



# Monthly Notices of the Everglades Astronomical Society



Naples, FL  
August 2019

**Officers: President:** Denise Sabatini      **Treasurer:** Victor Farris

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**Home Page:** <http://naples.net/~nfn19284/eas/>      **Webmaster:** Mike Usher

## President's Message

Susan and Mike Usher were great hosts for our July meeting. Susan, a very brave woman, provided refreshments for all. I particularly loved the coffee. Thanks!

The August meeting will gather at Zoes Kitchen at 7:00 PM. This is located in the Mercado Plaza. It is right next door to where the Second Cup used to be. They do have a menu if you want to get dinner or a snack. I will warn you however, they do not serve coffee. There are other liquid refreshments, though.

I recently attended the Astronomical League's annual conference, ALCON. The conference was split between Titusville, Florida, and a three-day cruise on The Mariner of the Seas which left out of Port Canaveral. I have written a full report that can be found on page 3 of this newsletter.

Denise

## Dates for Observing

Usually the best times to observe are moonless nights. Below is a list of upcoming Saturday nights that you will likely find fellow club members out there enjoying the skies with you (weather permitting). We will let you know the new location.

Date	Moonrise	Moonset
August 24	1:08 a.m.	2:54 p.m.
August 31	8:19 a.m.	9:07 p.m.

## Sky Events

Aug. 7      - First Quarter  
 Aug. 12    - Jupiter Transit (Io)  
 Aug. 13    - Perseid Meteor Shower Peak  
                   (entire length is 7/17/19 – 8/24/19)

Aug. 15    - Full Moon  
 Aug. 19    - Jupiter Transit (Io)  
 Aug. 23    - Last Quarter  
 Aug. 24    - Jupiter Transit (Europa)  
 Aug. 30    - New Moon  
 Aug. 31    - Jupiter Transit (Europa)

## Next Meeting

**August 13, 2019: Time 7:00 – 9:00 pm**  
 Zoes Kitchen (Mercado), Naples

## Gulfshore Life Magazine Interview of EAS Members By Jackie Richards

Our club was approached by Gulfshore Life Magazine a couple of weeks ago hoping to interview members to do an article on astronomy. Thanks to the coordination by Denise and Mike, on Sunday morning, August 11th (about 3:00 a.m.), we met up with Susan Barnes, the writer, her husband, Josh, and Brian



Image of the Double Cluster (NGC 869 and NGC 844) taken by Vic Farris on 8/11/19 at Big Cypress.

Tietz, the photographer at Big Cypress. Club members that were there were Mike Usher, Denise Sabatini, Robin and Chris Prichard, Vic Farris, Andy Gustafson and me.

It was muggy and buggy and our scopes dewed up almost immediately although Mike did get to show some objects before his scope dewed up, too. Denise's scope and mine dewed up in 5 minutes so we packed them up almost right away.

Club members showed Susan, Josh and Brian the constellations of the night sky, telescopes and imaging equipment. As it took two weeks to get a halfway decent night, Susan, Josh and Brian saw firsthand the obstacles that amateur astronomers face.

I then set up my camera hoping to get some Perseid Meteor shots but was unsuccessful. We did see many Perseids meteors, and Susan, Josh and Brian was just thrilled. Vic Farris imaged successfully the entire night and his image of the double cluster is shown on page 1.

It was a pleasure to meet the Gulfshore Life Magazine folks and good to get out for a viewing.

The article should be published in the October issue. We look forward to seeing it.

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### PHOTOS BY EAS MEMBERS

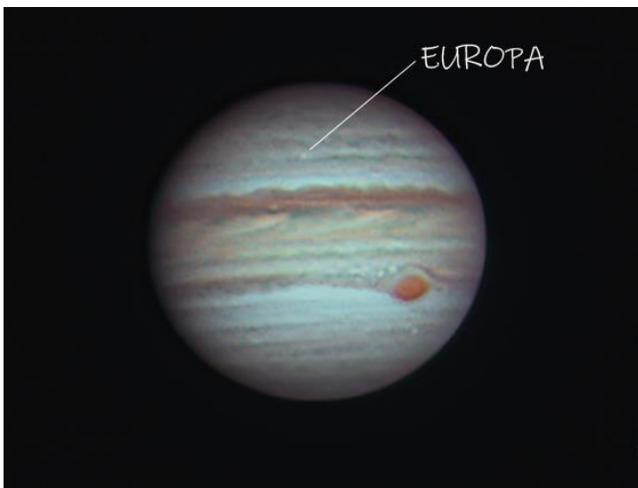


Image of Jupiter (transit of Europa) by Chuck Pavlick on 7/24/19.



