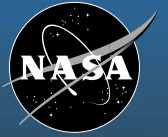


# NASA

National Aeronautics and  
Space Administration

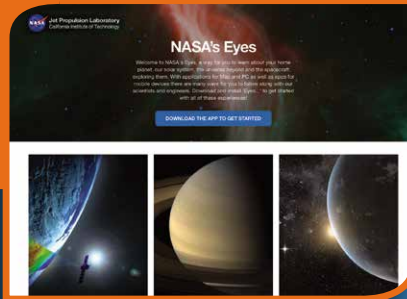


## *Science*

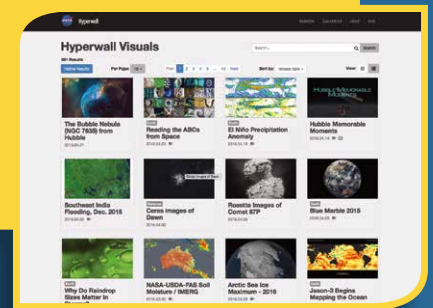
# RESOURCES



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**Books** 12  
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For Online Digital Version  
***[eosps.gsfc.nasa.gov/publications/24](https://eosps.gsfc.nasa.gov/publications/24)***

**science.nasa.gov**

**eospso.gsfc.nasa.gov**





### NASA Science

NASA leads the nation on a great journey of discovery, seeking new knowledge and understanding of our planet Earth, our Sun and solar system, and the universe out to its farthest reaches and back to its earliest moments of existence. NASA's Science Mission Directorate (SMD) and the nation's science community use space observatories to conduct scientific studies of the Earth from space to visit and return samples from other bodies in the solar system, and to peer out into our Galaxy and beyond.

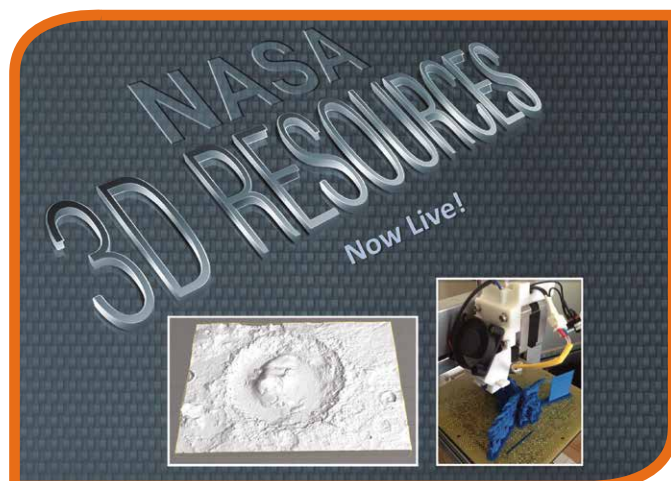
[science.nasa.gov](http://science.nasa.gov)



### NASA's Earth Observing System

NASA's Earth Observing System (EOS) is a coordinated series of polar-orbiting and low inclination satellites for long-term global observations of the land surface, biosphere, solid Earth, atmosphere, and oceans. As a major component of the Earth Science Division of NASA's Science Mission Directorate, EOS enables an improved understanding of the Earth as an integrated system. The EOS Project Science Office (EOSPSO) is committed to bringing program information and resources to the Earth science research community and the general public alike.

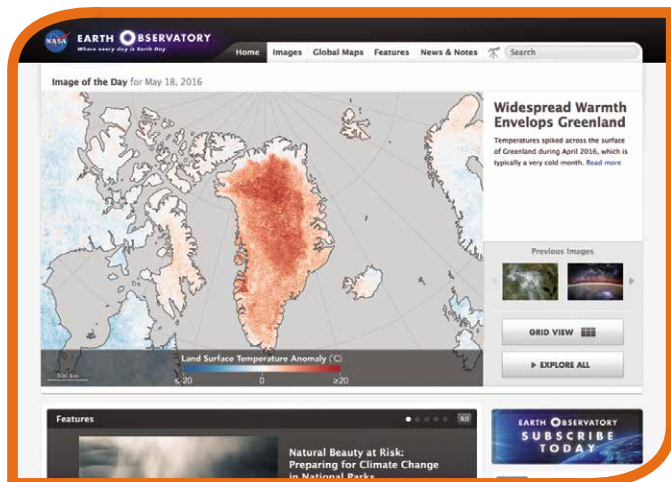
[eospsso.gsfc.nasa.gov](http://eospsso.gsfc.nasa.gov)



### NASA 3D Resources

Want to 3D print your own piece of Mars? NASA's one-stop shop for 3D resources has been updated and is now live. Space-related models, images, textures, and visualizations are free to download and use.

