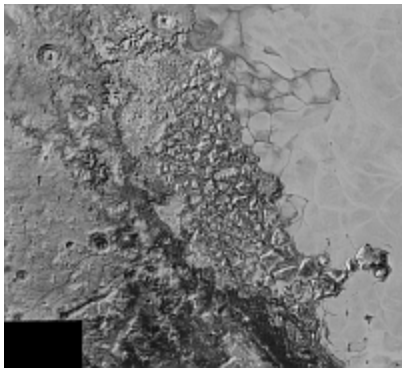


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*This 350-kilometer wide view of Pluto from NASA's New Horizons spacecraft illustrates the incredible diversity of surface reflectivities and geological landforms on the dwarf planet. The image includes dark, ancient heavily cratered terrain; bright, smooth geologically young terrain; assembled masses of mountains; and an enigmatic field of dark, aligned ridges that resemble dunes; its origin is under debate. The smallest visible features are 0.8 kilometers in size. This image was taken as New Horizons flew past Pluto on July 14, 2015, from a distance of 80,000 kilometers.*



*In the center of this 470-km wide image of Pluto from NASA's New Horizons spacecraft is a large region of jumbled, broken terrain on the northwestern edge of the vast, icy plain informally called Sputnik Planum, to the right. The smallest visible features are 0.8 km in size. This image was taken as New Horizons flew past Pluto on July 14, 2015, from a distance of 80,000 km.*

The **Atlanta Astronomy Club, Inc.**, one of the South's largest and oldest astronomical society, meets at **3:00 P.M.** on the **2nd 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.

## 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/atlastro>.

### AAC Officers and Contacts

**President:** Mark Banks [President@AtlantaAstronomy.org](mailto:President@AtlantaAstronomy.org)

**Program Chair:** Richard Jakiel [Programs@AtlantaAstronomy.org](mailto:Programs@AtlantaAstronomy.org)

**Observing Chair:** Daniel Herron [Observing@AtlantaAstronomy.org](mailto:Observing@AtlantaAstronomy.org)

**Corresponding Secretary:** Tom Faber  
[Focalpoint@AtlantaAstronomy.org](mailto:Focalpoint@AtlantaAstronomy.org)

**Treasurer:** Sharon Carruthers [Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

**Recording Secretary:** Alan Coffelt,  
[Secretary@AtlantaAstronomy.org](mailto:Secretary@AtlantaAstronomy.org)

**Board Chair:** Sharon Carruthers [Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

**Board:** Brigitte Fessele, Contact info TBA

**Board:** David Lumpkin, Contact info TBA

**Board:** Steve Phillips [sandsphillips@att.net](mailto:sandsphillips@att.net)

**ALCor:** Jamie Anderson, [jameia@bellsouth.net](mailto:jameia@bellsouth.net)

**Elliott Chapter Co-Directors:** Jack Fitzmier  
[director@ceastronomy.org](mailto:director@ceastronomy.org)

**Elliott Observing Supervisor:** David Whalen  
[observing@ceastronomy.org](mailto:observing@ceastronomy.org)

**Elliott Recording Secretary:** Valorie Whalen  
[secretary@ceastronomy.org](mailto:secretary@ceastronomy.org)

**Elliott Chapter ALCor:** Jack Fitzmier

**Elliott Coordinator:** Alesia Rast [Alesia\\_Rast@mail.dnr.state.ga.us](mailto:Alesia_Rast@mail.dnr.state.ga.us)

**Elliott Webmaster:** Larry Owens [webmaster@CEAstronomy.org](mailto:webmaster@CEAstronomy.org)

**Elliott Outreach Coordinator:** Position Open  
[outreach@ceastronomy.org](mailto:outreach@ceastronomy.org)

**Georgia Astronomy in State Parks:** Sharon Carruthers  
[Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

**PSSG Chairman:** Peter Macumber [pmacumber@nightsky.org](mailto:pmacumber@nightsky.org)

**PSSG Co-Chair:** Open

**Sidewalk Astronomy:** Brad Isley  
[sidewalkastronomy@AtlantaAstronomy.org](mailto:sidewalkastronomy@AtlantaAstronomy.org)

