

News and Public Affairs

- The News team produces a wealth of products to support the media.
 - Press releases
 - Background materials
 - Images
 - Videos
 - Scientific Simulations
- Many of our releases are quoted verbatim and presented as articles and features in print and online.





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NASA'S HUBBLE CELEBRATES 21ST ANNIVERSARY WITH "ROSE" OF GALAXIES

WASHINGTON — To celebrate the 21st anniversary of the Hubble Space Telescope's deployment into space, astronomers at the Space Telescope Science Institute in Baltimore, Md., pointed Hubble's eye at an especially photogenic pair of interacting galaxies called Arp 273. The new image is available at:

http://www.nasa.gov/hubble

"For 21 years, Hubble has profoundly changed our view of the universe, allowing us to see deep into the past while opening our eyes to the majesty and wonders around us," NASA Administrator Charles Bolden said. "I was privileged to pilot space shuttle Discovery as it deployed Hubble. After all this time, new Hubble images still inspire awe and are a testament to the extraordinary work of the many people behind the world's most famous observatory."

Hubble was launched April 24, 1990, aboard Discovery's STS-31 mission. Hubble discoveries revolutionized nearly all areas of current astronomical research from planetary science to cosmology.

"Hubble is America's gift to the world," Sen. Barbara Mikulski of Maryland said. "Its jaw-dropping images have rewritten the textbooks and inspired generations of schoolchildren to study math and science. It has been documenting the history of our universe for 21 years. Thanks to the daring of our brave astronauts, a successful servicing mission in 2009 gave Hubble new life. I look forward to Hubble's amazing images and inspiring discoveries for years to come."



News and Public Affairs

News of Hubble's discoveries reaches more than 100 million
 Americans annually via the News Office's press releases,
 press conferences, and supplementary videos and materials,

as well as through online dissemination.

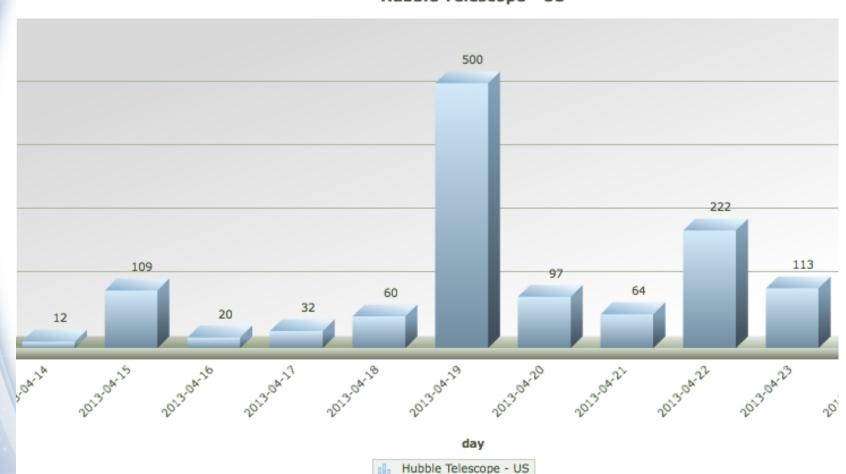








Hubble Telescope - US



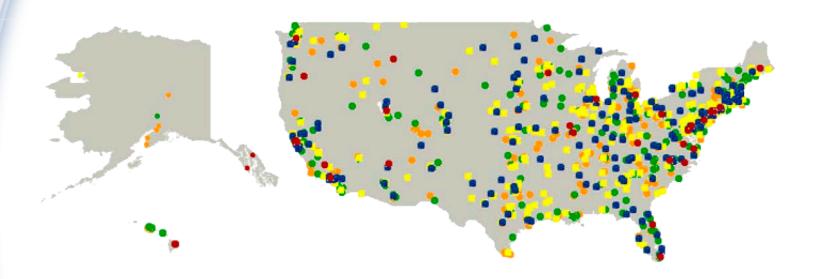
OPO Education Program

Designed to bring the universe to the formal and informal education communities, and engage educators and students in the adventure of scientific discovery.





A national **sample** of users provides data on selection criteria and use of materials in a variety of settings.



Education Materials:

- Used in all 50 states
- Integrated into the programs of more than half of the U.S.
 state departments of education
- Reach over 6 million students per year
- Reach a half-million educators

Organizations

Space Grant Consortia
Learning.com
WorldWide Telescope
American Library Association
National Federation of the Blind
Night Sky Network
Spitz Digital Institute
Maryland Science Center
The After-School Institute

Partners

Textbooks/Curriculum

Houghton Mifflin
Lawrence Hall of Science
NSTA sciLinks
Brooks/Cole
McGraw-Hill
Harcourt
Scholastic
Open Court
MacMillan
Baltimore County Curriculum &
Star Lab Program

States

Maryland, California New York, Utah, Pennsylvania, Delaware, Ohio, Texas

Universities

Johns Hopkins University
Morgan State University
Stevenson University
University of Maryland,
Baltimore County
University of Texas at Austin
Towson University
Louisiana State University

NASA Programs

Goddard Education,
NASA Explorer
Schools, Solar System
Ambassadors,
Aerospace Education
Services Project



















SCIENTIFIC AMERICAN[™]



THE GEORGE LUCAS EDUCATIONAL FOUNDATION



ing quality professional development for educators.



