



ASSET NEWSLETTER
STARGAZER



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APRIL 2011

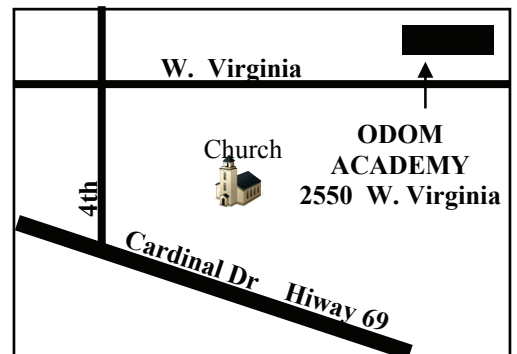
**FRIDAY EVENING
 ASSET CLUB
 MEETING 7:00 PM,
 APRIL 8TH**

**PRE-DINNER MEETING
 THE CATTLE COMPANY
 On I-10, South of Mall**



**APRIL SHOWERS
 BRING MAY
 FLOWERS**

**THE CLUB WEB SITE:
 asset-astronomer.org**



Lonnie's Words , Hello everyone

This Spring/Summer observing is starting out with a bang. I just got back from the Hodges Gardens Star Party and had a great time. As usual the weather was off and on, but I logged several Caldwell's and got to observe a lot of galaxies with my buddy Howard. It was good to get out under the stars again. That always gets me excited about our great club and where it's headed. I have several ideas for the future and hopefully they will improve the benefits of belonging to ASSET. *(Continued on page 2)*



ASSET Minutes/Friday March 11, 2011

Lonnie reported that the Shangri La Star Party was an unqualified success with an attendance of 506. Roger was awarded a certificate for completing his binocular messier observing list. He said this is a "really fun program" and he recommends it to everyone. Welcome to new member Rob Emanuel from Pt. Neches. Justin gave his first ever solar report in Bill's absence, and he did a superb job. The majority of the evening was taken by Bill Leach with a presentation called "The End of the World." Great job, Bill! We are all breathing a sigh of relief that the world will not be ending on 12/21/11.. Lonnie presented evidence showing that water certainly did flow on Mars at some time in the past. Thanks, Cat for the refreshments.

Attendance: 25

Brenda Tantzen, ASSET Secretary

THE OBSERVING CORNER - BY OUR MEMBERS



Will's Observing Report:

Another Hodges Gardens Star Party has come and gone, and my love for astronomy has grown even more. I'm still amazed at how one can become more in love with a hobby as time goes by. We arrived Friday night, set up camp, and met up with Lonnie and Howard on the observing field. Lucky for us the skies opened up and the views were very nice. Saturday night the views were even better. The public was allowed to observe with us for a few hours, and it was a great time. I always love showing someone something they have never seen before. This was my wife's first star party and she had a great time. Her shooting star count was well over 20 for the weekend. For those of you who haven't been to this star party, you should make an effort to get there. Everyone is super nice and the skies are normally really great. Also I have a new website that is up and running:

www.iphoneastronomy.com. Check it out for some iPhone pictures myself and others have taken.

Until next time.... Will

Hodges Gardens Star Party

This star party and campout was a success again. As it falls at the time of the year when the weather plays a big part of the astronomy activities, the people were able view each night. Friday and Saturday night turned out to be the best. Wednesday was the worst, but it got better each night.

Lonnie and I got there Thursday and played golf Thursday afternoon, and then fixed our camping meal and prepared for the night's viewing. Unfortunately we had high clouds and viewing was limited, but we at least viewed some. Friday evening started off cloudy, but cleared and was reasonably good till about 2:30 AM, when the fog moved in. Will and Courtney showed up late and viewed with us. There were some pretty good meteors which we all enjoyed. I crawled into my sleeping bag by 3 and was snoozing shortly.

Saturday, Lonnie decided he had some stuff to do at home and left. We thanked him for leaving as we had the best night's viewing. HA! Lonnie did get 6 Caldwell's logged Friday night including Omega Centari. Will, Courtney, Steve, (my friend from Baton Rouge) and I again observed till the fog moved in at 2:30 AM, like the night before. We had lots of meteors and Courtney wrote down 21, I think. There were 2 really good ones and I missed them both. - Howard

(Continued from page 1) Lonnie's Words

This year as previous years as president, has really flown by. A reminder in December we will be electing new club officers. You need to start thinking about who you want to lead us in the future.

