



Monthly Notices of the Everglades Astronomical Society



Naples, FL
July 2018

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President's Message

It is hard to believe that the 2017 – 2018 season is over. I hope you enjoyed this year's programming and events. If you have a suggestion on how next year can be better, let me know.

A very interesting and thought-provoking video by Neil deGrasse Tyson was shown at the last meeting. Ed Jaekle had suggested and hosted this "class," and he didn't disappoint. After the video, we had an interesting discussion. As always, we were constrained by time. Hopefully, you will be able to continue this conversation at the July meeting at the Second Cup in the Mercado mall at 7:00 PM. Remember, in July and August, we do not meet at the Norris Center. A gathering of members/friends meet at the Second Cup to have a coffee, pastry, and talk about whatever you'd like.

I have been working on the programming for next year. I do have the September and December meetings confirmed. Please let me know if you want to give a talk, and/or if there is a topic you would like to be presented, and/or if there is speaker you would like me to get.

Whether you are up north or down here, may your summer be clear and safe.

Denise.

Dates for the "Fak"

Usually the best times to go out to the Fakahatchee Strand viewing site are moonless nights. Below is a list of upcoming Saturday nights that you will often find fellow club members out there enjoying the skies with you (weather permitting).

Date	Moonrise	Moonset
July 7	1:02 a.m.	1:51 p.m.
July 14	7:21 a.m.	9:00 p.m.

Sky Events

July 6	- Last Quarter
July 8	- Jupiter Transit (Io)
July 9	- Jupiter Transit (Ganymede)
July 12	- New Moon
July 15	- Jupiter Transit (Io)
July 19	- First Quarter
July 22	- Jupiter Transit (Europa)
July 27	- Full Moon
July 31	- Jupiter Transit (Io)

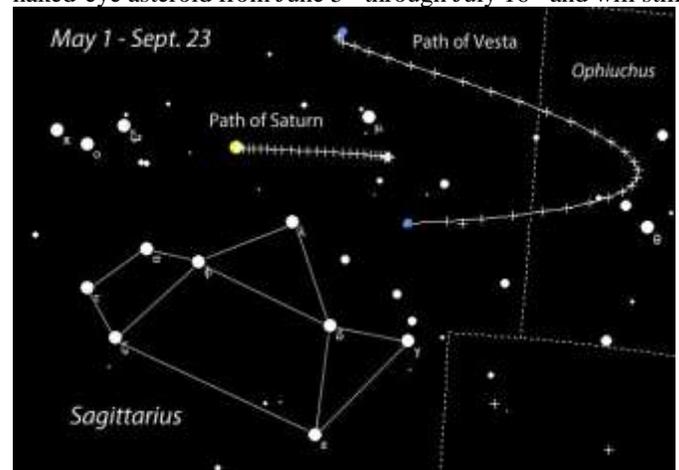
Next Meeting

July 10, 2018: Time 7:00 – 9:00 pm
Second Cup at the Mercado, Naples

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ASTEROID VESTA By Jackie Richards

This should be a fun object to try to find. Asteroid Vesta is a naked-eye asteroid from June 5th through July 16th and will still



Sky map taken from Sky and Telescope Magazine.

be visible with a telescope until mid-September. Vesta reached opposition on June 19th (the closest it has been to Earth in over 20 years). See the above and below sky maps to help you find it. The below map shows where the asteroid will be on specific dates. Best viewing is on a moonless night. All we need is a clear, dark, bugless sky. That might happen in Florida, right?



Sky map taken from Sky and Telescope Magazine.

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PHOTOS BY CLUB MEMBERS



Jupiter transit (Io) and the Great Red Spot. Photo by Chuck Pavlick.



Photo of M3 by Vic Farris taken on May 8, 2018.



Photo of M83 by Vic Farris taken on 5/8/18.

