

The image features a dark, star-filled background. A horizontal grey band is positioned at the top, containing the word "Appendices" in a white, italicized serif font. The rest of the image is a dense field of stars of various colors and sizes, with a prominent yellow star and several bright white stars in the center.

*Appendices*

## APPENDIX A. Directory of OSS E/PO Products and Activities

This directory provides detailed information on each of the OSS E/PO products and activities produced or carried out in FY 2001. The listings are grouped into categories as follows, according to the type of E/PO product or activity that they represent.

### Science Center Shows/Exhibits:

- **Planetarium Shows:** Planetarium shows developed or produced with direct OSS mission/program involvement.
- **Science Center Exhibits:** Exhibits developed with direct OSS mission/program involvement and installed in a science center or museum.
- **Materials/Support:** Materials or content supplied by OSS missions/programs for use as components of planetarium shows or museum exhibits.

### Targeted Outreach:

- **Minority Institution Initiative in Space Science:** Projects that are part of the OSS/OEOP Minority University Education and Research Partnership Initiative in Space Science.
- **University Research Centers:** Projects that are part of the OEOP University Research Centers Program and have significant involvement with OSS activities.
- **Other Targeted Activities:** Projects that provide substantial targeted outreach to underserved/underutilized groups.

### Educational Products:

- E/PO products entered into the OSS Educational Resources Directory during FY 2001.

### Educational Activities:

- **Classroom Education:** Activities that are primarily targeted at improving formal education, following the subcategories below:
  - **Systemic Improvement:** Activities that use OSS missions/programs to support local, State, regional, and national mathematics, science, engineering, and technology education change efforts through collaboration with internal and external stakeholders.
  - **Teacher Preparation/Enhancement:** Activities that use OSS missions, facilities, human resources, and programs to provide exposure and experiences to teachers and faculty to support the enhancement of knowledge and skills and to provide access to NASA information in science and mathematics.
  - **Curriculum Development/Dissemination:** Activities that develop, utilize, and disseminate science, mathematics, geography, and technology instructional materials based on OSS missions and results.
  - **Student Support:** Activities that use the OSS missions, facilities, human resources, and programs to provide information, experiences, and research opportunities for students to support the enhancement of knowledge and skill in the area of science, mathematics, engineering, and technology.
- **Public Outreach:** Activities that are primarily targeted at improving the general public's understanding of science and technology.
- **Scientist Involvement:** Activities that are primarily targeted at encouraging the participation of scientists in E/PO activities.

Each listing contains some or all of the following detailed information:

#### Title:

Title of the product or activity.

#### Subject(s):

Subject area(s) that an E/PO product addresses (e.g., physical science, space science).

#### Format(s):

Format in which an E/PO product is produced (e.g., CD, pamphlet, Web site).

#### Audience:

Target audience for an E/PO product (e.g., grades K-12, general public).

#### Msn/Prgm(s):

OSS mission(s) and program(s) that contributed to producing the product or conducting the activity. Further information on the overall E/PO activities of each mission or program can be found in Appendix B. A listing of all missions and programs according to their acronyms, as well as an index of where they are referenced in this report, is located at the back of this report.

**Theme(s):**

OSS Science Theme(s) on which the product or activity is focused:

ASO = Astronomical Search for Origins.

SEC = Sun-Earth Connection.

SEU = Structure and Evolution of the Universe.

SSE = Solar System Exploration.

**Description:**

Narrative description of the product or activity.

**Lead:**

Person or organization with lead responsibility for the product or activity.

**URL:**

Web address for further information on the product or activity.

**Scientist(s):**

OSS-affiliated scientists, technologists, and support staff who participated in developing the product or conducting the activity.

**Partner(s):**

Institutions or organizations that are partners or collaborators in the product or activity.

**Event(s):**

Dates, location, and numbers of participants for each discrete event associated with an E/PO activity. For example, if the activity is a program of teacher workshops, then each individual workshop is an event. The numbers of participants are counted in three separate categories: direct participants (**DRT**) are those whose name, school, or organization is known and who have interactions with the activity leader; anonymous participants (**ANY**) are those whose name, school, or organization is not known or who do not have interactions with the activity leader; and Web (**WEB**) audiences.

## SCIENCE CENTER SHOWS/EXHIBITS

### Planetarium Shows

**Black Holes: Into the Dark Abyss StarRider Show**  
 Theme(s): SEU  
 Msn/Prgm: Adler, SEU Forum, DePaul B/F  
 Description: Journey to the edge of the event horizon as you take a voyage to "Black Holes: Into the Dark Abyss" in the world's first StarRider Theater. StarRider is the most technologically advanced planetarium theater in the world. It enables audiences to take an active role in the experience by operating controls on the armrest of each seat. StarRider's revolutionary projection technology allows visitors to explore the mystery of black holes.  
 Lead: Mr. Larry Ciupik, Adler Planetarium and Astronomy Museum, Chicago, IL 60605  
 E-mail: [Jciupik@adlernet.org](mailto:Jciupik@adlernet.org). Phone: 312-322-0313.

Primary URL: <http://www.adlerplanetarium.org>  
 Scientist(s):  

Dr. Evalyn Gates	Adler Planetarium and Astronomy Museum	Chicago, IL
Dr. Geza Gyuk	Adler Planetarium and Astronomy Museum	Chicago, IL
Dr. Cole Miller	University of Maryland at Baltimore County	Baltimore, MD
Dr. Doug Roberts	Adler Planetarium and Astronomy Museum	Chicago, IL

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	13 Sep 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	54,000	-

**Images of the Infinite: Hubble Space Telescope Sky Show**  
 Theme(s): ASO, SEU, SSE  
 Msn/Prgm: Adler, DePaul B/F, HST  
 Description: "Images of the Infinite" is a planetarium show that highlights the history and key science findings of the Hubble Space Telescope. The Adler's Sky Theater presentation utilizes the spectacular, awe-inspiring images captured by the HST to take you on an unforgettable tour through the solar system and Milky Way galaxy and to the limits of the visible universe.  
 Lead: Mr. Larry Ciupik, Adler Planetarium and Astronomy Museum, Chicago, IL 60605  
 E-mail: [Jciupik@adlernet.org](mailto:Jciupik@adlernet.org). Phone: 312-322-0313.

Primary URL: <http://www.adlerplanetarium.org>  
 Scientist(s):  

Dr. Grace Wolf-Chase	Adler Planetarium and Astronomy Museum	Chicago, IL
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Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	01 Nov 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	38,600	-

**MarsQuest Planetarium Show**  
 Theme(s): ASO, SSE  
 Msn/Prgm: SSE Forum, SSI B/F, SSE Theme, Mars E/PO  
 Description: The "MarsQuest" planetarium show is an NSF-funded product produced by Loch Ness Productions in collaboration with the Space Science Institute (SSI) of Boulder, Colorado, and more than a dozen scientists and education experts. The "MarsQuest" planetarium show is a supplemental component of the "MarsQuest" traveling exhibition now touring the U.S., and planetariums at exhibit host sites receive the show free. The show is divided into three sections that present the viewer with the cultural, historical, and scientific aspects of Mars study and exploration. In the first section, "Homage" the show traces Mars through history. The second section, "Mars in Focus" details the Mars of our time—as seen in the night sky, through binoculars and telescopes, and from our Mars explorations. Mission findings from Viking, Pathfinder, and Mars Global Surveyor feature reports on Mars weather, climate, and areology. The narrative compares the climate and terrain of Earth and Mars, and it presents the current thinking about the areologic history of the planet and a rationale for future exploration. "Mars in the Future" examines where on Earth people can prepare to live on Mars, what will be needed to get crewed missions there, and what the first landing may be like. The show ends with "Rhapsody on a Red Planet" a poetically styled "ode to Mars" this time from the perspective of a future Mars explorer tracing the efforts that led to the first human footsteps on the Red Planet. The show's opening was in Orlando, Florida, at the Dr. Phillips CineDome, where it ran in conjunction with SSI's

"MarsQuest" exhibit at the Orlando Science Center. Since midsummer 2001, 10 other venues have purchased or received the show. The estimated number of viewers to date is 35,000, but the data are incomplete until further reports are accumulated.

Lead: Ms. Carolyn Collins Petersen, Loch Ness Productions, Groton, MA 01450-3159  
E-mail: [carolyn@lochness.com](mailto:carolyn@lochness.com). Phone: 978-448-3666.

Primary URL: <http://www.spacescience.org>

Partner(s): California Institute of Technology Pasadena, CA  
European Space Agency Houston, TX  
Lunar and Planetary Institute La Jolla, CA  
Malin Space Science Systems Moffett Field, CA  
NASA Ames Research Center Pasadena, CA  
NASA Jet Propulsion Laboratory Houston, TX  
NASA Johnson Space Center Mountain View, CA  
SETI Institute Boulder, CO  
Space Science Institute Baltimore, MD  
Space Telescope Science Institute Flagstaff, AZ  
United States Geological Survey

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
		Allen F. Blocher Planetarium	Stevens Point, WI	-	-	-
		Arnim D. Hummel Planetarium	Richmond, KY	-	-	-
		Carr-Fles Planetarium	Muskegon, MI	-	-	-
		Chabot Space and Science Center	Oakland, CA	-	-	-
		Flandrau Science Center	Tucson, AZ	-	-	-
		Heritage Planetarium	Maryville, TN	-	-	-
		Lafayette Planetarium	Lafayette, LA	-	-	-
		Omnisphere Theater	Columbus, GA	-	-	-
		Orlando Science Center	Orlando, FL	-	-	-
		Reynolds Science Center	Arkadelphia, AR	-	-	-
		Robert McMath Planetarium	Bloomfield Hills, MI	-	-	-
		Scobee Planetarium	San Antonio, TX	-	-	-
		University of Toledo	Toledo, OH	-	-	-

Solar Storms StarRider Show

Theme(s): SEC

Msn/Prgm: Adler, DePaul B/F, SEC Forum

Description: "Solar Storms" is the newest experience in the StarRider Theater at the Adler Planetarium & Astronomy Museum. In the world's most advanced planetarium theater, audiences participate in the digital presentation as they travel to our star, plunge deep into a sunspot, and emerge to discover the power of our dynamic Sun.

Lead: Mr. Larry Ciupik, Adler Planetarium and Astronomy Museum, Chicago, IL 60605  
E-mail: [lcupik@adlernet.org](mailto:lcupik@adlernet.org). Phone: 312-322-0313.

Primary URL: <http://www.adlerplanetarium.org>

Scientist(s): Dr. Priscilla Frisch University of Chicago Chicago, IL  
Dr. Evalyn Gates Adler Planetarium and Astronomy Museum Chicago, IL  
Dr. Andy Hanson Indiana University, Bloomington Bloomington, IN  
Dr. Robert Hurt California Institute of Technology Pasadena, CA  
Dr. Bruce McKibben University of Chicago Chicago, IL  
Dr. Doug Roberts Adler Planetarium and Astronomy Museum Chicago, IL  
Dr. Jose Francisco Salgado Adler Planetarium and Astronomy Museum Chicago, IL

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Sep 01	01 Nov 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	6,200	-

## Science Center Exhibits

### Cosmic Questions: Our Place in Space and Time

Theme(s): SEU

Msn/Prgm: SEU Forum, ARISE, CXO, CGRO, Constellation-X, GLAST, GP-B, LISA, CHIPS, GALEX, HETE-2, MAP, RXTE, SWAS, Swift, ACCESS, HEASARC, FIRST, INTEGRAL, XMM-Newton

Description: "Cosmic Questions: Our Place in Space and Time" is a 5,000-square-foot hands-on exhibition and education program that will travel to science museums nationwide beginning in the fall of 2002. The exhibition invites museum visitors of all ages to join the ongoing quest to understand the universe and our place in the cosmos. Multimedia displays, interactive exhibits, immersive experiences, and a range of programming opportunities engage audiences in exploring "Our Place in Space" "Our Place in Time" "Observing the Universe" and "Great Cosmic Mysteries." The project is being developed by the Harvard-Smithsonian Center for Astrophysics, with major funding from the National Science Foundation and NASA.

Lead: Ms. Mary Dussault, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
E-mail: [mdussault@cfa.harvard.edu](mailto:mdussault@cfa.harvard.edu). Phone: 617-496-7962.

Primary URL: <http://cfa-www.harvard.edu/sed/projects/cosmic.html>

Scientist(s):	Dr. Kenneth Brecher	Boston University	Boston, MA
	Dr. Roger Brissenden	Chandra X-Ray Center	Cambridge, MA
	Ms. Sabina Bucher	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Sandra Castro	California Institute of Technology	Pasadena, CA
	Dr. Peter Challis	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Andrea Dupree	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Emilio Falco	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Michael Garcia	Chandra X-Ray Center	Cambridge, MA
	Dr. Owen Gingerich	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Mr. Bruce Gregory	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Robert Kirshner	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Rocky Kolb	Fermilab	Batavia, IL
	Mr. Anthony Lavoie	NASA Marshall Space Flight Center	Huntsville, AL
	Dr. Peter Michaud	Gemini Observatory	Hilo, HI
	Dr. Stephen Murray	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. David Spergel	Princeton University	Princeton, NJ
	Dr. Harvey Tananbaum	Chandra X-Ray Center	Cambridge, MA
	Dr. Wallace Tucker	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Brent Tully	University of Hawaii at Manoa	Honolulu, HI
	Dr. Alexander Vilenkin	Tufts University	Medford, MA
	Dr. Jan Vrtilek	Harvard University	Cambridge, MA
	Dr. Martin White	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Partner(s):	Association of Science-Technology Centers (ASTC)		Washington, DC
	Harvard-Smithsonian Center for Astrophysics		Cambridge, MA

### CyberSpace Learning Center

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: Adler, DePaul B/F

Description: The CyberSpace Learning Center is a museum gallery composed of an interactive video-based distance learning studio, a multifunction computer classroom, and an electronic public exhibition space. The gallery will host the studio from where formal distance learning programs originate, bringing the resources of the Adler into K-12 classrooms. The unique updateable nature of the informal public space allows content to be changed at a keystroke, creating a "programmable" museum environment.

Lead: Mr. Ken Kobus, Adler Planetarium and Astronomy Museum, Chicago, IL 60605  
E-mail: [kkobus@adlnet.org](mailto:kkobus@adlnet.org). Phone: 312-322-0552.

Primary URL: <http://www.adlerplanetarium.org>

Scientist(s):	Dr. Lucy Fortson	Adler Planetarium and Astronomy Museum	Chicago, IL
Partner(s):	U.S. Department of Education		Washington, DC

## Explore the Universe Exhibition

Theme(s): ASO, SEU

Msn/Prgm: OSS/Sci. Ctr. Dev., HST

Description: The Smithsonian Institution's National Air and Space Museum opened a new permanent exhibition, "Explore the Universe" on Friday, September 21, 2001. The gallery showcases some of the most significant observational tools astronomers have devised over the past four centuries and the role each has played in our continuing quest to understand the universe. Visitors to "Explore the Universe" pass through five sections representing the evolution of the astronomer's instruments. In the final section, "Exploring the Universe with Spectroscopy" visitors encounter the flight-ready backup mirror to the Hubble Space Telescope (HST) and instruments removed from the HST during servicing by astronauts.

Primary URL: <http://www.nasm.edu/galleries/gal111/universe/>

Partner(s): Corning Incorporated  
National Science Foundation  
TRW

Corning, NY  
Arlington, VA  
Cleveland, OH

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Sep 01	30 Sep 01	Smithsonian National Air and Space Museum	Washington, DC	-	-	-

## Hubble Space Telescope: New Views of the Universe (version 1)

Theme(s): ASO, SEU

Msn/Prgm: HST

Description: "Hubble Space Telescope: New Views of the Universe (version 1)" is a 5,000-square-foot traveling exhibition designed to immerse visitors in the magnificence and mystery of the Hubble mission. How old is the universe? How big is the universe? What is the fate of the universe? Where did planets, stars, and galaxies come from? "New Views of the Universe" attempts to answer these and other questions through spectacular imagery, interactive activities, videos, and more. Its four-year tour began in 1999 and will continue through 2003.

Lead: Mr. John Stoke, Space Telescope Science Institute, Baltimore, MD 21218  
E-mail: [stoke@stsci.edu](mailto:stoke@stsci.edu). Phone: 410-338-4394.

Primary URL: <http://hubble.stsci.edu/discoveries/hstexhibit/index.html>

Scientist(s): Dr. Mark Voit  
Space Telescope Science Institute  
Baltimore, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Space Telescope Science Institute	Baltimore, MD	-	-	122,743
07 Oct 00	02 Jan 01	Space Center Houston	Houston, TX	-	-	-
03 Feb 01	29 Apr 01	Strategic Air and Space Museum	Ashland, NE	-	-	-
31 May 01	02 Jun 01	North Carolina Museum of Natural Sciences	Raleigh, NC	-	500	-

## Hubble Space Telescope: New Views of the Universe (version 2)

Theme(s): ASO, SEU

Msn/Prgm: HST

Description: "Hubble Space Telescope: New Views of the Universe (version 2)" is a 2,500-square-foot traveling exhibition designed to immerse visitors in the magnificence and mystery of the Hubble mission. How old is the universe? How big is the universe? What is the fate of the universe? Where did planets, stars, and galaxies come from? "New Views of the Universe" attempts to answer these and other questions through spectacular imagery, interactive activities, videos, and more. Its four-year tour began in 1999 and will continue through 2003.

Lead: Mr. John Stoke, Space Telescope Science Institute, Baltimore, MD 21218  
E-mail: [stoke@stsci.edu](mailto:stoke@stsci.edu). Phone: 410-338-4394.

Primary URL: <http://hubble.stsci.edu/discoveries/hstexhibit/index.html>

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Nov 00	28 Jan 01	Springfield Science Museum	Springfield, MA	-	-	-
24 Feb 01	06 May 01	Family Museum	Bettendorf, IA	-	-	-

12 Aug 00	22 Oct 00	Castle Museum	Saginaw, MI	-	-	-
02 Jun 01	12 Aug 01	Chabot Space and Science Center	Oakland, CA	-	-	-

## Hubble Space Telescope: ViewSpace

Theme(s): ASO, SEU, SSE

Msn/Prgm: HST

Description: ViewSpace is a broadband multimedia astronomy display screen designed for use in science museums and planetariums.

Lead: Mr. John Stoke, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [stoke@stsci.edu](mailto:stoke@stsci.edu). Phone: 410-338-4394.Primary URL: <http://informal-sci.stsci.edu/exhibits/standalone/viewspace/index.html>

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
08 Dec 00	08 Dec 00	Lida G. Sharpe Planetarium	Memphis, TN	-	-	-
11 Dec 00	11 Dec 00	Parkland College	Champaign, IL	-	-	-
13 Dec 00	13 Dec 00	Angelo State University Planetarium	San Angelo, TX	-	-	-
13 Dec 00	13 Dec 00	Fleischmann Planetarium	Reno, NV	-	-	-
13 Dec 00	13 Dec 00	Hudnall Planetarium, Tyler Jr. College	Tyler, TX	-	-	-
13 Dec 00	13 Dec 00	North Medford High School	Medford, OR	-	-	-
13 Dec 00	13 Dec 00	Schreder Planetarium & Science Learning Center	Redding, CA	-	-	-
15 Dec 00	15 Dec 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
16 Jan 01	16 Jan 01	California Academy of Science	San Francisco, CA	-	-	-
16 Jan 01	16 Jan 01	Chabot Space and Science Center	Oakland, CA	-	-	-
16 Jan 01	16 Jan 01	North Museum of Natural History and Science	Lancaster, PA	-	-	-
16 Jan 01	16 Jan 01	Raritan Valley Community College	Somerville, NJ	-	-	-
26 Jan 01	26 Jan 01	Kennedy Space Center Visitor Center	Kennedy SC, FL	-	-	-
30 Jan 01	30 Jan 01	Curious Kids Museum	Saint Joseph, MI	-	-	-
08 Feb 01	08 Feb 01	West Valley College	Saratoga, CA	-	-	-
12 Feb 01	12 Feb 01	U.S. Space and Rocket Center	Huntsville, AL	-	-	-
13 Feb 01	13 Feb 01	COSI Toledo	Toledo, OH	-	-	-
13 Feb 01	13 Feb 01	Gayle Planetarium	Montgomery, AL	-	-	-
13 Feb 01	13 Feb 01	Orlando Science Center	Orlando, FL	-	-	-
13 Feb 01	13 Feb 01	Science Discovery Center of Oneonta	Oneonta, NY	-	-	-
13 Feb 01	13 Feb 01	SciTech Hands On Museum	Aurora, IL	-	-	-
14 Feb 01	14 Feb 01	Cranbrook Institute of Science	Bloomfield Hills, MI	-	-	-
14 Feb 01	14 Feb 01	Kalamazoo Valley Museum	Kalamazoo, MI	-	-	-
14 Feb 01	14 Feb 01	Perkins Observatory	Delaware, OH	-	-	-
14 Feb 01	14 Feb 01	Ward Beecher Planetarium	Youngstown, OH	-	-	-
15 Feb 01	15 Feb 01	Downing Planetarium	Fresno, CA	-	-	-
15 Feb 01	15 Feb 01	Howard B. Owens Science Center	Lanham, MD	-	-	-
15 Feb 01	15 Feb 01	McDonald Elementary School	Warminster, PA	-	-	-
15 Feb 01	15 Feb 01	Richland College Planetarium	Dallas, TX	-	-	-
15 Feb 01	15 Feb 01	St. Louis Science Center	St. Louis, MO	-	-	-
16 Feb 01	16 Feb 01	University of Arkansas Little Rock Planetarium	Little Rock, AR	-	-	-
18 Feb 01	18 Feb 01	Ventura County Discovery Center	Thousand Oaks, CA	-	-	-
19 Feb 01	19 Feb 01	Junior Museum of Bay County	Panama City, FL	-	-	-
19 Feb 01	19 Feb 01	New Jersey State Museum & Planetarium	Trenton, NJ	-	-	-
19 Feb 01	19 Feb 01	Renaissance Center	Dickson, TN	-	-	-
20 Feb 01	20 Feb 01	Museum of the Rockies	Bozeman, MT	-	-	-
21 Feb 01	21 Feb 01	Downing Planetarium	Fresno, CA	-	-	-
21 Feb 01	21 Feb 01	Reynolds Science Center	Arkadelphia, AR	-	-	-
22 Feb 01	22 Feb 01	California Science Center	Los Angeles, CA	-	-	-
08 Mar 01	08 Mar 01	South Florida Science Museum	West Palm Beach, FL	-	-	-
14 Mar 01	14 Mar 01	Maynard F. Jordan Planetarium	Orono, ME	-	-	-
14 Mar 01	14 Mar 01	University of Wyoming	Laramie, WY	-	-	-

15 Mar 01	15 Mar 01	Maryland Science Center	Baltimore, MD	-	-	-
16 Mar 01	28 Apr 01	Arizona Science Center	Phoenix, AZ	-	-	-
09 Apr 01	09 Apr 01	Discovery Center	Rockford, IL	-	-	-
02 May 01	02 May 01	University of Pennsylvania, Edinboro, Planetarium	Edinboro, PA	-	-	-
03 May 01	04 May 01	Liberty Science Center	Jersey City, NJ	-	-	-
14 May 01	14 May 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	-	-
22 May 01	22 May 01	Radford University	Radford, VA	-	-	-
24 May 01	24 May 01	Cable Natural History Museum	Cable, WI	-	-	-
24 May 01	24 May 01	Exploration Station	Bourbonnais, IL	-	-	-
24 May 01	24 May 01	Golden Pond Planetarium	Golden Pond, KY	-	-	-
28 May 01	28 May 01	Westlake Schools Planetarium	Westlake, OH	-	-	-
28 Jun 01	28 Jun 01	Abrams Planetarium	East Lansing, MI	-	-	-
28 Jun 01	28 Jun 01	Akima Planetarium	Knoxville, TN	-	-	-
28 Jun 01	28 Jun 01	Bays Mountain Planetarium	Kingsport, TN	-	-	-
28 Jun 01	28 Jun 01	Boonshoft Museum of Discovery	Dayton, OH	-	-	-
28 Jun 01	28 Jun 01	Cernan Earth and Space Center	River Grove, IL	-	-	-
28 Jun 01	28 Jun 01	COSI Science Museum	Columbus, OH	-	-	-
28 Jun 01	28 Jun 01	Craigmont High School Planetarium	Memphis, TN	-	-	-
28 Jun 01	28 Jun 01	Cumberland Science Museum	Nashville, TN	-	-	-
28 Jun 01	28 Jun 01	Dupont Planetarium	Aiken, SC	-	-	-
28 Jun 01	28 Jun 01	Euclid High School Planetarium	Euclid, OH	-	-	-
28 Jun 01	28 Jun 01	Fernbank Science Center	Atlanta, GA	-	-	-
28 Jun 01	28 Jun 01	Hummel Planetarium	Richmond, KY	-	-	-
28 Jun 01	28 Jun 01	Jefferson Planetarium	Richmond, VA	-	-	-
28 Jun 01	28 Jun 01	Koch Science Center & Planetarium	Evansville, IN	-	-	-
28 Jun 01	28 Jun 01	Lafayette Planetarium	Lafayette, LA	-	-	-
28 Jun 01	28 Jun 01	Longway Planetarium	Flint, MI	-	-	-
28 Jun 01	28 Jun 01	Minneapolis Planetarium	Minneapolis, MN	-	-	-
28 Jun 01	28 Jun 01	New Detroit Science Center	Detroit, MI	-	-	-
28 Jun 01	28 Jun 01	ROE Schoolworks	Manfield, IL	-	-	-
28 Jun 01	28 Jun 01	Southwest State University Planetarium	Marshall, MN	-	-	-
28 Jun 01	28 Jun 01	St. Charles Parish Library & Planetarium	Luling, LA	-	-	-
28 Jun 01	28 Jun 01	Sunrise Museum	Charleston, WV	-	-	-
28 Jun 01	28 Jun 01	University of Wisconsin—Stevens Point	Stevens Point, WI	-	-	-
28 Jun 01	28 Jun 01	Virginia Living Museum	Newport News, VA	-	-	-
28 Jun 01	28 Jun 01	Waubonsie Valley High School	Aurora, IL	-	-	-
28 Jun 01	28 Jun 01	Wausau West High School	Wausau, WI	-	-	-
		Carmel High School Planetarium	Carmel, IN	-	-	-
		Cleveland Museum of Natural History	Cleveland, OH	-	-	-
		Freeport McMoRan DLSC Planetarium and Observatory	Kenner, LA	-	-	-
		Garfield Heights High School	Garfield Heights, OH	-	-	-
		Make-A-Wish Foundation	Los Angeles, CA	-	-	-
		Merrillville Community Planetarium	Merrillville, IN	-	-	-
		Morehead Planetarium	Chapel Hill, NC	-	-	-
		Mueller Planetarium	Lincoln, NE	-	-	-
		Museum of Arts & Sciences	Macon, GA	-	-	-
		Museum of Science	Boston, MA	-	-	-
		Museum of Science and History	Jacksonville, FL	-	-	-
		North Hills High School	Pittsburgh, PA	-	-	-
		South Florida Science Museum	West Palm Beach, FL	-	-	-
		Southworth Planetarium	Portland, ME	-	-	-

## MarsQuest Traveling Exhibit

Theme(s): ASO, SSE

Msn/Prgm: SSI B/F, Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: The "MarsQuest" project is a 4,500-square-foot, \$3M, traveling exhibition that will enable millions of Americans to share in the excitement of the scientific exploration of Mars and to learn more about their own planet in the process. The exhibit began a nine-city, three-year tour in October 2000. "MarsQuest" is organized around three intriguing locations on Mars: 1) Olympus Mons, the largest volcano in the Solar System; 2) Valles Marineris, a canyon as long as the United States is wide; and 3) Ares Vallis, the Pathfinder landing site. Each area makes comparisons between Mars and Earth, giving visitors a real sense of the Martian environment. "MarsQuest" visitors encounter more than 20 interactive experiences, four life-size models, and dramatic artwork of Martian landscapes. Visitors can send commands to maneuver a rover over a simulated Martian landscape, among many other engaging hands-on opportunities. Additional components of the "MarsQuest" program include a 30-minute planetarium show from Loch Ness Productions narrated by actor Patrick Stewart, best known as Captain Picard of the TV program "Star Trek, The Next Generation." The MarsQuest Education Program implements onsite, full-day workshops for museum staff and teachers that empower them to use the "MarsQuest" exhibit to share the thrill of scientific discovery with students and the public. Thus far, about 20 scientists have participated in the design, development, and implementation of the "MarsQuest" project. The Space Science Institute led the development of the "MarsQuest" exhibition with major funding from the National Science Foundation and NASA. Additional support was provided by Mitsubishi Digital Electronics America, Inc.; Hewlett-Packard Company; and CBS. For more information on the "MarsQuest" exhibit, please see the primary URL. For the latest "MarsQuest" itinerary, please see the secondary URL.

Lead: Dr. Paul Dusenbery, Space Science Institute, Boulder, CO 80309  
E-mail: [dusenbery@colorado.edu](mailto:dusenbery@colorado.edu). Phone: 303-492-2013.

Primary URL: <http://www.spacescience.org/>2nd URL: <http://www.astc.org/exhibitions/mars/dmars.htm>

Scientist(s):	Dr. Nadine Barlow	University of Central Florida	Orlando, FL
	Dr. Jim Bell	Cornell University	Ithaca, NY
	Dr. Bill Boynton	University of Arizona	Tucson, AZ
	Dr. Michael Carr	United States Geological Survey	Flagstaff, AZ
	Dr. Todd Clancy	Space Science Institute	Boulder, CO
	Dr. Ben Clark	Lockheed Martin Space Systems	Littleton, CO
	Dr. Robert Craddock	Smithsonian National Air and Space Museum	Washington, DC
	Dr. Ken Edgett	Malin Space Science Systems	La Jolla, CA
	Dr. Robert Haberle	NASA Ames Research Center	Moffett Field, CA
	Dr. William Hartmann	Planetary Science Institute	Tucson, AZ
	Dr. William Ingino	University of Colorado	Boulder, CO
	Dr. Bruce Jakosky	University of Colorado	Boulder, CO
	Dr. Philip James	University of Toledo	Toledo, OH
	Dr. Steve Lee	University of Colorado	Boulder, CO
	Dr. Mike Malin	Malin Space Science Systems	La Jolla, CA
	Dr. Cherylynn Morrow	Space Science Institute	Boulder, CO
	Dr. Greg Neumann	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Stephen Pompea	Pompea & Associates	Tucson, AZ
	Dr. Jim Rice	Arizona State University	Tempe, AZ
	Dr. David Sherrod	Hawaiian Volcano Observatory, USGS	Hawaii Nat'l Park, HI
	Dr. Peter Smith	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Peter Thomas	Cornell University	Ithaca, NY
	Dr. Mary Urquhart	NASA Ames Research Center	Moffett Field, CA
	Ms. Adrienne Wasserman	United States Geological Survey	Flagstaff, AZ
	Dr. Thomas Wdowiak	University of Alabama at Birmingham	Birmingham, AL
Partner(s):	Association of Science-Technology Centers (ASTC)		Washington, DC
	CBS Corporation		New York, NY
	Jeff Kennedy & Associates, Inc.		Somerville, MA
	Mystic Scenic Studios, Inc.		Dedham, MA
	National Science Foundation		Arlington, VA

Randi Korn & Associates, Inc.  
University of Colorado

Alexandria, VA  
Boulder, CO

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	31 Dec 00	McWane Science Center	Birmingham, AL	-	54,000	-
01 Feb 01	30 Apr 01	Orlando Science Center	Orlando, FL	-	60,000	-
01 Jun 01	31 Aug 01	Tucson Children's Museum	Tucson, AZ	-	50,000	-

Microbes Astrobiology Exhibit

Theme(s): ASO

Msn/Prgm: NAI

Description: Preparation of a 1,000 square-foot NASA Astrobiology supplement to the national traveling exhibit "Microbes! Invisible Invaders & Amazing Allies" was done by astrobiology outreach teams from NASA Johnson Space Center (JSC), the Woods Hole Marine Biological Laboratory, and the NASA Astrobiology Institute in collaboration with Space Center Houston. The exhibit was on public display at Space Center Houston (SCH) from February 1, 2001, to May 15, 2001. The team also prepared an education module for the exhibit to focus on the basic science and NASA supplement. The JSC team presented two teacher workshops at SCH using the module. Each included hands-on activities and presentations by NASA astrobiologists. JSC has continued to follow the "Microbes" exhibit to other venues and offer the supplement and education module, as well as to work with the NASA Planetary Protection Officer to make the supplement a permanent addition to the exhibit.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov)

Solar-B Exhibit, Phase I

Theme(s): SEC

Msn/Prgm: Solar-B

Description: The premier "Solar-B" exhibit at Chabot Space & Science Center is a stand-alone, permanent exhibit presenting and detailing the story theme of the Sun-Earth Connection, the nature of the Sun, and how the "Solar-B" mission will expand our knowledge of them. The exhibit incorporates graphics, a computer kiosk, and hands-on experiments with light that allow experimentation with the optical phenomena that the Solar B Focal Plane Package will employ and what the various instruments will tell us about the Sun. The "Solar-B" exhibit, although designed as a stand-alone, is situated in an exhibit environment rich in hands-on interactives focused on the Sun and on light and optics, including a public-access solar telescope and solar exhibit and a children's "light and optics" exploration area.

Lead: Mr. Benjamin Burress, Chabot Space and Science Center, Oakland, CA 94619  
E-mail: [bburress@chabot.space.org](mailto:bburress@chabot.space.org). Phone: 510-336-7308.

Primary URL: <http://www.chabot.space.org/vsc/exhibits/solarb/default.asp>

Scientist(s): Dr. Gibor Basri University of California, Berkeley Berkeley, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Mar 01	09 Mar 01	Chabot Space and Science Center	Oakland, CA	-	-	-

Space Weather Center Traveling Exhibit

Theme(s): SEC

Msn/Prgm: SSI B/F, ACE, HESSI, IMAGE, ISTP, SOHO, SEC Forum

Description: This new 700-square-foot exhibit shows viewers how space weather (disturbances in space driven by solar activity) plays a role in their everyday lives. The exhibit incorporates engaging hands-on interactives, stunning graphic displays, and near-real-time data from NASA missions currently studying the Sun and the near-Earth space environment. Visitors to the Space Weather Center learn about solar cycles and space weather, including the effects of Solar Maximum; the electrical and magnetic changes that take place in space that affect people and equipment on Earth, as well as in space; the cause of the greatest light show on Earth-the aurora; and current events about space weather, including recent discoveries from leading scientists. A companion Web site Space Weather Center Online (URL below) offers a virtual tour of the exhibit along with links and additional resources related to exhibit content. The exhibit debuted at the Denver Museum of Natural History in March of 2000. It has been at the Discovery Museum in Sacramento, the Maryland Science Center, the

Goddard Visitors' Center, the Lawrence Hall of Science, and the Adler Planetarium. It is scheduled for the El Paso Science Center in early 2002. Scientists and Education Outreach experts have supported various activities at exhibit venues including teacher workshops, hands-on demonstrations for the public and schools, solar observing, and planetarium shows. The Sun-Earth Connection Education Forum (SECEF) and related missions conducted extensive educational programming at the Maryland host sites. The Space Weather Center exhibit was developed through a partnership among the Space Science Institute, NASA Goddard Space Flight Center, Sun-Earth Connection missions, and the NASA OSS Sun-Earth Connection Education Forum.

Lead: Dr. Paul Dusenbery, Space Science Institute, Boulder, CO 80309

E-mail: [dusenbery@colorado.edu](mailto:dusenbery@colorado.edu). Phone: 303-492-2013.

Primary URL: <http://www.spacescience.org/SWOP/1.html>

Scientist(s):	Dr. Mario Acuna	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Michael Carlowicz	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Eric Christian	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Carol Crannell	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Bernard Fleck	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Nicola Fox	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Steele Hill	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Robert Hoffman	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Therese Kucera	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Ronald Lepping	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Donald Michels	Naval Research Laboratory	Washington, DC
	Ms. Carolyn Ng	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Kristine Sigsbee	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD
Partner(s):	Adler Planetarium and Astronomy Museum		Chicago, IL
	Condit Exhibits		Denver, CO
	Denver Museum of Nature and Science		Denver, CO
	Discovery Museum		Sacramento, CA
	Johns Hopkins Applied Physics Laboratory		Laurel, MD
	Lawrence Hall of Science		Berkeley, CA
	Maryland Science Center		Baltimore, MD
	NASA Goddard Space Flight Center		Greenbelt, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
27 Sep 00	07 Jan 01	Maryland Science Center	Baltimore, MD	400	175,000	-
10 Jan 01	04 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	3,100	-
26 May 01	02 Sep 01	Lawrence Hall of Science	Berkeley, CA	-	30,000	-
13 Sep 01	31 Dec 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	30,000	-

Stardust Museums and Planetarium Exhibits

Theme(s): SSE

Msn/Prgm: Stardust

Lead: Ms. Aimee Whalen, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [AIMEE.L.WHALEN@JPL.NASA.GOV](mailto:AIMEE.L.WHALEN@JPL.NASA.GOV). Phone: 818-354-3245.

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	01 Jan 02	Bell Museum of Natural History	Minneapolis, MN	-	-	-
01 Jan 01	01 Jan 02	Onizuka Space Center	Kailua-Kona, HI	1,800	15,000	-
01 Feb 01	01 Feb 02	T.C. Bird Planetarium	Boise, ID	2,545	-	-
02 Feb 01	02 Feb 02	Muncie Community Schools' Planetarium	Muncie, IN	1,000	-	-
01 Apr 01	01 Apr 02	Maryland Science Center	Baltimore, MD	-	22,000	-
25 Sep 01	25 Sep 02	Newark State Museum	Newark, NJ	-	25,000	-

### Voyage: A Journey Through Our Solar System

Theme(s): SEC, SSE

Msn/Prgm: Challenger Center

Description: "Voyage: A Journey Through Our Solar System" a permanent, space science exhibit on the National Mall in Washington, DC, opened on October 17, 2001. Created by the Challenger Center for Space Science Education, the Smithsonian Institution, and NASA, "Voyage" is a 1-to-10-billion scale model of the solar system that provides visitors with a dramatic understanding of Earth's place in space. The exhibition consists of 13 8.5-foot-tall stainless steel stations, spanning 650 yards along Jefferson Drive, between NASM and the Castle. In nine of these stations, three-dimensional model planets and their moons are laser-sculpted in crystal. The remaining stations feature the Sun, asteroids, and comets; they also introduce the exhibition to visitors. Each station includes high-resolution, full-color graphics in porcelain enamel. The graphics offer the opportunity to see these worlds up close via stunning color imagery, most of which was commissioned specially for this exhibition and derived from NASA planetary data sets. Vital baseline statistics for each planet are also provided. In addition to the exhibit, supplemental materials will be available at the "Voyage" Web site. "Voyage" K-12 educational materials are currently under development and will be free to download as PDF files. The "Voyage" exhibition was designed to be replicated and permanently placed at sites worldwide.

Lead: Dr. Jeffrey Goldstein, Challenger Center for Space Science Education, Alexandria, VA 22314

E-mail: [jgoldstein@challenger.org](mailto:jgoldstein@challenger.org). Phone: 703-683-9740.

Primary URL: <http://www.voyageonline.org>

Partner(s): NASA Office of Human Resources and Education  
Smithsonian Institution  
Smithsonian National Air and Space Museum

Washington, DC  
Washington, DC  
Washington, DC

## Materials/Support

### Association of Science-Technology Centers

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: OSS/Outreach, ASO Forum, SEU Forum, SSI B/F, SEC Forum

Description: The Association of Science-Technology Centers Incorporated (ASTC) is an organization of science centers and museums dedicated to furthering the public understanding of science. ASTC encourages excellence and innovation in informal science learning by serving and linking its members worldwide and advancing their common goals. Through a variety of programs and services, ASTC provides professional development for the science center field, promotes best practices, supports effective communication, strengthens the position of science centers within the community at large, and fosters the creation of successful partnerships and collaborations.

Lead: Mr. Dan Woods, NASA Office of Space Science, Washington, DC 20546

E-mail: [dwoods@hq.nasa.gov](mailto:dwoods@hq.nasa.gov). Phone: 202-358-0850.

Primary URL: <http://www.astc.org>

Scientist(s): Dr. Isabel Hawkins University of California, Berkeley  
Dr. Cherilynn Morrow Space Science Institute

Berkeley, CA  
Boulder, CO

Partner(s): Harvard-Smithsonian Center for Astrophysics  
NASA Goddard Space Flight Center  
Space Telescope Science Institute  
University of California, Berkeley

Cambridge, MA  
Greenbelt, MD  
Baltimore, MD  
Berkeley, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Oct 00	17 Oct 00	Association of Science-Technology Centers (ASTC) Conference	Cleveland, OH	-	750	-

### HESSI Informal Education Planetarium/Science Center/Museum Outreach

Theme(s): SEC

Msn/Prgm: HESSI, STEREO

Description: High Energy Solar Spectroscopic Imager (HESSI) scientists from the University of California, Berkeley's Space Sciences Laboratory and NASA Goddard Space Flight Center partner with science centers and museums to leverage the maximum dissemination of Sun-Earth Connection resources. Scientists interact with the general

public through presentations, question-and-answer sessions, informal interviews, and hands-on activities.  
 Lead: Dr. Nahide Craig, University of California, Berkeley, Berkeley, CA 94720  
 E-mail: [ncraig@ssl.berkeley.edu](mailto:ncraig@ssl.berkeley.edu). Phone: 510-643-7273.

Primary URL: <http://hessi.ssl.berkeley.edu>

Scientist(s): Dr. Manfred Bester University of California, Berkeley Berkeley, CA  
 Dr. Nahide Craig University of California, Berkeley Berkeley, CA  
 Dr. Michelle Larson University of California, Berkeley Berkeley, CA  
 Mr. Mark Lewis University of California, Berkeley Berkeley, CA  
 Partner(s): Exploratorium San Francisco, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
30 May 01	30 May 01	University of California, Berkeley	Berkeley, CA	23	-	-
15 Aug 01	15 Aug 01	Lawrence Hall of Science	Berkeley, CA	62	-	-
22 Aug 01	22 Aug 01	University of California, Berkeley	Berkeley, CA	-	12	-

#### Informal Education Web Watering Hole—Space Science Access

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SEU Forum

Description: The Space Science Access Web site aims to support the efforts of informal science education organizations through three main resource sections that will evolve and grow as the Office of Space Science Education and Public Outreach program grows. "NASA Space Science Resources" serves as a portal to access space science images, data, education programs, and human resources of particular interest to planetariums and science centers. By providing a community bulletin board, "Project Sharing" supports communication among those working on developing informal astronomy education projects. "Best Practices" posts articles and resources aimed at improving the quality of future informal science education programs and projects.

Lead: Ms. Mary Dussault, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
 E-mail: [mdussault@cfa.harvard.edu](mailto:mdussault@cfa.harvard.edu). Phone: 617-496-7962.

Primary URL: <http://mo-www.harvard.edu/spacescienceaccess>

Scientist(s): Dr. Bernhard Beck-Winchatz DePaul University Chicago, IL

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Oct 00	14 Oct 00	Great Lakes Planetarium Association Annual Conference	Chicago, IL	30	250	-
14 Oct 00	17 Oct 00	Association of Science-Technology Centers (ASTC) Conference	Cleveland, OH	50	1,200	-
31 Mar 01	31 Mar 01	Great Lakes Planetarium Association—Ohio Meeting	Canton, OH	-	-	-
26 Jun 01	30 Jun 01	Great Lakes Planetarium Association Southeastern Region 2001	Richmond, KY	-	-	-

#### Mars Curator/Docent Professional Development

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: Seminars/workshops to provide up-to-date information to informal educators about Mars-related science and technology and Mars missions.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: <http://mars.jpl.nasa.gov/events/>

Scientist(s): Dr. Scott Anderson NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Phil Christensen Arizona State University Tempe, AZ  
 Dr. Matt Golombek NASA Jet Propulsion Laboratory Pasadena, CA  
 Ms. Sheri Klug Arizona State University Tempe, AZ  
 Dr. Steve Lee University of Colorado Boulder, CO  
 Mr. Bob Mase NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Dan McCleese NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Gene McDonald NASA Jet Propulsion Laboratory Pasadena, CA

Dr. Cherilynn Morrow	Space Science Institute	Boulder, CO
Dr. Kenneth Nealon	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Timothy Parker	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Jeffrey Plaut	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Steve Saunders	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Albert Yen	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Rich Zurek	NASA Jet Propulsion Laboratory	Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	23 May 01	Natural History Museum	Los Angeles, CA	-	-	-
15 Feb 01	15 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
02 Jun 01	02 Jun 01	Space Science Institute	Boulder, CO	8	-	-
		Denver Museum of Nature and Science	Denver, CO	-	-	-
		Orlando Science Center	Orlando, FL	-	-	-

## Mars Model Loans

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: Loans of models and exhibits to informal education institutions.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Disneyland	Anaheim, CA	-	-	-
01 Oct 00	30 Sep 01	Houston Museum of Natural Science	Houston, TX	-	-	-
01 Oct 00	30 Sep 01	Kauai Children's Discovery Museum	Kapaa, HI	-	-	-
01 Oct 00	31 Dec 01	McWane Science Center	Birmingham, AL	-	-	-
01 Oct 00	30 May 01	Onizuka Space Center	Kailua-Kona, HI	-	-	-
01 Oct 00	30 Sep 01	Smithsonian National Air and Space Museum	Washington, DC	-	-	-
01 Feb 01	30 Apr 01	Orlando Science Center	Orlando, FL	-	-	-
01 Apr 01	25 Oct 01	Kennedy Space Center Visitor Center	Kennedy SC, FL	-	-	-
01 Jun 01	31 Aug 01	Tucson Children's Museum	Tucson, AZ	-	-	-

## Mars Speaker Support

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: To provide scientists and engineers as speakers to informal education institutions for their public events.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: <http://mars.jpl.nasa.gov/events>

Scientist(s):	Mr. Chuck Acton	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Erik Bailey	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Todd Barber	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Kelly Bender	Arizona State University	Tempe, AZ
	Mr. Robert Bunker	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. John Callas	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Ben Clark	Lockheed Martin Space Systems	Littleton, CO
	Mr. Brian Cooper	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Nagin Cox	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jim Erickson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. John Essmiller	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Orlando Figueroa	NASA Office of Space Science	Washington, DC
	Dr. Jim Garvin	NASA Office of Space Science	Washington, DC
	Mr. Carl Kloss	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. B. Gentry Lee (retired)	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Laurie Leshin	Arizona State University	Tempe, AZ
	Mr. Mark Maimone	NASA Jet Propulsion Laboratory	Pasadena, CA

Dr. Mike Malin	Malin Space Science Systems	La Jolla, CA
Mr. Terrence Mason	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Dan McCleese	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Firouz Naderi	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Kenneth Neelson	NASA Jet Propulsion Laboratory	Pasadena, CA
Ms. Regina Sakurai	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Chris Salvo	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. John Sepikas	Pasadena City College	Pasadena, CA
Ms. Jennifer Trosper	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Adolfo Valerin	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Randii Wessen	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Peter Xaypraseuth	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Tom Young (retired)	NASA Jet Propulsion Laboratory	Pasadena, CA

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Jan 01	11 Jan 01	Xavier Preparatory School	Phoenix, AZ	-	1,158	-
17 Mar 01	17 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
15 Apr 01	15 Apr 01	Griffith Observatory	Los Angeles, CA	-	200	-
15 Apr 01		Women's Transportation Seminar	Long Beach, CA	-	200	-
24 Apr 01	24 Apr 01	Montebello Rotary Club	Montebello, CA	40	-	-
12 May 01	12 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	1,000	-
13 May 01	13 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	24	-	-
16 Jun 01	16 Jun 01	Travis Air Force Base	Fairfield, CA	-	125,000	-
27 Jun 01	27 Jun 01	Claremont College Rotary Club	Claremont, CA	15	-	-
30 Jun 01	30 Jun 01	Brown Center for Innovation	Loma Linda, CA	-	250	-
09 Jul 01	09 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	20	-	-
19 Jul 01	19 Jul 01	National Geographic Society	Washington, DC	-	400	-
20 Jul 01	20 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	200	-
20 Jul 01	20 Jul 01	Pasadena City College	Pasadena, CA	150	-	-
20 Jul 01	20 Jul 01	Smithsonian National Air and Space Museum	Washington, DC	-	-	-
18 Aug 01	18 Aug 01	Chabot Space and Science Center	Oakland, CA	-	150	-
28 Sep 01	30 Sep 01	Paseo Colorado Mall	Pasadena, CA	-	35,000	-
		Challenger Learning Center	Brownsburg, IN	-	-	-
		Science City at Union Station	Kansas City, MO	-	-	-

## Museum of Discovery and Science/NASA Space Education Partnership

Msn/Prgm: OSS/Sci. Ctr. Dev., SERCH B/F

Description: The Museum of Discovery and Science's new immersive space exhibit hall will provide visitors with the opportunity to gain knowledge about our Earth, our solar system, and the universe. Visitors will also explore "how we know what we know," learn about tools scientists use to gather information about space, and discover the relevance of what we have learned to everyday life. Additionally, our hands-on exhibits will use lighting, graphics, surface treatments, video, and audio to allow visitors to investigate "space" using a variety of learning styles (visual, auditory, and kinesthetic). For example, one component of the new electromagnetic spectrum exhibits will help the visitor understand the scope of electromagnetic radiation by manipulating a maneuverable radio receiver dish, an LED display, and a graphic panel. As the visitor pans the background for radio sources and finds one, the LED bar graph mounted to the graphic panel intensifies. During FY 2001, the Museum of Discovery and Science created committees and hired a design firm to bring the new space exhibit hall from inception to fruition. The museum's internal committee of scientists, educators, and exhibits specialists met with its external science advisory committee, which included astronomers from Buehler Planetarium, professors from Florida Atlantic University and Nova Southeastern University, physical science teachers from the Broward County Public Schools, and industry representatives. Their recommendations guided the selection of a design firm. The context for the four main exhibit themes was established, and several exhibit modules were approved for fabrication. The theme for the exhibit is the Sun, a platform from which the visitors will explore and learn specific science content.

Lead: Mr. Joe Cytacki, Museum of Discovery and Science, Ft. Lauderdale, FL 33312-1707  
E-mail: [jcytacki@mods.net](mailto:jcytacki@mods.net). Phone: 954-467-6637.

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**NEAR Events/Exhibits at Science Centers/Museums**

Theme(s): SSE

Msn/Prgm: NEAR

Description: The NEAR E/PO office helped scientists, engineers, and other team members become involved in the NEAR E/PO efforts by providing opportunities to participate in exhibits and events at museums and science centers. The E/PO office supported these events by providing the resources necessary in order for the team members to talk at events and activities, provide demonstrations, and conduct classroom activities related to the NEAR mission. These efforts supported State, local, and national efforts directed toward systemic reform of science, mathematics, and technology education. Also, these classroom activities were based on the criteria contained in the national Mathematics, Science, and Technology Standards. Exhibits and events were conducted by some of our NEAR E/PO partners, such as the Maryland Science Center and the Smithsonian Museum of Natural History. These were high-leverage opportunities that built on existing programs, institutions, and infrastructure. Other planetariums, museums, and science centers across the country provide the latest images, animations, videos, and movies to support their existing programs and to showcase the current events related to the NEAR missions.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099  
E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://near.jhuapl.edu>

2nd URL: <http://www.mdsci.org/spacelink>

Scientist(s): Ms. Kerri Beisser Johns Hopkins Applied Physics Laboratory Laurel, MD  
Dr. Tim McCoy Smithsonian National Museum of Natural History Washington, DC

Partner(s): Maryland Science Center Baltimore, MD  
Smithsonian National Air and Space Museum Washington, DC

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Maryland Science Center	Baltimore, MD	-	500,000	-
16 Nov 00	18 Nov 00	National Science Teachers Association (NSTA) Eastern Area Conference	Baltimore, MD	-	400	-
17 Nov 00	30 Sep 01	Smithsonian National Museum of Natural History	Washington, DC	-	9,000,000	-

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**Observatory, Planetarium, Theater Project**

Msn/Prgm: OSS/Sci. Ctr. Dev., SERCH B/F

Description: The Observatory, Planetarium, Theater Project will expand the South Carolina State Museum by adding an astronomical observatory, multimedia planetarium, and large-format theater. These additions will establish the State Museum as South Carolina's first major center for informal science education. Funding from the NASA Office of Space Science will be used to equip the planetarium with an optical-mechanical star projector and an all-dome video panorama system and to create programs using these technologies. This equipment will enable the museum to present a wide range of educational programs in space science, as well as in other scientific disciplines.

Lead: Mr. Michael Fey, South Carolina State Museum, Columbia, SC 29201  
E-mail: [feym@museum.state.sc.us](mailto:feym@museum.state.sc.us). Phone: 803-898-4950.

Primary URL: <http://www.museum.state.sc.us>

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**OSS Representation at the Annual Conference of the Great Lakes Planetarium Association**

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: ASO Forum, DePaul B/F, SEC Forum

Description: The Space Science Center for Education and Outreach at DePaul University organized a large OSS presence at the annual meeting of the Great Lakes Planetarium Association (GLPA), which took place at the Adler Planetarium from October 11 through 14. OSS exhibits and computer stations were set up in Adler's new CyberSpace classroom and highlighted the Space Science Education Resource Directory and the Informal Space Science "Watering Hole," currently under development. GLPA members had the opportunity to explore these resources via four Internet-connected computers and provided valuable feedback to the developers.

Lead: Dr. Bernhard Beck-Winchatz, DePaul University, Chicago, IL 60614-2458  
E-mail: [bbeck@condor.depaul.edu](mailto:bbeck@condor.depaul.edu). Phone: 773-325-4545.

Partner(s): Great Lakes Planetarium Association Shaker Heights, OH

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Oct 00	14 Oct 00	Great Lakes Planetarium Association Annual Conference	Chicago, IL	120	-	-

Planetarium Learning and Teaching Opportunities

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: DePaul B/F

Description: The Planetarium Learning and Teaching Opportunities (PLATO) small grants program, funded by OSS's Broker/Facilitator program, was launched at the annual meeting of the Great Lakes Planetarium Association, which took place at the Adler Planetarium from October 11 through 14, 2000. The program is designed particularly for small planetariums, which often operate on very small budgets, and allows them to apply for up to \$1,000 for innovative planetarium learning and teaching experiences through a streamlined application process. The call for proposals and further information about this program can be found at the URL below.

Primary URL: [http://analyzer.depaul.edu/glpa\\_oss/](http://analyzer.depaul.edu/glpa_oss/)

Partner(s): Great Lakes Planetarium Association Shaker Heights, OH

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Oct 00	14 Oct 00	Great Lakes Planetarium Association	Shaker Heights, OH	9	-	-

SEC—Informal Education Community Support

Theme(s): SEC

Msn/Prgm: SEC Forum

Description: The Sun-Earth Connection Education Forum, at the University of California, Berkeley and Goddard Space Flight Center, supports planetariums, museums, and science centers by providing national events and materials; arranging presentations by Sun-Earth Connection mission scientists; and conducting hands-on activities during special programs for the general public, educators, students, and other professionals.

Lead: Ms. Diane Kisich, University of California, Berkeley, Berkeley, CA 94720

E-mail: [dianek@ssl.berkeley.edu](mailto:dianek@ssl.berkeley.edu). Phone: 510-643-7217.

Primary URL: <http://sunearth.gsfc.nasa.gov>

2nd URL: <http://sunearth.ssl.berkeley.edu>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Oct 00	13 Oct 00	Adler Planetarium and Astronomy Museum	Chicago, IL	200	-	-

SOHO—Presentations and Assistance at Museums

Theme(s): SEC

Msn/Prgm: SOHO

Description: Solar and Heliospheric Observatory (SOHO) scientists from GSFC interact with visitors at planetariums and science centers in the Greater Baltimore-Washington, DC, metropolitan area to provide information and materials about Sun-Earth Connection Science. Additional presentations are given to enhance programs in planetariums, science centers, and museums both nationally and internationally.

Primary URL: <http://sohowww.nascom.nasa.gov>

Scientist(s): Mr. Steele Hill NASA Goddard Space Flight Center Greenbelt, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
27 Apr 01	27 Apr 01	Howard B. Owens Science Center	Lanham, MD	26	-	-
07 Jul 01	07 Jul 01	Christa McAuliffe Planetarium	Concord, NH	-	5,150	-

Solar Convection, Spectroscopy, and Velocity and Acceleration

Theme(s): SEC

Msn/Prgm: SRT, HESSI, SOHO

**Description:** This project has two parts: 1) development of lesson plans relating to spectroscopy, convection, and velocity and acceleration, using NASA solar data as illustrations and 2) development of solar spectroscopy program at Owens Science Center.

**Lead:** Dr. Therese Kucera, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [terry.kucera@gssc.nasa.gov](mailto:terry.kucera@gssc.nasa.gov). Phone: 301-286-0829.

**Partner(s):** Howard B. Owens Science Center Lanham, MD

#### Solar System Exploration Forum and International Planetarium Society Partnership

**Theme(s):** SSE

**Msn/Prgm:** SSE Forum, Cassini/Huygens Probe, Galileo, Genesis, NEAR, MGS, 2001 Mars Odyssey

**Description:** High-quality slides and videos of solar system exploration missions and discoveries are provided to the International Planetarium Society, which then makes these materials available to its 400 member institutions worldwide through a low-cost subscription service (cost covers duplication, shipping, and handling).

**Lead:** Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

**Primary URL:** <http://www.ips-planetarium.org/ips-slides.html>

**2nd URL:** <http://www.ips-planetarium.org/ips-videos.html>

**Partner(s):** International Planetarium Society Rochester, NY

#### Teacher Thursday

**Theme(s):** SEC

**Msn/Prgm:** ISTEP, Polar

**Description:** International Solar-Terrestrial Physics (ISTP) scientists support the Maryland Science Center's Teacher Thursdays, a series of science presentations and hands-on activities designed to increase the scientific knowledge of the classroom teacher. The teachers learn about the newest scientific discoveries and ways to incorporate the science into their classrooms. There are 10 of these programs during the normal school year. Those teachers attending all of the science presentations are awarded inservice credits.

**Lead:** Mr. Michael Carlowicz, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [mcarlowi@pop600.gssc.nasa.gov](mailto:mcarlowi@pop600.gssc.nasa.gov). Phone: 301-286-6353.

**Primary URL:** <http://mdsci.org>

**2nd URL:** <http://mdsci.org/spacelink>

**Partner(s):** Maryland Science Center Baltimore, MD

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
30 Oct 00	02 Jan 01	Maryland Science Center	Baltimore, MD	42	-	-

## TARGETED OUTREACH

### Minority Institution Initiative in Space Science

#### A Space Science Curriculum at Hampton University: Development of a Minor, Faculty Enhancement, and K-14 Outreach

**Theme(s):** SEC, SSE

**Msn/Prgm:** MI Initiative

**Description:** Our primary goal in this proposal is to directly participate in NASA's pursuit of knowledge and in particular to inspire minority and underrepresented students with NASA's discoveries and exploration. To accomplish this goal, we have three specific objectives: 1) to develop a sustainable curriculum in Space Sciences at Hampton University that includes a minor program and builds upon the active space science research programs already existing at Hampton University (HU) 2) to expand and enhance the faculty research experience base at HU to support the space sciences curriculum and 3) to establish an outreach program that focuses on K-12 and community college students so that they may be introduced to and inspired by space science at an early age.

**Lead:** Dr. Scott Bailey, Hampton University, Hampton, VA 23668  
E-mail: [scott.bailey@hamptonu.edu](mailto:scott.bailey@hamptonu.edu). Phone: 757-728-6936.

**Scientist(s):** Mr. Abdelkader Baggag Hampton University Hampton, VA  
Dr. Scott Bailey Hampton University Hampton, VA

**Description:** This project has two parts: 1) development of lesson plans relating to spectroscopy, convection, and velocity and acceleration, using NASA solar data as illustrations and 2) development of solar spectroscopy program at Owens Science Center.

**Lead:** Dr. Therese Kucera, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [terry.kucera@gssc.nasa.gov](mailto:terry.kucera@gssc.nasa.gov). Phone: 301-286-0829.

**Partner(s):** Howard B. Owens Science Center Lanham, MD

#### Solar System Exploration Forum and International Planetarium Society Partnership

**Theme(s):** SSE

**Msn/Prgm:** SSE Forum, Cassini/Huygens Probe, Galileo, Genesis, NEAR, MGS, 2001 Mars Odyssey

**Description:** High-quality slides and videos of solar system exploration missions and discoveries are provided to the International Planetarium Society, which then makes these materials available to its 400 member institutions worldwide through a low-cost subscription service (cost covers duplication, shipping, and handling).

**Lead:** Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

**Primary URL:** <http://www.ips-planetarium.org/ips-slides.html>

**2nd URL:** <http://www.ips-planetarium.org/ips-videos.html>

**Partner(s):** International Planetarium Society Rochester, NY

#### Teacher Thursday

**Theme(s):** SEC

**Msn/Prgm:** ISTEP, Polar

**Description:** International Solar-Terrestrial Physics (ISTP) scientists support the Maryland Science Center's Teacher Thursdays, a series of science presentations and hands-on activities designed to increase the scientific knowledge of the classroom teacher. The teachers learn about the newest scientific discoveries and ways to incorporate the science into their classrooms. There are 10 of these programs during the normal school year. Those teachers attending all of the science presentations are awarded inservice credits.

**Lead:** Mr. Michael Carlowicz, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [mcarlowi@pop600.gssc.nasa.gov](mailto:mcarlowi@pop600.gssc.nasa.gov). Phone: 301-286-6353.

**Primary URL:** <http://mdsci.org>

**2nd URL:** <http://mdsci.org/spacelink>

**Partner(s):** Maryland Science Center Baltimore, MD

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
30 Oct 00	02 Jan 01	Maryland Science Center	Baltimore, MD	42	-	-

## TARGETED OUTREACH

### Minority Institution Initiative in Space Science

#### A Space Science Curriculum at Hampton University: Development of a Minor, Faculty Enhancement, and K-14 Outreach

**Theme(s):** SEC, SSE

**Msn/Prgm:** MI Initiative

**Description:** Our primary goal in this proposal is to directly participate in NASA's pursuit of knowledge and in particular to inspire minority and underrepresented students with NASA's discoveries and exploration. To accomplish this goal, we have three specific objectives: 1) to develop a sustainable curriculum in Space Sciences at Hampton University that includes a minor program and builds upon the active space science research programs already existing at Hampton University (HU) 2) to expand and enhance the faculty research experience base at HU to support the space sciences curriculum and 3) to establish an outreach program that focuses on K-12 and community college students so that they may be introduced to and inspired by space science at an early age.

**Lead:** Dr. Scott Bailey, Hampton University, Hampton, VA 23668  
E-mail: [scott.bailey@hamptonu.edu](mailto:scott.bailey@hamptonu.edu). Phone: 757-728-6936.

**Scientist(s):** Mr. Abdelkader Baggag Hampton University Hampton, VA  
Dr. Scott Bailey Hampton University Hampton, VA

Partner(s): Dr. Arthor Bowman Hampton University Hampton, VA  
 Dr. Jawed Jafri Hampton University Hampton, VA  
 Dr. Ali Omar Hampton University Hampton, VA  
 NASA Office of Equal Opportunity Programs Washington, DC

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	31 Dec 01	Hampton University	Hampton, VA	9	1,208	-

An Urban Outreach Program in Space Science: A Collaborative Effort between NASA, Hispanic-Serving and Historically Black Universities

Theme(s): SEC, SSE

Msn/Prgm: MI Initiative

Description: An Urban Outreach Program in Space Science has encouraged and developed innovative space science outreach programs that are relevant to a diverse urban community through community events, space-science-related courses and workshops for teachers, and opportunities for students and faculty from minority-serving institutions to participate in space science research programs. The collaboration among the University of Houston-Downtown (UHD), a Hispanic-Serving Institution, Texas Southern University (TSU), a Historically Black University, Houston Museum of Natural Science (HMNS), an inner-city museum, and NASA Johnson Space Center (JSC) has enhanced space science education outreach programs in the greater Houston area. Raul Yzaguirre School for Success (RYSS), a predominantly Hispanic-serving charter school for grades pre-K through 12, is an important collaborator. To accomplish our primary goal of sharing space science with under-represented students and educators, we have done the following: 1) designed interactive space science demonstrations and presentations, which included hands-on activities for events at HMNS, in community settings, and in urban area schools; 2) trained Space Science Ambassadors, who were high school and college students from minority-serving schools, to present programs at local venues, especially at HMNS and YMCA camps; 3) initiated an intern program for minority university students to conduct research side by side with NASA/Johnson Space Center scientists; and 4) developed and conducted inservice and graduate courses for science teachers who attended minority-serving universities. All of our programs are a success. The Ambassadors have gained self-confidence and poise, and our interns have successfully worked with NASA Johnson Space Center scientists. Science teachers are inquiring about next year's programs, and the Houston school district is interested in expanding our course offerings.

Lead: Dr. Penny Morris, University of Houston-Downtown, Houston, TX 77002  
 E-mail: [smithp@dt.uh.edu](mailto:smithp@dt.uh.edu); [pmorris@ems.jsc.nasa.gov](mailto:pmorris@ems.jsc.nasa.gov). Phone: 713-221-8178.

Primary URL: [www.tccc-ryss.org/solarsys/solarmingrant.htm](http://www.tccc-ryss.org/solarsys/solarmingrant.htm)

2nd URL: [www.tccc-ryss.org/solarsys/ambassador.htm](http://www.tccc-ryss.org/solarsys/ambassador.htm)

Scientist(s): Dr. Carlton Allen NASA Johnson Space Center Houston, TX  
 Ms. Jaclyn Allen Lockheed Martin ESC/JSC Houston, TX  
 Ms. Sangeeta Gad University of Houston-Downtown Houston, TX  
 Dr. Marilyn Lindstrom NASA Johnson Space Center Houston, TX  
 Dr. Glen Merrill University of Houston-Downtown Houston, TX  
 Dr. Penny Morris University of Houston-Downtown Houston, TX  
 Dr. Victor Obot Texas Southern University Houston, TX  
 Dr. Carolyn Sumners Houston Museum of Natural Science Houston, TX  
 Dr. Bobby Wilson Texas Southern University Houston, TX  
 Mr. James Wooten Houston Museum of Natural Science Houston, TX

Partner(s): Houston Museum of Natural Science Houston, TX  
 NASA Johnson Space Center Houston, TX  
 NASA Office of Equal Opportunity Programs Washington, DC  
 Raul Yzaguirre School for Success Houston, TX  
 Texas Southern University Houston, TX

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Apr 01	31 Dec 01	Houston Museum of Natural Science	Houston, TX	15	5,000	-
28 Apr 01	28 Apr 01	Houston Museum of Natural Science	Houston, TX	-	5,000	-
28 May 01	03 Jul 01	Texas Southern University	Houston, TX	4	-	-

01 Jun 01	31 Dec 01	NASA Johnson Space Center	Houston, TX	3	-	-
04 Jun 01	08 Jun 01	University of Houston-Downtown	Houston, TX	23	-	-
18 Jun 01	29 Jun 01	Texas Southern University	Houston, TX	25	-	-
06 Jul 01	07 Jul 01	Houston Museum of Natural Science	Houston, TX	-	2,300	-
09 Sep 01	31 Dec 01	Raul Yzaguirre School for Success	Houston, TX	656	-	-

#### Astronomy and Astrophysics Course Development at Salish Kootenai College

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: MI Initiative

Description: The goals of this project are to develop an associate degree transfer program in astronomy and astrophysics, better prepare Salish Kootenai College (SKC) students to participate in ongoing astrophysics research at SKC, and increase the scientific literacy of nonscience majors at SKC. Towards these goals, four new courses in astronomy and astrophysics are being developed. The development of the first course, Introduction to Astronomy, has been completed and added to the SKC College Catalog. Work is ongoing on an Internet-delivered version of this course, with completion anticipated in the summer of 2002. The development of the other two courses, Stellar Astronomy and Astrophysics and Galactic Astronomy and Astrophysics was completed in December 2001. A new associate degree transfer program in astronomy and astrophysics has been designed and approved for accepting students into the program during the Fall Quarter 2001.

Lead: Dr. Timothy Olson, Salish Kootenai College, Pablo, MT 59855

E-mail: [tim\\_olson@skc.edu](mailto:tim_olson@skc.edu). Phone: 406-675-4800.

Partner(s): NASA Office of Equal Opportunity Programs

Washington, DC

#### Collision Processes in Astrophysical Plasmas

Theme(s): SEU

Msn/Prgm: MI Initiative

Description: Collision processes important for understanding astrophysical plasmas are being studied computationally and experimentally. The collision of atomic ions and electrons with atoms and molecules is the subject of the research. The principal focus is the computational and experimental study of charge exchange collisions and the determination of collision cross sections. This provides spectral diagnostics of galactic and stellar x-ray emission from charge exchange recombination. In addition, electron impact scattering, with a particular emphasis on excitation, is being studied. The research supports the NASA Chandra Emission Line Project. The experimental effort is using an electron beam ion trap (EBIT) to study x-ray emission from charge-exchange recombination (CER) and radiative recombination (RR) of neutral hydrogen and helium with highly charged ions, deriving cross sections as a function of temperature. The calculations employ several related computational theories. A new method using numerical wave-packets with an implicit split-operator propagator (ISOP), employing fast Fourier transforms, is in use. This code has the highly desirable feature of avoiding translation factors. The ISOP employs a short-time propagator and is second-order accurate in time. A more traditional time-dependent close-coupling (TDCC) molecular orbital method, using translation factors to describe the CER and RR processes, is also being employed. Finally, a new wave-packet method using a long-time propagator, based on a discrete variable representation (DVR) of a new set of synthetic polynomials, and using a basis set in time, is being used.

Lead: Dr. Charles Weatherford, Florida A&M University, Tallahassee, FL 32307

E-mail: [weatherf@cennas.nhmf.gov](mailto:weatherf@cennas.nhmf.gov). Phone: 850-599-3767.

Scientist(s): Dr. Peter Beiersdorfer Lawrence Livermore National Laboratory Livermore, CA

Dr. Adam Ritchie Lawrence Livermore National Laboratory Livermore, CA

Dr. Bradley Wargelin Harvard-Smithsonian Center for Astrophysics Cambridge, MA

Partner(s): Harvard-Smithsonian Center for Astrophysics Cambridge, MA

Lawrence Livermore National Laboratory Livermore, CA

NASA Office of Equal Opportunity Programs Washington, DC

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	31 Dec 01	Florida A&M University	Tallahassee, FL	5	720	-

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### Connecting Sun City with Sun-Earth Connections

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: MI Initiative

Description: Through a mix of school-year and summer activities, our "Connecting Sun City with Sun-Earth Connections" will encourage more El Paso-area Hispanic students to pursue science careers and will assist teachers and university faculty in providing improved science education to their students by using space science as a thematic vehicle to create enthusiasm for science and mathematics. University of Texas at El Paso (UTEP) faculty in all departments in the College of Science participate in the program in conjunction with teachers from area schools. Activities for teachers include a week-long summer inquiry institute centered on space science for up to 30 teachers and shorter school-year workshops to discuss how things are going and plan future activities (such as school visits by university faculty). There is also support for the implementation of space-science-related materials in the classroom. Activities for students include visits to schools by UTEP faculty, special on-campus lectures by leading space scientists, tours of UTEP science facilities, and a week-long summer science camp for up to 100 students. UTEP faculty participate in professional development with precollege teachers, both as instructors and as learners. Materials they develop using space science themes will also be used in regular UTEP courses.

Lead: Dr. Ramon Lopez, University of Texas at El Paso, El Paso, TX 79968-0515

E-mail: [relopez@utep.edu](mailto:relopez@utep.edu). Phone: 915-747-7534.

Scientist(s):	Dr. Lewis Irwin	University of Texas at El Paso	El Paso, TX
	Dr. Ramon Lopez	University of Texas at El Paso	El Paso, TX
	Dr. Luis Martinez	University of Texas at El Paso	El Paso, TX
	Dr. Nicholas Pingitore	University of Texas at El Paso	El Paso, TX
	Dr. Luis Valdez-Sanchez	University of Texas at El Paso	El Paso, TX

Partner(s):	NASA Office of Equal Opportunity Programs	Washington, DC
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Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Feb 01	20 Feb 01	University of Texas at El Paso	El Paso, TX	9	-	-
27 Mar 01	27 Mar 01	University of Texas at El Paso	El Paso, TX	7	-	-
18 Apr 01	18 Apr 01	University of Texas at El Paso	El Paso, TX	27	-	-
27 Apr 01	27 Apr 01	University of Texas at El Paso	El Paso, TX	103	-	-
21 May 01	21 May 01	University of Texas at El Paso	El Paso, TX	6	-	-
05 Jun 01	08 Jun 01	University of Texas at El Paso	El Paso, TX	12	-	-
08 Aug 01	08 Aug 01	University of Texas at El Paso	El Paso, TX	62	-	-
07 Sep 01	07 Sep 01	University of Texas at El Paso	El Paso, TX	56	-	-

### Enhancement of the Space Science Research Program at South Carolina State University

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SERCH B/F, MI Initiative

Description: South Carolina State University (SCSU) has completed a successful first year under its Space Science Minority University award from NASA's Office of Space Science (NAG 5-10145). Faculty and student research has been significantly enhanced through the formation of new partnerships. A faculty member and student from SCSU are now working with the Advanced Detector Group at the Lawrence Livermore National Laboratory on the design and construction of cryogenic, photon-counting cameras. Another faculty member has submitted a proposal to use the Hubble Space Telescope during Cycle 11. A student research program in the summer of 2001, funded by this award, sent minority students to NASA Goddard Space Flight Center to work with solar astronomers, to Kitt Peak National Observatory to hunt for Earth-crossing asteroids, and to the Lawrence Livermore National Laboratory to participate in the MACHO project. SCSU conducted a one-week intensive course on space science for inservice teachers in grades 6 through 12, that emphasized hands-on activities and addressed the South Carolina standards related to astronomy and space science. In the area of curriculum enhancement, one SCSU faculty member is developing new materials for a course on cosmology for nonscience majors to be offered in the fall of 2002, possibly through distance learning. Dissemination of the results of Year 1 of the SCSU program includes presentations at professional meetings, informal seminar talks, and public news releases. Year 2 looks to be even more productive, with the continuation of the above-mentioned programs as well as the hiring of an additional, tenure-track astronomer at SCSU.

Lead: Dr. Donald Walter, South Carolina State University, Orangeburg, SC 29117

E-mail: [dkw@physics.scsu.edu](mailto:dkw@physics.scsu.edu). Phone: 803-533-3773.

Scientist(s):	Dr. Kem Cook	Lawrence Livermore National Laboratory	Livermore, CA	
	Dr. Mark Everett	Planetary Science Institute	Tucson, AZ	
	Dr. Ted Gull	NASA Goddard Space Flight Center	Greenbelt, MD	
	Dr. Therese Kucera	NASA Goddard Space Flight Center	Greenbelt, MD	
	Dr. Simon Labov	Lawrence Livermore National Laboratory	Livermore, CA	
	Dr. Kenneth Mighell	National Optical Astronomy Observatory	Tucson, AZ	
	Dr. Brian Moore	Rice University	Houston, TX	
	Dr. Paul Scowen	Arizona State University	Tempe, AZ	
	Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD	
	Dr. Joel Ullom	Lawrence Livermore National Laboratory	Livermore, CA	
	Partner(s):	Arizona State University		Tempe, AZ
		Lawrence Livermore National Laboratory		Livermore, CA
		NASA Goddard Space Flight Center		Greenbelt, MD
NASA Office of Equal Opportunity Programs			Washington, DC	
National Optical Astronomy Observatory			Tucson, AZ	

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	30 Sep 01	South Carolina State University	Orangeburg, SC	20	2,000	2

NASA-HBCU Partnership to Enhance Minority Education and Research Participation in the Space Sciences

Theme(s): SEU

Msn/Prgm: MI Initiative

Description: This project has three main components: 1) enhancement of Norfolk State University's (NSU) faculty and student participation in the space sciences; 2) astronomy education of high school science teachers; and 3) general public outreach. We collaborate with members of the Laboratory for High Energy Astrophysics at NASA Goddard Space Flight Center (GSFC). During the past first year, our faculty has begun the analysis of cosmic-ray data from the Balloon Borne Experiment Superconducting Solenoid magnet (BESS) experiment. NSU became a member of the BESS international collaboration. We are in the process of hiring a Research Associate who will base his research efforts on the analysis of cosmic-ray data. During the past year, we developed and began teaching two courses for high school inservice teachers. One course in Fundamentals of Astronomy was taught during the spring 2001 semester and the other, on Observational Astronomy, during the fall 2001 academic semester. We had 18 inservice and four preservice teachers from several Hampton Roads school systems attending these classes. These astronomy courses were specially designed for high school teachers and provide hands-on astronomical activities. We have been upgrading our astronomical equipment (e.g., telescopes, CCD camera) and we are now planning for a university-funded, on-campus astronomical observatory. Our outreach program is centered at the NSU Planetarium. The Planetarium went through a major overhaul during the summer. Our main instrument has been totally refurbished, and new multimedia equipment has been added. We are preparing new shows for the general public that we plan to start by this coming fall. In collaboration with GSFC and the Maryland Science Center Planetarium in Baltimore, MD, we are planning the production of a Cosmic Rays show suitable for national distribution.

Lead: Dr. Carlos Salgado, Norfolk State University, Norfolk, VA 23504

E-mail: [salgado@jlab.org](mailto:salgado@jlab.org). Phone: 757-823-9212.

Primary URL: <http://www.nsu.edu/Planetarium>

Scientist(s):	Ms. Beth Jacob	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. John Mitchell	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Alex Moiseev	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Jonathan Ormes	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Robert Streitmatter	NASA Goddard Space Flight Center	Greenbelt, MD
Partner(s):	Maryland Science Center		Baltimore, MD
	NASA Goddard Space Flight Center		Greenbelt, MD
	NASA Office of Equal Opportunity Programs		Washington, DC

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	31 Dec 01	Norfolk State University	Norfolk, VA	28	1	-

## New Mexico Connections: Connecting Teachers, Resources, and Research

Theme(s): SEU

Msn/Prgm: MI Initiative

Description: The goal of New Mexico Connections is to connect K-12 teachers to space science research and resources within New Mexico. We accomplished this through the development of interdisciplinary courses for inservice and preservice science and social studies teachers. This mix of topics is the result of a partnership among a physicist, science education faculty, and a historian specializing in NASA history. To better meet teacher needs and concerns, the classes were designed in collaboration with several area teachers. Two of the three classes explored New Mexico connections to the development of space science, structured chronologically. Local experts discussed early Native American astronomy and biological concerns of human space flight as well. Class format split time between discussing history and performing pertinent hands-on science activities chosen from several Educator Guides from the NASA Spacelink service. As part of one of the classes, teachers sponsored a program at a local school in which many of these hands-on projects were tried out on elementary school children. The third class toured many of the facilities in New Mexico associated with space science: the White Sands Missile Range; the New Mexico Space History Museum; the Robert Goddard Planetarium; the Sunspot Solar Observatory; Apache Point; and the Coulston Foundation Biomedical Chimp Laboratory, the descendent of the facility where the space chimps were trained. Participants were able to evaluate these sites for future field trips with their own students. Teacher response to the classes was very positive. In addition, research ties between ENMU and the Pennsylvania State University (PSU) were developed. The Principal Investigator spent the academic year at PSU participating in the design, fabrication, and testing of detectors for the NASA-sponsored Cosmic Ray Energetics and Mass (CREAM) experiment, a balloon-borne instrument designed to study the elemental composition of cosmic rays.

Lead: Dr. Scott Nutter, Eastern New Mexico University, Portales, NM 88130

E-mail: [nutters@nku.edu](mailto:nutters@nku.edu). Phone: 505-562-2491.

Scientist(s):	Dr. James Beatty	Pennsylvania State University	State College, PA
	Dr. Stephane Coutu	Pennsylvania State University	State College, PA
Partner(s):	NASA Office of Equal Opportunity Programs		Washington, DC
	Pennsylvania State University		State College, PA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	31 Dec 01	Eastern New Mexico University	Portales, NM	52	-	-

## New Opportunities Through Minority Initiatives in Space Science

Theme(s): ASO, SEC

Msn/Prgm: Navigator, MI Initiative

Description: New Opportunities Through Minority Initiatives in Space Science (NOMISS) is designed to encourage minority students (particularly those of Hawaiian ancestry) to engage in learning about culture and its relevance to the study of space science. Increased public awareness of astronomy within the Hawaiian community is a goal of the program. NOMISS activities engage a broad spectrum of participants—K-12 students and their teachers, undergraduate university students and their professors, and community and business partners—by bringing together modern space science and concepts of Hawaiian celestial navigation and traditions of the land. Dr. Richard Crowe, University of Hawaii at Hilo (UHH) Astronomy Chair, initiated the Astronomy Department's summer course with coursework and labs as well as field-based telescopic observations from the summit of Mauna Kea. The redesigned undergraduate astronomy curriculum includes a new textbook, a spectrograph, and cultural information. Partnerships with the observatories (Institute for Astronomy, Gemini, NASA IRTF) provide internships for participation in current space science research. UHH Education Chair Dr. Alice Kawakami leads a network of K-12 teachers who participated in a summer workshop with classroom activities and excursions to cultural sites. Teachers now are designing and implementing curriculum activities to increase their students' learning about culture, math, and science, particularly astronomy. Coordinator Nathan Chang has assisted with generating newspaper and magazine articles, electronic media announcements, and handling requests for talks at business and community organizations. Public interest in NOMISS is high as the

Hawaiian community focuses on bringing together diverse perspectives about space science at Mauna Kea, the best observational astronomy site on Earth.

Lead: Dr. Richard Crowe, University of Hawaii at Hilo, Hilo, HI 96720-4091  
E-mail: [rcrowe@hubble.uhh.hawaii.edu](mailto:rcrowe@hubble.uhh.hawaii.edu). Phone: 808-974-7649.

Primary URL: <http://hubble.uhh.hawaii.edu/index.html>

Scientist(s):	Dr. Richard Crowe	University of Hawaii at Hilo	Hilo, HI
	Dr. Rudolf Danner	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Brent Ellerbroek	Gemini Observatory	Hilo, HI
	Dr. William Heacox	University of Hawaii at Hilo	Hilo, HI
	Dr. Joe Jensen	Gemini Observatory	Hilo, HI
	Mr. Dan O'Connor	NASA Infrared Telescope Facility (IRTF)	Honolulu, HI
	Dr. Andrew Pickles	University of Hawaii at Manoa	Honolulu, HI
	Mr. Richard Shope III	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	Gemini Observatory		Hilo, HI
	Kamehameha Elementary School		Honolulu, HI
	Kamehameha Schools		Hilo, HI
	NASA Infrared Telescope Facility (IRTF)		Honolulu, HI
	NASA Jet Propulsion Laboratory		Pasadena, CA
	NASA Office of Equal Opportunity Programs		Washington, DC

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	31 Dec 01	University of Hawaii at Hilo	Hilo, HI	1,084	336,180	500
12 Jun 01	16 Jun 01	University of Hawaii at Hilo	Hilo, HI	18	143,000	500

New York City Space Science Research Alliance

Theme(s): SEC, SEU, SSE

Msn/Prgm: MI Initiative

Description: The New York City Space Science Research Alliance is a collaboration in both space science research and in the offering of a space science B.S. degree program in the City University of New York (CUNY). The Alliance is anchored by CUNY, the Hayden Planetarium of the American Museum of Natural History, and NASA Goddard Space Flight Center. A multicampus research center based on space science has been created in New York City, so that underrepresented undergraduate students and faculty, as well as high school students and teachers can be involved in NASA space science research and education projects. The goals of this program are 1) to establish or enhance the space science research capabilities of faculty; 2) to create a space science major in the CUNY B.S. degree program; 3) to have a pipeline of research activities from high school, to community college, to four-year college, to graduate school; 4) to integrate research and research-related activities into our undergraduate programs; and 5) to increase the number of underrepresented students in the science, math, engineering, and technology pipeline. The major research projects/activities are "Astrometry and Photometry of Asteroids and Comets with Emphasis on Near Earth Objects," "Photometry of Binary and Variable Stars," "Radial Distribution of Supernovae in Spiral and Elliptical Galaxies," "The Evolution of Galaxies in Groups," "Radio Luminosity Extinction in Jets of Extragalactic Radio Sources," "The Distribution and Dynamics of Atmospheric Aerosols on Jupiter," and "Probing Planetary Surfaces for Micro-Organisms." Other partners include the NASA Goddard Institute for Space Studies and the NASA Minority University Space Interdisciplinary Network. The CUNY campuses are Medgar Evers College, the College of Staten Island and its Astrophysical Observatory, the City College of New York, Queensborough Community College, LaGuardia Community College, Hunter College, York College, and Hostos Community College.

Lead: Dr. Leon Johnson, Medgar Evers College, Brooklyn, NY 11225  
E-mail: [lpjohnson99@cswebmail.com](mailto:lpjohnson99@cswebmail.com). Phone: 718-270-6454.

Primary URL: <http://nrts.mec.cuny.edu/nycssra>

Scientist(s):	Dr. Beth Brown	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Barbara Carlson	NASA Goddard Institute for Space Studies	New York, NY
	Dr. Carol Crannell	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Joseph King	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. James Lochner	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD

Partner(s): American Museum of Natural History New York, NY  
 NASA Office of Equal Opportunity Programs Washington, DC

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 Dec 00	19 Dec 00	American Geophysical Union (AGU) Meeting	San Francisco, CA	2	-	-
18 Jan 01	18 Jan 01	NASA Goddard Space Flight Center	Greenbelt, MD	6	-	-
26 Jun 01	26 Jun 01	NASA Goddard Institute for Space Studies	New York, NY	2	-	-
02 Jul 01	10 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	1	-	-

#### Partnerships in Astronomy and Astrophysics Education and Research at Southern University

Theme(s): SEC, SEU

Msn/Prgm: SOHO, MI Initiative

Description: Southern University, the largest Historically Black College and University (HBCU) system in the country, is pursuing two collaborative research and education projects involving undergraduate students and their faculty in the areas of experimental high-energy and solar astrophysics. With the Space Science and Particle Astrophysics research group at neighboring Louisiana State University (LSU), we are collaborating in an experimental detector development project related to gamma-ray astronomy. Student and faculty participants are receiving broad-based multidisciplinary instruction and hands-on training in state-of-the-art laboratory techniques. We are also collaborating with scientists at the Smithsonian Astrophysical Observatory (SAO) associated with the Ultraviolet Coronagraph Spectrometer (UVCS) aboard the Solar and Heliospheric Observatory (SOHO) spacecraft. Southern students and faculty are being instructed and trained in the research skills required to actively participate in ongoing UVCS calibration, data analysis, and scientific projects related to studies of the Sun's corona and the solar wind. Both collaborative projects involve regular visits by LSU and SAO scientists to the Southern campus in Baton Rouge as part of a space science lecture series to teach and mentor students, as well as reciprocal visits by qualified Southern students to LSU and SAO to work on joint research activities. The results of these research projects are also being incorporated into ongoing local public education and outreach efforts.

Lead: Dr. J. Gregory Stacy, Southern University and A&M College, Baton Rouge, LA 70813  
 E-mail: [gstacy@phys.subr.edu](mailto:gstacy@phys.subr.edu). Phone: 225-771-2831.

Scientist(s): Dr. Michael Cherry Louisiana State University Baton Rouge, LA  
 Dr. Leonard Strachan Harvard-Smithsonian Center for Astrophysics Cambridge, MA

Partner(s): Harvard-Smithsonian Center for Astrophysics Cambridge, MA  
 Louisiana State University Baton Rouge, LA  
 NASA Office of Equal Opportunity Programs Washington, DC

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 Jan 01	30 Sep 01	Southern University and A&M College	Baton Rouge, LA	41	-	-

#### Scientists Mentoring Astronomy Research Teams of Tomorrow

Theme(s): ASO

Msn/Prgm: SIRTF, 2MASS, MI Initiative

Description: The S.M.A.R.T.T. (Scientists Mentoring Astronomy Research Teams of Tomorrow) program has three main goals: 1) to create a small, focused, quality research capability at Pasadena City College (PCC) in infrared astronomy that is meaningful to students, faculty, and the scientific community, and, in particular, to apply for time on the Space Infrared Telescope Facility (SIRTF); 2) to use this research capability to establish and strengthen relationships among staff members at the participating institutions of NASA Jet Propulsion Laboratory (JPL), the California Institute of Technology (Caltech), SIRTF, the Infrared Processing and Analysis Center (IPAC) at Caltech, and the Griffith Observatory; and 3) to perform educational outreach and infrared astronomy research dissemination. The latter is being done through existing school programs at the Griffith Observatory planetarium, PCC's planetarium and Native American educational events, as well as through the construction of an infrared exhibit at Griffith Observatory. Due to the special circumstances of a late award, the S.M.A.R.T.T. program has only been operational since mid-September, so the program activities have been limited. However, there are some results to report. The initial contacts to establish formal links with the participating institutions have taken place on both the research and educational outreach components of the program. The research component of the team has been meeting with designated mentors to explore an

appropriate research area, to identify and discuss the appropriate literature, and to begin to obtain formal accounts with SIRTf and IPAC databases. The educational outreach component has started to give presentations to schools and has established contact with local Native American educational programs for permission to do joint collaborative efforts.

Lead: Mr. John Sepikas, Pasadena City College, Pasadena, CA 91106  
E-mail: [jpssepikas@paccd.cc.ca.us](mailto:jpssepikas@paccd.cc.ca.us). Phone: 626-585-7322.

Scientist(s): Dr. Thomas Jarret California Institute of Technology Pasadena, CA  
Dr. Karl Stapelfeldt NASA Jet Propulsion Laboratory Pasadena, CA  
Dr. Michael Werner NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): California Institute of Technology Pasadena, CA  
Griffith Observatory Los Angeles, CA  
NASA Office of Equal Opportunity Programs Washington, DC

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 Aug 01	01 Dec 01	Pasadena City College	Pasadena, CA	-	-	-

South-West Internet Program for the Enhancement of Minority Education

Theme(s): SEC, SEU, SSE

Msn/Prgm: MI Initiative

Description: The Internet Based Education (IBE) consortium was formed to implement the South-West Internet Program for the Enhancement of Minority Education (NASA Grant NAG5-10254). Members include Diné College, New Mexico Highlands University (NMHU), University of New Mexico (UNM), Los Alamos National Laboratory (LANL), and the University of California at Berkeley. To enhance accessibility to minority students, the consortium recruited, as a no-cost partner, Colorado's Fort Lewis College. They educate Native American students tuition-free. The consortium met all its Year 1 objectives and has begun some Year 2 activities. The consortium developed, tested, and piloted a Web-based introductory Astronomy Lab course initially devised at UNM. Student feedback was collected and analyzed and is being incorporated into future courses. Feedback helped us develop a uniform set of consortium-wide course standards. This activity paved the way for a formal astronomy course at Diné College, the first in many years. The first Internet-based course debuts in 2002. Furthermore, an upper-division astrophysics course that incorporates student research projects has evolved at NMHU. We also conducted a number of Star Parties as public outreach. With the help of LANL, the consortium acquired a 16-inch Meade Telescope to support robotic telescope development dedicated to education and some fundamental research. We enlisted Hands-on Universe (UC Berkeley) assets to speed telescope automation. In fact, ground-breaking occurred at Fort Lewis' 8,500-foot Agricultural Station in August. Furthermore, we invested in a new server dedicated exclusively to course delivery and telescope control. The consortium also invested in video conferencing software and hardware that will be integrated into the course delivery infrastructure.

Lead: Dr. Steven Semken, Diné College, Shiprock, NM 87420  
E-mail: [scsemken@shiprock.ncc.cc.nm.us](mailto:scsemken@shiprock.ncc.cc.nm.us). Phone: 505-368-3632.

Scientist(s): Dr. Neb Duric University of New Mexico Albuquerque, NM  
Dr. Galen Gisler Los Alamos National Laboratory Los Alamos, NM  
Dr. Carlton Pennypacker University of California, Berkeley Berkeley, CA  
Dr. Eileen Ryan New Mexico Highlands University Las Vegas, NM  
Dr. William Ryan New Mexico Highlands University Las Vegas, NM

Partner(s): Los Alamos National Laboratory Los Alamos, NM  
New Mexico Highlands University Las Vegas, NM  
University of California, Berkeley Berkeley, CA  
University of New Mexico Albuquerque, NM

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
		Diné College	Shiprock, NM	427	300	-

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 Space Science Education and Sun-Earth Connection

Theme(s): SEC

Msn/Prgm: STP, MI Initiative

Description: The purpose of this project is to 1) initiate a B.S. degree program in physics with space science as a concentration area; 2) to train minority (especially African American) students for eventual careers in space science; 3) to establish a space science research group at Alabama A&M University to conduct research in the space science area; and 4) to establish partnerships with other institutions (namely, The University of Alabama in Huntsville, NASA Marshall Space Flight Center, National Space Science and Technology Center, and Lawrence Livermore National Laboratory) to further the goals of this project. Two African American students have enrolled in the program so far, and more are anticipated in fall 2001. Shawn Smith has already received valuable training at NASA Marshall Space Flight Center and at Lawrence Livermore National Laboratory. Internationally renowned scholar Wladislaw Lyatsky joined Alabama A&M University in May 2001. Four traditional basic courses in lower atmosphere, aeronomy, the solar system and orbital mechanics have been developed and sanctioned by the curriculum committee. Collaborative efforts have been established with The University of Alabama in Huntsville (Wu, Germany, Wang), NASA Marshall Space Flight Center, and National Space Science and Technology Center (Hathaway, Six, Khazanov), Lawrence Livermore National Laboratory (Reed, Bala), the University of Texas at El Paso (Lopez), and the DePaul Center for Space Science Education and Outreach (Narasimhan). Advances in space weather prediction-related studies (e.g., solar wind effects on geomagnetic storms, numerical simulation studies on coronal mass ejections, radiation belt studies, and climatological effects of the Sun) have been made.

Lead: Dr. Arjun Tan, Alabama A&amp;M University, Normal, AL 35762

E-mail: [atan@aamu.edu](mailto:atan@aamu.edu). Phone: 256-858-8115.

Scientist(s):	Dr. G. Germany	University of Alabama at Huntsville	Huntsville, AL
	Dr. Bala Govindasamy	Lawrence Livermore National Laboratory	Livermore, CA
	Dr. Joseph Gurman	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. David Hathaway	NASA Marshall Space Flight Center	Huntsville, AL
	Dr. Ravindra Lal	Alabama A&M University	Normal, AL
	Dr. W. Lyatsky	Alabama A&M University	Normal, AL
	Dr. Kennedy Reed	Lawrence Livermore National Laboratory	Livermore, CA
	Dr. Frank Six	NASA Marshall Space Flight Center	Huntsville, AL
	Dr. A Tan	Alabama A&M University	Normal, AL
	Dr. A. Wang	University of Alabama at Huntsville	Huntsville, AL
	Dr. S. Wu	University of Alabama at Huntsville	Huntsville, AL

Partner(s):	Lawrence Livermore National Laboratory	Livermore, CA
	NASA Goddard Space Flight Center	Greenbelt, MD
	NASA Marshall Space Flight Center	Huntsville, AL
	NASA Office of Equal Opportunity Programs	Washington, DC
	University of Alabama at Huntsville	Huntsville, AL

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	31 Dec 01	Alabama A&M University	Normal, AL	6	-	-

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 Stars on Earth Providing Underrepresented New Mexico High School Students with Research Experience in Space Science and Preparation for MSET in College

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: MI Initiative

Description: Stars on Earth is a year-round academic and research-based program opportunity for underrepresented students to develop a solid foundation in Earth and planetary sciences, mathematics, technology, and communications. Significant accomplishments during FY 2001 include 1) hosting Saturday Academies, during which high school students were actively engaged in projects that integrate Earth and space science, mathematics, and English; 2) participating in NASA's Student Involvement Program and in a six-week residential program, during which students attended Earth, space, life, and environmental science classes and labs; developed research projects; and interacted with professionals in the field; 3) developing and implementing Physical Geology 101 and 101L courses for students attending Southwestern Indian Polytechnic Institute (SIPI); 4) collaborating with the Institute of Meteoritics at the University of New Mexico, to establish a meteorite

identification laboratory at SIPI; and (5) developing an introduction to astronomy course in collaboration with the University of New Mexico. It is important to note that as the courses and opportunities were developed, strict attention was paid to national, State, and local standards and expectancies in the specific content areas.

Lead: Ms. Catherine Abeita, Southwestern Indian Polytechnic Institute, Albuquerque, NM 87184  
E-mail: [cabeita@sipi.bia.edu](mailto:cabeita@sipi.bia.edu). Phone: 505-346-7712.

Primary URL: [www.http://sipi.bia.edu](http://sipi.bia.edu)

Scientist(s): Ms. Joan Goodman Southwestern Indian Polytechnic Institute Albuquerque, NM  
Dr. Rhian Jones University of New Mexico Albuquerque, NM  
Ms. Ramona Montoya University of New Mexico Albuquerque, NM  
Dr. Horton Newsom University of New Mexico Albuquerque, NM  
Dr. Jerry Simmons Southwestern Indian Polytechnic Institute Albuquerque, NM  
Partner(s): NASA Office of Equal Opportunity Programs Washington, DC  
University of New Mexico Albuquerque, NM

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	31 Dec 01	Southwestern Indian Polytechnic Institute	Albuquerque, NM	262	38,500	1,000

York College Observatory Educational Outreach Program (YCOOP)

Theme(s): ASO, SEU

Msn/Prgm: MI Initiative

Description: This NASA-OSS grant is providing support for a broad program to upgrade science education in Jamaica and other inner-city areas of New York City. This program is developing educational infrastructure at York College of the City University of New York and at John Adams High School of the Board of Education of the City of New York, as well as training inservice secondary school science teachers and establishing linkages with educational and NASA research institutions. Specifically, this program is developing the following at York College: minors in astronomy and new courses in astronomy, as well as revised courses aimed at majors in physics, physical and biological sciences, teacher education, and general education. The NASA-OSS grant funding has strengthened the college's physics and astronomy program by the addition of a new faculty line. The grant has stimulated cooperative programs with Princeton University that have offered research opportunities for York College faculty and undergraduates and with John Adams High School's program in Earth and Space Sciences, which is being upgraded through curriculum and high school faculty development. An inservice teacher training program for secondary school science faculty is under preparation. Cooperative programs with other City University of New York-NASA/OSS grant programs have led to strengthening of the university's program in space sciences. A collaboration has been established with the York College Science, Engineering, Mathematics and Aerospace Academy (SEMAA), a NASA-sponsored enrichment program for underrepresented children in grades 4 through 8.

Lead: Dr. Martin Spergel, York College, Jamaica, NY 11451  
E-mail: [spergel@york.cuny.edu](mailto:spergel@york.cuny.edu). Phone: 718-262-2650.

Primary URL: [http://natsci.york.cuny.edu/yc\\_observatory.html](http://natsci.york.cuny.edu/yc_observatory.html)

2nd URL: <http://natsci.york.cuny.edu/>

Scientist(s): Dr. Charles Bennett NASA Goddard Space Flight Center Greenbelt, MD  
Dr. Bodhan Paczynski Princeton University Princeton, NJ  
Dr. John Pebbles Princeton University Princeton, NJ  
Dr. David Spergel Princeton University Princeton, NJ

Partner(s): NASA Office of Equal Opportunity Programs Washington, DC

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
22 Mar 01	22 Mar 01	York College	Jamaica, NY	-	-	-
20 Jun 01	21 Jun 01	Princeton University	Princeton, NJ	27	-	-
29 Jun 01	01 Jul 01	NASA Kennedy Space Center	Kennedy SC, FL	125	175	-

## University Research Centers

### Center for Automated Space Science

Theme(s): ASO, SEC

Msn/Prgm: URC

Description: The Center for Automated Space Science (CASS) at Tennessee State University continued its research in advanced control systems and astrophysics utilizing both graduate and undergraduate underrepresented students. A Memorandum of Agreement was signed between CASS and NASA Langley Research Center to perform flexible membrane research for the Gossamer initiative. A Stewart Platform testbed is under construction and will be delivered to the CASS Automatic Controls Systems Lab by January 2002. Having observed the first transit of an extra-solar planet across its parent star in late 1999, the astrophysics team continues to search for planets outside the solar system and also to observe the characteristics of Sun-like stars utilizing its seven automatic photoelectric telescopes at its Arizona observatory. During the past year, the CASS team produced 35 publications, mentored 76 students, and produced 26 graduates. A Ph.D. program has been established in Computer Information Systems Engineering.

Lead: Dr. Michael Busby, Tennessee State University, Nashville, TN 37203-3401

E-mail: [busby@coe.tsuniv.edu](mailto:busby@coe.tsuniv.edu). Phone: 615-963-7013.

Primary URL: <http://coe.tsuniv.edu>

Partner(s): NASA Office of Equal Opportunity Programs

Washington, DC

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jul 00	30 Jun 01	Tennessee State University	Nashville, TN	88	1,000	-

## Other Targeted Activities

### American Indian Research Opportunities in Solar Physics at Montana State University

Theme(s): SEC

Msn/Prgm: SRT

Description: With NASA support, the solar physics group at Montana State University sponsors two high school students as part of the Montana Apprentice Program (MAP) of the American Indian Research Opportunities (AIRO) program. These two students worked on a solar research project (studies of coronal mass ejections) that developed their research skills (data handling and computing methods, scientific method, documentation of results). Additionally, these two students studied side topics of their choice (computing and mathematics in summer 2001, computing and physics in summer 2000) under the supervision of MSU physics and computer engineering undergraduate students. Upon completion of their research project, the students prepared formal computer-based presentations and delivered them to an AIRO symposium attended by their parents, their mentors, and all participants in the program. The program serves to enhance the probability of entry into and success in college education for these two unusually talented and motivated American Indian students. It also exposes a much larger number of American Indians (all parents and participants in the MAP program) to opportunities in science and engineering.

Primary URL: <http://solar.physics.montana.edu/reu/map/>

### Astrobiology: Palo Alto Partnership

Theme(s): ASO

Msn/Prgm: NAI

Description: The Ames Astrobiology team developed a partnership with the Palo Alto Rotary Club. Dr. Pat DeVaney of Stanford University worked with Ames to develop a science program for the gifted population in East Palo Alto. These students were selected by their teachers as students that have potential for college, with an emphasis on math and science. We outlined a program in collaboration with teams from Life Sciences, SOPHIA, the Mars project, and astrobiology to provide hands-on lessons and "real" scientists in the Mars, technology, and astrobiology missions while Catherine Tsairides presented the Astrobiology Resource Guide activities. The Ames outreach provided the students with a field trip to Ames and Space Camp; the Rotary Club sponsored students to attend the week-long Space Camp at Ames Research Center.

Lead: Dr. Pat DeVaney, Stanford University, Stanford, CA 94305.

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 Astronomy and Space Science Outreach Programs for DC Public School Students and Teachers

Msn/Prgm: IDEAS

Description: This project created an ARGOS Web page and engaged student in the ARGOS flight mission. The Web page provided descriptions of individual ARGOS experiments and are supplemented by stand-alone tutorials, including Introduction to Space Astronomy, The Life Cycles of Stars, and Introduction to Upper Atmospheric Science. Scientists mentored students from Anacostia and Ballou High Schools on their Science Fair projects.

Lead: Dr. George Carruthers, Naval Research Laboratory, Washington, DC 20375.

Partner(s): Young Technocrats, Inc.

Washington, DC

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 Astronomy Education/Outreach for K-12 and Underrepresented Students and Teachers

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IDEAS

Description: This Initiative to Develop Education through Astronomy and Space Science (IDEAS) funded program's objectives had Louisiana State University, Southern University, and the Recreation and Parks Commission for the Parish of East Baton Rouge partnering with school systems of East Baton Rouge and surrounding parishes to build upon the existing Highland Road Park Observatory. The partnership developed and tested resources that will assist K-12 teachers in implementing science reform and will encourage the participation of underrepresented groups in science. The IDEAS Grant Program objective is to provide grants that will enhance science education through astronomy and space science via collaboration between scientists and educators.

Lead: Dr. Gregory Guzik, Louisiana State University, Baton Rouge, LA 70803-4001.

Primary URL: <http://www.phys.lsu.edu/observatory>

Partner(s): Louisiana State University

Baton Rouge, LA

Recreation and Park Commission for the Parish of East Baton Rouge

Baton Rouge, LA

Southern University and A&amp;M College

Baton Rouge, LA

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 From the Outer Planets to the Inner City

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: Navigator, SIM, Cassini/Huygens Probe, Galileo, Voyager, MGS, 2001 Mars Odyssey, MER, OP E/PO, Europa Orbiter, DSMS, Mars Express, SP, Ulysses

Description: From the Outer Planets to the Inner City, an urban E/PO initiative, collaborates with community organizations and inner-city school districts within Greater Los Angeles, with emphasis on after-school enrichment, Saturday Academy enrichment, and inner-city high school programs. The program features liaison work between JPL and inner-city Los Angeles community organizations to assess needs, conduct educator workshops, and arrange direct involvement of scientists and engineers, primarily in after-school and Saturday informal science learning settings. We also encourage direct student involvement by hiring qualified students from diverse urban settings to participate in space science inquiry experiences. We work with inner-city school districts to create an ongoing NASA presence by creating personal connections—facilitating learning experiences and fostering ongoing relationships between educators and scientists. We provide special opportunities for students and parents to experience space exploration knowledge together.

Lead: Mr. Richard Shope III, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [rick.shope@jpl.nasa.gov](mailto:rick.shope@jpl.nasa.gov). Phone: 818-354-3812.Primary URL: <http://www.jpl.nasa.gov/europaorbiter/>

Scientist(s):	Dr. Jan Berkeley	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Ken Berry	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Geoffrey Bryden	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Stephanie Buck	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Kevin Criddle	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Steve Durden	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Tom Farr	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Lucien Froidevaux	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Ramon Garcia	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Troy Goodson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Peter Halverson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Donald Heller	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Theodore Iskenderian	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Rhonda Jones	NASA Jet Propulsion Laboratory	Pasadena, CA

Dr. Roger Lighty	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Bernardo Lopez	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Martin Nachman	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Tom Nolan	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Leonard Reder	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Annie Richardson	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Terry Scharton	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Cesar Sepulveda	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Suresh Seshadri	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Shervin Shambayati	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Richard Shope III	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Nathan Strange	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Danielle Svehla	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. David Tseng	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Thomas Weeks	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Bernard Widynski	NASA Jet Propulsion Laboratory	Pasadena, CA
Ms. Shirley Wolff	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Shonte Wright	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s): Academic Research Lab		Phoenix, AZ
Project Universe		Minneapolis, MN
Telescopes in Education Foundation		Pasadena, CA

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Dec 00	13 Dec 00	Albion Elementary School	Los Angeles, CA	30	-	-
13 Dec 00	13 Dec 00	Ann Street Elementary School	Los Angeles, CA	-	-	-
13 Dec 00	13 Dec 00	Aragon Elementary School	Los Angeles, CA	27	-	-
13 Dec 00	13 Dec 00	Baldwin Hills Elementary School	Los Angeles, CA	33	-	-
13 Dec 00	13 Dec 00	Bridge Elementary School	Los Angeles, CA	31	-	-
13 Dec 00	13 Dec 00	Broadus Elementary School	Pacoima, CA	34	-	-
13 Dec 00	13 Dec 00	Canterbury Elementary School	Pacoima, CA	40	-	-
13 Dec 00	13 Dec 00	Cohasset Street School	Van Nuys, CA	37	-	-
13 Dec 00	13 Dec 00	Fair Avenue Elementary School	North Hollywood, CA	35	-	-
13 Dec 00	13 Dec 00	Figueroa Elementary School	Los Angeles, CA	235	-	-
13 Dec 00	13 Dec 00	First Street Elementary School	Los Angeles, CA	52	-	-
13 Dec 00	13 Dec 00	Gates Elementary School	Los Angeles, CA	21	-	-
13 Dec 00	13 Dec 00	Gratts Elementary School	Los Angeles, CA	27	-	-
13 Dec 00	13 Dec 00	Hart Street Elementary School	Canoga Park, CA	37	-	-
13 Dec 00	13 Dec 00	Hazeltine Elementary School	Van Nuys, CA	40	-	-
13 Dec 00	13 Dec 00	Hobart Elementary School	Los Angeles, CA	54	-	-
13 Dec 00	13 Dec 00	Hooper Elementary School	Los Angeles, CA	34	-	-
13 Dec 00	13 Dec 00	Kittridge Elementary School	Van Nuys, CA	33	-	-
13 Dec 00	13 Dec 00	Langdon Elementary School	Sepulveda, CA	31	-	-
13 Dec 00	13 Dec 00	Logan Elementary School	Los Angeles, CA	23	-	-
13 Dec 00	13 Dec 00	Loreto Elementary School	Los Angeles, CA	44	-	-
13 Dec 00	13 Dec 00	Main Street Elementary School	Los Angeles, CA	24	-	-
13 Dec 00	13 Dec 00	Monlux Elementary School	North Hollywood, CA	37	-	-
13 Dec 00	13 Dec 00	Montague Elementary School	Pacoima, CA	54	-	-
13 Dec 00	13 Dec 00	Napa Street Elementary School	Northridge, CA	24	-	-
13 Dec 00	13 Dec 00	Noble Elementary School	North Hills, CA	51	-	-
13 Dec 00	13 Dec 00	Politi Elementary School	Los Angeles, CA	40	-	-
13 Dec 00	13 Dec 00	Roscoe Elementary School	Sun Valley, CA	23	-	-
13 Dec 00	13 Dec 00	Sheridan Elementary School	Los Angeles, CA	51	-	-
13 Dec 00	13 Dec 00	Strathern Elementary School	North Hollywood, CA	38	-	-
13 Dec 00	13 Dec 00	Sunrise Elementary School	Los Angeles, CA	33	-	-
13 Dec 00	13 Dec 00	Sylmar Elementary School	Sylmar, CA	19	-	-
13 Dec 00	13 Dec 00	Telfair Elementary School	Pacoima, CA	44	-	-

13 Dec 00	13 Dec 00	Valley View Elementary School	Los Angeles, CA	29	-	-
13 Dec 00	13 Dec 00	Van Nuys Elementary School	Van Nuys, CA	42	-	-
13 Dec 00	13 Dec 00	Vaughn Elementary School	San Fernando, CA	50	-	-
16 Feb 01	16 Feb 01	Figueroa Elementary School	Los Angeles, CA	94	-	-
24 Mar 01	24 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	252	-	-
01 May 01	01 May 01	Garfield High School	Los Angeles, CA	21	-	-
11 Jun 01	17 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	2	-	-
13 Aug 01	24 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	7	-	-

### From the Sun to the Star Nations

Theme(s): SEC, SSE

Msn/Prgm: SSE Forum, Voyager, Deep Impact, Stardust, 2001 Mars Odyssey, MER, OP E/PO, Europa Orbiter, DSMS, SP, Ulysses, SEC Forum

Description: From the Sun to the Star Nations develops a sustained NASA presence in Native American nations partnering with effective community-based organizations to engage in a Space Science and Star Knowledge dialogue in the context of K-12 classroom school visits, community skywatching events, educator workshops, and intercultural exchanges that occur in the community over a two- to three-day period, to bring together expertise in the areas of space exploration and star knowledge side by side in a balanced and respectful look at science and cultural issues. By working in several venues—the traditional community, the schools, and the Tribal College structure—this approach provides greater access to science and technology, maintaining a focus on the nature of science and relating the long cultural history of skywatching and practical astronomy. This effort is led by the Europa Orbiter Project in collaboration with several Solar System Exploration efforts, including Mars, Stardust, Deep Impact, and the Deep Space Network. We bring NASA presenters, including JPL, Solar System Ambassadors, Solar System Educators, NASA Goddard Space Flight Center, the ASU Mars Education Program, Diné College, and Northern Arizona University, into dialogue with Native American cultural practitioners, scholars, and star knowledge holders. We maintain an exemplary community partnership with the World Hope Foundation, based in Boulder, Colorado, with extensive experience working directly with Native American community leaders, elders, and educators. We have established an effective and culturally sensitive strategy of “making relations,” building a track record of trust within the community, assessing needs, and responding to needs that are within the scope of our work. We work in five main geographical areas: with the Diné (Navajo) in Arizona/New Mexico, the Lakota (Sioux) in South Dakota/North Dakota, the Anishinaabe (Ojibway) in Minnesota, Hawaii (Native Hawaiian), and with communities in California, including the Ajachemen (Juaneno).

Lead: Mr. Richard Shope III, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [rick.shope@jpl.nasa.gov](mailto:rick.shope@jpl.nasa.gov). Phone: 818-354-3812.

Primary URL: <http://www.worldhopefoundation.org/>

Scientist(s): Dr. Bob Anderson NASA Jet Propulsion Laboratory Pasadena, CA  
Mr. Robert Friedberg Diné College Tsale, AZ  
Mr. Jim Klemazewski Arizona State University Tempe, AZ  
Ms. Sheri Klug Arizona State University Tempe, AZ  
Dr. Paul Morgan Northern Arizona University Flagstaff, AZ  
Mr. Richard Shope III NASA Jet Propulsion Laboratory Pasadena, CA  
Mr. Keith Watt Arizona State University Tempe, AZ

Partner(s): Academic Research Lab Phoenix, AZ  
Project Universe Minneapolis, MN  
Telescopes in Education Foundation Pasadena, CA  
University of Hawaii at Hilo Hilo, HI  
World Hope Foundation Boulder, CO

### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Oct 00	13 Oct 01	NASA Jet Propulsion Laboratory	Pasadena, CA	50	-	-
14 Dec 00	17 Dec 00	Oglala Lakota College	Kyle, SD	57	-	-
24 Jan 01	27 Jan 01	Young Diné Women's Leadership Conference	Flagstaff, AZ	175	-	-
28 Feb 01	03 Mar 01	Young Diné Men's Leadership Conference	Flagstaff, AZ	200	-	-
27 Apr 01	28 Apr 01	Pinon Unified School District	Pinon, AZ	180	-	-
11 Jul 01	11 Jul 01	Shonto Preparatory School	Shonto, AZ	15	-	-
11 Jul 01	11 Jul 01	World Hope Foundation	Boulder, CO	45	90	-

17 Jul 01	20 Jul 01	White Earth Tribal & Community College	Mahnomen, MN	90	-	-
18 Jul 01	18 Jul 01	Circle of Life K-12 Tribal School	White Earth, MN	16	-	-
21 Jul 01	21 Jul 01	Grunion Festival	San Diego, CA	-	150	-
25 Jul 01	26 Jul 01	Pinon Unified School District	Pinon, AZ	20	-	-
21 Sep 01	23 Sep 01	Flagstaff Unified School District	Flagstaff, AZ	795	75	-

#### Girl Scouts of the USA (GSUSA) Partnership

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SSE Forum, SIM, SSE Theme, Cassini/Huygens Probe, Deep Impact, DS-1, DSMS, Astromaterials

Description: Working with the GSUSA presents us with the opportunity of reaching more than 2.6 million girls, as well as their parents, leaders, and councils. We help scientists teach girls (and their parents) not to fear science. We provide training, make connections between scientists and GSUSA councils and national headquarters, submit quarterly articles for their national "Leader" magazine, provide content for their Web site, provide content for newsletters, provide resources for special events when possible, and help them develop activity/event kits using mission information.

Lead: Ms. Rosalie Betrue, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Rosalie.Betrue@jpl.nasa.gov](mailto:Rosalie.Betrue@jpl.nasa.gov). Phone: 818-393-5388.

Scientist(s):  
 Dr. Claudia Alexander NASA Jet Propulsion Laboratory Pasadena, CA  
 Ms. Jaclyn Allen Lockheed Martin ESC/JSC Houston, TX  
 Ms. Sheri Klug Arizona State University Tempe, AZ

Partner(s): Girl Scouts of the USA (GSUSA) National Headquarters New York, NY

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Feb 01	01 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,600,000	-
06 Jun 01	09 Jun 01	Girl Scouts, Little Cloud Council	Dubuque, IA	82	300	-

#### JSC Outreach to Women and Minorities

Theme(s): ASO, SEC, SSE

Msn/Prgm: SRT, SSE Forum, NAI, Astromaterials, MI Initiative

Description: NASA Johnson Space Center (JSC) scientists and their educator partners have targeted both women and minorities with outreach efforts. Minority outreach has been largely through the University of Houston-Downtown (UHD) project in the NASA OSS Minority University Initiative and in the JSC Equal Opportunity program. We have sponsored interns working in JSC labs, trained ambassadors in space science, and provided special JSC tours for student ambassadors and teachers attending workshops sponsored by our museum/university partners. Outreach to young women has included presentations at a local Expanding Your Horizons conference and Texas Tech University's "Science, It's a Girl Thing." We are major partners in the Solar System Education Forum's Girl Scout leader training program; we organized the prototype training in Iowa in June 2001 and did a distance-learning workshop for the International Girl Scouts.

Scientist(s):  
 Dr. Carlton Allen NASA Johnson Space Center Houston, TX  
 Ms. Jaclyn Allen Lockheed Martin ESC/JSC Houston, TX  
 Ms. Sangeeta Gad University of Houston-Downtown Houston, TX  
 Dr. Marilyn Lindstrom NASA Johnson Space Center Houston, TX  
 Dr. Glen Merrill University of Houston-Downtown Houston, TX  
 Dr. Penny Morris University of Houston-Downtown Houston, TX  
 Dr. Victor Obot Texas Southern University Houston, TX  
 Dr. Craig Schwandt Lockheed Martin ESC/JSC Houston, TX  
 Dr. Carolyn Sumners Houston Museum of Natural Science Houston, TX  
 Mr. James Wooten Houston Museum of Natural Science Houston, TX

Partner(s):  
 Houston Museum of Natural Science Houston, TX  
 Texas Southern University Houston, TX  
 University of Houston-Downtown Houston, TX

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**Making Relations: Boulder Symposium**

Theme(s): SEC, SSE

Msn/Prgm: SSE Forum

Description: This conference brought together representatives of the Minority University Partnership Initiative (OSS & OEOP) who serve Native American/Native Hawaiian communities to meet with a cross section of NASA OSS Support Network representatives from NASA Goddard, JPL, the Solar System Exploration Forum, and the Space Science Institute to discuss protocols, models, and action plans regarding effective mutual collaboration efforts. The event was hosted by the World Hope Foundation, a nonprofit organization that partners with JPL's Europa Orbiter Project, the Mars Program, Deep Impact, Stardust, and the Deep Space Network to conduct E/PO programs for Native American communities through a program called "From the Sun to the Star Nations."

Lead: Mr. Richard Shope III, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [rick.shope@jpl.nasa.gov](mailto:rick.shope@jpl.nasa.gov). Phone: 818-354-3812.

Scientist(s):	Dr. Richard Crowe	University of Hawaii at Hilo	Hilo, HI
	Dr. Rudolf Danner	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Cherilynn Morrow	Space Science Institute	Boulder, CO
	Mr. Richard Shope III	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	Diné College		Tsaile, AZ
	NASA Goddard Space Flight Center		Greenbelt, MD
	Space Science Institute		Boulder, CO
	University of Hawaii at Hilo		Hilo, HI
	World Hope Foundation		Boulder, CO

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**NASA Outdoor Education Program**

Theme(s): SSE

Msn/Prgm: Cassini/Huygens Probe, DPSO, Genesis, OP E/PO

Description: Representatives from the JPL Education Office, the Cassini mission, the Genesis mission, the OuterPlanets/Solar Probe mission, the Discovery Program Support Office, the Telescopes in Education (TIE) program and JPL Earth Science missions participated in a day-long training session for 180 Orange County and Los Angeles County outdoor educators at a NASA Outdoor Education Program at Pilgrim Pines Camp, Yucaipa. Morning presentations consisted of mission overviews and current information from space. A variety of outdoor hands-on activities were demonstrated in the afternoon. In the evening, a Constellation and Star Party took place, along with a demonstration from TIE. The objective was to provide mission information and hands-on activities appropriate for the outdoor camp setting, which over the course of the school year reaches approximately 50,000 students.

Lead: Mr. Ken Berry, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Kenneth.S.Berry@jpl.nasa.gov](mailto:Kenneth.S.Berry@jpl.nasa.gov). Phone: 818-393-5386.

Primary URL: <http://www.ocde.k12.ca.us/ito/>

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**Professional Societies of Minority Scientists/OSS Collaboration**

Msn/Prgm: ASO Forum, SSE Forum, SEU Forum, DePaul B/F, LPI B/F, OAI B/F, SERCH B/F, SSI B/F, SEC Forum

Description: A meeting of the members of the OSS Support Network with officers of 10 professional societies of minority scientists was held on May 9-10, 2001, at Western Kentucky University. The goals were to seek near-term pilot projects and long-term methods for engaging society members in OSS E/PO projects. As a followup, two teleconferences calls, on June 25 and July 30, respectively, took place among meeting participants. There were reports on the involvement of members of the National Society of Black Physicists in events related to the June 2001 solar eclipse, which was total over sites in Africa, and on potential future collaborations, such as those between the LPI Broker/Facilitators and the National Association for Black Geologists and Geophysicists (NABGG).

Lead: Dr. Lynn Narasimhan, DePaul University, Chicago, IL 60614-2458  
E-mail: [cnarasim@depaul.edu](mailto:cnarasim@depaul.edu). Phone: 773-325-1854.

Primary URL: <http://oss-ecosystem.stsci.edu/mps.shtml>

Partner(s):	American Indian Science and Engineering Society (AISES)	Albuquerque, NM
	Coalition to Diversify Computing (CDC)	
	Council for African-American Researchers in the Mathematical Sciences (CAARMS)	Buffalo, NY
	Institute for African-American e-Culture	Boston, MA

National Association of Mathematicians	Atlanta, GA
National Institutes of Health Black Scientists Association	Clarksburg, MD
National Organization of Black Chemists and Chemical Engineers (NOBCCChE)	Washington, DC
National Society of Black Physicists (NSBP)	Greensboro, NC
National Society of Hispanic Physicists	Nashville, TN
Society for the Advancement of Chicanos and Native Americans in Science	Santa Cruz, CA

## Event(s):

Dates		Location	Participants				
Start Date	End Date	Venue	City, State	DRT	ANY	WEB	
09 May 01	10 May 01	Western Kentucky University	Bowling Green, KY	39	-	-	
26 Sep 01	29 Sep 01	National Association of Black Geologists and Geophysicists (NABGG) - Celebrating 20 Years New Orleans, LA				-	-

## Students United With NASA Becoming Enthusiastic About Math and Science (SUNBEAMS)

Theme(s): SEC

Msn/Prgm: HESSI

Description: SUNBEAMS is an exciting and successful educational partnership between NASA Goddard Space Flight Center and the District of Columbia School System. It continues to evolve as a model urban intervention program for the sixth grade that empowers teachers and inspires students with the process and excitement of science and technology. Local teachers of sixth grade math and science are invited to come to Goddard for a five-week paid internship during the summer. They are each paired with a mentor from the Goddard scientific or technical staff. The teachers work with mentors in their professional work. In addition, the teachers are responsible for developing lesson plans that they pilot at their schools and post on the SUNBEAMS Web site. These lessons are standards-based and designed to give students an understanding of the method used by Goddard scientists, engineers, and technicians to develop and operate scientific spacecraft. During the following year, each SUNBEAMS teacher brings a class of up to 30 students to Goddard for a full week of immersion in math and science. The students also develop Web pages describing their experiences. After their week at Goddard, the students plan a Family Night at their schools. The program for the evening is to share what they have learned and done with their families and other members of their communities. Goddard mentors are major participants. The SUNBEAMS goals are to provide the teachers with the time and resources to develop curriculum materials based on NASA research and National Standards; to establish meaningful, long-term partnerships between DCPS teachers and Goddard technical personnel; and to foster a positive attitude toward math and science.

Primary URL: [www.space.gsfc.nasa.gov/sunbeams](http://www.space.gsfc.nasa.gov/sunbeams)2nd URL: [www.library.gsfc.nasa.gov](http://www.library.gsfc.nasa.gov)

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Oct 00	12 May 01	NASA Goddard Space Flight Center	Greenbelt, MD	1,234	-	2

## Touch the Universe: A NASA Braille Book of Astronomy

Theme(s): ASO

Msn/Prgm: DePaul B/F, HST

Description: Astronomy is often thought of as a visual science. From the backyard stargazer to the visitor at a local planetarium, people expect to see brilliant stars, planets, and deep-sky objects. However, if a person has a visual impairment, celestial objects can become shrouded in secrecy. A new NASA braille book was developed through a Cycle 9 E/PO grant from the Space Telescope Science Institute. Using a "twin vision" format, a selection of images taken by the Hubble Space Telescope has been converted into tactile representations to provide a barrier-free view of the night sky. The book was first presented at a press conference at the American Astronomical Society (AAS) Conference in Pasadena in June of 2001.

Primary URL: <http://www.touchtheuniverse.com/>2nd URL: <http://analyzer.depaul.edu/ttu/>

Scientist(s): Dr. Bernhard Beck-Winchatz      DePaul University      Chicago, IL

## Unraveling the Mysteries of the Universe

Msn/Prgm: IDEAS

Description: The program created a set of school-based learning activities that span grades K-5. Highlights of the program

included, a solar tea party, a lunar eclipse party and creating myth dramatization, a star party, space ship construction project, sci-fi video creation, and a trip to the Maryland Science Center to view a planetarium show.

Lead: Dr. Steven Hulbert, Space Telescope Science Institute, Baltimore, MD 21218.

Partner(s): Grace and St. Peter's School

Baltimore, MD

#### Video and Classroom Curriculum for DC Public Schools Students and Teachers in Earth and Space Science

Msn/Prgm: IDEAS

Description: The following were accomplished by the IDEAS Grant: 1) Short videos were produced that combined topic areas, such as Volcano Simulation and Measuring Oxygen by its Absorption of Far Ultraviolet Radiation, with the high school students' science fair projects in Earth and Space Science, and 2) The program provided a teacher enhancement course on Earth and Space Science as well as an Introduction to Electronic Imaging and Image Processing.

Lead: Dr. George Carruthers, Naval Research Laboratory, Washington, DC 20375.

Partner(s): Young Technocrats, Inc.

Washington, DC

#### WISE WEEK—Science Projects in Astrobiology

Theme(s): ASO

Msn/Prgm: NAI

Description: Dr. Bob Minard and chemistry undergraduate student Nick Hartman participated in WISE Week 2001, a one-week residential program for young women in the 11th grade. WISE Week is a program of Penn State's WISE Institute (Women In Science and Engineering). The high school students were engaged in a weeklong project designed to expose them to some of the important questions in Astrobiology and to some of the approaches used in answering those questions. Students chose to participate in one of two projects: Project 1—"Chemical Analysis for the Fingerprint of Life—Analysis of Samples for Biomolecules Using Gas Chromatography/Mass Spectrometry," in which team members analyzed small amounts of materials of their own choosing (with some guidance on limitations) using modern, highly sensitive chemical instrumentation; and Project 2—"Spectral Analysis for the Fingerprint of Life—Signals from Across the Cosmos," in which team members built a take-home spectroscope and looked for evidence of certain elements in our star, the Sun. They also examined the infrared spectra of some important atmospheric molecules.

Lead: Dr. Bob Minard, Pennsylvania State University, State College, PA 16803.

#### Women in Science and Engineering Research (WISER)

Theme(s): ASO

Msn/Prgm: NAI

Description: Faculty from the Penn State Astrobiology Research Center participate in this two-semester research internship program, which is sponsored by the Pennsylvania Space Grant Consortium. The program is designed to retain women students in the science and engineering fields by providing first-year undergraduate students invaluable experience and mentoring at the critical early stages of their undergraduate careers. Students begin their research in the spring semester and continue during either the subsequent summer or fall semester. This past year, Drs. Sue Brantley, Blair Hedges, and Chuck Fisher involved WISER students in their astrobiology-related research.

Lead: Dr. Lisa Brown, Pennsylvania State University, State College, PA 16803.

#### Yohkoh-Solar Week

Theme(s): SEC

Msn/Prgm: Yohkoh

Description: Solar Week is a week-long event of Web-based educational games and activities about the Sun, designed to spark the interest of pre- and early-teen girls in science by direct interaction with female scientists. Each day in Solar Week, a different topic is covered that highlights different scientists with Q&A sessions through an online bulletin board format.

Lead: Dr. David Alexander, Lockheed Martin Solar and Astrophysics Lab, Palo Alto, CA 94304

E-mail: [alexander@lmsal.com](mailto:alexander@lmsal.com). Phone: 650-424-2047.

Primary URL: <http://www.lmsal.com/ypop/solarweek>

Scientist(s):	Dr. David Alexander	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA
	Dr. Nicola Fox	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Mary Ann Hager	Lunar and Planetary Institute	Houston, TX
	Dr. Therese Kucera	NASA Goddard Space Flight Center	Greenbelt, MD

Dr. Dawn Myers NASA Goddard Space Flight Center Greenbelt, MD  
 Dr. Kristine Sigsbee NASA Goddard Space Flight Center Greenbelt, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Oct 00	13 Oct 00	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	-	4,096	-
09 Oct 00	13 Oct 00	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	4,065	-	-
15 Dec 00	19 Dec 00	American Geophysical Union (AGU) Meeting	San Francisco, CA	50	-	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	37	-	-
29 May 01	02 Jun 01	American Geophysical Union (AGU) Meeting	Boston, MA	50	-	-
03 Jun 01	07 Jun 01	American Astronomical Society (AAS) Meeting	Pasadena, CA	-	-	-
		Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	5,112	-	-

## EDUCATIONAL PRODUCTS

### Asteroids Lithograph

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This lithograph is part of a 16-lithograph Solar System Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000632&mode=full>

Scientist(s): Dr. Rick Binzel Massachusetts Institute of Technology Cambridge, MA  
 Dr. Donald Yeomans NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): NASA Office of Human Resources and Education Washington, DC

### Astrobiology in Your Classroom—Life on Earth . . . and Elsewhere?

Subject(s): Mathematics, Space Science, Life Science

Format(s): Book, PDF

Grade(s): Grades 5-10

Msn/Prgm: NAI

Description: The hands-on activities in this Educator Resource Guide lay the conceptual groundwork for understanding questions fundamental to the field of astrobiology. They enable students to examine the nature of life, what it requires, its limits, and where it might be found. Through these experiences, students learn about important ideas related to the search for extraterrestrial life.

Lead: The Astrobiology Curriculum, TERC, Cambridge, MA 02140.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000406&mode=full>

Scientist(s): Dr. Gene McDonald NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): NASA Jet Propulsion Laboratory Pasadena, CA

### Astrobiology: Discovering New Worlds of Life

Theme(s): ASO

Msn/Prgm: NAI

Description: This is a full-color, 24 X 36 inch educational poster about hydrothermal vents and astrobiology. The front of the poster consists of an original work of art by undersea artist Karen Jacobsen. The reverse side of the poster contains background text about hydrothermal vent life and the importance of these sites to the field of astrobiology. The poster discusses aspects of the research being conducted by Carnegie and other scientists. The poster will accompany a booklet entitled "Astrobiology: Discovering New Worlds of Life." Both items will be distributed through NSTA, AAAS, and the Carnegie Institute of Washington. The poster has a unique and interactive dimension.

Lead: Dr. Cindy Van Dover, Carnegie Institute of Washington, Washington, DC 20015.

Dr. Dawn Myers NASA Goddard Space Flight Center Greenbelt, MD  
 Dr. Kristine Sigsbee NASA Goddard Space Flight Center Greenbelt, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Oct 00	13 Oct 00	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	-	4,096	-
09 Oct 00	13 Oct 00	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	4,065	-	-
15 Dec 00	19 Dec 00	American Geophysical Union (AGU) Meeting	San Francisco, CA	50	-	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	37	-	-
29 May 01	02 Jun 01	American Geophysical Union (AGU) Meeting	Boston, MA	50	-	-
03 Jun 01	07 Jun 01	American Astronomical Society (AAS) Meeting	Pasadena, CA	-	-	-
		Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	5,112	-	-

## EDUCATIONAL PRODUCTS

### Asteroids Lithograph

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This lithograph is part of a 16-lithograph Solar System Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000632&mode=full>

Scientist(s): Dr. Rick Binzel Massachusetts Institute of Technology Cambridge, MA  
 Dr. Donald Yeomans NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): NASA Office of Human Resources and Education Washington, DC

### Astrobiology in Your Classroom—Life on Earth . . . and Elsewhere?

Subject(s): Mathematics, Space Science, Life Science

Format(s): Book, PDF

Grade(s): Grades 5-10

Msn/Prgm: NAI

Description: The hands-on activities in this Educator Resource Guide lay the conceptual groundwork for understanding questions fundamental to the field of astrobiology. They enable students to examine the nature of life, what it requires, its limits, and where it might be found. Through these experiences, students learn about important ideas related to the search for extraterrestrial life.

Lead: The Astrobiology Curriculum, TERC, Cambridge, MA 02140.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000406&mode=full>

Scientist(s): Dr. Gene McDonald NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): NASA Jet Propulsion Laboratory Pasadena, CA

### Astrobiology: Discovering New Worlds of Life

Theme(s): ASO

Msn/Prgm: NAI

Description: This is a full-color, 24 X 36 inch educational poster about hydrothermal vents and astrobiology. The front of the poster consists of an original work of art by undersea artist Karen Jacobsen. The reverse side of the poster contains background text about hydrothermal vent life and the importance of these sites to the field of astrobiology. The poster discusses aspects of the research being conducted by Carnegie and other scientists. The poster will accompany a booklet entitled "Astrobiology: Discovering New Worlds of Life." Both items will be distributed through NSTA, AAAS, and the Carnegie Institute of Washington. The poster has a unique and interactive dimension.

Lead: Dr. Cindy Van Dover, Carnegie Institute of Washington, Washington, DC 20015.

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**Astrobiology: The Search for Water Interactive Educational Book**

Theme(s): ASO

Msn/Prgm: NAI

Description: Volume 1 is entitled "Astrobiology: The Search for Water" and is aimed at middle and high school students. The print materials survey content in a substantial yet conversational manner. The booklet has a unique and interactive dimension. Throughout the text we will have embedded barcodes that can be scanned using the new CueCat technology developed by Digital Convergence. When an embedded barcode is scanned, it will take the reader/student/teacher to a Web page with original source articles, more information, and perhaps an activity about the topic. These associated Web pages in effect act like "filing cabinets" where the latest information can be stored about the topics found in the print material. For a rapidly changing field, this format allows us to print materials that will have a long and useful shelf life in the classroom. We are making the booklets and barcode readers available to classrooms free of charge upon request. At the moment, Volume 1 is ready for distribution. Future titles in the series include "Astrobiology: Discovering New Life at the Bottom of the Ocean" and "Astrobiology: Microbes."

Lead: Dr. Robert Hazen, Carnegie Institute of Washington, Washington, DC 20015.

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**Auroras: Paintings in the Sky**

Subject(s): Earth Science, Space Science

Format(s): Web Site

Grade(s): Grades 5-8, Adult/Continuing Education, General Public

Msn/Prgm: FAST

Description: Students go on a tour of auroral phenomena through research images and taped interviews with scientists. Diagrams and text provide background on Earth's magnetosphere, the solar wind, and explanations of locations of auroral zones on Earth. Variations in color are used to introduce ideas about spectroscopy.

Lead: Mish Denlinger, Exploratorium, San Francisco, CA 94123

E-mail: [mishd@exploratorium.edu](mailto:mishd@exploratorium.edu). Phone: 415 563-7337.Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000538&mode=full>

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**Blinded by the Light!**

Subject(s): Physical Science, Space Science, Technology

Format(s): PDF

Grade(s): Grades 5-12

Msn/Prgm: Keck

Description: This classroom activity article was originally published by the International Technology Education Association in "The Technology Teacher" magazine (February 2001). Activity uses flashlights and small objects to demonstrate how planets around other stars are very hard to detect, even with the best telescopes, because they get lost in the glare of the star. Discusses telescope technologies that compensate for this glare and other ways to look for evidence of planets.

Lead: Keck E/PO Team, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000511&mode=full>

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**Chandra CD-ROM**

Theme(s): SEU

Subject(s): Space Science

Format(s): CD

Grade(s): Grades 8-12, Adult/Continuing Education, Community College, General Public, Higher Education

Msn/Prgm: CXO

Description: This is a collection of all publicly released Chandra images through April 2001, with captions, additional information about black holes, supernova remnants, active galaxies, and so on, and images and information about the constellation in which the object is located. The CD-ROM is updated approximately twice a year, and all requestors automatically receive an update. The CD provides a resource to use with the Chandra education activities for those classrooms with slow or no Internet connections.

Lead: CXO E/PO Team, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138.

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**Chandra: Ask an Astrophysicist**

Theme(s): SEU

Subject(s): Space Science  
 Format(s): Web Site  
 Grade(s): Grades 6-12, Adult/Continuing Education, Community College, General Public  
 Msn/Prgm: CXO  
 Description: This is a collection of questions relevant to the science and mission of the Chandra X-Ray Observatory, submitted by students and the general public, posted with answers by experts in the field. Questions are organized in categories such as "cosmology," "black holes," "normal stars," and "dark matter."  
 Lead: Dr. Wallace Tucker, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
 E-mail: [cxcpub@cfa.harvard.edu](mailto:cxcpub@cfa.harvard.edu). Phone: 617-496-7998.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000604&mode=full>  
 Scientist(s): Dr. Wallace Tucker Harvard-Smithsonian Center for Astrophysics Cambridge, MA

#### Clean Room Technology—NASA Genesis Mission

Subject(s): Space Science  
 Grade(s): Grades 5-12  
 Msn/Prgm: Genesis  
 Description: "Clean Room Technology" is a video with accompanying education materials, including a standards-aligned teacher guide and student activity. The 11-minute video and materials can serve as a stand-alone activity or accompany a Genesis education module focused on the clean room at Johnson Space Center.  
 Lead: Genesis E/PO Team, Mid-continent Research for Education and Learning (McREL), Aurora, CO 80014  
 E-mail: [genesisepo@mcrel.org](mailto:genesisepo@mcrel.org). Phone: 303-337-0990.

#### COBE Image Gallery

Theme(s): SEU  
 Subject(s): Space Science, Technology  
 Format(s): PDF  
 Grade(s): Grades 9-12, Adult/Continuing Education, Community College, General Public, Higher Education, Vocational Education  
 Msn/Prgm: COBE  
 Description: The Cosmic Background Explorer (COBE) satellite was designed to measure the diffuse infrared and microwave radiation from the early universe. The COBE was launched on November 18, 1989, and carried three instruments. The image gallery describes the satellite and each COBE instrument, each of which yielded a major cosmological discovery.  
 Lead: Dr. Dave Leisawitz, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [leisawitz@stars.gsfc.nasa.gov](mailto:leisawitz@stars.gsfc.nasa.gov). Phone: 301-286-0807.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000471&mode=full>

#### Collaborative Decisionmaking Activity

Subject(s): Mathematics, Space Science, Technology  
 Format(s): Book, Web Site  
 Grade(s): Grades 7-12, Community College, Higher Education  
 Msn/Prgm: Deep Impact  
 Description: Students in grades 7 through 12 engage in processes/activities for collaboration and communication strategies. Students compare risks of courses of action confronting the Deep Impact Mission team. Students investigate information necessary to support arguments, quantitative risk analyses, debate, role play, persuasive writing/communication skills and group decisionmaking procedures. This activity has been aligned with the national math and science standards as well as math and science standards for California, Texas, and Maryland.  
 Lead: Deep Impact E/PO Team, Mid-continent Research for Education and Learning (McREL), Aurora, CO 80014  
 E-mail: [jristvey@mcrel.org](mailto:jristvey@mcrel.org). Phone: 303/337-0990.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000571&mode=full>  
 Scientist(s): Dr. Michael A'Hearn University of Maryland College Park, MD  
 Mr. William Blume NASA Jet Propulsion Laboratory Pasadena, CA  
 Mr. John Marriott Ball Aerospace Technologies Corp. Boulder, CO  
 Dr. Lucy McFadden University of Maryland College Park, MD  
 Mr. John McKinney NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Karen Meech University of Hawaii at Manoa Honolulu, HI

Mr. Brian Muirhead	NASA Jet Propulsion Laboratory	Pasadena, CA
Ms. Maura Rountree-Brown	NASA Jet Propulsion Laboratory	Pasadena, CA
Ms. Gretchen Walker	University of Maryland	College Park, MD

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#### Colors of the Sun

Subject(s): Space Science

Grade(s): Grades 5-8

Msn/Prgm: SOHO

Description: The video gives an entertaining venue for getting a summary background about the Sun. It is hosted by a middle school student. The product as used in connection with Pathways Program-Live from the Sun. Teachers used it to enhance their participation in the program and to give the students background knowledge as they study the Sun.

Lead: Dr. Paul Mortfield, Stanford University, Stanford, CA 94305  
E-mail: [paul@backyardastronomer.com](mailto:paul@backyardastronomer.com). Phone: 408-730-4443.

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#### Colors of the Sun Spectroscope

Subject(s): Space Science

Format(s): Poster

Grade(s): Grades 5-8

Msn/Prgm: SOHO

Description: The Sun emits energy in many wavelengths. Each wavelength reveals something different about the solar activity. Students can create their own spectrometer by following the directions on the poster. Students can record the Sun's colors with colored pencils. The spectroscope can be pointed to other light sources and the spectrums compared.

Lead: Dr. Paul Mortfield, Stanford University, Stanford, CA 94305  
E-mail: [paul@backyardastronomer.com](mailto:paul@backyardastronomer.com). Phone: 408-730-4443.

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#### Comets Lithograph

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This lithograph is one of the 16 lithographs that are part of the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000639&mode=full>

Scientist(s):	Mr. Ray Newburn	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Donald Yeomans	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	NASA Office of Human Resources and Education		Washington, DC
	University of Arizona		Tucson, AZ

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#### CONTOUR Mission Video

Subject(s): Space Science

Grade(s): Grades 7-12, General Public

Msn/Prgm: CONTOUR

Description: This film animation provides a detailed look at the future CONTOUR mission that will visit and make detailed studies of at least two comets. The film includes information on the target comets Encke and Schwassmann-Wachmann 3, the three launch stages of the Delta rocket, the instruments on board the spacecraft, and details on how the spacecraft uses Earth to adjust trajectory. See representations of the spacecraft approaching its targets and making detailed measurements.

Lead: CONTOUR E/PO Team, Cornell University, Ithaca, NY 14853  
E-mail: [lautz@astro.cornell.edu](mailto:lautz@astro.cornell.edu). Phone: 607-254-4973.

Scientist(s):	Dr. Joseph Veverka	Cornell University	Ithaca, NY
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**CONTOUR Pamphlet****Subject(s):** Space Science**Format(s):** Pamphlet, PDF**Grade(s):** Grades 7-12, General Public**Msn/Prgm:** CONTOUR**Description:** This resource was developed for the general public. It is a one-page, double-sided, trifold, black-and-white informational brochure explaining the CONTOUR mission. The content of the brochure includes a mission timeline, the mission objectives, the CONTOUR comet targets, instruments aboard the spacecraft, and mission flexibility.**Lead:** CONTOUR E/PO Team, Cornell University, Ithaca, NY 14853E-mail: [lautz@astro.cornell.edu](mailto:lautz@astro.cornell.edu). Phone: 607-254-4973.**Primary URL:** <http://teachspacescience.org/cgi-bin/search.plex?catid=10000606&mode=full>

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**Cue Cards****Theme(s):** ASO**Msn/Prgm:** NAI**Description:** Cue Cards are content links to NASA Astrobiology (NAI) and Carnegie Institute of Washington (CIW) astrobiology Web sites. The cards have an interactive dimension. The cards have barcodes that can be scanned using the new CueCat technology developed by Digital Convergence. When an embedded barcode is scanned, it will take the reader/student/teacher to a Web page with original source articles, more information, and perhaps an activity about the topic. These associated Web pages in effect act like "filing cabinets" where the latest information can be stored about the topics found in the print material. For a rapidly changing field, this format allows students to access current materials that will have a long and useful shelf life in the classroom. We are making the barcode readers available to classrooms free of charge upon request.**Lead:** Mr. Charles James, Carnegie Academy for Science Education, Washington, DC 20005.

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**Deep Impact Color Page****Subject(s):** Space Science**Format(s):** Web Site**Grade(s):** Grades K-8, General Public, Preschool Education**Msn/Prgm:** Deep Impact**Description:** The encounter between the Deep Impact spacecraft and Comet Tempel 1 is depicted for children in grades K through 4. Older students can use the page to communicate theories about what the cometary environment might be, a description of the comet surface, the direction of the comet tail, and angle of Sun reflection.**Lead:** Laura Berwin, NASA Jet Propulsion Laboratory, Pasadena, CA 91109E-mail: [iberwin@sdsio.jpl.nasa.gov](mailto:iberwin@sdsio.jpl.nasa.gov). Phone: 626-817-5964.**Primary URL:** <http://teachspacescience.org/cgi-bin/search.plex?catid=10000577&mode=full>

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**Deep Impact Video Clips****Subject(s):** Space Science, Technology**Format(s):** Web Site**Grade(s):** Grades K-12, Adult/Continuing Education, Community College, General Public, Higher Education, Preschool Education**Msn/Prgm:** Deep Impact**Description:** The Deep Impact Mission provides short video clips to be viewed and downloaded from the Web site. Videotape copies can be ordered by contacting Martha Heil ([Martha.J.Heil@jpl.nasa.gov](mailto:Martha.J.Heil@jpl.nasa.gov)). Videos show impact testing, deployment of the spacecraft after launch, and flight of the spacecraft to encounter.**Lead:** Dr. Peter Schultz, Brown University, Providence, RI 02912E-mail: [Peter\\_Schultz@brown.edu](mailto:Peter_Schultz@brown.edu). Phone: 401-863-2417.**Primary URL:** <http://teachspacescience.org/cgi-bin/search.plex?catid=10000576&mode=full>**Scientist(s):** Dr. Lucy McFadden University of Maryland**Partner(s):** Ball Aerospace Technologies Corp.

NASA Jet Propulsion Laboratory

College Park, MD

Boulder, CO

Pasadena, CA

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#### Discovery of Infrared Light—The Herschel Experiment

Subject(s): Physical Science, Space Science

Format(s): Pamphlet, Web Site

Grade(s): Grades 7-9

Msn/Prgm: SIRTf

Description: Students perform a version of the experiment of 1800, in which a form of radiation other than visible light was discovered by the famous astronomer Sir Frederick William Herschel.

Lead: Linda Hermans, California Institute of Technology, Pasadena, CA 91125

E-mail: [outreach@ipac.caltech.edu](mailto:outreach@ipac.caltech.edu).

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000405&mode=full>

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#### Earth and Mars Comparison Poster

Subject(s): Earth Science, Mathematics, Space Science

Format(s): Poster

Grade(s): Grades 3-12, Adult/Continuing Education, Community College, General Public, Higher Education

Msn/Prgm: Mars Pathfinder

Description: This poster provides information that compares and contrasts Earth and Mars. The images on the front of the poster show the relative sizes of the two planets. The back of the poster provides educational information, including a Mars exploration overview, a kid-friendly Mars Quick Fact Sheet, teacher resource information, and 11 National Science Education Standards-aligned hands-on activities. Teachers can download the full lesson plans that include student pages and teacher background information from the Web site included on the poster.

Lead: David M. Seidel, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [David.M.Seidel@jpl.nasa.gov](mailto:David.M.Seidel@jpl.nasa.gov). Phone: 818-354-9313.

Scientist(s): Dr. Phil Christensen

Arizona State University

Tempe, AZ

Partner(s): Arizona State University

Tempe, AZ

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#### Earth and Space Images for the Classroom

Theme(s): SEU

Subject(s): Earth Science, Space Science

Format(s): Web Site

Grade(s): Grades 3-8

Msn/Prgm: Keck, Galileo, Voyager, ST-3

Description: This set includes images of Earth and space, with simple captions in large type, suitable for printing on a color or black-and-white printer and displaying in the classroom. Images are categorized based on common teaching units. Categories include solar system; earth (geography and mapping, oceans, volcanoes, weather); stars, galaxies, and nebulae; astronauts; rockets, Space Shuttles, International Space Station, and rovers; plus others to be added.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000510&mode=full>

Partner(s): NASA Jet Propulsion Laboratory

Pasadena, CA

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#### Earth Lithograph

Subject(s): Earth Science, Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This lithograph is part of the Solar System Lithograph Set. It can be used for formal education, for informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000626&mode=full>

Scientist(s): Ms. Marguerite Syvertson

NASA Jet Propulsion Laboratory

Pasadena, CA

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### Eskimo Nebula

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: HST

Description: This Hubble Space Telescope image shows the colorful death of a Sun-like star named the "Eskimo Nebula" and describes how this planetary nebula may have formed. Definitions of key words are provided.

Lead: Amazing Space, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [amazing-space.stsci.edu](mailto:amazing-space.stsci.edu). Phone: 410-338-4848.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000513&mode=full>

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### Excavating Cratering

Subject(s): Physical Science, Space Science

Format(s): Web Site

Grade(s): Grades 7-10

Msn/Prgm: Deep Impact

Description: This activity is a two- to three-week educational module for students in grades 7 through 10. The activity focuses on developing students' inquiry skills. Students center studies around the question "How do you make a 25-meter-deep crater on a comet?" The module is aligned to national science and math education standards.

Lead: Gretchen Walker, University of Maryland, College Park, MD 20742

E-mail: [walker@astro.umd.edu](mailto:walker@astro.umd.edu). Phone: 301/405-0355.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000579&mode=full>

Scientist(s): Dr. Peter Schultz

Brown University

Providence, RI

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### Exploring Earth's Magnetic Field

Subject(s): Earth Science, Mathematics, Physical Science, Space Science

Format(s): PDF, Web Site

Grade(s): Grades K-12, Adult/Continuing Education

Msn/Prgm: IMAGE

Description: A collection of 23 classroom activities written by teachers, spanning grades 2 through 12 and exploring magnetism in the classroom, the design and operation of a simple magnetometer, and the properties of Earth's magnetosphere. A number of activities rely on Web-based data archives to examine the phenomenon of magnetic storms and how they are correlated with solar activity and aurorae.

Lead: Dr. Sten Odenwald, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [odenwald@bolero.gsfc.nasa.gov](mailto:odenwald@bolero.gsfc.nasa.gov). Phone: 301-286-6953.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000562&mode=full>

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### Exploring Our Universe: From the Classroom to Outer Space

Theme(s): ASO

Msn/Prgm: FUSE

Description: This is a series of educational "kits" (classroom material and lesson plans) that will span a range of topics to progressively build a valuable resource covering major subjects that are required by the school curriculum (National Science Education Standards) and related to the FUSE project either in the technological or scientific aspects. Each kit (issue) contains background information at an entry and more in-depth level, a list of additional resources, hands-on experiments and classroom activities, notes to teachers and students, glossary, and feedback form. The second issue of the series "The FUSE Satellite" has been revised after testing an early version in local schools and is available online. It includes classroom materials and lesson plans that relate to the FUSE satellite and cover topics of the science curriculum defined by the National Science Standards for physics, algebra, geometry, and astronomy/Earth science at middle and high school levels.

Lead: Dr. Luciana Bianchi, Johns Hopkins University, Baltimore, MD 21218-2695

E-mail: [bianchi@pha.jhu.edu](mailto:bianchi@pha.jhu.edu). Phone: 410-516-4009.

Primary URL: <http://fuse.pha.jhu.edu/outreach>



activities and events, facts about the FUSE mission, classroom material that can be downloaded, and a printable paper model of the FUSE satellite.

Lead: FUSE E/PO Program, Johns Hopkins University, Baltimore, MD 21218-2695

E-mail: [bianchi@pha.jhu.edu](mailto:bianchi@pha.jhu.edu). Phone: 410-516-4009.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000584&mode=full>

Scientist(s): Dr. Luciana Bianchi Johns Hopkins University Baltimore, MD

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#### Galaxies in the Classroom

Theme(s): SEU

Subject(s): Space Science

Format(s): Pamphlet

Grade(s): Grades 6-12

Msn/Prgm: SEU Forum

Description: This informative handout on "Galaxies in the Classroom." Explains galaxies in the standards and lists many NASA resources on cosmic structure and evolution.

Lead: Ms. Mary Dussault, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138

E-mail: [mdussault@cfa.harvard.edu](mailto:mdussault@cfa.harvard.edu).

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#### Galaxy Cluster Abell 2218

Subject(s): Physical Science, Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: HST

Description: This Hubble Space Telescope image of the massive galaxy cluster Abell 2218 shows distant galaxies made visible by a phenomenon known as gravitational lensing. Background information describes how the cluster's gravitational field acts as a telephoto lens for viewing more distant objects.

Lead: Amazing Space, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [amazing-space.stsci.edu](mailto:amazing-space.stsci.edu). Phone: 410-338-4848.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000514&mode=full>

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#### Genesis Education CD

Subject(s): Space Science

Format(s): CD

Grade(s): Grades K-12

Msn/Prgm: Genesis

Description: "Genesis in Education" is a CD-ROM that features middle and high school education modules, as well as elementary school activities that connect the intriguing real-world science of the mission to classroom instruction. Genesis education modules are standards-aligned and rich in technology applications, with embedded assessments.

Lead: Jacinta M. Behne, Mid-continent Research for Education and Learning (McREL), Aurora, CO 80014

E-mail: [jbehne@mcrel.org](mailto:jbehne@mcrel.org). Phone: 303-632-5605.

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#### Got Calcium?

Theme(s): SEU

Subject(s): Physical Science, Space Science

Format(s): Lithograph, PDF

Grade(s): Grades 9-12, Community College, Higher Education

Msn/Prgm: HEASARC

Description: This lithograph illustrates how scientists determine the chemical composition in the supernova remnants. Using Cassiopeia A as an example, students can determine the amount of calcium in the remnant and its equivalent amount in glasses of milk.

Lead: Gail Rohrbach, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [rohrbach@mayet.gsfc.nasa.gov](mailto:rohrbach@mayet.gsfc.nasa.gov). Phone: (301) 286-1516.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000524&mode=full>

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**High Energy Vision: The Chandra X-ray Observatory (Video)**

Theme(s): SEU

Subject(s): Space Science

Grade(s): Grades 9-12, Community College, General Public, Higher Education

Msn/Prgm: CXO

Description: This one-hour video describes the building and launch of the Chandra X-ray Observatory and the early results. Interviews with scientists working in the field offer additional insight. The video can be ordered from University of California San Diego Television.

Lead: Chandra E/PO Team, Chandra X-Ray Center, Cambridge, MA 02138.

Scientist(s):	Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Michael Garcia	Chandra X-Ray Center	Cambridge, MA
	Dr. Patrick Slane	Chandra X-Ray Center	Cambridge, MA
	Dr. Harvey Tananbaum	Chandra X-Ray Center	Cambridge, MA
	Dr. Wallace Tucker	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Belinda Wilkes	Chandra X-Ray Center	Cambridge, MA

Partner(s): University California San Diego Television La Jolla, CA

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**How Fast Do Galaxies Move? An Interactive Lab**

Theme(s): SEU

Subject(s): Space Science

Format(s): Web Site

Grade(s): Grades 8-12

Msn/Prgm: SEU Forum

Description: Galaxies are so large, and so far away, that you could never see them move just by looking—even if you looked for a whole lifetime through the most powerful telescope! Fortunately, there is a way to detect the motion of a galaxy: by examining the spectrum of light from a galaxy, you can determine whether the galaxy is moving toward or away from Earth and how fast. In this interactive laboratory, you'll investigate for yourself how fast several galaxies are moving.

Lead: Dr. Roy Gould, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138

E-mail: [seuforum@cfa.harvard.edu](mailto:seuforum@cfa.harvard.edu). Phone: 617-495-7000.Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000607&mode=full>

Scientist(s):	Mr. Freeman Deutsch	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Emilio Falco	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Mr. Douglas Mink	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Ms. Susan Tokarz	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA

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**Hubble Space Telescope (HST): Amazing Space**

Theme(s): ASO

Msn/Prgm: HST

Description: Amazing Space, a collaboration between scientists and teachers augmented by professional graphic artists, Web developers, programmers, and technical writers, is a line of educational products generated by the Formal Education Branch of the Office of Public Outreach at the Space Telescope Science Institute. Amazing Space products incorporate real scientific data from NASA missions (primarily HST) and include several interactive online activities, as well as engaging printed material such as the popular trading cards and Hubble Deep Field activity packet. These curriculum support tools, which come complete with suggested educational activities, can be used in the classroom to develop specific student skills articulated in the national standards.

Lead: Amazing Space, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [amazing-space.stsci.edu](mailto:amazing-space.stsci.edu). Phone: 410-338-4848.Primary URL: <http://amazing-space.stsci.edu/>

Scientist(s):	Dr. Denise Smith	Space Telescope Science Institute	Baltimore, MD
	Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD

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### Imagine the Universe! CD-ROM (5th Edition)

Theme(s): SEU  
 Subject(s): Physical Science, Space Science  
 Format(s): CD-ROM  
 Grade(s): Grades K-12, Community College, General Public, Higher Education  
 Msn/Prgm: HEASARC  
 Description: This CD-ROM contains a capture of three Web sites as they existed on January 1, 2001: Imagine the Universe!, StarChild, and the 2000 Astronomy Picture of the Day. Together, they offer information and teaching resources on astronomy and space science for all grade levels and ages. Each site contains its own learning adventure full of facts, fun, music, beautiful images, and movies.  
 Lead: High Energy Astrophysics Science Archive Research Center (HEASARC), NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [itu@athena.gsfc.nasa.gov](mailto:itu@athena.gsfc.nasa.gov).

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### Jupiter Lithograph

Subject(s): Space Science  
 Format(s): Lithograph, PDF  
 Grade(s): Grades K-12, General Public  
 Msn/Prgm: SSE Theme  
 Description: This lithograph is one of 16 that are part of the Solar System Lithograph Set. It can be used for formal education, for informal education, and by the general public.  
 Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
 E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000633&mode=full>  
 Scientist(s): Mr. Ray Newburn NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Donald Yeomans NASA Jet Propulsion Laboratory Pasadena, CA  
 Partner(s): NASA Office of Human Resources and Education Washington, DC  
 University of Arizona Tucson, AZ

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### Live From a Black Hole—Video

Theme(s): SEU  
 Subject(s): Space Science  
 Grade(s): Grades 6-12  
 Msn/Prgm: P2K, CXO  
 Description: This one-hour video produced by Passport to Knowledge features results from the Chandra X-ray Observatory, demos of science principles relevant to astrophysical sources, interviews, and questions and answers with Chandra scientists. Available from Passport to Knowledge.  
 Lead: Passport to Knowledge, Geoff Haines-Stiles Productions, Inc., Morristown, NJ 07960  
 E-mail: [ptkinfo@passporttoknowledge.com](mailto:ptkinfo@passporttoknowledge.com). Phone: 973-656-9403.  
 Primary URL: <http://passporttoknowledge.com>

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### Live From the Edge of the Universe—Video

Theme(s): SEU  
 Subject(s): Space Science  
 Grade(s): Grades 6-12  
 Msn/Prgm: P2K, CXO  
 Description: This one-hour video produced by Passport to Knowledge features results from the Chandra X-ray Observatory, demos of science principles relevant to astrophysical sources, interviews and questions and answers with Chandra scientists. Available from Passport to Knowledge.  
 Lead: Passport to Knowledge, Geoff Haines-Stiles Productions, Inc., Morristown, NJ 07960  
 E-mail: [ptkinfo@passporttoknowledge.com](mailto:ptkinfo@passporttoknowledge.com). Phone: 973-656-9403.  
 Primary URL: <http://passporttoknowledge.com>

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### Living with a Star: An Educator Guide with Activities in Sun-Earth Connection Science

Subject(s): Earth Science, Space Science, Technology  
 Format(s): Book, PDF

Grade(s): Grades K-12, Adult/Continuing Education, Community College, General Public, Higher Education, Vocational Education  
 Msn/Prgm: IMAGE, SEC Forum  
 Description: This guide is designed to provide educators with a quick reference to materials and resources that are useful for understanding the connections between the Sun and Earth. There are sections for commonly asked questions, Sun-Earth Connection Missions, and a classroom activities.  
 Lead: Ms. Diane Kisich, University of California, Berkeley, Berkeley, CA 94720  
 E-mail: [dianek@ssl.berkeley.edu](mailto:dianek@ssl.berkeley.edu). Phone: 510-643-7217.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000527&mode=full>  
 Scientist(s): Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD  
 Partner(s): NASA Goddard Space Flight Center Greenbelt, MD

#### Making Sun-Earth Connections—CD

Subject(s): Space Science  
 Format(s): CD, CD-ROM  
 Grade(s): Grades K-12  
 Msn/Prgm: SEC Forum  
 Description: The materials provided in each of the four presentations on this CD are intended to assist scientists and educators when presenting to K-12 audiences. Each version of the presentation represents information collected from NASA scientists, seminars, Web sites, and publications. Ultimately, it is designed to spark an interest in learning more about the Sun-Earth connection.  
 Lead: NASA's Sun-Earth Connection Education Forum, University of California, Berkeley, Berkeley, CA 94720  
 E-mail: [outreach@ssl.berkeley.edu](mailto:outreach@ssl.berkeley.edu). Phone: 510-643-7217.  
 Partner(s): NASA Goddard Space Flight Center Greenbelt, MD

#### Mars Activities: Hands-On Activities for K-5 Classrooms

Subject(s): Earth Science, Mathematics, Physical Science, Space Science, Technology  
 Format(s): Book  
 Grade(s): Grades K-5  
 Msn/Prgm: Mars Pathfinder  
 Description: This national science education standards-aligned guide will provide K-5 teachers with fun, grade-level-appropriate Mars-related hands-on activities. The activities presented in this guide teach basic science process skills such as observation, critical thinking skills, the scientific method, and basic beginning science concepts.  
 Lead: Ms. Sheri Klug, Arizona State University, Tempe, AZ 85287-6305  
 E-mail: [sklug@asu.edu](mailto:sklug@asu.edu). Phone: 480-727-6495.

#### Mars Activities: Teacher Resources and Classroom Activities

Subject(s): Earth Science, Mathematics, Physical Science, Space Science, Technology, Life Science  
 Format(s): PDF  
 Grade(s): Grades K-12, Community College, General Public, Higher Education  
 Msn/Prgm: Mars Pathfinder  
 Description: This engaging national science education standards-aligned guide will provide teachers with fun Mars-related hands-on activities and mission resource information. The activities presented in this guide use planetary comparisons, the scientific method, observation, and synthesis of data to increase students' understandings of Earth and space science.  
 Lead: Ms. Sheri Klug, Arizona State University, Tempe, AZ 85287-6305  
 E-mail: [sklug@asu.edu](mailto:sklug@asu.edu). Phone: 480-727-6495.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000601&mode=full>  
 Scientist(s): Ms. Jaclyn Allen Lockheed Martin ESC/JSC Houston, TX  
 Ms. Kelly Bender Arizona State University Tempe, AZ  
 Dr. John Callas NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Vicky Hamilton Arizona State University Tempe, AZ  
 Dr. Mary Urquhart NASA Ames Research Center Moffett Field, CA



rials. It contains an extensive image database of high-quality, downloadable digital images of microbes from a variety of environments, along with taxonomic, habitat, and morphological descriptions of each. Information in the site can be accessed in variety of ways, including alphabetically, by habitat, by taxonomic affinity, and through the use of interactive LUCID nondichotomous keys. Also accessible are a complete taxonomic listing of protist families and educational materials including PowerPoint presentations related to protist evolution and microbial diversity. This site will continue to expand to include images of microbes from environments being studied by various astrobiology researchers.

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#### MIT Center for Space Research: Education and Public Outreach Web Page

Theme(s): SEU

Subject(s): Physical Science, Space Science, Technology

Format(s): Web Site

Grade(s): Grades K-12, Adult/Continuing Education, General Public

Msn/Prgm: CXO

Description: This Web site describes the education and outreach initiatives carried out at the MIT Center for Space Research (CSR). The Center supports research in space science, engineering, and astrophysics. The site includes science news from the CSR, links to educational resources and information on the initiatives of the CSR Education and Outreach Office.

Lead: Dr. Irene L. Porro, Massachusetts Institute of Technology, Cambridge, MA 02139  
E-mail: [iporro@space.mit.edu](mailto:iporro@space.mit.edu). Phone: 617-258-7481.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000586&mode=full>

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#### Moons of Jupiter Lithograph

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This is one of 16 lithographs that make up the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000634&mode=full>

Scientist(s): Ms. Shannon McConnell	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Ellis Miner	NASA Jet Propulsion Laboratory	Pasadena, CA

Partner(s): NASA Office of Human Resources and Education	Washington, DC
University of Arizona	Tucson, AZ

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#### Neptune Lithograph

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This product is one of 16 lithographs that form the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000637&mode=full>

Scientist(s): Dr. Ellis Miner	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s): NASA Office of Human Resources and Education	Washington, DC	
University of Arizona	Tucson, AZ	

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#### Origins Brochure

Subject(s): Space Science

Format(s): Pamphlet

Grade(s): Grades 9-12, Adult/Continuing Education, Community College, General Public

Msn/Prgm: HST, Keck, ST-3

Description: This is a four-page color brochure highlighting Origins-related missions.

Lead: Dr. Rudolf Danner, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Rudolf.M.Danner@jpl.nasa.gov](mailto:Rudolf.M.Danner@jpl.nasa.gov). Phone: 818-393-4877.

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#### Our Very Own Star

Subject(s): Space Science

Format(s): Book, Web Site

Grade(s): Grades K-4

Msn/Prgm: STP

Description: This booklet is designed to supplement classroom inquiry as an engagement tool, especially with its connection to other teaching resources on the Solar Terrestrial Probe (STP) Web site. It is also meant to initiate questions about the Sun, its relationship to Earth and to stars, and how we know these things. Activities have been designed to assist teachers and students in active inquiry.

Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-6953.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000532&mode=full>

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#### Paper Model of FUSE Satellite

Subject(s): Mathematics, Physical Science, Space Science

Format(s): Lithograph, Web Site

Grade(s): Grades 9-12, General Public, Higher Education

Msn/Prgm: FUSE

Description: A paper model of the Far-Ultraviolet Explorer (FUSE) satellite can be printed from the FUSE Educational Web page. The model can be built just for fun, but it is also used in one of the FUSE lesson plans about circular motion.

Lead: FUSE E/PO Program, Johns Hopkins University, Baltimore, MD 21218-2695  
E-mail: [bianchi@pha.jhu.edu](mailto:bianchi@pha.jhu.edu). Phone: 410-516-4009.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000585&mode=full>

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#### Partners in Science Education: SOFIA's Education and Public Outreach Program

Subject(s): Space Science

Format(s): Pamphlet

Grade(s): Grades K-12, Community College, Higher Education

Msn/Prgm: SOFIA

Description: "Partners in Science Education" is a descriptive brochure about the education and public outreach (E/PO) programs planned for NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA), an airborne infrared telescope facility. The brochure briefly describes infrared astronomy, contrasting it with visible astronomy. E/PO programs described are Airborne Astronomy Ambassadors, Education Partners, Science Literacy & Education, and Visiting Educators. The Web site and SOFIA team are included.

Lead: SOFIA E/PO Program, NASA Ames Research Center, Moffett Field, CA 94035-1000  
E-mail: [edevore@seti.org](mailto:edevore@seti.org). Phone: 650-604-2130.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000591&mode=full>

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#### Planetary Observing

Subject(s): Physical Science, Space Science

Format(s): Web Site

Grade(s): Grades 5-12, Community College, Higher Education

Msn/Prgm: Cassini/Huygens Probe

Description: This educational brief teaches students how to identify and track planets from Earth. This activity is hands-on and inquiry-based.

Lead: Mr. Steve Edberg, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [stephen.edberg@jpl.nasa.gov](mailto:stephen.edberg@jpl.nasa.gov). Phone: 818-354-6085.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000555&mode=full>

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### Pluto and Charon Lithograph

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This product is one of 16 lithographs that form of the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000638&mode=full>

Scientist(s): Mr. Richard Shope III NASA Jet Propulsion Laboratory Pasadena, CA

Mr. Robert Staehle NASA Jet Propulsion Laboratory Pasadena, CA

Dr. Richard Terrile NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): NASA Office of Human Resources and Education Washington, DC  
University of Arizona Tucson, AZ

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### Production and Distribution of an Astrobiology Magazine Supplement

Theme(s): ASO

Msn/Prgm: NAI

Description: "Astrobiology: The Search for Life in the Universe" is a hardcopy, color magazine publication that is written at the high school level. The piece was originally published in the Research Penn State magazine, January 2001 issue, and is based on a lecture series that was held at Pennsylvania State University in January 2000. The lecture series and the magazine supplement feature NASA Astrobiology Institute (NAI) scientists from Pennsylvania State University, the University of Colorado, and Harvard University, as well as researchers from the Search for Extraterrestrial Intelligence (SETI) Institute and Rice University. Funding for the publication was provided by the Pennsylvania State University Astrobiology Research Center and Pfizer, Inc. The Pennsylvania Space Grant Consortium is distributing the publication to interested educators, students, researchers, and others across the country and internationally.

Lead: Dr. Lisa Brown, Pennsylvania State University, State College, PA 16803.

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### Saturn Lithograph

Subject(s): Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme

Description: This is one of 16 lithographs that form the the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000635&mode=full>

Scientist(s): Ms. Shannon McConnell NASA Jet Propulsion Laboratory Pasadena, CA

Dr. Ellis Miner NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): NASA Office of Human Resources and Education Washington, DC  
University of Arizona Tucson, AZ

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### Scaling the Spectrum from Chandra X-Ray Observatory

Theme(s): SEU

Subject(s): Space Science

Format(s): PDF, Web Site

Grade(s): Grades 6-12, Higher Education, Vocational Education

Msn/Prgm: CXO

Description: Classroom-ready and aligned with the national science education standards and Project 2061 Benchmarks for Science Literacy, this content investigation explores the electromagnetic spectrum. The materials allow students to explore and apply science concepts while using the Chandra X-ray Observatory mission as an exciting vehicle for learning.

Lead: Donna Young, Wright Center for Innovative Science Education, Medford, MA 02155  
 E-mail: [donna-young@tufts.edu](mailto:donna-young@tufts.edu). Phone: 617-627-5394.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000465&mode=full>

#### Seeing the Invisible—Teacher's Guide

Subject(s): Space Science  
 Format(s): Book  
 Grade(s): Grades K-4  
 Msn/Prgm: ISTP  
 Description: The activities provide students with an opportunity to discover that the Sun emits light both above and below the visible part of the electromagnetic spectrum; they also allow students to view unique features of the Sun revealed only at certain spectral wavelengths of light.  
 Lead: Michael Carlowicz, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [mcarlowi@pop600.gsfc.nasa.gov](mailto:mcarlowi@pop600.gsfc.nasa.gov). Phone: 301-286-6353.

#### Small Bodies of Our Solar System

Subject(s): Space Science  
 Format(s): Slide/slide set  
 Grade(s): Grades K-12, Adult/Continuing Education, Community College, General Public, Higher Education  
 Msn/Prgm: Galileo, Stardust  
 Description: The set includes 20 35-mm slides about asteroids including Mathilde, Eros, Gaspra, Phobos, Deimos, Ida, Dactyl, Toutatis, and Kleopatra; comets Halley, Shoemaker Levy 9, Hale-Bopp, and Hyakutake; and the Oort Cloud and Kuiper Belt.  
 Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
 E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Scientist(s):	Dr. Rick Binzel	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Andrew Cheng	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Mr. Ray Newburn	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Steve Ostro	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Paul Weissman	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Donald Yeomans	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	Johns Hopkins Applied Physics Laboratory		Laurel, MD

#### Small Telescope Science Program Web Site

Subject(s): Space Science, Technology  
 Format(s): Web Site  
 Grade(s): Grade 12, Community College, General Public, Higher Education, Vocational Education  
 Msn/Prgm: Deep Impact  
 Description: This site represents active involvement between amateur astronomers and Deep Impact. Anyone can visit the site to view images of Comet Tempel 1 submitted by observers, but participation is geared toward technically proficient amateurs and small professional observatories. Observations from this site have been used to complement science team data.  
 Lead: Ms. Stephanie McLaughlin, University of Maryland, College Park, MD 20742  
 E-mail: [stefmcl@astro.umd.edu](mailto:stefmcl@astro.umd.edu). Phone: 301-405-3605.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000580&mode=full>

Scientist(s):	Dr. Lucy McFadden	University of Maryland	College Park, MD
Partner(s):	NASA Jet Propulsion Laboratory		Pasadena, CA

#### SOFIA Lithograph

Subject(s): Space Science  
 Format(s): Lithograph  
 Grade(s): Grades K-12, Adult/Continuing Education, Community College, General Public, Higher Education  
 Msn/Prgm: SOFIA  
 Description: NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA) is an airborne astronomical observatory. This lithograph shows an artist's conception of the observatory on the face and provides a brief description of the observatory on the reverse.

Lead: SOFIA E/PO Program, NASA Ames Research Center, Moffett Field, CA 94035-1000  
 E-mail: [edevore@seti.org](mailto:edevore@seti.org). Phone: 650-604-2130.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000592&mode=full>

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#### SOFIA Presentation Folder

Subject(s): Space Science  
 Format(s): Pamphlet  
 Grade(s): Grades K-12, Community College, General Public, Higher Education  
 Msn/Prgm: SOFIA  
 Description: NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA) is under development by NASA and DLR, the German Aerospace Center. This presentation brochure provides a general overview of SOFIA, its science, and its technology. Designed as a presentation folder, the brochure will hold additional materials in an internal pocket.

Lead: SOFIA E/PO Program, NASA Ames Research Center, Moffett Field, CA 94035-1000  
 E-mail: [edevore@seti.org](mailto:edevore@seti.org). Phone: 650-604-2130.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000595&mode=full>

Scientist(s): Dr. Jacqueline Davidson Universities Space Research Association (USRA)/SOFIA Moffett Field, CA

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#### SOFIA Technical Brochure

Subject(s): Space Science, Technology  
 Format(s): Pamphlet  
 Grade(s): Grades 11-12, Community College, Higher Education  
 Msn/Prgm: SOFIA  
 Description: NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA) is under development by NASA and the DLR, the German Aerospace Center. This technical brochure describes the observatory, the instruments that will be used, the allocation of telescope time, the system characteristics, SOFIA's expected performance in comparison to that of other infrared telescopes, and the current status of the project.

Lead: SOFIA E/PO Program, NASA Ames Research Center, Moffett Field, CA 94035-1000  
 E-mail: [edevore@seti.org](mailto:edevore@seti.org). Phone: 650-604-2130.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000593&mode=full>

Scientist(s): Dr. Jacqueline Davidson Universities Space Research Association (USRA)/SOFIA Moffett Field, CA

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#### Solar Flip Book

Subject(s): Space Science  
 Format(s): Web Site  
 Grade(s): Grades 6-8  
 Msn/Prgm: SOHO  
 Description: This resource is an interdisciplinary assessment activity. Students will make a flip book that shows the progression of two solar events on reversible sides of the flip book. Event choices include the sunspot cycle, differential rotation of the Sun using sunspots, a total solar eclipse, progression of a coronal mass ejection, and a sungrazing comet.

Lead: Ms. Betty Harris, Teitelman Middle School, Cape May, NJ E-mail: [eaharris@lcmr.capemayschools.com](mailto:eaharris@lcmr.capemayschools.com).

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000436&mode=full>

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#### Solar System Lithograph Set

Subject(s): Earth Science, Space Science  
 Format(s): Lithograph, PDF  
 Grade(s): Grades K-12, Adult/Continuing Education, Community College, General Public, Preschool Education, Vocational Education  
 Msn/Prgm: SSE Theme

Description: This color Solar System Lithograph Set contains lithographs of our Solar System, the Sun, Mercury, Venus, Earth, the Moon, Mars, Asteroids, Jupiter, the Moons of Jupiter, Saturn, Uranus, Neptune, Pluto and Charon, and Comets. Suitable for formal education, informal education, and the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000605&mode=full>

Partner(s): NASA Office of Human Resources and Education Washington, DC  
University of Arizona Tucson, AZ

#### Space Interferometry Mission Brochure

Subject(s): Space Science  
Format(s): Pamphlet  
Grade(s): Grades 9-12, Adult/Continuing Education, Community College, General Public  
Msn/Prgm: SIM  
Description: This brochure highlights the Space Interferometry Mission (SIM) and the SIM Science Team.  
Lead: Dr. Rudolf Danner, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Rudolf.M.Danner@jpl.nasa.gov](mailto:Rudolf.M.Danner@jpl.nasa.gov). Phone: 818-393-4877.  
Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000543&mode=full>

#### Space Science Access—Bringing the Universe to Museums and Planetariums

Theme(s): SEU  
Subject(s): Space Science  
Format(s): Web Site  
Grade(s): Grade 12, Higher Education  
Msn/Prgm: SEU Forum  
Description: Are you an informal educator working on an "Astronomy in the News" presentation, a space science exhibit, a new planetarium show? This annotated list of links pulls together many of the widely distributed NASA resources that may be helpful to you. This Web site also includes a "Project Exchange Page" and "Best Practices and Lessons Learned."  
Lead: Ms. Mary Dussault, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
E-mail: [mdussault@cfa.harvard.edu](mailto:mdussault@cfa.harvard.edu).  
Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000611&mode=full>  
Partner(s): Association of Science-Technology Centers (ASTC) Washington, DC  
Great Lakes Planetarium Association Shaker Heights, OH

#### Space Science Education Resource Directory

Theme(s): ASO, SEC, SEU, SSE  
Msn/Prgm: ASO Forum, SSE Forum, SEU Forum, DePaul B/F, LPI B/F, OAI B/F, SERCH B/F, SSI B/F, SEC Forum  
Description: The Space Science Education Resource Directory (SSERD), an online repository of OSS education resources, is a collaborative effort between the members of the OSS Education Support Network. The SSERD is the first project resulting from this collaboration across Education Forums and Broker/Facilitators. The Directory is operated and maintained by the Origins Forum at the Space Telescope Science Institute. During FY 2001, many changes were made to the Directory, enabling users to more easily search for and locate resources. Some of these changes include the addition of a topic/grade level/keyword search mechanism, updated help text, user reviews, and enhanced graphics for easier navigation. The SSERD Registry was also enhanced to allow easier entry of new products into the database by resource developers. Periodic upgrades will continue to be made to both the SSERD and the Registry based on user feedback obtained through the site, national teacher conferences, and usability labs.  
Lead: Dr. Terry Teays, Space Telescope Science Institute, Baltimore, MD 21218  
E-mail: [teays@stsci.edu](mailto:teays@stsci.edu). Phone: 410-338-4733.  
Primary URL: <http://teachspacescience.org>  
Scientist(s): Dr. Denise Smith Space Telescope Science Institute Baltimore, MD  
Dr. Terry Teays Space Telescope Science Institute Baltimore, MD

#### Spin-A-Spectrum! Wheel and Teacher's Guide

Theme(s): SEU  
Subject(s): Mathematics, Physical Science, Space Science  
Format(s): Lithograph, Pamphlet  
Grade(s): Grades 9-12, Adult/Continuing Education, Community College, General Public, Higher Education  
Msn/Prgm: Swift  
Description: This unique tool engages students in reinforcing and assessing their knowledge of the electromagnetic spectrum—its various regions and their associated wavelengths, frequencies, and energies. What each region reveals about the universe is also introduced. The focus of the teacher's guide for the wheel is a series of

mini-mysteries or riddles whose solutions are based on the students' mastery of the parameters of the electromagnetic spectrum and of the objects which are best observed in a certain region of the spectrum.

Lead: Dr. Laura A. Whitlock, Sonoma State University, Rohnert Park, CA 94928

E-mail: [laura.whitlock@sonoma.edu](mailto:laura.whitlock@sonoma.edu). Phone: 707-664-2256.

Partner(s): NASA Goddard Space Flight Center

Greenbelt, MD

#### Stories in the Sky

Subject(s): Space Science

Format(s): Pamphlet

Grade(s): Grades 4-8

Msn/Prgm: SSE Forum

Description: This is an activity where you can build a planetarium for about \$30 and then have students write stories about the constellations they create.

Lead: Art Hammon, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [ahammon@jpl.nasa.gov](mailto:ahammon@jpl.nasa.gov). Phone: 818-393-4702.

Partner(s): NASA Jet Propulsion Laboratory

Pasadena, CA

#### Taking the Measure of the Universe

Subject(s): Mathematics, Space Science

Format(s): PDF, Poster

Grade(s): Grades 6-8

Msn/Prgm: SIM

Description: This product includes integrated science and math curricular materials related to the Space Interferometry Mission. It introduces measurement and scale using hands-on activities and various methods of approach.

Lead: Virgil Arthur Hammon, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Virgil.A.Hammon@jpl.nasa.gov](mailto:Virgil.A.Hammon@jpl.nasa.gov). Phone: 818-393-4702.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000540&mode=full>

#### Terrestrial Planet Finder Brochure

Msn/Prgm: TPF

Description: This brochure highlights the Terrestrial Planet Finder (TPF) mission.

Lead: Dr. Rudolf Danner, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Rudolf.M.Danner@jpl.nasa.gov](mailto:Rudolf.M.Danner@jpl.nasa.gov). Phone: 818-393-4877.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000545&mode=full>

#### The Cosmic Distance Scale

Theme(s): SEU

Subject(s): Mathematics, Physical Science, Space Science

Format(s): Web Site

Grade(s): Grades 7-12, Adult/Continuing Education, Community College, General Public, Higher Education

Msn/Prgm: HEASARC

Description: This feature will give an impression of how immense our universe is by employing a method used many times in "Power of 10" films—that is, starting with an image of Earth and then zooming out to the farthest visible reaches of our universe. This is not, however, an exercise in "powers of 10"—on the contrary, our goal is to show you astronomical distances without scientific notation. We instead focus on the large number of zeros that are in astronomical distances when we measure them with a familiar unit like the kilometer.

Lead: Maggie Masetti, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [mmasetti@ltpmail.gsfc.nasa.gov](mailto:mmasetti@ltpmail.gsfc.nasa.gov). Phone: 301-614-6067.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000526&mode=full>

Scientist(s): Mr. Koji Mukai

NASA Goddard Space Flight Center

Greenbelt, MD

#### The FUSE Satellite: Observing from Space

Subject(s): Mathematics, Physical Science, Space Science, Technology

Format(s): Web Site

Grade(s): Grades 9-12, Higher Education

Msn/Prgm: FUSE

Description: This kit contains five lesson plans and classroom materials related to the Far-Ultraviolet Spectroscopic

Explorer (FUSE) satellite, covering topics of the science curriculum defined by the national science standards for physics, algebra, geometry, and astronomy/Earth science at middle and high school level. The lessons allow students to learn physics and mathematics by solving problems related to the operations of a real satellite. This is the second issue in the series "Exploring Our Universe: from the Classroom to Outer Space." These lessons are revised after testing in local schools.

Lead: Dr. Luciana Bianchi, Johns Hopkins University, Baltimore, MD 21218-2695  
E-mail: [bianchi@pha.jhu.edu](mailto:bianchi@pha.jhu.edu). Phone: 410-516-4009.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000583&mode=full>

Scientist(s): Dr. Luciana Bianchi Johns Hopkins University Baltimore, MD

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#### The Moon Lithograph

Subject(s): Earth Science, Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12

Msn/Prgm: SSE Theme

Description: This lithograph is one of 16 that form the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000628&mode=full>

Scientist(s): Dr. Marilyn Lindstrom NASA Johnson Space Center Houston, TX  
Dr. Jeff Taylor University of Hawaii at Manoa Honolulu, HI  
Partner(s): NASA Office of Human Resources and Education Washington, DC  
University of Arizona Tucson, AZ

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#### The Real Reasons for Seasons: Sun-Earth Connections

Subject(s): Earth Science, Mathematics, Physical Science, Space Science, Life Science

Format(s): Book, CD-ROM

Grade(s): Grades 6-8, Adult/Continuing Education, Community College, General Public

Msn/Prgm: SEC Forum

Description: This guide was developed through a partnership between the University of California, Berkeley, Lawrence Hall of Science's Great Explorations in Math and Science Program (GEMS) and NASA's Sun-Earth Connection Education Forum. This GEMS guide is aimed at helping students arrive at a clear understanding of seasons as they investigate the connections between the Sun and Earth. Along the way, students take a "Trip to the Sun" determine the real shape of Earth's orbit, evaluate actual data on world temperature and hours of sunlight in different locations, and model how the angle at which sunlight hits Earth affects its concentration. Throughout these engaging activities, students gain important standards-based science and mathematics content and develop abilities essential in scientific investigation. A CD-ROM, included in this guide, offers a rich collection of helpful resources, software programs, and Web links.

Lead: Great Explorations in Math and Science (GEMS), Lawrence Hall of Science, Berkeley, CA 94720-5200  
E-mail: [gems@uclink4.berkeley.edu](mailto:gems@uclink4.berkeley.edu). Phone: 510-642-7771.

Partner(s): Pompea & Associates Tucson, AZ

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#### The Sun Lithograph

Subject(s): Earth Science, Space Science

Format(s): Lithograph, PDF

Grade(s): Grades K-12, General Public

Msn/Prgm: SSE Theme, SEC Forum

Description: This lithograph is one of 16 that form the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000617&mode=full>

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### The Sunspots and Lesson Plan—Resource Guide

Subject(s): Space Science

Format(s): CD-ROM

Grade(s): Grades 8-10

Msn/Prgm: SEC Forum

Description: This lesson covers solar science, ancient and modern, and features an interactive research exercise in which students attempt to correlate the areas of sunspots with those of x-ray-active regions. Self-guided sections on history and modern study include researcher interviews.

Lead: Space Sciences Laboratory Center for Science Education, University of California, Berkeley, Berkeley, CA 94720

E-mail: [outreach@ssl.berkeley.edu](mailto:outreach@ssl.berkeley.edu).

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### Touch the Sun Activities Guide

Theme(s): SEC

Msn/Prgm: Solar-B

Description: This guide includes seven hands-on activities/experiments for designing, building, and gathering data with different simple, inexpensive instruments. These activities were developed for the Touch the Sun workshop at Chabot and will be available for download in PDF form at the Chabot/Solar-B Web site. The activities emphasize the design and construction process for scientific instrumentation; the impact of design, materials, and observing technique on the quality/accuracy of the data obtained; and the iterative process of improving design and construction based on lessons learned. Three of the units are Sun-measuring instruments: a sundial for measuring the Sun's apparent motion in the sky, a pinhole camera for measuring the Sun's diameter, and a sunspot tracking activity for measuring and characterizing the motions of sunspots. Three of the units are light experiments: an exploration of spectroscopy, a color filter bandpass activity, and a polarimeter. The seventh activity is a spacecraft/satellite engineering design challenge. The Shoebox Satellite presents students with the threefold challenge of designing and constructing a "device" that will 1) protect ice from melting in the hot sunlight (thermal engineering), 2) protect an egg from damage when being dropped from at least 25 feet over a hard surface, and 3) be as light as possible, using a launch cost multiplier of \$80,000 per pound to drive the point home.

Lead: Mr. Benjamin Burress, Chabot Space and Science Center, Oakland, CA 94619

E-mail: [bburress@chabotspace.org](mailto:bburress@chabotspace.org). Phone: 510-336-7308.

Primary URL: <http://www.chabotspace.org/vsc/exhibits/solarb/default.asp>

Scientist(s): Dr. Gibor Basri

University of California, Berkeley

Berkeley, CA

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### Tracking a Solar Storm

Subject(s): Physical Science, Space Science

Format(s): PDF, Web Site

Grade(s): Grades 10-12, Higher Education

Msn/Prgm: IMAGE

Description: This is a step-by-step manual that shows how to use Web-based resources and real-time data archives to monitor the evolution of a solar storm and track it as it approaches Earth.

Lead: Bill Pine, Chaffey High School, Ontario, CA

E-mail: [pine@mail630.gsfc.nasa.gov](mailto:pine@mail630.gsfc.nasa.gov). Phone: 909-985-3844.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000565&mode=full>

Scientist(s): Dr. Sten Odenwald

NASA Goddard Space Flight Center

Greenbelt, MD

Partner(s): NASA Goddard Space Flight Center

Greenbelt, MD

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### Universe! Cosmic Journeys to the Edge of Gravity, Space, and Time

Theme(s): SEU

Subject(s): Space Science

Format(s): Web Site

Grade(s): Grades 9-12, Adult/Continuing Education, Community College, General Public, Higher Education

Msn/Prgm: SEU Forum

Description: The Universe Web site is part of the Structure and Evolution of the Universe (SEU) Education Forum support activities. This Web site provides an overview of satellite missions associated with the SEU forum, SEU forum flyers, lesson plans, and other links.

Lead: Dr. Lynn R. Cominsky, Sonoma State University, Rohnert Park, CA 94928  
 E-mail: [lynnc@charmian.sonoma.edu](mailto:lynnc@charmian.sonoma.edu). Phone: 707-664-2655.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000506&mode=full>

#### Uranus Lithograph

Subject(s): Space Science  
 Format(s): Lithograph, PDF  
 Grade(s): Grades K-12, General Public  
 Msn/Prgm: SSE Theme  
 Description: This lithograph is one of 16 lithographs that form the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
 E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000636&mode=full>

Scientist(s):	Dr. Heidi Hammel	Space Science Institute	Ridgefield, CT
	Dr. Ellis Miner	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	NASA Office of Human Resources and Education		Washington, DC
	University of Arizona		Tucson, AZ

#### Venus Lithograph

Subject(s): Space Science  
 Format(s): Lithograph, PDF  
 Grade(s): Grades K-12, General Public  
 Msn/Prgm: SSE Theme  
 Description: This lithograph is one of 16 lithographs that form the Solar System Lithograph Set. It can be used in formal education, in informal education, and by the general public.

Lead: Ms. Anita Sohus, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
 E-mail: [Anita.M.Sohus@jpl.nasa.gov](mailto:Anita.M.Sohus@jpl.nasa.gov). Phone: 818-354-6613.  
 Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000625&mode=full>

Scientist(s):	Dr. Jeffrey Plaut	NASA Jet Propulsion Laboratory	Pasadena, CA
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#### Waves Light Up the Universe! Slinky and Teacher's Guide

Theme(s): SEU  
 Subject(s): Mathematics, Physical Science, Space Science  
 Format(s): Pamphlet  
 Grade(s): Grades 9-12, Adult/Continuing Education, Community College, General Public  
 Msn/Prgm: Swift  
 Description: "Waves Light Up the Universe" is a teacher's guide that discusses the basics of waves and wave motions. The activities presented engage students in learning about the characteristics of waves, as well as how waves are absorbed, reflected, and emitted by all objects in the universe.

Lead: Dr. Laura A. Whitlock, Sonoma State University, Rohnert Park, CA 94928  
 E-mail: [laura.whitlock@sonoma.edu](mailto:laura.whitlock@sonoma.edu). Phone: 707-664-2256.

Partner(s):	NASA Goddard Space Flight Center	Greenbelt, MD
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#### Where Do Stars Come From? And Where Do They Go?

Subject(s): Space Science  
 Format(s): PDF, Poster  
 Grade(s): Grades 9-12, General Public  
 Msn/Prgm: HST  
 Description: This poster shows the birth, evolution, and death of small- and large-mass stars. It shows the cycle of change that takes place as the star is born from the raw materials of interstellar gas, emerges either as a yellow or a blue star, and eventually reaches old age and dies, forming a planetary nebula or a supernova explosion.

Lead: Amazing Space, Space Telescope Science Institute, Baltimore, MD 21218  
 E-mail: [amazing-space.stsci.edu](mailto:amazing-space.stsci.edu). Phone: 410-338-4848.

