LRO News

LRO Updated Webpage and New Animations.

Have you visited the LRO webpage, http://lunar.gsfc.nasa.gov, recently? Did you know the layout has changed?

The first thing you will notice is the new animation of LRO’s launch. The full length animation can be seen at: http://lunar.gsfc.nasa.gov/gallery-multimedia.html. This animation consists of the launching of LRO and LCROSS, their flight to the Moon, and the collecting of data. Besides this great new animation, the Images & Multimedia, http://lunar.gsfc.nasa.gov/gallery.html, has images of the preliminary LRO model. Check back to these pages periodically to see new photos. New images will consist of LRO hardware photos as the different instruments are built.

New Group of LRO Librarians

Over 2007 the EPO team will be going around the country to facilitate “To the Moon and Beyond” workshops. Our first stop will be Phoenix, Arizona in the beginning of April followed by Boulder, Colorado the end of May. After our barrage of workshops here at GSFC, we will be on the road again with two workshops this fall, one in Boston, Massachusetts and one in Pasadena, California.

As you look back at your experience as Lunar Librarians, what changes would you suggest for future workshops? What information do you think you benefited the most from? Is there something you wish you knew before the workshop that would have allowed you to get more out of the program? Are there any recommendations or suggestions you would have for the new Lunar Librarians? Any suggestions would be greatly appreciated.
Stereo – A new look at the sun from two different points of view.

Solar Terrestrial Relations Observatories (STEREO) was launched October 25, 2006, aboard a Delta II. This is a joint mission between NASA and the Johns Hopkins University Applied Physics Laboratory (APL) to look at the Sun and solar events in 3-D. STEREO consists of two nearly identical spacecrafts which are offset from each other. One of the observatories will be “placed "ahead" of the Earth in its orbit and the other, "behind" using a series of lunar swingbys.” This offset will allow STEREO to obtain 3-D images.

During the planned two-year mission, STEREO will be looking at solar events, such as coronal mass ejections (CME) to help determine their origins, evolution and interplanetary impact. CMEs cause magnetic disruptions on the Earth affecting “satellite operations, communications, power systems, and the lives of astronauts in space.”

For more information on STEREO, please visit: [http://stereo.jhuapl.edu/](http://stereo.jhuapl.edu/)

A mosaic of the extreme ultraviolet images from STEREO's SECCHI/Extreme Ultraviolet Imaging Telescope aboard the “A” observatory taken on Dec. 4, 2006. These false color images show the sun's atmospheres at a range of different temperatures. Clockwise from top left: 1 million degrees C (171 Å), 1.5 million C (195 Å), 60,000-80,000 C (304 Å), and 2.5 million C (286 Å).
Science News

NASA Science News has published several articles last month. Please follow the links to read the full stories.

Floods! Fire! SERVIR!
When deadly floods struck Panama last November, a space-age situation room named SERVIR helped save lives.  http://science.nasa.gov/headlines/y2007/31jan_servir.htm?list907815

181 Things to do on the Moon
If you woke up tomorrow morning and found yourself on the moon, what would you do? NASA has released a list of 181 good ideas.  http://science.nasa.gov/headlines/y2007/02feb_181.htm?list907815

South Pole Flyby
Today, the ESA-NASA Ulysses spacecraft is flying over uncharted territory--the mysterious South Pole of the Sun.  http://science.nasa.gov/headlines/y2007/07feb_southpole.htm?list907815

Lunar Eclipse
Mark your calendar: On March 3, 2007, the Moon will turn red during a total lunar eclipse visible from parts of all seven continents, including the eastern half of the United States.  http://science.nasa.gov/headlines/y2007/12feb_lunareclipse.htm?list907815

A Cool Solar Mystery
One pole of the sun is cooler than the other. That's the surprising conclusion just announced by scientists who have been analyzing data from the ESA-NASA Ulysses spacecraft.  http://science.nasa.gov/headlines/y2007/20feb_coolmystery.htm?list907815

