THE STAR DIAGONAL

THE JOURNAL OF THE OGDEN ASTRONOMICAL SOCIETY

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Meeting Announcement

The annual summer BBQ of the Ogden Astronomical Society will be held on June 9th at 6:30pm at Doug Say's home. Please respond to the email or send an email to the OAS_news group to RSVP so that Doug will know how many people are coming. Doug's address is

2060 W. 1025 N.
Farr West, UT 84404

President's Message

Hi All,

Finally, we had a successful star party last Saturday at Antelope Island. It was great, we had clear skies, a good crowd; the only issue was the bugs were about normal. The next star party is our annual Monte Cristo camp out, it will be Friday and Saturday July 29th and 30th. For those that are new, this is our premier activity, several members go earlier in the week. We will have our usual pot luck dinners Friday and Saturday nights at 6:00 we will have BBQ grills available, bring something to grill and something to share. You can camp out or come for the evening whatever fits your schedule and interest. We will be at the Monte Cristo camp ground loop D and the telescope area is the field just west of the camp ground. We will post more details later or if you have any questions you can check with anyone on the Executive Committee.

Don't forget our Family BBQ next Thursday June 9th dinner is at 6:30, if you want to play golf on Doug's golf course play starts about 4:00. I hope to see you at these activities.

Thanks,
Lee Priest

OAS Minutes

The meeting began on May 12, 2016 at 7:30 with Lee Priest conducting.

Announcements:

- Aug 26. Antelope Island is working on their Dark Sky program. They would like a Ranger Talk 8-9pm and then have us count stars in an area of the sky.
- Jun 4. Dead Horse Point
- Jun 4. Antelope Island
- Jun 9. BBQ at Doug's
- Aug 18-19. Good Sam event at North Fork Park

For the remainder of the meeting we watched a short video on Gravitational Waves and then had a discussion about them.

The meeting was adjourned and those that wanted to went to Village Inn for food and further discussion.

Star Parties

Public

- 8/6 – Antelope Island
- 8/26 – Ranger Program and Star Count
- 9/24 – Antelope Island
- 10/1 – North Fork Park
- 10/22 – Antelope Island

Requested

Private

- 7/27-30 – Monte Cristo
- 8/31-9/5 – Monte Cristo
- 9/30-10/1 – North Fork Park
- 10/28-29 - Curlew

External

- 5/1-8 - http://texasstarparty.org/get-started/
- 6/1-4 – Bryce Canyon Astronomy Festival
- 6/4-11 – Grand Canyon Star Pary
- 8/2-7 – www.oregonstarparty.org
- 9/29-10/1 – Great Basin Astronomy Festival
-

Pictures by Tony

This is the first time I have ever seen the red spot on Jupiter. It appeared last week about 12:47 your time (EDT) and took about one hour to rotate around

the planet. I also watch Io orbit the planet and disappear behind it. The photo was taken with my Sony a77 directly “T” mounted to the telescope. Note spot left mid-bottom line.

One of 641 photos taken with three videos. Used a Sony a77, set at 160, ISO 200, direct connected to a 12” meade.

NOAA's Joint Polar Satellite System (JPSS) to revolutionize Earth-watching

By Ethan Siegel

If you want to collect data with a variety of instruments over an entire planet as quickly as possible, there are two trade offs you have to consider: how far away you are from the world in question, and what orientation and direction you choose to orbit it. For a single satellite, the best of all worlds comes from a low-Earth polar orbit, which does all of the following:

- orbits the Earth very quickly: once every 101 minutes,
- is close enough at 824 km high to take incredibly high-resolution imagery,
- has five separate instruments each probing various weather and climate phenomena,
- and is capable of obtaining full-planet coverage every 12 hours.

The type of data this new satellite – the Joint Polar Satellite System-1 (JPSS-1) -- will take will be essential to extreme weather prediction and in early warning systems, which could have severely mitigated the impact of natural disasters like Hurricane Katrina. Each of the five instruments on board are fundamentally different and complementary to one another. They are:

1. The Cross-track Infrared Sounder (CrIS), which will measure the 3D structure of the atmosphere, water vapor and temperature in over 1,000 infrared spectral channels. This instrument is vital for weather forecasting up to seven days in advance of major weather events.

