



Monthly Notices of the Everglades Astronomical Society



Naples, FL
December 2015

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President's Message

Despite the season now in full swing, we are still having an unusually high cancellation rate of events due to cloudy and rainy weather. The persistent ones are still getting some quality evening images and observing in. The morning skies have been clearer with the planets visible for the coming months. Also Comet Catalina C/2013 US10 is brightening and sporting twin tails in the morning sky.

I believe the next event is the Family Fun Night on the roof of the YMCA on the 18th which will include the moon nicely placed for viewing. We will talk about more at the meeting.

With our membership at an all time high and our seasonal members returned, we should have a great attendance this Tuesday for Ted Wolfe's presentation about his remote observatory. I will be there with refreshments for during the break just before the presentation.

Please check the status of your dues and support your club by wearing an EAS club shirt and hat. They are available at every meeting.

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
Jan. 2	12:32 a.m.	12:36 p.m.
Jan. 9	6:39 a.m.	5:49 p.m.

Sky Events

Dec. 3 - Last quarter
Dec. 11 - New Moon
Dec. 13 - Geminids Meteor Shower
Dec. 18 - First Quarter
Dec. 25 - Full moon

Next Meeting

December 15, 2015: Time 7:00 – 9:00 pm
Norris Center, Cambier Park

The Moon and Venus By Chuck Pavlick

The moon and Venus put on a show around noon on December 7th. Venus was just about ready to go behind the moon when the clouds came rolling in. I was still able to capture the below photo before the clouds completely covered



Photo of the Moon and Venus by Chuck Pavlick

the event. I drove 60 miles to get this shot because of clouds in Cape Coral to be met with clear blue skies until I got my equipment set up. At least it wasn't a total cloud out. Venus looked like half a moon and was visible with the naked eye and even brighter than the moon. You had to know where to look because the moon was just a sliver.

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Published Articles by EAS Members

Ted Wolfe's article in the Naples News/Collier Citizen on October 28, 2015, Looking up: Exploring the hidden galaxy: IC 342 in plain sight, but not so easy to see

<http://www.naplesnews.com/community/collier-citizen/looking-up-exploring-the-hidden-galaxy-ic-342-in-plain-sight-but-not-so-easy-to-see-254b5f55-e074-69-353333141.html>

TO VIEW THIS 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>

Articles about EAS Members

Article in News-Press regarding EAS Member, Chuck Pavlick

<http://www.news-press.com/story/life/outdoors/2015/12/05/explore-night-sky-swf-as-pavlick-calusa-nature/76540468/>

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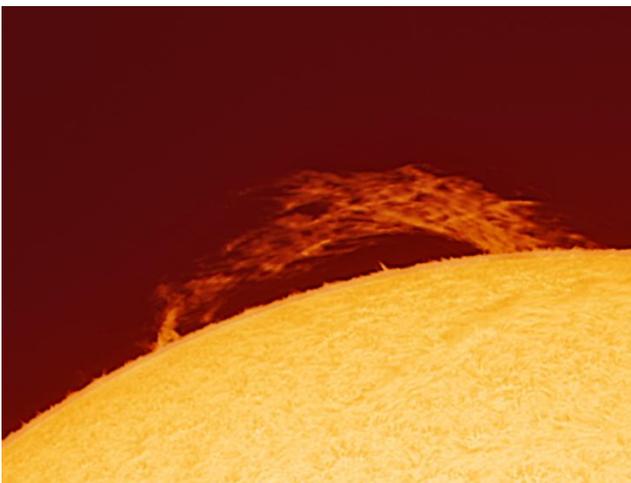


Photo of the sun taken by Chuck Pavlick 11/28/15.



Comet Catalina C2013/US10 taken by Rick Piper and Jackie Richards 12/12/15 at the Picayune Strand Preserve. The comet is in Virgo moving north.



Cocoon Nebula by Chuck Pavlick taken at the Fak 12/12/15.



NGC 891 – Caldwell 23 by Chuck Pavlick taken at the Fak 12/12/15.



Comets that Graze the Sun

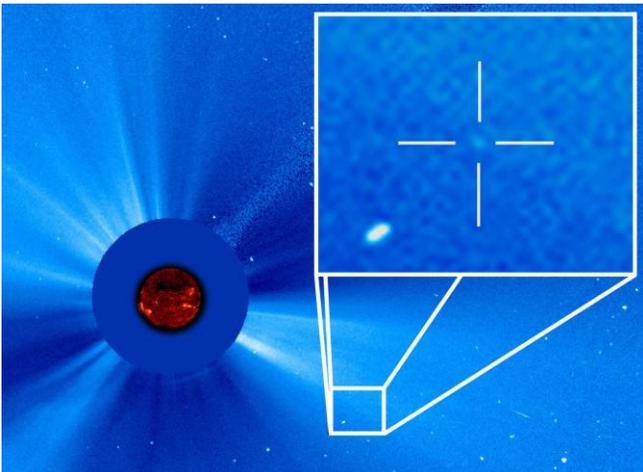
By Katie McKissick

National Aeronautics and Space Administration

It's not easy finding comets, especially when they're near the bright, shining sun. Comets that approach the sun are called sungrazers. They can be as small as 30 to 150 feet in diameter. That's the length of a limousine up to half a football field. Out in space, that's a very small object to find. Also, some of these comets are only bright for a few hours before they go around the sun and burn up.

So how do we spot these sungrazer comets? We find them with a satellite that watches the sun from space.

The Solar and Heliospheric Observatory (SOHO), a joint project of the European Space Agency and NASA, was launched in 1995. SOHO's main mission is to observe the sun and the space around it. It watches the sun for giant explosions called coronal mass ejections. It looks at the constant energy and particles the sun releases that we call the solar wind. It wasn't built to find sungrazing comets, but it turned out to be really good at it.



The dot in the cross hairs is a comet streaming toward the sun, as seen on Sept. 14, 2015, by the ESA/NASA Solar and Heliospheric Observatory (SOHO). This is the 3,000th comet discovered in SOHO data since the spacecraft launched in 1995. The comet was originally spotted by Worachate Boonplod of Samut Songkhram, Thailand by looking through SOHO images. Credits: ESA/NASA/SOHO

SOHO has discovered over 3,000 comets. In fact, it is the greatest comet finder of all time. Before SOHO, only about a dozen comets had been discovered from space. And only 900 had been discovered from the ground.

SOHO didn't find all these comets by itself. It gathered lots of data about what's going on around the sun, but it took many people looking at the data to spot the sungrazers. The data is available for everyone to see, including citizen scientists. These are volunteers who help out with scientific research. Lots of people with all different backgrounds helped spot the comets. In all, 95 percent of SOHO's comets were found by citizen scientists, including teachers, writers, and 13-year-olds.

We can learn a lot from comets. These chunks of ice and rock flying through space can teach us about how our solar system formed. When they get close to the sun, their gas tails light up and blow in the solar wind. Looking at their tails closely, we can learn more about the solar wind and what makes the tails shine so brightly.

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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:

Address:

Phone:

Email:
