

Explore the Universe in Your Own Backyard

See for yourself what future lies behind the gates of NASA Goddard!



Sneak Peek

LAUNCHFEST

NASA GODDARD SPACE FLIGHT CENTER

Opening for the public on

**Saturday
September 13, 2008**

10:00 a.m.—4:30 p.m.

Don't miss...

A Salute to NASA's 50th Anniversary

In 2008, NASA celebrates 50 years of scientific and technological excellence. NASA has powered us into the 21st century through signature accomplishments that are enduring icons of human achievement. Among those accomplishments are technological innovations and scientific discoveries that have improved and shaped our lives on Earth in countless ways. Please join us as we celebrate the past and look forward to a promising new era of inspiration, innovation, and discovery at the Festival of Cakes.



Journey To Tomorrow Adjacent to Mall

Visit this 53' foot trailer packed with interactive hands-on activities and digital learning stations. Be sure to try the solar system scale where visitors discover how much they weigh on each of the planets.



Meet an Astronaut 10:45 a.m. Mall

Mission Specialist Paul Richards shares his personal voyage as an astronaut on STS-102 and will be available for autographs after his brief presentation.

Special Welcome by Goddard's Center Director

11:30 a.m.

Mall

Center Director Robert Strain welcomes you to Goddard, home to world-renowned science and technology and over 9,000 employees.



A Salute to Hubble

10:30 a.m., 11:15 a.m. & 12:00 p.m.

Building 8 Auditorium

The Columbia Orchestra will present "Christopher Theofanidis Rainbow Body" with Dr. Mario Livio of the Space Telescope Science Institute at Johns Hopkins University.



Festival of Cakes

1:00 p.m.

Mall

Join members of the Columbia Orchestra and Food Network Celebrity Chef Warren Brown as they celebrate NASA's 50th Anniversary. CakeLove founder and owner, Warren Brown, will showcase an array of delectable sweets, including CakeLove's popular cakes, brownies and cookies. Take part in the cake cutting ceremony that starts at 1:00 p.m. Be on time, as tasty treats are served to the first 5000!



2006 Nobel Prize Laureate, Dr. John Mather

2:00 p.m.

Building 8 Auditorium

Goddard's own Nobel Prize Laureate, Dr. John Mather, will discuss origins of the universe, his Nobel Prize winning-research, and the James Webb Space Telescope.

JAXA Space

3:00 p.m.

Building 8 Auditorium

See launch footage and lunar images for the Japan Aerospace Exploration Agency's Selene mission and view a spectacular lunar fly-by movie.



Hungry?

Serving up some delicious local eats, these food vendors offer savory edibles available for purchase. Find a flavor that satisfies your cravings while you enjoy LaunchFest. **Several of our Mall food vendors have decided to join Goddard in the Greening of LaunchFest. Stop by the Somat compost truck on the Mall to find out more!**

On the Mall

- Jay's and Annes Pepper Jack Grill (Greek & Mexican Food)
- Boardwalk Fries (Chicken Tenders & Fries)
- "Weekness" for Sweetness (Caribbean Food)
- Margaret's Soul Food (Soul Food)
- Buddy's Crab's & Ribs (Crab cakes & Pulled Pork/Chicken)
- National Museum of the American Indian (Native American Food)
- Rita's Concessions (Beach Food)
- Armand's Pizza
- Golden Krust (Caribbean)
- A&B Soft Ice Cream
- Go Melvo (Sno Balls)

At the Spacey-Kid Zone (Recreation Center)

Goddard Recreation Center Catering Services
(chicken, hot dogs, and burgers)



= photo opportunity



= upcoming mission

Ever look up in the sky at night and wonder what the universe has to offer? Look no further than Goddard Space Flight Center to find out! Learn about the solar system, human exploration, and the cosmos in the Explore Pod. You'll find out what it takes to build, launch, and maintain the spacecraft that have given us exciting discoveries about the universe around us.

Live Presentations, Demonstrations, and Scheduled Activities

Cosmic Survey

10:00 a.m. & 1:00 p.m.