No Safe Place from Solar Storms
The ESA-NASA Ulysses spacecraft has discovered that there is no place in the inner solar system completely safe from solar radiation storms.  http://science.nasa.gov/headlines/y2007/22feb_nosafeplace.htm?list907815

Grand Theft Pluto
En route to Pluto, NASA's New Horizons spacecraft is about to visit Jupiter, and while it's there, steal some velocity for the trip ahead.  http://science.nasa.gov/headlines/y2007/26feb_grandtheft.htm?list907815
Librarian News

Here’s what’s going with some of the librarians who participated in the workshops

Maryland:

Diane Monnier and Kit Bloom, Montgomery County librarians, are planning on doing a "Space Science" programming for elementary ages the first week in April. Part of their program will consist of looking at our initial trip to the Moon and our future return trips.

Pennsylvania:

Melissa Jones, Pittston Memorial Library, is planning on presenting a “space” program to a 6th grade class in a few weeks.

What’s going on at your library??
Email Heather, heather_weir@ssaihq.com, with your library’s space program activities by March 15th, and it will be included in the next Lunar Librarian Newsletter. Feel free to send along pictures from your workshops.

Did you know?? Where can I find??

NASA Resources:

Do you find yourself looking for something? Wondering who the right person to contact? You may not be alone. Please send me an email and let me know what you are looking for. You may be helping someone else with the same question.

NEW! Links of the Month...

• New Horizons has just flown by Jupiter on its way to Pluto. Check out some of the cool images at: http://pluto.jhuapl.edu/gallery/missionPhotos.html

• Is there life on Mars? NASA is backing a team which is developing a sensor to check to see if there is life on Mars. http://www.nasa.gov/mission_pages/mars/news/urey-20070209.html

• National Science Teachers Association annual meeting is coming up in the end of March. The LRO EPO team will be attending. For more information about NSTA, please visit: http://www.nsta.org/

• IPY starts March 1, 2007. You can find out more about it at: http://www.us-ipy.org/ and http://www.ipy.org/
**Monthly Lunar Activity**

**Globe At Night**

Globe at night and lets your students contribute observations to a project measuring light pollution around the world. No special equipment is needed as the observations are done visually.

__________**Can You See the Stars?**

Join thousands of other students, families and citizen-scientists hunting for stars during March 8 - 21, 2007. Take part in this international event called GLOBE at Night to observe the nighttime sky and learn more about light pollution around the world.

GLOBE at Night is an easy observation and reporting activity that takes approximately 15-30 minutes to complete. Citizen-scientists record the brightness of the night sky by matching its appearance toward the constellation Orion with 1 of 7 stellar maps of different limiting magnitude. They then submit measurements on-line at [http://www.globe.gov/globeatnight/](http://www.globe.gov/globeatnight/). Resulting maps of all observations are created and placed back on-line by the GLOBE at Night staff within the couple of weeks that follow.

**The five easy star-hunting steps, for which more information is provided on-line, are:**

1) Find your latitude and longitude.

2) Find Orion by going outside an hour after sunset (about 7-10pm local time)

3) Match your nighttime sky to one of our magnitude charts.

4) Report your observation on our website.

5) Compare your observation to thousands around the world.

Helpful and user-friendly ancillary materials such as a teacher packet and science standards, a family packet, and student games and information are provided on-line at [http://www.globe.gov/globeatnight/](http://www.globe.gov/globeatnight/).

You can also subscribe to our mailing list to receive updates and results of this campaign. Visit [http://www.globe.gov/globeatnight/](http://www.globe.gov/globeatnight/) and click on “subscribe” at the bottom of the webpage.

During the 2006 event over 18,000 people from 96 countries submitted observations, including data from every U.S. state. Help us exceed these numbers in 2007!

GLOBE at Night is a collaboration between the National Optical Astronomy Observatory (www.noao.edu), The GLOBE Program (www.globe.gov), Centro de Apoyo a la Didactica de la Astronomia, Windows to the Universe (http://www.windows.ucar.edu), The International Dark-Sky Association (www.darksky.org) and Environmental Systems Research Institute, Inc.