Smithsonian Institution

National Science Resources Center





National School Boards Association

School Library Journal For Children's, Young Adult and School Librarians

Online Outreach - HubbleSite

- HubbleSite.org is our main website and receives over
 2 million visitors each month.
- Our goal has been to provide the public with information about Hubble and astronomy.
 We are a unique source for Hubble information because of our direct connection to NASA and STScl.





New Media

- Hubble & JWST iBooks
 - Downloaded 140,000 times
 - Hubble book has been the number one free book in the astronomy section of iTunes.
- Amazing Space iPad App
- Microsoft App for tablets
 - Guided Tour of JWST & HST Science and Technology

Online Outreach - Beyond HubbleSite

Over the past 10 years HubbleSite has evolved beyond just being a website



Get Involved!

- In an effort to inform and reach out to a growing community interested in citizen science programs, HubbleSite will post and maintain an index of current projects to a new "Get Involved" page.
- The content will focus on encouraging online visitors to volunteer their time, participate in contests, and collaborate with the astronomical community.



HUBBLE HANGOUTS

Live talks each month! Present your questions or comments, or just watch.

We have a lot of great hangouts planned, all designed to get you involved in Hubble Citizen Science! We hope to see you there!

Hubble Hangouts



CITIZEN SCIENCE

Join forces with professional astronomers to make new discoveries and better understand our universe. Through the projects listed here, you can volunteer your time to help analyze astronomical data collected by NASA space observatories and stored in the Mikulski Archive for Space Telescopes (MAST).

Citizen Science



HUBBLE: SCIENCE THAT INSPIRES

Video contest

Has Hubble ignited a spark of creativity in you? Use that inspiration to create a video! We'll provide resources that you can use, or create your own. The producers of the best videos in two categories – "Artistic" and "Narrative" – win cash prizes!

Video contest site



HUBBLE IMAGE PROCESSORS

If you are a photography and/or science enthusiast, try uncovering your own gems in the Hubble archive! Here you'll find guides, tools and conversations for pro and amateur astronomical image processors.

Hubble Image Processors



MYSTAR Stellar lifecycle game

Create different types of stars in different parts of the galaxy and watch them develop at a million years per minute. You can even add planets or try to develop life. MyStar is based on our current scientific understanding of the cosmos.

MyStar



HUBBLE HERITAGE CREATIVE CHALLENGE

What do you see in Hubble images? Try our monthly Creative Challenge on Facebook.

Creative Challenge

Hubble Heritage finds and releases the most visually appealing images taken by the Hubble Space Telescope.

Hubble Heritage

Astrophysics Forum

 We help the NASA Science Mission Directorate (SMD) and its nationwide education and outreach community increase the coherence and impact of their efforts, foster innovation, and build partnerships.







Education – Collaborations with Northrop Grumman

- Quarterly meetings with Northrup Education Foundation
- JWST Full-Scale Model
 - Building on the power of the JWST full-scale model, OPO brings outreach materials and support staff to supplement the exhibit.

 • New York Science Festival

 - National Mall
 - Baltimore Inner Harbor
 - South by Southwest in Austin Texas

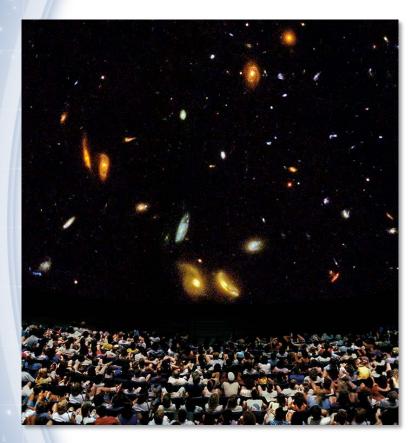






JWST Full scale model in Austin

3-D Visualizations





FEDERAL STEM EDUCATION FUNDING FY14 (budget in millions)

	FY 2012	FY2014	
NASA	149	100	-49
Department of Education	529	814	285
Smithsonian Institution	0	25	25
National Science Foundation	1,154	1,243	89

NASA FY2014 Education Funding:

- \$67.5 million for Space Grant, GLOBE and minority-serving education programs.
- \$26.8 million to be refocused on coordination with the NSF, ED and Smithsonian.