**Light Trespass:** Ken Edwards, Contact info TBA

**Woodruff Observ. Coordinator:** Sharon Carruthers  
[Treasurer@AtlantaAstronomy.org](mailto:Treasurer@AtlantaAstronomy.org)

**AAC Webmaster:** Daniel Herron  
[Observing@AtlantaAstronomy.org](mailto:Observing@AtlantaAstronomy.org)

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

## AAC Events are listed in BOLD

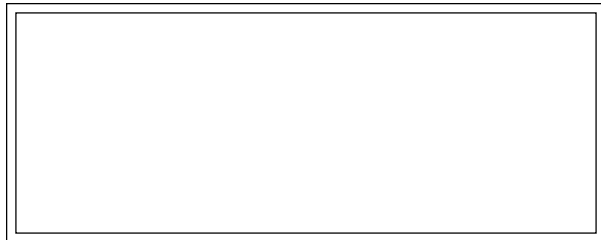
- Oct 3rd, Saturday: Venus, Regulus, Mars, & Jupiter in a near line in morning sky.
- Oct 4th, Sunday: Moon Last Quarter.
- Oct 8th-9th, Thursday-Friday: Draconids Meteor Shower.
- Oct 9th, Friday: Moon near Mars between Venus & Jupiter.
- Oct 10th, Saturday: **CEA Meeting in the Campbell Building (Note Date Change).**
- Oct 11th, Sunday: Peach State Star Gaze Begins 12:00PM.** Moon near Mercury, Venus near Regulus, Mars near Jupiter in morning sky.
- Oct 12th, Monday: New Moon.
- Oct 17th, Saturday: Mars & Jupiter less than 0.5° apart.
- Oct 18th, Sunday: Peach State Star Gaze Ends 12:00PM.**
- Oct 20th, Tuesday: Moon First Quarter.
- Oct 27th, Tuesday: Full Moon.
- Nov 2nd, Monday: Venus & Mars close conjunction.
- Nov 3rd, Tuesday: Moon Last Quarter.
- Nov 4th, Wednesday: Algol at minimum brightness 10:32PM.
- Nov 6th, Friday: Moon near Jupiter.
- Nov 7th, Saturday: Moon near Venus & Mars.
- Nov 8th, Sunday: BoD Meeting at Sharon & Peter's House 3PM.**
- Nov 11th, Wednesday: New Moon.
- Nov 14th, Saturday: **AAC Meeting at Fernbank Science Center 3:00PM.**
- Nov 17th, Tuesday: Leonid Meteor Shower. Mercury superior conjunction.
- Nov 19th, Thursday: Moon First Quarter.
- Nov 25th, Wednesday: Full Moon.
- Nov 27th, Friday: Algol at minimum brightness 9:04PM.
- Dec 3rd, Thursday: Moon Last Quarter.

## Atlanta Astronomy Club Listserv

Subscribe to the Atlanta Astronomy Club Mailing List: The name of the list is: AstroAtlanta. The address for messages is: [AstroAtlanta@yahoogroups.com](mailto:AstroAtlanta@yahoogroups.com) . To add a subscription, send a message to: [AstroAtlanta-subscribe@yahoogroups.com](mailto:AstroAtlanta-subscribe@yahoogroups.com) .

## 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](mailto:focalpoint@atlantaastronomy.org). Please send images separate from articles, not embedded in them. Articles are preferred as plain text files but Word documents or PDFs are okay. You can submit articles anytime up to the deadline. **The deadline for November is Saturday, October 24. Submissions after the deadline will go in the following issue.**



FIRST CLASS



[www.beclage.com](http://www.beclage.com)



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

Newsletter of The Atlanta Astronomy Club, Inc.



*The Focal Point*

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Atlanta, GA 30358-1155

[www.atlantaastronomy.org](http://www.atlantaastronomy.org)

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