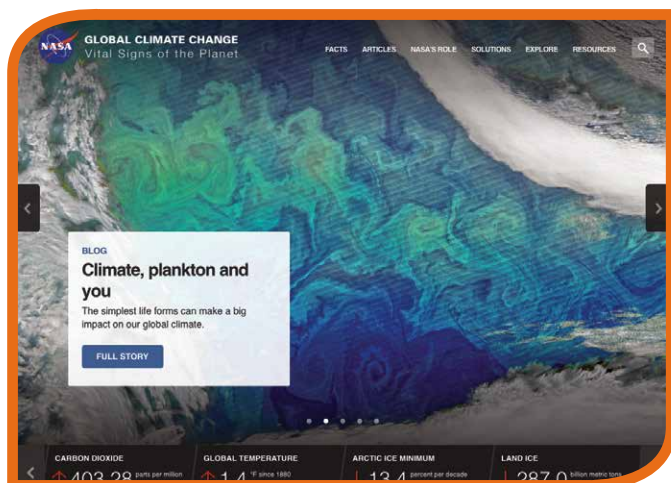
[nasa3d.arc.nasa.gov](http://nasa3d.arc.nasa.gov)



### NASA's Earth Observatory

The Earth Observatory's mission is to share with the public the images, stories, and discoveries about the environment, Earth systems, and climate that emerge from NASA research, including its satellite missions, in-the-field research, and models.

[earthobservatory.nasa.gov](http://earthobservatory.nasa.gov)



### NASA Climate Website

The mission of "Global Climate Change: Vital Signs of the Planet" is to provide the public with accurate and timely news and information about Earth's changing climate, along with current data and visualizations, presented from the unique perspective of NASA, the world's leading climate research agency.

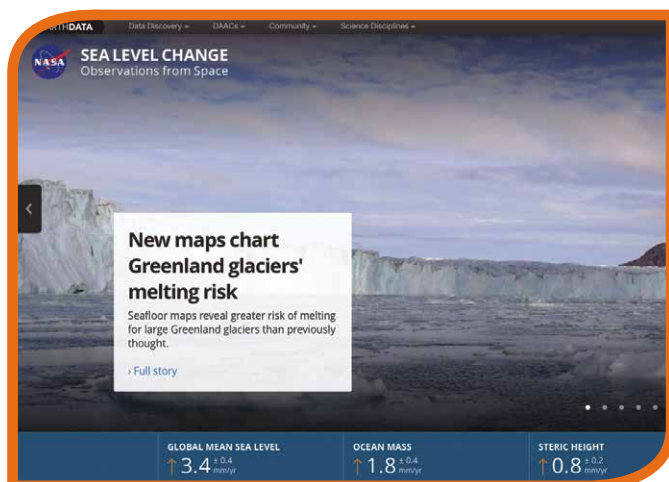
[climate.nasa.gov](http://climate.nasa.gov)



### NASA Goddard Institute for Space Studies Website

The NASA Goddard Institute for Space Studies (GISS) is a laboratory in the Earth Sciences Division of NASA's Goddard Space Flight Center. A key objective of GISS research is prediction of atmospheric and climate changes in the 21<sup>st</sup> century. The research combines analysis of comprehensive global datasets with global models of atmospheric, land surface, and oceanic processes.

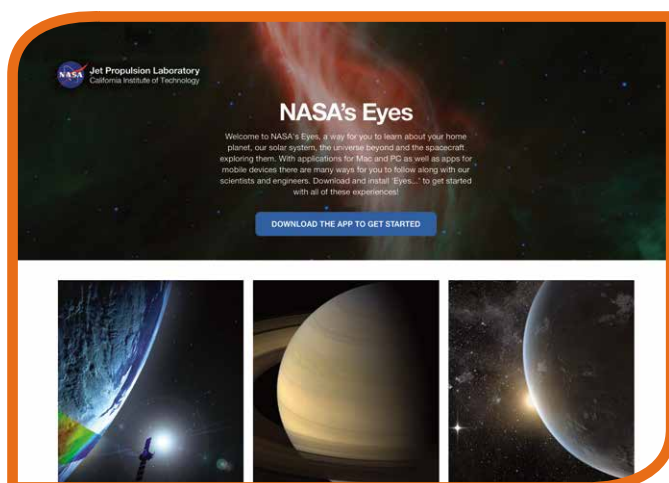
[giss.nasa.gov](http://giss.nasa.gov)



### NASA Sea Level Change Website

NASA keeps track of sea level change and its causes from space. Find out more about how NASA satellite observations help our understanding of this complex topic.

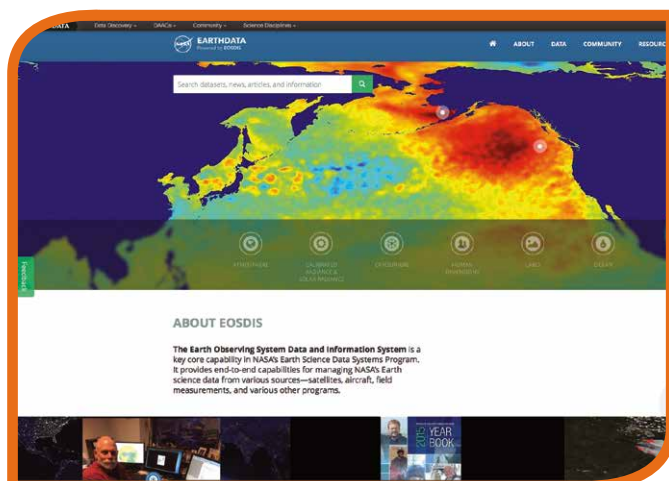
[sealevel.nasa.gov](https://sealevel.nasa.gov)



### NASA's Eyes

Welcome to NASA's Eyes, a way for you to learn about your home planet, our solar system, the universe beyond, and the spacecraft exploring them. With applications for Mac and PC as well as apps for mobile devices there are many ways for you to follow along with our scientists and engineers. Download and install 'Eyes...' to get started with all of these experiences!