Buildings 7/10/15

An interactive photographic introduction to scientific classification that gives new insights into our Earth and other objects in the universe and their size and scale.

Impacts!

11:00 a.m. 1:00 p.m. & 3:00 p.m.

Buildings 7/10/15

What caused the craters on the Moon? Find out and explore more about crater formation in this completely interactive crater-modeling experience.

What's Out There?

11:00 a.m. & 2:00 p.m.

Buildings 7/10/15

Use household materials to figure out the composition of familiar objects in the universe and how astronomers discover the elements and compounds that make up objects in space.

Why Go into Space?

12:00 p.m. & 3:00 p.m.

Buildings 7/10/15

"Why Go Into Space?" is an interactive demonstration that answers a common question about NASA's satellites. The demonstration explains different wavelengths of light and why space-based observing is necessary.

All Day Activities



Spacecraft Test and Integration Facility

Buildings 7/10/15

Before launching a spacecraft, satellites are tested at the Goddard Spacecraft Test and Integration Facility to ensure it can withstand the rigors of space. Live demos are conducted throughout the day. You can see a centrifuge, acoustics chamber, and much, much more!



Lunar Reconnaissance Orbiter (LRO)

Buildings 7/10/15/29

LRO is the first mission in NASA's planned return to the Moon. LRO will launch in 2009 with the objective of finding safe landing sites and locating potential resources. Take advantage of this unique opportunity to see real spaceflight hardware in one of the world's largest clean rooms and participate in several hands-on activities that further expand your knowledge about this upcoming mission.

Moon Pie—Take part in this activity where you will work in teams to apply your knowledge about the Moon, its environment, and the LRO Mission.

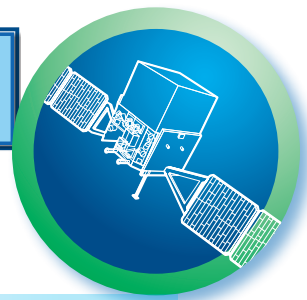
Build An LRO—Learn about the instruments carried aboard LRO and how these instruments will help us better understand the Moon and plan for a future lunar outpost.

Lunar Mapping—Pictures of the lunar surface with increasing resolution will be displayed along with an example of the 1 m resolution that will be possible with LRO's Narrow Angle Camera. These images will be coupled with lunar geologic maps.

Moon Rocks—A 5 kg lunar sample encased in a Lucite pyramid will be on display.

explore pod

...Explore Further



Solar Dynamics Observatory (SDO)

Building 7

SDO is designed to help us understand the Sun's influence on Earth and near-Earth space by studying the solar atmosphere. Participate in several activities that enlighten you about the Sun's quirky and sometimes stormy output of extreme ultraviolet light.

Sun Spots—Use a telescope to observe solar phenomena (weather permitting).

Make Your Own Cereal Box Diffractor—Use common everyday materials to construct your own cereal box diffractor and observe diffraction and the spectrum of various items.

All About Magnetics—Learn how magnets, electromagnetism, and magnetic fields work and how our Sun and Earth are giant magnets. Learn how NASA plans to predict solar weather by studying the magnetic activity on the Sun.

Walk on the Sun

Building 7

The "Walk on the Sun" Solar TErestrial RElations Observatory (STEREO) Space Mission science exhibit makes possible new ways of understanding data and imagery from this recent space mission. It is designed to increase accessibility and provide new ways to explore the millions of images and other data recorded by the two spacecraft as they study the Sun, coronal mass ejections, and solar winds.

STEREO 3D Movie

Building 7

NASA's STEREO satellites have given the world 3D views of the Sun for the first time. The two observatories are not large, about the size of a golf cart! They were launched on October 25, 2006. During the two-year mission, the STEREO Program will explore the origin, evolution, and interplanetary consequences of some of the most violent explosions in our solar system. Come view this 3-D movie to learn more!

Maryland Science Center Star Lab

Buildings 7/10/15

Check out an inflatable, portable planetarium!

Wallops Flight Facility Exhibit

Buildings 7/10/15

There's more to Goddard than just the Greenbelt site. Goddard Space Flight Center's Wallops Flight Facility is an important piece of Goddard and is located on Virginia's eastern shore and prides itself on being NASA's only-owned launch range.



