



THE STAR DIAGONAL

THE JOURNAL OF THE OGDEN ASTRONOMICAL SOCIETY



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Vol. 41 Number 2

November 2012

<http://ogdenastronomy.com/>

Meeting Announcement

The meeting this month will be YouTube videos that will be suggested by the members.

Message from the President

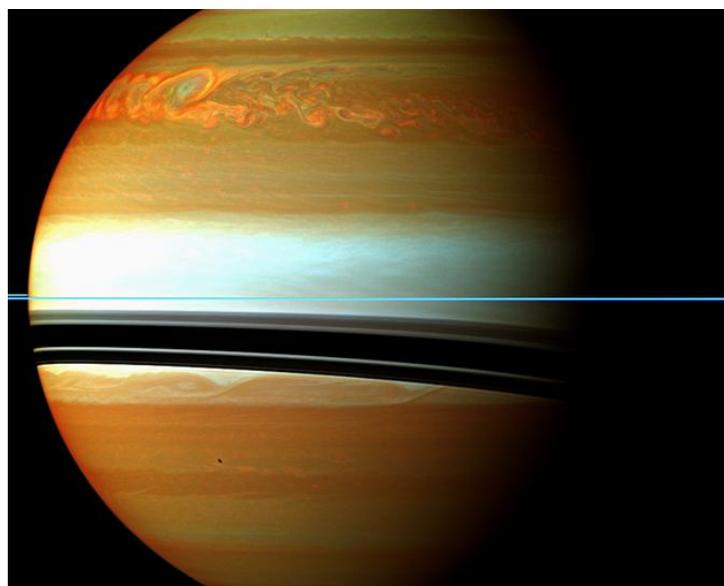
Hi All,

There is a storm larger than the Great Red Spot on Jupiter and no I'm not talking about Sandy. This storm on Saturn, for a short time it was larger than GRS. The funny thing is it has been releasing Ethylene a gas which as to date was never seen on Saturn and it also raised the temperature in the area 150 degrees Fahrenheit you can find the article here

http://www.nasa.gov/mission_pages/cassini/whycassini/cassini20121025.html

I have been traveling for work and have not had time to contact anyone on doing a presentation so I think I will take a page from our past Prez and let YouTube be our presenter. Please send me any YouTube links you would like to share with the group I will try and group them together into something interesting for us.

Clear Skies
Craig



OAS Minutes – October 2012

The monthly meeting of the Ogden Astronomical Society was held on October 11, 2012 in the Ott Planetarium at Weber State University.

There was a discussion about having someone coordinate star parties for the club. It was decided that Dave Dunn or Dustin Klein would do it. We need to make sure that we don't cause burn out by having too many star parties in a short time.

We have a star party at Antelope Island on 10/20. This will be the last planned public star party for this year.

We are planning to go to Lowell Observatory in early May next year. Craig is working to get us signed up for a couple of nights the first weekend on May. We will also take tours of the observatories and Meteor Crater. Some of us are talking about taking an extra day and riding the train from Wilson AZ to the south rim of the Grand Canyon. You can find out more about this at <http://www.thetrain.com/>

Doug gave us a financial update for our club funds.

Lee is taking orders for the Year In Space calendars. He will take them at the next meeting and will need to place the order the next day so we get them for December.

It was proposed and approved that we purchase an Orion Equatorial Mount for the club's Coronado H-Alpha telescope.

Mike then gave us a presentation of the new planetarium projector that they purchased. It is had very nice round stars. He took us forward and backward through the universe. He took us to Saturn to have a look around. He also presented an updated Space Race program that they had created. They had updated it in memorial of Neil Armstrong.

We then adjourned. Several members went to Village Inn for some food and further conversation.

Mirror Grinding Class

Do you want to build a Telescope?

We have some people interest in grinding mirrors as a group. Dave Dunn and Lee Priest have talked about organizing workshops and we would like to know who is interested. The plan would be to get together and offer whatever help you need to decide what size and type you want to build, go over the cost and steps required to grind a mirror and build a telescope. We would like to complete this in

November and give everyone time to buy their mirror blank, and grinding supplies in December. We would get together in Lee's garage one evening a week for a couple of hours starting in January maybe Wednesday evenings at 7:00pm as a possibility, we can pick a night that works for the group. You should be able to do a 10" or smaller mirror in about 20 hours, over 10" may take a little longer. We will continue getting together until the end of March; we can work it out for anyone needing more time.

We won't do regular workshops to build the telescopes, with different sizes and designs it doesn't help to do it as a group and everyone can work at their own pace. With a minimum of woodworking skills and tools you can build a nice telescope, we will be available to help however we can.

There are several web sites on Amateur Telescope Making (ATM) Here is a list of a few you can check out to get ideas and supplies. The got grit . com site has some detailed information on the mirror grinding and telescope making process.

You can contact Lee Priest at levae@aol.com or David Dunn at dunndave@aol.com to sign up or get more information.

<http://www.gotgrit.com/> good source for mirror blanks and grinding supplies and information
<http://www.amateurtelescope.com/mm.htm>
this web site has links to many other ATM suppliers
<http://www.telescopemirrorblanks.com/> another source for mirror blanks
<http://www.willbell.com/tm/index.htm> ATM Books
<http://www.willbell.com/tm/dobtel.htm> the book we used to build our telescopes

Year In Space Desk Calendars

I will Order the Year in Space Desk Calendars again I will bring a sign-up sheet to the November meeting and send it in November 9th. Anyone interested that won't be to the meeting can contact me at levae@aol.com before the 9th. They will ship before the end of November should be available at the December meeting. The price will be \$10.95 each if we order 10 or more, we usually get 11 or 12. For

more information check out
<http://www.yearinspace.com/desk-calendar>
Thanks,
Lee Priest

Curlew Star Party

Just a short note to let everyone know that the last event planned for Curlew two weeks ago was a complete success on Saturday evening. It was not so good on Friday however we went four wheeling in my little Suzuki on a road that Less Bitton called the road from hell after a couple of months ago he just about got stuck. There was no one there from the club but me and my girlfriend, and I only set up my binoculars and looked a few galaxies and nebulas because no one else was there to enjoy the very clear skies that night.....Doug Say



Star Party Schedule

Public Star Parties are as follows.

