

The PULSAR Ames Area Amateur ASTRONOMERS

Ames Area Amateur Astronomy Club Newsletter

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Regular Monthly Meeting

The September meeting (9/20/08) will be held in the Story County Conservation Center at McFarland Park. We will open with a short business meeting followed by a review of what can be observed in this season and the program:

Norma Cutsforth from Cedar Amateur Astronomers – Keeping Starwatch

Norma, will read from her collection of essays, *Keeping Starwatch*. The life of a working mother melds with nights (and some days) spent under the sky. Travel, history, geography, time, and relationships are woven into the thread of astronomy that runs throughout the book.

August Meeting Notes

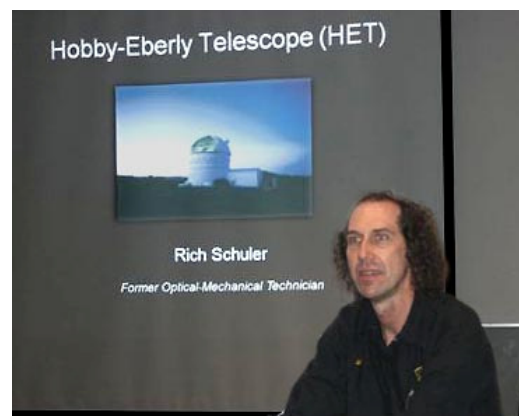
The meeting opened with reading the minutes from the Officer's meeting and the Adam's committee meeting. Ed Engle then made a motion that we purchase a Celestron CGE 1400 equatorial mount telescope for about \$7000 to replace the 12.5" scope as our main telescope for the observatory when the funds are available later this year. Sandy Hempe seconded. The motion passed unanimously.

We had a brief discussion about the ALCON 2008 which several had attended in July. The Iowa Star Party was also promoted for members to attend.

Ed Engle provided the What's Up In The Sky. He is encouraging members to participate in an occultation of a star by an Asteroid that will occur around 12:30 a.m. on September 12.

Rich Schuler then presented his experience with the Hobby-Eberly telescope. Rich was

part of the staff during the construction and early operation of this large telescope located in West Texas.



We adjourned for some observing. With a very full Moon, we primarily looked at the Moon and Jupiter.

Directory

President

Al Johnson

President

@amesastronomers.org

Vice- President

Ed Engle

Vice-President

@amesastronomers.org

Treasurer

Roger Berger

Treasurer

@amesastronomers.org

Membership Secretary

Joe Kollasch

Membership

@amesastronomers.org

Newsletter Editor

Jim Gohman

Newsletter

@amesastronomers.org

Webmaster

Jonathan Kollasch

Webmaster

@amesastronomers.org

Outreach

Dirk Scholten

Outreach

@amesastronomers.org

Observatory Manager

Anthony Jeffries

Observatory

@amesastronomers.org

NASA Space Place

A Google for Satellites: Sensor Web 2.0

If you could see every satellite passing overhead each day, it would look like a chaotic meteor shower in slow motion.

Hundreds of satellites now swarm over the Earth in a spherical shell of high technology. Many of these satellites gaze at the planet's surface, gathering torrents of scientific data using a dizzying array of advanced sensors — an extraordinary record of our dynamic planet.

To help people tap into this resource, NASA researchers such as Daniel Mandl are developing a “Google for satellites,” a web portal that would make requesting data from Earth-observing satellites almost as easy as typing a search into Google.

“You just click on it and it takes care of all the details for you across many sensors,” Mandl explains.

Currently, most satellites are each controlled separately from the others, each one dauntingly complex to use. But starting with NASA's Earth Observing-1 (EO-1) satellite, part of the agency's New Millennium Program, Mandl and his team are building a prototype that stitches these satellites together into a seamless, easy-to-use network called “Sensor Web 2.0.”

The vision is to simply enter a location anywhere on Earth into the website's search field along with the desired information types — wildfire maps, vegetation types, floodwater salinity, oil spill extent — and software written by the team goes to work.

“Not only will it find the best sensor, but with proper access rights, you could actually trigger a satellite to take an image in the area of interest,” Mandl says. Within hours, the software will send messages to satellites instructing them to gather the needed data, and then download and crunch that raw data to produce easy-to-read maps.

For example, during the recent crisis in Myanmar (Burma) caused by Cyclone Nargis, an experimental gathering of data was triggered through Sensor Web 2.0 using a variety of NASA satellites including EO-1. “One thing we might wish to map is the salinity of flood waters in order to help rescue workers plan their relief efforts,” Mandl says. If the floodwater in an area was salty, aid workers would need to bring in bottled water, but if flood water was fresh, water purifiers would suffice. An early and correct decision could save lives.

Thus far, Mandl and his team have expanded Sensor Web 2.0 beyond EO-1 to include three other satellites and an unmanned aircraft. He hopes to double the number of satellites in the network

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every 18 months, eventually weaving the jumble of satellites circling overhead into a web of sensors with unprecedented power to observe and understand our ever-changing planet.