Primary URL: <http://teachspacescience.org/cgi-bin/search.plex?catid=10000508&mode=full>

**Who's Got the Power? Card Deck and Teacher's Guide**

Theme(s): SEU

Subject(s): Mathematics, Physical Science, Space Science

Format(s): Lithograph, Pamphlet

Grade(s): Grades 9-12, Adult/Continuing Education, Community College, General Public, Higher Education

Msn/Prgm: Swift

Description: "Who's Got the Power?" This is no ordinary deck of cards—it is one with the Powers of Ten! This deck has been designed so that students must use scientific notation (as well as other skills) to compete in games while reinforcing standards-based mathematics and science. The cards contain information about objects or phenomena in the universe, which allows you to play all sorts of games while learning!

Lead: Dr. Laura A. Whitlock, Sonoma State University, Rohnert Park, CA 94928

E-mail: [laura.whitlock@sonoma.edu](mailto:laura.whitlock@sonoma.edu). Phone: 707-664-2256.

Partner(s): NASA Goddard Space Flight Center

Greenbelt, MD

**XMM-Newton E/PO Mission Flyer**

Theme(s): SEU

Subject(s): Physical Science, Space Science, Technology

Format(s): Lithograph

Grade(s): Grades 8-12, Adult/Continuing Education, Community College, General Public

Msn/Prgm: XMM-Newton

Description: A one page double-sided color information sheet and educational activity that describes the X-Ray Multi-Mirror (XMM-Newton) mission science and educational objectives. The flyer includes information about X-ray astronomy and the Newton satellite. It also describes the education and public outreach activities planned to tell the story of XMM. The second side of the flyer is comprised of an activity titled "Seeing the Universe Through X-ray Eyes." This student worksheet activity simulates the operation of a CCD array to image the central portion of the Andromeda galaxy.

Lead: Chris Foster, University of California, Santa Barbara, Santa Barbara, CA 93106

E-mail: [cfoster@itsc.ucsb.edu](mailto:cfoster@itsc.ucsb.edu). Phone: 805-893 7966.

Partner(s): Ilana Harrus

Greenbelt, MD

**EDUCATIONAL ACTIVITIES****Classroom Education****Systemic Improvement****Chicago Teachers' Advisory**

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: DePaul B/F

Description: The Chicago Teachers' Advisory is a partnership between the DePaul Broker/Facilitators and Chicago teachers whose goal is to develop ways to bring space science to the schoolchildren of Chicago. Advisory meetings called Space Science Symposia occur several times a year and attract a broad group of teachers representative of the Chicago Public School System. Sessions are a mixture of space science presentations by local scientists and discussions in areas such as curriculum and professional development, NASA resources, and communication. Planning for the Advisories is done in monthly meetings by a small group of teachers known as the Teacher Consultants. Over the past 15 months, the Teacher Consultants have moved into leadership positions in advancing space science in the Chicago area.

Lead: Dr. Lynn Narasimhan, DePaul University, Chicago, IL 60614-2458

E-mail: [cnarasim@depaul.edu](mailto:cnarasim@depaul.edu). Phone: 773-325-1854.

Scientist(s): Dr. Richard Kron University of Chicago

Chicago, IL

Dr. Jesus Pando DePaul University

Chicago, IL

Partner(s): Chicago Public School District

Chicago, IL

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Oct 00	14 Oct 00	DePaul University	Chicago, IL	87	-	-
14 Nov 00	14 Nov 00	DePaul University	Chicago, IL	11	-	-
09 Jan 01	09 Jan 01	DePaul University	Chicago, IL	9	-	-
31 Jan 01	31 Jan 01	DePaul University	Chicago, IL	9	-	-
05 Feb 01	05 Feb 01	DePaul University	Chicago, IL	7	-	-
10 Mar 01	10 Mar 01	DePaul University	Chicago, IL	32	-	-
10 Apr 01	10 Apr 01	DePaul University	Chicago, IL	7	-	-

## Formal Education Systemic Reform Initiatives

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SEC Forum

Description: Sun-Earth Connection Education Forum scientists and education specialists at Goddard Space Flight Center and U.C. Berkeley partner with local school systems, the NASA Goddard Space Flight Center Education Office, and AAAS through systemic reform initiatives in an attempt to improve the teaching of space science in school systems. Team members partner with local and State initiatives to develop frameworks that will lead to literacy in space science. The efforts work through curriculum framework development, professional development, and assessment and modification of overall space science education goals and objectives at the local and State levels.

Lead: Mr. Louis Mayo, Raytheon ITSS, Lanham, MD 20706  
E-mail: [lmayo@pop600.gsfc.nasa.gov](mailto:lmayo@pop600.gsfc.nasa.gov). Phone: 301-286-0165.

Primary URL: <http://sunearth.gsfc.nasa.gov>

Scientist(s):	Dr. James Lochner	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. David Stern	NASA Goddard Space Flight Center	Greenbelt, MD

Partner(s):	NASA Goddard Space Flight Center	Greenbelt, MD
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## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Montgomery County Board of Education	Rockville, MD	20	-	-
07 Jun 01	30 Sep 01	NASA Goddard Space Flight Center	Greenbelt, MD	3	-	-
14 Aug 01	30 Sep 01	Maryland State Board of Education	Annapolis, MD	24	-	-

## Support for Western Region State Education Leadership

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SSI B/F

Description: The SSI Broker program lends its support to NASA's State-based approach of supporting formal science education reform efforts, joining forces with NASA Education Division personnel to identify and take action on the ways NASA resources (scientists, missions, data or imagery, educational materials, teacher workshops, exhibits, and so on) can be used to meet State educational needs in the western U.S. We have made connections or attended meetings of educational leadership in several states, including Colorado, New Mexico, Utah, Wyoming, and South Dakota. Outcomes of these meetings have included 1) working with a NASA Johnson Aerospace Education Specialist and McREL to produce a matrix that links NASA materials with Colorado State education standards in science and math; 2) an agreement to conduct a more elaborate "Linking" project in New Mexico in collaboration with their Rural Systemic Initiatives; 3) an agreement to design a syllabus for a middle school Earth and space science course that meets South Dakota science education standards and that can be posted on an innovative educational Web page that facilitates partnerships among teachers, parents, and students; 4) an agreement to support Utah's strategic planning effort to make best use of NASA's educational materials; and 5) an agreement to work with the Wyoming Space Grant College on a plan for reaching underserved rural populations with useful NASA resources. We have also consulted Mary Gromko, Colorado's representative to the National Council of State Science Supervisors (NCSSE); Larry Bilbrough, Program Manager for Systemic Improvement at NASA Headquarters; and Robert Gabrys, Center Education Director at NASA Goddard.

Lead:	Dr. Cherilynn Morrow, Space Science Institute, Boulder, CO 80309 E-mail: <i>camorrow@colorado.edu</i> . Phone: 303-492-7321.	
Partner(s):	Center for Science, Mathematics, and Technology (CSMATE) Colorado Math, Science, & Technology Education Coalition (COMSTEC) Council of State Science Supervisors (CSSS) Mid-continent Research for Education and Learning (McREL) NASA Goddard Space Flight Center NASA Office of Human Resources and Education National Alliance of State Science and Math Coalitions (NASSMC) New Mexico Partnership for Math & Science Education (NMPMSE) NSF/Rural Systemic Initiative for Utah, Colorado, Arizona, New Mexico South Dakota School of Mines and Technology Utah State Office of Education Wyoming Space Grant Consortium	Ft. Collins, CO Denver, CO  Aurora, CO Greenbelt, MD Washington, DC Washington, DC Rociada, NM Rociada, NM Rapid City, SD Salt Lake City, UT Laramie, WY

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#### Wisconsin Data Retreat

Msn/Prgm: DePaul B/F

Description: The purpose of the Wisconsin Data Retreat was to examine standardized test results and questions for information about the extent to which Wisconsin students have achieved understanding of space science. The weekend retreat was facilitated by members of Wisconsin's Department of Public Instruction and hosted by Space Explorers, Inc. Eighteen teachers participated in the work of the retreat.

Lead: Ms. Shelley Lee, Wisconsin Department of Public Instruction, Madison, WI 53707  
E-mail: *shelley.lee@dpi.state.wi.us*. Phone: 608-266-3319.

Partner(s): Space Explorers, Inc. De Pere, WI  
Wisconsin Department of Public Instruction Madison, WI

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
19 Jan 01	21 Jan 01	Space Explorers, Inc.	De Pere, WI	28	-	-

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#### Teacher Preparation/Enhancement

"Living in the Microbial World"—Teacher Enhancement Workshop

Theme(s): ASO

Msn/Prgm: NAI

Description: This intensive one-week workshop for middle and high school teachers combines hands-on activities in microbial diversity and evolution with lectures and demonstrations from visiting and resident research scientists. Lecturers this year were Margulis (UMass), Amils (Madrid, Astrobiology Inst.), Stolz (Dusquesne, Ames Astrobiology), Edgcomb (Astrobiology MBL), and Wainwright (MBL).

Lead: Dr. Lorraine Olendzenski, Marine Biological Laboratory, Woods Hole, MA 02543  
E-mail: *lco95001@uconnvm.uconn.edu*.

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A Space Weather Module for Los Alamos Space Science Outreach (LASSO)

Theme(s): SEC

Msn/Prgm: SRT, ACE, IMAGE, TWINS

Description: The Los Alamos Space Science Outreach (LASSO) program is based on teacher workshops in which K-14 teachers spend several weeks at Los Alamos National Laboratory (LANL) learning space science from lab scientists and developing methods and materials for teaching this science to their students. The program is designed to provide hands-on space science training to teachers as well as assistance in developing lesson plans for use in their classrooms. The program supports an instructional model based on education research and cognitive theory. Students and teachers engage in activities that encourage critical thinking and a constructivist approach to learning. LASSO is run through the Los Alamos Science Education Team (SET). SET personnel have many years of experience in teaching, education research, and science education programs. Their involvement ensures that the teacher workshop program is grounded in sound pedagogical methods and meets current educational standards. This year, the lesson plans focused on the solar wind, Earth's magnetosphere, and the space weather connections between them. The program focus was on current space science projects including the Advanced Composition Explorer (ACE), the Magnetospheric Plasma Analyzers (MPA), the

Imager for Magnetopause to Auroral Global Exploration (IMAGE), and the Two Wide-angle Imaging Neutral-atom Spectrometers (TWINS). LASSO is an umbrella program for space science education activities at LANL. LASSO was created to enhance the science and math interests and skills of both New Mexico and national students. The LASSO umbrella allows maximum leveraging of E/PO funding from a number of projects (and thus maximum educational benefits to both students and teachers), while providing a format for the expression of the unique science perspective of each project.

Lead: Dr. Ruth Skoug, Los Alamos National Laboratory, Los Alamos, NM 87545  
E-mail: [rskoug@lanl.gov](mailto:rskoug@lanl.gov). Phone: 505-667-6594.

Primary URL: <http://set.lanl.gov/programs/lasso/lassomain.htm>

Scientist(s):	Mr. Philip Barker	Los Alamos National Laboratory	Los Alamos, NM
	Dr. William Feldman	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Geoffrey Reeves	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Ruth Skoug	Los Alamos National Laboratory	Los Alamos, NM
	Dr. John Steinberg	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Michelle Thomsen	Los Alamos National Laboratory	Los Alamos, NM

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Jul 01	09 Aug 01	Los Alamos National Laboratory	Los Alamos, NM	20	-	-

Astromaterials-Astrobiology Teacher Workshops

Theme(s): ASO, SSE

Msn/Prgm: SRT, NAI, Astromaterials, MI Initiative

Description: The NASA Johnson Space Center (JSC) scientist/educator team presents numerous teacher workshops on the general topics of rocks from space, astrobiology, and exploring the solar system. These workshops include hands-on activities and presentations by JSC scientists that are tailored for specific science education groups. During FY 2001, we presented 37 workshops at venues ranging from JSC (13), to science teacher conferences (10), to museums (6) and universities (8). Our partners in these workshops are the teachers who have helped us develop new classroom activities.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov). Phone: 281-483-5135.

Scientist(s):	Dr. Carlton Allen	NASA Johnson Space Center	Houston, TX
	Ms. Jaclyn Allen	Lockheed Martin ESC/JSC	Houston, TX
	Ms. Sangeeta Gad	University of Houston-Downtown	Houston, TX
	Dr. Everett Gibson	NASA Johnson Space Center	Houston, TX
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Dr. Gary Lofgren	NASA Johnson Space Center	Houston, TX
	Dr. David McKay	NASA Johnson Space Center	Houston, TX
	Dr. Glen Merrill	University of Houston-Downtown	Houston, TX
	Dr. Penny Morris	University of Houston-Downtown	Houston, TX
	Dr. Victor Obot	Texas Southern University	Houston, TX
	Dr. Patricia Reiff	Rice University	Houston, TX
	Dr. Craig Schwandt	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Eileen Stansbery	NASA Johnson Space Center	Houston, TX
	Dr. Carolyn Sumners	Houston Museum of Natural Science	Houston, TX
Partner(s):	Houston Museum of Natural Science		Houston, TX
	Rice University		Houston, TX
	Space Center Houston		Houston, TX
	Texas Southern University		Houston, TX
	University of Houston-Downtown		Houston, TX

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Oct 00	14 Oct 00	Science Teachers Association of Texas Conference for the Advancement of Science Teaching	College Station, TX	-	250	-
08 Dec 00	13 Jul 01	Space Center Houston	Houston, TX	170	-	-

20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	200	150	-
24 Apr 01	20 Jul 01	University of Houston-Downtown	Houston, TX	85	-	-
29 May 01	10 Sep 01	NASA Johnson Space Center	Houston, TX	190	-	-

#### Astronomy Connections: Teacher Professional Development

Theme(s): SEC, SEU

Msn/Prgm: Adler, SEU Forum, DePaul B/F, OAI B/F, SEC Forum

Description: The Astronomy Connections Teacher Professional Development program provides teachers with sustained support and resources necessary to implement a thematic curriculum. Middle school teachers work in pairs of one science teacher and one nonscience teacher to integrate astronomy-related topics across the school curriculum. Specific emphasis is placed on improving teacher content knowledge, integrating technology into the instructional program, and using museum resources to support teaching and learning. Specific topics of focus this year included Gravity & Black Holes and the Sun-Earth Connection.

Primary URL: <http://www.adlerplanetarium.org/education/ac/>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
03 Feb 00	17 Nov 01	Adler Planetarium and Astronomy Museum	Chicago, IL	3,658	-	-

#### Carnegie Academy for Science Education (CASE) Summer Institute

Theme(s): ASO, SSE

Msn/Prgm: NAI, MESSENGER

Description: The CASE Summer Institute is a five-week program for elementary teachers that focuses on science content and pedagogy. Each of the five weeks is centered on a theme in the field of astrobiology. Themes include microbes, mission designs and goals in astrobiology research, hydrothermal vent geo- and bio-diversity, the characteristics of life, and the potential of life on extra-solar planets. Scientists teach and contribute to the work of classroom educators by highlighting scientific discoveries and leading activities. The Institute exposes teachers to new ways to teach math and science, making use of current software and materials. Teachers spend their days engaged in hands-on, minds-on activities that their students will use. This strategy leads to implementations that engage the attention of both students and teachers, an element critical to the actual use of materials developed.

Lead: Mr. Charles James, Carnegie Academy for Science Education, Washington, DC 20005  
E-mail: [ccjames@pst.ciw.edu](mailto:ccjames@pst.ciw.edu). Phone: 202-939-1124.

Scientist(s): Dr. Sean Solomon Carnegie Institute of Washington Washington, DC  
Partner(s): National Science Foundation Arlington, VA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
24 Jun 01	28 Jul 01	Carnegie Academy for Science Education	Washington, DC	75	-	-

#### Deep Impact Educator Workshops

Theme(s): SSE

Msn/Prgm: Deep Impact

Description: Deep Impact participated in several educator workshops to bring comet science, math, and the engineering of the Deep Impact Mission to classrooms. Teachers were given experience in activities and training resources to excite their students about science, math, and space exploration. Two activities were tested and used this year in these workshops. The Deep Impact mission technology was used to introduce a new approach to cratering. A second activity, "Why We Explore Comets," begins with the very basics of comet science and the ways in which scientists have learned about comets throughout history. The module is flexible to expansion and also includes mission information and activities for other comet missions like Stardust.

Lead: Dr. Lucy McFadden, University of Maryland, College Park, MD 20742  
E-mail: [Mcfadden@astro.umd.edu](mailto:Mcfadden@astro.umd.edu). Phone: 301-405-2081.

Primary URL: <http://deepimpact.jpl.nasa.gov>

2nd URL: <http://deepimpact.umd.edu>

Scientist(s): Dr. Karen Meech University of Hawaii at Manoa Honolulu, HI

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Jan 01	20 Jan 01	Bishop Museum	Honolulu, HI	30	-	-
25 Jan 01	25 Jan 01	Bishop Museum	Honolulu, HI	42	60	-
26 Jan 01	26 Jan 01	Bishop Museum	Honolulu, HI	70	-	-
03 Feb 01	03 Feb 01	Bishop Museum	Honolulu, HI	140	-	-
09 Feb 01	09 Feb 01	Institute for Astronomy	Honolulu, HI	90	-	-
11 Jun 01	29 Jun 01	Institute for Astronomy	Honolulu, HI	60	-	-
13 Jun 01	13 Jun 01	NASA Jet Propulsion Laboratory ERC	Pomona, CA	28	-	-
19 Jul 01	19 Jul 01	NASA Jet Propulsion Laboratory ERC	Pomona, CA	30	-	-

## From the Sun to the Earth Content Workshop

Theme(s): SEC

Msn/Prgm: ISTEP, Cluster II, Geotail, Polar, Wind

Description: The International Solar-Terrestrial Physics (ISTP) Program Office at NASA Goddard Space Flight Center coordinates the content presentations and activity applications of the science for teachers and NASA network education specialists. The participants develop workshops using the content and activities for educators and school districts within their States.

Lead: Mr. Michael Carlowicz, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [mcarlowi@pop600.gsfc.nasa.gov](mailto:mcarlowi@pop600.gsfc.nasa.gov). Phone: 301-286-6353.Primary URL: <http://istp.gsfc.nasa.gov>

Scientist(s): Dr. Nicola Fox NASA Goddard Space Flight Center Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	75	-	-

## Fun with Planetary Geology in the Classroom

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SERCH B/F

Description: The workshop "Fun with Planetary Geology in the Classroom" promoted the Multi-Sensory Space Science Kit and its dynamic usefulness. It was the first time that participants were provided with a digital copy of all NASA educator guidebooks and corresponding materials used in the workshop. Session abstract: Have you ever wondered what another planet's surface looks like or how it was formed? Come explore our solar system in a fun-filled, action-packed, full-day workshop. We'll use numerous hands-on activities to explore the many geologic processes that are active in our solar system. Workshop activities are targeted for teachers of grades 4-8, with discussion directed to the higher and lower grades and special-needs audiences. All activities have been tested by teachers, scientists, and students and are guaranteed to stimulate your students' imagination. Registered participants will receive classroom materials, including recent posters, maps, slide sets, activity workbooks, and much more.

Lead: Dr. Cassandra Runyon, College of Charleston, Charleston, SC 29424

E-mail: [cass@cofc.edu](mailto:cass@cofc.edu). Phone: 843-953-8279.

Partner(s): Geological Society of America (GSA) Boulder, CO  
 NASA Johnson Space Center Houston, TX  
 South Carolina Space Grant Consortium Charleston, SC

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Nov 00	16 Nov 00	Geological Society of America (GSA) Meeting	Reno, NV	16	-	-

## FUSE 2001 Teacher Internship at JHU

Theme(s): ASO

Msn/Prgm: FUSE

Description: A high school science teacher was hosted for a four-week internship by the Far-Ultraviolet Explorer (FUSE) project at the Johns Hopkins University Department of Physics and Astronomy to continue development of

FUSE-related classroom material. The two objectives proposed for this project have been fulfilled. The second issue of the educational kit in the series "Exploring Our Universe: from the Classroom to Outer Space" has been entirely revised based on feedback from classroom experiences in the past school year. The series is a product of the FUSE educational program (a description can be found in the FUSE educational Web page <http://fuse.pha.jhu.edu/outreach>). The teacher had developed an early version of some lesson plans and material included in the second issue during the summer 2000 internship. The lesson plans were tested in classrooms during the past school year and evaluated by scientists and educators. Additionally, the graphic presentation of the package has been improved to make it more appealing and user-friendly to teachers and students. The revised version is online (accessible from <http://fuse.pha.jhu.edu/outreach>). The classroom materials all relate to the FUSE satellite and cover topics of the science curriculum defined by the national science standards for physics, algebra, geometry, and astronomy/Earth science at middle and high school levels. A new lesson plan and activities for the first issue of the series (Spectroscopy) have also been developed during the 2001 internship and added online. Thanks to this addition, Issue I now includes classroom material at both the middle and high school levels. The teacher's salary was sponsored by the Maryland Space Grant Consortium.

Lead: Dr. Luciana Bianchi, Johns Hopkins University, Baltimore, MD 21218-2695  
E-mail: [bianchi@pha.jhu.edu](mailto:bianchi@pha.jhu.edu). Phone: 410-516-4009.

Primary URL: <http://fuse.pha.jhu.edu/outreach>

#### Genesis Chautauqua Program

Theme(s): SEC, SSE

Msn/Prgm: Genesis

Description: Chautauqua Short Courses are an annual series of forums in which scholars at the frontiers of various sciences meet intensively for several days with undergraduate college teachers of science. The series is held at colleges and universities throughout the United States, as well as at selected special sites. These forums provide an opportunity for invited scholars to communicate new knowledge, concepts, and techniques directly to college teachers in ways that are immediately beneficial to their teaching. The primary aim is to enable undergraduate teachers in the sciences to keep their teaching current with respect to both content and pedagogy. From year to year, there is an attempt to rotate courses among different regions of the country.

Lead: Dr. Gilbert Yanow, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [gilbert.yanow@jpl.nasa.gov](mailto:gilbert.yanow@jpl.nasa.gov). Phone: 818-354-8060.

Primary URL: <http://www.engrng.pitt.edu/>

2nd URL: <http://www.engrng.pitt.edu/chautauqua/>

Partner(s): California Institute of Technology Pasadena, CA  
Los Alamos National Laboratory Los Alamos, NM  
NASA Kennedy Space Center Kennedy SC, FL  
National Science Foundation Arlington, VA

#### Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 May 01	23 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	28	-	-
30 Jul 01	04 Aug 01	Marriott Hotel	Cape Canaveral, FL	43	-	-
01 Aug 01	01 Aug 01	Brevard Community College	Cocoa, FL	16	-	-
08 Aug 01	11 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	31	-	-
16 Aug 01	18 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	25	-	-

#### Genesis Conference Workshops

Theme(s): SEC, SSE

Msn/Prgm: Genesis

Lead: Dr. Gilbert Yanow, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [gilbert.yanow@jpl.nasa.gov](mailto:gilbert.yanow@jpl.nasa.gov). Phone: 818-354-8060.

Partner(s): Mid-continent Research for Education and Learning (McREL) Aurora, CO

#### Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Oct 00	06 Oct 00	Education Development Center, Inc. (EDC) Conference	Spearfish, SD	65	-	-

26 Oct 00	28 Oct 00	Nebraska Association of Teachers of Science (NATS) Fall Conference 2000	Fremont, NE	12	-	-
12 Nov 00	16 Nov 00	Geological Society of America (GSA) Meeting	Reno, NV	-	150	-
03 Jan 01	05 Jan 01	Orange County Outdoors Educators Conference	Oak Glen, CA	550	-	-
12 Mar 01	12 Mar 01	Kean University	Union, NJ	14	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	3	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	20	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	25	-	-
21 Mar 01	21 Mar 01	National Science Education Leadership Association (NSELA) 2001 Mini-Conference	St. Louis, MO	25	-	-
02 Apr 01	04 Apr 01	National Council of Supervisors of Mathematics	Orlando, FL	30	-	-
27 Apr 01	29 Apr 01	Kansas Association of Teachers of Science (KATS) Kamp 2001	Junction City, KS	6	-	-
27 Apr 01	29 Apr 01	Kansas Association of Teachers of Science (KATS) Kamp 2001	Junction City, KS	18	-	-
26 Jul 01	26 Jul 01	NASA Ames Research Center	Moffett Field, CA	50	-	-
27 Jul 01	27 Jul 01	21st Century Community Learning Centers	Wichita, KS	25	-	-
15 Aug 01	17 Aug 01	Los Angeles County Office of Education	Downey, CA	7	-	-
		NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-

#### Genesis Education Event Exhibits

Theme(s): SEC, SSE

Msn/Prgm: Genesis

Partner(s): Mid-continent Research for Education and Learning (McREL)

Aurora, CO

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	2,100	-	-
12 Oct 00	14 Oct 00	Science Teachers Association of Texas Conference for the Advancement of Science Teaching	College Station, TX	500	-	-
16 Nov 00	18 Nov 00	National Science Teachers Association (NSTA) Eastern Area Conference	Baltimore, MD	-	300	-
07 Dec 00	09 Dec 00	National Science Teachers Association (NSTA) Southwestern Area Conference	Phoenix, AZ	-	1,500	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	2,500	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
21 Jul 01	22 Jul 01	City of Aurora, Colorado	Aurora, CO	-	-	-
27 Jul 01	27 Jul 01	21st Century Community Learning Centers	Wichita, KS	100	-	-
01 Aug 01	01 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	80	-	-

#### GLAST Sponsored Presentations to Teachers

Theme(s): SEU

Msn/Prgm: GLAST

Description: Teacher Workshops associated with GLAST utilize the observations and scientific discoveries of the GLAST mission to improve the understanding and utilization of physical science and mathematics concepts for grades 9 through 12.

Lead: Dr. Lynn Cominsky, Sonoma State University, Rohnert Park, CA 94928

E-mail: [lynnc@charmian.sonoma.edu](mailto:lynnc@charmian.sonoma.edu). Phone: 707-664-2655.

Primary URL: <http://www-glast.sonoma.edu>

Scientist(s):	Dr. Patricia Boyd	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Lynn Cominsky	Sonoma State University	Rohnert Park, CA
	Dr. Chryssa Kouveliotou	NASA Marshall Space Flight Center	Huntsville, AL

Dr. Philip Plait	Sonoma State University	Rohnert Park, CA
Dr. Steve Ritz	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Hartmut Sadrozinski	University of California, Santa Cruz	Santa Cruz, CA
Dr. Terry Schalk	University of California, Santa Cruz	Santa Cruz, CA
Ms. Karen Smale	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Alan Smale	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Laura Whitlock	Sonoma State University	Rohnert Park, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
28 Oct 00	28 Oct 00	University of California, Santa Cruz	Santa Cruz, CA	30	-	-
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	3,000	-	-
03 Apr 01	06 Apr 01	Gamma 2001	Baltimore, MD	25	-	-
13 Jul 01	18 Jul 01	Astronomical Society of the Pacific (ASP) Meeting	St. Paul, MN	50	-	-
26 Jul 01	10 Aug 01	University of California, Santa Cruz	Santa Cruz, CA	5	-	-

## HEASARC Educator Workshop

Theme(s): SEU

Msn/Prgm: HEASARC

Description: Presentation on the content of the StarChild Web site.

Lead: Dr. James Lochner, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [lochner@xeric.gsfc.nasa.gov](mailto:lochner@xeric.gsfc.nasa.gov). Phone: 301-286-9711.Primary URL: <http://starchild.gsfc.nasa.gov>

Scientist(s):	Dr. Patricia Boyd	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. James Lochner	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Ronald Oliverson	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Steve Ritz	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Gail Rohrbach	NASA Goddard Space Flight Center	Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
03 Mar 01	03 Mar 01	Alabama Education Association Aerospace Celebration	Gadsden, AL	10	-	-
07 Mar 01	07 Mar 01	National Teacher Training Institute	New York, NY	140	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	100	-	-
03 Apr 01	06 Apr 01	Gamma 2001	Baltimore, MD	21	-	-
15 May 01	15 May 01	Latino Educato (ASPIRA)	Atlantic City, NJ	20	-	-
14 Jun 01	14 Jun 01	NASA Goddard Space Flight Center	Greenbelt, MD	27	-	-
13 Jul 01	13 Jul 01	NASA Goddard Space Flight Center	Greenbelt, MD	8	-	-
25 Jul 01	25 Jul 01	NASA Goddard Space Flight Center	Greenbelt, MD	25	-	-

## HETE-2 Teachers Workshops

Theme(s): SEU

Msn/Prgm: CXO, HETE-2, RXTE

Description: The MIT Center for Space Research (CSR) is an active contributor to workshops to present middle and high school science teachers with the content, materials, and methods to involve their students with the HETE-2 satellite mission. CSR scientists directly involved in several other space missions also take part in workshops focused on space science.

Lead: Dr. Irene Porro, Massachusetts Institute of Technology, Cambridge, MA 02139

E-mail: [iporro@space.mit.edu](mailto:iporro@space.mit.edu). Phone: 617-258-7481.Primary URL: <http://space.mit.edu/HETE>2nd URL: <http://space.mit.edu/CSR/outreach>

Scientist(s):	Dr. Marshall Bautz	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Hale Van Dorn Bradt	Massachusetts Institute of Technology	Cambridge, MA

Partner(s):	Dr. Claude Canizares	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Alan Levine	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Edward Morgan	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Irene Porro	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Ronald Remillard	Massachusetts Institute of Technology	Cambridge, MA
	Dr. George Ricker	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Roland Vanderspek	Massachusetts Institute of Technology	Cambridge, MA
Event(s):	Massachusetts Institute of Technology		Cambridge, MA

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
28 Mar 01	28 Mar 01	Massachusetts Institute of Technology	Cambridge, MA	20	-	-

#### Hubble Space Telescope: Workshops/Presentations

Theme(s): ASO

Msn/Prgm: HST

Description: Space Telescope Science Institute staff are often invited and/or requested by professional organizations, community organizations, radio and television stations, and schools to give talks and/or make presentations. From Teach for America to Rotary Clubs, National Public Radio broadcasts to local television stations, graduate education program students to first-grade classrooms, the Space Telescope Science Institute has presented Hubble Space Telescope materials that have excited, amazed, and challenged a wide variety of public audiences.

Lead: Ms. Bonnie Eisenhamer, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [bonnie@stsci.edu](mailto:bonnie@stsci.edu). Phone: 410-338-4798.

Scientist(s):	Dr. Steven Beckwith	Space Telescope Science Institute	Baltimore, MD
	Dr. Carol Christian	Space Telescope Science Institute	Baltimore, MD
	Dr. Mark Clampin	Space Telescope Science Institute	Baltimore, MD
	Dr. Carol Grady	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Helen Hart	Space Telescope Science Institute	Baltimore, MD
	Ms. Cathy Imhoff	Space Telescope Science Institute	Baltimore, MD
	Dr. Mario Livio	Space Telescope Science Institute	Baltimore, MD
	Dr. Melissa McGrath	Space Telescope Science Institute	Baltimore, MD
	Dr. Paolo Padovani	Space Telescope Science Institute	Baltimore, MD
	Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD
	Dr. Mark Voit	Space Telescope Science Institute	Baltimore, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
04 Oct 00	19 May 01	Howard County Public Library	Ellicott City, MD	500	-	-
06 Oct 00	08 Oct 00	Farpoint Science Fiction Convention	Hunt Valley, MD	-	200	-
16 Oct 00	17 Oct 00	Denali Elementary School	Anchorage, AK	243	-	-
17 Oct 00	17 Oct 00	Anchorage Montessori School	Anchorage, AK	14	-	-
17 Oct 00	17 Oct 00	Tudor Elementary School	Anchorage, AK	94	-	-
18 Oct 00	18 Oct 00	Cooper Landing Elementary School	Cooper Landing, AK	63	-	-
18 Oct 00	18 Oct 00	Romig Middle School	Anchorage, AK	104	-	-
19 Oct 00	19 Oct 00	Baxter Elementary School	Anchorage, AK	94	-	-
20 Oct 00	20 Oct 00	Airport Heights Elementary School	Anchorage, AK	260	-	-
20 Oct 00	20 Oct 00	Service High School	Anchorage, AK	78	-	-
21 Oct 00	22 Oct 00	SciCon Alaska: Science Fiction Convention	Anchorage, AK	-	500	-
23 Oct 00	23 Oct 00	Hart Middle School	Washington, DC	176	-	-
24 Oct 00	24 Oct 00	Towson University	Towson, MD	-	101	-
27 Oct 00	29 Oct 00	Vulkon Science Fiction Convention	Strongsville, OH	-	300	-
27 Oct 00	29 Oct 00	Vulkon Science Fiction Convention	Strongsville, OH	-	400	-
28 Oct 00	28 Oct 00	University of Texas at Austin	Austin, TX	20	-	-
31 Oct 00	31 Oct 00	Towson University	Towson, MD	-	101	-

02 Nov 00	04 Nov 00	Learning Strategies for Science Education Web Sites	Salt Lake City, UT	12	-	-
02 Nov 00	04 Nov 00	Learning Strategies for Science Education Web Sites	Salt Lake City, UT	48	-	-
04 Nov 00	04 Nov 00	Christian Liberty Academy	Arlington Heights, IL	100	-	-
07 Nov 00	07 Nov 00	Towson University	Towson, MD	-	101	-
08 Nov 00	08 Nov 00	Library of Congress	Washington, DC	200	-	-
14 Nov 00	14 Nov 00	Towson University	Towson, MD	-	101	-
11 Dec 00	11 Dec 00	Astronomical Society of Harrisburg	Harrisburg, PA	100	-	-
19 Dec 00	19 Dec 00	Albert Einstein High School	Kensington, MD	101	-	-
19 Jan 01	19 Jan 01	Halethorpe Elementary School	Baltimore, MD	208	-	-
01 Mar 01	01 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
12 Mar 01	12 Mar 01	Belleville Savage Elementary School	Belleville, MI	283	-	-
12 Mar 01	12 Mar 01	Birmingham Covington Middle School	Bloomfield Hills, MI	314	-	-
13 Mar 01	13 Mar 01	Herndon High School	Herndon, VA	120	-	-
13 Mar 01	13 Mar 01	Lincoln High School	Ypsilanti, MI	303	-	-
13 Mar 01	13 Mar 01	Scarlett Middle School	Ann Arbor, MI	76	-	-
14 Mar 01	14 Mar 01	King High School	Detroit, MI	344	-	-
14 Mar 01	16 Mar 01	Michigan Association for Computer Users in Learning Educators Conference	Detroit, MI	-	250	-
21 Mar 01	21 Mar 01	Talent Middle School	Talent, OR	21	-	-
23 Mar 01	25 Mar 01	LunaCon: Science Fiction Convention	Rye Brook, NY	-	200	-
30 Mar 01	01 Apr 01	I-Con: Science Fiction Convention	Stony Brook, NY	-	300	-
30 Mar 01	01 Apr 01	I-Con: Science Fiction Convention	Stony Brook, NY	-	400	-
03 Apr 01	03 Apr 01	Mt. St. Joseph High School	Baltimore, MD	101	-	-
12 Apr 01	19 Apr 01	TV Fox 45—News at 10	Baltimore, MD	-	-	-
16 Apr 01	16 Apr 01	Hunt Valley Inn	Baltimore, MD	-	76	-
16 Apr 01	16 Apr 01	Martin Boulevard Elementary	Baltimore, MD	150	-	-
19 Apr 01	24 Apr 01	Space Telescope Science Institute	Baltimore, MD	-	-	200,000
26 Apr 01	26 Apr 01	Salt Spring Island Community Center	Salt Spring Island, BC	-	200	-
09 May 01	09 May 01	Pacific Science Center	Seattle, WA	-	400	-
10 May 01	11 May 01	MARCO Science Fiction Convention	Columbus, OH	-	-	-
15 May 01	15 May 01	Michigan Space Grant	Ann Arbor, MI	-	250	-
18 May 01	18 May 01	South Dorchester School	Church Creek, MD	220	-	-
19 May 01	19 May 01	Boy Scout Expo	Baltimore, MD	-	1,000	-
21 May 01	21 May 01	Montessori School	Baltimore, MD	-	275	-
25 May 01	28 May 01	Balticon 35: Science Fiction Convention	Baltimore, MD	-	400	-
25 May 01	25 May 01	Oakland Terrace Elementary School	Silver Spring, MD	130	-	-
30 May 01	30 May 01	Charles Carroll Barrister Elementary School	Baltimore, MD	130	-	-
03 Jun 01	07 Jun 01	American Astronomical Society (AAS) Meeting	Pasadena, CA	45	-	-
08 Jun 01	08 Jun 01	Rogers Forge Elementary School	Baltimore, MD	25	-	-
20 Jun 01	20 Jun 01	Star Party Convention	Morgantown, WV	-	100	-
10 Jul 01	10 Jul 01	Maryland Science Center	Baltimore, MD	15	-	-
11 Jul 01	11 Jul 01	AstroFest at Penn State University	University Park, PA	-	1,200	-
24 Jul 01	24 Jul 01	Maryland Science Center	Baltimore, MD	30	-	-
26 Jul 01	26 Jul 01	AICon (Amateur Astronomers)	Washington, DC	100	-	-
27 Jul 01	27 Jul 01	University of Pennsylvania	Philadelphia, PA	200	-	-
24 Aug 01	24 Aug 01	Mark Steiner Show	Baltimore, MD	-	40,000	-
24 Aug 01	24 Aug 01	Talk to the Nation: Science Friday	New York, NY	-	-	-
27 Aug 01	27 Aug 01	Diane Rehm Show	Washington, DC	-	1,090,300	-
28 Aug 01	28 Aug 01	Indiana Space Grant Consortium	West Lafayette, IN	-	-	-
30 Aug 01	03 Sep 01	Millennium Philcon Science Fiction Convention	Philadelphia, PA	-	400	-
30 Aug 01	03 Sep 01	Millennium Philcon Science Fiction Convention	Philadelphia, PA	-	500	-
28 Sep 01	30 Sep 01	SpaceFest	Titusville, FL	-	500	-
		AstroFest at Penn State University	University Park, PA	-	1,200	-

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 Illinois MagNet

Theme(s): SEC

Msn/Prgm: DePaul B/F, SEC Forum

Description: The Illinois MagNet is a project in which teachers and their students collect data about magnetic activity and share the data on a central Web site. Since January 2001, a series of meetings has taken place at which Illinois teachers have built magnetometers and discussed issues related to designing and using the instrument and teaching the science behind it in the classroom. Partners in this program are the Sun-Earth Connection Forum and Walter Payton High School in Chicago, a science/mathematics magnet school that will serve as the Data Center for the project. Unique characteristics of the program are that it is teacher-created and teacher-led, and that it offers possibilities of extensions in ways that were originally unexpected.

Lead: Dr. Lynn Narasimhan, DePaul University, Chicago, IL 60614-2458

E-mail: [cnarasim@depaul.edu](mailto:cnarasim@depaul.edu). Phone: 773-325-1854.Primary URL: [www.payton.cps.k12.il.us/magnet](http://www.payton.cps.k12.il.us/magnet)

Scientist(s): Dr. Bernhard Beck-Winchatz DePaul University Chicago, IL  
 Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD  
 Dr. Elizabeth Roettger DePaul University Chicago, IL

Partner(s): Walter Payton High School Chicago, IL

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
02 Dec 00	02 Dec 00	Walter Payton High School	Chicago, IL	8	-	-
13 Jan 01	13 Jan 01	Walter Payton High School	Chicago, IL	8	-	-
03 Feb 01	03 Feb 01	Walter Payton High School	Chicago, IL	35	-	-
20 Mar 01	20 Mar 01	DePaul University	Chicago, IL	20	-	-
05 May 01	05 May 01	DePaul University	Chicago, IL	10	-	-

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 IMAGE Teacher Workshops

Theme(s): SEC

Msn/Prgm: IMAGE

Description: Since 1996, scientists and education specialists of the Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) education and public outreach program have trained teachers to use its classroom activities and other products in support of programs and conferences with NSTA, NCTM, and NASA Goddard Space Flight Center.

Lead: Dr. Sten Odenwald, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [odenwald@bolero.gsfc.nasa.gov](mailto:odenwald@bolero.gsfc.nasa.gov). Phone: 301-286-6953.Primary URL: <http://image.gsfc.nasa.gov/poetry>2nd URL: <http://image.gsfc.nasa.gov/poetry/activities.html>

Scientist(s): Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD

Partner(s): Rice University Houston, TX

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Feb 01	06 Feb 01	DePaul University	Chicago, IL	44	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	140	-	-
27 Jun 01	27 Jun 01	Sherwood High School	Olney, MD	15	-	-
01 Jul 01	30 Jul 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	-	-

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 Improvement of Elementary School Science Instruction Through Early Teacher Training

Msn/Prgm: IDEAS

Description: The program held a workshop to give focused instruction and hands-on training in astronomy and space science to preservice and inservice teachers. The workshop provided preservice and early inservice elementary teachers with developmentally appropriate curriculum as well as scientist mentoring. Resources from Hubble Space Telescope, Voyager, Galileo, and Cassini were used.

Lead: Dr. David Kuehn, Pittsburg State University, Pittsburg, KS 66762.

Partner(s): Southeast Kansas Education Service Center

Greenbush, KS

### International Technology Education Association (ITEA)

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: OSS/Outreach, ASO Forum, SSE Forum, SSE Theme, Cassini/Huygens Probe, Galileo, Voyager, DPSO, CONTOUR, Deep Impact, Genesis, Lunar Prospector, MESSENGER, NEAR, Stardust, Mars E/PO, MGS, 2001 Mars Odyssey, MER, OP E/PO, Europa Orbiter, PKB, DS-1, DSMS, NEAT, Astromaterials, Mars Express, MUSES-CN, NMS, Rosetta, Ulysses, HESSI, IMAGE, ISTP, SOHO, STP, ST-5, Yohkoh, SEC Forum

Description: The ITEA is the largest professional educational association, principal voice, and information clearinghouse devoted to enhancing technology education through experiences in our K-12 schools. As an exhibitor NASA OSS had the opportunity to reach technology educators, local and State supervisors, national administrators, students, and college and university professionals seeking new products and services.

Lead: Mr. Dan Woods, NASA Office of Space Science, Washington, DC 20546  
E-mail: [dwoods@hq.nasa.gov](mailto:dwoods@hq.nasa.gov). Phone: 202-358-0850.

Primary URL: <http://spacescience.nasa.gov/education/index.htm>

Scientist(s): Mr. Steele Hill NASA Goddard Space Flight Center Greenbelt, MD  
Dr. Terry Teays Space Telescope Science Institute Baltimore, MD

Partner(s): NASA Goddard Space Flight Center Greenbelt, MD  
NASA Jet Propulsion Laboratory Pasadena, CA  
Space Telescope Science Institute Baltimore, MD  
University Corporation for Atmospheric Research (UCAR) Boulder, CO

#### Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
22 Mar 01	24 Mar 01	International Technology Education Association (ITEA) Meeting	Atlanta, GA	-	2,000	-

### ISTP Teacher-Scientist Collaboration Experience

Theme(s): SEC

Msn/Prgm: ISTP

Description: International Solar-Terrestrial Physics (ISTP) scientists at GSFC sponsor teacher interns who work within the missions with scientists to develop educational products designed to share the mission discoveries with the formal education community. The activities are validated for scientific accuracy and field-tested in local schools. They appear on the ISTP Web site.

Lead: Mr. Michael Carlowicz, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [mcarlowi@pop600.gsfc.nasa.gov](mailto:mcarlowi@pop600.gsfc.nasa.gov). Phone: 301-286-6353.

Primary URL: <http://istp.gsfc.nasa.gov>

Scientist(s): Dr. Mario Acuna NASA Goddard Space Flight Center Greenbelt, MD  
Dr. Robert Hoffman NASA Goddard Space Flight Center Greenbelt, MD

#### Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 May 01	30 Sep 01	NASA Goddard Space Flight Center	Greenbelt, MD	1	-	1

### Los Alamos Space Science Outreach Program (LASSO)

Theme(s): SEC

Msn/Prgm: SRT

Description: The LASSO program is based on teacher workshops in which K-14 teachers spend several weeks at Los Alamos National Laboratories (LANL) learning space science from lab scientists and developing methods and materials for teaching this science to their students. The program is designed to provide hands-on space science training to teachers, as well as assistance in developing lesson plans for use in their classrooms. The program supports an instructional model based on education research and cognitive theory. Students and teachers engage in activities that encourage critical thinking and a constructivist approach to learning. LASSO is run through the Los Alamos Science Education Team (SET). SET personnel have many years of experience in teaching, education research, and science education programs. Their involvement ensures that the teacher workshop program is grounded in sound pedagogical methods and meets current educational standards. This year, the lesson plans focused on the solar wind and Earth's magnetosphere. The program focus was on current space science projects including the Magnetospheric Plasma Analyzers (MPA), the Advanced Composition

Explorer (ACE), the Imager for Magnetopause to Auroral Global Exploration (IMAGE), and the Two Wide-angle Imaging Neutral-atom Spectrometers (TWINS). LASSO is an umbrella program for space science education activities at LANL. LASSO was created to enhance the science and math interests and skills of both New Mexico and national students. The LASSO umbrella allows maximum leveraging of E/PO funding from a number of projects (and thus maximum educational benefits to both students and teachers) while providing a format for the expression of the unique science perspective of each project.

Lead: Dr. Michelle Thomsen, Los Alamos National Laboratory, Los Alamos, NM 87545  
E-mail: [mthomsen@lanl.gov](mailto:mthomsen@lanl.gov). Phone: 505-667-1210.

Primary URL: <http://set.lanl.gov/programs/lasso/lassomain.html>

Scientist(s):	Mr. Philip Barker	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Geoffrey Reeves	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Ruth Skoug	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Michelle Thomsen	Los Alamos National Laboratory	Los Alamos, NM

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
27 Apr 01	27 Apr 01	Bradbury Science Museum	Los Alamos, NM	-	53	-
09 Jul 01	09 Aug 01	Los Alamos National Laboratory	Los Alamos, NM	20	-	-

LWS 2001 Summer Teacher Internship

Theme(s): SEC

Msn/Prgm: LWS

Description: LWS E/PO is creating a network of teacher leaders to promote science, math, and technology in our American schools and preservice teachers' programs, as well as to enhance teachers' professional development. Teachers interns worked on educational materials and coordinated resources to be posted later in the LWS E/PO Web site. Upon return to their respective schools, participating teachers are monitored and receive support from the E/PO office. Participants also have the opportunity to exchange ideas and acquire new information for their classes from scientists and engineers at GSFC.

Lead: Dr. Evelina Fellicite-Maurice, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [efelicit@pop400.gsfc.nasa.gov](mailto:efelicit@pop400.gsfc.nasa.gov). Phone: 301-286-6949.

Primary URL: <http://lws-edu.gsfc.nasa.gov>

LWS Project 2061 Workshop for K-12 Teachers and E/PO Leads

Theme(s): SEC

Msn/Prgm: STP, LWS

Description: LWS Project 2061 workshop was for K-12 teachers and E/PO leads. The participants were invited to contribute to the development of K-12 supplementary curriculum materials that focus on a set of key scientific ideas that are being investigated by NASA under the SEC theme in the Living With a Star program. Participants, based on their expertise, planned units of study for their own classes. Participants identified a coherent set of learning goals to serve as a basis for their course design, became familiar with the research base on preconceptions and misconceptions that students commonly have on topics of the learning goals, and designed several assessment probes for each learning goal and defined minimum performance levels for demonstrating achievement. They also identified relevant activities that can help students to progress from their initial conceptions to the scientific ideas.

Lead: Dr. Evelina Fellicite-Maurice, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [efelicit@pop400.gsfc.nasa.gov](mailto:efelicit@pop400.gsfc.nasa.gov). Phone: 301-286-6949.

Scientist(s):	Dr. Art Poland	NASA Goddard Space Flight Center	Greenbelt, MD
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Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
08 Aug 01	08 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	27	-	-
09 Aug 01	09 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	30	-	-
05 Sep 01	05 Sep 01	Smithsonian National Air and Space Museum	Washington, DC	-	50	-

## Mars Educator Workshops

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: These workshops provide educators with training on standards-based, Mars-related classroom activities and information on current Mars missions and their scientific and technological goals.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: <http://mars.jpl.nasa.gov/classroom/>2nd URL: <http://tes.asu.edu/neweducation.html>

Scientist(s):	Dr. Carlton Allen	NASA Johnson Space Center	Houston, TX
	Ms. Jaclyn Allen	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Bob Anderson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Gautam Badhwar	NASA Johnson Space Center	Houston, TX
	Dr. Jim Bell	Cornell University	Ithaca, NY
	Ms. Kelly Bender	Arizona State University	Tempe, AZ
	Dr. Bill Boynton	University of Arizona	Tucson, AZ
	Dr. Phil Christensen	Arizona State University	Tempe, AZ
	Dr. Todd Clancy	Space Science Institute	Boulder, CO
	Mr. Nagin Cox	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Ken Edgett	Malin Space Science Systems	La Jolla, CA
	Dr. William Feldman	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Jim Garvin	NASA Office of Space Science	Washington, DC
	Dr. Vicky Hamilton	Arizona State University	Tempe, AZ
	Mr. Jim Klemazewski	Arizona State University	Tempe, AZ
	Ms. Sheri Klug	Arizona State University	Tempe, AZ
	Dr. Steve Lee	University of Colorado	Boulder, CO
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Ms. Lynn Lowry	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Mike Malin	Malin Space Science Systems	La Jolla, CA
	Mr. Greg Mehall	Arizona State University	Tempe, AZ
	Dr. Paul Morgan	Northern Arizona University	Flagstaff, AZ
	Dr. Cherilynn Morrow	Space Science Institute	Boulder, CO
	Dr. Kenneth Neelson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jeffrey Plaut	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Trina Ray	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jim Rice	Arizona State University	Tempe, AZ
	Dr. Steve Ruff	Arizona State University	Tempe, AZ
	Dr. Susan Sakimoto	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Richard Shope III	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. David Smith	University of California, Berkeley	Berkeley, CA
	Dr. William Stefanov	Arizona State University	Tempe, AZ
	Ms. Paige Valderrama	Arizona State University	Tempe, AZ
	Mr. Keith Watt	Arizona State University	Tempe, AZ
Partner(s):	Arizona State University		Tempe, AZ
Event(s):			

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Oct 00	21 Oct 00	Arizona State University	Tempe, AZ	79	-	-
07 Dec 00	09 Dec 00	National Science Teachers Association (NSTA) Southwestern Area Conference	Phoenix, AZ	45	-	-
07 Dec 00	09 Dec 00	National Science Teachers Association (NSTA) Southwestern Area Conference	Phoenix, AZ	60	-	-
24 Jan 01	27 Jan 01	Young Diné Women's Leadership Conference	Flagstaff, AZ	84	-	-
02 Feb 01	02 Feb 01	Orlando Science Center	Orlando, FL	30	-	-
10 Feb 01	10 Feb 01	Arizona State University	Tempe, AZ	20	-	-
01 Mar 01	02 Mar 01	Arizona State University	Tempe, AZ	29	-	-
03 Mar 01	03 Mar 01	Arizona State University	Tempe, AZ	112	-	-

06 Mar 01	06 Mar 01	Los Angeles County Museum of Art	Los Angeles, CA	275	-	-
09 Mar 01	10 Mar 01	Girl Scouts of the East Valley	Tempe, AZ	-	150	-
16 Mar 01	17 Mar 01	Shonto Preparatory School	Shonto, AZ	32	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	47	47	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	48	96	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	67	134	-
26 Mar 01	26 Mar 01	Saint Vincent College	Latrobe, PA	36	25	-
27 Mar 01	27 Mar 01	Tucson Children's Museum	Tucson, AZ	15	16	-
21 Apr 01	21 Apr 01	Malin Space Science Systems	La Jolla, CA	61	59	-
16 May 01	16 May 01	Saint Vincent College	Latrobe, PA	38	-	-
21 May 01	22 May 01	Cornell University	Ithaca, NY	16	16	-
01 Jun 01	01 Jun 01	Space Science Institute	Boulder, CO	13	13	-
07 Jun 01	09 Jun 01	Girl Scouts, Little Cloud Council	Dubuque, IA	44	-	-
10 Jun 01	15 Jun 01	College of Southern Idaho	Twin Falls, ID	28	27	-
21 Jun 01	24 Jun 01	Tufts University	Medford, MA	31	30	-
22 Jul 01	27 Jul 01	Edufest	Boise, ID	7	7	-
22 Jul 01	27 Jul 01	Edufest	Boise, ID	25	25	-
22 Jul 01	27 Jul 01	Edufest	Boise, ID	45	93	-
27 Jul 01	28 Jul 01	Pinon Unified School District	Pinon, AZ	18	16	-
30 Jul 01	30 Jul 01	Peterson Air Force Base	Colorado Springs, CO	30	-	-
08 Aug 01	10 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	33	33	-
06 Sep 01	06 Sep 01	Challenger Learning Center National Flight Director Training	Alexandria, VA	53	52	-
14 Sep 01	15 Sep 01	Arizona MESA	Casa Grande, AZ	54	-	-
22 Sep 01	22 Sep 01	Flagstaff Unified School District	Flagstaff, AZ	10	-	-
27 Sep 01	28 Sep 01	Catawba Science Center	Hickory, NC	25	11	-
		California University	California, PA	21	21	-
		Tucson Children's Museum	Tucson, AZ	-	-	-

#### Microbes Teacher Workshop

Theme(s): ASO, SSE

Msn/Prgm: SRT, NAI, Astromaterials

Description: The NASA JSC Astrobiology Institute team and education partners produced a NASA addition to the traveling museum exhibit "Microbes" and displayed it for four months at Space Center Houston. The new exhibit focused on the possibility of life in space and probability that anything that is found will be a microbe. We also prepared an education module of classroom activities to complement the exhibit and presented it in two teacher workshops during the exhibits' tenure.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov). Phone: 281-483-5135.

Scientist(s):	Dr. Carlton Allen	NASA Johnson Space Center	Houston, TX
	Ms. Jaclyn Allen	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Everett Gibson	NASA Johnson Space Center	Houston, TX
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Dr. David McKay	NASA Johnson Space Center	Houston, TX

Partner(s): Space Center Houston Houston, TX

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	15 May 01	Space Center Houston	Houston, TX	50	15,000	-

### Microwave Anisotropy Probe (MAP) Formal Education

Theme(s): SEU

Msn/Prgm: MAP

Description: Microwave Anisotropy Probe (MAP) uses formal activities primarily to address teachers and school groups. Many workshops have been given at national and regional conferences to enhance teachers' knowledge of the origin and evolution of the universe as well as to inform them about SEU Forum resources. Other events that fall into this category include student visits to Princeton and scientist interaction with students from Old Bridge High School.

Lead: Dr. David Spergel, Princeton University, Princeton, NJ 08544-1001  
E-mail: [dns@astro.princeton.edu](mailto:dns@astro.princeton.edu). Phone: 609-258-3589.

Primary URL: <http://www.astro.princeton.edu/>

2nd URL: <http://www.astro.princeton.edu/~clark/teachersguide.html>

Scientist(s): Dr. Lindsay Clark Adler Planetarium and Astronomy Museum Chicago, IL  
Dr. Jacklyn Green NASA Jet Propulsion Laboratory Pasadena, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Oct 00	14 Oct 00	Great Lakes Planetarium Association Annual Conference	Chicago, IL	30	-	-
17 Jun 01	17 Jun 01	NASA Jet Propulsion Laboratory ERC	Pomona, CA	47	-	-
		NASA Jet Propulsion Laboratory	Pasadena, CA	48	-	-

### National Council of Teachers of Mathematics (NCTM)

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: OSS/Outreach, ASO Forum, SSE Forum, SEU Forum, DePaul B/F, LPI B/F, OAI B/F, SERCH B/F, SSI B/F, HST, Galileo, MGS, CXO, ACE, IMAGE, ISTP, STP, Yohkoh, SEC Forum

Description: The annual NCTM conference provides the opportunity for thousands of math teachers to come together and learn more about the new and various ways to teach math. OSS attends the conference to highlight how math is used to conduct space science and to provide education and outreach materials to the teachers.

Lead: Mr. Dan Woods, NASA Office of Space Science, Washington, DC 20546  
E-mail: [dwoods@hq.nasa.gov](mailto:dwoods@hq.nasa.gov). Phone: 202-358-0850.

Primary URL: <http://spacescience.nasa.gov/education/index.htm>

Scientist(s): Dr. Ian Griffin Space Telescope Science Institute Baltimore, MD  
Dr. Denise Smith Space Telescope Science Institute Baltimore, MD  
Dr. Terry Teays Space Telescope Science Institute Baltimore, MD  
Dr. James Thieman NASA Goddard Space Flight Center Greenbelt, MD

Partner(s): NASA Goddard Space Flight Center Greenbelt, MD  
Space Telescope Science Institute Baltimore, MD  
University Corporation for Atmospheric Research (UCAR) Boulder, CO  
University of California, Berkeley Berkeley, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
04 Apr 01	07 Apr 01	National Council of Teachers of Mathematics (NCTM) Conference	Orlando, FL	-	18,000	-

### National Science Teachers Association (NSTA)

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: OSS/Outreach, ASO Forum, SSE Forum, SEU Forum, DePaul B/F, LPI B/F, OAI B/F, SERCH B/F, SSI B/F, HST, NGST, SIRTF, SOFIA, FUSE, SIM, Keck, TPF, NAI, Cassini/Huygens Probe, Galileo, CONTOUR, Genesis, MESSENGER, NEAR, Stardust, MGS, 2001 Mars Odyssey, CXO, Constellation-X, GLAST, GP-B, LISA, EUVE, GALEX, HETE-2, MAP, SWAS, Swift, HEASARC, FIRST, Planck, XMM-Newton, Ulysses, ACE, FAST, HESSI, IMAGE, TRACE, ISTP, SOHO, TIMED, Yohkoh, SEC Forum, ST-3

Description: The annual, national NSTA conference provides the opportunity for thousands of science teachers to come together to learn about the latest discoveries in science. OSS attends the conference to provide the teachers with information about space science via posters, education briefs, hands-on activity packets, lithographs,

CDs, brochures, and other educational material. The conference also provided a venue for field-testing the Space Science Education Directory on teachers.

Lead: Mr. Dan Woods, NASA Office of Space Science, Washington, DC 20546. Phone: 202-358-0850.

Primary URL: <http://spacescience.nasa.gov/education/index.htm>

Scientist(s):	Dr. Nahide Craig	University of California, Berkeley	Berkeley, CA
	Dr. Carol Crannell	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Nicola Fox	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Patricia Reiff	Rice University	Houston, TX
	Dr. Denise Smith	Space Telescope Science Institute	Baltimore, MD
	Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD
	Dr. Michelle Thaller	California Institute of Technology	Pasadena, CA
	Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Gilbert Yanow	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	Harvard-Smithsonian Center for Astrophysics		Cambridge, MA
	Lunar and Planetary Institute		Houston, TX
	Sonoma State University		Rohnert Park, CA
	Space Telescope Science Institute		Baltimore, MD
	University of California, Berkeley		Berkeley, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	16,000	-

NEAR Teacher Training

Theme(s): SSE

Msn/Prgm: NEAR

Description: The Near Earth Asteroid Rendezvous (NEAR) E/PO office helped scientists, engineers and other team members become involved in the NEAR E/PO efforts by providing opportunities for teaching training. The E/PO office coordinated these events and provided the resources necessary for the team members to participate in these pre-arranged teacher training events. Team members led discussions and activities, provided demonstrations, and conducted classroom activities related to the NEAR mission. These efforts supported State, local, and national efforts directed toward systemic reform of science, mathematics, and technology education. Also, these activities were based on the criteria contained in the national mathematics, science, and technology standards. Teacher training was also conducted by some of our NEAR E/PO partners such as The Maryland Science Center during SpaceLink's Teacher Thursday events and Space Explorers for the NEARLink program. These were high-leverage teacher training opportunities that built on existing programs, institutions, and infrastructure.

Primary URL: <http://near.jhuapl.edu>

2nd URL: <http://www.mdsci.org/spacelink>

Scientist(s):	Ms. Kerri Beisser	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Noam Izenberg	Johns Hopkins Applied Physics Laboratory	Laurel, MD
Partner(s):	Maryland Science Center		Baltimore, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
16 Nov 00	18 Nov 00	National Science Teachers Association (NSTA) Eastern Area Conference	Baltimore, MD	-	400	-
13 Jan 01	13 Jan 01	Maryland Science Center	Baltimore, MD	22	-	-
24 Apr 01	24 Apr 01	Johns Hopkins University	Baltimore, MD	15	-	-

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**NSTA Presentation**

Theme(s): ASO

Msn/Prgm: NAI

Description: An hour-long, hands-on workshop was given at the National Science Teachers Association annual meeting in St. Louis, MO, entitled "Living in the Microbial World—Hands-on Activities in Microbial Diversity and Astrobiology." The presenters, Susan Rutland and Dee Wilkinson, provided information on the Woods Hole workshops and the NASA Astrobiology Program and presented concepts related to microbes as the most abundant and little-understood inhabitants of our planet, as well as the relevance of microbial diversity to astrobiology. Participants were given examples of various methods of capturing microbes and created low-cost plankton nets for their own classrooms.

Lead: Dr. Susan Rutland, Marine Biological Laboratory, Woods Hole, MA 02543.

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**Origins Education Forum Workshops/Presentations**

Theme(s): ASO

Msn/Prgm: ASO Forum

Description: Origins staff often attend events for professional organizations, community organizations, and schools to give talks and/or make presentations. Using the program's two defining science questions, "Where do we come from?" and "Are we alone?," Origins talks and presentations have enticed and intrigued a wide variety of audiences.

Lead: Dr. Terry Teays, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [teays@stsci.edu](mailto:teays@stsci.edu). Phone: 410-338-4733.Primary URL: <http://origins.stsci.edu>2nd URL: <http://teachspacescience.org>

Scientist(s): Dr. Cassandra Runyon

College of Charleston

Charleston, SC

Dr. Terry Teays

Space Telescope Science Institute

Baltimore, MD

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	12	-	-
31 Jan 01	31 Jan 01	National Academy of Sciences	Washington, DC	12	-	-
24 Aug 01	24 Aug 01	Space Telescope Science Institute	Baltimore, MD	22	-	-

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**Passport to the Solar System**

Theme(s): ASO, SEC, SSE

Msn/Prgm: P2K, SSE Theme, Cassini/Huygens Probe, Galileo, Voyager, CONTOUR, NEAR, Stardust, Mars E/PO, MGS, 2001 Mars Odyssey, MER, Ulysses, ACE, IMAGE, TRACE, ISTP, Polar, SOHO, Wind, Yohkoh

Description: Passport to the Solar System is a series of eight 15-minute video programs and two 30-minute teacher in-service programs, with hands-on activities and online resources, connecting the ongoing exploration of the solar system to key concepts in the core science curriculum. Using NASA researchers as on-camera presenters (and role models for careers in science), it uses current results from recent missions to enliven the national science education standards and AAAS/Project 2061 "Benchmarks" with amazing imagery and fascinating discoveries. The video programs—broadcast by participating PBS stations and State networks—are accompanied by teacher guides offering nearly 80 hands-on activities, an implementation guide, and a companion Web site.

