



Monthly Notices of the Everglades Astronomical Society



Naples, FL
August 2016

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President's Message

When first starting out in amateur astronomy, I learned the summer sky fairly well. I didn't start out to specifically learn the summer sky versus the winter sky. However, the northern latitudes and cold winters had a lot to say about it. Driving to the observatory was almost impossible in the winter months. To this day, I'm much more familiar with the summer sky. Yes, there is a BUT coming. When I moved to approximately latitude N. 23, I found myself getting lost in the winter sky. The few constellations I did know, Orion, Taurus, and Canis Major, were higher in the sky. This threw off my orientation.

Now that I'm retired, I find myself taking daily walks after dark. This past winter, I decided that I would be more diligent in learning the lesser-known winter constellations. With each walk, I would memorize a section of the sky. When I got home, I consulted my star maps to see what I was looking at. This year, I'm hoping to become more comfortable with the autumn and spring constellations in the same way. Getting in a daily walk and learning the night sky seems like a good symbiotic match. My point of this diatribe is to encourage you to learn the night sky if you don't already know it.

What got me thinking of this was my effort this summer to sell my house in Canada. Behind the house is an observatory with a 14" Celestron telescope. This telescope was manufactured and purchased in May of 1981. When this telescope was made, the observer pretty much had to know the night sky to find anything. There were no computers that would auto-

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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
August 27	1:35 a.m.	3:20 p.m.
September 3	8:02 a.m.	8:17 p.m.

Sky Events

- Aug. 10 - First Quarter
- Aug. 11/12 - Perseid Meteor Shower
- Aug. 15 - Jupiter transit (Io)
- Aug. 18 - Full Moon
- Aug. 24 - Last Quarter
- Aug. 28 - Jupiter transit (Europa)
- Sept. 1 - New Moon

Next Meeting

August 9, 2016: Time 7:00 – 9:00 pm
Second Cup (@ Mercado)
9115 Strada Place
Naples, FL

Lots of activity on the sun captured by Chuck Pavlick.



The Sun by Chuck Pavlick on 7/20/16. Lunt 60 Solar Scope; DMK 21au618; 550 frames processed in Registax and Photoshop.

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Perseid Meteor Shower should be Even Better than Usual by Jackie Richards

As most of you already know, this coming weekend hosts the best meteor shower of the year (The Perseid Meteor Shower). The best nights to view it will be on Thursday night and on Friday night. We are planning to go to the Fak on Friday night (August 12th) into Saturday morning. The moon sets around 1:00 a.m. Saturday morning, so we can plan to get there late Friday night to set up. Many of the articles I read state that this year's meteor shower should provide more meteors than usual because the Earth will collide with more material than usual from Comet Swift Tuttle, which is the source of the Perseids. It was stated by a NASA official that Jupiter's gravity has tugged the debris stream in such a way that Earth will move closer to the middle of the stream, rather than the edge. Thus, we should have quite a viewing of the Perseids. I am so looking forward to it and hope you are, too.

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Published Articles by EAS Members

Ted Wolfe's article in the Naples News/Collier Citizen on July 27, 2016, Looking Up: A Bar of Stars: NGC 7479 Galaxy is Rich in Features

www.naplesnews.com/story/news/local/communities/collier-citizen/2016/07/27/looking-up-bar-stars-ngc-7479-galaxy-rich-features/87635576/

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

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

<http://search.naplesnews.com/jmg.aspx?k=looking+up+ted+wolfe>

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President's Message (Continued (from Page 1)

atically slew over to the object when you punched in a couple of coordinates. Nor were there any cell phones that had apps on them that all you had to do was hold it up to the sky to tell you what you were looking at. I had to donate the telescope to the local astronomy club because no one wanted this archaic telescope that is still in great condition. Technology has taken a bit of the thrill and a sense of accomplishment out of finding an object by learning the night sky.

I'm looking forward to this September's meeting and seeing everyone again. Chris Pritchard's talk on "A New Way to Astronomy" should be very enjoyable and interesting. In the meantime, enjoy August's coffee klatch on August 9, 2016, at Second Cup, and the Perseid meteor shower on August 11/12, 2016. As the Perseid meteor shower is a long one, you may already be seeing a few.

