



Monthly Notices of the Everglades Astronomical Society



Naples, FL
August 2020

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President's Message

August is upon us and we are having our usual summer weather. It is fortunate that viewing the universe can be done anywhere in the world and not just in Naples. Our July meeting on Zoom was interesting and enjoyable. We learned what our members were viewing around the country and were able to see up-to-the-minute photos of the Comet Neowise.

Be sure to mark your calendar Aug 11-12 for the Perseid Meteor Shower.

The best way to get through any crisis is to keep up the activities that you enjoy. In spite of meeting restrictions, we expect this to be a good year.

Our next meeting on Zoom will be 7pm August 11. Please make time to join us and bring your photos and stories of your recent viewings.

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
August 15	2:19 a.m.	4:31 p.m.
August 22	9:42 a.m.	9:49 p.m.

Sky Events

- August 3 - Full Moon
- August 11 - Last Quarter
- August 11 - Perseid Meteor Shower
- August 18 - New Moon
- August 25 - First Quarter

Next Meeting – VIA ZOOM August 11, 2020 at 7:00 p.m. Eastern

Click on the below link to Join Zoom Meeting

<https://us02web.zoom.us/j/3495687507?pwd=RytWL1pzRjRDdHhDSDJvdnh1UVVYZz09>

Meeting ID: 349 568 7507

Password: telescope

FABULOUS PHOTOS BY EAS MEMBERS



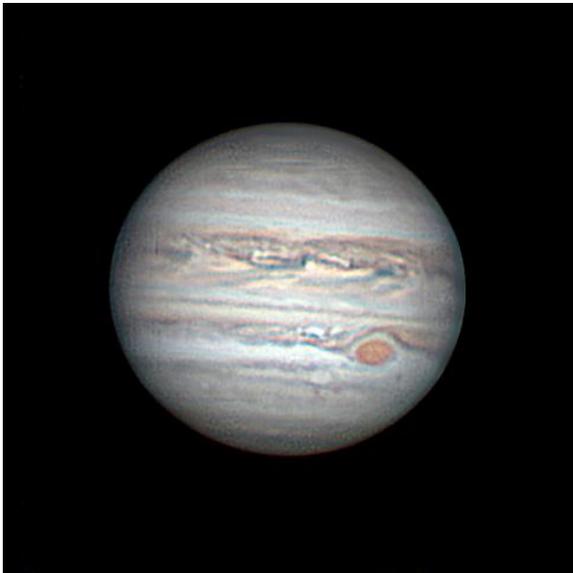
Comet Neowise by Chuck Dryer in Michigan.



Comet Neowise by Henri Troch in Hyeres, France.



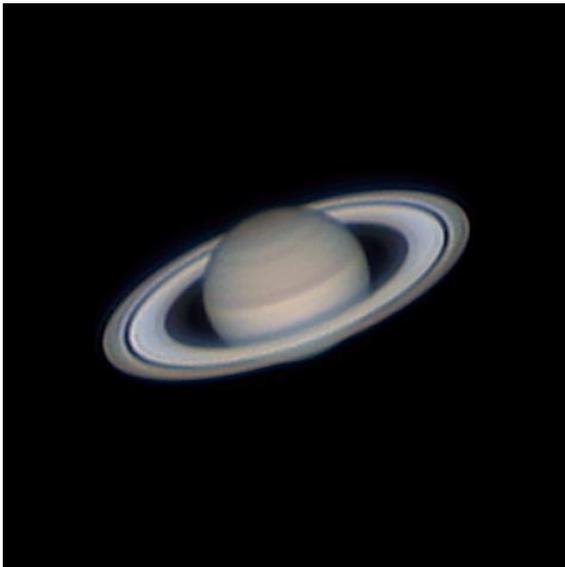
Jupiter, Europa and shadow of Europa by Chuck Pavlick on 8/1/20



Jupiter by Chuck Pavlick on 8/1/20.



The Sun by Chuck Pavlick on 7/31/20



Saturn by Chuck Pavlick on 7/19/20.



Photo of Comet Neowise by member, Gaetan Godin's nephew-in-law, Carl Pawlowski.



Summer Triangle Corner: Deneb

David Prosper

The Summer Triangle is high in the sky after sunset this month for observers in the Northern Hemisphere, its component stars seemingly brighter than before, as they have risen out of the thick, murky air low on the horizon and into the crisper skies overhead. Deneb, while still bright when lower in the sky, now positively sparkles overhead as night begins. What makes Deneb special, in addition to being one of the three points of the Summer Triangle? Its brilliance has stirred the imaginations of people for thousands of years!

Deneb is the brightest star in Cygnus the Swan and is positioned next to a striking region of the Milky Way, almost as a guidepost. The ancient Chinese tale of the Cowherd (Niulang) and the Weaver Girl (Zhinü) - represented by the stars Altair and Vega - also features Deneb. In this tale the two lovers are cast apart to either side of the Milky Way, but once a year a magical bridge made of helpful magpies - marked by Deneb - allows the lovers to meet. Deneb has inspired many tales since and is a staple setting of many science fiction stories, including several notable episodes of *Star Trek*.

Astronomers have learned quite a bit about this star in recent years, though much is still not fully understood - in part because of its intense brightness. The distance to Deneb from our Sun was measured by the ESA's Hipparcos mission and estimated to be about 2,600 light years. Later analysis of the same data suggested Deneb may be much closer: about 1,500 light years away. However, the follow-up mission to Hipparcos, Gaia, is unable to make distance measurements to this star! Deneb, along with a handful of other especially brilliant stars, is too bright to be accurately measured by the satellite's ultra-sensitive instruments.

Deneb is unusually vivid, especially given its distance. Generally, most of the brightest stars seen from Earth are within a few dozen to a few hundred light years away, but Deneb stands out by being thousands of light years

distant! In fact, Deneb ranks among the top twenty brightest night time stars (at #19) and is easily the most distant star in that list. Its luminosity is fantastic but uncertain, since its exact distance is also unclear. What is known about Deneb is that it's a blue-white supergiant star that is furiously fusing its massive stocks of thermonuclear fuel and producing enough energy to make this star somewhere between 50,000 and 190,000 times brighter than our Sun if they were viewed at the same distance! The party won't last much longer; in a few million years, Deneb will exhaust its fuel and end its stellar life in a massive supernova, but the exact details of how this will occur, as with other vital details about this star, remain unclear.

EAS 2020 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: _____

Address: _____

Phone: _____

Email: _____



Long exposure shot of Deneb (brightest star, near center) in its richly populated Milky Way neighborhood. Photo credit: Flickr user jpstanley. Source:

<https://www.flickr.com/photos/jpstanley/1562619922>

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Spot Vega and the other stars of the Summer Triangle by looking straight up after sunset in August!

Discover more about brilliant stars and their mysteries at nasa.gov.

This article is distributed by NASA Night Sky Network

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