To learn more about the EO-1 sensor web initiatives, go to <http://eo1.gsfc.nasa.gov/new/extended/>

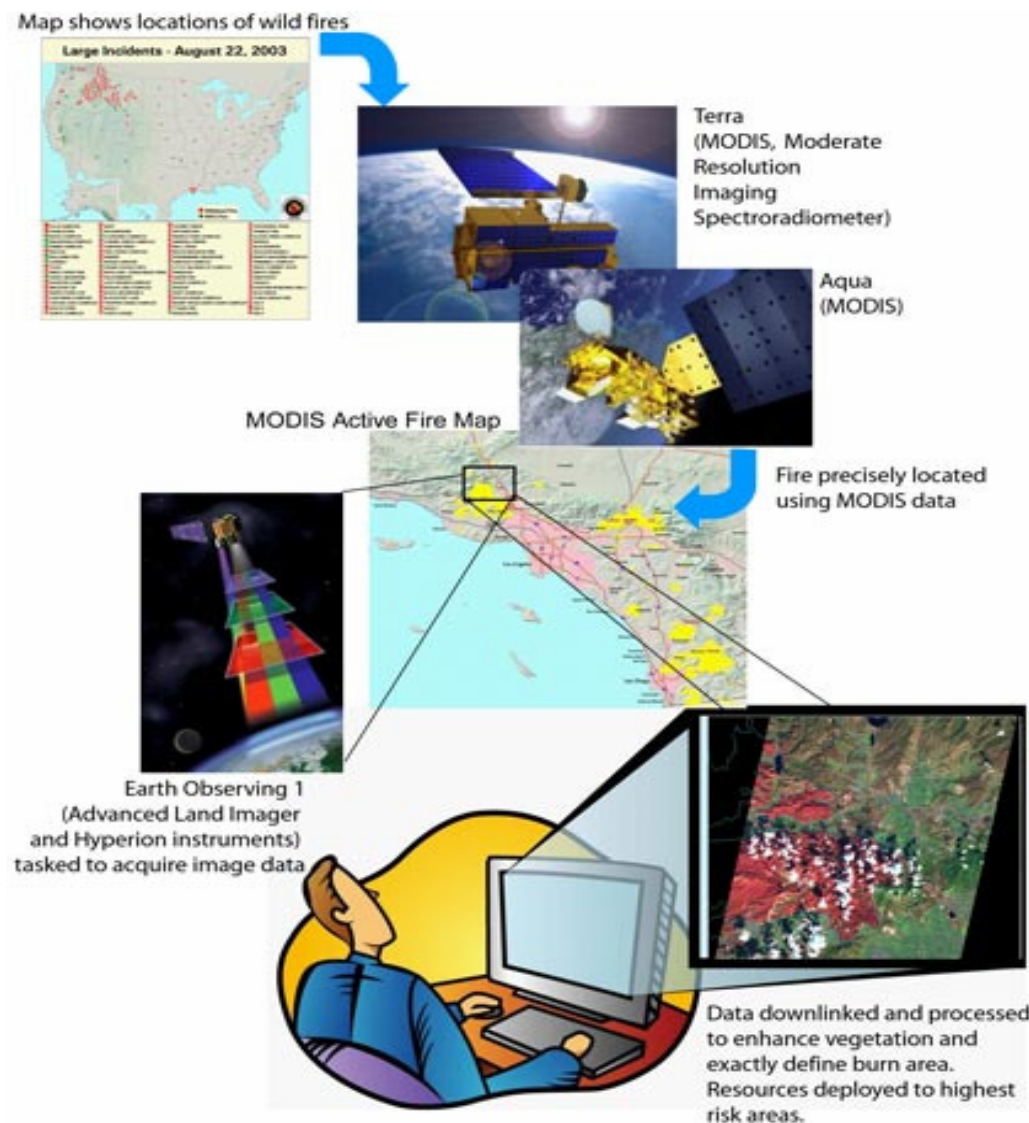
sensorWeb/sensorWeb.html. space at http://spaceplace.nasa.gov/en/kids/eo1_1.shtml.

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

The Pulsar is the monthly newsletter of the Ames Area Amateur Astronomers (AAAA). The AAAA is a non Profit, 501-©-3 educational corporation whose goals are to inform and excite people about the wonders of the night sky and encourage preservation of dark skies.

This newsletter is distributed at the beginning of the month indicated at the top of the page. We encourage contributions of all kind from our readers, including articles, photographs, sketches, and poems. Please note that copyrighted material must have proper permission from the copyright holder and that submissions are subject to editing. More information is available from our website:

Amesastronomers.org



A "Google for satellites" type of web portal will allow users to request real-time data from Earth observing satellites

Annual Membership Dues

Junior (under 18)	\$10
Regular	\$20
Family	\$25
Supporting	\$35
Sustaining	\$50
Benefactor	\$100

Dues are payable July first and prorated for memberships that are initiated after that date.

Payment is made to:

Treasurer, AAAA

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Dark Sky***

AAAA Membership and Contribution form

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Mail to: *Joe Kollasch, Membership Secretary*

2817 Oakland Avenue

Ames, Iowa 50014

Editor's Notes

The replacement of the main observatory telescope sound exciting to me. The present one has provided us with years of great viewing but was never very user friendly. If we want to encourage members to be checked out on the use of the observatory this would be a great leap forward. If we had "go to" capability I would be less dependent on Drew Sorenson, Ed Engle and Jim Bonser etc to find things for me.

"How quickly do we grow accustomed to wonders. I am reminded of the Isaac Asimov story "Nightfall," about the planet where the stars were visible only once in a thousand years. So awesome was the sight that it drove men mad. We who can see the stars every night glance up casually at the cosmos and then quickly down again, searching for a Dairy Queen".

- Roger Ebert,

**Remember to
renew your
AAAA. Member-
ship. (Renewal
date is July 1st)**