Clear skies, Denise Sabatini

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The Sun by Chuck Pavlick on 8/3/16. Lunt 60 Solar Scope; DMK 21au618; 450 frames processed in Registax and Photoshop.

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Venus and Jupiter prepare for their close-up this August

By Ethan Siegel

As Earth speeds along in its annual journey around the Sun, it consistently overtakes the slower-orbiting outer planets, while the inner worlds catch up to and pass Earth periodically. Sometime after an outer world—particularly a slow-moving gas giant—gets passed by Earth, it appears to migrate closer and closer to the Sun, eventually appearing to slip behind it from our perspective. If you've been watching Jupiter this year, it's been doing exactly that, moving consistently from east to west and closer to the Sun ever since May 9th.

On the other hand, the inner worlds pass by Earth. They speed away from us, then slip behind the Sun from west to east, re-emerging in Earth's evening skies to the east of the Sun. Of all the planets visible from Earth, the two brightest are Venus and Jupiter, which experience a conjunction from our perspective only about once per year. Normally, Venus and Jupiter will appear separated by approximately 0.5° to 3° at closest approach. This is due to the fact that the Solar System's planets don't all orbit in the same perfect, two-dimensional plane.

But this summer, as Venus emerges from behind the Sun and begins catching up to Earth, Jupiter falls back toward the Sun,

from Earth's perspective, at the same time. On August 27th, all three planets—Earth, Venus and Jupiter—will make nearly a perfectly straight line.

As a result, Venus and Jupiter, at 9:48 PM Universal time, will appear separated by only 4 arc-minutes, the closest conjunction of naked eye planets since the Venus/Saturn conjunction in 2006. Seen right next to one another, it's startling how much brighter Venus appears than Jupiter; at magnitude -3.80 , Venus appears some *eight times brighter than* Jupiter, which is at magnitude -1.53 .

Look to the western skies immediately after sunset on August 27th, and the two brightest planets of all—brighter than all the stars—will make a dazzling duo in the twilight sky. As soon as the sun is below the horizon, the pair will be about two fists (at arm's length) to the left of the sun's disappearance and about one fist above a flat horizon. You may need binoculars to find them initially and to separate them. Through a telescope, a large, gibbous Venus will appear no more distant from Jupiter than Callisto, its farthest Galilean satellite.

As a bonus, Mercury is nearby as well. At just 5° below and left of the Venus/Jupiter pair, Mercury achieved a distant conjunction with Venus less than 24 hours prior. In 2065, Venus will actually occult Jupiter, passing in front of the planet's disk. Until then, the only comparably close conjunctions between these two worlds occur in 2039 and 2056, meaning this one is worth some special effort—including traveling to get clear skies and a good horizon—to see!

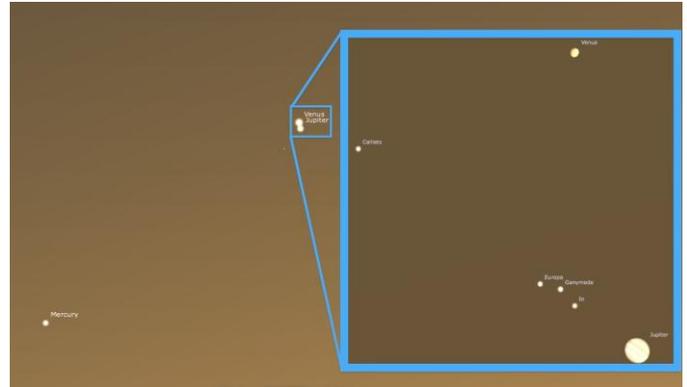


Image credit: E. Siegel, created with Stellarium, of a small section of the western skies as they will appear this August 27th just after sunset from the United States, with Venus and Jupiter separated by less than 6 arc-minutes as shown. Inset shows Venus and Jupiter as they'll appear through a very good amateur telescope, in the same field of view.

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Items For Sale or Trade or Wanted:

http://www.naples.net/clubs/eas/equipment_sales.html

Useful links (software, telescope making, telescope and equipment suppliers, astronomical data sources, iPhone and iPad Apps and more):

<http://www.naples.net/clubs/eas/links.html>

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EAS 2016 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 1868,
Marco Island, Florida, 34146.

Name: _____

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