[eyes.nasa.gov](https://eyes.nasa.gov)

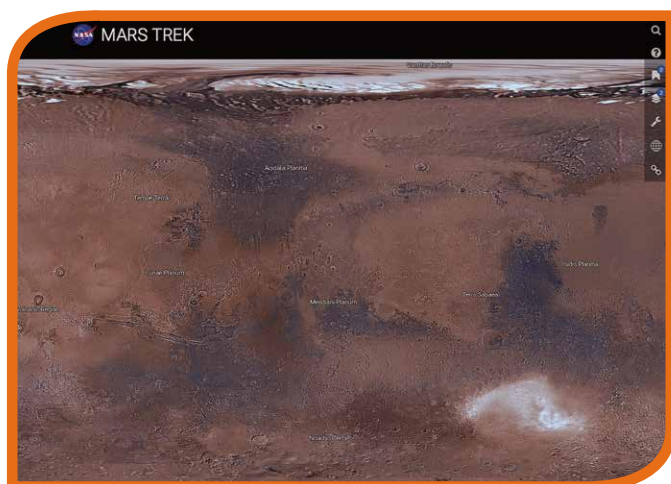


### NASA's Earth Observing System Data and Information System

The Earth Observing System Data and Information System is a key core capability in NASA's Earth Science Data Systems Program. It provides end-to-end capabilities for managing NASA's Earth science data from various sources—satellites, aircraft, field measurements, and various other programs.

[earthdata.nasa.gov](https://earthdata.nasa.gov)

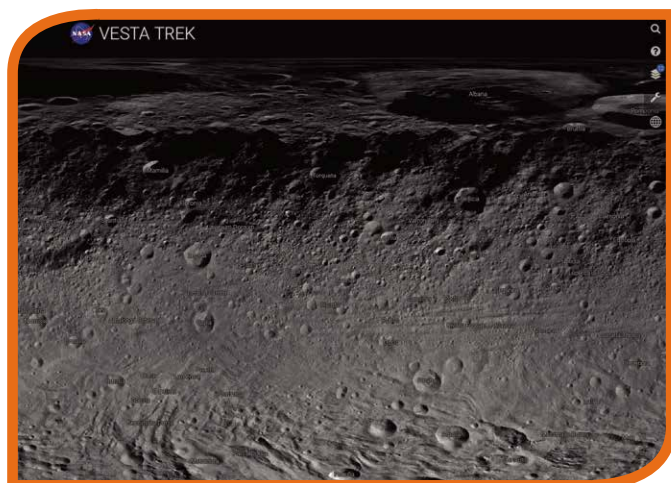




### Mars Trek

Explore the planet Mars, looking at its amazing features through the eyes of a number of different scientific instruments aboard a range of spacecraft in orbit about Mars. Mars Trek allows you to take the controls as you fly down into the depths of Mars' canyons, soar over its towering volcanoes, visualize and measure unique landforms, and get close-up vantages of fascinating landing sites.

[marstrek.jpl.nasa.gov](http://marstrek.jpl.nasa.gov)



### Vesta Trek

Explore the amazing landforms of the asteroid Vesta, from gigantic craters, to towering mountains, and a network of deep cracks circling its surface. Using a range of data from NASA's Dawn spacecraft, Vesta Trek lets you skim Vesta's landscapes, fly over its heights, and examine the many fascinating features of this enigmatic world.

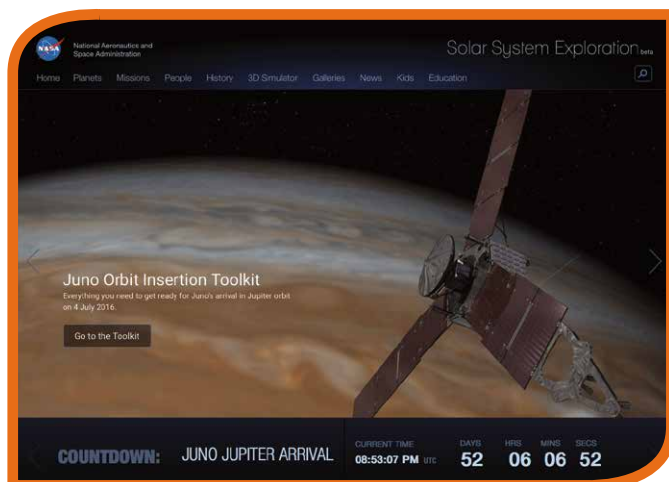
[vestatrek.jpl.nasa.gov](http://vestatrek.jpl.nasa.gov)



### Lunar Mapping and Modeling Portal

Explore the surface of the Moon as seen through the eyes of many different instruments aboard a range of different spacecraft. The Lunar Mapping and Modeling Portal provides tools to visualize, study, and measure the diverse and intriguing landforms of the Moon.