James Webb Space Telescope (JWST)

Buildings 7/10/15

Scientists/engineers speak about JWST's science objectives: to examine every phase of our history, from the Big Bang to the formation of the solar system. Also highlighted will be the engineering marvels of JWST, including its deployment.

Spaceflight America (Volanz Aerospace Inc.)

Bldg. 29

Learn about the 2008-2009 Astronaut Glove Challenge and find out how you can enter!

NOTE: explore pods are continued on page 4.





Putting $E=mc^2$ to Work

Buildings 7/10/15

The Gamma-ray Large Area Space Telescope (GLAST) is a space-based gamma-ray observatory that studies black holes, galaxies, and gamma-rays. Visit this booth to see how it's all being done!



Interstellar Boundary Explorer (IBEX)

Buildings 7/10/15

IBEX is an upcoming mission that images global interactions at the outer reaches of the solar system. During its science investigation, IBEX will use a pair of energetic neutral atom "cameras" to image the interactions between the million mile-per-hour solar wind continually blown out by the Sun and the low-density material between the stars, known as the interstellar medium. Visit the IBEX display to learn more.

New Horizons

Buildings 7/10/15

New Horizons studies worlds at the edge of our solar system. The first voyage to a whole new class of planets in the farthest zone of the solar system, New Horizons is a historic mission of exploration. To learn more, come to the New Horizons exhibit.

Cassini

Buildings 7/10/15

Cassini's observations of Saturn's largest moon, Titan, have given scientists a glimpse of what Earth might have been like before life existed. They now believe Titan possesses many parallels to Earth, including lakes, rivers, channels, dunes, rain, snow, clouds, mountains, and possibly volcanoes. Come to this exhibit to learn more about what Earth might have been like before life existed.

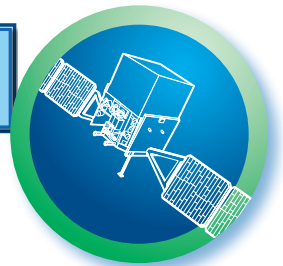
MESSENGER Magnetometer (MAG) and X-Ray Spectrometer (XRS) Displays

Buildings 7/10/15

Visitors will view animations created by one of the members of the MESSENGER Magnetometer instrument team.

explore pod

continued from page 3



Hubble Gallery

Building 29

Check out one of the world's largest clean rooms and don a spacesuit to try your hand at some astronaut maneuvers. Also see Hubble hardware from previous servicing missions.



ILC Dover

Building 29

Talk with representatives from ILC Dover and watch video footage of astronauts at work in space. Here's your chance to don an astronaut space suit and gloves.



Topographic Features

Building 33

Use digital elevation maps to recognize features on the surface of Mars. These maps came from the Mars Orbiter Laser Altimeter (MOLA) instrument aboard the Mars Reconnaissance Orbiter.



SAM Lab Tour Stop/Animations

Building 33

The Sample Analysis at Mars (SAM) Instrument Suite will fly onboard the Mars Science Laboratory (MSL) in 2009. Come see a full scale model and learn how SAM's five science goals will address three of the most fundamental questions about the ability of Mars to support life. After viewing the full-scale model, visit Rm. H114 to see SAM animations.

Spacecraft Fabrication Facility Machine Shop

Building 5

See the Spacecraft Fabrication Facility Machine Shop up close and personal where satellite parts are constructed and crafted. This high-tech shop features the latest computer-controlled milling equipment.

LAUNCHFEST





people pod

...More Than Rocket Science

NASA is more than shuttles and satellites. NASA's greatest asset is the people that support every mission – from rocket scientists to human resource managers to legal counsel. The People Pod focuses on the human element of NASA's space exploration and study, and introduces you to the people that make up Goddard.

Live Presentations, Demonstrations, and Scheduled Activities

Goddard Science Café

Building 1 Cafeteria

These NASA scientists, engineers, and researchers share their exciting work.



Dr. Paul Mahaffy

10:30 a.m.

Learn how SAM (Sample Analysis at Mars) will investigate the surface of Mars.