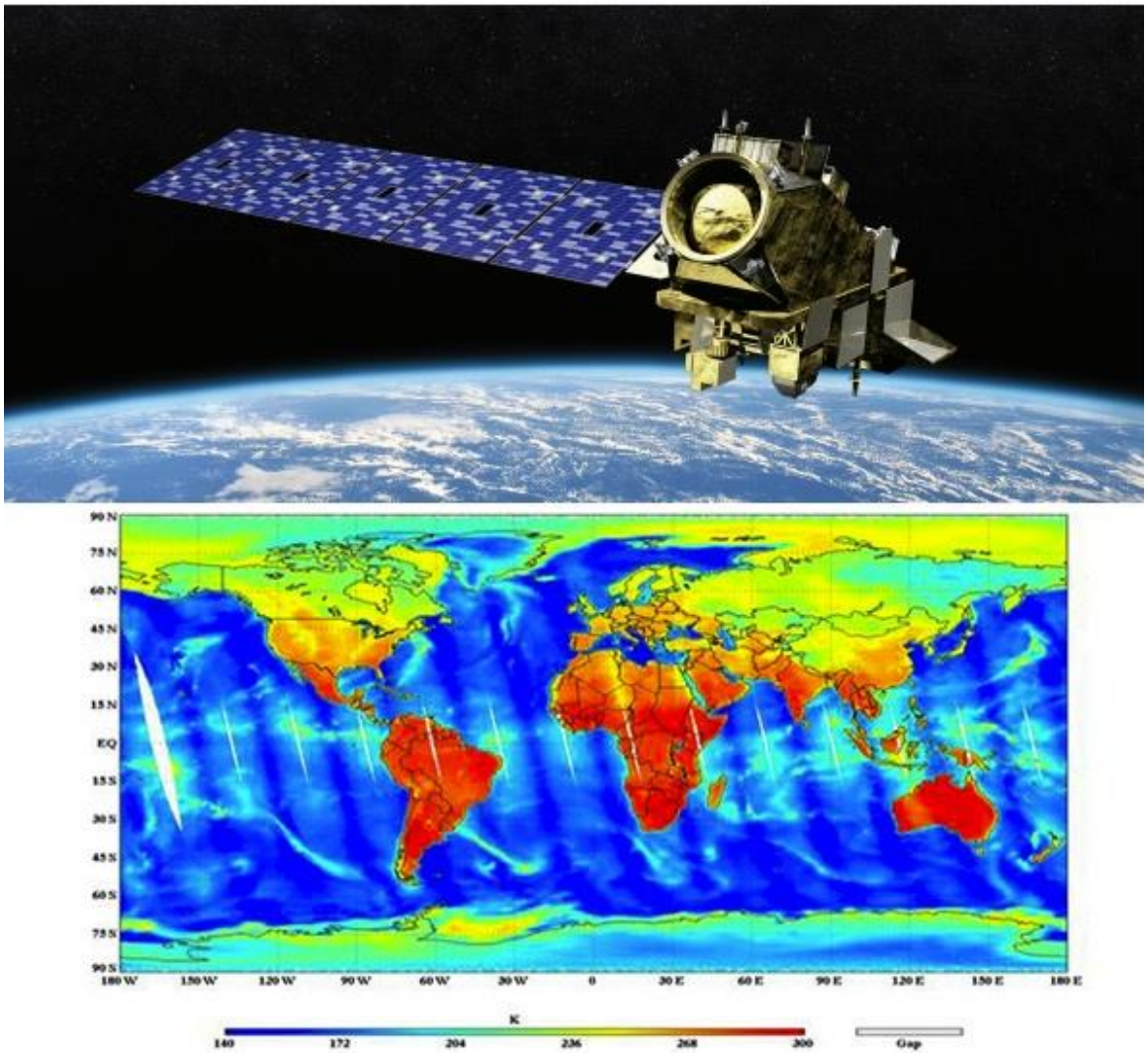
2. The Advanced Technology Microwave Sounder (ATMS), which assists CrIS by adding 22 microwave channels to improve temperature and moisture readings down to 1 Kelvin accuracy for tropospheric layers.

3. The Visible Infrared Imaging Radiometer Suite (VIIRS) instrument, which takes visible and infrared pictures at a resolution of just 400 meters (1312 feet), enables us to track not just weather patterns but fires, sea temperatures, nighttime light pollution as well as ocean-color observations.

4. The Ozone Mapping and Profiler Suite (OMPS), which measures how the ozone concentration varies with altitude and in time over every location on Earth's surface. This instrument is a vital tool for understanding how effectively ultraviolet light penetrates the atmosphere.

5. Finally, the Clouds and the Earth's Radiant System (CERES) will help understand the effect of clouds on Earth's energy balance, presently one of the largest sources of uncertainty in climate modeling.

The JPSS-1 satellite is a sophisticated weather monitoring tool, and paves the way for its' sister satellites JPSS-2, 3 and 4. It promises to not only provide early and detailed warnings for disasters like hurricanes, volcanoes and storms, but for longer-term effects like droughts and climate changes. Emergency responders, airline pilots, cargo ships, farmers and coastal residents all rely on NOAA and the National Weather Service for informative short-and-long-term data. The JPSS constellation of satellites will extend and enhance our monitoring capabilities far into the future.



Images credit: an artist's concept of the JPSS-2 Satellite for NOAA and NASA by Orbital ATK (top); complete temperature map of the world from NOAA's National Weather Service (bottom).