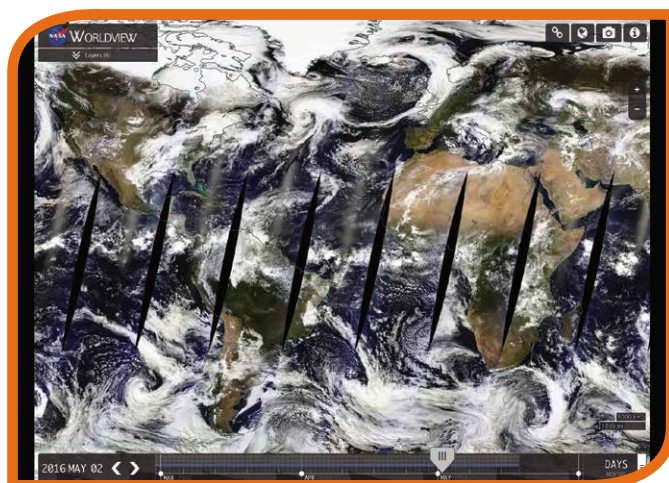
[lmp.nasa.gov](http://lmp.nasa.gov)



### NASA's Solar System Exploration

Launched in October 1998, this site strives to be a real-time, living encyclopedia of robotic exploration of our solar system. Our goal is to provide the public, students, and teachers with reliable, accurate, up-to-date planet and mission information and create a complete historical record of deep space exploration.

[solarsystem.nasa.gov](http://solarsystem.nasa.gov)



### NASA Worldview

Worldview is a web-based application that allows you to explore Earth as it is "right now." Interactively browse 150+ global, full-resolution satellite products and imagery. Using Worldview, you can visually discover natural phenomena through an easy map interface, download near real-time and historical imagery and its underlying data for further analysis, learn more about the imagery with detailed layer descriptions, and explore remote polar regions with Arctic and Antarctic views. Access to near real-time satellite data within three hours of observation supports time-critical application areas such as wildfire management, air quality measurements, and flood monitoring.

[worldview.earthdata.nasa.gov](http://worldview.earthdata.nasa.gov)



### Earthdata Search

NASA's myriad of Earth-observing platforms provide continuous streams of data, all focused on taking the pulse of our planet. The Earthdata Search tool provides a state-of-the-art web client for discovering, searching, visualizing, and retrieving Earth science data in an intuitive and engaging way. Discover what NASA's Earth Observing System Data and Information System (EOSDIS) has to offer with respect to land, atmosphere, ocean, cryosphere, solar irradiance, and human dimension data products.

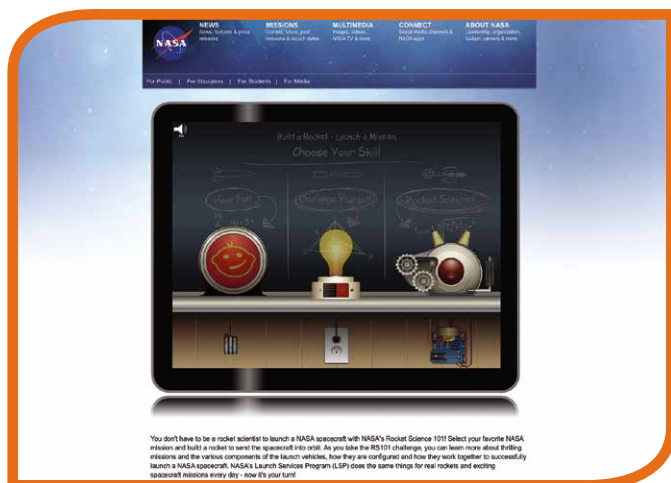
[search.earthdata.nasa.gov](http://search.earthdata.nasa.gov)



### NASA 3D View

The NASA 3D View (3DV) Mobile app gives you the ability to view several different aspects of NASA's human deep space exploration that will be taking our space program to asteroids, Mars, and beyond. To get started, print out the 3DV marker from the "Marker" menu. Then, download the mobile app or click on "augmented reality" above to get specific instructions and start exploring!

[www.nasa.gov/externalflash/3DV](http://www.nasa.gov/externalflash/3DV)

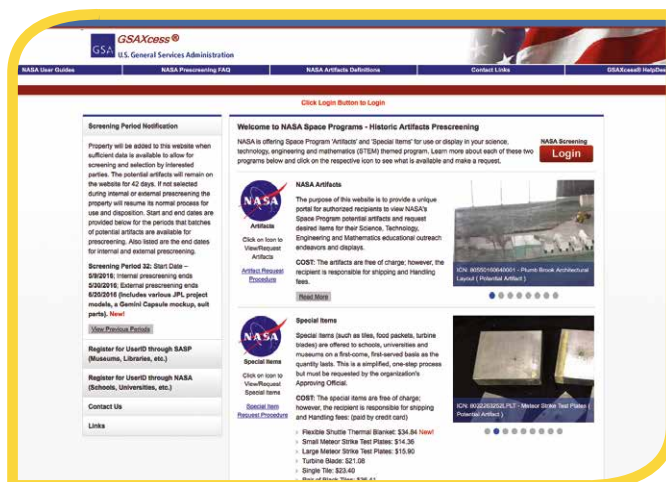


### Rocket Science 101

You don't have to be a rocket scientist to launch a NASA spacecraft with NASA's Rocket Science 101! Select your favorite NASA mission and build a rocket to send the spacecraft into orbit. As you take the RS101 challenge, you can learn more about thrilling missions and the various components of the launch vehicles, how they are configured and how they work together to successfully launch a NASA spacecraft. NASA's Launch Services Program does the same things for real rockets and exciting spacecraft missions every day—now it's your turn! Rocket Science 101 is also available free of charge at the App Store.