Image of M16 (the Eagle Nebula) by Vic Farris. July 2019.



Image of M20 (Triffid Nebula top right) and M21 (open cluster bottom left) by Vic Farris on 7/24-25, 2019; Sky Water Espirit 100 APO; Camera: ZWO ASI 1600 MC.



Image of prominence on the sun on 7/21/19 by Chuck Pavlick.

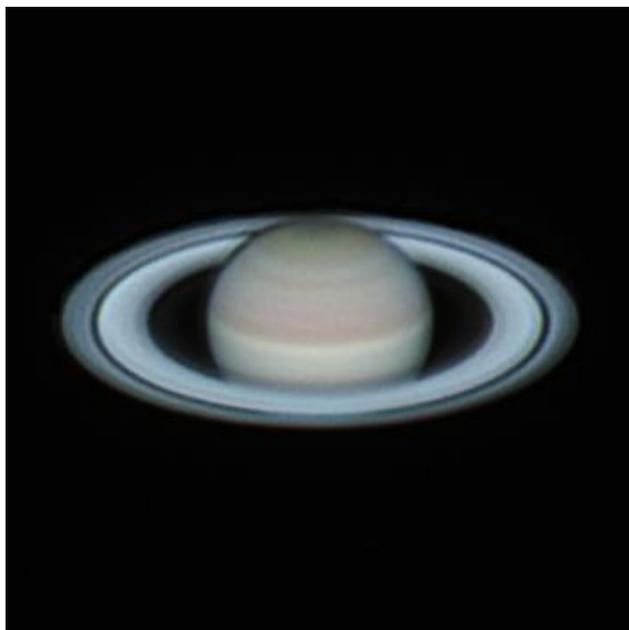


Image of Saturn by Chuck Pavlick on 7/19/19.

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### EAS Member's Photos Displayed at Library

Chuck Pavlick's fabulous astronomy images were on display this summer at the South Regional Library, 8065 Lely Cultural Parkway, Naples, FL 34113.



Chuck Pavlick with one of his images on display at the South Regional Library in Naples.

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## Astronomical League Annual Conference (ALCON) – 2019 Denise's Diary

There was a bit of trepidation about attending the ALCON conference. I had only been to one Astronomical League sponsored meeting before, and that was over 30 years ago. It was a NERAL conference in Rhode Island. This conference would be much bigger and have more people, none of whom I knew.

The lure, of course, was fourfold:

1. The celebration of the 50<sup>th</sup> anniversary of the moon walk;
2. A chance to see a launch;
3. Going to the Space Center; and
4. A cruise.

Overall, it was a wonderful experience.

**Wednesday, July 24<sup>th</sup>:** We drove over to the space coast. The GPS got us to the hotel without getting lost and in plenty of time to drive over to the Space View Park in downtown Titusville to see the 6:24 PM launch of the Space X rocket with supplies for the International Space Station. I know you are wondering if the launch actually happened. Thirty minutes before the countdown, the clouds and rain moved in. Thirty seconds before lift-off, the launch was scrubbed. They did give us hope by rescheduling the launch for the next night at 6:01 PM. (Good luck with that!)

**Thursday, July 25<sup>th</sup>:** The League arranged for us to spend a day at the Space Center on Thursday. It was a soggy day, so I bought a \$17.00 planet umbrella. In my defense, it was cute. The paid tours of the launch sites were sold out. No problem. Among other things, we saw the Atlantis and attended a talk given by Al Worden, who stayed in the command lunar module during the Apollo 15 moon walk.