Lead: Mr. Geoffrey Haines-Stiles, Geoff Haines-Stiles Productions, Inc., Morristown, NJ 07960

E-mail: [ghs@passporttoknowledge.com](mailto:ghs@passporttoknowledge.com). Phone: 973-656-9403.Primary URL: <http://passporttoknowledge.com/solarsystem>

Scientist(s): Dr. Claudia Alexander

NASA Jet Propulsion Laboratory

Pasadena, CA

Partner(s): Johns Hopkins Applied Physics Laboratory

Laurel, MD

Lockheed Martin Advanced Technology Center

Palo Alto, CA

Lockheed Martin Solar and Astrophysics Lab

Palo Alto, CA

NASA Goddard Space Flight Center

Greenbelt, MD

NASA Jet Propulsion Laboratory

Pasadena, CA

NASA Office of Earth Science

Washington, DC

NASA Office of Space Science

Washington, DC

National Science Foundation

Arlington, VA

SETI Institute  
 Space Science Institute  
 Space Telescope Science Institute  
 University Corporation for Atmospheric Research (UCAR)

Mountain View, CA  
 Boulder, CO  
 Baltimore, MD  
 Boulder, CO

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Sep 00	30 Aug 01	KERA, North Texas PBS Inc.	Dallas, TX	-	300,000	25,000
01 Sep 00	30 Aug 01	KLRU, Capital of Texas Public Telecommunications	Austin, TX	-	193,413	-
01 Sep 00	30 Aug 01	Louisiana Educational Television Authority	Baton Rouge, LA	-	875,054	20,000
01 Sep 00	30 Aug 01	Maryland Public Television	Owings Mills, MD	-	916,671	50,000
01 Sep 00	30 Aug 01	New Hampshire Public Television	Durham, NH	-	247,690	15,000
01 Sep 00	30 Aug 01	Tennessee Public Television Council	Martin, TN	-	133,419	10,000
01 Sep 00	30 Aug 01	Virginia Educational Satellite Network	Richmond, VA	-	1,218,698	50,000
01 Sep 00	30 Aug 01	Wisconsin Educational Telecommunications Board	Madison, WI	-	904,535	35,000

## Professional Development Workshop: Molecular Biological Approaches to Looking at Microbial Diversity and Evolution

Theme(s): ASO

Msn/Prgm: NAI

Description: Two one-day professional development workshops for Massachusetts secondary science teachers were offered. The subject of the workshop was the tools of molecular biology used to address topics of interest to astrobiologists, microbial diversity of extreme environments, and early evolution of eukaryotes. The workshop consisted of lecture, a tour of laboratory and DNA sequencing facilities, and lab bench work. A similar workshop was given for 11th-grade biology students at Falmouth Academy in Falmouth, MA. The workshop consisted of two sessions with 20 students per session.

Lead: Dr. Virginia Edgcomb, Marine Biological Laboratory, Woods Hole, MA 02543.

## Regional Planetary Imaging Facilities Teacher Workshops

Theme(s): SSE

Msn/Prgm: SRT

Description: The Regional Planetary Image Facilities (RPIFs) are a network of libraries of planetary images, maps, and digital data, comprising 18 facilities around the world (10 domestic, 8 foreign). Although the principal mission of the RPIF system is to serve the data reference needs for the planetary science community, the RPIFs have pioneered public outreach and education efforts since their establishment over 25 years ago. The RPIF system fully supports NASA's E/PO activities through a variety of means. The RPIFs engage in doing various educator workshops throughout the year.

Lead: Dr. Paul Spudis, Lunar and Planetary Institute, Houston, TX 77058-1113

E-mail: [spudis@lpi.usra.edu](mailto:spudis@lpi.usra.edu). Phone: 281-486-2193.Primary URL: <http://www.lpi.usra.edu/library/RPIF/RPIF.html>

Scientist(s):	Dr. Ronald Greeley	Arizona State University	Tempe, AZ
	Ms. Mary Ann Hager	Lunar and Planetary Institute	Houston, TX
	Mr. B. Ray Hawke	University of Hawaii at Manoa	Honolulu, HI
	Mr. Charles Hewett	Arizona State University	Tempe, AZ
	Mr. Chris Peterson	University of Hawaii at Manoa	Honolulu, HI
	Dr. Paul Spudis	Lunar and Planetary Institute	Houston, TX
	Ms. Rosemary Steinat	Smithsonian National Air and Space Museum	Washington, DC
	Dr. James Zimbelman	Smithsonian National Air and Space Museum	Washington, DC
Partner(s):	Arizona State University		Tempe, AZ
	Brown University		Providence, RI
	Cornell University		Ithaca, NY
	NASA Jet Propulsion Laboratory		Pasadena, CA
	Smithsonian National Air and Space Museum		Washington, DC
	United States Geological Survey		Flagstaff, AZ
	University of Arizona		Tucson, AZ

University of Hawaii at Manoa  
Washington University

Honolulu, HI  
St. Louis, MO

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
16 Nov 00	16 Nov 00	Arizona State University	Tempe, AZ	150	-	-
10 Feb 01	10 Feb 01	University of Hawaii at Manoa	Honolulu, HI	40	-	-
16 Feb 01	16 Feb 01	Arizona State University	Tempe, AZ	280	-	-
26 Feb 01	26 Feb 01	Smithsonian National Air and Space Museum	Washington, DC	15	-	-
06 May 01	06 May 01	University of Hawaii at Manoa	Honolulu, HI	40	-	-
20 Jul 01	20 Jul 01	Lunar and Planetary Institute	Houston, TX	25	-	-

## Science Education Gateway (SEGway)

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SRT

Description: SEGway is a national consortium of science museums, research institutions, and educators who are working together to present the latest space science research for students, teachers, and the general public. Resources developed through this rich partnership can be used to enhance classroom science programs or as self-guided modules for the general public. SEGway is both an online educational resource center and a platform for showcasing cutting-edge discoveries—adapting space science research and information for the benefit of broad audiences using Web-based learning technologies.

Lead: Dr. Nahide Craig, University of California, Berkeley, Berkeley, CA 94720

E-mail: [ncraig@ssl.berkeley.edu](mailto:ncraig@ssl.berkeley.edu). Phone: 510-643-7273.Primary URL: <http://cse.ssl.berkeley.edu/segway>

Scientist(s): Dr. Nahide Craig University of California, Berkeley Berkeley, CA

Dr. Michelle Larson University of California, Berkeley Berkeley, CA

Ms. Anne Miller-Bagwell University of California, Berkeley Berkeley, CA

Partner(s): Exploratorium San Francisco, CA

Lawrence Hall of Science Berkeley, CA

Smithsonian National Air and Space Museum Washington, DC

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	-	80	-
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	-	141	-
22 Jan 01	02 Feb 01	Horace Mann Middle School	San Francisco, CA	95	-	10
07 Feb 01	07 Feb 01	San Francisco Unified School District	San Francisco, CA	20	-	-
01 Jun 01	01 Jun 01	Hoover Elementary School	Oakland, CA	65	-	-
03 Aug 01	03 Aug 01	Astronomical Society of the Pacific (ASP)	San Francisco, CA	55	-	-
06 Aug 01	06 Aug 01	Chabot Space and Science Center	Oakland, CA	6	-	-

## Scientist-Teacher Cooperation Awards

Theme(s): SEU, SSE

Msn/Prgm: LPI B/F

Description: The Scientist-Teacher Cooperation Awards are small awards of up to \$300 with the purpose of increasing scientists' participation in educational outreach. The awards are intended to be available to all scientists performing research supported by NASA's Office of Space Science (OSS), including OSS-funded Principal Investigators and their Co-Investigators, technical support staff, and graduate students. Eligible teachers include public or private school teachers at the K-12 level and appropriate administrators such as school principals or district science coordinators. The awards are intended to be used for necessary supplies and materials for small educational projects that involve scientist-teacher cooperation.

Lead: Dr. Kathleen Johnson, Lunar and Planetary Institute, Houston, TX 77058-1113

E-mail: [johnson@lpi.usra.edu](mailto:johnson@lpi.usra.edu). Phone: 281-244-2014.Primary URL: <http://www.lpi.usra.edu/education/EPO/teachergrants.html>

Scientist(s): Dr. Don Jaffe University of Texas at Austin Austin, TX  
 Dr. Rex Saffer Villanova University Villanova, PA  
 Dr. Allan Treiman Lunar and Planetary Institute Houston, TX

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
03 Oct 00	31 May 01	Lunar and Planetary Institute	Houston, TX	2	-	-
18 Oct 00	31 May 01	Lunar and Planetary Institute	Houston, TX	2	-	-
09 May 01	31 May 02	Lunar and Planetary Institute	Houston, TX	1	-	-

## SECEF Educator Internships

Theme(s): SEC

Msn/Prgm: HESSI, IMAGE, ISTEP, SOHO, STP, SEC Forum

Description: Sun-Earth Connection (SEC) mission scientists and the Sun-Earth Connection Education Forum (SECEF) educational specialists at NASA Goddard Space Flight Center, during a 6- to 10-week summer internship, provide a partnership opportunity for educators to gain new knowledge through SEC mission discoveries, resulting in educational products that contain the cutting-edge science. The products are related to national science education standards and are pedagogically correct to entice a wider national audience. After a complete science review and field testing, the products are distributed through Web pages, teacher workshops, and NASA dissemination methods to a national audience for use in a classroom.

Lead: Ms. Elaine Lewis, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [lewis@mail630.gsfc.nasa.gov](mailto:lewis@mail630.gsfc.nasa.gov). Phone: 301-286-3337.

Primary URL: <http://sunearth.gsfc.nasa.gov>

Scientist(s): Mr. Michael Carlowicz NASA Goddard Space Flight Center Greenbelt, MD  
 Dr. Eric Christian NASA Goddard Space Flight Center Greenbelt, MD  
 Mr. Steele Hill NASA Goddard Space Flight Center Greenbelt, MD  
 Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
24 Jun 01	03 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	2	-	-

## SERCH and Space Explorers, Inc.—Regional Space Science Education Workshop

Theme(s): SSE

Msn/Prgm: SERCH B/F

Description: The objective of this SERCH/Space Explorers, Inc., initiative is to support teams of two K-12 educators from each SERCH member State to help increase understanding and awareness of the solar system exploration efforts conducted by the Jet Propulsion Laboratory (JPL). Three outstanding Solar System Educators and staff from Space Explorers, Inc., led the training. Training covered content and educational activities on solar system exploration, small bodies (comets, STARDUST, Deep Impact), Mars exploration, Cassini, Galileo, and the Deep Space Network. The group participated in a VIP tour of NASA KSC, which included an overview of the Educator Resource Center network and opportunities and information available through NASA's education programs. This SERCH/SSEP workshop emphasized the purpose and goals of NASA's solar system exploration efforts and their relationship to current JPL missions and programs. Participants are immersed in SSEP activities and curriculum supplements and how they can be used to engage students learning science, math, and technology.

Lead: Ms. Kathryn Trembl, College of Charleston, Charleston, SC 29424  
 E-mail: [serch@cofc.edu](mailto:serch@cofc.edu). Phone: 843-953-5437.

Primary URL: <http://serch.cofc.edu/serch/>

Partner(s): NASA Jet Propulsion Laboratory Pasadena, CA  
 NASA Kennedy Space Center Kennedy SC, FL  
 NASA Office of Human Resources and Education Washington, DC  
 Orlando Science Center Orlando, FL  
 Space Explorers, Inc. De Pere, WI  
 Space Science Institute Boulder, CO

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Feb 01	25 Feb 01	NASA Kennedy Space Center	Kennedy SC, FL	13	-	-

## SEU Forum Educator Workshops

Theme(s): SEU

Msn/Prgm: SEU Forum

Description: The Structure and Evolution of the Universe Forum supports and participates in educator workshops that introduce formal and informal educators to NASA Space Science relative to the SEU theme. Topics include size and scale, multiwavelength astronomy, and the detection of change over time.

Lead: Ms. Mary Dussault, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138

E-mail: [mdussault@cfa.harvard.edu](mailto:mdussault@cfa.harvard.edu). Phone: 617-496-4784.

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Oct 00	18 Oct 00	Harvard University	Cambridge, MA	30	-	-
05 Nov 00	05 Nov 00	American Association of Physics Teachers (AAPT) New England Chapter	Milton, MA	50	100	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	100	-	-

## SIRTF Teacher Workshops

Theme(s): ASO, SEU

Msn/Prgm: SIRTF

Description: Teacher workshops of at least two days length.

Lead: Dr. Michelle Thaller, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [thaller@ipac.caltech.edu](mailto:thaller@ipac.caltech.edu). Phone: 626-395-8670.

Scientist(s): Dr. Michelle Thaller California Institute of Technology Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	-	-	-
12 Feb 01	14 Feb 01	Challenger Center for Space Science Education	Alexandria, VA	111	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	21	-	-
13 Jul 01	18 Jul 01	Astronomical Society of the Pacific (ASP) Meeting	St. Paul, MN	152	-	-

## SOFIA Education Partners Program

Theme(s): ASO

Msn/Prgm: SOFIA

Description: The Stratospheric Observatory for Infrared Astronomy (SOFIA) Education Partners Program: In their home communities, SOFIA team members partner with teachers and youth group leaders to share astronomy with young people. SOFIA team members are trained in appropriate hands-on, minds-on teaching techniques and make multiple visits to their teacher-partners' classrooms or youth group events. The SOFIA team is diverse; it includes scientists, observers, instrument builders, engineers, technicians, flight crew, and educators located throughout the country.

Lead: Mr. Michael Bennett, Astronomical Society of the Pacific (ASP), San Francisco, CA 94112

E-mail: [mbennett@astrosociety.org](mailto:mbennett@astrosociety.org). Phone: 650-604-2128.

Scientist(s): Ms. Maureen Savage Universities Space Research Association (USRA)/SOFIA Moffett Field, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Nov 00	14 Nov 00	Lexington Elementary School	Los Gatos, CA	21	-	-
07 Mar 01	07 Mar 01	Lexington Elementary School	Los Gatos, CA	21	-	-
17 May 01	17 May 01	Lexington Elementary School	Los Gatos, CA	21	-	-

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**SOFIA—Astronomy at 41,000 Feet: Teacher Workshop**

Theme(s): ASO

Msn/Prgm: SIRTf, SOFIA

Description: "SOFIA—Astronomy at 41,000 Feet" is a one-hour workshop on infrared astronomy that includes demonstrations with an infrared camera, resource materials for teachers and college instructors who participate, and a view to the future of infrared astronomy with the Stratospheric Observatory for Infrared Astronomy (SOFIA) and the Space Infrared Telescope Facility (SIRTf). The goal of the workshop is to raise awareness of educators about NASA's infrared research programs and the expected contributions to our understanding of the origin and evolution of the universe. Workshop demonstrations introduce infrared imaging (with an infrared camera and/or the infrared video produced by SIRTf) with information on how participants can conduct similar activities in their curriculum. Future opportunities to participate in SOFIA research missions are described, and participants are invited to register for the SOFIA quarterly electronic newsletter.

Lead: Michael Bennett, Astronomical Society of the Pacific (ASP), San Francisco, CA 94112

E-mail: [mbennett@astrosociety.org](mailto:mbennett@astrosociety.org). Phone: 650-604-2128.

Scientist(s):  
 Dr. Michael Bennett                      NASA Ames Research Center                      Moffett Field, CA  
 Dr. Edna DeVore                              NASA Ames Research Center                      Moffett Field, CA  
 Ms. Pamela Harman                         SETI Institute    Mountain View, CA  
 Dr. Michelle Thaller                         California Institute of Technology                      Pasadena, CA

Partner(s): SETI Institute    Mountain View, CA  
 Universities Space Research Association (USRA)/SOFIA                      Moffett Field, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	25	25	-
19 Oct 00	21 Oct 00	National Science Teachers Association (NSTA) Midwest Area Conference	Milwaukee, WI	-	40	-
19 Oct 00	21 Oct 00	National Science Teachers Association (NSTA) Midwest Area Conference	Milwaukee, WI	25	25	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	30	30	-
13 Jul 01	18 Jul 01	Astronomical Society of the Pacific (ASP) Meeting	St. Paul, MN	85	85	-

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**Solar Music Teacher Module—Using Helioseismology To See Inside Our Sun**

Theme(s): SEC

Msn/Prgm: SRT

Description: We have developed an educational module to improve student understanding of Helioseismology, the study of the solar interior using the acoustic (sound) waves that are trapped within the Sun. The module uses the familiar concepts of sound and music to convey how we can gain information about the interior of the Sun by "listening to" its acoustic vibrations. The improved module has been rewritten as a teacher resource rather than an astronomer resource, thus making it of interest to a large and diverse audience. It will be distributed to teachers through existing networks and through an interpretive display at the Kitt Peak Visitor Center in Arizona and the Sunspot Astronomy and Visitor Center on Sacramento Peak, New Mexico. The module is being evaluated by a test audience of professional educators through National Optical Astronomy Observatories and National Solar Observatory outreach programs such as Project ASTRO.

Lead: Dr. John Leibacher, National Optical Astronomy Observatory, Tucson, AZ 85729-6732

E-mail: [jleibacher@noao.edu](mailto:jleibacher@noao.edu). Phone: 520-318-8305.

Primary URL: [http://www.noao.edu/education/ighelio/Solar\\_Music.pdf](http://www.noao.edu/education/ighelio/Solar_Music.pdf)

2nd URL: <http://www.noao.edu/education/ighelio/slides.html>

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**Solar Observing: A Model Curriculum for Middle School Teachers and Students**

Msn/Prgm: IDEAS

Description: In collaboration with scientists at Florida Institute of Technology (FIT), the Orlando Space Center (OSC) teachers-in-residence hosted a five-day workshop for teachers from the six-county region of Central Florida. The workshop's goal was to provide middle school teachers with informal science techniques and resources

focused on the observable features of the Sun. Teachers were able to use the 10-inch refractor telescope at OSC to observe Sun features, and eleven MEAD ETX-70EC Astro telescopes were available during the workshop, as well as during the school year, to share what they had learned in the workshop with their students.

Lead: Dr. Mark Moldwin, Florida Institute of Technology, Melbourne, FL 32901.

Partner(s): Orlando Science Center

Orlando, FL

#### Solar System Educator Program

Theme(s): SSE

Msn/Prm: SSE Forum, SSE Theme, Cassini/Huygens Probe, Galileo, Deep Impact, Stardust, Mars E/PO, MGS, 2001 Mars Odyssey, MER, OP E/PO, Europa Orbiter, PKB, DSMS

Description: The goal of the Solar System Educators Program (SSEP) is to inspire America's students, create learning opportunities, and enlighten inquisitive minds by engaging them in the solar system exploration efforts conducted by the Jet Propulsion Laboratory (JPL). SSEP accomplishes this via a nationwide network of highly skilled and motivated educators. These Solar System Educators lead workshops around the country that show teachers how to successfully incorporate solar system materials into their classes. SSEP is a collaborative effort between the Jet Propulsion Laboratory (JPL), Space Explorers Inc. (SEI), and the Virginia Space Grant Consortium (VSGC). The JPL missions and programs involved in SSEP include the Cassini Mission to Saturn, Galileo Mission to Jupiter, the STARDUST Comet Sample Return Mission, Deep Impact Mission to a Comet, the Mars Exploration Program and Outer Planets/Solar Probe Program, the Deep Space Network, JPL Space and Earth Science Directorate, and the NASA Office of Space Science Solar System Exploration Education and Public Outreach Forum.

Lead: Mr. David Seidel, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [David.Seidel@jpl.nasa.gov](mailto:David.Seidel@jpl.nasa.gov). Phone: 818-354-9313.

Primary URL: <http://www.ssep.org/>

Partner(s): Space Explorers, Inc.

De Pere, WI  
Hampton, VA

Virginia Space Grant Consortium

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
10 Sep 00	10 May 01	Carey Junior High	Cheyenne, WY	8	-	-
26 Sep 00	15 Oct 00	Rainwater Planetarium and Observatory	French Camp, MS	350	-	-
01 Oct 00	01 Oct 00	McKinley County	Gallup, NM	300	-	-
04 Oct 00	07 Oct 00	Boise Convention Center	Boise, ID	112	-	-
05 Oct 00	07 Oct 00	Morton High School	Hammond, IN	90	-	-
06 Oct 00	06 Oct 00	Kalamazoo Valley Community College	Kalamazoo, MI	74	-	-
06 Oct 00	07 Oct 00	Muskegon Community College	Muskegon, MI	26	-	-
06 Oct 00	06 Oct 00	Polk County Convention Center	Des Moines, IA	20	-	-
06 Oct 00	06 Oct 00	Salt Lake Convention Center	Salt Lake City, UT	200	-	-
06 Oct 00	07 Oct 00	University of Colorado	Boulder, CO	20	-	-
07 Oct 00	09 Oct 00	New Mexico Museum of Space History	Alamogordo, NM	26	-	-
11 Oct 00	11 Oct 00		MA	28	-	-
11 Oct 00	11 Oct 00		OH	94	-	-
11 Oct 00	11 Oct 00	Middle School	Anchorage, AK	64	-	-
11 Oct 00	12 Oct 00	New Jersey Science Convention	Somerset, NJ	15	-	-
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	38	-	-
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	76	-	-
12 Oct 00	12 Oct 00	John F. Kennedy Elementary	Green Bay, WI	9	-	-
12 Oct 00	12 Oct 00	Logan Elementary School	Los Angeles, CA	40	-	-
12 Oct 00	12 Oct 00	Logan Elementary School	Los Angeles, CA	48	-	-
12 Oct 00	13 Oct 00	Roswell Convention Center	Roswell, NM	2,062	-	-
13 Oct 00	13 Oct 00		College Station, TX	41	-	-
13 Oct 00	13 Oct 00	Community Center	Blue Springs, MO	70	-	-
13 Oct 00	13 Oct 00	Gardiner High School	Gardiner, ME	52	-	-
13 Oct 00	13 Oct 00	Heritage High School	Vancouver, WA	45	-	-
14 Oct 00	14 Oct 00	Fulton Middle School	Richmond, VA	92	-	-

15 Oct 00	15 Oct 00	Burns Park	Burns, WY	14	-	-
16 Oct 00	16 Oct 00	Polk County Convention Center	Des Moines, IA	28	-	-
19 Oct 00	21 Oct 00		Omaha, NE	16	-	-
19 Oct 00	20 Oct 00	Albuquerque Convention Center	Albuquerque, NM	60	-	-
19 Oct 00	19 Oct 01	Kealakehe High School	Kailua-Kona, HI	400	-	-
19 Oct 00	19 Oct 00	Midwest Express Center	Milwaukee, WI	24	-	-
19 Oct 00	19 Oct 00	New England Tech	Portland, ME	16	-	-
19 Oct 00	19 Oct 00	Radisson Hotel	Saint Paul, MN	116	-	-
19 Oct 00	20 Oct 00	Ramada Convention Ctr	Topeka, MS	32	-	-
20 Oct 00	20 Oct 00	Carnegie Science Center	Pittsburgh, PA	216	-	-
20 Oct 00	20 Oct 00	New England Association	Portland, ME	8	-	-
20 Oct 00	20 Oct 00	Syring Elementary	Swartz Creek, MI	22	-	-
20 Oct 00	20 Oct 00	Wayeata High School	Plymouth, MN	11	-	-
21 Oct 00	21 Oct 00	Earth and Space Center	River Groove, IL	3	-	-
21 Oct 00	21 Oct 00	Our Lady of Lourdes	Bethesda, MD	134	-	-
21 Oct 00	21 Oct 00	Parkside Junior High School	Normal, IL	14	-	-
23 Oct 00	23 Oct 00	CPS	Chicago, IL	80	-	-
26 Oct 00	26 Oct 00		Flint, MI	300	-	-
26 Oct 00	26 Oct 00	Camp Calvin Crest	Fremont, NE	11	-	-
26 Oct 00	26 Oct 00	Polk County Convention Center	Des Moines, IA	56	-	-
28 Oct 00	28 Oct 00	National Geographic Society	Washington, DC	166	-	-
28 Oct 00	28 Oct 00	Wesleyan University	Middletown, CT	20	-	-
29 Oct 00	29 Oct 00		Flint, MI	90	-	-
31 Oct 00	31 Oct 00	Unitarian	El Paso, TX	112	-	-
01 Nov 00	01 Nov 00	Ferryway School	Malden, MA	66	-	-
01 Nov 00	01 Nov 00	Mountain View Elementary School	Mendham, NJ	106	-	-
02 Nov 00	02 Nov 00		Flint, MI	42	-	-
02 Nov 00	02 Nov 00	Hapuna Prince Hotel	Kona, HI	442	-	-
04 Nov 00	04 Nov 00	Chadron State College	Chadron, NE	28	-	-
04 Nov 00	04 Nov 00	Lawrence Technological University	Southfield, MI	54	-	-
04 Nov 00	04 Nov 00	Lawrence Technological University	Southfield, MI	108	-	-
04 Nov 00	04 Nov 00	Mountainland Advanced Technology Center	Orem, UT	12	-	-
04 Nov 00	04 Nov 00	South Florida Science Museum	West Palm Beach, FL	26	-	-
04 Nov 00	04 Nov 00	WHRC Pontiac Schools	Pontiac, MI	60	-	-
05 Nov 00	05 Nov 00	South Florida Science Museum	West Palm Beach, FL	16	-	-
06 Nov 00	06 Nov 00	Brookstone School		16	-	-
09 Nov 00	09 Nov 00	New Mexico Museum of Space History	Alamogordo, NM	53	-	-
10 Nov 00	11 Nov 00	Rainwater Planetarium and Observatory	French Camp, MS	68	-	-
11 Nov 00	12 Nov 00	Eagle Creek Resort	Shelbyville, IL	68	-	-
11 Nov 00	11 Nov 00	ICE Conference	Stokie, IL	70	-	-
11 Nov 00	11 Nov 00	Mt. View Middle School	WA	20	-	-
14 Nov 00	14 Nov 00	Christa McAuliffe Planetarium	Concord, NH	40	-	-
14 Nov 00	14 Nov 00	Grand Blanc High School	Grand Blanc, MI	70	-	-
15 Nov 00	15 Nov 00	Albin Memorial Park	Albin, WY	6	-	-
16 Nov 00	16 Nov 00	Convention Center	Baltimore, MD	34	-	-
16 Nov 00	16 Nov 00	Inez Middle School	Inez, KY	288	-	-
16 Nov 00	16 Nov 00	University of Louisiana at Monroe	Monroe, LA	54	-	-
17 Nov 00	17 Nov 00	Ann Antolini School	New Hartford, CT	52	-	-
18 Nov 00	18 Nov 00	Cernan Earth and Space Center	River Grove, IL	10	-	-
18 Nov 00	18 Nov 00	Convention Center	Baltimore, MD	26	-	-
21 Nov 00	21 Nov 00	Ann Antolini School	New Hartford, CT	48	-	-
21 Nov 00	21 Nov 00	Grand Blanc High School	Grand Blanc, MI	30	-	-
30 Nov 00	30 Nov 00	Ann Antolini School	New Hartford, CT	46	-	-
30 Nov 00	30 Nov 00	Muncie Community Schools' Planetarium	Muncie, IN	48	-	-
30 Nov 00	30 Nov 00	Springs Resort	Champion, PA	116	-	-
01 Dec 00	01 Dec 00	Pennsylvania Science Center	Seven Valleys, PA	110	-	-
01 Dec 00	01 Dec 00	University Center	Williamsburg, VA	80	-	-

02 Dec 00	02 Dec 00	Challenger Learning Center	San Benito, TX	24	-	-
04 Dec 00	04 Dec 00	CPS	Chicago, IL	50	-	-
04 Dec 00	04 Dec 00	Tracy School	Erie, PA	40	-	-
07 Dec 00	09 Dec 00	Phoenix Civic Center	Phoenix, AZ	112	-	-
08 Dec 00	08 Dec 00	Ann Antolini School	New Hartford, CT	52	-	-
08 Dec 00	30 Jan 01	Meridian College	Meridian, MS	600	-	-
09 Dec 00	09 Dec 00	McClellan Aviation Museum	North Highlands, CA	54	-	-
09 Dec 00	09 Dec 00	South Florida Science Museum	West Palm Beach, FL	2	-	-
12 Dec 00	12 Dec 00	Lakeview Resort	Morgantown, WV	94	-	-
15 Dec 00	15 Dec 00	Wingate School	Fort Wingate, NM	120	-	-
19 Dec 00	19 Dec 00	New Mexico Museum of Space History	Alamogordo, NM	28	-	-
07 Jan 01	07 Jan 01	Kalamazoo Valley Museum	Kalamazoo, MI	36	-	-
09 Jan 01	09 Jan 01	Christa McAuliffe Planetarium	Concord, NH	36	-	-
13 Jan 01	13 Jan 01	UACTC Conference	St. George, UT	20	-	-
15 Jan 01	15 Jan 01	Deming School	Cheyenne, WY	10	-	-
17 Jan 01	20 Jan 01	Science City Museum		40	-	-
19 Jan 01	19 Jan 01	Cernan Earth and Space Center	River Grove, IL	44	-	-
20 Jan 01	20 Jan 01		Green Bay, WI	28	-	-
20 Jan 01	20 Jan 01	Mountainland Advanced Technology Center	Orem, UT	30	-	-
20 Jan 01	20 Jan 01	South Florida Science Museum	West Palm Beach, FL	22	-	-
25 Jan 01	26 Jan 01	University of Mississippi	Oxford, MS	54	-	-
26 Jan 01	26 Jan 01	New Mexico Museum of Space History	Alamogordo, NM	49	-	-
26 Jan 01	26 Jan 01	New Mexico Museum of Space History	Alamogordo, NM	145	-	-
27 Jan 01	03 Feb 01	Carnegie Science Center	Pittsburgh, PA	48	-	-
27 Jan 01	27 Jan 01	Imagination Station	Lafayette, IN	28	-	-
27 Jan 01	27 Jan 01	University of Hawaii at Hilo	Hilo, HI	138	-	-
27 Jan 01	27 Jan 01	University of Hawaii at Hilo	Hilo, HI	170	-	-
27 Jan 01	27 Jan 01	University of Washington	Seattle, WA	24	-	-
31 Jan 01	31 Jan 01		Green Bay, WI	44	-	-
02 Feb 01	02 Feb 01	Oconto Senior High School	Oconto, WI	14	-	-
02 Feb 01	02 Feb 01	Utah Science Teachers Association (USTA) Conference				
			Provo, UT	52	-	-
07 Feb 01	07 Feb 01	Ann Antolini School	New Hartford, CT	29	-	-
08 Feb 01	08 Feb 01	NASA Kennedy Space Center	Kennedy SC, FL	12	-	-
08 Feb 01	08 Feb 01	NASA Kennedy Space Center	Kennedy SC, FL	14	-	-
08 Feb 01	08 Feb 01	NASA Kennedy Space Center	Kennedy SC, FL	26	-	-
08 Feb 01	10 Feb 01	Wilson Convention Center	Macon, GA	86	-	-
09 Feb 01	09 Feb 01	NASA Kennedy Space Center	Kennedy SC, FL	26	-	-
10 Feb 01	10 Feb 01	NASA Kennedy Space Center	Kennedy SC, FL	26	-	-
10 Feb 01	10 Feb 01	Windward Community College	Kaneohe, HI	68	-	-
13 Feb 01	13 Feb 01	Christa McAuliffe Planetarium	Concord, NH	30	-	-
14 Feb 01	14 Feb 01	Ann Antolini School	New Hartford, CT	29	-	-
14 Feb 01	14 Feb 01	Henry Buhl, Jr. Planetarium and Observatory	Pittsburgh, PA	50	-	-
21 Feb 01	21 Feb 01	Interface Conference	Osage Beach, MO	400	-	-
23 Feb 01	23 Feb 01	United States Air Force Academy	USAF Academy, CO	120	-	-
24 Feb 01	24 Feb 01	United States Air Force Academy	USAF Academy, CO	90	-	-
25 Feb 01	25 Feb 01	Space Foundation	Colorado Springs, CO	120	-	-
27 Feb 01	27 Feb 01	Grosse Pointe S. High School	Grosse Pointe, MI	-	-	-
27 Feb 01	27 Feb 01	Grosse Pointe S. High School	Grosse Pointe, MI	60	-	-
27 Feb 01	27 Feb 01	St. Francis Indian	St. Francis, SD	100	-	-
28 Feb 01	28 Feb 01	Wingate School	Fort Wingate, NM	110	-	-
02 Mar 01	23 Mar 01	Rainwater Planetarium and Observatory	French Camp, MS	175	-	-
03 Mar 01	03 Mar 01	Almaden Research	San Jose, CA	36	-	-
03 Mar 01	03 Mar 01	University of Maine	Orono, ME	42	-	-
06 Mar 01	06 Mar 01	Science Museum	Richmond, VA	68	-	-
09 Mar 01	09 Mar 01	Marriott Hotel	Detroit, MI	114	-	-

09 Mar 01	09 Mar 01	Northwest Evaluation Association (NWEA) Convention	Green Bay, WI	66	-	-
10 Mar 01	10 Mar 01	Marriott Hotel		110	-	-
10 Mar 01	10 Mar 01	Mountainland Advanced Technology Center	Orem, UT	8	-	-
10 Mar 01	10 Mar 01	New Britain High School	New Britain, CT	6	-	-
10 Mar 01	10 Mar 01	Windward Community College	Kaneohe, HI	130	-	-
12 Mar 01	12 Mar 01	Chadron State College	Chadron, NE	75	-	-
13 Mar 01	13 Mar 01		Colorado Springs, CO	40	-	-
13 Mar 01	13 Mar 01	Christa McAuliffe Planetarium	Concord, NH	22	-	-
15 Mar 01	15 Mar 01	Ann Antolini School	New Hartford, CT	500	-	-
15 Mar 01	15 Mar 01	Hyatt Regency	Minneapolis, MN	24	-	-
15 Mar 01	15 Mar 01	Sarah Banks	Wixom, MI	54	-	-
16 Mar 01	17 Mar 01	Shonto Prep School	Shonto, AZ	50	-	-
17 Mar 01	17 Mar 01	Cernan Earth and Space Center	River Grove, IL	18	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	116	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	150	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	210	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	220	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	300	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	500	-	-
22 Mar 01	24 Mar 01	International Technology Education Association (ITEA) Meeting	Atlanta, GA	62	-	-
27 Mar 01	29 Mar 01	Space Foundation	Los Angeles, CA	86	-	-
29 Mar 01	29 Mar 01	Westlake Middle School	Erie, PA	25	-	-
30 Mar 01	30 Mar 01	Bogan High School	Chicago, IL	80	-	-
31 Mar 01	31 Mar 01	Carnegie Science Center	Pittsburgh, PA	3,600	-	-
05 Apr 01	05 Apr 01		Orlando, FL	40	-	-
07 Apr 01	07 Apr 01	Cernan Earth and Space Center	River Grove, IL	20	-	-
07 Apr 01	07 Apr 01	New Mexico Museum of Space History	Alamogordo, NM	38	-	-
07 Apr 01	07 Apr 01	New Mexico Museum of Space History	Alamogordo, NM	58	-	-
15 Apr 01	15 Apr 01	Ann Antolini School	New Hartford, CT	114	-	-
15 Apr 01	15 Apr 01	ISSEC		44	-	-
17 Apr 01	17 Apr 01	Christa McAuliffe Planetarium	Concord, NH	22	-	-
19 Apr 01	19 Apr 01	Dixon Middle School	Provo, UT	-	-	-
19 Apr 01	19 Apr 01	Dixon Middle School	Provo, UT	45	-	-
19 Apr 01	19 Apr 01	Morehead State University	Morehead, KY	24	-	-
21 Apr 01	21 Apr 01	Rainwater Planetarium and Observatory	French Camp, MS	62	-	-
23 Apr 01	23 Apr 01	Idaho State University	Pocatello, ID	30	-	-
24 Apr 01	24 Apr 01	Chartiers Valley High School	Collier, PA	90	-	-
24 Apr 01	24 Apr 01	Idaho State University	Pocatello, ID	30	-	-
25 Apr 01	27 Apr 01	Fort River School	Amherst, MA	108	-	-
25 Apr 01	25 Apr 01	Idaho State University	Pocatello, ID	44	-	-
25 Apr 01	25 Apr 01	ISU Center for Education	Idaho Falls, ID	36	-	-
26 Apr 01	26 Apr 01	Idaho State University	Pocatello, ID	44	-	-
26 Apr 01	26 Apr 01	Minnetrasta Cultural Center	Muncie, IN	40	-	-
26 Apr 01	26 Apr 01	Wildwood School	Amherst, MA	25	-	-
27 Apr 01	29 Apr 01	Kansas Association of Teachers of Science (KATS) Kamp 2001	Junction City, KS	46	-	-
27 Apr 01	27 Apr 01	MacDuffie School	Springfield, MA	194	-	-
27 Apr 01	28 Apr 01	Pinon Elementary		162	-	-
28 Apr 01	28 Apr 01	New Mexico Museum of Space History	Alamogordo, NM	60	-	-

28 Apr 01	28 Apr 01	Pioneer Ridge Science Center	Independence, MO	60	-	-
28 Apr 01	28 Apr 01	University of Maine	Farmington, ME	24	-	-
29 Apr 01	29 Apr 01	ISU Center for Education	Idaho Falls, ID	36	-	-
01 May 01	01 May 01	Holiday Inn	Waterville, ME	50	-	-
03 May 01	03 May 01	Space Day	Chattanooga, TN	1,150	-	-
04 May 01	04 May 01	Montana Vista Elementary School	El Paso, TX	64	-	-
04 May 01	04 May 01	New Mexico Museum of Space History	Alamogordo, NM	68	-	-
05 May 01	05 May 01	Carnegie Science Center	Pittsburgh, PA	28	-	-
05 May 01	05 May 01	Eagle Cliffs Elementary School	Billings, MT	6	-	-
05 May 01	05 May 01	Rapid City Civic	Rapid City, SD	54	-	-
07 May 01	07 May 01	New Mexico Museum of Space History	Alamogordo, NM	54	-	-
08 May 01	08 May 01	Christa McAuliffe Planetarium	Concord, NH	10	-	-
09 May 01	12 May 01	Carnegie Science Center	Pittsburgh, PA	280	-	-
09 May 01	12 May 01	Hilton Pittsburgh and Towers	Pittsburgh, PA	340	-	-
12 May 01	12 May 01	Alta Vista Elementary	Cheyenne, WY	12	-	-
12 May 01	12 May 01	Cernan Earth and Space Center	River Grove, IL	16	-	-
12 May 01	12 May 01	Noble High School	Berwick, ME	32	-	-
13 May 01	13 May 01	Poly Drive School	Billings, MT	8	-	-
14 May 01	14 May 01	New Mexico Museum of Space History	Alamogordo, NM	35	-	-
15 May 01	15 May 01	Meadowlake School	Billings, MT	8	-	-
15 May 01	15 May 01	Najatuck Community College	Najatuck, CT	28	-	-
15 May 01	15 May 01	University of Washington	Seattle, WA	264	-	-
19 May 01	19 May 01	John I. Leonard High School	Greenacres, FL	50	-	-
19 May 01	19 May 01	New Mexico Museum of Space History	Alamogordo, NM	36	-	-
20 May 01	20 May 01	Powell High School	Powell, WY	8	-	-
22 May 01	22 May 01	Taylor Middle School	Albuquerque, NM	34	-	-
23 May 01	23 May 01	Longway Planetarium	Flint, MI	72	-	-
24 May 01	24 May 01	Lawrence Technological University	Southfield, MI	24	-	-
30 May 01	31 May 01	Copper Hills Youth Club	West Jordan, UT	50	-	-
30 May 01	30 May 01	Kalamazoo Valley Community College	Kalamazoo, MI	82	-	-
05 Jun 01	05 Jun 01	Christa McAuliffe Planetarium	Concord, NH	8	-	-
06 Jun 01	06 Jun 01	University of Texas at El Paso	El Paso, TX	30	-	-
12 Jun 01	12 Jun 01	Ysleta Independent School District	El Paso, TX	12	-	-
14 Jun 01	14 Jun 01	Green Bay Public Schools	Green Bay, WI	54	-	-
14 Jun 01	14 Jun 01	Minnetrissa Cultural Center	Muncie, IN	1,400	-	-
14 Jun 01	14 Jun 01	Onizuka Space Center	Kailua-Kona, HI	60	-	-
16 Jun 01	16 Jun 01		Hazelton, WV	212	-	-
18 Jun 01	18 Jun 01	Gateway High School	Monroeville, PA	56	-	-
19 Jun 01	19 Jun 01	Green Bay Public Schools	Green Bay, WI	28	-	-
19 Jun 01	19 Jun 01	Sally Ride Academy	West Allis, WI	26	-	-
20 Jun 01	20 Jun 01	Centennial Museum	El Paso, TX	10	-	-
20 Jun 01	20 Jun 01	Lawrence Technological University	Southfield, MI	38	-	-
20 Jun 01	24 Jun 01	Wright Court		58	-	-
21 Jun 01	21 Jun 01	Prestonsburg Community College	Prestonsburg, KY	34	-	-
21 Jun 01	21 Jun 01	West Virginia University	Morgantown, WV	40	-	-
22 Jun 01	22 Jun 01	Sally Ride Academy	West Allis, WI	26	-	-
24 Jun 01	30 Jun 01	Eastern Illinois University	Charleston, IL	8	-	-
25 Jun 01	25 Jun 01	D.H. Visitor Center	Empire, MI	52	-	-
25 Jun 01	25 Jun 01	NASA Langley Research Center	Hampton, VA	56	-	-
26 Jun 01	26 Jun 01	NASA Langley Research Center	Hampton, VA	56	-	-
26 Jun 01	26 Jun 01	Star Academy	Cumberland, WI	42	-	-
26 Jun 01	26 Jun 01	Weaver High School	Hartford, CT	60	-	-
26 Jun 01	26 Jun 01	Western Kentucky University	Bowling Green, KY	50	-	-
27 Jun 01	27 Jun 01	NASA Langley Research Center	Hampton, VA	56	-	-
28 Jun 01	28 Jun 01	NASA Langley Research Center	Hampton, VA	56	-	-
28 Jun 01	28 Jun 01	Rowan County Board of Education	Morehead, KY	16	-	-
29 Jun 01	29 Jun 01	Star Academy	Cumberland, WI	42	-	-

30 Jun 01	30 Jun 01	Northern Arizona University	Flagstaff, AZ	52	-	-
02 Jul 01	02 Jul 01	Alexander Park Conf.	Auckland, New Zealand	156	-	-
02 Jul 01	02 Jul 01	Cernan Earth and Space Center	River Grove, IL	40	-	-
02 Jul 01	02 Jul 01	Star Dome Observatory	Auckland, New Zealand	70	-	-
03 Jul 01	03 Jul 01	Alexander Park Conf.	Auckland, New Zealand	98	-	-
08 Jul 01	13 Jul 01	Rainwater Planetarium and Observatory	French Camp, MS	24	-	-
09 Jul 01	09 Jul 01	New Mexico Museum of Space History	Alamogordo, NM	58	-	-
09 Jul 01	09 Jul 01	Science Museum	Springfield, MA	40	-	-
10 Jul 01	10 Jul 01	Space Education	Green Bay, WI	20	-	-
11 Jul 01	12 Jul 01	National Teacher Training Institute	Kansas City, MO	60	-	-
11 Jul 01	11 Jul 01	Space Education	Green Bay, WI	20	-	-
13 Jul 01	13 Jul 01	NASA Jet Propulsion Laboratory ERC	Pomona, CA	50	-	-
16 Jul 01	16 Jul 01		St. Paul, MN	34	-	-
17 Jul 01	17 Jul 01		St. Paul, MN	76	-	-
17 Jul 01	17 Jul 01	Christa McAuliffe Academy	Appleton, WI	38	-	-
17 Jul 01	20 Jul 01	National Teacher Training Institute	Farmington, MO	150	-	-
18 Jul 01	18 Jul 01	Space Education	Green Bay, WI	20	-	-
20 Jul 01	20 Jul 01	Christa McAuliffe Academy	Appleton, WI	38	-	-
20 Jul 01	20 Jul 01	Space Education	Green Bay, WI	20	-	-
24 Jul 01	24 Jul 01	Masonic Lodge	Charleston, IL	80	-	-
26 Jul 01	26 Jul 01	Eastern Illinois University	Charleston, IL	10	-	-
26 Jul 01	26 Jul 01	Iowa Central Community College	Fort Dodge, IA	24	-	-
31 Jul 01	31 Jul 01	Desert Trails School	Adelanto, CA	96	-	-
02 Aug 01	02 Aug 01	Jefferson School	Charleston, IL	10	-	-
06 Aug 01	06 Aug 01		Buzhanka, Ukraine	66	-	-
07 Aug 01	07 Aug 01	ISU Center for Education	Pocatello, ID	16	-	-
18 Aug 01	18 Aug 01	Silva Magnet School	El Paso, TX	63	-	-
				41	-	-
		Columbus State University	Columbus, GA	68	-	-
		Sinclair College	Dayton, OH	8	-	-
		Wayzata High School	Plymouth, MN	11	-	-
		Wesleyan University	Middletown, CT	38	-	-

#### Solar System Exploration Forum K-12 Formal Educator Professional Development

Theme(s): SSE

Msn/Prgm: SSE Forum, Galileo, MGS, 2001 Mars Odyssey

Description: Professional development standards-based workshops for K-12 educators on topics related to solar system exploration, held at major national educational conferences. These are thematic workshops coordinated with mission E/PO programs.

Lead: Ms. Leslie Lowes, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Leslie.Lowes@jpl.nasa.gov](mailto:Leslie.Lowes@jpl.nasa.gov). Phone: 818-393-7734.

Partner(s): Arizona State University  
NASA Jet Propulsion Laboratory

Tempe, AZ  
Pasadena, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	70	-	-
04 Apr 01	07 Apr 01	National Council of Teachers of Mathematics (NCTM) Conference	Orlando, FL	120	-	-

#### Space Science and the TEKS

Theme(s): SSE

Msn/Prgm: LPI B/F

Description: Personnel from the Lunar and Planetary Institute Broker/Facilitator team, Johnson Space Center, and Space Center Houston conduct one-day workshops on space science and the Texas Essential Knowledge and Skills (TEKS) standards. The day of presentations and hands-on activities is designed to help teachers of grades 6-8

who are now required to teach units on space science as outlined in the TEKS State standards.

Lead: Dr. Kathleen Johnson, Lunar and Planetary Institute, Houston, TX 77058-1113  
E-mail: [johnson@lpi.usra.edu](mailto:johnson@lpi.usra.edu). Phone: 281-244-2014.

Primary URL: <http://www.spacecenter.org/centerinfo.html>

2nd URL: <http://www.lpi.usra.edu/education/products/spectro.html>

Scientist(s): Dr. Allan Treiman Lunar and Planetary Institute Houston, TX

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Jan 01	18 Jan 01	Space Center Houston	Houston, TX	15	-	-

#### Space Science Field Workshops for K-12 Teacher-Scientist Teams

Theme(s): SEU, SSE

Msn/Prgm: LPI B/F

Description: In collaboration with NASA Space Grant Consortia, universities, and other partners, we have developed space science workshops for K-12 science, math, and technology teachers. The focus is on involving scientists by supporting scientist-teacher teams from across the Country, so that team members participate as mentors and instructors throughout the entire workshop, rather than giving isolated presentations. Field trips allow scientists and teachers to interact informally and spontaneously, encouraging active participation from everyone as the workshop progresses.

Lead: Dr. Kathleen Johnson, Lunar and Planetary Institute, Houston, TX 77058-1113  
E-mail: [johnson@lpi.usra.edu](mailto:johnson@lpi.usra.edu). Phone: 281-244-2014.

Scientist(s): Dr. Anthony Irving University of Washington Seattle, WA  
Dr. Walter Kiefer Lunar and Planetary Institute Houston, TX  
Dr. Allan Treiman Lunar and Planetary Institute Houston, TX

Partner(s): University of Washington Seattle, WA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jul 01	14 Jul 01	University of Washington	Seattle, WA	22	-	-
08 Sep 01	08 Sep 01	Lunar and Planetary Institute	Houston, TX	5	-	-

#### Space Science for Illinois Teachers

Theme(s): ASO, SEC, SSE

Msn/Prgm: DePaul B/F

Description: The major goal of Space Science for Illinois Teachers, a two-week professional development program, was to bring together local space scientists and teachers so that each would benefit from the experiences of the others. The objectives were to strengthen teachers' abilities in science instruction and curriculum design, and to continue our development of a cadre of teacher-leaders who can connect space science resources to their school systems and partner with space scientists and educators in the development of space science education products. Sixteen teachers, four space scientists, and four scientists and science educators spent one week at Yerkes Observatory and one week at DePaul University engaging in science presentations, small group follow-up discussions, and hands-on activities. Several unique characteristics of the program were the design and building of scientific instruments and an explicit focus on communication across communities.

Lead: Dr. Lynn Narasimhan, DePaul University, Chicago, IL 60614-2458  
E-mail: [cnarasim@depaul.edu](mailto:cnarasim@depaul.edu). Phone: 773-325-1854.

Scientist(s): Dr. Bernhard Beck-Winchatz DePaul University Chicago, IL  
Dr. Kyle Cudworth University of Chicago Chicago, IL  
Dr. Rhodri Evans University of Chicago Chicago, IL  
Dr. Doyal Harper University of Chicago Chicago, IL  
Dr. Sanjay Limaye University of Wisconsin—Madison Madison, WI

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Jun 01	09 Jun 01	DePaul University	Chicago, IL	19	-	-
07 Jul 01	27 Jul 01	DePaul University	Chicago, IL	25	-	-

## Space Science Workshops for Educators

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SSE Forum, SSI B/F, NAI, SSE Theme, Cassini/Huygens Probe, Mars E/PO, SEC Forum

Description: The Space Science Institute (SSI) delivers workshops (one hour to one week in duration) for classroom and outdoor educators who wish to use Sun-Earth Connections (eclipses, space weather), planetary science (e.g., Mars and Saturn), and basic astronomy (kinesthetic astronomy) as engaging contexts for learning age-appropriate, standards-based concepts in science and mathematics. SSI is also developing the capacity for workshops in astrobiology and Earth system science. SSI workshops generally include background science content, inquiry-based pedagogy, and hands-on practice with exemplary lesson plans. Workshops often combine science education with an artistic dimension, such as music, movement, poetry, or visual art, and in this way endeavor to address diverse ways of knowing and learning. SSI educator workshops have been offered at a variety of venues: 1) regional and national NSTA meetings; 2) the conferences of the Astronomical Society of the Pacific, the Association of Experiential Educators, and the American Astronomical Society; 3) host sites of SSI's traveling science exhibits; 4) the Arvada Center for the Arts and Humanities; 5) the Colorado Outward Bound School; and 6) University of Colorado science classes for preservice educators. New venues are anticipated, including planetarium association conferences, minority professional society meetings, the Denver Museum of Nature and Science, the Association of Science and Technology Centers (ASTC), and the Aspen Center for Environmental Studies. SSI is also working through its Broker/Facilitator program to help identify and create opportunities for underserved classroom educators to learn how space science can be used in standards-based teaching in the Four Corners region (NM, AZ, CO, UT) and in South Dakota. SSI is also working to create a week-long professional development opportunity in the summer for educators in grades 5-9 who want to enrich their Earth and physical science classes with space science content.

Lead: Dr. Cherilynn Morrow, Space Science Institute, Boulder, CO 80309

E-mail: [camorrow@colorado.edu](mailto:camorrow@colorado.edu). Phone: 303-492-7321.

Scientist(s):	Dr. Nadine Barlow	University of Central Florida	Orlando, FL
	Dr. Bill Boynton	University of Arizona	Tucson, AZ
	Dr. Susan Buhr	University of Colorado	Boulder, CO
	Dr. Todd Clancy	Space Science Institute	Boulder, CO
	Dr. William Hartmann	Planetary Science Institute	Tucson, AZ
	Dr. Steve Lee	University of Colorado	Boulder, CO
	Dr. Cherilynn Morrow	Space Science Institute	Boulder, CO
	Dr. Stephen Pompea	Pompea & Associates	Tucson, AZ
	Dr. Jim Rice	Arizona State University	Tempe, AZ
	Dr. Peter Smith	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Thomas Wdowiak	University of Alabama at Birmingham	Birmingham, AL
Partner(s):	Catawba Science Center		Hickory, NC
	Colorado Outward Bound School		Denver, CO
	Denver Museum & Arvada Center for the Arts		Arvada, CO
	McWane Science Center		Birmingham, AL
	NASA Goddard Space Flight Center		Greenbelt, MD
	New Mexico Partnership for Math & Science Education (NMPMSE)		Rociada, NM
	Orlando Science Center		Orlando, FL
	Tucson Children's Museum		Tucson, AZ
	University of Colorado		Boulder, CO

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	01 Oct 00	McWane Science Center	Birmingham, AL	12	-	-
02 Nov 00	05 Nov 00	Association for Experiential Education International Conference	Tucson, AZ	-	25	-
02 Feb 01	02 Feb 01	Orlando Science Center	Orlando, FL	20	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	40	-
02 Jun 01	02 Jun 01	Tucson Children's Museum	Tucson, AZ	10	-	-
18 Sep 01	18 Sep 01	University of Colorado	Boulder, CO	14	-	-
29 Sep 01	30 Sep 01	Catawba Science Center	Hickory, NC	10	-	-

## STEREO—Internships for Teachers

Theme(s): SEC

Msn/Prgm: STEREO

Description: Teacher Internships, sponsored by the Solar Terrestrial Probe Program Office and conducted by scientists involved in the STEREO mission at Naval Research Laboratory, provided professional growth opportunities for educators, as well as development of products for curriculum enhancement and community programs for planetariums, museums, and science centers.

Lead: Dr. Don Michels, Naval Research Laboratory, Washington, DC 20375

E-mail: [michels@louis14.nrl.navy.mil](mailto:michels@louis14.nrl.navy.mil). Phone: 202-767-2737.Primary URL: <http://stp.gsfc.nasa.gov/missions/stereo/stereo/htm>

Scientist(s): Dr. Donald Michels Naval Research Laboratory Washington, DC

Partner(s): Howard B. Owens Science Center Lanham, MD

Naval Research Laboratory Washington, DC

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
25 Jun 01	17 Aug 01	Naval Research Laboratory	Washington, DC	1	-	-

## STEREO—Teacher Development Workshops

Theme(s): SEC

Msn/Prgm: STEREO

Description: University of New Hampshire scientists organized and presented numerous workshops geared toward the professional development of educators in the science of electromagnetism, and incorporating lectures and hands-on activities. The workshops entitled, "Electromagnetism: The Interactions Between the Earth and Space" and "The Electromagnetic Spectrum, Light" were conducted at local high schools.

Lead: Dr. Toni Galvin, University of New Hampshire, Durham, NH 03824

E-mail: [toni.galvin@unh.edu](mailto:toni.galvin@unh.edu). Phone: 603-862-3511.Primary URL: <http://stp.gsfc.nasa.gov/missions/stereo/stereo/htm>

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
17 Mar 01	17 Mar 01	Newport High School	Newport, NH	12	-	-

## STP Internships for Teachers

Theme(s): SEC

Msn/Prgm: STP

Description: Internships for Teachers is sponsored by the Solar Terrestrial Probe Program Office (STP) and are conducted at NASA/GSFC. The internships encourage the collaboration of teachers, with varied backgrounds and experiences, to develop educational products for curriculum enhancement, or to promote professional growth in a specific content area. Internships are usually available during the summer months, resulting with the development of products that can be integrated into the classroom during the school year.

Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-1275.

Scientist(s): Dr. Richard Fisher NASA Goddard Space Flight Center Greenbelt, MD

Dr. Fred Herrero NASA Goddard Space Flight Center Greenbelt, MD

Mr. Shane Hynes NASA Goddard Space Flight Center Greenbelt, MD

Ms. Barbara Lambert NASA Goddard Space Flight Center Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
24 Jun 01	10 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	2	-	-

## STP Science, Math, Engineering, and Technology—Workshops

Theme(s): SEC, SSE

Msn/Prgm: STP

Description: Solar Terrestrial Probe Program Office (STP) educational workshops are conducted at various NASA Centers

and minority universities, such as the University of Puerto Rico at Mayagüez, to emphasize and promote professional growth through the adoption of inquiry-based teaching methods aligned with local and national standards for science, math, engineering, and technology. In addition, these educational opportunities share the excitement of the NASA missions through lectures and hands-on activities that promote enthusiasm for the development of new techniques and teaching resources for the classroom.

Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-1275.

Scientist(s):	Dr. Yasmine Detres	University of Puerto Rico, Mayagüez Campus	Mayagüez, PR
	Dr. Juan Gonzalez	University of Puerto Rico, Mayagüez Campus	Mayagüez, PR
	Dr. Fred Herrero	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Shane Hynes	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Barbara Lambert	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Donald Robinson-Boonstra	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Maria Schwarz	University of Puerto Rico, Mayagüez Campus	Mayagüez, PR
	Ms. Wei Xia-Serafino	Global Science and Technology, Inc.	Greenbelt, MD

Partner(s): University of Puerto Rico, Mayagüez Campus Mayagüez, PR

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
10 Jul 01	14 Jul 01	University of Puerto Rico, Mayagüez Campus	Mayagüez, PR	29	-	-

#### Sun-Earth Connection Educational Workshop

Theme(s): SEC

Msn/Prgm: HESSI, IMAGE, ISTP, SOHO, STP, TIMED, Yohkoh, SEC Forum

Description: The Sun-Earth Connection Education Forum (SECEF), a partnership between NASA Goddard Space Flight Center (GSFC) and the University of California at Berkeley, has developed a workshop that provides for classroom teachers, curriculum specialists, and education specialists an opportunity to learn about the science of the Sun-Earth Connection (SEC). Included in the workshop are mission scientists' content presentations and many hands-on activities that can easily be adapted into any classroom. Time is given to connect the content into the curriculum requirements for the particular education community. Also demonstrated is the OSS Resource Directory for access to space science education products. SEC scientists and education specialists team to present the workshop. The workshop is available upon request from a school district or within a SEC project.

Lead: Ms. Elaine Lewis, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [lewis@mail630.gsfc.nasa.gov](mailto:lewis@mail630.gsfc.nasa.gov). Phone: 301-286-3337.

Primary URL: <http://sunearth.gsfc.nasa.gov>

Scientist(s):	Dr. Carol Crannell	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Nicola Fox	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Isabel Hawkins	University of California, Berkeley	Berkeley, CA
	Mr. Steele Hill	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Robert Hoffman	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Therese Kucera	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Carolyn Ng	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Greg Schultz	University of California, Berkeley	Berkeley, CA
	Dr. Adam Szabo	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. William Taylor	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
02 Oct 00	02 Oct 00	NASA Goddard Space Flight Center	Greenbelt, MD	36	-	-
14 Oct 00	14 Oct 00	DePaul University	Chicago, IL	150	-	-
19 Jan 01	19 Jan 01	NASA Ames Research Center	Moffett Field, CA	40	-	-
20 Apr 01	20 Apr 01	University of California, Berkeley	Berkeley, CA	4	-	-

18 Jun 01	22 Jun 01	University of California, Berkeley	Berkeley, CA	5	-	-
09 Jul 01	20 Jul 01	NASA Goddard Space Flight Center	Greenbelt, MD	25	-	-

#### Swift Teacher Workshops

Theme(s): SEU

Msn/Prgm: Swift

Description: The Swift mission creates and delivers numerous workshops, institutes, and exhibitions to introduce the education materials of its program to teachers. Modeling of the classroom material use, along with appropriate background information and awareness, allows educators to see the advantages of the cutting-edge materials being created out of the exciting Swift mission science.

Lead: Dr. Laura Whitlock, Sonoma State University, Rohnert Park, CA 94928

E-mail: [laura.whitlock@sonoma.edu](mailto:laura.whitlock@sonoma.edu). Phone: 707-664-2256.

Primary URL: <http://swift.sonoma.edu>

2nd URL: <http://swift.sonoma.edu/epo>

Scientist(s):	Dr. Patricia Boyd	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Neil Brandt	Pennsylvania State University	State College, PA
	Dr. Eric Feigelson	Pennsylvania State University	State College, PA
	Dr. Philip Plait	Sonoma State University	Rohnert Park, CA
	Ms. Karen Smale	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Alan Smale	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Laura Whitlock	Sonoma State University	Rohnert Park, CA

#### Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	45	45	-
06 Nov 00	11 Nov 00	AAS/High Energy Astrophysics Division (HEAD) Meeting	Honolulu, HI	40	-	-
29 Nov 00	01 Dec 00	California Mathematics Council-Asilomar	Pacific Grove, CA	180	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	60	-	-
03 Apr 01	06 Apr 01	Gamma 2001	Baltimore, MD	30	30	-
04 Apr 01	07 Apr 01	National Council of Teachers of Mathematics (NCTM) Conference	Orlando, FL	130	130	-
09 Jul 01	13 Jul 01	Pennsylvania State University	State College, PA	20	-	-
13 Jul 01	18 Jul 01	Astronomical Society of the Pacific (ASP) Meeting	St. Paul, MN	-	25	-
16 Jul 01	20 Jul 01	Pennsylvania State University	State College, PA	20	-	-
16 Jul 01	20 Jul 01	Sonoma State University	Rohnert Park, CA	16	-	-
23 Jul 01	27 Jul 01	Sonoma State University	Rohnert Park, CA	12	-	-

#### Taking the Measure of the Universe Exhibit and Minidemos

Theme(s): ASO

Msn/Prgm: Navigator, SIM

Description: The "Taking the Measure of the Universe" exhibit and corresponding demonstrations are an opportunity to teach middle school students about measurement. It reinforces the connection between math and science.

Lead: Ms. Rhonda Hines-Jones, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [rhonda.r.jones@jpl.nasa.gov](mailto:rhonda.r.jones@jpl.nasa.gov). Phone: 818-354-1562.

Scientist(s):	Dr. Rudolf Danner	NASA Jet Propulsion Laboratory	Pasadena, CA
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#### Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	106	2,000	-
19 Oct 00	21 Oct 00	National Council of Teachers of Mathematics (NCTM) Fall Regional Conference	Omaha, NE	73	-	-

08 Mar 01	10 Mar 01	San Diego Science Educator's Association Conference	San Diego, CA	46	1,100	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	6	12,100	-
04 Apr 01	07 Apr 01	National Council of Teachers of Mathematics (NCTM) Conference	Orlando, FL	16	12,000	-

#### Teacher Workshop—Astrobiology, the Origins and Early Evolution of Life

Theme(s): ASO

Msn/Prgm: NAI

Description: This five-day residential workshop for inservice teachers is designed to expose middle and high school science teachers to current thinking about the origin and early evolution of life in a way that they can pass on to their students. The course combines lectures by several Pennsylvania State University faculty members, hands-on classroom activities, lab tours, and a field trip to a local bog. Classroom activities included some from TERC's draft high school curriculum. Evaluations were conducted using daily participant surveys. Following the workshop, this year's teachers were added to our existing electronic mailing list discussion group to facilitate and track the application of knowledge from the workshop back in the classrooms. Funding for the workshop is provided by the Penn State Astrobiology Research Center and the Pennsylvania Space Grant Consortium. Housing, meals, and some travel support are provided. Teachers are charged tuition for two graduate credits from Penn State. The workshop is approved by the Pennsylvania Department of Education for Act 48 Professional Development credit.

Lead: Dr. Jim Kasting, Pennsylvania State University, State College, PA 16803.

#### Teachers Workshops by the MIT Center for Space Research

Theme(s): SEC, SEU

Msn/Prgm: CXO, IMP-8, Wind

Description: The Massachusetts Institute of Technology (MIT) Center for Space Research (CSR) is an active contributor to workshops which present middle and high school science teachers with the content, materials, and methods to involve their students with the Chandra X-ray Observatory satellite mission. CSR scientists directly involved in several other space missions also take part in workshops focused on space science.

Lead: Dr. Kathryn Flanagan, Massachusetts Institute of Technology, Cambridge, MA 02139

E-mail: [kaf@space.mit.edu](mailto:kaf@space.mit.edu). Phone: 617-258-7324.