[www.nasa.gov/externalflash/RocketScience101/RocketScience101.html](http://www.nasa.gov/externalflash/RocketScience101/RocketScience101.html)





### NASA Artifacts

NASA is offering Space Program 'Artifacts' and 'Special Items' for use or display in your science, technology, engineering and mathematics (STEM) themed program. NASA artifacts of particular interest to eligible U.S. libraries include Space Food ([artifacts.nasa.gov/space\\_food.htm](http://artifacts.nasa.gov/space_food.htm)) and Space Shuttle Tiles ([artifacts.nasa.gov/shuttle\\_tiles.htm](http://artifacts.nasa.gov/shuttle_tiles.htm)).

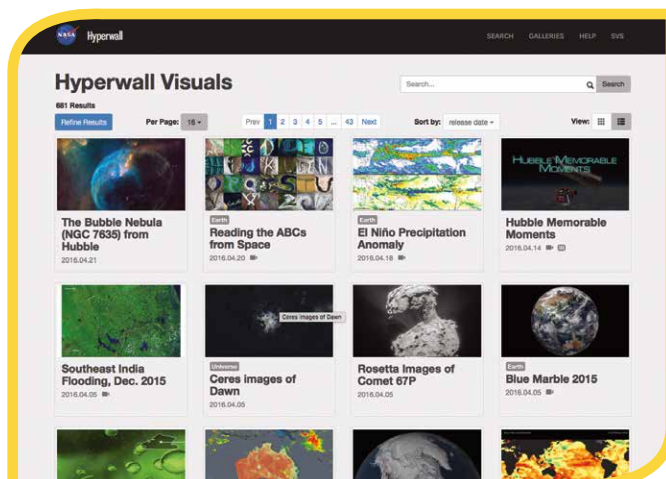
[gsaxcess.gov/NASAWel.htm](http://gsaxcess.gov/NASAWel.htm)



### NASA Wavelength Digital Library

NASA Wavelength is your pathway into a digital collection of Earth and space science resources for educators of all levels—from elementary to college, to out-of-school programs. These resources, developed through funding of the NASA Science Mission Directorate, have undergone a peer-review process through which educators and scientists ensure the content is accurate and useful in an educational setting.

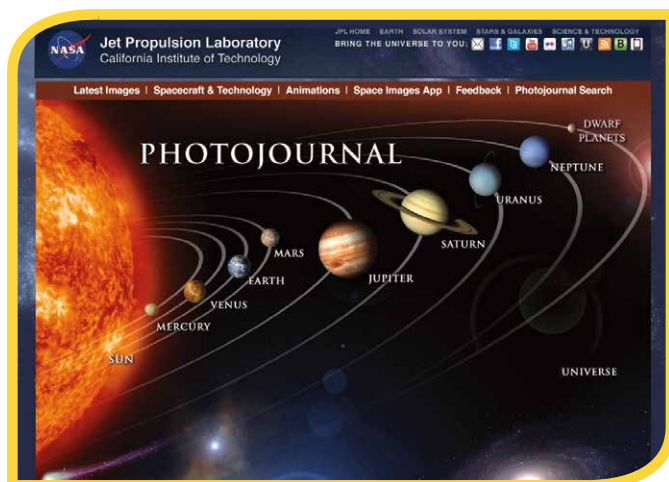
[nasawavelength.org](http://nasawavelength.org)



### NASA Hyperwall Website

NASA's Hyperwall is a video wall capable of displaying multiple high-definition data visualizations and/or images simultaneously across an arrangement of screens. Functioning as a key component at many NASA exhibits, the Hyperwall is used to help explain phenomena, ideas, or examples of world change. PowerPoint and Keynote presentations as well as Story Text files are available for download on each existing topic—a great resource for those interested in using powerful visualizations and images to communicate NASA Science.