Dr. Dave Thompson

11:30 a.m.

Find out how Goddard designed and launched a new, powerful tool to explore the most extreme environments in the universe.

Cathy Peddie

12:30 p.m.

Do you own a GPS? So do we! NASA is developing our own mapping system to go back to the Moon with LRO.

Dr. Neil Gehrels

2:30 p.m.

Dr. Gehrels discusses how one of Goddard's missions carries three instruments to enable the most detailed observation yet of gamma ray bursts.

More than Rocket Science

Building 1 Cafeteria

Rethink the NASA stereotype. Goddard scientists, engineers and other employees do more than just complex calculations.

Terri Randall

11:00 a.m.

Customer Service Manager, Terri Randall discusses what it takes to provide top-notch customer service to a world-class science organization.

Leigh Janes

12:00 p.m.

NASA Aerospace Engineer, Leigh Janes will talk about her journey at Goddard from a Gen Y perspective.

Mark Branch

1:00 p.m.

NASA Aerospace Engineer, Mark Branch by day, and DJ Scientific by night discusses what it takes to juggle two careers.

Kelly Farrell

2:00 p.m.

Legislative Affairs Liaison, Kelly Farrell discusses how she keeps an eye on Congress.

Noble Jones

3:30 p.m.

NASA Engineer and professional Arena football player, Noble Jones will let us in on his secret of how he tackles challenges on and off the football field.

Generation Y Meet and Greet

11:00 a.m. and 3:00 p.m.

Building 1, Room E100B

Enjoy a conversation with some of Goddard's influential young employees who contribute to the Center's success. These men and women just like you work in all areas of Goddard—from Public Affairs to Flight Dynamics. This is NOT a lecture. This is NOT a presentation. Discover how they got to Goddard and maybe learn something about yourself.

Mind Your Manners

1:15 p.m.

Building 1, Room E100B

Shawn E. Gilleylen, Chief Etiquette Officer and creator of Success with Etiquette, presents to a highly interactive, educational, and entertaining session with fun role-playing exercises that help children develop their social skills and character while building self-esteem, confidence, and leadership skills.

Polish Your Professional Presence

2:00 p.m.

Building 1, Room E100B

Shawn E. Gilleylen, Chief Etiquette Officer and creator of Success with Etiquette teaches you valuable strategies to reveal the principles of proper etiquette and how dress, body language, communication, and social skills can enhance or undermine your chance to obtain your dream job.

All Day Activities

So You Want to Work at GSFC? Career Showcase

Building 1, Room E100

Participants will gain a better understanding of the Federal application process and the careers at the Goddard.



Picture Yourself Working at NASA

Building 1, Room E100

Get your picture taken and embedded electronically in a space suit, on the Moon, or other NASA related images.

Health & Wellness in Our Community

Building 1, Room E100

Dr. Randy Hallman and his staff from Yahlic Clinic will be on hand to discuss several health and wellness related topics, including general nutrition, workstation/computer ergonomics and everyday activities done without pain.

Free Massage!

Building 1, Room E100

Have an achy back? Stop by and get a seated massage by a staff member of the Yahlic Clinic.

Success With Etiquette

Building 1, Room E100

Visit the Etiquette Expert, Shawn Gilleylen, Chief Etiquette Officer and creator of *Success with Etiquette* and get tips on how to improve your chances of getting the NASA job of your dreams.

Greenbelt Library

Building 1, Room E100

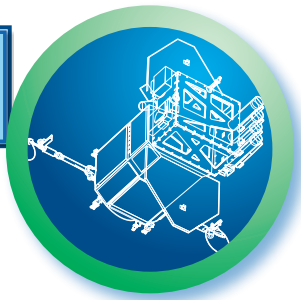
Get "book-smart" with the Greenbelt Library as they present "Library Jeopardy," targeting all ages. Pens, pencils, card cases, toy gliders and children novelty rings will be given as prizes.