Primary URL: <http://space.mit.edu/CSR/outreach>

Scientist(s): Dr. Kathryn Flanagan Massachusetts Institute of Technology Cambridge, MA  
 Dr. Alan Lazarus Massachusetts Institute of Technology Cambridge, MA  
 Dr. Irene Porro Massachusetts Institute of Technology Cambridge, MA

Partner(s): Massachusetts Institute of Technology Cambridge, MA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Jun 01	21 Jun 01	Tufts University	Medford, MA	30	-	-
09 Jul 01	13 Jul 01	Massachusetts Institute of Technology	Cambridge, MA	25	-	-

#### TIMED Teacher Interns

Theme(s): SEC, SSE

Msn/Prgm: TIMED

Description: The Johns Hopkins University Applied Physics Laboratory education and public outreach program provided an opportunity for teachers to learn about the Thermosphere Ionosphere Mesosphere Energetics and Dynamics (TIMED) mission for classroom enrichment during a summer internship.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099

E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://www.timed.jhuapl.edu>

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jun 01	01 Aug 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	2	-	-

## TIMED Teacher Support

Theme(s): SEC

Msn/Prgm: TIMED

Description: The Johns Hopkins University Applied Physics Laboratory Education and Public Outreach (E/PO) office helped scientists, engineers, and other team members become involved by providing opportunities for teacher training, such as onsite teacher interns, teacher visits, and offsite talks to teachers. The E/PO office coordinated these events and provided the resources necessary for the team members to participate in these pre-arranged teacher training events. Team members led discussions and activities, providing demonstrations and conducting classroom activities related to the Thermosphere Ionosphere Mesosphere Energetics and Dynamics (TIMED) mission. These efforts supported State, local and national efforts directed toward systemic reform of science, mathematics, and technology education. Also, these classroom activities were based on the criteria contained in the national mathematics, science, and technology standards.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099

E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.Primary URL: <http://www.timed.jhuapl.edu>

Scientist(s): Ms. Kerri Beisser Johns Hopkins Applied Physics Laboratory Laurel, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Jan 01	13 Jan 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	22	-	-
19 Jul 01	19 Jul 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	24	-	-

## Touch the Sun Teacher Training Workshop

Theme(s): SEC

Msn/Prgm: Solar-B

Description: Touch the Sun explores an experiment-based curriculum designed to excite student interest in science with hands-on activities in designing, building, and collecting/analyzing data with six different Sun- and light-observing instruments. The activities emphasize the impact of design and material choices on the accuracy and repeatability of measurements, as well as a lessons-learned approach to improving instrument design and/or measurement technique. The activities all culminate in a meaningful and interesting scientific result from the students' direct measurements of the Sun and light. The six observational activities include usage of 1) a sundial for tracking the Sun's motion, determining the time of true local noon, and pinpointing the observer's geographic location; 2) a pinhole camera for measuring the physical diameter of the Sun (given the distance from Earth to the Sun); 3) a sunspot tracking activity for tracking the character and speed of sunspots; 4) a spectrograph for recording and comparing spectra of different light sources; 5) a polarimeter for detecting and making quantitative measurements of polarization of light from different sources; and 6) a color filter and bandpass activity for characterizing color filters and constructing a custom filter with the desired bandpass characteristics. A seventh activity was developed around the theme of satellite/spacecraft engineering, using the Solar-B spacecraft mission as an example. This activity, the "Shoebbox Satellite," provides students with the challenge of designing and constructing a structure that will 1) protect a cube of ice from melting under the hot Sun (thermal engineering) and 2) protect an egg from damage when dropped from a height of at least 25 feet over a hard surface (mechanical engineering). A third test goal was included: make the Shoebbox Satellite as light as possible—using a launch cost factor of \$80,000 per pound.

Lead: Mr. Benjamin Burress, Chabot Space and Science Center, Oakland, CA 94619

E-mail: [bburress@chabot.space.org](mailto:bburress@chabot.space.org). Phone: 510-336-7308.Primary URL: <http://www.chabot.space.org/vsc/exhibits/solarb/default.asp>

Scientist(s): Dr. Gibor Basri University of California, Berkeley Berkeley, CA  
 Ms. Barbara Francis Lockheed Martin Solar and Astrophysics Lab Palo Alto, CA  
 Dr. Michelle Larson University of California, Berkeley Berkeley, CA  
 Ms. Ericka Sleight Lockheed Martin Solar and Astrophysics Lab Palo Alto, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Aug 01	08 Aug 01	Chabot Space and Science Center	Oakland, CA	6	-	-

## Tour the X-Ray Sky

Msn/Prgm: RXTE

Primary URL: <http://heasarc.gsfc.nasa.gov/docs/xte/>2nd URL: [http://heasarc.gsfc.nasa.gov/docs/xte/learning\\_center/](http://heasarc.gsfc.nasa.gov/docs/xte/learning_center/)

Scientist(s): Dr. James Lochner NASA Goddard Space Flight Center Greenbelt, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Nov 00	09 Nov 00	AAS/High Energy Astrophysics Division (HEAD) Executive Committee meeting	Honolulu, HI	50	-	-
16 Nov 00	18 Nov 00	National Science Teachers Association (NSTA) Eastern Area Conference	Baltimore, MD	6	-	-
01 Dec 00	01 Dec 00	Pennsylvania Science Teachers Association Annual Meeting	Champion, PA	18	-	-
19 Jul 01	19 Jul 01	Maryland Science Center	Baltimore, MD	11	-	-

## TWINS—Teacher Training Program

Theme(s): SEC

Msn/Prgm: IMAGE, TWINS

Description: The Two Wide-angle Imaging Neutral-atom Spectrometers (TWINS) Teacher Training Program is run through the Los Alamos Science Education Team (SET) in conjunction with the TWINS mission. SET personnel have many years of experience in teaching, education research, and science education programs. Their involvement ensures that the teacher workshop program is grounded in sound pedagogical methods and meets current educational standards. In the teacher workshops, K-14 teachers spend several weeks at Los Alamos National Laboratories (LANL) learning space science from lab scientists and developing methods and materials for teaching this science to their students. The program supports an instructional model based on education research and cognitive theory. Students and teachers engage in activities that encourage critical thinking and a constructivist approach to learning.

Lead: Dr. Ruth Skoug, Los Alamos National Laboratory, Los Alamos, NM 87545

E-mail: [rskoug@lanl.gov](mailto:rskoug@lanl.gov). Phone: 505-667-6594.Primary URL: <http://nis.www.lanl.gov/mis-projects/twins>2nd URL: <http://set.lanl.gov/programs/lasso/lassomain.htm>

Scientist(s):	Dr. Frank Ameduri	Los Alamos National Laboratory	Los Alamos, NM
	Mr. Philip Barker	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Dot Delapp	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Eric Dors	Los Alamos National Laboratory	Los Alamos, NM
	Dr. William Feldman	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Stefanie Lawson	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Robert Reedy	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Geoffrey Reeves	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Dan Reisenfeld	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Mark Shappirio	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Ruth Skoug	Los Alamos National Laboratory	Los Alamos, NM
	Dr. John Steinberg	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Michelle Thomsen	Los Alamos National Laboratory	Los Alamos, NM
	Dr. Roger Wiens	Los Alamos National Laboratory	Los Alamos, NM

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Jul 01	12 Jul 01	Los Alamos National Laboratory	Los Alamos, NM	20	-	-
16 Jul 01	19 Jul 01	Los Alamos National Laboratory	Los Alamos, NM	20	-	-
06 Aug 01	09 Aug 01	Los Alamos National Laboratory	Los Alamos, NM	20	-	-

## Under the Umbrella Professional Development Conference for Chicago Science Teachers

Theme(s): SEC

Msn/Prgm: DePaul B/F, SOHO

**Description:** Under the Umbrella is an annual professional development conference for Chicago science teachers. Approximately 1,000 teachers attend the conference where they participate in workshops, collect new resources, and hear about upcoming opportunities. In January 2001, the DePaul Broker/Facilitator organized an OSS presence that included a presentation by a Goddard scientist, a teacher-led workshop on the soda-bottle magnetometer, and an OSS resource table.

**Lead:** Dr. Lynn Narasimhan, DePaul University, Chicago, IL 60614-2458  
E-mail: [cnarasim@depaul.edu](mailto:cnarasim@depaul.edu). Phone: 773-325-1854.

**Scientist(s):** Dr. Therese Kucera NASA Goddard Space Flight Center Greenbelt, MD

#### Using Astronomy Camp-Ins for Preservice Teacher Development

**Msn/Prgm:** IDEAS

**Description:** The team conducted a 4-hour teacher-training workshop and 12 camp-ins at the Maryland Science Center as well as held a workshop at Maryland's annual service learning conference at the University of Maryland, Baltimore County. The workshops were focused on helping preservice and inservice teachers engage elementary school students in hands-on learning experiences at the Maryland Science Center. They received training in informal teaching techniques, service learning, and general astronomy with an emphasis on Hubble Space Telescope research and results.

**Lead:** Dr. Alex Storrs, Towson University, Towson, MD 21252.

**Partner(s):** Maryland Science Center

Baltimore, MD

#### Using Space Science Research To Support Physics Learning

**Theme(s):** SEU

**Msn/Prgm:** SRT, CHIPS

**Description:** The Education and Public Outreach (E/PO) effort for the Cosmic Hot Interstellar Plasma Spectrometer (CHIPS) mission uses cutting-edge space science research as a framework on which to build student understanding of the particulate nature of matter. The E/PO lesson, aimed at precollege students, is based on research of student understanding of the concepts of density, heat, temperature, and heat transfer, and provides opportunities for inquiry-based exploration. Students explore how these concepts are related and apply their knowledge to the issues being investigated by CHIPS—namely, how an extremely hot, low-density gas such as the ISM might be cooling. Mission data for student use will be available in the future.

**Lead:** Dr. Nahide Craig, University of California, Berkeley, Berkeley, CA 94720

E-mail: [ncraig@ssl.berkeley.edu](mailto:ncraig@ssl.berkeley.edu). Phone: 510-643-7273.

**Scientist(s):** Dr. Nahide Craig University of California, Berkeley Berkeley, CA  
Ms. Nicole Gillespie University of California, Berkeley Berkeley, CA

**Event(s):**

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	110	5,300	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	-	-

#### What Do Astronomers Do?

**Msn/Prgm:** IDEAS

**Description:** The program introduced San Jose Unified School District K-12 science teachers to basic astronomy, critical thinking skills, the scientific method, and current astronomical technology through teacher training workshops. To explore the scientific process and technology used, participating K-12 science teachers planned and executed an astronomical experiment. Through this process, they learned firsthand how astronomical observations are planned and carried out with current technological tools, how scientific information can be gained from the data, and how the scientific method is applied to astronomy.

**Lead:** Dr. Remington Stone, University of California, Santa Cruz, Santa Cruz, CA 95064

E-mail: [rem@ucolick.org](mailto:rem@ucolick.org). Phone: 831-459-5933.

**Partner(s):** Lick Observatory  
San Jose Unified School District

Santa Cruz, CA  
San Jose, CA

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XMM-Newton Summer Teachers Workshop

Theme(s): ASO, SEU

Msn/Prgm: XMM-Newton

Description: This summer workshop for secondary teachers focuses on basic astrophysical concepts illustrated by the XMM-Newton Mission that are representative of the national standards for teaching science. Teachers are taught the basic concepts by learning classroom activities that illustrate these principles. Later during the workshop, teachers create their own curriculum materials based on their unique classroom situation.

Lead: Mr. Christian Foster, University of California, Santa Barbara, Santa Barbara, CA 93106

E-mail: [cfoster@ltsc.ucsb.edu](mailto:cfoster@ltsc.ucsb.edu). Phone: 805-893-7966.Primary URL: <http://outreach.ucsb.edu/xmm/>2nd URL: <http://heasarc.gsfc.nasa.gov/docs/xmm-lc/>


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**Curriculum Development/Dissemination**


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## Academic Talent Development Program for Grades 9-12

Theme(s): SEU

Msn/Prgm: SRT, CHIPS

Description: Through SEGway, teachers and museum curriculum specialists will develop Web-based lessons for high school students in grades 9-12 that utilize CHIPS mission observations. These lessons would use motivating questions, such as, "What and where is the Local Bubble?," "How does a nearby supernova affect the cosmic neighborhood?," or "What is a plasma, and how is it created?," to address topics like the scale and structure of the Local Bubble, mapping techniques, and measuring temperature.

Lead: Dr. Nahide Craig, University of California, Berkeley, Berkeley, CA 94720

E-mail: [ncraig@ssl.berkeley.edu](mailto:ncraig@ssl.berkeley.edu). Phone: 510-643-7273.Primary URL: [http://cse.ssl.berkeley.edu/chips\\_epo/students2.html](http://cse.ssl.berkeley.edu/chips_epo/students2.html)

Scientist(s): Dr. Nahide Craig University of California, Berkeley Berkeley, CA

Dr. Mark Hurwitz University of California, Berkeley Berkeley, CA

Partner(s): Chabot Space and Science Center Oakland, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Jun 01	27 Jul 01	University of California, Berkeley	Berkeley, CA	42	-	-

## Astrobiology: The Search For Life

Theme(s): ASO

Msn/Prgm: NAI

Description: TERC and NASA have developed an interdisciplinary high school course using the science of astrobiology as its unifying, underlying structure. Through a series of inquiry-based activities designed according to the theme of the search for life on other planets, students will explore diverse concepts in chemistry, physics, biology, Earth and space science, and engineering. These concepts are truly integrated for ninth-grade students and are designed as a sequential, coherent stream of units, chapters, activities, and long-term investigations. The astrobiology curriculum is currently being field tested nationally by educators and students. The NAI lead team members participating in the national review include the Ames Research Center, Pennsylvania State University, and Jet Propulsion Laboratory. This astrobiology product is scheduled for publication with a national publishing company in January 2002. The national publisher will provide extensive marketing, dissemination, and professional development for prospective users of the curriculum, reaching an estimated eight thousand classrooms.

Lead: Ms. Catherine Tsairides, NASA Astrobiology Institute, Moffett Field, CA 94035

E-mail: [ctsairides@mail.arc.nasa.gov](mailto:ctsairides@mail.arc.nasa.gov). Phone: 650-604-0808.Primary URL: <http://astrobio.terc.edu>

## Astromaterials-Astrobiology Curriculum Development

Theme(s): ASO, SSE

Msn/Prgm: SRT, NAI, Astromaterials

Description: The Astromaterials-Astrobiology curriculum development project brought teachers into JSC labs to learn about our science, develop activities, and support materials to take that science into the K-12 classroom. We use a theme of Martian meteorites, "How do we know they're from Mars?" and "Do they contain evidence of

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XMM-Newton Summer Teachers Workshop

Theme(s): ASO, SEU

Msn/Prgm: XMM-Newton

Description: This summer workshop for secondary teachers focuses on basic astrophysical concepts illustrated by the XMM-Newton Mission that are representative of the national standards for teaching science. Teachers are taught the basic concepts by learning classroom activities that illustrate these principles. Later during the workshop, teachers create their own curriculum materials based on their unique classroom situation.

Lead: Mr. Christian Foster, University of California, Santa Barbara, Santa Barbara, CA 93106

E-mail: [cfoster@ltsc.ucsb.edu](mailto:cfoster@ltsc.ucsb.edu). Phone: 805-893-7966.Primary URL: <http://outreach.ucsb.edu/xmm/>2nd URL: <http://heasarc.gsfc.nasa.gov/docs/xmm-1c/>


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**Curriculum Development/Dissemination**


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## Academic Talent Development Program for Grades 9-12

Theme(s): SEU

Msn/Prgm: SRT, CHIPS

Description: Through SEGway, teachers and museum curriculum specialists will develop Web-based lessons for high school students in grades 9-12 that utilize CHIPS mission observations. These lessons would use motivating questions, such as, "What and where is the Local Bubble?," "How does a nearby supernova affect the cosmic neighborhood?," or "What is a plasma, and how is it created?," to address topics like the scale and structure of the Local Bubble, mapping techniques, and measuring temperature.

Lead: Dr. Nahide Craig, University of California, Berkeley, Berkeley, CA 94720

E-mail: [ncraig@ssl.berkeley.edu](mailto:ncraig@ssl.berkeley.edu). Phone: 510-643-7273.Primary URL: [http://cse.ssl.berkeley.edu/chips\\_epo/students2.html](http://cse.ssl.berkeley.edu/chips_epo/students2.html)

Scientist(s): Dr. Nahide Craig University of California, Berkeley Berkeley, CA

Dr. Mark Hurwitz University of California, Berkeley Berkeley, CA

Partner(s): Chabot Space and Science Center Oakland, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Jun 01	27 Jul 01	University of California, Berkeley	Berkeley, CA	42	-	-

## Astrobiology: The Search For Life

Theme(s): ASO

Msn/Prgm: NAI

Description: TERC and NASA have developed an interdisciplinary high school course using the science of astrobiology as its unifying, underlying structure. Through a series of inquiry-based activities designed according to the theme of the search for life on other planets, students will explore diverse concepts in chemistry, physics, biology, Earth and space science, and engineering. These concepts are truly integrated for ninth-grade students and are designed as a sequential, coherent stream of units, chapters, activities, and long-term investigations. The astrobiology curriculum is currently being field tested nationally by educators and students. The NAI lead team members participating in the national review include the Ames Research Center, Pennsylvania State University, and Jet Propulsion Laboratory. This astrobiology product is scheduled for publication with a national publishing company in January 2002. The national publisher will provide extensive marketing, dissemination, and professional development for prospective users of the curriculum, reaching an estimated eight thousand classrooms.

Lead: Ms. Catherine Tsairides, NASA Astrobiology Institute, Moffett Field, CA 94035

E-mail: [ctsairides@mail.arc.nasa.gov](mailto:ctsairides@mail.arc.nasa.gov). Phone: 650-604-0808.Primary URL: <http://astrobio.terc.edu>

## Astromaterials-Astrobiology Curriculum Development

Theme(s): ASO, SSE

Msn/Prgm: SRT, NAI, Astromaterials

Description: The Astromaterials-Astrobiology curriculum development project brought teachers into JSC labs to learn about our science, develop activities, and support materials to take that science into the K-12 classroom. We use a theme of Martian meteorites, "How do we know they're from Mars?" and "Do they contain evidence of

Martian life?" The curriculum includes hands-on activities to introduce concepts, laboratory tours, and scientist interviews, and activities using real science data.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov). Phone: 281-483-5135.

Scientist(s):	Dr. Carlton Allen	NASA Johnson Space Center	Houston, TX
	Ms. Jaclyn Allen	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Donald Bogard	NASA Johnson Space Center	Houston, TX
	Dr. Everett Gibson	NASA Johnson Space Center	Houston, TX
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Dr. Gordon McKay	NASA Johnson Space Center	Houston, TX
	Dr. David McKay	NASA Johnson Space Center	Houston, TX
	Dr. David Mittlefehldt	NASA Johnson Space Center	Houston, TX
	Dr. Lawrence Nyquist	NASA Johnson Space Center	Houston, TX
	Dr. Craig Schwandt	Lockheed Martin ESC/JSC	Houston, TX

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Jun 01	15 Aug 01	NASA Johnson Space Center	Houston, TX	7	-	-

#### Astronomy Connections: Gravity and Black Holes Curriculum

Theme(s): SEU

Msn/Prgm: Adler, SEU Forum, DePaul B/F

Description: The Astronomy Connections curriculum is designed to engage middle school students in the exploration of concepts related to gravity and black holes. Each curriculum resource module utilizes an astronomy-related theme as the context for bridging the sciences, arts, and humanities. Instructional technologies and museum resources are emphasized as educational tools to support teaching and learning.

Lead: Mr. Bryan Wunar, Adler Planetarium and Astronomy Museum, Chicago, IL 60605  
E-mail: [wunar@adlernet.org](mailto:wunar@adlernet.org). Phone: 312-322-0542.

Primary URL: <http://www.adlerplanetarium.org/education/ac/gravity/>

#### Astronomy Connections: Sun-Earth Connection Curriculum

Theme(s): SEC

Msn/Prgm: Adler, DePaul B/F, OAI B/F, SEC Forum

Description: The Astronomy Connections curriculum is designed to engage middle school students in the exploration of concepts related to the Sun-Earth Connection. Each curriculum resource module utilizes an astronomy-related theme as the context for bridging the sciences, arts, and humanities. Instructional technologies and museum resources are emphasized as educational tools to support teaching and learning.

Primary URL: <http://www.adlerplanetarium.org/education/ac/sunearth/>

#### Astroventure

Theme(s): ASO

Msn/Prgm: NAI

Description: A nationwide pilot test of 14 astronomy lessons and one astronomy multimedia activity was conducted with 1,136 students in 14 States. These students represented 16 regular education classrooms, 1 gifted classroom, 2 magnet, 7 homeschools, and 3 after-school programs. The results of the evaluation were very positive overall. The majority of students learned from and liked the product. Ninety-three percent of educators rated the product as good or excellent, and 100 percent said they were somewhat or very likely to use the product again. The level of difficulty was one area that was identified as an area for improvement. There were also specific concerns about particular lessons, improvements to the technology, and page layout that were identified.

Lead: Ms. Christina O'Guinn, NASA Ames Research Center, Moffett Field, CA 94035-1000  
E-mail: [coguinn@mail.arc.nasa.gov](mailto:coguinn@mail.arc.nasa.gov).

#### Cassini Educator Workshops

Theme(s): SSE

Msn/Prgm: Cassini/Huygens Probe

Description: Educator workshops are designed to introduce teachers, curriculum developers, science coordinators, and

administrators to educational activities produced by the Cassini E/PO Team. Workshops consist of introductory material, supporting scientific and/or engineering briefing, and hands-on training products. Workshops are held at JPL, in classroom settings, and at professional conferences (such as NSTA and TechEd) throughout the year.

Lead: Ms. Shannon McConnell, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [shannon.mcconnell@jpl.nasa.gov](mailto:shannon.mcconnell@jpl.nasa.gov). Phone: 818-393-5815.

Scientist(s):	Dr. Scott Bolton	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Stephen Edberg	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Kevin Grazier	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Shannon McConnell	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Trina Ray	NASA Jet Propulsion Laboratory	Pasadena, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Oct 00	20 Oct 00	NASA Jet Propulsion Laboratory	Pasadena, CA	130	-	-
20 Oct 00	20 Oct 00	NASA Jet Propulsion Laboratory	Pasadena, CA	175	-	-
23 Oct 00	27 Oct 00	AAS/Division for Planetary Sciences (DPS) Meeting				
			Pasadena, CA	-	1,000	-
02 Nov 00	02 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	80	-	-
02 Nov 00	02 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	100	-	-
03 Jan 01	05 Jan 01	Orange County Outdoors Educators Conference	Oak Glen, CA	100	-	-
08 Mar 01	10 Mar 01	San Diego Science Educator's Association Conference				
			San Diego, CA	9	-	-
09 Mar 01	09 Mar 01	San Diego Convention Center	San Diego, CA	15	-	-
26 Mar 01	28 Mar 01	TechEd '01	CA	4	-	-
26 May 01	26 May 01	Albuquerque Hilton Hotel	Albuquerque, NM	-	25	-
04 Jun 01	07 Jun 01	College of Charleston	Charleston, SC	31	-	-
13 Jun 01	13 Jun 01	NASA Jet Propulsion Laboratory ERC	Pomona, CA	20	-	-
14 Jun 01	14 Jun 01	College of Southern Idaho	Twin Falls, ID	30	-	-
20 Jun 01	21 Jun 01	Bradbury Science Museum	Los Alamos, NM	57	-	-
17 Jul 01	17 Jul 01	NASA Jet Propulsion Laboratory ERC	Pomona, CA	30	-	-

Curriculum Standards Quilt Development and Dissemination

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SSE Forum, SSE Theme, Cassini/Huygens Probe, Galileo, DPSO, CONTOUR, Deep Impact, MESSENGER, Stardust, Mars E/PO, OP E/PO, DS-1

Description: The Solar System Exploration Forum has partnered with the Office of Education and Public Outreach at JPL in the development of a tool called the Curriculum Standards "Quilt." The Quilt is a matrix which displays NASA educational products according to the curriculum standard for which they could serve as replacement modules. The matrix displays the standards in three ways: 1) By curriculum content standard (the focus of the curricular material); 2) by thematic organizing standard (the presentation of the content); and 3) by grade span (blocked out in rows). The Quilt which displays the science standards, taken from the National Science Education Standards, was put on CD-ROM format and included electronic activities from various solar system missions. The Quilt which displays the math standards, taken from Principles and Standards for School Mathematics (National Council of Teachers of Mathematics), was put in hard-copy format and contains activities from all OSS themes. Both have been distributed at various venues and have undergone extensive evaluation.

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	15	-	-
09 Aug 01	09 Oct 01	Solar System Educator Annual Meeting	Monrovia, CA	45	-	-

### Exceptional Space Science Materials for Exceptional Students

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: ASO Forum, SSE Forum, SEU Forum, SERCH B/F, Swift, SEC Forum

Description: This pilot workshop will focus on the use and development of space science educational materials for the special needs classroom. Purpose: 1) to familiarize developers of NASA OSS education materials with the diversity of exceptional classroom and audience needs; 2) to familiarize educators of exceptional students with the wide variety of standards-based space science educational support materials available from NASA; 3) to evaluate several popular classroom materials from the different OSS themes for use in exceptional classrooms; and 4) to build a communication and support network of exceptional teachers and NASA mission-related personnel. Goals: 1) to provide teachers of exceptional students with exciting new resources to use in their classrooms and some experience in using them; 2) to provide recommendations for modifications and future design issues to developers of NASA mission-related educational products so that they are readily useable by exceptional audiences; and 3) to begin developing a handbook of best practices for use in other workshops and educational settings for members of the NASA OSS Education Support Network.

Lead: Dr. Cassandra Runyon, College of Charleston, Charleston, SC 29424

E-mail: [cass@cofc.edu](mailto:cass@cofc.edu). Phone: 843-953-8279.

Primary URL: <http://serch.cofc.edu/serch/workshop.htm>

Partner(s):	Charleston Math and Science Hub	Charleston, SC
	NASA Goddard Space Flight Center	Greenbelt, MD
	NASA Office of Human Resources and Education	Washington, DC
	Pacific Science Center	Seattle, WA
	South Carolina Space Grant Consortium	Charleston, SC
	South Carolina State Museum	Columbia, SC

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
04 Jun 01	07 Jun 01	College of Charleston	Charleston, SC	21	-	-

### Formal Education, Chandra X-Ray Center (CXC)

Theme(s): SEU

Msn/Prgm: CXO

Description: The Chandra X-Ray Center and the Wright Center for Innovative Science Education collaborate on several workshops each year for the purpose of introducing master teachers to Chandra-related education materials, and to prepare the teachers to give workshops of their own and to further disseminate Chandra materials. The program includes formal curriculum development and review. The CXC program also offers the opportunity for teachers to propose a week's residence at the Wright Center in the Teacher-Scholar program to work on a Chandra-related project. In addition, Chandra scientists help prepare questions that were used in the final round of the National Science Olympiad. Chandra Scientists participate in NASA product reviews and workshops.

Lead: Ms. Kathleen Lestition, Chandra X-Ray Center, Cambridge, MA 02138

E-mail: [klestition@cfa.harvard.edu](mailto:klestition@cfa.harvard.edu). Phone: 617-495-7399.

Primary URL: <http://chandra.harvard.edu>

2nd URL: [http://www.tufts.edu/as/wright\\_center/](http://www.tufts.edu/as/wright_center/)

Scientist(s):	Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Christine Jones	Chandra X-Ray Center	Cambridge, MA
	Dr. Terry Matilsky	Rutgers University	Piscataway, NJ
	Dr. Stephen Murray	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Frederick Seward	Chandra X-Ray Center	Cambridge, MA
	Dr. Patrick Slane	Chandra X-Ray Center	Cambridge, MA
	Dr. Randall Smith	Harvard University	Cambridge, MA
	Dr. Jan Vrtilik	Harvard University	Cambridge, MA

Partner(s): Wright Center for Innovative Science Education

Medford, MA

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
05 Oct 00	06 Oct 00	National Science Olympiad Coaches Clinic	Hammond, IN	400	-	-

07 Mar 01	07 Mar 01	Arlington Public Schools	Arlington, MA	-	-	-
14 Mar 01	19 Mar 01	Wright Center for Innovative Science Education	Medford, MA	2	-	-
01 Apr 01	01 Apr 01	Bishop School	Arlington, MA	-	-	-
17 May 01	23 May 01	National Science Olympiad	Boulder, CO	162	-	-
01 Jun 01	31 Aug 01	Chandra X-Ray Center	Cambridge, MA	-	-	-
16 Jun 01	19 Jun 01	Wright Center for Innovative Science Education	Medford, MA	9	-	-
20 Jun 01	24 Jun 01	Wright Center for Innovative Science Education	Medford, MA	33	-	-
15 Jul 01	18 Jul 01	Wright Center for Innovative Science Education	Medford, MA	7	-	-

#### FOSS-LPI Solar System Curriculum Workshop

Theme(s): SSE

Msn/Prgm: LPI B/F

Description: The Full-Option Science System (FOSS) Solar System Curriculum, created at UC Berkeley Lawrence Hall of Science, was introduced to 30 K-12 science teachers in collaboration with LPI science and education staff. The week-long workshop included hands-on and multimedia material from the FOSS kit, as well as activities developed through LPI's education efforts. The event was held at the Lunar and Planetary Institute in Houston, August 12-17.

Lead: Mr. Larry Malone, Lawrence Hall of Science, Berkeley, CA 94720-5200.

Primary URL: <http://www.delta-education.com>

Scientist(s):	Dr. David Black	Lunar and Planetary Institute	Houston, TX
	Dr. Robert Herrick	Lunar and Planetary Institute	Houston, TX
	Dr. Kathleen Johnson	Lunar and Planetary Institute	Houston, TX
	Dr. Walter Kiefer	Lunar and Planetary Institute	Houston, TX
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Dr. Paul Spudis	Lunar and Planetary Institute	Houston, TX

Partner(s): University of California, Berkeley

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Aug 01	17 Aug 01	Lunar and Planetary Institute	Houston, TX	32	-	-

#### Galileo Educator Workshops and Conferences

Theme(s): SSE

Msn/Prgm: Galileo

Description: Educator workshops allow Galileo Outreach the opportunity to reach our teachers, presenting them with new materials, training them on new and existing materials, and assisting them with lesson development for their classrooms. Workshops are held throughout the year at a variety of venues ranging from JPL, to school classrooms, local educator conferences, and national conferences.

Lead: Ms. Shannon McConnell, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [shannon.mcconnel@jpl.nasa.gov](mailto:shannon.mcconnel@jpl.nasa.gov). Phone: 818-393-5815.

Primary URL: <http://galileo.jpl.nasa.gov>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
02 Nov 00	02 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	130	-	-

#### Hands-On Activities in Solar and Stellar Variability

Theme(s): SEC, SEU

Msn/Prgm: SRT

Description: The two complementary goals of this education/public outreach project are 1) to develop materials useful for education in the science of solar and stellar variability, and 2) to explore new technologies for education and public outreach. The project is designed as an extension to the Hands-On Astrophysics (HOA) project carried out by the American Association of Variable Star Observers (AAVSO). Our objective is to produce several online modules for the HOA users to access on the AAVSO Web site. These modules concern the astrophysical interpretation and analysis of light curves—plots of brightness vs. time—and the solar activity cycle. Many variable stars, as well as the Sun, show variability on a variety of time scales and have nonperiodic contributions that make the variability hard to predict. In our exercises, students will test predictions from several

possible models for the nature of the variability against the observed variability and eliminate some models while retaining others. The most unique element of this project is that students will be able to work with real, current data and to attempt predictions of future variability that they can then also, after a time, check against the observations.

Lead: Dr. Lee Anne Willson, Iowa State University, Ames, IA 50010  
E-mail: [lwillson@iastate.edu](mailto:lwillson@iastate.edu). Phone: 515-294-6765.

Primary URL: <http://hoa.aavso.org/>

2nd URL: <http://www.polaris.iastate.edu/>

Scientist(s): Dr. Lee Anne Willson Iowa State University Ames, IA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
25 Oct 00	28 Oct 00	American Association of Variable Star Observers (AAVSO) Annual Meeting 2000	Waltham, MA	76	50	-
01 Jan 01	08 May 01	Iowa State University	Ames, IA	7	-	-

#### Hubble Space Telescope Formal Education

Theme(s): ASO

Msn/Prgm: HST

Description: The Formal Education branch of the Office of Public Outreach at the Space Telescope Science Institute develops both online and hard-copy curriculum support products for the K-12 formal education community. These products, such as the popular Amazing Space series, are formulated in strict compliance with national educational standards and are subject to a rigorous evaluation program before and after release.

Lead: Ms. Bonnie Eisenhamer, Space Telescope Science Institute, Baltimore, MD 21218  
E-mail: [bonnie@stsci.edu](mailto:bonnie@stsci.edu). Phone: 410-338-4798.

Primary URL: <http://opposite.stsci.edu/pubinfo/edugroup/educational-activities.html>

Scientist(s): Dr. Denise Smith Space Telescope Science Institute Baltimore, MD  
Dr. Terry Teays Space Telescope Science Institute Baltimore, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
16 Nov 00	18 Nov 00	National Science Teachers Association (NSTA) Eastern Area Conference	Baltimore, MD	26	-	-
27 Feb 01	04 Apr 01	Home Schoolers	Various Locations,	-	40	-
01 Mar 01	15 Jun 01	Education Consultant	Madison, TN	-	135	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	70	-
		South Dorchester School	Church Creek, MD	220	-	-

#### IMAGE K-12 Education Products

Theme(s): SEC

Msn/Prgm: IMAGE

Description: The Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) education and public outreach program creates exemplary classroom activity workbooks in space physics for the K12 community, including "Solar Storms and You!" and "Exploring the Earth's Magnetic Field."

Primary URL: <http://image.gsfc.nasa.gov/poetry/activities.html>

Scientist(s): Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD  
Dr. Patricia Reiff Rice University Houston, TX

Partner(s): Rice University Houston, TX

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	01 Mar 01	Cherry Hill Middle School	Elkton, MD	-	-	-
01 Jan 01	15 Mar 01	NASA Goddard Space Flight Center	Greenbelt, MD	113	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	-	-
05 May 01	09 May 01	Glencoe/McGraw Hill Publishers	New York, NY	-	-	-

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IMP-8 Content Support

Theme(s): SEC

Msn/Prgm: IMP-8

Description: Interplanetary Monitoring Platform (IMP-8) scientists at NASA Goddard Space Flight Center work with education and public outreach leads to validate the scientific accuracy of the educational and public outreach products.

Scientist(s): Dr. Joseph King NASA Goddard Space Flight Center Greenbelt, MD  
Dr. Ronald Lepping NASA Goddard Space Flight Center Greenbelt, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	09 Sep 01	NASA Goddard Space Flight Center	Greenbelt, MD	30	-	-

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It's About Time

Msn/Prgm: IDEAS

Description: The program developed a curriculum unit that provides students in second and third grades with a means to investigate why there are 24 hours in a day, 12 months in a year and 365 days in a year (usually). The unit is detailed in a booklet for teachers that include activities, background information, and supplies needed to carry out the activities. Students engage in various modes of learning through observations, hands-on creation of various timekeeping devices, narrative, discussions, and creative activities.

Lead: Christine Jones, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138.

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JSC Astrobiology Classroom Activities Development

Theme(s): ASO

Msn/Prgm: NAI

Description: A team of six educators and all of the JSC Astrobiology science team have worked on the development of a series of activities that highlight aspects of research conducted in our laboratories. They also have developed and tested several activities that will help students to understand some of the difficulties of working with very small samples. Other activities allow students to experiment with yeast's range of tolerance for salt and temperature. These activities will be available on our JSC Astrobiology Web site and on CD.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov).

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Kinesthetic Astronomy Curriculum Development

Theme(s): SEU, SSE

Msn/Prgm: SSI B/F

Description: Astronomy educators at the Space Science Institute in Boulder, CO, are developing an innovative, experiential approach to learning basic astronomical concepts. The approach is called "Kinesthetic Astronomy," and it is currently intended for learners in both formal and informal educational settings. We are developing a sequence of inquiry-based lesson plans that address astronomical phenomena people can readily see in the sky. The lessons are science-rich and fun, and they are also fully aligned with national science education standards. In our first lesson, called "Sky Time," students experience a series of simple body movements (e.g., rotating, revolving, tilting, bending, twisting) that gives them insight into the relationship between time and astronomical motions of Earth (rotation about its axis and orbit around the Sun), and also about how these motions influence what we see in the sky at various times of the day and year. This lesson is published on the Web and can be found by clicking on "K-12 Curriculum" at the URL list below. Other lessons in development are devoted to lunar motion, meteor showers, and the sky motions of the planets. Field testing with grades six and up suggests that kinesthetic astronomy techniques allow learners to achieve a good intuitive grasp of concepts that are much more difficult to learn in more conventional ways. Field testing has been conducted in a variety of settings, including Sunset Middle School (100 7th-grade students) in Longmont, CO, Eagle Rock High School, for at-risk students in Estes Park, CO (30 9th-12th-grade students), and in adult education programs such as those at the Aspen Center for Environmental Studies, Western State College, Gunnison, CO, and the Colorado Outward Bound School. Versions of these lessons for younger grades, family programs, and science center floor demonstrations are also in planning and development.

Lead: Dr. Cherylynn Morrow, Space Science Institute, Boulder, CO 80309  
E-mail: [camorrow@colorado.edu](mailto:camorrow@colorado.edu). Phone: 303-492-7321.Primary URL: <http://www.spacescience.org>

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
10 Oct 00	11 Oct 00	Eagle Rock School	Estes Park, CO	12	-	-
12 Feb 01	13 Feb 01	Sunset Middle School	Longmont, CO	103	-	-
08 Aug 01	09 Aug 01	Aspen Center for Environmental Studies	Aspen, CO	12	-	-
21 Sep 01	23 Sep 01	Western State College	Gunnison, CO	25	-	-

## Mars Educational Product Development/Dissemination

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: Classroom activities and products for educators featuring standards-based, Mars-related themes.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: <http://mars.jpl.nasa.gov/classroom/>2nd URL: <http://tes.asu.edu/neweducation.html>

Scientist(s): Ms. Sheri Klug Arizona State University Tempe, AZ

Partner(s): Arizona State University Tempe, AZ

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Dec 00	09 Dec 00	National Science Teachers Association (NSTA) Southwestern Area Conference	Phoenix, AZ	105	212	-
07 Dec 00	09 Dec 00	National Science Teachers Association (NSTA) Southwestern Area Conference	Phoenix, AZ	110	-	-
25 Jan 01	25 Jan 01	Deer Valley School	Glendale, AZ	180	-	-
13 Feb 01	13 Feb 01	Sanborn Elementary	Chandler, AZ	25	825	-

## Navigator Workshops/Presentations

Theme(s): ASO

Msn/Prgm: Navigator, SIM, Keck, TPF, ST-3

Lead: Dr. Rudolf Danner, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [rudolf.danner@jpl.nasa.gov](mailto:rudolf.danner@jpl.nasa.gov). Phone: 818-393-4877.Primary URL: <http://sim.jpl.nasa.gov/michelson/index.html>

Scientist(s): Dr. Rudolf Danner NASA Jet Propulsion Laboratory Pasadena, CA

## Origins Education Forum Evaluation

Theme(s): ASO

Msn/Prgm: ASO Forum

Description: The Origins Education Forum provides a formative evaluation service to Origins missions. Any Origins mission may request to have a product in development be reviewed by the evaluation team at Origins. This provides an independent look at the product from an external set of evaluators. Products are assessed according to a number of criteria, including scientific and educational content, design, pedagogical approach, and usability. The service has been used by most of the Origins missions and has been applied to diverse products such as Web sites, teacher's guides, posters, and complete curricula.

Lead: Ms. Bonnie Eisenhamer, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [bonnie@stsci.edu](mailto:bonnie@stsci.edu). Phone: 410-338-4798.

Scientist(s): Dr. Michael Smith NASA Goddard Space Flight Center Greenbelt, MD  
 Dr. Denise Smith Space Telescope Science Institute Baltimore, MD  
 Dr. Frank Summers Space Telescope Science Institute Baltimore, MD  
 Dr. Terry Teays Space Telescope Science Institute Baltimore, MD  
 Dr. Mark Voit Space Telescope Science Institute Baltimore, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	20	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	600	-

20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	25	-	-
04 Apr 01	07 Apr 01	National Council of Teachers of Mathematics (NCTM) Conference	Orlando, FL	-	250	-
09 Apr 01	08 May 01	Space Telescope Science Institute	Baltimore, MD	3	-	-
23 Apr 01	23 Apr 01	Space Telescope Science Institute	Baltimore, MD	5	-	-
25 Jun 01	20 Jul 01	Space Telescope Science Institute	Baltimore, MD	6	-	-
25 Jun 01	26 Jul 01	Space Telescope Science Institute	Baltimore, MD	9	-	-
24 Sep 01	28 Sep 01	Space Telescope Science Institute	Baltimore, MD	5	-	-

#### Practical Uses of Math and Science

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SSE Forum

Description: Practical Uses of Math And Science—PUMAS—is a collection of one-page examples of how math and science topics taught in K-12 classes can be used in interesting settings, including everyday life. The examples are written primarily by scientists and engineers, and are available to teachers, students, and other interested parties via the PUMAS Web site. Our goal is to capture, for the benefit of precollege science education, the flavor of the vast experience that working scientists have with interesting and practical uses of math and science.

Lead: Ralph Kahn, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Ralph.A.Kahn@jpl.nasa.gov](mailto:Ralph.A.Kahn@jpl.nasa.gov). Phone: 818-354-9024.

Primary URL: <http://pumas.jpl.nasa.gov/>

Scientist(s):	Mr. Paul Broome	ENSCO Inc.	Springfield, VA
	Mr. William Cantrell	Indiana University, Bloomington	Bloomington, IN
	Dr. Lin Chambers	NASA Langley Research Center	Hampton, VA
	Mr. Martin Cohen	Environmental Standards Inc.	Langhorne, PA
	Mr. Stephen Edberg	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. James Foster	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Steve Frolking	University of New Hampshire	Durham, NH
	Mr. Alan Jones	State University of New York at Binghamton	Endwell, NY
	Mr. Evan Manning	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Charles Moren	Embry Riddle Aeronautical University	Daytona Beach, FL
	Mr. Elliott Ostler	METS Inc.	Omaha, NE
	Dr. Claire Parkinson	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Gregory Pasternack	University of California, Davis	Davis, CA
	Mr. Joseph Reid (retired)	University of Québec	Montreal, Canada,
	Ms. Lorraine Remer	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Martin Ruzek	Universities Space Research Association	Whitelaw, WI
	Ms. Phyllis Salmons	Embry Riddle Aeronautical University	Daytona Beach, FL
	Mr. David Stern	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Donald Wylie	University of Wisconsin—Madison	Madison, WI

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	128,716

#### Preparing for Multispacecraft Missions: Auroral Space Time Scales and Magnetotail Assimilation Model

Theme(s): SEC

Msn/Prgm: SRT

Description: The goal of this Education and Public Outreach program is to create learning materials for grades 6-12 and a Web site targeting the general public. Developed through professional educator and scientist partnerships, these materials will be compliant with the National Education Standards and the NASA E/PO Implementation Strategy. Our innovative Web site will provide the primary method of dissemination for the general public and educators alike. The purpose of this E/PO effort is to promote the use of advanced science concepts as a way of encouraging students in their scientific studies. This program will create materials which build upon the science course materials taught in the classroom using the unique twist of spacecraft and space weather to link these lessons to real-life innovative technology. These materials directly relate our scientific research with the science the students themselves are studying to give them a greater scope of understanding and an apprecia-

tion of where science can lead them. These materials will not only allow a science educator to cover the required standards at the appropriate grade level, but also to use space weather and spacecraft technology concepts to present textbook science linked with recent research. To achieve this, the educational materials will focus on supplementing existing modules, thus using advanced research concepts to give students the knowledge and interest they will need to succeed in science.

Lead: Dr. Simon Wing, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099  
E-mail: [simon.wing@jhuapl.edu](mailto:simon.wing@jhuapl.edu). Phone: 240-228-8075.

Partner(s): Howard B. Owens Science Center Lanham, MD  
Maryland Science Center Baltimore, MD

#### Presenting Einstein's Relativity and Gravity Probe B in High School Classrooms

Theme(s): SEU

Msn/Prgm: GP-B

Description: One- or two-day presentations to high school physics classes in the San Francisco Bay area. Presentations demonstrate a lesson guide prepared to teach students, teachers, and the general public about a connection between Newton's theory of gravity, Einstein's theory of curved spacetime, and the Gravity Probe B mission to explore the structure of spacetime.

Lead: Mr. Shannon Range, Stanford University, Stanford, CA 94305  
E-mail: [kdoah@stanford.edu](mailto:kdoah@stanford.edu). Phone: 415-824-1716.

Primary URL: <http://einstein.stanford.edu>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Jan 01	10 Jan 01	Aragon High School	Belmont, CA	63	-	-
01 Feb 01	02 Feb 01	Stanford University	Stanford, CA	78	-	-
15 Feb 01	16 Feb 01	Hayward High School	Hayward, CA	31	-	-
01 Apr 01	02 Apr 01	Stanford University	Stanford, CA	10	-	-

#### Space Place Access for Community Education—A Worldwide Link

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IDEAS

Description: UW Space Place created "shoebox" astronomical activities, published a set of educational materials about astronomical optics, and developed specific links to the "Universe in the Park" program that were integrated with the annual summer teacher workshops. All these items are available on the Web at UW Space Place.

Lead: Dr. Karen Bjorkman, University of Wisconsin-Madison, Madison, WI 53715.

Primary URL: <http://www.sal.wisc.edu/spaceplace>

#### STP K-12 Program Development

Theme(s): SEC

Msn/Prgm: STP

Description: As part of the overall Solar Terrestrial Probe (STP) Program Office E/PO effort, the K-12 Educational Program Development provides partnerships with STP scientists and E/PO personnel to develop inquiry-based activities and lessons with a cross-disciplinary approach to education. The final products incorporate national standards and provide educators with continuous resources necessary for curriculum enhancement for the K-12 education community.

Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-1275.

Scientist(s):	Dr. Joseph Davila	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Richard Fisher	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Shane Hynes	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Barbara Lambert	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Art Poland	NASA Goddard Space Flight Center	Greenbelt, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
08 Aug 01	09 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	11	-	-
		Abingdon Elementary School	Abingdon, MD	-	-	-

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 Swift Classroom Materials Development

Theme(s): SEU

Msn/Prgm: Swift

Description: Each year, the Swift mission E/PO program produces standards-based materials for use in the classrooms of grades 7-12. The topic for this year's materials was "Waves and Wave Motion," and included lesson plans and activities for both the mathematics and science classroom.

Lead: Dr. Laura Whitlock, Sonoma State University, Rohnert Park, CA 94928

E-mail: [laura.whitlock@sonoma.edu](mailto:laura.whitlock@sonoma.edu). Phone: 707-664-2256.

Scientist(s): Dr. Laura Whitlock Sonoma State University Rohnert Park, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	15 Mar 01	Sonoma State University	Rohnert Park, CA	8	-	-
01 Jan 01	15 Mar 01	Sonoma State University	Rohnert Park, CA	10	-	-
01 Jan 01	15 Mar 01	Sonoma State University	Rohnert Park, CA	11	-	-
01 Jan 01	01 May 01	Sonoma State University	Rohnert Park, CA	11	-	2,000

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## Taking the Measure of the Universe Workshops

Theme(s): ASO

Msn/Prgm: SIM

Description: Workshops for educators of grades 5-8 and 9-12 on the Taking the Measure of the Universe educational wall sheet.

Lead: Ms. Rhonda Hines-Jones, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [rhonda.r.jones@jpl.nasa.gov](mailto:rhonda.r.jones@jpl.nasa.gov). Phone: 818-354-1562.

Scientist(s): Dr. Ann Werhle NASA Jet Propulsion Laboratory Pasadena, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
23 Oct 00	23 Oct 00	Millard North High School	Omaha, NE	50	-	-
13 Dec 00	13 Dec 00	Napa Street Elementary School	Northridge, CA	19	-	-
03 Jan 01	05 Jan 01	Orange County Outdoors Educators Conference	Oak Glen, CA	180	70	-
24 Feb 01	24 Feb 01	Canyon Springs Elementary School	Santa Clarita, CA	22	-	-
24 Feb 01	24 Feb 01	Mint Canyon Elementary School	Canyon County, CA	46	-	-
08 Mar 01	10 Mar 01	San Diego Science Educator's Association Conference	San Diego, CA	27	-	-
04 Apr 01	07 Apr 01	National Council of Teachers of Mathematics (NCTM) Conference	Orlando, FL	20	-	-
04 Apr 01	07 Apr 01	National Council of Teachers of Mathematics (NCTM) Conference	Orlando, FL	122	-	-
24 May 01	24 May 01	Nicolet Middle School	Banning, CA	22	-	-

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## Voyages Through Time Field Test

Theme(s): ASO

Msn/Prgm: NAI

Description: A Voyage Through Time (VTT) is a curriculum development project with major funding from the NSF. The NASA Astrobiology Institute is supporting the national field test, final revision, and dissemination of VTT. VTT is an integrated science course for high school students in grades 9 or 10. Designed as a yearlong course in six modules, VTT will be a core course when adopted by districts and schools. In schools where only discipline-based courses (i.e., biology, chemistry, and physics) are taught, individual VTT modules may be integrated into these courses. The overarching theme for VTT is evolution—the study of change in physical and living systems. Evolutionary change is a powerful framework for studying our universe and our place therein. It is a recurring theme in every realm of science. Over time, the universe, the planet Earth, life, and human technologies all change, albeit on vastly different scales. Evolution offers scientific explanations for the age-old question, "where did we come from?" In addition, historical perspectives of science show how our understanding has evolved over time. The complexities of all of these systems will never reveal a "finished" story. But it is a story of epic size, capable of inspiring awe and of expanding our sense of time and place, and emi-

nently worthy of investigating. This story is the basis of *Voyages Through Time*.  
 Lead: Ms. Edna DeVore, SETI Institute, Mountain View, CA 94043  
 E-mail: [edevore@seti.org](mailto:edevore@seti.org). Phone: 650-960-4538.

#### XMM E/PO Summer Planning Workshop

Theme(s): SEU

Msn/Prgm: XMM-Newton

Description: A planning workshop to develop the model for future summer teacher workshops and to identify areas for project curriculum development, this two-day meeting gathered representatives from local formal and informal educational institutions. It included middle school, high school, junior college, and science museum personnel who learned about the XMM Mission and E/PO program, and then made recommendations about appropriate workshop activities and products for classroom use.

Lead: Mr. Christian Foster, University of California, Santa Barbara, Santa Barbara, CA 93106  
 E-mail: [cfoster@lsc.ucsb.edu](mailto:cfoster@lsc.ucsb.edu). Phone: 805-893-7966.

Primary URL: <http://outreach.ucsb.edu/xmm>

2nd URL: [http://heasarc.gsfc.nasa.gov/docs/xmm\\_lc/](http://heasarc.gsfc.nasa.gov/docs/xmm_lc/)

Partner(s): University of California, Santa Barbara

Santa Barbara, CA

### Student Support

#### Astromaterials-Astrobiology Student Presentations

Theme(s): ASO, SSE

Msn/Prgm: SRT, Astromaterials

Description: JSC space scientists actively support JSC Education Office programs with numerous student presentations. Major examples are Mars geology and meteorites talks, lunar lab tours for Texas Aerospace Scholars and "Rocks from Space" or Mars talks for the JSC Distance Learning Outpost. A total of 40 presentations were given in FY 2001.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
 E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov). Phone: 281-483-5135.

Primary URL: <http://learningoutpost.jsc.nasa.gov>

2nd URL: <http://aerospacescholars.jsc.nasa.gov>

Scientist(s):	Dr. Carlton Allen	NASA Johnson Space Center	Houston, TX
	Ms. Jaclyn Allen	Lockheed Martin ESC/JSC	Houston, TX
	Ms. Judith Allton	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Everett Gibson	NASA Johnson Space Center	Houston, TX
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Dr. Gordon McKay	NASA Johnson Space Center	Houston, TX
	Dr. Douglas Ming	NASA Johnson Space Center	Houston, TX
	Dr. David Mittlefehldt	NASA Johnson Space Center	Houston, TX
	Dr. Craig Schwandt	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Eileen Stansbery	NASA Johnson Space Center	Houston, TX
	Dr. Michael Zolensky	NASA Johnson Space Center	Houston, TX

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
17 Oct 00	31 Aug 01	NASA Johnson Space Center	Houston, TX	231	780	-

#### Astronomy and Science Education for Elementary School Students

Msn/Prgm: IDEAS

Description: The program worked with the Hempfield Area School District (PA), providing presentations and demonstrations for K-8 grade students, conducted observing sessions, held an enrichment program for gifted students, and worked with teachers to make them aware of resources available through NASA Educator Resource Centers and how to use materials available.

Lead: Dr. David Turnshek, University of Pittsburgh, Pittsburgh, PA 15260  
 E-mail: [turnshek@quasar.physast.pitt.edu](mailto:turnshek@quasar.physast.pitt.edu).

Partner(s): Hempfield Area School District  
 University of Pittsburgh

Greensburg, PA  
 Pittsburgh, PA

## Cassini Classroom Visits

Theme(s): SSE

Msn/Prgm: Cassini/Huygens Probe

Description: Working directly with students is part of the Cassini Mission Outreach Program. Using outreach personnel, as well as the "Cassini Speakers," Cassini Outreach can support classroom events such as science fairs, science laboratories, and careers days.

Lead: Mr. Stephen Edberg, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [stephen.edberg@jpl.nasa.gov](mailto:stephen.edberg@jpl.nasa.gov). Phone: 818-354-6085.Primary URL: <http://www.jpl.nasa.gov/cassini>

Scientist(s):	Mr. David Atkinson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Todd Barber	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Stephen Edberg	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. John Essmiller	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Kevin Grazier	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Jody Gunn	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. James Hauge	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Robert Mitchell	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Peter Poon	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Gerardo Rivera	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Linda Spilker	NASA Jet Propulsion Laboratory	Pasadena, CA

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Oct 00	06 Oct 00	Brookings High School	Brookings, SD	52	-	-
12 Oct 00	14 Oct 00	Hyatt Regency Hotel	Sacramento, CA	7	-	-
20 Oct 00	20 Oct 00	Benson High School	Portland, OR	77	-	-
20 Oct 00	20 Oct 00	Buckman School	Portland, OR	77	-	-
20 Oct 00	20 Oct 00	Humboldt Elementary School	Portland, OR	77	-	-
20 Oct 00	20 Oct 00	Ockley Green High School	Portland, OR	52	-	-
20 Oct 00	20 Oct 00	Roosevelt High School	Portland, OR	52	-	-
26 Oct 00	26 Oct 00	Great Bend High School	Great Bend, KS	62	-	-
31 Oct 00	31 Oct 00	California State Polytechnic University	Pomona, CA	54	-	-
09 Nov 00	09 Nov 00	Heritage Academy	Bakersfield, CA	-	-	-
18 Jan 01	18 Jan 01	South Pasadena High School	Pasadena, CA	50	-	-
07 Feb 01	07 Feb 01	San Dimas High School	San Dimas, CA	62	-	-
21 Feb 01	22 Feb 01	Bradbury Science Museum	Los Alamos, NM	30	140	-
27 Feb 01	27 Feb 01	Lewis-Clark College	Lewiston, ID	404	-	-
13 Mar 01	13 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	45	-	-
18 Apr 01	19 Apr 01	Los Angeles Convention Center	Los Angeles, CA	1,500	-	-
20 Apr 01	20 Apr 01	Colfax Elementary School	Colfax, WA	75	-	-
20 Apr 01	20 Apr 01	Colton Elementary School	Moscow, ID	100	-	-
20 Apr 01	20 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	35	-	-
20 Apr 01	20 Apr 01	Trinity Christian Elementary	Tujunga, CA	26	-	-
20 Apr 01	20 Apr 01	Whitman College	Walla Walla, WA	60	-	-
23 Apr 01	23 Apr 01	Franklin Elementary School	Pullman, WA	150	-	-
23 Apr 01	23 Apr 01	Jefferson Elementary School	Pullman, WA	40	-	-
23 Apr 01	23 Apr 01	Moscow Middle School	Moscow, ID	240	-	-
26 Apr 01	26 Apr 01	Harding University	Searcy, AR	30	-	-
27 Apr 01	27 Apr 01	Harding University	Searcy, AR	100	-	-
28 Apr 01	28 Apr 01	Madison Elementary	Pasadena, CA	72	-	-
09 May 01	10 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	1,000	-
21 May 01	21 May 01	California Science Center	Los Angeles, CA	2,000	-	-
24 May 01	24 May 01	Wiley Canyon School	Newhall, CA	75	-	-
01 Jun 01	01 Jun 01	Washington Middle School	Pasadena, CA	260	-	-
19 Jun 01	21 Jun 01	Technical Vocational Institute	Albuquerque, NM	65	-	-
08 Aug 01	08 Aug 01	Elementary Institute of Science	San Diego, CA	40	-	-

21 Sep 01	21 Sep 01	University of Southern California	Los Angeles, CA	125	-	-
29 Sep 01	29 Sep 01	Minnesota University	Minneapolis, MN	100	-	-

#### CONTOUR Student Involvement

Theme(s): SSE

Msn/Prgm: CONTOUR

Description: The Comet Nucleus Tour (CONTOUR) Team has made a series of classroom visits, presentations, and other interactions with students throughout the year. In each instance, the science of the CONTOUR mission was presented and discussed.

Primary URL: <http://www.contour2002.org/>

Scientist(s): Dr. Anita Cochran University of Texas at Austin Austin, TX  
 Dr. Jeff Warren Johns Hopkins Applied Physics Laboratory Laurel, MD  
 Dr. Cliff Willey Johns Hopkins Applied Physics Laboratory Laurel, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Feb 01	14 Feb 01	Worthington Elementary School	Ellicott City, MD	25	-	-
20 Feb 01	20 Feb 01	Muskingum College	New Concord, OH	-	-	-
28 Jun 01	28 Jun 01	Centennial High School	Columbia, MD	40	-	-

#### Cooperative Satellite Learning Project—ACE

Theme(s): SEC

Msn/Prgm: ACE

Description: The Advanced Composition Explorer (ACE) mission sponsored students who participated in the Cooperative Learning Satellite Program to motivate students in the K-12 community into science, engineering, math, and careers in the space business, through the integration and application of technical disciplines into the complex system of ground- and space-based segments composing the end-to-end mission system.

Lead: Dr. Eric Christian, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [erc@cosmicra.gsfc.nasa.gov](mailto:erc@cosmicra.gsfc.nasa.gov). Phone: 301-286-1041.

Primary URL: <http://helios.gsfc.nasa.gov/ace/acehtml>

2nd URL: <http://cslp.gsfc.nasa.gov/home.html>

Scientist(s): Dr. Eric Christian NASA Goddard Space Flight Center Greenbelt, MD  
 Ms. Shirley Jacob NASA Goddard Space Flight Center Greenbelt, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	NASA Goddard Space Flight Center	Greenbelt, MD	22	-	-

#### Cooperative Satellite Learning Project—SAMPEX

Theme(s): SEC

Msn/Prgm: SAMPEX

Description: Solar Anomalous and Magnetospheric Particle Explorer (SAMPEX) scientists and engineers at NASA Goddard Space Flight Center support high school teams through the Cooperative Satellite Learning Project that involves high school students in the process of developing and operating SAMPEX that will demonstrate how NASA implements a specific mission and introduces students to careers in space.

Lead: Mr. James Watzin, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [jwatzin@pop700.gsfc.nasa.gov](mailto:jwatzin@pop700.gsfc.nasa.gov). Phone: 301-286-7933.

Primary URL: <http://joy.gsfc.nasa.gov/CSLP/home.html>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	NASA Goddard Space Flight Center	Greenbelt, MD	49	-	-

#### Deep Impact Classroom Presentations

Theme(s): SSE

Msn/Prgm: Deep Impact

Description: The Deep Impact mission team visits classrooms on a regular basis to educate students and preservice teach-

ers in basic and advanced comet science and the goals and objectives of the Deep Impact mission. Hands-on activities are generally included. The Deep Impact mission has had the opportunity to test and use two activities this year. One uses the technical objectives of the mission to teach a new approach to cratering. The second is "Why We Explore Comets," which begins with the very basics of comet science. Among other activities, students model their comet theories by making an ice cream comet filled with "debris" of their choice.

Lead: Ms. Maura Rountree-Brown, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [mnkbrown@earthlink.net](mailto:mnkbrown@earthlink.net). Phone: 818-952-7135.

Primary URL: <http://deepimpact.jpl.nasa.gov>

2nd URL: <http://deepimpact.umd.edu>

Scientist(s):	Mr. Tim Flora	Ball Aerospace Technologies Corp.	Boulder, CO
	Mr. Loren Jones	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Casey Lisse	University of Maryland	College Park, MD
	Dr. Karen Meech	University of Hawaii at Manoa	Honolulu, HI
	Dr. Flavio Mendez	Maryland Science Center	Baltimore, MD
	Mr. Mike Renbarger	Ball Aerospace Technologies Corp.	Boulder, CO
	Dr. Peter Schultz	Brown University	Providence, RI
	Ms. Gretchen Walker	University of Maryland	College Park, MD
	Ms. Elizabeth Warner	University of Maryland	College Park, MD
	Mr. Steve Wissler	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Donald Yeomans	NASA Jet Propulsion Laboratory	Pasadena, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Oct 00	18 Oct 00	Punahou School	Honolulu, HI	38	-	-
21 Oct 00	21 Oct 00	Punahou School	Honolulu, HI	100	-	-
03 Nov 00	03 Nov 00	University of Maryland at Baltimore County	Baltimore, MD	40	2	-
01 Dec 00	01 Dec 00	European Southern Observatory	Santiago, Chile	60	4	-
10 Jan 01	10 Jan 01	Colorado School of Mines	Golden, CO	53	-	-
25 Jan 01	25 Jan 01	Institute for Astronomy	Honolulu, HI	43	-	-
07 Feb 01	07 Feb 01	Ball Aerospace Technologies Corp.	Boulder, CO	75	-	-
10 Feb 01	10 Feb 01	Sacred Heart Academy	Honolulu, HI	97	-	-
29 Mar 01	29 Mar 01	Culver Christian School	Los Angeles, CA	17	-	-
03 Apr 01	03 Apr 01	Glenallen Elementary School	Silver Spring, MD	64	-	-
04 Apr 01	04 Apr 01	Challenger Learning Center	Phoenix, AZ	39	9	-
04 Apr 01	04 Apr 01	Superior Elementary School	Superior, CO	28	-	-
26 Apr 01	26 Apr 01	Brown University	Providence, RI	72	-	-
27 Apr 01	27 Apr 01	Carey Junior High School	Cheyenne, WY	77	-	-
24 May 01	24 May 01	University of South Carolina	Columbia, SC	30	-	-
31 May 01	31 May 01	Arcadia Christian School	Arcadia, CA	45	-	-
09 Aug 01	09 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	35	-	-

Galileo Career Fairs and Classroom Visits

Theme(s): SSE

Msn/Prgm: Galileo

Description: Schools need support in many forms. From classroom experiments and lectures to career fairs, Galileo Outreach offers a variety of programs designed to augment a school's existing technical curriculum.

Lead: Ms. Shannon McConnell, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [shannon.mcconnell@jpl.nasa.gov](mailto:shannon.mcconnell@jpl.nasa.gov). Phone: 818-393-5815.

Primary URL: <http://galileo.jpl.nasa.gov>

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Aug 01	01 Aug 01	Washington Middle School	Pasadena, CA	30	-	-

GAVRT—Cassini JMOG

Theme(s): SSE

Msn/Prgm: DSMS

**Description:** GAVRT/Cassini-JMOC (Jupiter Microwave Observing Campaign) students supported the Cassini mission's flyby of Jupiter by providing ground-based radio astronomy measurements of Jupiter's microwave emissions. During the Cassini-JMOC, students' data were used to calibrate and support interpretation of simultaneous measurements taken by Cassini's on-board radar instrument receiver. GAVRT students and teachers had the task of delivering to the Cassini program a prescribed set of radio astronomy measurements that would enable Cassini to perform previously unplanned observations, enhancing science return at Saturn. The project gave the students a chance to become part of an interdependent science team.

**Lead:** Dr. Michael Klein, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [michael.j.klein@jpl.nasa.gov](mailto:michael.j.klein@jpl.nasa.gov). Phone: 818-354-7132.