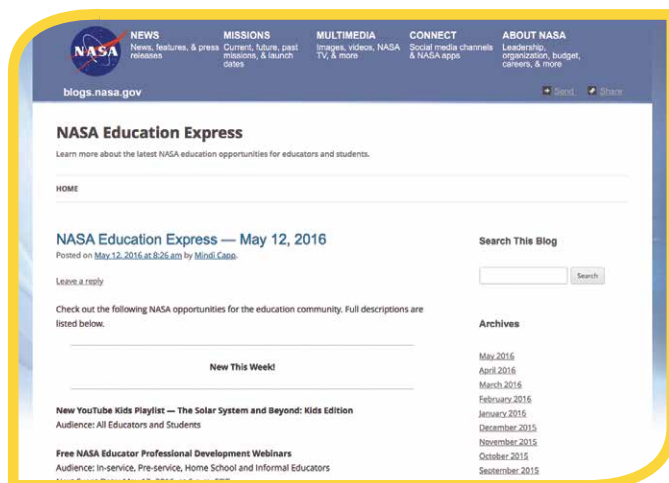
[svs.gsfc.nasa.gov/hw](http://svs.gsfc.nasa.gov/hw)



## NASA's Photojournal

The Photojournal is your interface to the Planetary Image Archive contained within the Planetary Data System Imaging Node. The home page graphic serves as a high-level entry point to the thousands of high-resolution images and their accompanying products which have been made available to the public from data returned by various NASA Jet Propulsion Laboratory missions over the course of many years.

[photojournal.jpl.nasa.gov](http://photojournal.jpl.nasa.gov)



## NASA Education Express

Learn more about the latest NASA education opportunities for educators and students.

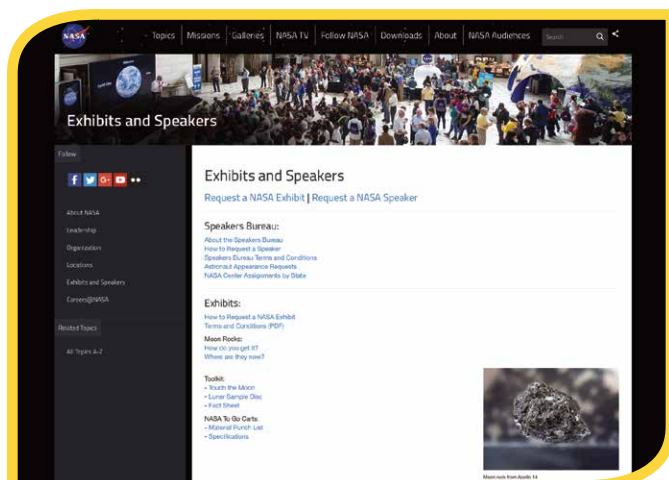
[blogs.nasa.gov/educationexpress](http://blogs.nasa.gov/educationexpress)



## NASA Museum Alliance

The Museum Alliance provides free professional development and access to NASA staff and materials to educators at over 800 museums, science centers, libraries, planetariums, nature centers, and youth-serving organizations. Go to “Join Our Community” for more info or to sign up.

[informal.jpl.nasa.gov/museum](http://informal.jpl.nasa.gov/museum)



## NASA Exhibits and Speakers

To request a NASA speaker for your group, the NASA Speakers Bureau must receive a request, preferably 6-8 weeks before the event. Because the Speakers Bureau is a volunteer program, we cannot guarantee that all requests will be filled.

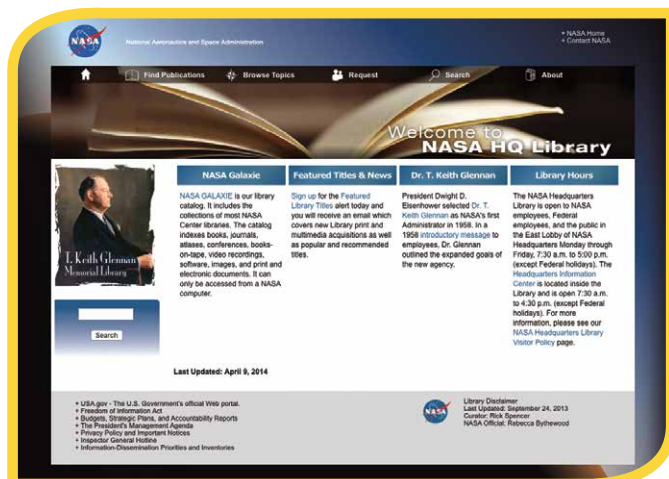
[nasa.gov/about/exhibits](http://nasa.gov/about/exhibits)



## NASA's Solar System Ambassadors

The Solar System Ambassadors Program is a public outreach program designed to work with motivated volunteers across the nation. These volunteers communicate the excitement of NASA Jet Propulsion Laboratory's space exploration missions and information about recent discoveries to people in their local communities.

[solarsystem.nasa.gov/ssa](http://solarsystem.nasa.gov/ssa)



## NASA Headquarters Library and Information Center

Visit the NASA Headquarters library and/or information center at 300 E Street SW Washington, DC 0546-0001. Collocated within the Library, the Headquarters Information Center responds to requests for publications and reports produced by NASA.

[www.hq.nasa.gov/office/hqlibrary](http://www.hq.nasa.gov/office/hqlibrary)





### Tour of the Electromagnetic Spectrum

Welcome to the Tour of the Electromagnetic Spectrum. This unique NASA resource on the web, in print, and with companion videos introduces electromagnetic waves, their behaviors, and how scientists visualize these data. Each region of the spectrum is described and illustrated with engaging examples of NASA science. Come and explore the amazing world beyond the visible!

