



Monthly Notices of the Everglades Astronomical Society



Naples, FL
September 2009

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Presidents Message

Here we go starting our EAS meetings at the Norris Center. Attendance at the Books-a-Million get together were well attended. At last month's we nearly took over the coffee area with tables pushed together. Our program this month will be Jupiter, if you haven't noticed it is very bright now, it's orbit brings it closer than it will be in several years. Astronomy Magazine produced a DVD on it, which will be shown.

Winter Star Party ticket applications have been sent to last years attendees. If you plan to attend in February you should send for them this month.

Viewing at the FAK has had most of the summer, with the exception of August 22nd. It was the best summer sky we have seen in years, no clouds, dew and great seeing. We can thank hurricane Bill for pulling all the clouds and moisture away as it past east of here.

See you at the meeting

Charlie Paul
Co-president
Viewing coordinator.

Astronomical Trivia Question of the Month

There are roughly half a million craters on the Moon larger than 1 km in diameter. What is the name of the largest?

- South Pole-Aitken basin
- Clavius
- Tyco
- Ptolemaeus

Answer on next page.

Sky Events

Sep 18 – New Moon
Sep 22 – Autumnal Equinox
Sep 26 – 1st Quarter Moon
Oct 4 – Full Moon

Oct 11 – 3rd Quarter Moon
Oct 18 – New Moon
Oct 21 – Orionid Meteor Shower

Next Meeting

September 24, 2009
Time 7 – 9 pm
At the Norris Center

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	Moonset
Sep 19		7:50 PM
Oct 10	12:25 AM	



Spitzer, the Sequel

The Spitzer Space Telescope is getting a second chance at life.

The liquid helium “lifeblood” that flows through the telescope has finally run out, bringing Spitzer’s primary mission to an end. But a new phase of this infrared telescope’s exploration of the universe is just beginning.

Even without liquid helium, which cooled the telescope to about 2 degrees above absolute zero (-271°C), Spitzer will continue to do important research—some of which couldn’t easily be done during its primary mission. For example,

scientists will use Spitzer's "second life" to explore the rate of expansion of the universe, study variable stars, and search for near-Earth asteroids that could pose a threat to our planet.

"We always knew that a 'warm phase' of the mission was a possibility, but it became ever more exciting scientifically as we started to plan for it seriously," says JPL's Michael Werner, Project Scientist for Spitzer. "Spitzer is just going on and on like the Energizer bunny."

Launched in August 2003 as the last of NASA's four Great Observatories, Spitzer specializes in observing infrared light, which is invisible to normal, optical telescopes.

That gives Spitzer the power to see relatively dark, cool objects such as planet-forming discs or nearby asteroids. These objects are too cold to emit light at visible wavelengths, but they're still warm enough to emit infrared light.

In fact, all warm objects "glow" with infrared light—even telescopes. That's why Spitzer had to be cooled with liquid helium to such a low temperature. Otherwise, it would be blinded by its own infrared glow.

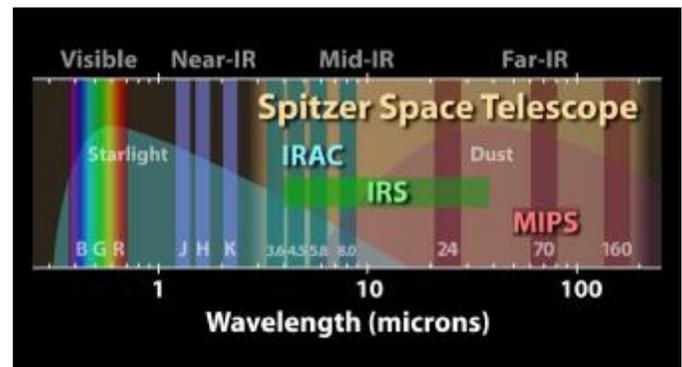
As the helium expires, Spitzer will warm to about 30 degrees above absolute zero (-243°C). At that temperature, the telescope will begin emitting long-wavelength infrared light, but two of its short-wavelength sensors will still work perfectly.

And with more telescope time available for the remaining sensors, mission managers can more easily schedule new research proposals designed for those sensors. For example, scientists have recently realized how to use infrared observations to improve our measurements of the rate of expansion of the universe. And interest in tracking near-Earth objects has grown in recent years—a task for which Spitzer is well suited.

"Science has progressed, and people always have new ideas," Werner says. In its second life, Spitzer will help turn those ideas into new discoveries.

For kids, The Space Place Web site has a fun typing game using Spitzer and infrared astronomy words. Check it out at www.spaceplace.nasa.gov/en/kids/spitzer/signs.

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The "warm mission" of the Spitzer Space Telescope will still be able to use two sensors in its Infrared Array Camera (IRAC) to continue its observations of the infrared universe.

Answer to Trivia Question

The answer is a. South Pole-Aitken basin is about 2500 km in diameter and 13 km deep. It is in fact the second largest crater in the Solar System (the largest is on Mars). The crater is located on the far side of the Moon and its existence was unsuspected until 1962. While mapped in 1978, detailed information about the crater was not available until the 1990's.