Our Requested Star Parties (Schools, etc).

Nov 19 Weber County Library (Main)

Our Private Star Parties are as follows.

Nov 9-11 Curlew

Feb 7-10 St. George

Cassini Images Bizarre Hexagon on Saturn

March 27, 2007

Pasadena, Calif. -- An odd, six-sided, honeycomb-shaped feature circling the entire north pole of Saturn has captured the interest of scientists with NASA's Cassini mission.

NASA's Voyager 1 and 2 spacecraft imaged the feature over two decades ago. The fact that it has appeared in Cassini images indicates that it is a long-lived feature. A second hexagon, significantly darker than the brighter historical feature, is also visible in the Cassini pictures. The spacecraft's visual and infrared mapping spectrometer is the first instrument to capture the entire hexagon feature in one image.

"This is a very strange feature, lying in a precise geometric fashion with six nearly equally straight sides," said Kevin Baines, atmospheric expert and member of Cassini's visual and infrared mapping spectrometer team at NASA's Jet Propulsion Laboratory, Pasadena, Calif. "We've never seen anything like this on any other planet. Indeed,

Saturn's thick atmosphere where circularly-shaped waves and convective cells dominate is perhaps the last place you'd expect to see such a six-sided geometric figure, yet there it is."

The hexagon is similar to Earth's polar vortex, which has winds blowing in a circular pattern around the polar region. On Saturn, the vortex has a hexagonal rather than circular shape. The hexagon is nearly 25,000 kilometers (15,000 miles) across. Nearly four Earths could fit inside it.

The new images taken in thermal-infrared light show the hexagon extends much deeper down into the atmosphere than previously expected, some 100 kilometers (60 miles) below the cloud tops. A system of clouds lies within the hexagon. The clouds appear to be whipping around the hexagon like cars on a racetrack.

"It's amazing to see such striking differences on opposite ends of Saturn's poles," said Bob Brown, team leader of the Cassini visual and infrared mapping spectrometer, University of Arizona, Tucson. "At the south pole we have what appears to be a hurricane with a giant eye, and at the north pole of Saturn we have this geometric feature, which is completely different."

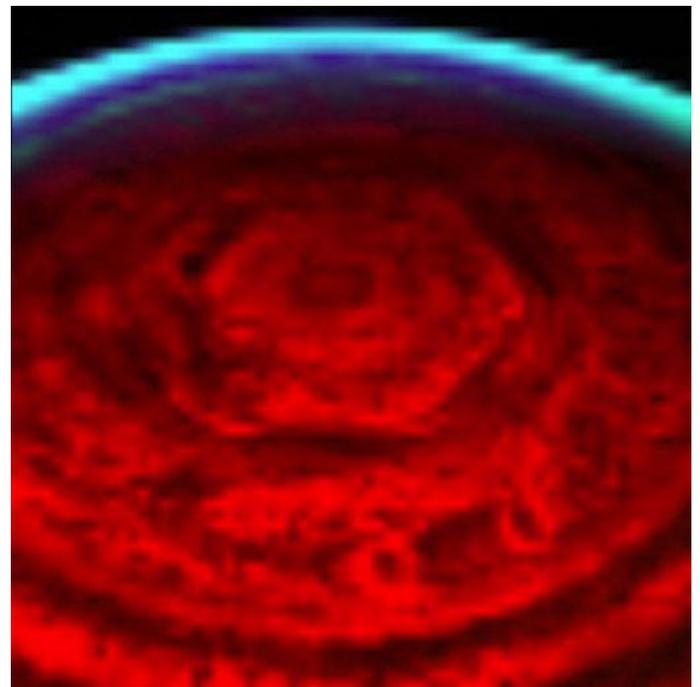
The Saturn north pole hexagon has not been visible to Cassini's visual cameras, because it's winter in that area, so the hexagon is under the cover of the long polar night, which lasts about 15 years. The infrared mapping spectrometer can image Saturn in both daytime and nighttime conditions and see deep inside. It imaged the feature with thermal wavelengths near 5 microns (seven times the wavelength visible to the human eye) during a 12-day period beginning on Oct. 30, 2006. As winter wanes over the next two years, the feature may become visible to the visual cameras.

Based on the new images and more information on the depth of the feature, scientists think it is not linked to Saturn's radio emissions or to auroral activity, as once contemplated, even though Saturn's northern aurora lies nearly overhead.

The hexagon appears to have remained fixed with Saturn's rotation rate and axis since first glimpsed by Voyager 26 years ago. The actual rotation rate of Saturn is still uncertain.

"Once we understand its dynamical nature, this long-lived, deep-seated polar hexagon may give us a clue to the true rotation rate of the deep atmosphere and perhaps the interior," added Baines.

The hexagon images and movie, including the north polar auroras are available at:
<http://www.nasa.gov/cassini> and
<http://saturn.jpl.nasa.gov> and
<http://www.vims.lpl.arizona.edu> .



This nighttime view of Saturn's north pole shows a bizarre six-sided hexagon feature encircling the entire north pole. The red color indicates the amount of 5-micron wavelength radiation, or heat, generated in the warm interior of Saturn that escapes the planet. Image credit: NASA/JPL/University of Arizona