

# Monthly Notices of the Everglades Astronomical Society



Naples, FL March 2016

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### President's Message

Welcome to March and the "Spring ahead" time change. Although this dampens the early observing, it gives us a bit more time before dark to set up for evening events. Observing highlights would have to include that Jupiter is well placed in the evening sky now. Jupiter's "Great Red Spot" (GRS) which has faded over the past years is easier to spot since it has darkened in color intensity again. So let's get out and observe Jupiter!

Please see the last newsletter that had excellent articles and photos about the most recent Winter Star Party (WSP). We will also have a short (and a bit more formal) presentation on the recent and past WSPs at a future meeting. I'll be asking members to assist in assembling pictures and other memories so we can share our enthusiasm and get even more members to participate.

As always check our calendar for other upcoming events and consider helping. An upcoming major daytime event will be the Mercury Transit which occurs on May 9<sup>th</sup>. We will be assisting Bart Thomas at Naples High School with what will likely include 1,000+ viewers at that event alone with more discussions about the transit to follow.

This meeting Mr. Jack Berringer will give the presentation. He always keeps our attention with no snoozing going on while the lights are out. I especially enjoy Jack's method of presenting and look forward to this next meeting!

Always a special thanks to our members for sharing their images and articles used in the newsletter and to Jackie for her time researching, editing and assembling the newsletter.

Clear Skies, Todd Strackbein

#### 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		
Apr. 2	2:34 a.m.	1:56 p.m.		
Apr. 9	8:01 a.m.	9:28 p.m.		

# **Sky Events**

Mar. 8 - New Moon Mar. 15 - First Quarter Mar. 20 - March Equinox Mar. 23 - Full Moon Mar. 31 - Last Quarter

## **Next Meeting**

March 8, 2016: Time 7:00 – 9:00 pm

Norris Center, Cambier Park

# **More Fak and WSP Photos**



Photo of M81 taken by Chuck Pavlick at the Fak on 2/27/16. Celestron Edge 9.25 w/Lepus 0.62reducer; AP Mach 1 w/Orion mini guider w/PHD guiding; SBIG 8300c; 15 @ 420 seconds; processed in Pixinsight.



Photo of Supernova in Centaurus A (NGC 5128) taken by Chuck Pavlick at the WSP on 2/12/16. Celestron Edge 9.25 w/Lepus 0.62reducer; AP Mach 1 w/Orion mini guider w/PHD guiding; SBIG 8300c.



Photo of Omega Centauri taken by Todd Strackbein at the WSP 2016

# **Published Articles by EAS Members**

Ted Wolfe's article in the Naples News/Collier Citizen on February 25, 2016, Looking up: We're gonna need a bigger boat: the 'shark' galaxy is coming

http://www.naplesnews.com/community/collier-citizen/looking-up-were-gonna-need-a-bigger-boat-the-shark-galaxy-is-coming-2c9a0c20-734e-2b56-e053-0100007f-370113801.html

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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# Saturn's Rings: More than Meets the Eye By Katie McKissick

When Galileo Galilei first spotted Saturn in his telescope, he didn't know what the shapes on either side of the planet were. He thought they might be two large moons. Today we know they're beautiful rings.



Saturn's B ring is the most opaque of the main rings, appearing almost black in this Cassini image taken from the unlit side of the ringplane. The dark bands on the lower part of Saturn are ring shadows. The B ring shadow is the darkest. Credits: NASA/JPL-Caltech/Space Science Institute

Saturn isn't the only planet with rings. Jupiter, Uranus, and Neptune have them too. But Saturn's are the most visible and complex. Saturn's rings are made mostly of pieces of water ice, with a little bit of dust and rocks. Some pieces are smaller than a grain of sand. Others are the size of a refrigerator. Saturn's rings aren't the same all over. There are brighter parts, darker parts, and gaps in between them. Scientists have named the different parts of Saturn's rings. They talk about the A ring, B ring, the Cassini Division between them, and the C ring.

Scientists have been taking a closer look at Saturn's B ring with data from NASA's Cassini mission. This spacecraft took off in 1997 and has been exploring Saturn, its ring system, and its many moons.

The B ring is the brightest and the most opaque (the least seethrough) of Saturn's rings. Until now, most people thought that the B ring was the densest – that it had the most ice and rock. This sounds like it makes sense based on our everyday experiences. If there's more stuff in the ring, it's harder to see though, and more light bounces off of it. This could explain why the B ring looks so thick and colorful.

But new information shows this isn't the whole picture.

Scientists measured how much material was in the B ring at different spots. Where the B ring is brightest and where it's not as bright, there's the same amount of stuff. This is surprising. Why would they look different if they have the same amount of material? It means there is something else that determines how visible the rings are. It could be the sizes of the individual pieces in the rings. Scientists have lots of questions.

Making measurements like these can teach us more about Saturn's rings and how they came to be and how old the different rings are.

Do you want to learn all about Saturn? Visit spaceplace.nasa.gov/all-about-saturn

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# Can Florida say goodbye to hurricanes for the next few years? By Richard J. Head

We are now well past the hurricane season. This runs officially from June 1 to November 30. Hurricanes are frightening things. They do immense damage including injury and death and are a fact of life for us in SW Florida.

But could the threat of hurricanes in Florida be a thing of the past?

Hurricanes have distinct characteristics. In the north Atlantic they originate mainly near the Cape Verde islands off the West African coast. This is caused by the cyclonic effect from the Sahara desert.

They then head out westward across the Atlantic only to develop a desire to curve round and head north. We in Florida hope they start to turn before they reach us but sometimes they leave this a little late and enter the Gulf of Mexico first and then execute the turn. Katrina then went on to devastate New Orleans. Charley turned earlier and destroyed Captiva. That was only in 2004. It gave a glancing blow to Naples and we all remember the trail of destruction it left behind. Wilma in 2005. These are recent examples. There were worse hits to Naples in earlier years —Andrew in 1992 and the worst being Donna in 1960.

But things may be changing. It is 10 years since the last one. We might well have seen the last of these visitors for many years to come.

Hurricanes like warm water and go in search of it. That is why they stay initially in the lower latitudes and are lured sometimes into the Gulf of Mexico and why they tend to lose their strength once they hit cold water or dry land.

The North Atlantic has been a happy hunting ground for them over the last 100 years but has been cooling over the last 30 years. This has made it unique among the oceans in a world of global warming. Surprisingly this has been a side effect of the same global warming which has been melting the polar ice cap and flooding the North Atlantic with newly melted fresh water. Fresh water has a lower density than sea water and stays on the surface fooling the hurricanes into thinking the sea is cold. They do not like that and die away.

2015 has been a very light year for hurricanes. They have rarely strayed too far west and then turned north only to fill and fizzle out. Hurricane Joaquin was the one exception which became lost and went on into the Mediterranean giving some surprises to lifeguards on beaches on islands like Majorca.

The hurricane season is June1 to November 30. That is the official season. We in Florida rarely see a hurricane in June and have not seen one at all over the last 100 years in July or November. Our worst month is October but even then almost never after 26th of the month. Hurricanes take about five days to cross the Atlantic from the coast off Africa so if one has not appeared there by 21st October you can start to relax.

With luck, we can relax even more over the next decade or so.

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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):

 $\underline{http://www.naples.net/clubs/eas/links.html}$ 

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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:		 	
Address:	 		
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