There would be no driving over to the Space View Park to see the launch unless you decided to miss the awards dinner and speaker, which was scheduled for 6:30 PM. There was still a chance to see the launch, assuming it went off. We would have to view it from the back of the hotel. A number of hotel guests were out there. Much to my surprise, the rain stopped, the clouds cleared out, and at exactly 6:01 PM we saw the rocket lift off. It was exciting, but not nearly as exciting as watching the booster burn and come back down. The dinner event was enjoyable. The guest speaker, Derek Demeter, gave a great presentation. Okay, except that he tried to defend the demotion of Pluto, it was a great presentation.

**Friday, July 26<sup>th</sup>:** Aside from checking out of the hotel and getting settled on the ship, there were only orientation meetings and dinner scheduled. Our observing session was canceled because of weather.

**Saturday, July 27<sup>th</sup>:** A pretty busy day was scheduled with 5 sessions and an evening viewing from the heliport. It was tempting not to get off the ship in Nassau, but I had been there before. I attended every presentation and meeting. I have to say that the first presentation was my favorite. A woman, Pranvera Hyseni, from Kosovo spoke about bringing astronomy to her country. Her story was inspiring and admirable. Three youth awards were given out. Each of the young adults gave a presentation about their winning topics. WOW!! My only regret is that these young adults don't live closer to us so they can give a talk to us. A panel discussion about getting and retaining members offered a lot of ideas. I'm thinking that maybe our group should have a similar meeting. The weather actually cooperated this evening, so there was some observing.

**Sunday, July 28<sup>th</sup>:** This day was mainly my day to enjoy the cruise. I did attend one panel discussion on diversity. After that, we took a Glass Bottom Boat tour. This tour was fabulous. I learned a lot. The observing session did happen, but I'm embarrassed to admit that I was too tired to attend.

**Monday, July 29<sup>th</sup>:** Today was nothing more than breakfast, disembarking, and driving home.

A lot of information and ideas were shared. I will be at Zoes Kitchen for our next meeting. If you'd like to know more about the conference, I'd be happy to share.

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## NASA Night Sky Notes

### Chill Out: Spot an Ice Giant in August By David Prosper

Is the summer heat getting to you? Cool off overnight while spotting one of the solar system's ice giants: **Neptune**! It's the perfect way to commemorate the 30th anniversary of Voyager 2's flyby.

Neptune is too dim to see with your unaided eye so you'll need a telescope to find it. Neptune is at opposition in September, but its brightness and apparent size won't change dramatically as it's so distant; the planet is usually just under 8th magnitude and 4.5 billion kilometers away. You can see Neptune with binoculars but a telescope is recommended if you want to discern its disc; the distant world reveals a very small but discernible disc at high magnification. Neptune currently appears in Aquarius, a constellation lacking in bright stars, which adds difficulty to pinpointing its exact location. Fortunately, the Moon travels past Neptune the night of August 16<sup>th</sup>, passing less than six degrees apart (or about 12 Moon widths) at their closest. If the Moon's glare overwhelms Neptune's dim light, you can still use the its location that evening to mark the general area to search on a darker night. Another Neptune-spotting tip: Draw an imaginary line from bright southern star Fomalhaut up to the Great Square of Pegasus, then mark a point roughly in the middle and search there, in the eastern edge of Aquarius. If you spot a blue-ish star, swap your telescope's eyepiece to zoom in as much as possible. Is the suspect blue "star" now a tiny disc, while the surrounding stars remain points of white light? You've found Neptune!

Neptune and Uranus are ice giant planets. These worlds are larger than terrestrial worlds like Earth but smaller than gas giants like Jupiter. Neptune's atmosphere contains hydrogen and helium like a gas giant, but also methane, which gives it a striking blue color. The "ice" in "ice giant" refers to the mix of ammonia, methane, and water that makes up most of Neptune's mass, located in the planet's large, dense, hot mantle. This mantle surrounds an Earth-size rocky core. Neptune possesses a faint ring system and 13 confirmed moons. NASA's Voyager 2 mission made a very close flyby on August 25, 1989. It revealed a dynamic, stormy world streaked by the fastest winds in the solar system, their ferocity fueled by the planet's surprisingly strong internal heating. Triton, Neptune's largest moon, was discovered to be geologically active, with

cryovolcanoes erupting nitrogen gas and dust dotting its surface, and a mottled "cantaloupe" terrain made up of hard water ice. Triton is similar to Pluto in size and composition, and orbits Neptune in the opposite direction of the planet's rotation, unlike every other large moon in the solar system. These clues lead scientists to conclude that this unusual moon is likely a captured Kuiper Belt object.