LAUNCHFEST

NASA- What have we done for you lately?—Every day, in a variety of ways, American lives are touched by space technology. Since 1976, about 1,400 documented NASA inventions have benefited U.S. industry, improved the quality of life and created jobs for Americans. Come to the Tech pod and learn about NASA in your life!

tech pod

...Pioneering Future Technologies



Live Presentations, Demonstrations, and Scheduled Activities

Dr. Thorsten Markus

10:30 a.m. & 12:30 p.m.

Building 28, S121

Dr. Markus discusses his study of Earth's polar regions: the science, the adventure and the beauty!

Beebots in Space (Ages 4–7)

11:00 a.m. & 1:00 p.m.

Building 28, Room S120

Beebot buzzes into town to teach us about robots and programming. Students will give Beebot commands and explore a newly discovered planet. Presented by The Greenbelt Recreation Department along with Computer Explorers.

Everyday Engineering (Ages 8–11)

12:00 p.m. & 2:00 p.m.

Building 28, Room N270

Beyond math and science, engineering brings an understanding of how the world works. Through this fun, hands-on project, kids gain the confidence and know-how to tackle all kinds of everyday engineering. Presented by the Howard County Library.

Are You Smarter than a Rocket Scientist?

3:00 p.m.

Building 28, Room E210

This game show-style event pits audience members against our rocket scientists in a test of trivia and observation. Prizes will be awarded to winners!

All Day Activities

Y Space?

Building 28 Atrium

Y Space answers the question, "Why Space?" Visitors also learn answers to the questions, "What do I get out of space exploration?" and "Is it worth the risk and cost?" Explore NASA City, an interactive exhibition of spin-offs in their everyday lives. Learn about many of the discoveries made in recent decades through the space program and about the return on the investment made in space exploration.

Touch the Earth

Building 28 Atrium

While your fingers walk the globe, learn about topography and oceanography. You will be amazed by the beautiful and educational imagery as you travel the globe.



Picture Yourself in Space

Building 28 Atrium

Get your picture taken and embedded electronically in a space suit, on the Moon, or other NASA related images.

Innovative Partnerships Program (IPP)

Building 28 Atrium

Representatives from IPP are on hand providing information about recent success stories relating to how the technology developed at the NASA Goddard Space Flight Center is benefiting your everyday life and to give away items.

Robotics Demonstrations

Building 28 Atrium

GREAT (Goddard Robotics for Exploration and Avionics Testing) is a robotic vehicle operated by remote control to simulate what is planned for the Moon and Mars. Come see the robot in action!

Scientific Visualization Studio

Building 28, Room S121

Step into a virtual world where satellite data is matched with world-class animators to create science conceptual visualizations based on reality, but showcasing virtual reality.

Flight Dynamics Facility

Building 28, Room N222

With over thirty years of experience, the Flight Dynamics Facility has an impressive record of achievement and success in the support of scores of NASA space missions of every kind. Today, a professional staff of analysts tends to a wide variety of missions. Learn how these analysts keep it all together and take part in several other activities:

Getting to the Moon without Mapquest—Learn how we map a trip to the Moon.

Where in Space is My Spacecraft?—Find out how we track spacecraft in space.

Getting Connected with Your Spacecraft—Discover how we always have our eyes on the spacecraft.

3-D Visualization for Advance Mission Planning—Take a close look at the 3-D system that designs pathways through space.

Space Operations Learning Center (SOLC)

The SOLC is a great place for students to learn about space through informative videos and challenging interactive simulations.

Goddard TV Operations Control Room

Building 28, Room 212

The Goddard TV Operations Control Room monitors the presence and quality of the multi-channel digital TV video/audio programming, which originates at the various NASA centers and is then transmitted throughout the United States to all NASA facilities, schools, cable companies, and the news media. The control room is also used to record and monitor video, audio, and data related to all shuttle missions as well as various unmanned launches.

Become a Moon Base One Explorer

Building 28 Atrium

Learn the principles of establishing a permanent presence on the Moon. Presented by Federation of Galaxy Explorers.





Fires in California, Chesapeake Bay recovery efforts, drought in the Southwest, polar bears in trouble, ice sheets melting

Come and see how Goddard is keeping an eye on your Mother (Earth, that is), and helping to take care of her with our innovative Green technologies and buildings. Learn about how satellites are constantly monitoring the health of the Earth's atmosphere, oceans, land, and life.

