



Monthly Notices of the Everglades Astronomical Society



Naples, FL
July 2020

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President's Message

As Robyn and I begin our term as Co-Presidents of EAS, we must first thank Denise Sabatini, who has served the club as President for the last four years.

We are beginning our year in the most uncertain of times and, of course, during the summer when most members are up north.

The first question is, When will we meet again? We will begin our monthly in-person meetings when we are given the all clear and our meeting room is again open to the public.

In the meantime, we will begin with Zoom meetings. The July meeting will be in the form of a social. This will give members a chance to become familiar with the operation of Zoom. We can have guest speakers from all over the world with Zoom. It is possible that we will not have an in-person meeting again in 2020.

The second question is, What about Star Viewing? The Big Cypress location is open and available. Since we have social distance telescopes already, it is just a matter of the conditions being right.

We look forward to serving the members and maintaining the high level of excellence that this club has achieved. If we are flexible and pull together, we can get through this most unusual year.

Clear skies, Robyn and Chris Pritchard

Dates for Observing

Usually the best times to observe are moonless nights. Below is a list of upcoming Saturday nights that you may wish to enjoy the night sky from home until things get back to normal.

Date	Moonrise	Moonset
July 11	11:57 p.m.	11:31 a.m.
July 18	3:39 a.m.	5:48 p.m.

Sky Events

- July 4 - Full Moon
- July 12 - Last Quarter
- July 20 - New Moon
- July 27 - First Quarter
- July 28/29 - Delta Aquariid Meteor Shower

Next Meeting – July 14, 2020 VIA ZOOM

IMAGING DURING THE PANDEMIC By Rick Piper

I'm really bad with computers so it's tough to take these pictures and stack them. But sitting at home allows me the time to learn. This is my new camera's second photograph. It's bad but my best yet of Jupiter so I'm proud of it. I can't wait to get Saturn. I need clear skies at 4:00 a.m. I'm very thankful for the help I'm getting from Chuck Pavlick and my wife, Lori.



Photo of Jupiter by Rick Piper in June 2020.

FABULOUS PHOTOS BY EAS MEMBERS



Photo of prominences on the sun by Chuck Pavlick on 7/1/20.



Photo of prominences on the sun by Chuck Pavlick on 7/2/20.



Photo of prominences on the sun by Chuck Pavlick on 7/3/20.



Mars's Latest Visitor: NASA's Perseverance Rover David Prosper

NASA's latest Mars rover, Perseverance, is launching later this month! This amazing robot explorer will scout the surface of Mars for possible signs of ancient life and collect soil samples for return to Earth by future missions. It will even carry the first off-planet helicopter: Integrity. Not coincidentally, Perseverance will be on its way to the red planet just as Mars dramatically increases in brightness and visibility to eager stargazers as our planets race towards their closest approach in October of this year.

Perseverance's engineers built upon the success of its engineering cousin, Curiosity, and its design features many unique upgrades for a new science mission! In February of 2021, Perseverance will land at the site of an ancient river delta inside of Jezero Crater and ready its suite of seven primary scientific instruments. The rover will search for traces of past life, including possible Martian fossils, with WATSON and SHERLOC, two advanced cameras capable of seeing tiny details. The rover also carries an amazing instrument, SuperCam, to blast rocks and soil outside of the rover's reach with lasers to determine their chemical makeup with its onboard suite of cameras and spectrometers. Perseverance will also take core samples of some of the most promising rocks and soil, storing them for later study with its unique caching system. Future missions will retrieve these samples from the rover and return them for detailed study by scientists on Earth. Perseverance also carries two microphones so we can hear the sounds of Mars and the noises of its instruments at work. It will even launch a small helicopter - Ingenuity - into the Martian atmosphere as a trial for future aerial exploration!

Would you like to contribute to Mars mission science? You can help NASA's rover drivers safely navigate the Martian surface by contributing to the AI4Mars project! Use this tool to label terrain features on photos taken of the Martian surface by NASA missions to help train an artificial intelligence algorithm to better read their surrounding landscape: bit.ly/AI4Mars

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EAS 2020 DUES

The launch of Mars Perseverance is, as of this writing, scheduled for July 20, 2020 at 9:15am EDT. More details, updates, and livestreams of the event are available on NASA's official launch page: bit.ly/Mars2020Launch. Dig deep into the science of the Mars 2020 mission and the Perseverance rover at: mars.nasa.gov/mars2020/. Find out even more about past, present, and future Mars missions at nasa.gov.



Perseverance inspects a cluster of interesting Martian rocks with its instruments in this artist rendering by NASA JPL/Caltech



Observe Mars yourself over the next few months! Mars can be found in early morning skies throughout July, and by the end of the month will rise before midnight. Mars gradually brightens every night until the close approach of Mars in October. The pre-dawn skies of July 17 present an especially nice view, as the waning crescent Moon will appear near Venus and Aldebaran.

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: _____

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