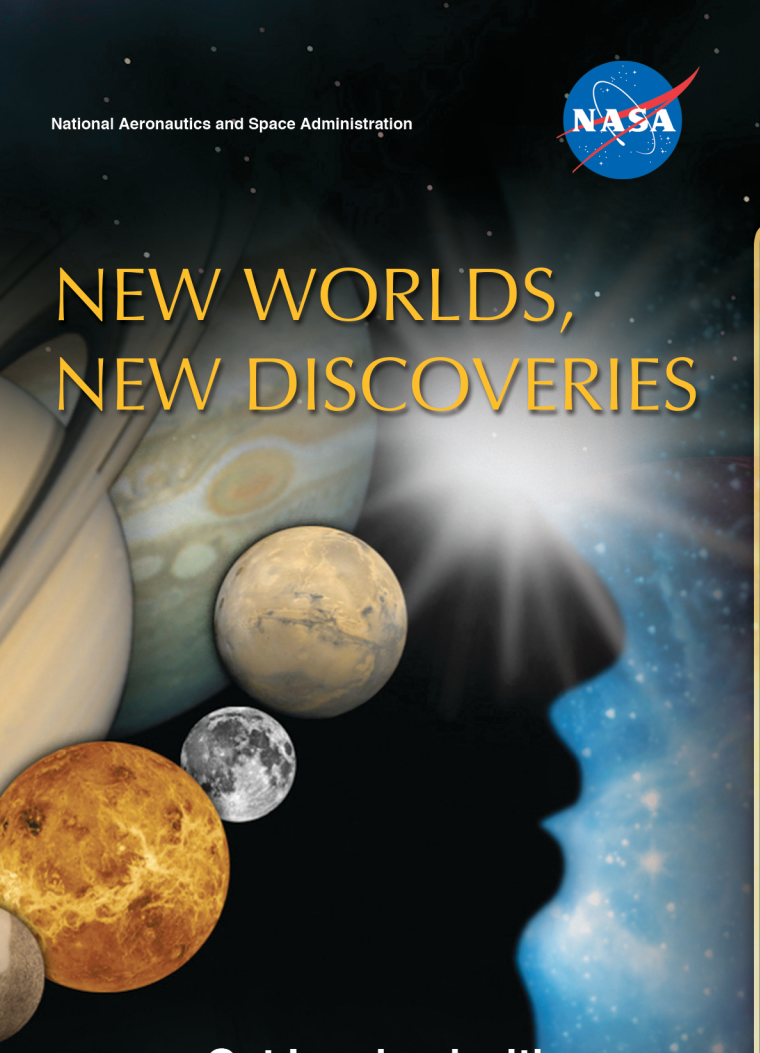
National Aeronautics and Space Administration

NEW WORLDS, NEW DISCOVERIES



Get Involved with NASA Science Through the Year of the Solar System and 50 Years of Solar System Exploration

Embark on A Journey Through NASA's Fifty Years and Continuing Exploration of the Solar System!

www.nasa.gov

Join NASA on a cosmic road trip across our vast solar system!

Bring New Worlds and New Discoveries to Your Community!

New Worlds, New Discoveries offers the continued opportunity to get involved in NASA science through the Year of the Solar System (YSS), as well as a salute to the 50-year history of solar system exploration. Providing an integrated view of our new understanding of the solar system, New Worlds, New Discoveries combines the amazing discoveries of past NASA planetary missions with the most recent findings of the ongoing missions, in this current unprecedented age of planetary exploration!

New Worlds, New Discoveries offers valuable educational materials and resources to engage students and the general public in exciting topics related to today's big questions in planetary science.

The journey continues with the anniversary of 50 years of solar system exploration.

50 Years

During the last five decades, NASA has launched a variety of robotic spacecraft and manned missions to study the planets and moons of our solar system. Over that time, our understanding of planets has been revolutionized, as has the technology that has made these discoveries possible.

Explore planetary discoveries and concepts within a collection of resources and materials!

Find Inspiration:

- Mission milestones and discoveries
- Educational materials and activities
- Images and videos related to each YSS topic

Get Involved:

- Host your own public event and share it on the YSS site! Registering your event is quick and easy and is a great way to get the word out about your program!
- Receive a FREE YSS educator kit and promotional materials (while supplies last).

Make Connections:

- Find events near you! Upcoming public YSS-related events are shown on the Calendar of Events and map.

Get Social:

- Use Twitter, Facebook, YouTube, and Flickr, or contribute and read stories to share your YSS experience with others and see what other people are doing.
- See the latest YSS-related tweets on the OurSolarSystem Twitter feed! Post a tweet with the hashtag #nasayss and your own tweet will show up on the YSS website.
- Friend OurSolarSystem on Facebook to get the latest solar-system-related updates.

http://solarsystem.nasa.gov/yss/

This is an unprecedented time in planetary sciences as we learn about new worlds and make new discoveries!

New Worlds, New Discoveries offers

Activities, resources, and background science information

Connections to the National Science Standards

All organized by topics that highlight exciting discoveries in our solar system and ready for use by YOU with your audiences!

Visit the website to...

- Learn about different topics: formation, water, moons and rings, volcanism, and more
- Find educational activities for K–12 and undergraduate classrooms
- Find educational activities for clubs/organizations and other out-of-school settings
- Find background information for each topic
- Download free resources such as bookmarks, PowerPoint files, and website widgets
- Discover many ways to get involved! Share your own observing session, workshop, planetarium show, or other event

Connect with NASA planetary missions, research, and resources through today's big questions in planetary science!

How did our Sun's family of planets and bodies originate?

The Journey Begins
Scale of the Solar System

Birth of Worlds
Formation of the Solar System

A Family Affair
The Planets — Investigating Our Planetary Family Tree

How has our solar system evolved to its current diverse state?

Windy Worlds
Gas Giants, Atmospheres, and Weather

Our Favorite Things
Moons and Rings

Leftovers from Planet Building
Asteroids

Small Bodies / Big Impacts
Comets

Volcanism in the Solar System!

Shadows of the Sun
The Sun, Transits, and Eclipses

Ice in the Solar System!

Gravity: It's What Keeps Us Together

Impacts!
Collisions and Craters in the Solar System

Water, Water, Everywhere!
Water in the Solar System

Evolving Worlds
How Planets Change Over Time

Magnetospheres: Planetary Shields

Ancient Astronomers / Modern Tools
Early Observations to Telescopes to Spacecraft

New Data, New Ideas
Our Evolving Understanding of the Solar System

Far-Ranging Robots
Robotic Spacecraft

How did life begin and evolve on Earth? Are we alone?

Discovering New Worlds
The Search for Planets

Got Life?
Astrobiology – Are We Alone in the Universe?

Missions Key:

- Mercury: MESSENGER
- Mars: MRO, MSL, MER, Mars Odyssey and MAVEN
- Jupiter: Juno
- Saturn: Cassini
- Moon: LRO, GRAIL, LADEE
- Sun: SOHO and SDO
- Other Solar System Objects: Dawn, EPOXI, New Horizons, Stardust-NExT, OSIRIS-REx
- Beyond the Solar System: Kepler, Hubble Space Telescope, Spitzer

*This is just a sampling of missions. Find more missions that have contributed to our understanding of the solar system at: http://solarsystem.nasa.gov/50th/