I am really proud of all of you that participate in our outreach program. The star parties we hold for the public always gets positive feedback from those who attend. Each of you is very enthusiastic and offers the public a wealth of knowledge. Keep up the good work.

I hope you are able to attend the pre meeting meal. We always have a great time eating and talking and eating.

See you there, Lonnie

April 2011 Treasurer's ASSET Newsletter Article



The March Shangri La public star party was a great event. Everyone who attended seemed to really enjoy it. And we got as much satisfaction from the public's "wows", "oohs" and "awesomes" as they did from viewing the various objects. We may take the more common objects for granted since we have seen most of them many times. But it is really fun to see how excited the public is to see them, most for the first time.

As we mentioned at the last club meeting, a feature on the moon known as Purbach's X (aka Purbach Cross, Werner Cross or Lunar X) was visible about ½ hour before midnight after our meeting. The moon was at about 15 degrees at the time of visibility and there were some clouds in the area. But we were able to clearly see the "X". With low power it almost looked as if it was painted on the moon's surface. Higher power brought out the ridges that cause it to appear.

Purbach's X is at the conjunction of three craters; La Caille, Blanchinus and Purbach (the latter named for Georg Purbach, a 15th century astronomer sometimes called the father of western mathematical and observational astronomy). The feature is an x-shaped illumination effect involving the rims and ridges at this conjunction when they are near the terminator. These rims and ridges are higher than the surrounding area near the terminator so they are lighted and appear as an "X".

The feature is only visible for about four hours. Visibility starts about 18 hours and 21 minutes prior to First Quarter moon. I have calculated visibility through 2012 and will have a handout of the dates/times at an upcoming meeting. It will only be visible before midnight one more time this year; May 9 at 9:11 PM with the moon about 50 degrees in altitude.

Clear Skies! Roger

ADVANTAGE

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FOR SALE: Refurbished Telescopes,
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Star Testing, Custom Fabrication;
A Schmidt Cassegrain Scope Specialist



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Stolen:

Well, Darrell has not gotten any of his stolen astronomy gear back. I am going to put this in the newsletter as a reminder to check publications or sales where this stuff may be sold. As you know his van was broken into and the following things were stolen. Call Darrell W. George Sr. at 409.6734284 if you have info that might help.

Eyepiece case, Televue 15mm Panoptic, Televue 24mm Panoptic, Televue 27mm Panoptic, Televue 35mm Panoptic, Televue 41mm Panoptic, Televue 7.5mm Plossl, Televue 10.5mm Plossl, Meade #930 2" Diagonal, Televue big barlow 2x, Green Laser pointer, Laser Bracket, Moon filter 2", Moon filter 1.25", Filter set red green blue yellow, Televue OIII Filter 1.25", Televue OIII Filter 2", Stansport Lensatic Compass Metal 552-P, Camera Equipment, Camera Bag, Canon 10D Body, Canon 100-400 Telephoto Lens f/4.5-5.6L IS USM, Canon EF-75-300 f4-5.6 III usm Telephoto zoom lens, Canon EF-S 10-22mm f3/3.5-4.5 USM Ultra Wide

FOR SALE - CHECK OUT THESE ITEMS

Grant Stuart has some outstanding things here!

1. Celestron SkyScout, in Great condition, for \$165 with all accessories and box. Plus extra memory card. (Regular Price \$ 229)
2. Qty 2: Baader Planetarium 21mm eyepieces for \$65 each, with box. (Regular price \$120 each)
3. Refractor: Bosma Beta 80mm f/6.25 achromatic doublet, with accessories and tripod for \$90, and \$110 with a telrad included.

Call me if you have any questions.

Thanks, Grant 409-350-8443

GOES-R, Zombie Fighter by Dr. Tony Phillips

On April 5, 2010, something eerie happened to the Galaxy 15 telecommunications satellite: It turned into a zombie.