Live Presentations, Demonstrations, and Scheduled Activities

Stormin' Bob Swanson, The Singing Weatherman

Building 32

He's not just a weatherman – he's a one-man band! What do you get when you cross music with meteorology? Stormin' Bob Swanson, the Singing Weatherman. Stormin' Bob's "Music and Meteorology" program will tap into kids' natural fascination with the weather.

Get a Measure on the Weather

11:00 a.m., 12:00 p.m., 1:00 p.m.

Building 32, Room E103

Demonstrations of professional weather instruments (anemometer, thermometer, wind vane, rain gauge), including a real weather balloon and radiosonde instrument package. Stormin' Bob Swanson demonstrates high and low pressure and its importance to meteorologists.

Cooking up a Storm

3:00 p.m. – 4:00 p.m.,

Building 33, Room E103

Stormin' Bob Swanson juggles his way through the water cycle, explaining how the energy released during condensation helps to fuel thunderstorms. Also included are tornado demonstrations. Don't miss the hits, "Head in the Clouds" and "The Weather Safety Polka."

Earth Science Multi-Media Presentations

Building 33, Room H114

Live Presentations:

Presenter: **Holli Riebeek**

NASA's Earth Observatory: Take a tour of NASA's Earth Observatory to enjoy current views of Earth from space and to learn about emerging research on Earth and its climate.

Presenter: **Steve Graham**

Earth Science E-Theatre: NASA's Earth Science E-Theatre is a dynamic theater-style presentation of high-definition Earth observations on global climate change.

Presenter: **Holli Riebeek**

Citizen Science: A citizen scientist's introduction to NASA Earth observations. Become a citizen scientist by exploring the same space-based satellite data that scientists use to study Earth and its climate.

Presenter: **Rob Simmon**

Perspectives of Earth from Space: See how the view from space provides a new perspective on our home planet.

Presenter: **Dr. Claire Parkinson**

The Earth's Changing Ice Cover: Listen to a NASA polar scientist describe recent changes in the Earth's sea ice and ice sheets as revealed through satellite observations.

DVDs to be shown:

A Tour of the Cryosphere: A ten-minute movie about glaciers, ice caps, and sea ice, and how global warming is changing Earth's frozen assets.

Multi-Sensor Fire Observations: A ten-minute movie about how NASA is fighting fires from space.

Schedule:

10:15	NASA's Earth Observatory
10:30	Earth Science E-theater
11:10	A Tour of the Cryosphere
11:20	Multi-Sensor Fire Observations
11:30	Citizen Science
12:00	Earth Science E-theater
12:40	Perspectives of Earth from Space
1:00	NASA's Earth Observatory
1:15	Multi-Sensor Fire Observations
1:25	A Tour of the Cryosphere
1:30	Perspectives of Earth from Space
1:45	Multi-Sensor Fire Observations
2:15	The Earth's Changing Ice Cover
2:40	Citizen Science
3:10	A Tour of the Cryosphere
3:20	Earth Observatory
3:40	Multi-Sensor Fire Observations

All Day Activities

EOS Mission Control Center

Building 32

See where and how NASA Goddard Space Flight Center controls several Earth-observing satellites.

Earth Science Spacecraft Models

Building 32

MODIS

Vesper

Aura

Aqua

National Oceanic and Atmospheric Administration (NOAA)

Building 32

Meet our partners from NOAA. From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration, and supporting marine commerce, NOAA's products and services support economic vitality. NOAA's scientists use cutting-edge research and high-tech instrumentation to provide citizens, planners, emergency managers, and other decision makers with reliable information when they need it. Learn how NASA and NOAA partner on several projects and take part in a variety of interactive activities, including:

- Scijinks
- Space Place
- Weather Jeopardy—interactive game

LAUNCHFEST

- Experts/videos for GOES Mission
- Experts and videos from several missions, including GOES, POES, and NOAA-N Prime
- Search and rescue emergency beacons
- Demo of the NOAA weather radio
- Jet Stream meteorology and Xtreme weather—interactive CD
- GOES and POES benefits to all
- NOAA/NESDIS Magic Planet and ocean climate interaction



Crevasse Tracking

Building 33

This activity will enable visitors to track crevasses and snow mounds over a 6-year period through LIMA images.