[science.nasa.gov/ems](http://science.nasa.gov/ems)



### NASA's Earth Observing System iBooks

NASA's Earth Observing System (EOS) is a coordinated series of polar-orbiting and low inclination satellites for long-term global observations of the land surface, biosphere, solid Earth, atmosphere, and ocean. As a major component of the Earth Science Division of NASA's Science Mission Directorate, EOS enables an improved understanding of the Earth as an integrated system. The EOS Project Science Office (EOSPSO) is committed to bringing program information and resources to the Earth science research community and the general public alike, including a variety of materials (including iBooks) available for download.

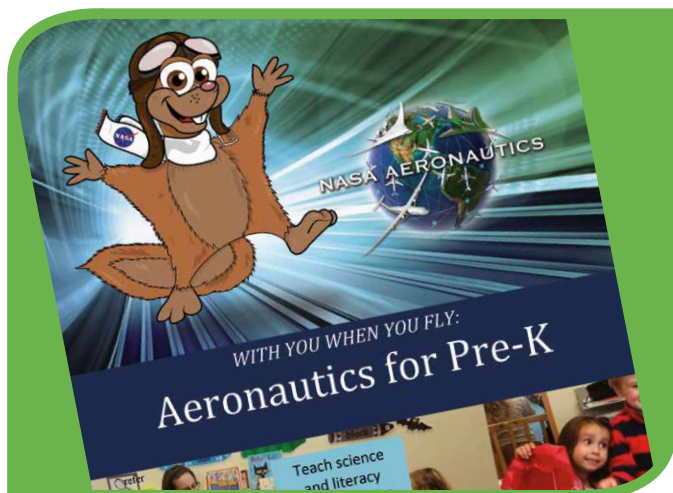
[eosps.gsfc.nasa.gov/publications/59](http://eosps.gsfc.nasa.gov/publications/59)



### The Air We Breathe

This colorful picture book is designed to introduce Earth's atmosphere and its importance to life on Earth. It is appropriate for students in grades K-4.

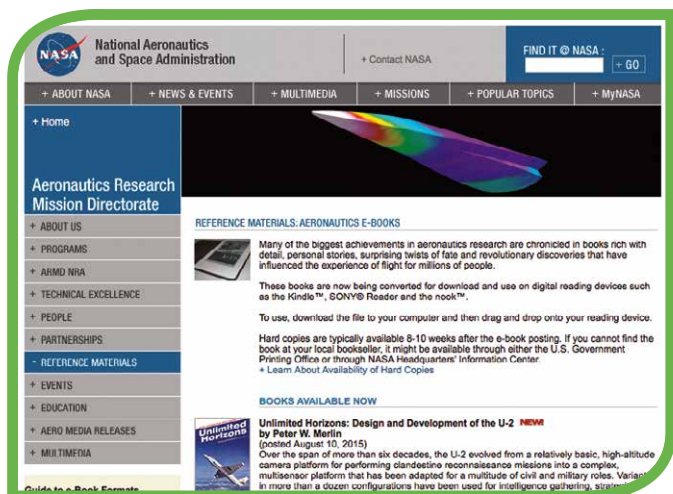
[nasa.gov/audience/foreducators/topnav/materials/listbytype/The\\_Air\\_We\\_Breathe.html#.VyuUAGPID-1](http://nasa.gov/audience/foreducators/topnav/materials/listbytype/The_Air_We_Breathe.html#.VyuUAGPID-1)



### Aeronautics for Pre-K

This educators' guide provides an opportunity to teach thematic lessons on aeronautical science principles through children's literature. The guide is the result of an effort to address a growing need for early STEM education, and is founded on the ideas and principles provided by popular children's books.

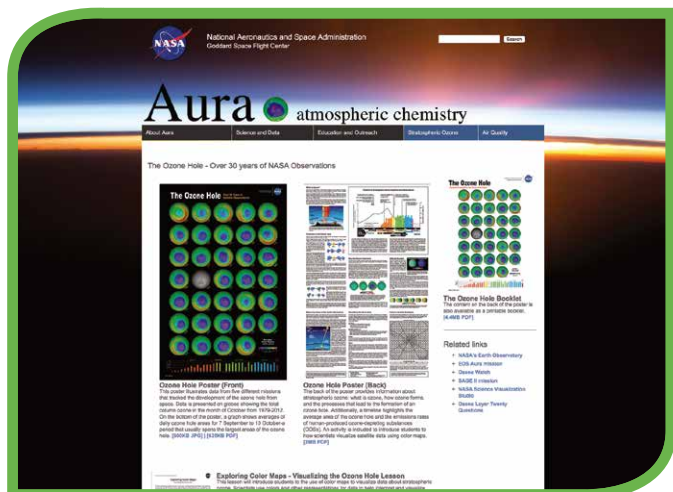
[aeronautics.nasa.gov/pdf/aero-prek.pdf](http://aeronautics.nasa.gov/pdf/aero-prek.pdf)



### Aeronautics E-Books

Many of the biggest achievements in aeronautics research are chronicled in books rich with detail, personal stories, surprising twists of fate, and revolutionary discoveries that have influenced the experience of flight for millions of people. These books are now being converted for download and use on digital reading devices such as the Kindle™, SONY® Reader, and the nook™.