Discover more about Voyager 2, along with all of NASA's past, present, and future missions, at [nasa.gov](https://www.nasa.gov)

## EAS 2019 DUES

For the bargain price of only \$20.00 per family, all this can be yours this year:

- Meet with your fellow astronomy enthusiasts at least 10 times a year;
- Learn about astronomy and telescopes. Check out our club scope;
- Many opportunities to view planets, nebulae and other celestial objects (even if you don't have your own telescope); and
- Enjoy the many astronomy programs at our regular monthly meetings.

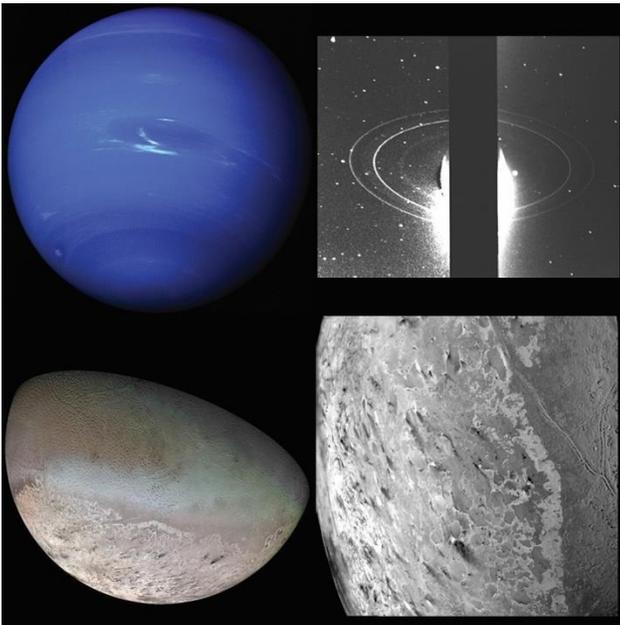
**Don't miss out!** Fill out this form (please print clearly) and send it with your \$20 check to the Everglades Astronomical Society, P. O. Box 1451, Marco Island, Florida, 34146.

Name: \_\_\_\_\_

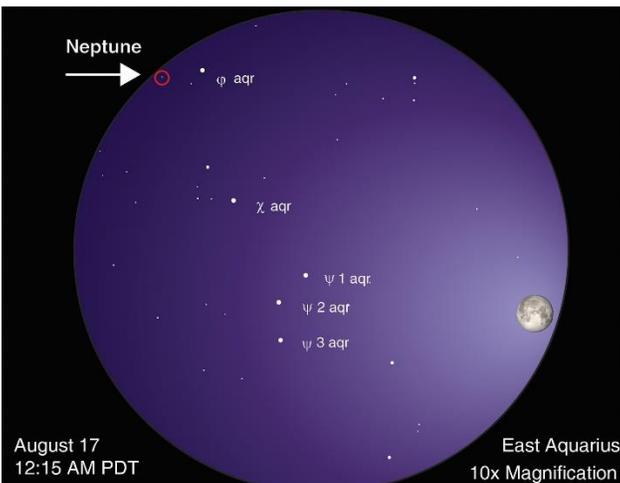
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Clockwise from top left: Neptune and the Great Dark Spot traced by white clouds; Neptune's rings; Triton and its famed icy cantaloupe surface; close up Triton's surface, with dark streaks indicating possible cryovolcano activity. Find more images and science from Voyager 2's flyby at [bit.ly/NeptuneVoyager2](http://bit.ly/NeptuneVoyager2) Image Credit: NASA/JPL



Finder chart for Neptune. This is a simulated view through 10x50 binoculars (10x magnification). Please note that the sizes of stars in this chart indicate their brightness, not their actual size. *Moon image courtesy NASA Scientific Visualization Studio; chart created with assistance from Stellarium.*

You can catch up on all of NASA's current and future missions at [nasa.gov](http://nasa.gov)

The Night Sky Network program supports astronomy clubs across the USA dedicated to astronomy outreach. Visit [nightsky.jpl.nasa.org](http://nightsky.jpl.nasa.org) to find local clubs, events, and more!

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