The day began as usual, with industry-owned Galaxy 15 relaying TV signals to millions of viewers in North America, when suddenly the geosynchronous satellite stopped taking commands from Earth. It was brain dead! Like any good zombie, however, its body continued to function. Within days, Galaxy 15 began to meander among other satellites in geosynchronous orbit, transmitting its own signal on top of the others'. Satellite operators scrambled to deal with the interference, all the while wondering *what happened?* In horror movies, zombies are usually produced by viruses.

"In this case, the culprit was probably the sun," says Bill Denig of the National Geophysical Data Center in Boulder, Colorado. He and colleague Janet Green of NOAA's Space Weather Prediction Center recently led a study of the Galaxy 15 anomaly, and here are their conclusions:

On April 3rd, a relatively minor solar flare launched a cloud of plasma toward Earth. Galaxy 15 had experienced many such events before, but this time there was a difference.

"Galaxy 15 was just emerging from the shadow of Earth when the cloud arrived and triggered a geomagnetic storm," explains Denig. Suddenly exposed to sunlight and the ongoing storm, "the spacecraft began to heat up and charge [up]."

Electrons swirling around Galaxy 15 stuck to and penetrated the spacecraft's surface. As more and more charged particles accumulated, voltages began to rise, and—zap!—an electrostatic discharge occurred. A zombie was born.

"At least, this is what we suspect happened based on data collected by GOES satellites in the vicinity," he says. "We'll be able to diagnose events like this much better, however, after GOES-R is launched by NASA in 2015."

GOES-R is NOAA's next-generation Geostationary Operational Environmental Satellite. One of the instruments it will carry, a low-energy electron counter, is crucial to "zombie fighting." Low energy-electrons are the ones most likely to stick to a spacecraft's surface and cause brain-frying discharges. By monitoring these particles in Earth orbit, GOES-R will provide better post-mortems for future zombie outbreaks. This could help satellite designers figure out how to build spacecraft less susceptible to discharges. Also, GOES-R will be able to issue alerts when dangerous electrons appear. Satellite operators could then take protective action—for example, putting their birds in "safe mode"—to keep the zombie population at bay.

Meanwhile, Galaxy 15 is a zombie no more. In late December 2010, after 9 months of terrorizing nearby spacecraft, the comsat was re-booted, and began responding to commands from Earth again.

All's well that ends well? True zombie fighters know better than to relax. Says Denig, "we're looking forward to GOES-R."

You and the kids can learn about space weather at <http://scijinks.gov/space-weather-and-us>.



This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.



APRIL METERS ARE ALL MONTH LONG

For April, there are no less than NINE meteor showers, some of which offer wonderful spring sky shows, provided that the light of the moon does not interfere. However, as with other months and times during the year, observers should always be aware that new sporadic meteor showers that can occur at anytime from seemingly unknown sources and radiants. **NOTE:** Look for the "April Fireballs" which occur this month.

APRIL'S LIGHT POLLUTION THOUGHT'S

It's not a stretch, some researchers say, to suggest that we're lighting ourselves to death.

For starters, as stars in our night skies vanish from view, many people worldwide are never in the dark. And the culprit—excessive outdoor lighting—is, according to experts, hurting our health, our emotions, our spiritual outlooks and our pocketbooks as billions of dollars are wasted annually around the globe on keeping things bright.

The good news, experts note, is that of all the artificial threats to our natural resources, light pollution—the illumination of the night sky by artificial light, decreasing the visibility of stars and other natural sky phenomena—is perhaps the most easily remedied. It's a matter of public education and awareness, of shielding bright lights with well-designed fixtures, lowering bulb wattages and eliminating glare.



Saturn Is Visible In The April Sky

The time to see Saturn is here! The Earth will be positioned between the Sun and Saturn. This event is called opposition by astronomers. Saturn is now opposite the Sun in Earth's sky.

During opposition, Saturn will rise in the east at sunset and set in the west at sunrise. So Saturn is visible all night, perfect for viewing. This will be the great planet's closest approach to Earth during 2011, thus it will be shining as bright as it ever will this year in our sky. Lonnie, Will and I viewed Saturn at the Hodges Gardens Star Party, last week there in Louisiana. By the way we enjoyed this star party.

The best way to see Saturn is to look east in early evening, and find the two "stars" in the sky that are both bright and very close to each other. The one higher in the sky and slightly brighter will be the Saturn. The other bright star is *Spica* in Virgo.

