



Monthly Notices of the Everglades Astronomical Society



Naples, FL
March 2009

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Fack Coordinator & information on viewing Charlie Paul cpaul651@earthlink.net 410-8192

Presidents Message

WOW!! What a Winter Star Party we had this year! The skies were great and the weather was warm and dry. We did have to contend with wind. At the great door prize event our club cleaned up. When you figure there were over 600 tickets that ' could be drawn, our club got 5 of them. Rick is the proud owner of a great refractor telescope. At our meeting this month we will show some pictures and also present a event speaker from the Winter Star Party, via DVD. The speaker list this year was impressive.

As spring arrives don't put off viewing at the Fakahatchee Strand. (FAK). Too our new members, our club views at a state preserve about 20 miles east of Naples. It is a dark location so the Milky Way and the Constellations standing out. I am the viewing coordinator, so if you are interested in attending give me a call at 410-8192. You don't have to have a telescope to come out and view. Each of our members enjoys showing the sky through their telescopes.

Those of you who have not sent in your dues, please do so, so we will know if we can meet our yearly commitments.

See you at the meeting

Charlie Paul
Co-President.

Dates for the "Fack"

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	Moonsset
March 21	4:56 AM	
March 28		9:58PM

Next Meeting

March 26, 2008
Time 7:00 – 9 pm
At the Norris Center

Sky Events

Mar 20 – Vernal equinox
Mar 26 – New Moon
Mar 27 – Venus at inferior conjunction (not visible)
Apr 2 – 1st Quarter Moon
Apr 9 – Full Moon
Apr 17 – 3rd Quarter Moon
Apr 22 – Lyrid Meteor Shower peaks
Apr 25 – New Moon

Astronomical Trivia Question of the Month

What is the coldest planet in the Solar System?

- Saturn
- Uranus
- Neptune
- Pluto

Answer on next page.



Where did all these gadgets come from?!

Ion propulsion. Artificial intelligence. Hyper-spectral imagers. It sounds like science fiction, but all these technologies are now flying around the solar system on real-life NASA missions.

How did they get there? Answer: the New Millennium Program (NMP). NMP is a special NASA program that flight tests wild and far-out technologies. And if they pass the test, they can be used on real space missions.

The list of probes that have benefited from technologies incubated by NMP reads like the Who's Who of cutting-edge space exploration: Spirit and Opportunity (the phenomenally successful rovers exploring Mars), the Spitzer Space Telescope, the New Horizons mission to Pluto, the Dawn asteroid-exploration mission, the comet-smashing probe Deep Impact, and others. Some missions were merely enhanced by NMP technologies; others would have been impossible without them.

"In order to assess the impact of NMP technologies, NASA has developed a scorecard to keep track of all the places our technologies are being used," says New Millennium Program manager Christopher Stevens of the Jet Propulsion Laboratory.

For example, ion propulsion technology flight-tested on the NMP mission Deep Space 1, launched in October 1998, is now flying aboard the Dawn mission. Dawn will be the first probe to orbit an asteroid (Vesta) and then travel to and orbit a dwarf planet (Ceres). The highly efficient ion engine is vital to the success of the 3 billion mile, 8 year journey. The mission could not have been flown using conventional chemical propulsion; launching the enormous amount of fuel required would have broken the project's budget. "Ion propulsion was the only practical way," says Stevens.

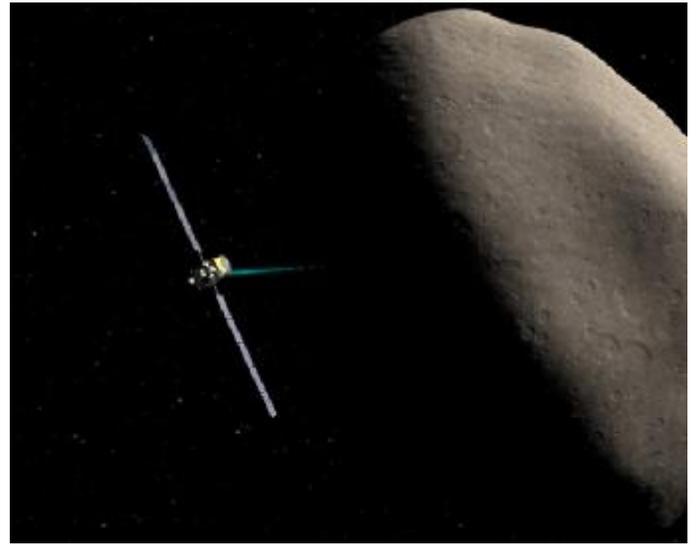
In total, 10 technologies tested by Deep Space 1 have been adopted by more than 20 robotic probes. One, the Small Deep Space Transponder, has become the standard system for Earth communications for all deep-space missions.

And Deep Space 1 is just one of NMP's missions. About a half-dozen others have flown or will fly, and their advanced technologies are only beginning to be adopted. That's because it takes years to design probes that use these technologies, but Stevens says experience shows that "if you validate experimental technologies in space, and reduce the risk of using them, missions will pick them up."

Stevens knew many of these technologies when they were just a glimmer in an engineer's eye. Now they're "all grown up" and flying around the solar system. It's enough to make a program manager proud!

The results of all NMP's technology validations are online and the list is impressive:
http://nmp.nasa.gov/TECHNOLOGY/scorecard/scorecard_results.cfm. For kids, the rhyming storybook, "Professor Starr's Dream Trip: Or, How a Little Technology Goes a Long Way" at <http://spaceplace.nasa.gov/en/kids/nmp/starr> gives a scientist's perspective on the technology that makes possible the Dawn mission.

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



Dawn will be the first spacecraft to establish orbits around two separate target bodies during its mission—thanks to ion propulsion validated by Deep Space 1.

Answer to Trivia Question

Well it's not Pluto; in case you haven't heard – it's not a planet anymore. The answer is b. Uranus. Due to the lack of internal heat leaking to the surface, temperatures on Uranus have been measured as low as 49 K, making it the coldest planet. There have not been any firm scientific conclusions reached to account for this odd fact.

Telescope Wanted

Wanted- 14-15" truss dob, good optics and condition a must. Flexible on any options you may have added. Please call or email. 239-353-4828, fishflash1@gmail.com. David Eimers