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Sunspots By Bart Thomas

I often look to see if there are sunspots on the following site: <https://sohowww.nascom.nasa.gov/sunspots/> I happened to look at the sun on the website Wednesday, June 20th. I have NOT seen many sunspots the last few months. I was very surprised to see four different sunspot areas. On Thursday afternoon, I set up my projection device at Beacon High School in the back of the building. We combined some classes and the students were able to compare the sunspots as seen from the SOHO spacecraft with the sun's image on the white board using my projection device.



Sunspots by Bart Thomas

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Published Articles by EAS Members

Ted Wolfe's article in the Naples News/Collier Citizen on June 29, 2018: Looking Up: Galaxy quest, a whale of a tale.

<https://www.naplesnews.com/story/news/local/communities/collier-citizen/2018/06/29/looking-up-galaxy-quest-whale-tale/734150002/>

TO VIEW THE ABOVE ARTICLE, PRESS "CTRL" AND LEFT CLICK BUTTON.



Photo by Ted Wolfe. This intriguing object highlights just how far a galaxy's faint, outer boundaries can extend all the way around it. The surrounding "mist" is made of cosmic material from the spiral galaxy itself.

The below link provides previous articles in the Collier Citizen by Ted Wolfe that appeared over past years.

<http://www.naplesnews.com/search/Ted%20Wolfe/>

To view all of Ted Wolfe's photos, visit his website @ www.tedwolfe.com.

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A Close-Up View of Mars By Jane Houston Jones and Jessica Stoller-Conrad

In July 2018, skywatchers can get an up close view of Mars—even without a telescope! In fact, on July 31, Mars will be closer to Earth than it has been in 15 years.

Why is that?

Like all the planets in our solar system, Earth and Mars orbit the Sun. Earth is closer to the Sun, and therefore it races along its orbit more quickly. Earth makes two trips around the Sun in about the same amount of time that Mars takes to make one trip.

Sometimes the two planets are on opposite sides of the Sun and are very far apart. Other times, Earth catches up with its neighbor and passes relatively close to it. This is called Mars's closest approach to Earth, and it's happening this year on July 31. The Moon will be near Mars on that night, too!

Keep in mind that even during its closest approach, Mars is still thmore than 35 million miles away from Earth. That's really far. So, Mars won't appear as big as the Moon in the sky, but it will appear bigger than it usually does.

July and August will be a great time to check out Mars. Through a telescope, you should normally be able to make out some of the light and dark features of the Red Planet—and sometimes even polar ice. However, a huge Martian dust storm is obscuring these features right now, so less planetary detail is visible.

There is another important Mars date in July: Mars opposition. Mars opposition is when Mars, Earth and the Sun all line up, with Earth directly in the middle. This event is happening on July 27 this year.



In 2018, Mars will appear brightest from July 27 to July 30. Its closest approach to Earth is July 31. That is the point in Mars' orbit when it comes closest to Earth. Mars will be at a distance of 35.8 million miles (57.6 million kilometers). Credit: NASA/JPL-Caltech

Although you may see news focusing on one of these two dates, Mars will be visible for many months. For about three weeks before and three weeks after opposition and closest approach, the planet will appear the same size to a skywatcher.

From July 7 through September 7 Mars will be the third brightest object in the sky (after the Moon and Venus), shining even brighter than Jupiter. The best time to view Mars during this time is several hours after sunset, when Mars will appear higher in the sky.

Mars will still be visible after July and August, but each month it will shrink in size as it travels farther from Earth in its orbit around the Sun.

EAS 2018 DUES

In other sky news, there will be a partial solar eclipse on July 13, but it will only be visible from Northern Antarctica and southern Australia. On July 27 (beginning at 20:21 UTC), a total lunar eclipse will be visible in Australia, Asia, Africa, Europe and South America. For those viewers, Mars will be right next to the eclipsing Moon!

If you're wanting to look ahead to next month, prepare for August's summer Perseid meteor shower. It's not too early to plan a dark sky getaway for the most popular meteor shower of the year!

You can catch up on NASA's missions to Mars and all of NASA's missions at www.nasa.gov

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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: _____

Address: _____

Phone: _____

Email: _____