- Howard



Just a reminder to check the AL web site for its news:

Since ASSET is a member of the Astronomy League you should check their web site. The issue of "What's Up With the Astronomical League" is posted on the League website, <http://www.astroleague.org/>.

It includes: Deadline for Jack Horkheimer Service Award extended until April 30, 2011, Invitation to apply for Astronomy Day awards-dates May 7 and October 1, Alcon 2011 reminders, Reminder about spring mailing to clubs-ballots and dues notices, Master Observer Network answers resource.

Thanks for your support of the League.

Carroll Iorg, President, Astronomical League

MORE TO CHECK OUT FOR SALE Kelly Taylor has a few items for sale:

1. 6" f15 refractor OTA with 2.7 AP focuser=\$2000.00 NEW
2. 12" f10 SCT Meade OTA with Moonlight focuser=\$1200.00
3. Meade DS16 DOB, 16" f 4.5 with Moonlight focuser=\$900.00

Call or email **Kelly Taylor at 409-548 5838** or kellytaylor1@sbcglobal.net for more info and to arrange to see these items.

ALERT! Comet C/2010 X1 (Elenin) -

This may develop into the comet of the decade if some predictions hold true for its development and orbit. It is in the constellation of LEO and is 170 million miles away from Earth; however, by this fall the comet may pass well within the Earth-moon distance and be a spectacular naked eye object. Some are predicting the brightest comet in many years. Perihelion to the sun will be in September. The Minor Planet Center predictions at that time place the comet at a naked eye magnitude 3.4, with a southeast-pointing long tail.

ASTRONOMICAL SOCIETY OF SOUTH EAST TEXAS MONTHLY CALENDAR

◀ March	~ April 2011 ~						May ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Moon closest to Earth, Perigee, on April 17th. Moon also FULL, makes for a Large Moon.						1 APRIL FOOLS DAY	2 Moon farthest from Earth, Apogee
3 NEW MOON ●	4	5	6	7	8 ASSET CLUB MEETING 7:00PM	9 CLAIBORNE PARK SP	
10	11 FIRST QUARTER ●◐	12	13	14	15	16	
17 FULL MOON ○	18	19	20	21	22 <i>GOOD FRIDAY</i>	23	
24 <i>EASTER</i> LAST QUARTER ◐●	25	26	27	28	29 Moon farthest from Earth, Apogee	30 RANCH Star Party	

The Solar System in April 2011 :

NOTE: The only planet of note for interesting viewing the entire month of April 2011 will be SATURN which reaches opposition to the sun as seen from Earth on April 3.

Mercury - Our innermost planet is hidden in the glare of the sun nearly all of April 2011. - in PISCES

Venus - Venus is now very low in pre-dawn morning skies and sinking lower as the month progresses. Look for it only a short time before the sun rises on the eastern horizon. - in AQUARIUS

Mars - Mars rises less than one hour before the sun at the beginning of April, but will rise about 5:45 a.m. local daylight time by the end of April - in PISCES

Jupiter - Similarly placed as Mars, now emerging from being hidden by the sun for all of March, Jupiter emerges in the twilight of our morning skies but not viewable in April. - In PISCES

Saturn - Now at opposition to the Sun on April 3, the ringed planet is now high in the western sky early in the evening, and well placed for telescopic viewing by midnight. The rings are still angled very little to our line of sight, making the detail in the rings more and more easily to view telescopically as well as giving an overall brighter appearance than it was in the two previous years. NOTE that the largest storm every recorded in our solar system is now taking place on Saturn! An incredible path of swirling and streaking gases are putting on a remarkable show that can be viewed even in smaller telescopes under steady skies.- in VIRGO

Uranus - This distant planet is just past conjunction with the sun and is difficult to view in very low SE predawn skies in April 2011; - in PISCES

Neptune - Those with large telescopes might be able to glimpse this distant planet in morning skies, rising about four hours ahead of morning dawn.- in AQUARIUS

Pluto - Now overhead in southern skies during morning hours by about 5 a.m. local daylight time just as morning twilight breaks; this 14th magnitude distant planet is; - In SAGITTARIUS