Ice, Cloud, and land Elevation Satellite (ICESat)

Building 33

Are the ice sheets that still blanket Earth's poles growing or shrinking? Will global sea levels rise or fall? NASA's ICESat satellite is helping to answer these and other questions, to help fulfill NASA's mission to understand and protect our home planet.

Aura

Building 33

Aura (Latin for breeze) was launched in 2004 and answers questions about changes in our life-sustaining atmosphere. See a scale-model of this spacecraft and take part in a hands-on activity that includes UV beads and Frisbees!

UV Radiation and the Ozone Hole—This activity will feature special materials (beads, Frisbees) that are sensitive to ultraviolet (UV) radiation. Participants will be given the opportunity to observe the changes in the beads and Frisbees to see how they react when exposed to UV.

NO₂ & Air Quality—Visitors will examine data in several formats in order to determine the presence or absence of seasonal variability in tropospheric nitrogen dioxide (NO₂) concentrations.

Aqua

Building 33

Launched on May 4, 2002, the Aqua satellite has six different Earth-observing instruments and is named for the large amount of information being obtained about water on Earth. The water variables being studied include almost all elements of the water cycle: water in its liquid, solid, and vapor forms. Additional variables being measured include radiative energy fluxes, aerosols, vegetation cover on the land, phytoplankton, and dissolved organic matter in the oceans, and air, land, and water temperatures. Come to the Aqua display to learn more.

Landsat

Building 33

"It's like having superhuman vision!" That's how some people describe the unique view of Earth that Landsat provides. Come and see how scientists use these remote sensing images to better understand how and why Earth is constantly changing.

Find The Difference?—In this activity, participants will draw from a suite of poster-sized images of Earth from space. Participants will be given an opportunity to pair them up and will be challenged to identify at least 5 differences between the two.

Spectroscopy and Light—Visitors will be able to experiment with an Alta II hand-held spectrometer to investigate how different pigments reflect light. The Alta II handheld spectrometer has several different bands of reflectivity, and when plotted on a graph, can produce a spectral response. This activity will be used to demonstrate to visitors how spacecraft puts together an "image" of the Earth using spectral responses. In addition to using the Alta II spectrometer, visitors will be able to use crayons and different colored lights to experiment with how pigments and colors of light combine, and how that affects what spacecraft see.

Explore A Pixel—Visitors will be taken to a plot of congruent land and will be asked to 'classify' the land (grass cover and pavement).

Land Ice vs. Sea Ice—Much of the world's ice can be divided into two major categories: floating ice (icebergs, sea ice) and land ice (glaciers, ice sheets). Both types of ice are at risk of shrinking if temperatures continue to increase, yet each affects global sea level in different ways. This demonstration is a day-long activity that focuses on the importance of scientific measurements taken at the polar regions.



Glory

Building 33

The Glory Mission will help increase our understanding of Earth's energy balance. Meet representatives from the project and learn more about this upcoming mission.



NPP

Building 32

Come see how this upcoming mission will collect and distribute land, ocean, and atmospheric data to the meteorological and global climate change communities.

SMAP

Building 33

Learn how we will all benefit from having a mission that focuses on soil moisture.

Making Images from Space

Building 33

This exhibit demonstrates how NASA scientists turn satellite data into images. In this activity, the Aqua Satellite has gathered data for you to process. Put your scientist hat on and turn data into an image of the Himalaya Mountains.

Magic Planet

Building 33

Explore NASA science through the lens of Magic Planet. This interactive, digital globe allows users to view and explore dynamic images of Earth, other planets, and space.



Baltimore/Washington Partners for Forest Stewardship

Building 33

Meet representatives from this preservation organization who help us protect some of Maryland's most precious forestlands.

Goddard's "Greening" Effort

Building 33

Meet Goddard representatives and learn about the many environmentally-focused activities that are going on at the Center, including our new green building and our landfill gas project.