[www.aeronautics.nasa.gov/ebooks](http://www.aeronautics.nasa.gov/ebooks)



### The Ozone Hole - Over 30 Years of Observations

This poster and pdf booklet illustrates data from five different missions that tracked the development of the ozone hole from space and information about stratospheric ozone: what is ozone, how ozone forms, and the processes that lead to the formation of an ozone hole.

[aura.gsfc.nasa.gov/ozoneholeposter](http://aura.gsfc.nasa.gov/ozoneholeposter)



### What's Up in the Atmosphere? Exploring Colors in the Sky

What color is the sky today? Anita, Simon, and Dennis want to know why the sky isn't always blue. They learn that there's a lot more than air in the atmosphere, which can affect the colors we see in the sky. Download the Aerosols storybook and learning activities! All files require the free Adobe Acrobat Reader.

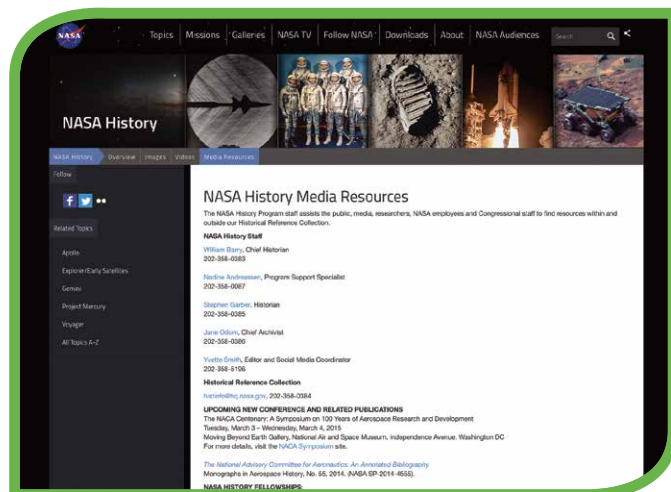
[globe.gov/en/web/elementary--globe/overview/aerosols/story-book](http://globe.gov/en/web/elementary--globe/overview/aerosols/story-book)



### Mysteries of the Sun

This unique NASA book, available as a PDF on the web (with companion videos), introduces Heliophysics: the study of the Sun's influence throughout the solar system and, in particular, its connection to the Earth and the Earth's extended space environment. Learn about topics such as Space Weather, Solar Variability, the Heliosphere, Earth's Magnetosphere, and the Earth's Upper Atmosphere. Come and explore our Sun!

[missionscience.nasa.gov/sun/MysteriesOfTheSun\\_Book.pdf](http://missionscience.nasa.gov/sun/MysteriesOfTheSun_Book.pdf)



### NASA History

The History Office in Washington, DC publishes books, issues newsletters, hosts social events, and provides other assistance relating to NASA aeronautical and space history.

[www.nasa.gov/content/nasa-history-media-resources](http://www.nasa.gov/content/nasa-history-media-resources)

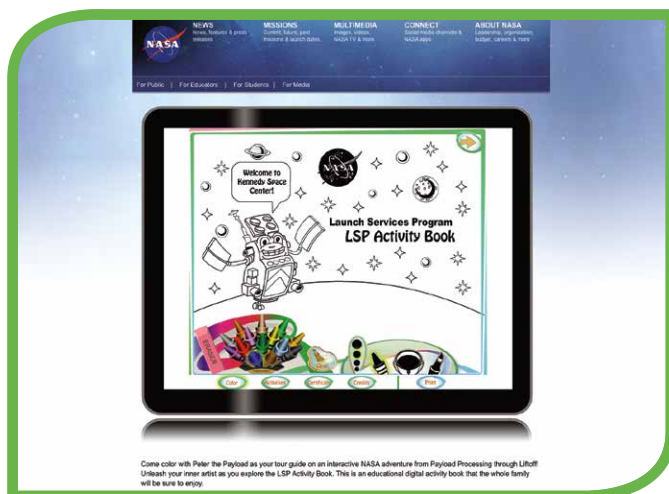




### NASA Visualization Explorer

The NASA Visualization Explorer app features visualizations, animations, images, and stories. Topics include findings from NASA spacecraft exploring Earth, the planets, and beyond. This app is available free of charge at the App Store.

[svs.gsfc.nasa.gov/nasaviz](https://svs.gsfc.nasa.gov/nasaviz)



### Launch Services Program Activity Book

Come color with Peter the Payload as your tour guide on an interactive NASA adventure from Payload Processing through Liftoff! Unleash your inner artist as you explore the LSP Activity Book. This is an educational digital activity book that the whole family will be sure to enjoy. The activity book is also available free of charge at the App Store.

[www.nasa.gov/externalflash/LSPActivityBookHTML/LSPActivityBook.html](http://www.nasa.gov/externalflash/LSPActivityBookHTML/LSPActivityBook.html)











# NASA *Science* RESOURCES

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**[science.nasa.gov](http://science.nasa.gov)**

**[eospsso.gsfc.nasa.gov](http://eospsso.gsfc.nasa.gov)**