**Primary URL:** <http://deepspace.jpl.nasa.gov/dsn/applevalley>

**2nd URL:** <http://www.avstc.org/gavrt>

**Scientist(s):**

Dr. Scott Bolton	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Michael Janssen	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Michael Klein	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Steven Levin	NASA Jet Propulsion Laboratory	Pasadena, CA

**Partner(s):** Lewis Center for Educational Research Apple Valley, CA

**Event(s):**

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
05 Oct 00	10 Nov 00	Camden Middle School	Camden, SC	45	-	-
23 Oct 00	27 Oct 00	AAS/Division for Planetary Sciences (DPS) Meeting	Pasadena, CA	1,500	-	-
02 Nov 00	02 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	80	-	-
03 Nov 00	31 Dec 00	Lewis Center for Education Research/Academy for Academic Excellence	Apple Valley, CA	21	-	-
03 Nov 00	31 Dec 00	Opelika Middle School	Opelika, AL	21	-	-
18 Nov 00	27 Nov 00	University Public School	Detroit, MI	171	-	-
27 Nov 00	31 Dec 00	Cherokee County High School	Centre, AL	14	-	-
27 Nov 00	12 Feb 01	Harborside School	San Diego, CA	20	-	-
27 Nov 00	19 Jan 01	Mojave Mesa Elementary School	Apple Valley, CA	31	-	-
27 Nov 00	28 Feb 01	St. Mary's School	Medford, OR	56	-	-
29 Nov 00	05 Feb 01	Don Benito Fundamental Elementary School	Pasadena, CA	31	-	-
12 Dec 00	25 Feb 01	George County Middle School	Lucedale, MS	81	-	-
12 Dec 00	28 Feb 01	George County Middle School	Lucedale, MS	81	-	-
12 Dec 00	06 Jan 01	Mojave Mesa Elementary School	Apple Valley, CA	31	-	-
12 Dec 00	09 Mar 01	Redlands East Valley High School	Redlands, CA	31	-	-
14 Dec 00	15 Dec 00	Coca-Cola Space Science Center	Columbus, GA	10	-	-
15 Dec 00	23 Feb 01	Strong Vincent High School	Erie, PA	51	-	-
20 Dec 00	28 Feb 01	St. Mary's School	Medford, OR	23	-	-
21 Dec 00	16 Mar 01	Barton Junior High School	Buda, TX	81	-	-
21 Dec 00	26 Jan 01	Connect Middle School	Pueblo, CO	7	-	-
05 Jan 01	16 Mar 01	Ballard Junior High School	Huxley, IA	48	-	-
05 Jan 01	16 Mar 01	Ballard Junior High School	Huxley, IA	50	-	-
05 Jan 01	15 Mar 01	East High School	Erie, PA	86	-	-
05 Jan 01	28 Feb 01	Lakes Middle School	Couer d'Alene, ID	131	-	-
05 Jan 01	28 Feb 01	Ramona Middle School	LaVerne, CA	403	-	-
12 Jan 01	28 Feb 01	Strong Vincent High School	Erie, PA	25	-	-
17 Jan 01	21 Feb 01	Lewis Center for Education Research/Academy for Academic Excellence	Apple Valley, CA	-	-	-
22 Jan 01	16 Mar 01	Brewton Middle School	Brewton, AL	51	-	-
11 Feb 01	25 Feb 01	University Public School	Detroit, MI	181	-	-
15 Feb 01	20 Mar 01	Brewton Middle School	Brewton, AL	51	-	-
15 Feb 01	11 Apr 01	Glendora High School	Glendora, CA	81	-	-
15 Feb 01	28 Mar 01	Oak Mountain Middle School	Birmingham, AL	128	-	-
26 Feb 01	13 Apr 01	Lewis Center for Education Research/Academy for Academic Excellence	Apple Valley, CA	31	-	-
26 Feb 01	16 Mar 01	Vista Campana Middle School	Apple Valley, CA	40	-	-

12 Mar 01	12 Mar 01	Coca-Cola Space Science Center	Columbus, GA	10	-	-
15 Mar 01	15 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	618	-	-
29 Mar 01	12 Apr 01	Brownstown Central School	Brownstown, IN	41	-	-
04 May 01	04 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	95	-	-
		Harborside School	San Diego, CA	-	-	-
		Mesquite Elementary School	Apple Valley, CA	31	-	-
		Opelika Middle School	Opelika, AL	41	-	-
		Sanford Middle School	Opelika, AL	141	-	-
		Strong Vincent High School	Erie, PA	-	-	-

#### GAVRT—Jupiter Quest

Theme(s): SSE

Msn/Prgm: DSMS

Description: Jupiter Quest students plan a hypothetical mission to the Jovian system and use the 34-meter radio telescope to measure the temperature of Jupiter's atmosphere and to study variations in the radio emissions from Jupiter's intense radiation belts. Students connect via the Internet to the Lewis Center in California to take control of the huge telescope.

Lead: Dr. Michael Klein, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [michael.j.klein@jpl.nasa.gov](mailto:michael.j.klein@jpl.nasa.gov). Phone: 818-354-7132.

Primary URL: <http://deepspace.jpl.nasa.gov/dsn/applevalley>

2nd URL: <http://www.avstc.org/gavrt>

Partner(s): Lewis Center for Educational Research

Apple Valley, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Mar 01	20 Mar 01	Brownstown Central School	Brownstown, IN	41	-	-
19 Mar 01	13 Apr 01	Ballard Junior High School	Huxley, IA	49	-	-
19 Mar 01	23 Apr 01	Ballard Junior High School	Huxley, IA	47	-	-
16 Apr 01	08 Jun 01	Lewis Center for Educational Research/Academy for Academic Excellence	Apple Valley, CA	21	-	-
14 Jun 01	28 Jun 01	Iowa State University	Ames, IA	32	-	-

#### GAVRT—Mars Radar Project

Theme(s): SSE

Msn/Prgm: MER, DSMS

Description: In a pilot program, 5th-grade students at the Lewis Center for Education Research's Academy for Academic Excellence assisted the Goldstone Solar System Radar group in taking radar data on Schiaparelli Crater to supplement the Mars Exploration program's search for possible landing sites for surface rovers.

Lead: Dr. Michael Klein, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [michael.j.klein@jpl.nasa.gov](mailto:michael.j.klein@jpl.nasa.gov). Phone: 818-354-7132.

Primary URL: <http://deepspace.jpl.nasa.gov/dsn/applevalley>

2nd URL: <http://www.avstc.org/gavrt>

Partner(s): Lewis Center for Educational Research

Apple Valley, CA

#### GAVRT—Variable Quasar Project

Theme(s): SSE

Msn/Prgm: DSMS

Description: In support of Australian astronomer Dr. David Jauncey, students in the GAVRT project have assisted in collecting data on 0917 + 624, which is an Intra-Day Variable Quasar. Using the 34-meter radio telescope at the Goldstone Deep Space Communication Complex, students from Texas and Arkansas participated in a five-day observation of the quasar in order to observe its variability.

Lead: Dr. Michael Klein, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [michael.j.klein@jpl.nasa.gov](mailto:michael.j.klein@jpl.nasa.gov). Phone: 818-354-7132.

Primary URL: <http://deepspace.jpl.nasa.gov/dsn/applevalley>

2nd URL: <http://www.avstc.org/gavrt>

Partner(s): Lewis Center for Educational Research

Apple Valley, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
30 May 01	30 May 01	Lewis Center for Educational Research/Academy for Academic Excellence	Apple Valley, CA	1	-	-
22 Jun 01	22 Jun 01	Ballard Junior High School	Huxley, IA	31	-	-
28 Jun 01	28 Jun 01	Ballard Junior High School	Huxley, IA	31	-	-
14 Aug 01	14 Aug 01	Chaffin Junior High School	Fort Smith, AR	12	-	-

## Genesis Student Enrichment

Theme(s): SEC, SSE

Msn/Prgm: Genesis

Description: Genesis has presented at various special study courses in astronomy at the University of Maryland. The science, technology, and operations of the Genesis mission were discussed in detail at the undergraduate level. Emphasis was placed on how NASA missions seek new knowledge and find answers to some of the basic questions about nature.

Lead: Dr. Gilbert Yanow, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [gilbert.yanow@jpl.nasa.gov](mailto:gilbert.yanow@jpl.nasa.gov). Phone: 818-354-8060.Primary URL: <http://genesismission.jpl.nasa.gov/>

Scientist(s): Dr. Gilbert Yanow NASA Jet Propulsion Laboratory Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
16 Nov 00	16 Nov 00	University of Maryland	College Park, MD	45	-	-
15 Jun 01	15 Jun 01	Patrick Air Force Base	Vacaville, CA	50	-	-
		Alta Loma High School	Alta Loma, CA	-	-	-
		Crown Valley Elementary	Laguna Niguel, CA	34	-	-

## GLAST Presentations to K-12 students

Theme(s): SEU

Msn/Prgm: GLAST

Description: Presentations by Gamma-ray Large Area Space Telescope (GLAST) scientists to K-12 students. Information includes the electromagnetic spectrum, gamma rays, and a description of GLAST.

Lead: Dr. Hartmut Sadrozinski, University of California, Santa Cruz, Santa Cruz, CA 95064

E-mail: [hartmut@scipp.ucsc.edu](mailto:hartmut@scipp.ucsc.edu). Phone: 831-459-2635.Primary URL: <http://scipp.ucsc.edu/outreach/>

Scientist(s): Dr. David Dorfan University of California, Santa Cruz Santa Cruz, CA  
 Dr. Hartmut Sadrozinski University of California, Santa Cruz Santa Cruz, CA  
 Dr. Terry Schalk University of California, Santa Cruz Santa Cruz, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Nov 00	01 Nov 00	Independence High School	San Jose, CA	-	250	-
02 Mar 01	02 Mar 01	Happy Valley Elementary School	Santa Cruz, CA	-	160	-
08 Mar 01	08 Mar 01	St. Ignatius Preparatory High School	San Francisco, CA	-	600	-
01 Apr 01	01 Apr 01	University of California, Santa Cruz	Santa Cruz, CA	-	500	-
19 Apr 01	19 Apr 01	Lowell High School	San Francisco, CA	-	875	-
31 May 01	31 May 01	Scotts Valley High School	Scotts Valley, CA	-	150	-
13 Jul 01	13 Jul 01	University of California, Santa Cruz	Santa Cruz, CA	-	130	-
21 Jul 01	21 Jul 01	Aptos High School	Aptos, CA	-	70	-
21 Sep 01	21 Sep 01	Freedom Elementary School	Freedom, CA	-	200	-

## Goldstone Apple Valley Radio Telescope Project (GAVRT)

Theme(s): SSE

Msn/Prgm: DSMS

Description: GAVRT introduces students to the process of science, and data collected and analyzed by students is submit-

ted to JPL for use by scientists. Prior to bringing the GAVRT Project to the classroom, teachers receive six days of training in the fundamentals of radio astronomy and guidelines to the curriculum provided, and they visit the Goldstone Deep Space Communications Complex to see the 34-meter radio telescope their students will control. Students control the radio telescope from the classroom by connecting to the Lewis Center for Educational Research via the Internet. GAVRT meets national science standards.

Primary URL: <http://avstc.org/gavrt>

2nd URL: <http://deepspace.jpl.nasa.gov/dsn/applevalley>

Scientist(s): Dr. Michael Klein NASA Jet Propulsion Laboratory Pasadena, CA  
Mr. David McLaren Lewis Center for Educational Research Apple Valley, CA

Partner(s): Lewis Center for Educational Research Apple Valley, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Oct 00	14 Oct 00	Lewis Center for Educational Research	Apple Valley, CA	5	-	-
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	12	2,000	-
22 Jan 01	27 Jan 01	Lewis Center for Educational Research	Apple Valley, CA	6	-	-
08 Mar 01	10 Mar 01	San Diego Science Educator's Association Conference	San Diego, CA	13	1,500	-
22 Mar 01	24 Mar 01	International Technology Education Association (ITEA) Meeting	Atlanta, GA	31	-	-
16 Jul 01	20 Jul 01	Auburn University	Auburn, AL	2	-	-
06 Aug 01	10 Aug 01	Lewis Center for Educational Research	Apple Valley, CA	12	-	-
		Lewis Center for Educational Research	Apple Valley, CA	6	-	-

#### Hands-On Universe Workshop

Theme(s): ASO, SEU, SSE

Msn/Prgm: STARBASE

Description: High school science teachers bring the adventure of exploring the universe directly to their students through the help of STARBASE and Hands-On Universe (HOU). The high school education goal of STARBASE is to introduce science to students by helping them perform scientific research. Our objective is to put astronomical data and tools into the students' hands, and then to mentor the students in their investigations. The key is to train a network of client science teachers who will sustain the project. STARBASE has a network of telescopes ready to supply data to students. The HOU training network, sponsored by the National Science Foundation (NSF) and the Lawrence Berkeley Laboratory, offers workshops to train teachers in astronomy, how to teach astrophysics, and how to use image-processing software. HOU then gives the teachers the software and an account to access the HOU data archive, which allows the teachers to request images from STARBASE telescopes. STARBASE hosts the workshops and provides computer-equipped classrooms, presentations by astronomers, planetarium shows, observatory tours, star parties, lodging, and meals. Teachers are trained during their choice of five-day, face-to-face workshops or one-day workshops, followed by an online course. Together the STARBASE and HOU networks deliver a powerful tool for involving students directly in science.

Lead: Dr. David Barnaby, Western Kentucky University, Bowling Green, KY 42101

E-mail: [david.barnaby@wku.edu](mailto:david.barnaby@wku.edu). Phone: 270-745-4357.

Primary URL: [starbase.wku.edu](http://starbase.wku.edu)

2nd URL: [hou.lbl.gov](http://hou.lbl.gov)

Partner(s): Lawrence Berkeley National Laboratory Berkeley, CA  
National Science Foundation Arlington, VA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
09 Jul 01	13 Jul 01	Western Kentucky University	Bowling Green, KY	10	-	-
14 Jul 01	14 Jul 01	Western Kentucky University	Bowling Green, KY	4	-	-

#### HETE-2 Informal Education

Theme(s): SEU

Msn/Prgm: HETE-2

Description: Scientists from the HETE-2 mission are involved in informal education activities such as visits to classrooms,



Lead: Ms. Kathleen Lestition, Chandra X-Ray Center, Cambridge, MA 02138  
E-mail: [klestition@cfa.harvard.edu](mailto:klestition@cfa.harvard.edu). Phone: 617-495-7399.

Primary URL: <http://chandra.harvard.edu>

Scientist(s):

Dr. Roger Brissenden	Chandra X-Ray Center	Cambridge, MA
Mr. Adam Contos	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Edward DeLuca	Chandra X-Ray Center	Cambridge, MA
Dr. Rosanne Di Stefano	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Martin Elvis	Chandra X-Ray Center	Cambridge, MA
Dr. Pepi Fabbiano	Chandra X-Ray Center	Cambridge, MA
Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
Dr. Michael Garcia	Chandra X-Ray Center	Cambridge, MA
Dr. F. Rick Harnden, Jr.	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Christine Jones	Chandra X-Ray Center	Cambridge, MA
Ms. Kimberly Kowal	Chandra X-Ray Center	Cambridge, MA
Dr. Jeffrey McClintock	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Stephen Murray	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Andrea Prestwich	Chandra X-Ray Center	Cambridge, MA
Dr. Patrick Slane	Chandra X-Ray Center	Cambridge, MA
Dr. Harvey Tananbaum	Chandra X-Ray Center	Cambridge, MA
Dr. Jan Vrtilik	Harvard University	Cambridge, MA
Dr. Bradley Wargelin	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Martin Weisskopf	NASA Marshall Space Flight Center	Huntsville, AL
Dr. Belinda Wilkes	Chandra X-Ray Center	Cambridge, MA

Partner(s): Harvard-Smithsonian Center for Astrophysics Cambridge, MA  
NASA Marshall Space Flight Center Huntsville, AL

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
05 Oct 00	05 Oct 00	Newbury Elementary School	Newbury, MA	25	-	-
20 Oct 00	06 Mar 01	Chandra X-Ray Center	Cambridge, MA	-	10,000	-
03 Nov 00	03 Nov 00	Newbury Elementary School	Newbury, MA	25	-	-
06 Dec 00	06 Dec 00	Newbury Elementary School	Newbury, MA	25	-	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	-	2,530	-
25 Jan 01	25 Jan 01	Nashoba Regional School District	Stow, MA	26	-	-
30 Jan 01	30 Jan 01	Nashoba Regional School District	Stow, MA	25	-	-
31 Jan 01	31 Jan 01	Perley Elementary School	Georgetown, MA	140	-	-
31 Jan 01	31 Jan 01	Rice University	Houston, TX	-	-	-
01 Feb 01	01 Feb 01	University of Texas at Austin	Austin, TX	-	-	-
02 Feb 01	03 Apr 01	Chandra X-Ray Center	Cambridge, MA	-	10,000	-
05 Feb 01	05 Feb 01	Nashoba Regional School District	Stow, MA	24	-	-
10 Feb 01	10 Feb 01	Newbury Elementary School	Newbury, MA	300	-	-
18 Feb 01	18 Feb 01	Hampshire Country School	Rindge, NH	25	-	-
27 Mar 01	27 Mar 01	Thoreau School	Concord, MA	24	-	-
11 Apr 01	11 Apr 01	University of Massachusetts	Amherst, MA	-	-	-
01 May 01	01 May 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	-	-
04 Sep 01	04 Sep 01	Hampton-Sidney College	Hampton-Sidney, VA	15	-	-

## Live From a Black Hole/Live From the Edge of Space and Time

Theme(s): ASO, SEU

Msn/Prgm: P2K, CXO, CGRO, Constellation-X, GLAST, GP-B, MAP, RXTE, Swift, HEASARC, XMM-Newton

Description: The two new "Live From" specials which debuted in 2001 used the latest discoveries about black holes to excite students about the scale and structure of the universe and the physics found in the core science curriculum. Researchers from the Chandra X-Ray Center (CXC) cooperated in taped and live sequences explaining how x rays allow us to see the invisible and how to transform speculation about black holes and quasars into scientific study. Both programs aired on PBS stations and NASA TV. Collaboration with the SEU Forum and GLAST/SWIFT educators resulted in a set of updated hands-on activities being published online, and demonstrated on camera by enthusiastic CXC researchers.

Lead: Mr. Geoffrey Haines-Stiles, Geoff Haines-Stiles Productions, Inc., Morristown, NJ 07960  
 E-mail: [ghs@passporttoknowledge.com](mailto:ghs@passporttoknowledge.com). Phone: 973-656-9403.

Primary URL: <http://passporttoknowledge.com>  
 2nd URL: <http://passporttoknowledge.com/universe>

Scientist(s):

Dr. Claudia Alexander	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Roger Brissenden	Chandra X-Ray Center	Cambridge, MA
Dr. Andrew Cheng	Johns Hopkins Applied Physics Laboratory	Laurel, MD
Dr. Chris Chyba	SETI Institute	Mountain View, CA
Dr. Joy Crisp	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Craig De Forest	Southwest Research Institute	Boulder, CO
Dr. Alan Dressler	Carnegie Observatories	Pasadena, CA
Dr. Pepi Fabbiano	Chandra X-Ray Center	Cambridge, MA
Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
Dr. Bill Forman	Chandra X-Ray Center	Cambridge, MA
Dr. Michael Garcia	Chandra X-Ray Center	Cambridge, MA
Dr. Jim Garvin	NASA Office of Space Science	Washington, DC
Dr. Andrea Ghez	University of California, San Diego	La Jolla, CA
Dr. Matt Golombek	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Torrence Johnson	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Wayne Lee	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. James Lochner	NASA Goddard Space Flight Center	Greenbelt, MD
Mr. Rob Manning	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Geoff Marcy	San Francisco State University	San Francisco, CA
Dr. Jeffrey McClintock	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Stephen Murray	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Kenneth Neelson	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Art Poland	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Stephen Pompea	Pompea & Associates	Tucson, AZ
Dr. Irene Porro	Massachusetts Institute of Technology	Cambridge, MA
Dr. Andrea Prestwich	Chandra X-Ray Center	Cambridge, MA
Dr. Patrick Slane	Chandra X-Ray Center	Cambridge, MA
Mr. Tony Spear	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Harvey Tananbaum	Chandra X-Ray Center	Cambridge, MA
Dr. Barbara Thompson	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Michael Turner	University of Chicago	Chicago, IL
Dr. Martin Weisskopf	NASA Marshall Space Flight Center	Huntsville, AL
Dr. Laura Whitlock	Sonoma State University	Rohnert Park, CA

Partner(s): American Astronomical Society (AAS) Washington, DC  
 Carnegie Observatories Pasadena, CA  
 Chandra X-Ray Center Cambridge, MA  
 Fermilab Batavia, IL  
 Gemini Observatory Hilo, HI  
 Harvard-Smithsonian Center for Astrophysics Cambridge, MA  
 Johns Hopkins Applied Physics Laboratory Laurel, MD  
 Lawrence Berkeley National Laboratory Berkeley, CA  
 Mt. Wilson Institute Mt. Wilson, CA  
 NASA Goddard Space Flight Center Greenbelt, MD  
 NASA Johnson Space Center Houston, TX  
 NASA Office of Space Science Washington, DC  
 National Optical Astronomy Observatory Tucson, AZ  
 National Science Foundation Arlington, VA  
 Naval Research Laboratory Washington, DC  
 Planetary Data System Pasadena, CA  
 SITRF Science Center Palo Alto, CA  
 Space Telescope Science Institute Baltimore, MD  
 University Corporation for Atmospheric Research (UCAR) Boulder, CO

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Sep 00	30 Aug 01	Louisiana Educational Television Authority	Baton Rouge, LA	-	840,054	900,000
01 Sep 00	30 Aug 01	Maryland Public Television	Owings Mills, MD	-	841,671	-
01 Sep 00	30 Aug 01	New Hampshire Public Television	Durham, NH	-	227,690	-
01 Sep 00	30 Aug 01	Tennessee Public Television Council	Martin, TN	-	-	-
01 Sep 00	30 Aug 01	Virginia Educational Satellite Network	Richmond, VA	-	1,118,698	-
01 Sep 00	30 Aug 01	Wisconsin Educational Telecommunications Board	Madison, WI	-	879,535	-
01 Feb 01	30 May 01	ASSET (Arizona Educational TV)	Tempe, AZ	-	279,052	15,000
01 Feb 01	30 May 01	Board of Cooperative Educational Services (BOCES) #1	West Seneca, NY	-	6,500	300
01 Feb 01	30 May 01	Catholic TV Network, Bay Area	Oakland, CA	-	185,000	10,000
01 Feb 01	30 May 01	Coldwater Community Schools	Coldwater, MI	-	4,500	250
01 Feb 01	30 May 01	Huntsville Schools	Huntsville, AL	-	85,000	5,000
01 Feb 01	30 May 01	Idaho Public Television	Boise, ID	-	265,226	20,000
01 Feb 01	30 May 01	KEET-TV	Redding, CA	-	29,000	7,500
01 Feb 01	30 May 01	Kentucky Public Television	Bowling Green, KY	-	704,004	50,000
01 Feb 01	30 May 01	KERA, North Texas PBS Inc.	Dallas, TX	-	352,234	20,000
01 Feb 01	30 May 01	KLCS, LA Unified School District	Los Angeles, CA	-	747,727	30,000
01 Feb 01	30 May 01	KLRU-TV	San Antonio, TX	-	203,413	15,000
01 Feb 01	30 May 01	KNME-TV	Albuquerque, NM	-	165,553	5,000
01 Feb 01	30 May 01	KOCE, Coast Community College District	Huntingdon Beach, CA	-	258,226	10,000
01 Feb 01	30 May 01	KQED-TV	San Francisco, CA	-	958,714	25,000
01 Feb 01	30 May 01	KRMA & Rocky Mountain PBS	Denver, CO	-	244,452	20,000
01 Feb 01	30 May 01	Maryland Public Television	Owings Mills, MD	-	916,671	15,000
01 Feb 01	30 May 01	Massachusetts Corporation for Educational Broadcasting, MCET	Cambridge, MA	-	1,075,000	50,000
01 Feb 01	30 May 01	Missouri School Boards Association	Kansas City, MO	-	211,000	10,000
01 Feb 01	30 May 01	Monroe 2-Orleans BOCES	Spencerport, NY	-	30,000	2,500
01 Feb 01	30 May 01	Montana Public Television	Bozeman, MT	-	160,000	50,000
01 Feb 01	30 May 01	NASA-TV	Washington, DC	-	250,000	25,000
01 Feb 01	30 May 01	Ohio Educational Telecommunications Association	Cincinnati, OH	-	1,300,573	35,000
01 Feb 01	30 May 01	Panhandle Area Educational Consortium	Chipley, FL	-	75,000	5,000
01 Feb 01	30 May 01	Prairie Public Television	Fargo, ND	-	701,434	20,000
01 Feb 01	30 May 01	Sarasota ITFS	Sarasota, FL	-	39,000	2,500
01 Feb 01	30 May 01	South Carolina ETV	Columbia, SC	-	1,198,698	50,000
01 Feb 01	30 May 01	Tucson Unified School District	Tucson, AZ	-	87,500	12,500
01 Feb 01	30 May 01	Vermont Public Television	Colchester, VT	-	123,933	75,000
01 Feb 01	30 May 01	Virginia Public Television	Richmond, VA	-	311,559	15,000
01 Feb 01	30 May 01	West Virginia Public Television	Morgantown, WV	-	160,000	10,000
01 Feb 01	30 May 01	WLIW, Long Island Educational TV Council Inc.	Plainview, NY	-	223,425	15,000
01 Feb 01	30 May 01	WLJT-TV	Martin, TN	-	85,413	7,500
01 Feb 01	30 May 01	WNCY-TV	Syracuse, NY	-	226,410	15,000
01 Feb 01	30 May 01	WNED, Western New York Public Broadcasting Association	Buffalo, NY	-	304,664	20,000
01 Feb 01	30 May 01	WNYE, New York City Public Schools	Brooklyn, NY	-	1,175,000	75,000
01 Feb 01	30 May 01	WPBA, Atlanta Board of Education	Atlanta, GA	-	61,880	5,000
01 Feb 01	30 May 01	WSKG Public Telecommunications Council	Binghamton, NY	-	144,454	15,000
01 Feb 01	30 May 01	WXXI Public Broadcasting Council	Rochester, NY	-	200,192	20,000
01 Feb 01	30 May 01	Wyoming Public Television	Riverton, WY	-	160,000	10,000
06 Mar 01	06 Mar 01	NASA-TV	Washington, DC	-	-	-
06 Mar 01	06 Mar 01	PBS (Channel 512)	Alexandria, VA	-	4.6M	320,000
03 Apr 01	03 Apr 01	NASA-TV	Washington, DC	-	-	-
03 Apr 01	03 Apr 01	PBS (Channel 512)	Alexandria, VA	-	4.6M	320,000

10 Aug 01	14 Aug 01	National Educational Telecommunications Association FirstView 2001	Dallas, TX	125	-	-
01 Sep 01	30 Aug 01	KERA, North Texas PBS Inc.	Dallas, TX	-	250,000	-

### Live From Mars 2001 and Live From Mars 2002

Theme(s): SSE

Msn/Prgm: P2K, SSE Theme, Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: Passport to Knowledge (P2K) introduced NASA's Mars Odyssey mission to 125 leading educational broadcasters at the PBS FirstView 2001 conference of new instructional programming in Dallas, TX (August 2001), and generated widespread interest in, and numerous commitments to air, the two new Live From Mars specials in the coming school year. Live From Mars 2001 is a school-year-long activity connecting students and teachers to NASA's Mars Odyssey mission. The activity debuts with Live From Mars 2001, on October 30, 2001, one week after Odyssey reaches the red planet. A live TV program originates from NASA JPL, with pretaped sequences showing recent Mars science from Mars Global Surveyor and Pathfinder, background on the search for life and water on Mars, and the kinds of machines and missions humans have built to explore our neighboring planet. On March 19, 2002, a follow-on program, Live From Mars 2002, will update students on new results from Odyssey and originate live from both NASA JPL and from the Mars Imaging Facility at Arizona State University. Both programs appear on public television stations and State educational networks and on NASA TV, and will be repeated throughout the school year. A companion Web site links students to online activities and to other NASA and university Web sites.

Lead: Ms. Erna Akuginow, Geoff Haines-Stiles Productions, Inc., Morristown, NJ 07960  
E-mail: [ea@passporttoknowledge.com](mailto:ea@passporttoknowledge.com). Phone: 973-656-9404.

Primary URL: <http://passporttoknowledge.com/mars>

2nd URL: <http://passporttoknowledge.com>

Scientist(s):	Mr. Mark Adler	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. John Callas	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Phil Christensen	Arizona State University	Tempe, AZ
	Dr. Joy Crisp	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jim Erickson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jim Garvin	NASA Office of Space Science	Washington, DC
	Mr. Roger Gibbs	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Matt Golombek	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Vicky Hamilton	Arizona State University	Tempe, AZ
	Ms. Denise Kato	Lockheed Martin Space Systems	Littleton, CO
	Mr. Carl Kloss	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Sheri Klug	Arizona State University	Tempe, AZ
	Mr. Matt Landano	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Wayne Lee	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Bob Mase	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jeffrey Plaut	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Peter Poon	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Steve Saunders	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. David Seidel	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Wayne Sidney	Lockheed Martin Space Systems	Littleton, CO
	Mr. Dave Spencer	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Steve Squyres	Cornell University	Ithaca, NY
	Mr. Pete Theisinger	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Marla Thornton	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Jennifer Trosper	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Mike Watkins	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Stacy Weinstein	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	NASA Ames Research Center		Moffett Field, CA
	NASA Goddard Space Flight Center		Greenbelt, MD
	NASA Jet Propulsion Laboratory		Pasadena, CA
	NASA Johnson Space Center		Houston, TX
	NASA Office of Space Science		Washington, DC

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
		NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-

## LWS 2001 Student Internship

Theme(s): SEC

Msn/Prgm: STP, LWS

Description: In partnership with the SHARP program, students had the opportunity to work with scientists and engineers. They developed different projects and presented their final product at the SHARP presentation. The program gave the students an overview of the different professions available in the field and information for their first year of college. The main goal of the program was to promote an active interaction between engineers and scientists, and it was accomplished.

Lead: Dr. Evelina Felicite-Maurice, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [efelici@pop400.gsfc.nasa.gov](mailto:efelici@pop400.gsfc.nasa.gov). Phone: 301-286-6949.Primary URL: <http://lws-edu.gsfc.nasa.gov>

Scientist(s): Dr. Art Poland NASA Goddard Space Flight Center Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jun 01	01 Jun 01	NASA Goddard Space Flight Center	Greenbelt, MD	50	-	-
01 Jun 01	12 Jun 01	NASA Goddard Space Flight Center	Greenbelt, MD	60	-	-

## Marine Science Institute

Theme(s): ASO

Msn/Prgm: NAI

Description: Students are able to join the Marine Science Institute (MSI) crew for a 4-hour expedition of the San Francisco Estuary aboard the 90-foot research vessel, Robert G. Brownlee. They spend a half-day as scientists, discovering the Estuary's ecosystem and discussing their own role within it. Students collect and examine plankton, run hydrology tests, and observe wetland ecology from the ship. They delve through mud samples, discovering the fascinating invertebrates that thrive at the Bay's bottom. Students also use a trawl net to catch a wide variety of fish species, including sharks and rays. This program offers students the chance to enjoy the natural vitality of this area while learning valuable scientific skills. Dr. Lynn Rothschild and her research team participate in developing and presenting the Ames astrobiology research to the students during hands-on activities, and also during the teacher training workshops throughout the year.

Lead: Dr. Lynn Rothschild, NASA Astrobiology Institute, Moffett Field, CA 94035.

## Mars Robotics Education

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: To provide students with opportunities to learn about robotics and the scientific discoveries that it enables.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Scientist(s):	Mr. Hrand Aghazarian	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Bob Anderson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Raymond Arvidson	Washington University	St. Louis, MO
	Dr. Paul Backes	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Bob Balaram	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Eric Baumgartner	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Charles Bergh	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. William Blume	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Susan Crowe	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Larry Edwards	NASA Ames Research Center	Moffett Field, CA
	Dr. William Faulkner	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Sarah Gavit	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Dan Helmick	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Ayanna Howard	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Theodore Iskenderian	NASA Jet Propulsion Laboratory	Pasadena, CA

	Mr. Brett Kennedy	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Satish Krishna	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Daniel Limonadi	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Elaina McCartney	Cornell University	Ithaca, NY
	Mr. Thomas Meehan	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Douglas Ming	NASA Johnson Space Center	Houston, TX
	Dr. Richard Morris	NASA Johnson Space Center	Houston, TX
	Ms. Annette Nasif	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Greg Neat	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jeff Norris	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Richard Petras	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Mark Powell	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Tommaso Rivellini	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Amit Sen	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Steve Squyres	Cornell University	Ithaca, NY
	Mr. Rob Steele	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Ashitey Trebi-Ollennu	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Eddie Tunstel	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Christopher Voorhees	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Kevin Watson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Shonte Wright	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	Arizona State University		Tempe, AZ
	Cornell University		Ithaca, NY
	Washington University		St. Louis, MO

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
04 Jan 01	12 Apr 01	Cambell Hall	North Hollywood, CA	16	-	-
05 Jan 01	12 Apr 01	Abraham Lincoln High School	Los Angeles, CA	54	-	-
05 Jan 01	21 Apr 01	Archer School for Girls	Los Angeles, CA	22	-	-
05 Jan 01	12 Apr 01	Bell Senior High School	Bell, CA	62	-	-
05 Jan 01	12 Apr 01	Cactus High School	Glendale, AZ	38	-	-
05 Jan 01	12 Apr 01	Cambell Hall	North Hollywood, CA	13	-	-
05 Jan 01	12 Apr 01	Cesar Chavez High School	Laveen, AZ	38	-	-
05 Jan 01	12 Apr 01	Chatsworth High School	Chatsworth, CA	325	-	-
05 Jan 01	21 Apr 01	Clark Magnet High School	La Crescenta, CA	52	-	-
05 Jan 01	12 Apr 01	Crescenta Valley High School	La Crescenta, CA	58	5	-
05 Jan 01	12 Apr 01	Culver City High School	Culver City, CA	17	-	-
05 Jan 01	12 Apr 01	Don Bosco Technical Institute HS	Rosemead, CA	54	-	-
05 Jan 01	12 Apr 01	Foshay Learning Center	Los Angeles, CA	33	-	-
05 Jan 01	12 Apr 01	Granada Hills High School	Granada Hills, CA	18	-	-
05 Jan 01	12 Apr 01	Hope Chapel Academy	Hermosa Beach, CA	72	-	-
05 Jan 01	12 Apr 01	King Drew Magnet High School of Medicine and Science	Los Angeles, CA	52	1,200,000	-
05 Jan 01	12 Apr 01	Los Angeles Center For Enriched Studies (LACES)	Los Angeles, CA	26	-	-
05 Jan 01	12 Apr 01	Mira Costa High School (Beach City Robotics)	Manhattan Beach, CA	87	-	-
05 Jan 01	12 Apr 01	South High School	Bakersfield, CA	16	-	-
05 Jan 01	12 Apr 01	Taft High School	Woodland Hills, CA	7	-	-
05 Jan 01	12 Apr 01	Tehachapi High School	Tehachapi, CA	19	-	-
05 Jan 01	12 Apr 01	University High School	Los Angeles, CA	15	-	-
05 Jan 01	12 Apr 01	Verdugo Hills High School	Tujunga, CA	18	-	-
05 Jan 01	12 Apr 01	William S. Hart High School	Newhall, CA	26	-	-
05 Jan 01	12 Apr 01	Woodrow Wilson High School	Los Angeles, CA	-	-	-
05 Jan 01	12 Apr 01	Xavier Preparatory School	Phoenix, AZ	26	-	-
10 Jan 01	31 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
02 Feb 01	31 May 01	Clayton High School	Clayton, MO	-	-	-

02 Feb 01	31 Mar 01	Haltom High School	Fort Worth, TX	-	-	-
02 Feb 01	31 May 01	Marshall High School	Los Angeles, CA	-	-	-
02 Feb 01	31 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	44	-	-
02 Feb 01	31 May 01	Norwich Senior High School	Norwich, NY	-	-	-
02 Feb 01	31 May 01	Thomas Starr King Middle School	Los Angeles, CA	-	-	-

## Mars Student Support

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: To provide students with opportunities to get involved with Mars exploration and discovery.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: <http://mars.jpl.nasa.gov/classroom/students.html>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
19 Oct 00	19 Oct 00	Nightingale Middle School	Los Angeles, CA	97	-	-

## MESSENGER Education Presentations and Classroom Visits

Theme(s): SSE

Msn/Prgm: MESSENGER

Description: This activity includes visits and presentations by MESSENGER scientists and engineers to K-12 and undergraduate classrooms.

Scientist(s):	Dr. Kate Reynolds	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Brian Wolven	Johns Hopkins Applied Physics Laboratory	Laurel, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
19 Oct 00	19 Oct 00	University of Maryland	College Park, MD	21	-	-
04 May 01	04 May 01	Pikesville High	Pikesville, MD	51	-	-

## MicroObservatory Online Telescopes

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SEU Forum, CXO

Many students have a deep interest in astronomy but limited opportunities to use telescopes to explore the heavens. The MicroObservatory network of five robotic, online telescopes enables middle and high school teachers and their students to investigate the night sky from the convenience of their classrooms. By means of an intuitive Web interface, students control the telescopes by specifying the target, exposure time, observation time, filter, and site location. Located at sites around the world, the telescopes have a combined capability of a quarter of a million observations each year. Students in 20 States now access the telescopes to carry out investigations ranging from the distance to the Moon to the expansion of the universe.

Lead: Dr. Roy Gould, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138

E-mail: [rgould@cfa.harvard.edu](mailto:rgould@cfa.harvard.edu). Phone: 617-496-7689.Primary URL: <http://mo-www.harvard.edu/MicroObservatory>

Scientist(s):	Dr. Kenneth Brecher	Boston University	Boston, MA
	Mr. Adam Contos	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Emilio Falco	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Michael Garcia	Chandra X-Ray Center	Cambridge, MA
	Dr. Roy Gould	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Mr. Douglas Mink	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Ms. Susan Tokarz	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Wallace Tucker	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA

Partner(s): National Science Foundation

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	American Museum of Natural History	New York, NY	2	100	-
01 Oct 00	30 Sep 01	Brooks School	North Andover, MA	31	-	-

01 Oct 00	30 Sep 01	Cape Cod Lighthouse Charter School	Orleans, MA	31	-	-
01 Oct 00	30 Sep 01	Crystal High School	Carson City, MI	61	-	-
01 Oct 00	30 Sep 01	Fenway High School	Boston, MA	66	-	-
01 Oct 00	30 Sep 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	-	7,000
01 Oct 00	30 Sep 01	Konawaena Middle School	Kealahou, HI	31	-	-
01 Oct 00	30 Sep 01	Lincoln-Sudbury Regional High School	Sudbury, MA	101	-	-
01 Oct 00	30 Sep 01	North Davidson High School	Lexington, NC	61	-	-
01 Oct 00	30 Sep 01	Northwest Guilford High School	Greensboro, NC	91	-	-
01 Oct 00	30 Sep 01	Northwest Middle School	Kansas City, KS	31	-	-
01 Oct 00	30 Sep 01	Ouray High School	Ouray, CO	31	-	-
01 Oct 00	30 Sep 01	Weymouth High School	Weymouth, MA	92	-	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	30	-	-
10 Apr 01	10 Apr 01	Milton Academy	Milton, MA	16	-	-
05 Jun 01	05 Jun 01	Lincoln-Sudbury Regional High School	Sudbury, MA	22	-	-
15 Jun 01	15 Jun 01	Fenway High School	Boston, MA	52	-	-
		Bromfield School	Harvard, MA	-	-	-
		Edith C. Baker School	Brookline, MA	-	-	-
		Fenway High School	Boston, MA	11	-	-

#### NEAR Off-Site Classroom Visits

Theme(s): SSE

Msn/Prgm: NEAR

Description: The NEAR E/PO office helped scientists, engineers, and other team members become involved in the NEAR E/PO efforts by providing opportunities for offsite classroom visits. The E/PO office supported these events by providing the resources necessary for the team members to talk to school groups, provide demonstrations, and to conduct classroom activities related to the NEAR mission. These efforts supported State, local, and national efforts directed toward systemic reform of science, mathematics, and technology education. Also, these classroom activities were based on the criteria contained in the national mathematics, science, and technology standards.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099

E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://near.jhuapl.edu>

Scientist(s):	Mr. Glen Baer	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Mr. Mike Buckley	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Ms. Laura Curry	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Ms. Jody Frey	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Robert Gold	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Mr. John Goldsten	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Noam Izenberg	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Lucy McFadden	University of Maryland	College Park, MD
	Ms. Mary Katherine Reynolds	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Mr. Andrew Santo	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Mr. David White	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Brian Wolven	Johns Hopkins Applied Physics Laboratory	Laurel, MD

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	01 Oct 00	Norwich University	Northfield, VT	37	-	-
19 Oct 00	19 Oct 00	University of Maryland	College Park, MD	21	-	-
17 Nov 00	17 Nov 00	University of Arkansas	Fayetteville, AR	74	-	-
02 Mar 01	02 Mar 01	Oak View Elementary School	Silver Spring, MD	55	-	-
28 Mar 01	28 Mar 01	Rosa Parks Middle School	Olney, MD	33	-	-
05 Apr 01	05 Apr 01	Belmont Elementary School	Olney, MD	30	-	-
05 Apr 01	05 Apr 01	Pikesville High School	Pikesville, MD	51	-	-
09 Apr 01	09 Apr 01	John Burroughs School	St. Louis, MO	25	-	-
09 May 01	09 May 01	Abingdon Elementary School	Abingdon, MD	90	-	-
11 May 01	11 May 01	Prettyboy Elementary School	Freeland, MD	25	-	-

12 May 01	12 May 01	Manor Woods Elementary School	Ellicott City, MD	600	-	-
15 Jun 01	15 Jun 01	Bethesda Community School	Bethesda, MD	20	-	-
02 Aug 01	02 Aug 01	Howard Community College	Columbia, MD	16	-	-

## NEARlink Program

Theme(s): SSE

Msn/Prgm: NEAR

Description: The Space Explorers, Inc., NEARlink program focuses on math, science, and technology in the classroom. The programs are divided into three phases. Phase I is designed to prepare the class for a NEARlink mission. It provides the necessary classroom materials and resources to make the project a valuable learning experience for the students, providing the teacher with the support necessary to use the program with confidence. This phase of the program consists of two parts: the curriculum and mission team selection. The curriculum has been developed by classroom teachers and is modular in nature. Each module contains the curriculum framework, lesson plans, student activities, and student study guides. The NEARlink curriculum is prepared for grades 3-5, 6-8, and 9-12. The students involved in the NEARlink program assume roles on the Mission Team that mirror the actual positions of the mission science teams. The students train individually and as a team to successfully operate the mission. The Internet mission mimics a real-life setting and requires students with different knowledge, interests and problem-solving skills to work together to accomplish a single goal. In Phase III, students take on the roles of scientists and researchers. They have access to the actual data from the spacecraft instruments and conduct the first preliminary research. Students experience the discovery process firsthand and participate in the creation of new knowledge. The critical elements of Phase III are the student research process, student collaboration and science team interaction.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099  
E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://near.jhuapl.edu>2nd URL: [near.space-explorers.com](http://near.space-explorers.com)

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
02 Oct 00	02 Oct 00	Wisconsin Science Teachers Association	Eau Claire, WI	26	-	-
14 Oct 00	17 Oct 00	Association of Science-Technology Centers (ASTC) Conference	Cleveland, OH	35	-	-
19 Oct 00	21 Oct 00	National Science Teachers Association (NSTA) Midwest Area Conference	Milwaukee, WI	119	-	-
31 Oct 00	31 Oct 00	School of Excellence	Houston, TX	116	-	-
16 Nov 00	18 Nov 00	National Science Teachers Association (NSTA) Eastern Area Conference	Baltimore, MD	80	-	-
07 Dec 00	09 Dec 00	National Science Teachers Association (NSTA) Southwestern Area Conference	Phoenix, AZ	63	-	-
08 Mar 01	10 Mar 01	San Diego Science Educator's Association Conference	San Diego, CA	77	-	-
19 Mar 01	30 Mar 01	Belmont Elementary School	West Babylon, NY	61	-	-
19 Mar 01	30 Mar 01	Danby Technical & Prep High School	Detroit, MI	29	-	-
19 Mar 01	30 Mar 01	Deb Reutter	Minneapolis, MN	61	-	-
19 Mar 01	30 Mar 01	Dell H. Robinson Middle School	Las Vegas, NV	50	-	-
19 Mar 01	30 Mar 01	Euper Lane Elementary School	Fort Smith, AR	37	-	-
19 Mar 01	30 Mar 01	Fifer Middle School	Camden, DE	27	-	-
19 Mar 01	30 Mar 01	H. P. Webb Elementary School	Otton, TX	25	-	-
19 Mar 01	30 Mar 01	Hampton Elementary CHROME	Hampton, VA	93	-	-
19 Mar 01	30 Mar 01	Lakewood School	Sonora, CA	97	-	-
19 Mar 01	30 Mar 01	Olivenhain Pioneer Elementary School	Brownsville, TX	28	-	-
19 Mar 01	30 Mar 01	Olmsted Falls Middle School	Olmstead Falls, OH	61	-	-
19 Mar 01	30 Mar 01	Park Place Elementary School	Houston, TX	121	-	-
19 Mar 01	30 Mar 01	R. H. Beardon Elementary School	Sumner, MS	25	-	-
19 Mar 01	30 Mar 01	Redondo Beach Unified School District	Redondo Beach, CA	97	-	-
19 Mar 01	30 Mar 01	Stillwater Area High School	Stillwater, MN	25	-	-
19 Mar 01	30 Mar 01	Terra Linda Elementary School	Colorado Springs, CO	49	-	-

19 Mar 01	30 Mar 01	Yazoo City High School	Plainview, NY	99	-	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	97	-	-
28 Mar 01	30 Mar 01	Wisconsin Educational Media Association Spring Conference	Green Bay, WI	91	-	-
04 May 01	05 May 01	Home Schoolers	Stevens Point, WI	60	-	-
11 Jun 01	12 Jun 01	Wisconsin Initiative for Math, Science, and Technology Education	Milwaukee, WI	12	-	-
09 Jul 01	10 Jul 01	Wisconsin Initiative for Math, Science, and Technology Education	Eau Claire, WI	19	-	-
23 Jul 01	24 Jul 01	Wisconsin Initiative for Math, Science, and Technology Education	LaCrosse, WI	34	-	-
06 Aug 01	07 Aug 01	Wisconsin Initiative for Math, Science, and Technology Education	Madison, WI	35	-	-
13 Aug 01	14 Aug 01	Wisconsin Initiative for Math, Science, and Technology Education	Dodgeville, WI	29	-	-
20 Aug 01	21 Aug 01	Wisconsin Initiative for Math, Science, and Technology Education	Green Bay, WI	25	-	-
27 Aug 01	28 Aug 01	Wisconsin Initiative for Math, Science, and Technology Education	Wisconsin Rapids, WI	23	-	-
29 Aug 01	30 Aug 01	Wisconsin Initiative for Math, Science, and Technology Education	Mosinee, WI	27	-	-
06 Sep 01	07 Sep 01	Wisconsin Initiative for Math, Science, and Technology Education	Racine, WI	13	-	-
17 Sep 01	28 Sep 01	Thurman White Middle School	Henderson, NV	61	-	-
17 Sep 01	28 Sep 01	Traner Middle School	Reno, NV	56	-	-
17 Sep 01	28 Sep 01	Virginia CUSD #64	Virginia, IL	98	-	-
17 Sep 01	28 Sep 01	Waunakee High School	Waunakee, WI	27	-	-
17 Sep 01	28 Sep 01	Wimberly Junior High School	Wimberley, TX	67	-	-
11 Oct 01	13 Oct 01	Illinois Science Teachers Association Conference	Peoria, IL	83	-	-

#### Oceans in Space

Theme(s): SSE

Msn/Prgm: SERCH B/F

Description: Through this presentation, we look at the early formation of the solar system; explore the evidence for (or against) ancient oceans on Mars, the possibility of frozen water at the lunar poles, and the possibility of water on Europa, a moon of Jupiter; and compare them to the Earth's oceans.

Lead: Dr. Cassandra Runyon, College of Charleston, Charleston, SC 29424

E-mail: [cass@cofc.edu](mailto:cass@cofc.edu). Phone: 843-953-8279.

Partner(s): Lowcountry Hall of Science and Math

Charleston, SC

#### OSS Staff Outreach

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: OSS/Outreach, Keck

Description: OSS conducted local visits to various schools and institutions to bring the latest research, discoveries, and understanding about space science to students and the general public. The goal of the activity was to enlighten them about the wonders of the universe and to help them understand and continue to support our activities for conducting space science research. It also served to spark the imagination of students and encourage them to pursue careers that emphasize the study of math, science, and technology.

Lead: Mr. Dan Woods, NASA Office of Space Science, Washington, DC 20546

E-mail: [dwoods@hq.nasa.gov](mailto:dwoods@hq.nasa.gov). Phone: 202-358-0850.

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Dec 00	13 Dec 00	Bogle Junior High School	Chandler, AZ	-	635	-
19 Jan 01	19 Jan 01	Glebe Elementary School	Arlington, VA	-	52	-
02 Feb 01	08 Feb 01	University of Hawaii at Hilo	Hilo, HI	-	1,900	-

**Project ASTRO—Improving Science Education Through Astronomer-Teacher Partnerships in Grades 3-9**  
 Theme(s): ASO, SEU, SSE  
 Msn/Prgm: SRT, CXO  
 Description: Project ASTRO Boston (PAB) improves science education in grades 3-9 by forming and supporting partnerships between astronomers and teachers throughout eastern Massachusetts. This program introduces some of the best available activities and methods for bringing the excitement of space science to the classroom. The goal of Project ASTRO is to instill interest in science through astronomy, enabling students to become citizens literate in the scientific process—a life-long skill suitable for any career choice. PAB is hosted jointly by the Smithsonian Astrophysical Observatory and by the Boston Museum of Science.

Lead: Dr. F. Rick Harnden, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
 E-mail: [frh@cfa.harvard.edu](mailto:frh@cfa.harvard.edu). Phone: 617-495-7143.

Primary URL: <http://hea-www.harvard.edu/astro/>

2nd URL: [http://www.astrosociety.org/education/astro/project\\_astro.html](http://www.astrosociety.org/education/astro/project_astro.html)

Scientist(s): Dr. F. Rick Harnden, Jr.    Harvard-Smithsonian Center for Astrophysics    Cambridge, MA  
 Dr. Philip Kaaret    Harvard-Smithsonian Center for Astrophysics    Cambridge, MA  
 Dr. Jonathan McDowell    Harvard-Smithsonian Center for Astrophysics    Cambridge, MA

Partner(s): Museum of Science    Boston, MA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
27 Jul 01	28 Jul 01	Museum of Science	Boston, MA	46	-	-

**Radio JOVE**

Theme(s): SEC, SSE  
 Msn/Prgm: SEC Forum  
 Description: The Radio JOVE project acquaints students with radio astronomy, providing opportunities for more than 300 teams of students and interested individuals around the world, from middle school students to adults, to build radio telescopes from inexpensive kits to study Jupiter, the Sun, and the galaxy. The students may also study radio astronomy through the use of online radio telescopes accessed through the Internet.

Lead: Dr. James Thieman, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [thieman@nssdc.gsfc.nasa.gov](mailto:thieman@nssdc.gsfc.nasa.gov). Phone: 301-286-9790.

Primary URL: <http://radiojove.gsfc.nasa.gov>

Scientist(s): Dr. James Thieman    NASA Goddard Space Flight Center    Greenbelt, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	NASA Goddard Space Flight Center	Greenbelt, MD	115	-	-
21 Jan 01	23 Jan 01	Yerkes Observatory	Williams Bay, WI	21	-	-
05 Apr 01	05 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	12	-	-
05 Sep 01	05 Sep 01	NASA Goddard Space Flight Center	Greenbelt, MD	10	25	-

**Rock Solid Leaders**

Theme(s): SEC, SEU, SSE  
 Msn/Prgm: SERCH B/F  
 Description: SERCH presented an overview of space science careers and discussed team research project ideas for 20 teams of leader/Junior Girl Scouts. Each team will now work with their troop to design and carry out a project to be presented to the Lowcountry Girl Scouts in the spring. Some suggested ideas are exploring the differences in volcanism within the solar system (e.g., Io versus Mars). They are to model and describe their projects.

Lead: Dr. Cassandra Runyon, College of Charleston, Charleston, SC 29424  
 E-mail: [cass@cofc.edu](mailto:cass@cofc.edu). Phone: 843-953-8279.

Partner(s): Girl Scouts of Carolina Low Country    North Charleston, SC

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 Sep 01	15 Sep 01	College of Charleston	Charleston, SC	40	-	-

## SECEF Astronomy Club

Theme(s): SEC

Msn/Prgm: IMAGE, SEC Forum

Description: The Sun-Earth Connection Education Forum (SECEF) sponsors and supports local astronomy clubs to give students an opportunity to interact with Goddard Space Flight Center scientists as they learn about the Sun and view the Sun with telescopes designed for solar viewing. Scientists visit several classrooms during the school year as an after-school program.

Lead: Dr. Sten Odenwald, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [odenwald@bolero.gsfc.nasa.gov](mailto:odenwald@bolero.gsfc.nasa.gov). Phone: 301-286-6953.

Primary URL: <http://sunearth.gsfc.nasa.gov>

Scientist(s):	Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
17 Sep 01	20 Nov 01	Holy Redeemer School	Kensington, MD	8	-	-
		Sligo Creek Elementary School	Silver Spring, MD	54	5,000	500

## SECEF Classroom Talks

Theme(s): SEC

Msn/Prgm: SEC Forum

Description: Sun-Earth Connection Education Forum (SECEF) scientists and master educators work with educators in their classrooms to present Sun-Earth Connection science to students at all levels; the program consists of hands-on activities and presentations on the newest discoveries about the Sun-Earth system.

Lead: Mr. Louis Mayo, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [lmayo@pop600.gsfc.nasa.gov](mailto:lmayo@pop600.gsfc.nasa.gov). Phone: 301-286-0165.

Primary URL: <http://sunearth.gsfc.nasa.gov>

Scientist(s):	Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Carolyn Ng	NASA Goddard Space Flight Center	Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
24 Oct 00	24 Oct 00	Cooke Elementary School	Washington, DC	63	-	-
24 Oct 00	24 Oct 00	Reed Elementary School	Washington, DC	64	-	-
31 Jan 01	01 Feb 01	Silver Spring Middle School	Silver Spring, MD	37	-	-

## SECEF Support for Student Programs

Theme(s): SEC

Msn/Prgm: Ulysses, ACE, FAST, HESSI, IMAGE, TRACE, ISTP, Cluster II, Geotail, Polar, SOHO, Wind, STP, GEC, STEREO, TIMED, Yohkoh, SEC Forum

Description: The Sun-Earth Connection Education Forum (SECEF) at Goddard Space Flight Center and the University of California, Berkeley, coordinate programs in which students are involved with Sun-Earth Connection scientists through mentoring programs at NASA Centers and through e-mail and special programs in support of local and national educational programs. Through these programs, students learn about the science of the Sun by helping with actual research at the high school to graduate levels and by participating in hands-on activities designed for basic understanding at the elementary and middle school levels. Students can also visit a scientist for short job-shadowing opportunities.

Lead: Elaine Lewis, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [lewis@mail630.gsfc.nasa.gov](mailto:lewis@mail630.gsfc.nasa.gov). Phone: 301-286-3337.

Primary URL: <http://sunearth.gsfc.nasa.gov>

Scientist(s):	Dr. Pal Brekke	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Carol Crannell	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Steele Hill	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Barbara Lambert	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Oct 00	21 Oct 00	NASA Goddard Space Flight Center	Greenbelt, MD	513	-	-

#### SEU Tours of Harvard-Smithsonian Center for Astrophysics

Theme(s): SEU

Msn/Prgm: SEU Forum

Description: Structure and Evolution of the Universe education specialists conducted several tours for students. Tours included discussions with scientists concerning current science topics and question-and-answer sessions with scientists concerning use of MicroObservatory Online Telescopes.

Lead: Ms. Mary Dussault, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
E-mail: [mdussault@cfa.harvard.edu](mailto:mdussault@cfa.harvard.edu). Phone: 617-496-7962.

Scientist(s):	Dr. Rene Plume	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
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Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Apr 01	07 Apr 01	Fenway High School	Boston, MA	25	-	-
12 Apr 01	12 Apr 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	14	-	-
21 Apr 01	21 Apr 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	22	-	-

#### SOFIA Classroom Visits by Scientists

Theme(s): ASO

Msn/Prgm: SOFIA

Description: Classroom visits by Stratospheric Observatory for Infrared Astronomy (SOFIA)-affiliated scientists supported science education in local schools. The visits are mostly single visits to a classroom. All participation by scientists was voluntary, and often self-initiated.

Lead: Mr. Michael Bennett, Astronomical Society of the Pacific (ASP), San Francisco, CA 94112  
E-mail: [mbennett@astrocoiety.org](mailto:mbennett@astrocoiety.org). Phone: 650-604-2128.

Scientist(s):	Mr. Tom Roellig	Universities Space Research Association/SOFIA	Moffett Field, CA
Partner(s):	NASA Ames Research Center		Moffett Field, CA
	SETI Institute		Mountain View, CA
	Universities Space Research Association (USRA)/SOFIA		Moffett Field, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
17 May 01	17 May 01	Collins Elementary School	Cupertino, CA	124	-	-

#### SOHO—Visits to Schools

Theme(s): SEC

Msn/Prgm: SOHO

Description: Solar and Heliospheric Observatory (SOHO) scientists and other SOHO representatives from NASA Goddard Space Flight Center visit classrooms to present information about SOHO and the Sun, including hands-on demonstrations and distribution of educational materials.

Lead: Dr. Steele Hill, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [steele.hill@gsfc.nasa.gov](mailto:steele.hill@gsfc.nasa.gov). Phone: 301-286-6452.

Primary URL: <http://sohowww.nascom.nasa.gov>

Scientist(s):	Mr. Steele Hill	NASA Goddard Space Flight Center	Greenbelt, MD
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## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Mar 01	14 Mar 01	DuVal High School	Greenbelt, MD	41	-	-

## Solar Summer Camp Activities

Theme(s): SEC

Msn/Prgm: Solar-B

Description: Chabot runs numerous summer camps for children of grades ranging from first through ninth. Solar-B "Solar Summer" camp will include fun and educational activities focused on the Sun, solar energy, color and light, the electromagnetic spectrum and spectra, and satellite/spacecraft engineering. Some of the activities to be run include the "Skittles" Spectrometer, Frisbee Photons and Picket-Fence Polarizers, The Shoebox Satellite, SolarCooker Cookout, The Human Sundial, The Electromagnetic Detective, and more.

Lead: Mr. Benjamin Burress, Chabot Space and Science Center, Oakland, CA 94619

E-mail: [bburress@chabot.space.org](mailto:bburress@chabot.space.org). Phone: 510-336-7308.Primary URL: <http://www.chabot.space.org/vsc/exhibits/solarb/default.asp>

Scientist(s): Ms. Barbara Francis Lockheed Martin Solar and Astrophysics Lab Palo Alto, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
10 Jul 01	25 Jul 01	Chabot Space and Science Center	Oakland, CA	60	-	-

## Solar Terrestrial Probe (STP) Internships for Students

Theme(s): SEC

Msn/Prgm: STP

Description: The STP Program scientists and education personnel mentor high school students through internships for students interested in pursuing math, science, engineering, or technological studies. These internships offer students the opportunity to work in a professional environment that provides the challenges necessary for personal enrichment and career growth.

Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-1275.

Scientist(s): Dr. Fred Herrero NASA Goddard Space Flight Center Greenbelt, MD  
 Mr. Shane Hynes NASA Goddard Space Flight Center Greenbelt, MD  
 Ms. Barbara Lambert NASA Goddard Space Flight Center Greenbelt, MD  
 Mr. Donald Robinson-Boonstra NASA Goddard Space Flight Center Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
27 Jun 01	10 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	5	-	-

## Space Experiments Facilitated by the NASA Get Away Special (GAS) Payloads

Theme(s): SEC, SSE

Msn/Prgm: SRT

Description: This program provides hands-on participation for K-12 and university students in Get Away Special (GAS) payloads flown on the NASA Space Shuttle. For over 20 years, Utah State University (USU) has pioneered and provided such opportunities for targeted elementary, middle, and high schools, as well as for Utah State University undergraduate and graduate students. To date, this program has flown experiments on over 10 GAS payloads and cooperated with other universities, enabling them to fly GAS payloads. The educational teaming involves interaction between undergraduates and faculty at USU with science teachers at the K-12 schools. Visits are made both to the schools and as field trips to the university. Educational presentations that fit within the State curriculum are planned and given by team members within a school setting.

Lead: Dr. Jan Sojka, Utah State University, Logan, UT 84322-4405

E-mail: [fasojka@sojka.cass.usu.edu](mailto:fasojka@sojka.cass.usu.edu). Phone: 435-797-2964.Primary URL: <http://gas.physics.usu.edu>

## STARBASE Astronomical Data Archive

Theme(s): ASO, SEU

Msn/Prgm: STARBASE  
 Description: The astronomical data obtained with STARBASE telescopes will be retrievable through a data management system developed by students for use by students. Undergraduate students at Western Kentucky University are developing the hardware and software necessary to store and retrieve the astronomical images obtained with the network of STARBASE telescopes. The students have specified PC-based hardware running Linux for the archive server, the redundant array of independent disks upon which the data are stored, and the database manager. The chosen software platform is the development version of Oracle's database package, mostly off-the-shelf with minor customization. Current efforts focus on developing a user-friendly, Web-based interface through which students will access the data.  
 Lead: Dr. Richard Gelderman, Western Kentucky University, Bowling Green, KY 42101  
 E-mail: [gelderman@wku.edu](mailto:gelderman@wku.edu). Phone: 270-745-6203.  
 Primary URL: <http://starbase.wku.edu>

#### STARBASE Teachers and Students

Theme(s): ASO, SEC, SEU  
 Msn/Prgm: STARBASE  
 Description: STARBASE astronomers bring the tools of astronomical research directly to high school students and teachers. The high school education goal of STARBASE is to introduce students to science by helping them perform scientific research. Our objective is to put astronomical data and tools into the students' hands and then mentor the students in their investigations. We have formed a network initially consisting of nine client high schools in Kentucky and the mid-southern United States using the Hands On Universe project as a model. Through the high school science teachers, we have introduced image-processing software into the classrooms, and we are visiting the schools to show the students the data they can download and types of investigations they can conduct. During our visits, the teachers ask us to give lectures on topics where the teachers feel personally less prepared. In addition, we have discussions with parent councils and school boards on the educational opportunity of becoming partners in STARBASE.  
 Lead: Dr. David Barnaby, Western Kentucky University, Bowling Green, KY 42101  
 E-mail: [david.barnaby@wku.edu](mailto:david.barnaby@wku.edu). Phone: 270-745-4357.  
 Primary URL: <http://starbase.wku.edu>

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Aug 01	23 Aug 01	Caverna High School	Horse Cave, KY	24	-	-
13 Sep 01	13 Sep 01	Metcalf County High School	Edmonton, KY	84	93	-
13 Sep 01	13 Sep 01	Metcalf County High School	Edmonton, KY	93	-	-
18 Sep 01	18 Sep 01	Summer Shade Elementary School	Edmonton, KY	80	-	-

#### STEREO—Public Speaking Engagements and Classroom Visits

Theme(s): SEC  
 Msn/Prgm: STEREO  
 Description: The Solar Terrestrial Relations Observatory (STEREO) education and public outreach effort encourages scientists and educators to participate in national and international speaking engagements at educational facilities, community events, and professional organizations. These arenas provide an opportunity to share knowledge of recent developments in science, math, and technology, and to encourage involvement with the STEREO mission. The talks will also expose students to various professional career opportunities.  
 Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
 E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-1275.  
 Primary URL: <http://stp.gsfc.nasa.gov/missions/stereo/stereo/htm>

Scientist(s):  
 Dr. Antoinette (Toni) Galvin University of New Hampshire Durham, NH  
 Dr. Michelle Larson University of California, Berkeley Berkeley, CA  
 Dr. Eberhard Moebius University of New Hampshire Durham, NH  
 Dr. Mark Popecki University of New Hampshire Durham, NH  
 Mr. Steven Turco University of New Hampshire Durham, NH

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 Mar 01	15 Mar 01	Moharimet Elementary School	Dover, NH	81	-	-

24 Mar 01	24 Mar 01	University of New Hampshire	Durham, NH	-	50	-
16 Aug 01	19 Aug 01	Oregon Star Party/Rose City Astronomers	Portland, OR	-	325	-

#### STP Public Speaking Engagements and Classroom Visits

Theme(s): SEC, SSE

Msn/Prgm: STP

Description: Scientists and educators from the Solar Terrestrial Probe (STP) Program Office visited classrooms and hosted students from various educational facilities in order to share the excitement of the STP missions and solar science through inquiry-based presentations and hands-on activities.

Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-1275.

Scientist(s):	Mr. Gilberto Colon	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Joseph Davila	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Shane Hynes	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Barbara Lambert	NASA Goddard Space Flight Center	Greenbelt, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 May 01	11 May 01	NASA Goddard Space Flight Center	Greenbelt, MD	4	-	-
21 Sep 01	21 Sep 01	Grace Christian School	Bowie, MD	27	-	-

#### Support for the Young Engineers and Scientists Program

Theme(s): SEC

Msn/Prgm: SRT, ACE, IMAGE, ISTP, Polar, SOHO, Wind, STP

Description: The Young Engineers and Scientists (YES) Program for high school students and their science teachers is an award-winning partnership between Southwest Research Institute (SwRI), local school districts, and charitable foundations. Since 1993, YES has consisted of a three-week summer workshop and independent study with SwRI mentors during the school year to complete science and engineering (S/E) research projects. Students and teachers interact with their SwRI mentors on a one-to-one basis for inquiry-based research. YES' goals are to increase the number of students (especially minorities and women) seeking S/E careers, assist their choice of college and major, and involve high school teachers in S/E research and technology that can be used in their classrooms. We have held this year's three-week workshop for our participants from June 12 through 28, 2001. The workshop held at SwRI provides students and teachers with first-hand experience in the research environment. They develop skills and acquire tools for solving scientific problems; attend minicourses and seminars on electronics, C++ programming, Web site development, careers, science ethics, social impact of technology, and other topics; and select individual research projects with their SwRI mentors to be completed during the academic year. This year, the Web page development was on the topic of space weather. Overview talks were followed by independent research on the topic. Each student developed his own Web page which was then integrated by a student Webmaster in a coherent structure.

Lead: Dr. Martin Wuest, Southwest Research Institute, San Antonio, TX 78228-0510

E-mail: [MWuest@swri.edu](mailto:MWuest@swri.edu). Phone: 210-522-5832.

Primary URL: <http://yesserver.space.swri.edu>

2nd URL: <http://yes.sat.tx.us/>

Scientist(s):	Dr. Daniel Boice	Southwest Research Institute	San Antonio, TX
	Dr. Rosemary Killen	Southwest Research Institute	San Antonio, TX
	Dr. Martin Wuest	Southwest Research Institute	San Antonio, TX

Partner(s):	Northside Independent School District	San Antonio, TX
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Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Jun 01	28 Jun 01	Southwest Research Institute	San Antonio, TX	14	-	-

#### Swift Student Workshops

Theme(s): SEU

Msn/Prgm: Swift

Description: The Swift mission E/PO program supports student activities in various venues. This support includes workshops for students, exhibits at student-centered events, and lectures at career days.

Lead: Dr. Laura Whitlock, Sonoma State University, Rohnert Park, CA 94928

E-mail: [laura.whitlock@sonoma.edu](mailto:laura.whitlock@sonoma.edu). Phone: 707-664-2256.

Scientist(s): Dr. Laura Whitlock Sonoma State University Rohnert Park, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
24 Jan 01	24 Jan 01	Grant Elementary School	Petaluma, CA	53	-	-
31 Mar 01	31 Mar 01	Expanding Your Horizons (Math Science Network)				
			Santa Rosa, CA	62	-	-

#### TIMED Educational Student Events

Theme(s): SEC

Msn/Prgm: TIMED

Description: The Johns Hopkins University Applied Physics Laboratory education and public outreach office helped scientists, engineers, and other team members become involved in the Thermosphere Ionosphere Mesosphere Energetics and Dynamics (TIMED) E/PO efforts by providing opportunities and resources necessary for team members to interact with students outside the classroom at events where they gave mission briefings, took part in question-and-answer sessions, provided demonstrations, and conducted activities related to the TIMED Mission. These efforts supported State, local, and national efforts directed toward systemic reform of science, mathematics, and technology education. Also, these classroom activities were based on the criteria contained in the national mathematics, science, and technology standards.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099

E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://www.timed.jhuapl.edu>

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
29 Nov 00	29 Nov 00	Johns Hopkins Applied Physics Laboratory	Laurel, MD	103	-	268,686
25 Jun 01	05 Jul 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	41	-	-
15 Aug 01	15 Aug 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	24	-	-

#### TIMED Student Mentoring

Theme(s): SEC

Msn/Prgm: TIMED

Description: JHU/APL E/PO team provided an opportunity for high school students to receive mentoring by scientists and engineers.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099

E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://www.timed.jhuapl.edu>

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
17 May 01	05 Jun 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	1	-	-
		Johns Hopkins Applied Physics Laboratory	Laurel, MD	1	-	-

#### TIMED Student Talks

Theme(s): SSE

Msn/Prgm: TIMED

Description: The Johns Hopkins Applied Physics Laboratory education and public outreach office helped scientists, engineers, and other team members become involved in the Thermosphere Ionosphere Mesosphere Energetics and Dynamics (TIMED) E/PO efforts by providing opportunities for on-site student visits and off-site classroom visits. The E/PO office supported these events by providing the resources necessary for the team members to talk to school groups, provide demonstrations, and conduct classroom activities related to the NEAR mission. These efforts supported State, local, and national efforts directed toward the systemic reform of science, mathematics, and technology education. Also, these classroom activities were based on the criteria contained in the national mathematics, science, and technology standards.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099

E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://www.timed.jhuapl.edu>

Scientist(s): Dr. Steve Gemeny Raytheon Company Lexington, MA  
Mr. Bill Knopf Johns Hopkins Applied Physics Laboratory Laurel, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
16 Mar 01	16 Mar 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	22	-	-
11 Jul 01	11 Jul 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	15	-	-
11 Jul 01	11 Jul 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	24	-	-
17 Jul 01	17 Jul 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	18	-	-

#### Training Undergraduate Telescope Operators

Theme(s): ASO

Msn/Prgm: STARBASE

Description: Undergraduate students are trained to remotely operate a meter-class STARBASE telescope and to obtain scientific data, initiating routine scientific operations with the Western Kentucky University (WKU) 0.6-meter Bell Observatory telescope. The objective of this activity is to train students in the remote operation of a research-grade telescope so that the students can independently operate the telescope and obtain research-quality data. The students undergo an intense period of training, first at the observatory itself, learning all about the telescope and its control systems. This phase of the training involves hands-on work with the telescope, control computers, weather station, other control hardware, the CCD camera systems, safeguarding the system, and troubleshooting hardware and software problems. Further training takes place in the control room on the campus of WKU. In this phase of the training, students learn how to operate the system and how to deal with problem situations from a remote location.

Lead: Dr. Michael Carini, Western Kentucky University, Bowling Green, KY 42101

E-mail: [mike.carini@wku.edu](mailto:mike.carini@wku.edu). Phone: 270-745-6198.

Primary URL: <http://starbase.wku.edu>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
19 Mar 01	14 Oct 01	Western Kentucky University	Bowling Green, KY	6	-	-

#### Ulysses Facility Tours

Theme(s): SEC

Msn/Prgm: Ulysses

Description: Ulysses Team members give individual tours for schools and public institutions requesting them.

Lead: Ms. Andrea Angrum, NASA Jet Propulsion Laboratory, Pasadena, CA 91109. Phone: 818-354-6775.

Primary URL: <http://www.vraptor.jpl.nasa.gov/voyger/voyager.html>

Scientist(s): Ms. Andrea Angrum NASA Jet Propulsion Laboratory Pasadena, CA  
Dr. Shonte Wright NASA Jet Propulsion Laboratory Pasadena, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Feb 01	21 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	32	-	-
01 Jun 01	01 Jun 01	NASA Jet Propulsion Laboratory	Pasadena, CA	43	-	-

#### Ulysses Interview Program

Theme(s): SEC, SSE

Msn/Prgm: Voyager, Ulysses

Description: Students from Los Angeles County Schools compete for interview opportunities with team members on space science, spacecraft design, spacecraft operations, or project management. Students are matched with team member volunteers based on their interests. Students do the research, professional interview, and professional presentation (at their schools) at the end of the project. A team member attends all presentations for evalua-

tion.

Lead: Ms. Andrea Angrum, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [andrea.angrum@jpl.nasa.gov](mailto:andrea.angrum@jpl.nasa.gov). Phone: 818-354-6775.

Primary URL: <http://www.ulysses.jpl.nasa.gov>

2nd URL: <http://www.vraptor.jpl.nasa.gov/voyager/voyager.html>

Scientist(s):	Ms. Andrea Angrum	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Fernando Castro	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Neil Murphy	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Edward Smith	NASA Jet Propulsion Laboratory	Pasadena, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 May 01	21 May 01	Huntington Beach High	Huntington Beach, CA	38	57	-
31 May 01	31 May 01	Lynwood High School	Lynwood, CA	21	27	-
08 Jun 01	08 Jun 01	Laguna Hills High School	Laguna Hills, CA	21	40	-
		Laguna Hills High School	Laguna Hills, CA	24	-	-

#### Voyager Interview Program

Theme(s): SEC

Msn/Prgm: Voyager, Ulysses

Description: Students from Los Angeles County schools compete for interview opportunities with team members on space science, spacecraft design, spacecraft operations, and project management. Students are matched with team member volunteers based on their interests. Students do the research, professional interview, and professional presentation (at their schools) at the end of the project. A team member attends all presentations for evaluation.

Lead: Ms. Andrea Angrum, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [andrea.angrum@jpl.nasa.gov](mailto:andrea.angrum@jpl.nasa.gov). Phone: 818-354-6775.

Primary URL: <http://vraptor.jpl.nasa.gov/voyager/voyager.html>

Scientist(s):	Ms. Andrea Angrum	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Donald Heller	NASA Jet Propulsion Laboratory	Pasadena, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Apr 01	06 Apr 01	Charter Oak High School	Covina, CA	2	23	-

#### Yohkoh Science Presentations

Theme(s): SEC

Msn/Prgm: Yohkoh

Description: The Yohkoh scientists share the science from the Yohkoh (an observatory for studying x-rays and gamma rays from the Sun) mission discoveries with students of all ages.

Lead: Dr. David Alexander, Lockheed Martin Solar and Astrophysics Lab, Palo Alto, CA 94304  
E-mail: [alexander@lmsal.co](mailto:alexander@lmsal.co). Phone: 650-424-2047.

Primary URL: <http://solar.physics.montana.edu/YPOP>

Scientist(s):	Dr. David Alexander	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA
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Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
23 Mar 01	23 Mar 01	Montana State University	Bozeman, MT	20	-	-
26 Apr 01	26 Apr 01	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	250	-	-
01 Jul 01	15 Aug 01	Montana State University	Bozeman, MT	-	500	-
01 Aug 01	01 Aug 01	Chabot Space and Science Center	Oakland, CA	20	-	-

#### Young Astronauts

Theme(s): ASO

Msn/Prgm: NAI

Description: The Young Astronauts program is created for fourth- through sixth-graders using aerospace themes to develop student interest and proficiency in science, technology, and math. The curriculum is developed by the Young

Astronaut Council, the world's largest space/technology education organization. Dr. Lynn Rothschild was featured in the "live" interaction portion of the program, which introduced scientists and research to the students on television. The Astrobiology Educator Guide was provided for the teachers of the program for continued astrobiology exposure during the course.

Lead: Dr. Lynn Rothschild, NASA Astrobiology Institute, Moffett Field, CA 94035  
E-mail: [lrothschild@mail.arc.nasa.gov](mailto:lrothschild@mail.arc.nasa.gov).

## Public Outreach

### Astrobiology at UCLA: An Integrated Multidisciplinary Approach to Research and Education

Theme(s): ASO

Msn/Prgm: NAI

Description: This activity consisted of a series of presentations on fossils and fossilization for an audience of elementary and junior high school students. Presentations consisted of a brief lecture (sometimes with slides), discussion, and hands-on examination of fossils. Also, a field trip to the tidepools was led for a third grade class.

Lead: Dr. Keith Kirts, University of Southern California, Los Angeles, CA 90089.

### Astrobiology Superstars

Theme(s): ASO

Msn/Prgm: NAI

Description: Astrobiology Superstars: A bimonthly, free public lecture series at the Midnight Special Bookstore on the Santa Monica Promenade, three blocks from the Pacific Ocean. The series features researchers and professors from the UCLA Center for Astrobiology, speaking on their area of expertise.

Lead: Mr. Keith Kirts, University of Southern California, Los Angeles, CA 90089.

### Bringing Solar Astronomy to the Public: A Multifaceted Outreach Program at BBSO

Msn/Prgm: SRT

Description: The Big Bear Solar Observatory (BBSO) gives guided public tours of the observatory to about 2,000 visitors and students a year. In addition, we have an off-site lecture program at public schools and other local facilities. With NASA funding, we added components to our mobile classroom (LCD/DLP projector and laptop computer) for use in public presentations given by BBSO staff, on and off-site at schools and community lecture halls. This system is also used during the guided tours to show the latest and most spectacular BBSO and NASA digital images and movies. An improved and more informative roadside self-guided display and a CD with educational resources and a BBSO image collection are in preparation.

Primary URL: <http://www.bbsso.njit.edu>

2nd URL: <http://www.njit.edu>

### Capital Science Lectures

Theme(s): ASO

Msn/Prgm: NAI

Description: This program is a series of nine public lectures on fundamental scientific research organized by the Carnegie Institution for the students and the general public. Invited speakers and Carnegie scientists interact with high school students in a special one-hour presentation prior to a full lecture with questions and answers provided for the general public. This year, four lectures focused on astrobiology.

Lead: Dr. Cindy Van Dover, Carnegie Institute of Washington, Washington, DC 20015.

### Cassini Mission Overview and Current Status

Theme(s): SSE

Msn/Prgm: Cassini/Huygens Probe

Description: Mission overview and current spacecraft status talks are supported through the "Cassini Speakers' Group" throughout the year. This group is a unique combination of flight team members, engineers, and scientists who work on some aspect of the mission every day. They receive materials support and training in public speaking through the Cassini Outreach Office. This is a dynamic group of enthusiastic members of the flight team.

Astronaut Council, the world's largest space/technology education organization. Dr. Lynn Rothschild was featured in the "live" interaction portion of the program, which introduced scientists and research to the students on television. The Astrobiology Educator Guide was provided for the teachers of the program for continued astrobiology exposure during the course.

Lead: Dr. Lynn Rothschild, NASA Astrobiology Institute, Moffett Field, CA 94035  
E-mail: [lrothschild@mail.arc.nasa.gov](mailto:lrothschild@mail.arc.nasa.gov).

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Lead: Ms. Shannon McConnell, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [shannon.mcconnell@jpl.nasa.gov](mailto:shannon.mcconnell@jpl.nasa.gov). Phone: 818-393-5815.

Scientist(s):	Mr. Stephen Edberg	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Shannon McConnell	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Robert Mitchell	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Trina Ray	NASA Jet Propulsion Laboratory	Pasadena, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
17 Oct 00	17 Oct 00	Hanson Planetarium	Salt Lake City, UT	-	150	-
20 Oct 00	20 Oct 00	Northridge Hospital	Northridge, CA	50	-	-
16 Nov 00	18 Nov 00	National Science Teachers Association (NSTA) Eastern Area Conference	Baltimore, MD	-	-	-
22 Nov 00	22 Nov 00	Reuben H. Fleet Space Museum	San Diego, CA	-	70	-
07 Dec 00	09 Dec 00	National Science Teachers Association (NSTA) Southwestern Area Conference	Phoenix, AZ	60	-	-
13 Dec 00	13 Dec 00	NASA Jet Propulsion Laboratory	Pasadena, CA	250	-	-
15 Dec 00	31 Mar 01	Museum of Science	Boston, MA	-	430,000	-
30 Dec 00	30 Dec 00	Pasadena City College	Pasadena, CA	340	-	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	-	200	-
24 Feb 01	24 Feb 01	Throop Unitarian Universalist Church	La Canada, CA	7	-	-
17 Apr 01	17 Apr 01	Brentwood Church	Los Angeles, CA	50	-	-
29 May 01	29 May 01	Anaheim Sertoma Club	Anaheim, CA	5	-	-
20 Jun 01	20 Jun 01	Bradbury Science Museum	Los Alamos, NM	-	75	-
20 Jul 01	20 Jul 01	Torrance Public Library	Torrance, CA	-	9	-
26 Jul 01	26 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	50	-	-
08 Aug 01	08 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	30	-	-
23 Aug 01	26 Aug 01	Kensington Metropark	Brighton, MI	-	325	-

Cassini Sky Observing and Star Parties

Theme(s): SSE

Msn/Prgm: Cassini/Huygens Probe

Description: Sky observing and star parties allow members of the general public the opportunity to view Saturn without having to visit an observatory.

Lead: Mr. Stephen Edberg, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [stephen.edberg@jpl.nasa.gov](mailto:stephen.edberg@jpl.nasa.gov). Phone: 818-393-5815.

Primary URL: <http://www.jpl.nasa.gov/cassini>

Scientist(s):	Mr. Stephen Edberg	NASA Jet Propulsion Laboratory	Pasadena, CA
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Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
19 Oct 00	19 Oct 00	Joshua Tree National Park	Yucca Valley, CA	75	-	-
16 Nov 00	16 Nov 00	Paradise Canyon School	La Canada, CA	179	-	-
17 Nov 00	17 Nov 00	Paradise Canyon School	La Canada, CA	124	-	-
03 Jan 01	03 Jan 01	La Canada High School	La Canada, CA	19	-	-
03 Jan 01	05 Jan 01	Orange County Outdoors Educators Conference	Oak Glen, CA	-	-	-
09 Feb 01	09 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	8	-	-
08 Aug 01	08 Aug 01	Holiday Inn, Monrovia	Monrovia, CA	10	-	-
10 Aug 01	10 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	33	-	-
		La Canada High School	La Canada, CA	50	-	-

Club Space Place Activities

Theme(s): SEC, SEU, SSE

Msn/Prgm: DS-1, ST-5, ST-3

Description: Club Space Place provides quarterly interdisciplinary hands-on activities that are space or Earth science-related. These quarterly activities are provided to the Space Place Library and Museum Partners, Boys & Girls Clubs of America, the YWCA, the 21st Century Department of Education, and the Civil Air Patrol.

Lead: Ms. Nancy Leon, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Nancy.J.Leon@jpl.nasa.gov](mailto:Nancy.J.Leon@jpl.nasa.gov). Phone: 818-354-1067.

Primary URL: <http://spaceplace.jpl.nasa.gov>

Scientist(s): Dr. Marc Rayman NASA Jet Propulsion Laboratory

Partner(s): 4-H Arkansas

4-H Delaware

4-H Florida

4-H Kansas

4-H Kentucky

4-H Maine

4-H Maryland

4-H Massachusetts

4-H Michigan

4-H Minnesota

4-H Missouri

4-H Montana

4-H National

4-H Nebraska

4-H New Hampshire

4-H North Carolina

4-H Oregon

4-H South Dakota

4-H Texas

4-H Virginia

4-H Wisconsin

Air Victory Museum

Alaska State Library Association

Andrews AFB

Arizona Library Association

Arkansas Air Museum

Arkansas Library Association

Arts and Science Center for Southeast Arkansas

Astronomy Center

Barksdale AFB Youth Center

Bassett Planetarium

Bays Mountain Planetarium

Billings Public Library

Bootheel Youth Museum

Boys & Girls Clubs, National HQ

Brazos Valley Family Museum

Brooks AFB Youth Center

Cable Natural History Museum

California Library Association

Calusa Nature Center & Planetarium

Camp Lejeune MCB

Carbondale Public Library

Casper Planetarium

Cayce-West Columbia Jaycees

Central Wisconsin's Children's Museum

Challenger Learning Center

Challenger Learning Center

Charleston Community Library

Chatham-Effingham-Liberty Regional Library

Children's Metamorphosis Museum

Children's Museum

Children's Museum

Children's Museum at Yunker Farm

Pasadena, CA

Little Rock, AR

Newark, DE

Gainesville, FL

Colby, KS

Lexington, KY

Bangor, ME

College Park, MD

Walpole, MA

East Lansing, MI

Minneapolis, MN

Columbia, MO

Bozeman, MT

Auburn, AL

Lincoln, NE

Durham, NH

Raleigh, NC

Corvallis, OR

Brookings, SD

Dallas, TX

Blacksburg, VA

Madison, WI

Medford, NJ

Juneau, AK

Andrews AFB, MD

Tempe, AZ

Fayetteville, AR

Conway, AR

Pine Bluff, AR

New Orleans, LA

Bossier, LA

Amherst, MA

Kingsport, TN

Billings, MT

Malden, MO

Atlanta, GA

Bryan, TX

Brooks AFB, TX

Cable, WI

Sacramento, CA

Fort Myers, FL

Camp Lejeune, NC

Carbondale, IL

Casper, WY

West Columbia, SC

Stevens Point, WI

Chattanooga, TN

Suffern, NY

Charleston, SC

Savanna, GA

Londonderry, NH

Boca Raton, FL

Egg Harbor Township, NJ

Fargo, ND

Children's Museum of La Crosse	La Crosse, WI
Children's Museum of New Braunfels	New Braunfels, TX
Children's Museum of Northern Nevada	Carson City, NV
Children's Museum of Portsmouth	Portsmouth, NH
Children's Museum of South Carolina	Myrtle Beach, SC
Children's Museum of Stockton	Stockton, CA
Cincinnati Museum Center	Cincinnati, OH
City of Riverside Public Library	Riverside, CA
Coeur d'Alene Public Library	Coeur d'Alene, ID
Combat Air Museum	Topeka, KS
Cumberland Science Museum	Nashville, TN
Curious Kids Museum	Saint Joseph, MI
Daniel Boone Regional Library	Columbia, MO
Delta College Planetarium	Bay City, MI
Discovery Center	Rockford, IL
Discovery Center of Springfield	Springfield, MO
Discovery Museum	Sacramento, CA
Discovery Science Place	Tyler, TX
Dodge City Public Library	Dodge City, KS
Don Harrington Discovery Center	Amarillo, TX
Dover Public Library	Dover, DE
El Paso Independent School District	El Paso, TX
Elgin AFB	Elgin AFB, FL
Ellsworth AFB	Ellsworth AFB, SD
Erie Historical Museum and Planetarium	Erie, PA
Estrella Squadron, Warbird Museum	Paso Robles, CA
Ethyl Universe Planetarium	Richmond, VA
Eugene Field Accelerated School Library	Mexico, MO
Evergreen Airventure	McMinnville, OR
Ewa Beach Public Library	Ewa Beach, HI
Exploration Station	Bourbonnais, IL
Fairchild AFB	Fairchild AFB, WA
Family Museum	Bettendorf, IA
Farmington Public Library	Farmington, NM
Fascinate-U Children's Museum	Fayetteville, NC
Fleischmann Planetarium	Reno, NV
Fletcher Free Library	Burlington, VT
Flying Leatherneck Aviation Museum	San Diego, CA
Fort Benning Youth Services	Ft. Benning, GA
Fort Bliss Youth Center	Fort Bliss, TX
Fort Campbell Child and Youth Services	Fort Campbell, KY
Fort Drum Youth Services	Fort Drum, NY
Fort Gordon Youth Center	Fort Gordon, GA
Fort Hood Army Base	Fort Hood, TX
Fort Jackson Youth Center	Fort Jackson, SC
Fort Knox	Fort Knox, KY
Fort Lewis	Fort Lewis, WA
Fort Meade	Fort Meade, MD
Fort Polk	Fort Polk, LA
Fort Sill Youth Center	Fort Sill, OK
Fort Smith Public Library	Fort Smith, AR
Gadsden Public Library	Gadsden, AL
Gayle Planetarium	Montgomery, AL
Golden Pond Planetarium	Golden Pond, KY
Grand Junction Public Library	Grand Junction, CO
Great Lakes Region Civil Air Patrol	Wright-Patterson AFB, OH
Hands-on Science Central Museum	Fort Wayne, IN

Highlands Museum & Discovery Center	Ashland, KY
Holloman AFB Youth Center	Holloman AFB, NM
Hoover Price Planetarium	Canton, OH
Hummel Planetarium	Richmond, KY
Illinois State University Planetarium	Normal, IL
Imaginarium Science Discovery Center	Anchorage, AK
Iowa Library Association	Des Moines, IA
John May Museum Center	Colorado Springs, CO
Johnson County Library	Buffalo, WY
Joplin Public Library	Joplin, MO
Junior Museum of Bay County	Panama City, FL
Kansas Aviation Museum	Wichita, KS
Kirkland AFB	Kirkland AFB, NM
Koch Science Center & Planetarium	Evansville, IN
Lafayette Planetarium	Lafayette, LA
Lakeview Museum of Arts & Science	Peoria, IL
Laredo Children's Museum	Laredo, TX
Las Cruces Museum of Natural History	Las Cruces, NM
Lida G. Sharpe Planetarium	Memphis, TN
Living Science Center	Arlington, TX
Longway Planetarium	Flint, MI
Lutz Children's Museum	Manchester, CT
Mallory Kountze Planetarium	Omaha, NE
March Field Museum	Riverside, CA
Maxwell-Gunter AFB	Montgomery, AL
McClellan Aviation Museum	North Highlands, CA
McConnell AFB	McConnell AFB, KS
McGuire AFB	McGuire AFB, NJ
Meridian Public Library	Meridian, MS
Mesa Union School Library	Somis, CA
Mid America Air Museum	Liberal, KS
Middle East Region Civil Air Patrol	Andrews AFB, MD
Minnesota Valley Regional Library	Mankato, MN
Minot Public Library	Minot, ND
Missouri Library Association	Columbia, MO
Morehead Planetarium	Chapel Hill, NC
Morgantown Public Library	Morgantown, WV
Mountain Home AFB	Mountain Home, ID
Mountain Skies Astronomical Society	Lake Arrowhead, CA
Museo del Nino	San Juan, PR
Museum of Arts & Sciences	Macon, GA
Museum of Southwest / Blakemore Planetarium	Midland, TX
Museum of the Rockies	Bozeman, MT
National HQ Civil Air Patrol	Maxwell AFB, AL
National Soaring Museum	Elmira, NY
Naval Station Mayport	Mayport, FL
New England Air Museum	Windsor Locks, CT
Newport Aquarium	Newport, KY
Niagara Aerospace Museum	Niagara Falls, NY
Norfolk Public Library	Norfolk, NE
Norfolk Public Library	Norfolk, VA
North Central Region Civil Air Patrol	Minneapolis, MN
North Museum of Natural History and Science	Lancaster, PA
Northeast Region Civil Air Patrol	McGuire AFB, NJ
Northern Stars Planetarium	Fairfield, ME
Northside Branch Library	Chillicothe, OH
Novins Planetarium	Toms River, NJ

Omnisphere Theater  
Oregon Coast Aquarium  
Ouachita Public Library  
Owls Head Transportation Museum  
Parker Public Library  
Parkersburg Public Library  
Patrick AFB Youth Center  
Paulucci Space Theater  
Pensacola Public Library  
Perkins Observatory  
Peter White Public Library  
Peterson AFB  
Pima Air and Space Museum  
Planetarium  
Planetarium  
Planetarium  
Port Defiance Zoo & Aquarium  
Portsmouth Museums  
Provo Library  
Putnam County Library System  
Rawlins Municipal Library  
Rhode Island Library Association  
Riverside Zoo  
Roberson Museum & Science Center  
Rock Springs Public Library  
Rocky Mount Children's Museum  
Rocky Mountain Civil Air Patrol  
Russell C. Davis Planetarium  
Sanford Museum & Planetarium  
Santa Maria Museum of Flight  
Science Station  
Scott AFB  
Shaw Youth Center  
Shenandoah Valley Discovery Museum  
Sheridan County Public Library  
South Florida Science Museum  
South Shore Natural Science Center  
Southeast Region Civil Air Patrol  
Southern Forest World  
Southern Museum of Flight  
Southworth Planetarium  
Springfield Children's Museum  
Staerkel Planetarium  
State Library of Hawaii  
State Library of Iowa  
Storer Planetarium  
Subase Youth Center  
Texas Air Museum  
Tinker AFB Youth Services  
To'Hajiilee Community School Library  
Tulsa Central Public Library  
Turkey Run State Park & Planetarium  
Turtle Bay Museums

Columbus, GA  
Newport, OR  
Monroe, LA  
Owls Head, ME  
Parker, AZ  
Parkersburg, WV  
Satellite Beach, FL  
Hibbing, MN  
Pensacola, FL  
Delaware, OH  
Marquette, MI  
Peterson AFB, CO  
Tucson, AZ  
North Las Vegas, NV  
Wheeling, WV  
Somerville, NJ  
Tacoma, WA  
Portsmouth, VA  
Provo, UT  
Cookeville, TN  
Pierre, SD  
Cranston, RI  
Scottsbluff, NE  
Binghamton, NY  
Rock Springs, WY  
Rocky Mount, NC  
Littleton, CO  
Jackson, MS  
Cherokee, IA  
Santa Maria, CA  
Cedar Rapids, IA  
Scott AFB, IL  
Shaw AFB, SC  
Winchester, VA  
Sheridan, WY  
West Palm Beach, FL  
Norwell, MA  
Maxwell AFB, AL  
Waycross, GA  
Birmingham, AL  
Portland, ME  
Springfield, IL  
Champaign, IL  
Honolulu, HI  
Des Moines, IA  
Prince Frederick, MD  
Groton, CT  
Rio Hondo, TX  
Tinker AFB, OK  
Canoncito, NM  
Tulsa, OK  
Marshall, IN  
Redding, CA

Tuzzy Consortium Library	Barrow, AK
U.S. Army Garrison-Selfridge	Sang, MI
U.S. Department of Education	Washington, DC
Universe Theater & Planetarium	Kalamazoo, MI
University of Guam Planetarium	Mangilao, Guam
Utica Zoo	Utica, NY
Venango Museum of Art, Science, & Industry	Oil City, PA
Victory Valley College	Victorville, CA
Wallace Planetarium	Fitchburg, MA
Warhawk Air Museum	Boise, ID
Washington County Free Library	Hagerstown, MD
Western Aerospace Museum	Oakland, CA
Western Museum of Flight	Hawthorne, CA
Willamette Science & Transportation Museum	Eugene, OR
Wilmington Public Library	Wilmington, DE
Wyoming Library Association	Buffalo, WY
YWCA of America	New York, NY
Zoo Atlanta	Atlanta, GA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Nov 00	01 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	4,410,000	-
01 Mar 01	01 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	4,410,000	-
01 May 01	01 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	4,410,000	-

## Community Access to Space Exploration—Europa Orbiter

Theme(s): SEC, SSE

Msn/Prgm: Europa Orbiter

Description: Community Access to Space Exploration is an informal science learning initiative that explores how to establish equity and excellence in order to reach academically diverse learners and at-risk youth through online and active learning environments. We assess needs, devise participatory action plans, test and modify ideas in small-scale pilot projects that lead to implementation partnerships with community organizations in informal settings such as after school programs, Saturday academies, museums, science centers, planetariums, observatories, outdoor education, and even shopping malls and theme parks to create programs, events, workshops, displays and exhibits that enable community access to space science and technology knowledge.

Lead: Mr. Richard Shope III, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [rick.shope@jpl.nasa.gov](mailto:rick.shope@jpl.nasa.gov). Phone: 818-354-3812.Primary URL: <http://www.jpl.nasa.gov/europaorbiter/>

Scientist(s): Mr. Richard Shope III NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): Academic Research Lab Phoenix, AZ  
 Project Universe Minneapolis, MN  
 Telescopes in Education Foundation Pasadena, CA  
 World Hope Foundation Boulder, CO

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Jan 01	21 Jan 01	Association for the Education of Teachers of Science (AETS) Meeting	Costa Mesa, CA	5	-	-
08 Mar 01	10 Mar 01	San Diego Science Educator's Association Conference	San Diego, CA	60	-	-
09 Jul 01	17 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	5	-	-
13 Jul 01	18 Jul 01	Astronomical Society of the Pacific (ASP) Meeting	St. Paul, MN	60	-	-

## CONTOUR Public Lectures

Theme(s): SSE

Msn/Prgm: CONTOUR

Description: The CONTOUR Team gave various lectures to the general public, including science, educational, and senior citizen audiences.

Lead: Laura Lautz, Cornell University, Ithaca, NY 14853  
E-mail: [lautz@astro.cornell.edu](mailto:lautz@astro.cornell.edu). Phone: 607-254-4973.

Primary URL: <http://www.contour2002.org>

Scientist(s): Dr. Anita Cochran University of Texas at Austin Austin, TX  
Dr. Kate Reynolds Johns Hopkins Applied Physics Laboratory Laurel, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
17 Aug 01	19 Aug 01	Bruneau Dunes State Park	Bruneau, ID	-	-	-
11 Sep 01	11 Sep 01	NASA Glenn Research Center	Cleveland, OH	40	-	-

Deep Impact Amateur Astronomer Outreach

Theme(s): SSE

Msn/Prgm: Deep Impact

Description: One of the goals of the Deep Impact Mission Outreach Plan is to provide opportunities for participation with amateur astronomers a collection of students, educators, scientists, and other community members. This participation was planned to run prior to and during the mission encounter with Comet Tempel 1. The Small Telescope Science Program and a Web site for amateur astronomer submissions to Deep Impact has been provided and will be ongoing from year 2000 through 2005. Because amateur astronomers are from a variety of backgrounds, Deep Impact's participation with them is also outreach to both the educational and public community.

Lead: Dr. Lucy McFadden, University of Maryland, College Park, MD 20742  
E-mail: [McFadden@astro.umd.edu](mailto:McFadden@astro.umd.edu). Phone: 301-405-2081.

Primary URL: <http://deepimpact.umd.edu/stsp/>

2nd URL: <http://deepimpact.umd.edu>

Scientist(s): Ms. Stephanie McLaughlin University of Maryland College Park, MD  
Ms. Elizabeth Warner University of Maryland College Park, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Apr 01	07 Apr 01	Rock Creek Park	Washington, DC	80	-	-
04 May 01	05 May 01	Civic Center—Tucson	Tucson, AZ	80	-	-
16 May 01	16 May 01	Prude Ranch	Ft. Davis, TX	70	4	-
26 Jul 01	27 Jul 01	Civic Center—Frederick	Frederick, MD	100	-	-
18 Aug 01	18 Aug 01	Fox Park	Laramie, WY	70	-	-

Deep Impact Public Talks

Theme(s): SSE

Msn/Prgm: Deep Impact

Description: The Deep Impact Mission team participated in several public talks to audiences of different age, interest, and experience levels. Especially encouraging were opportunities to reach whole families together. There was a great diversity of locations, media, experience levels in the audiences and approach taken by team members.

Lead: Dr. Lucy McFadden, University of Maryland, College Park, MD 20742  
E-mail: [McFadden@astro.umd.edu](mailto:McFadden@astro.umd.edu). Phone: 301-405-2081.

Primary URL: <http://deepimpact.jpl.nasa.gov>

2nd URL: <http://deepimpact.umd.edu>

Scientist(s): Dr. Jacklyn Green NASA Jet Propulsion Laboratory Pasadena, CA  
Mr. Casey Lisse University of Maryland College Park, MD  
Dr. Lucy McFadden University of Maryland College Park, MD  
Ms. Stephanie McLaughlin University of Maryland College Park, MD  
Dr. Karen Meech University of Hawaii at Manoa Honolulu, HI  
Mr. Brian Muirhead NASA Jet Propulsion Laboratory Pasadena, CA  
Ms. Elizabeth Warner University of Maryland College Park, MD  
Dr. Gilbert Yanow NASA Jet Propulsion Laboratory Pasadena, CA  
Dr. Donald Yeomans NASA Jet Propulsion Laboratory Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Oct 00	06 Oct 00	Institute for Astronomy	Honolulu, HI	790	-	-
10 Nov 00	12 Nov 00	Aspen Lodge	Estes Park, CO	16	5	-
13 Nov 00	13 Nov 00	University of Arkansas	Fayetteville, AR	70	-	-
12 Dec 00	12 Dec 00	Institute for Astronomy	Honolulu, HI	-	30	-
18 Dec 00	18 Dec 00	Institute for Astronomy	Honolulu, HI	-	30	-
16 Jan 01	16 Jan 01	Cigna Healthcare	Hartford, CT	550	-	-
10 Feb 01	10 Feb 01	Pagoda Hotel	Honolulu, HI	60	-	-
09 Mar 01	09 Mar 01	Explorations Unlimited	Greenbelt, MD	-	12	-
20 Mar 01	20 Mar 01	University of Maryland	College Park, MD	-	75	-
27 Apr 01	27 Apr 01	Carey Junior High School	Cheyenne, WY	450	4	-
07 Jun 01	07 Jun 01	WRC Business Radio	Washington, DC	-	10,000	-
08 Jun 01	08 Jun 01	Cable News Channel 8	Springfield, VA	-	15,000	-
10 Aug 01	10 Aug 01	Anaheim Public Library	Anaheim, CA	-	40	-
15 Aug 01	15 Aug 01	KSER Radio	Lynwood, WA	-	10,000	-
24 Aug 01	24 Aug 01	David Star	Davis, CA	-	150	-

## Deep Impact Web Site

Theme(s): SSE

Msn/Prgm: Deep Impact

Description: The "Deep Impact Web Mission" Web site and a mirror site at the University of Maryland provide the resources for most of the public and educational outreach of the mission. There are areas for information on the mission, the science, the technology, and education and press resources. There is also an additional area called "Discovery Zone" with general public interest materials and activities. Our images and animations are in a section called "Gallery." There is a second Web site developed for the Small Telescope Science Program that links from both the JPL and UMD sites. This site carries images and information for our special programs with the amateur astronomers. There is no tracking system for visitors to that site or to the UMD mirror site at this point.

Lead: Dr. Lucy McFadden, University of Maryland, College Park, MD 20742  
E-mail: [McFadden@astro.umd.edu](mailto:McFadden@astro.umd.edu). Phone: 301-405-2081.

Primary URL: <http://deepimpact.jpl.nasa.gov>2nd URL: <http://deepimpact.umd.edu>

Scientist(s): Dr. Lucy McFadden University of Maryland College Park, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 May 01	30 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	21,486

## Deep Space Network Public Outreach

Theme(s): SSE

Msn/Prgm: DSMS

Description: This activity includes DSN public lectures, exhibits, and other noneducational events.

Scientist(s): Mr. Richard Miller NASA Jet Propulsion Laboratory Pasadena, CA  
Mr. Douglas Mudgway NASA Jet Propulsion Laboratory Pasadena, CA  
Ms. Trina Ray NASA Jet Propulsion Laboratory Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Oct 00	20 Oct 00	California Institute of Technology	Pasadena, CA	30	-	-
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	-	-	-
20 Mar 01	20 Mar 01	Cinema Society of San Diego	La Jolla, CA	-	800	-
16 Jun 01	17 Jun 01	Travis Air Force Base	Fairfield, CA	-	-	-

## Deep Space Network Web Pages

Theme(s): SSE

Msn/Prgm: DSMS

Description: There are several public Web pages describing the role of the DSN in deep space communications and how we obtain images of planets in the solar system. There are other pages about radio astronomy, as well as educational pages describing materials available to educators.

Lead: Ms. Shirley Wolff, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: <http://deepspace.jpl.nasa.gov/dsn>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
02 Jan 01	31 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	5,984
01 Feb 01	28 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	6,136
01 Mar 01	31 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	4,991
01 Apr 01	30 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	4,981
01 May 01	31 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	8,517
01 Jun 01	30 Jun 21	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	9,595
01 Jul 01	31 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	4,976
01 Aug 01	31 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	5,061
01 Sep 01	30 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	6,167

## Discovery Program Web Site

Theme(s): SSE

Msn/Prgm: DPSO

Description: This Web site is aimed at the general public. It is intended to provide an overview of the program and its objectives, a description of the eight missions selected to date, latest news about the program and the missions, and easy access to the education and outreach activities of each mission. It describes the different ways of getting involved with the Discovery Program. It also features a quarterly newsletter that presents the current status of each mission and its E/PO activities and focuses on a particular mission at the time of a significant event such as launch.

Lead: Ms. Shari Asplund, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [shari.e.asplund@jpl.nasa.gov](mailto:shari.e.asplund@jpl.nasa.gov). Phone: 818-354-7280.Primary URL: <http://discovery.nasa.gov>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	140,000

## Explore! and Fun with Science Library Programs for Youth

Theme(s): ASO, SEU, SSE

Msn/Prgm: LPI B/F

Description: The "Explore!" program was developed to facilitate distribution of basic space science information and related NASA materials utilizing the highly leveraged public library systems. Libraries have long provided essential learning resources that strengthen and perpetuate formal and informal education. NASA materials can be utilized, organized, and distributed nationwide to a broad spectrum of the populace. "Fun with Science" was developed as a new and exciting way to team public libraries, community sponsors, and scientists to bring space science to the community. Targeted to preteen youth, "Fun with Science" explores scientific concepts through directed experiments in an inquiry-based approach.

Lead: Dr. Kathleen Johnson, Lunar and Planetary Institute, Houston, TX 77058-1113

E-mail: [johnson@lpi.usra.edu](mailto:johnson@lpi.usra.edu). Phone: 281-244-2059.Primary URL: <http://www.lpi.usra.edu/education/EPO/explore.html>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	26 Apr 01	Sabine Parish Library	Many, LA	448	-	-
10 Oct 00	10 Oct 00	Lunar and Planetary Institute	Houston, TX	21	-	-



Dr. James Thieman                      NASA Goddard Space Flight Center                      Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Oct 00	07 Oct 00	Greenbelt National Park	Greenbelt, MD	-	500	-
07 Oct 00	07 Oct 00	Greenbelt National Park	Greenbelt, MD	2,200	-	-
12 Mar 01	12 Mar 01	Girl Scouts of America	Stafford County, VA	59	-	-
05 Apr 01	05 Apr 01	Girl Scouts of America	Calvert Cliffs, MD	-	150	-

## GLAST and Swift Space Scientists Web Chats Through NASA Quest

Theme(s): SEU

Msn/Prgm: GLAST, Swift

Description: Online Web chats with students and the general public feature mission scientists as experts. Informal education involving scientists from the Gamma-ray Large Area Space Telescope (GLAST) and Swift Gamma Ray Burst MIDEX Missions was also included.

Lead: Dr. Lynn Cominsky, Sonoma State University, Rohnert Park, CA 94928

E-mail: [lynnc@charmian.sonoma.edu](mailto:lynnc@charmian.sonoma.edu). Phone: 707-664-2655.Primary URL: <http://www-glast.sonoma.edu/epo/chats/index.html>

Scientist(s): Dr. Elliot Bloom                      Stanford University                      Stanford, CA  
 Dr. David Burrows                      Pennsylvania State University                      State College, PA  
 Dr. Lynn Cominsky                      Sonoma State University                      Rohnert Park, CA  
 Dr. Neil Gehrels                      NASA Goddard Space Flight Center                      Greenbelt, MD  
 Dr. Kevin Hurley                      University of California, Berkeley                      Berkeley, CA  
 Dr. David Palmer                      Los Alamos National Laboratory                      Los Alamos, NM  
 Dr. Philip Plait                      Sonoma State University                      Rohnert Park, CA  
 Dr. Steve Ritz                      NASA Goddard Space Flight Center                      Greenbelt, MD  
 Dr. Dan Suson                      Texas A&M University                      College Station, TX  
 Dr. Dave Thompson                      NASA Goddard Space Flight Center                      Greenbelt, MD

Partner(s): NASA Ames Research Center                      Moffett Field, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
25 Oct 00	25 Oct 00	Stanford University	Stanford, CA	-	2	103
12 Dec 00	12 Dec 00	Pennsylvania State University	State College, PA	-	3	112
24 Jan 01	24 Jan 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	2	94
28 Feb 01	28 Feb 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	3	83
28 Mar 01	28 Mar 01	Texas A&M University	College Station, TX	-	7	87
25 Apr 01	25 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	3	72
30 May 01	30 May 01	Los Alamos National Laboratory	Los Alamos, NM	-	8	87

## GLAST Public Presentations

Theme(s): SEU

Msn/Prgm: GLAST

Description: Gamma-ray Large Area Space Telescope (GLAST) Colloquiums are given to the general public, teaching professionals, and students. Various scientists associated with the GLAST have given these presentations. All of the talks include information about the GLAST mission and/or gamma-ray astronomy.

Lead: Dr. Lynn Cominsky, Sonoma State University, Rohnert Park, CA 94928

E-mail: [lynnc@charmian.sonoma.edu](mailto:lynnc@charmian.sonoma.edu). Phone: 707-664-2655.Primary URL: <http://www-glast.sonoma.edu>

Scientist(s): Dr. Elliot Bloom                      Stanford University                      Stanford, CA  
 Dr. Lynn Cominsky                      Sonoma State University                      Rohnert Park, CA  
 Dr. David Dorfan                      University of California, Santa Cruz                      Santa Cruz, CA  
 Dr. Greg Madejski                      Stanford University                      Stanford, CA  
 Dr. John Mattox                      Francis Marion University                      Florence, SC  
 Dr. Gordon Spear                      Sonoma State University                      Rohnert Park, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
22 Feb 01	22 Feb 01	University of Oregon	Eugene, OR	75	-	-
15 Mar 01	15 Mar 01	Stanford University	Stanford, CA	100	-	-
05 May 01	05 May 01	Carnegie Mellon University	Pittsburg, PA	200	-	-
12 May 01	12 May 01	University of California, Berkeley	Berkeley, CA	-	150	-
19 Jun 01	19 Jun 01	South Carolina State University	Orangeburg, SC	15	-	-
11 Jul 01	13 Jul 01	National Youth Science Foundation	Charleston, WV	124	-	-
25 Jul 01	29 Jul 01	International Hands-On Universe Annual Conference	Berkeley, CA	30	-	-

## HEASARC Presentation

Theme(s): SEU

Msn/Prgm: HEASARC

Lead: Dr. Stephen Drake, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [drake@legacy.gsfc.nasa.gov](mailto:drake@legacy.gsfc.nasa.gov). Phone: 301-286-6962.Primary URL: <http://heasarc.gsfc.nasa.gov/>

Scientist(s):	Dr. Stephen Drake	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Koji Mukai	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Gail Rohrbach	NASA Goddard Space Flight Center	Greenbelt, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
02 Jul 01	27 Jul 01	National Youth Science Camp 2001	Bartow, WV	104	-	-

## HESSI @CALday/Exhibit and Demonstrations

Theme(s): SEC

Msn/Prgm: FAST, HESSI

Description: High Energy Solar Spectroscopic Imager (HESSI) scientists share the Sun-Earth Connection science at space sciences information exhibits that are set up on college campuses, at NASA Centers, and at community gatherings. This activity was in support of CALday and included exhibits and tours of the Space Sciences Laboratory and missions operations control room (used for communicating with satellites such as HESSI, FAST and others).

Lead: Dr. Nahide Craig, University of California, Berkeley, Berkeley, CA 94720  
E-mail: [ncraig@ssl.berkeley.edu](mailto:ncraig@ssl.berkeley.edu). Phone: 510-643-7273.Primary URL: <http://cse.ssl.berkeley.edu/hessi>2nd URL: <http://hessi.ssl.berkeley.edu>

Scientist(s):	Dr. Manfred Bester	University of California, Berkeley	Berkeley, CA
	Dr. Nahide Craig	University of California, Berkeley	Berkeley, CA

Partner(s): University of California, Berkeley Berkeley, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 Mar 01	15 Mar 01	University of California, Berkeley	Berkeley, CA	18	-	-
21 Apr 01	21 Apr 01	University of California, Berkeley	Berkeley, CA	-	150	-
21 Apr 01	21 Apr 01	University of California, Berkeley	Berkeley, CA	-	30,000	-

## HESSI—Sun Discoveries

Theme(s): SEC

Msn/Prgm: HESSI, SEC Forum

Description: High Energy Solar Spectroscopic Imager (HESSI) scientists from UC Berkeley's Space Sciences Laboratory and scientists from NASA Goddard Space Flight Center conduct presentations and lectures at community events, universities, Girl Scout gatherings, and NASA Centers to introduce the public to discoveries about the Sun.

Lead: Dr. Nahide Craig, University of California, Berkeley, Berkeley, CA 94720

E-mail: [ncraig@ssl.berkeley.edu](mailto:ncraig@ssl.berkeley.edu). Phone: 510-643-7273.

Primary URL: <http://hessi.ssl.berkeley.edu>

Scientist(s): Dr. Michelle Larson University of California, Berkeley Berkeley, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
16 Aug 01	19 Aug 01	Oregon Star Party/Rose City Astronomers	Portland, OR	-	325	-

#### Hubble Space Telescope Informal Education

Theme(s): ASO

Msn/Prgm: HST

Description: This program includes a wide variety of activities associated with science museums, science centers, planetariums, and other venues of free-choice learning. In addition to the activities recorded here, activities recorded under "ViewSpace" and "Hubble Space Telescope: New Views of The Universe" are informal in nature.

Lead: Mr. John Stoke, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [stoke@stsci.edu](mailto:stoke@stsci.edu). Phone: 410-338-4394.

Primary URL: <http://informal-sci.stsci.edu/>

Scientist(s): Dr. Ian Griffin Space Telescope Science Institute Baltimore, MD  
 Dr. Frank Summers Space Telescope Science Institute Baltimore, MD  
 Dr. Mark Voit Space Telescope Science Institute Baltimore, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	International Planetarium Society	Rochester, NY	-	-	-
01 Oct 00	30 Sep 01	Space Telescope Science Institute	Baltimore, MD	-	-	9,687
10 Dec 00	16 Dec 00	Space Telescope Science Institute	Baltimore, MD	-	-	-
20 Dec 00	20 Dec 00	Fleischmann Planetarium	Reno, NV	-	-	-
13 Feb 01	13 Feb 01	Bays Mountain Planetarium	Kingsport, TN	-	-	-
14 Feb 01	14 Feb 01	Southwest State University Planetarium	Marshall, MN	-	-	-
21 Feb 01	21 Feb 01	Downing Planetarium	Fresno, CA	-	-	-
27 Feb 01	27 Feb 01	St. Charles Parish Library & Planetarium	Luling, LA	-	-	-
16 Mar 01	15 Apr 01	Delaware Astronomical Society	Newark, DE	-	-	-
22 Mar 01	24 Mar 01	International Technology Education Association (ITEA) Meeting	Atlanta, GA	-	-	-
30 Mar 01	30 Mar 01	SciWorks Museum	Winston-Salem, NC	-	-	-
09 Apr 01	10 Apr 01	Discovery Center	Rockford, IL	30	-	-
26 Apr 01	26 Apr 01	Maryland Science Center	Baltimore, MD	25	-	-
30 Apr 01	30 Apr 01	Palomar College	San Marcos, CA	-	-	-
03 May 01	03 May 01	Liberty Science Center	Jersey City, NJ	-	-	-
03 May 01	03 May 01	Museum of Science	Boston, MA	-	-	-
09 May 01	12 May 01	Middle Atlantic Planetarium Society 2001 Conference	Pittsburgh, PA	-	135	-
16 May 01	16 May 01	Upper Dublin Planetarium	Dresher, PA	-	-	-
22 May 01	22 May 01	Westminster College Planetarium	New Wilmington, PA	-	-	-
30 May 01	30 May 01	LodeStar Astronomy Center	Albuquerque, NM	-	-	-
02 Jul 01	02 Jul 01	Ball State University Planetarium	Muncie, IN	-	-	-
02 Jul 01	02 Jul 01	Euclid High School Planetarium	Euclid, OH	-	-	-
02 Jul 01	02 Jul 01	Waubonsie Valley High School	Aurora, IL	-	-	-
02 Jul 01	02 Jul 01	Westlake Schools Planetarium	Westlake, OH	-	-	-
12 Jul 01	12 Jul 01	Houston Museum of Natural Science	Houston, TX	-	-	-
13 Jul 01	13 Jul 01	University of Pennsylvania, Edinboro, Planetarium	Edinboro, PA	-	-	-
17 Jul 01	17 Jul 01	Freeport McMoRan DLSC Planetarium and Observatory	Kenner, LA	-	-	-
31 Jul 01	31 Jul 01	American Museum of Natural History	New York, NY	-	-	-

05 Aug 01	25 Aug 01	Smithsonian National Air and Space Museum	Washington, DC	-	-	-
25 Aug 01	25 Aug 01	Smithsonian National Air and Space Museum	Washington, DC	-	125	-
28 Aug 01	28 Aug 01	New Detroit Science Center	Detroit, MI	-	-	-
04 Sep 01	03 Oct 01	LodeStar Astronomy Center	Albuquerque, NM	500	-	-
		Bogle Junior High School	Chandler, AZ	600	-	-
		Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	-	-
		Houston Museum of Natural Science	Houston, TX	-	-	-
		Sage Valley Junior High	Gillette, WY	-	-	-

#### Hubble Space Telescope Online Outreach

Theme(s): ASO

Msn/Prgm: HST

Description: "Online Outreach" is a suite of Web sites developed and used by the Space Telescope Science Institute to convey news, discoveries, information, technology, education, and fun facts about the Hubble Space Telescope to the general public.

Lead: Mr. Stratis Kakadelis, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [stratis@stsci.edu](mailto:stratis@stsci.edu). Phone: 410-338-4756.

Primary URL: <http://hubble.stsci.edu>

2nd URL: <http://heritage.stsci.edu>

Scientist(s):	Dr. Howard Bond	Space Telescope Science Institute	Baltimore, MD
	Dr. Andrew Fruchter	Space Telescope Science Institute	Baltimore, MD
	Dr. Keith Noll	Space Telescope Science Institute	Baltimore, MD
	Dr. Frank Summers	Space Telescope Science Institute	Baltimore, MD
	Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD
	Dr. Mark Voit	Space Telescope Science Institute	Baltimore, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Space Telescope Science Institute	Baltimore, MD	-	-	13,039,072

#### IMAGE Books and Articles

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IMAGE

Description: Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) scientists and E/PO staff educate the public about space science by writing books and articles for the general public and by cooperating with newspaper reporters. These include the book "The 23rd Cycle" written by Dr. Sten Odenwald (E/PO), and the Scientific American article "The Fury of Space Storms" by Dr. Jim Burch (Mission PI).

Lead: Dr. Sten Odenwald, NASA Goddard Space Flight Center, Greenbelt, MD 20771

E-mail: [odenwald@bolero.gsfc.nasa.gov](mailto:odenwald@bolero.gsfc.nasa.gov). Phone: 301-286-6953.

Primary URL: <http://image.gsfc.nasa.gov/poetry>

2nd URL: <http://www.theastronomycafe.net>

Scientist(s):	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
Partner(s):	Rice University		Houston, TX

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
15 Feb 01	15 Feb 01	Columbia University Press	New York, NY	-	3,000	-
05 May 01	05 May 01	San Francisco Chronicle	San Francisco, CA	-	600,000	-
11 May 01	17 May 01	Washington City Paper	Washington, DC	-	350,000	-

#### IMAGE E/PO on the Internet

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IMAGE

Description: The Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) education and public outreach program

supports Web-based dissemination of space science information, classroom activities, and public education through its "POETRY" Web site (URL below) and affiliated Web sites at Rice University, "The Astronomy Cafe" and Interactive NASA Space Physics Ionosphere Radio Experiments (INSPIRE).

Lead: Dr. Sten Odenwald, Raytheon/Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [odenwald@bolero.gsfc.nasa.gov](mailto:odenwald@bolero.gsfc.nasa.gov). Phone: 301-286-6953.

Primary URL: <http://image.gsfc.nasa.gov/poetry>

2nd URL: <http://image.gsfc.nasa.gov/poetry/inspire>

Scientist(s): Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD

Partner(s): Rice University Houston, TX

#### IMAGE Public Lectures

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IMAGE

Description: Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) scientists and E/PO staff are invited to give public lectures about space science and astronomy to planetariums, museums, science centers, and a variety of other public venues.

Lead: Dr. Sten Odenwald, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [odenwald@bolero.gsfc.nasa.gov](mailto:odenwald@bolero.gsfc.nasa.gov). Phone: 301-286-6953.

Primary URL: <http://image.gsfc.nasa.gov/poetry>

Scientist(s): Dr. Flavio Mendez Maryland Science Center Baltimore, MD

Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD

Dr. Neil Tyson American Museum of Natural History New York, NY

Partner(s): Rice University Houston, TX

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
19 Mar 01	19 Mar 01	American Museum of Natural History	New York, NY	-	265	-
17 Apr 01	17 Apr 01	California Academy of Science	San Francisco, CA	-	339	-
21 Jun 01	21 Jun 01	Maryland Science Center	Baltimore, MD	55	45	-
07 Jul 01	07 Jul 01	Rotary Club of Kensington	Kensington, MD	48	-	-
10 Aug 01	10 Aug 01	Boston University	Boston, MA	40	-	-

#### IMAGE Television and Radio Programs

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IMAGE

Description: Imager for Magnetopause-to-Aurora Global Exploration (IMAGE) scientists and education and public outreach staff are interviewed for television and radio programs and discuss space science.

Lead: Dr. Sten Odenwald, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [odenwald@bolero.gsfc.nasa.gov](mailto:odenwald@bolero.gsfc.nasa.gov). Phone: 301-286-6953.

Primary URL: <http://image.gsfc.nasa.gov/poetry>

Scientist(s): Dr. Sten Odenwald NASA Goddard Space Flight Center Greenbelt, MD

Partner(s): Rice University Houston, TX

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Jan 01	18 Jan 01	National Public Radio, Todd Mundt Show	Ann Arbor, MI	-	500,000	-
08 Apr 01	09 Apr 01	Whitley Streiber Show, "Dreamland"		-	3,500,000	-

#### Interactive Exhibits at Community Events

Theme(s): SEC, SSE

Msn/Prgm: SSI B/F

Description: Starting in the spring of 2001, the Space Science Institute (SSI) has made available a space science outreach exhibit (500 sq ft), staffed by SSI educators and scientists and providing hands-on, interactive experiences and NASA outreach materials for all ages at a variety of community events. In early April 2001, the SSI Broker program responded to a request from the Newspapers in Education (NIE) editor at the newspaper in a

neighboring town to support a visit of a NASA trailer at a shopping mall. The SSI educators and scientists who staffed the community outreach exhibit fielded two full days of visits from classrooms, scout troops, and families. This small road show was creatively assembled from prototype components of SSI's traveling exhibits (Electric Space and MarsQuest). The event provided hands-on, interactive experiences for all ages. In addition, SSI education staff developed some family astronomy games that were extremely successful in engaging parents with their children. Stirred by the success in Longmont, CO, SSI assembled two similar interactive exhibit events: one in support of a science night in the neighboring Sugarloaf Mountain community, and two in support of the Arvada Center for the Arts and Humanities on the opening day of their "Honoring the Sky" exhibition, being run concurrently with a parallel exhibition at the Denver Museum of Nature and Science. These experiences have led us to propose collaborations with mobile outreach programs operating from the Boulder/Denver area and to plan for a similar community outreach exhibit at the spring 2002 meeting of the National Organization of Black Chemists and Chemical Engineers (NOBCChe).

Lead: Dr. Cherilynn Morrow, Space Science Institute, Boulder, CO 80309  
E-mail: [camorrow@colorado.edu](mailto:camorrow@colorado.edu). Phone: 303-492-7321.

Scientist(s):	Dr. Paul Dusenbery	Space Science Institute	Boulder, CO
	Dr. Scot Elkington	Space Science Institute	Boulder, CO
	Dr. Cherilynn Morrow	Space Science Institute	Boulder, CO
	Dr. Steve Musman	Space Science Institute	Boulder, CO
	Dr. Brad Sandor	Space Science Institute	Boulder, CO

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Apr 01	07 Apr 01	Twin Peaks Mall	Longmont, CO	-	1,200	-
30 Jul 01	30 Jul 01	Sugarloaf Community Science	Boulder, CO	-	50	-
15 Sep 01	15 Sep 01	Denver Museum & Arvada Center for the Arts	Arvada, CO	-	500	-

Internet Outreach for NASA Space Science Missions

Msn/Prgm: SRT

Description: Development began on an Internet site, tentatively called "NASA's COSMOS" that will share the excitement and scientific content of the Office of Space Science's missions with the American public. It will nourish the curiosity and imagination of and raise the awareness of NASA for large numbers of people of all ages and economic classes, making their lives richer, fuller, and more complete, while also bringing national and global recognition to NASA. The site includes 1) Fundamental Concepts—basic units, each beginning with an overview that contains key ideas and is connected to supportive tutorials and images; 2) Access to Space—online connections to satellites now in space and to other relevant Web sites; 3) Multiple Perspectives—dramatic visual images, phenomena on small and large spatial scales, movies, and colored digital images of invisible worlds; 4) Recent Results—continuously updated with supplemental writing about recent discoveries from current spacecraft well before they are collectively available in any other format; and 5) Human Interest—topics of direct concern to all of us, such as global warming, asteroid impact with Earth, the search for extraterrestrial life, and the Sun's affect on our planet. Tutorials and images for spacecraft exploration of the Sun, including the Ulysses, SOHO, and Yohkoh missions, as well as many of the planetary missions, such as Magellan, Galileo, and Mars Orbiter, have already been completed.

Lead: Dr. Kenneth Lang, Tufts University, Medford, MA 02155  
E-mail: [ken.lang@tufts.edu](mailto:ken.lang@tufts.edu). Phone: 617-627-3390.

JPL Open House

Theme(s): SSE

Msn/Prgm: SSE Theme, Cassini/Huygens Probe, Galileo, Voyager, DPSO, ASPERA-3, CONTOUR, Deep Impact, Genesis, Lunar Prospector, MESSENGER, NEAR, Stardust, Mars E/PO, MGS, 2001 Mars Odyssey, MER, OP E/PO, Europa Orbiter, PKB, DS-1, DSMS, NEAT, Astromaterials, Mars Express, MUSES-CN, NMS, Rosetta

Description: The annual NASA Jet Propulsion Laboratory (JPL) Open House is a free two-day event that invites the public to visit the Laboratory and learn about our latest projects. The lab is transformed by hundreds of booths, providing visitors with exciting information about JPL missions, technology, and programs. In 2001, over 60,000 guests experienced JPL's Open House.

Lead: Ms. Kimberly Lievense, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
E-mail: [Kimberly.A.Lievense@jpl.nasa.gov](mailto:Kimberly.A.Lievense@jpl.nasa.gov). Phone: 818-394-0112.

Primary URL: <http://www.jpl.nasa.gov/psd/se.html>

Scientist(s):	Mr. William Blume	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Wendy Ellery	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Anne Elson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Sergio Fajardo	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. David Gallagher	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Varoujan Gorjian	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Ingolf Heinrichsen	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Amy Jurewicz	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Deborah Levine	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Bruce McCollum	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. John McKinney	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Victoria Meadows	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Deborah Padgett	California Institute of Technology	Pasadena, CA
	Dr. Chester Sasaki	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Calina Seybold	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. David Shupe	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Joshua Stamp	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Lisa Storrie-Lombardi	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Donald Sweetnam	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Michelle Thaller	California Institute of Technology	Pasadena, CA
	Dr. Michael Werner	NASA Jet Propulsion Laboratory	Pasadena, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	60,000	-

JSC Open House—Space Science

Theme(s): ASO, SSE

Msn/Prgm: SRT, NAI, Astromaterials, MI Initiative

Description: The NASA Johnson Space Center (JSC) space science and education team presented seven exhibits to the public during the day-long JSC Open House. Exhibits included display of a Moon rock and Martian meteorite at the Astromaterials and Astrobiology exhibits, telescopic and spacecraft imagery in the Planetary Astronomy exhibit, viewing of JSC labs for the Electron Microprobe and Lunar Sample Facility, and a 3-D Mars display. These exhibits were staffed by JSC scientists who shared their knowledge with the public. We also had a large room dedicated to space science education. There were four hands-on activities set up around the room and a table of educational materials. The education area was staffed by NASA JSC space science education personnel, our teacher partners in curriculum development, and seven Student Ambassadors from the University of Houston-Downtown.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov). Phone: 281-483-5135.

Scientist(s):	Dr. Carlton Allen	NASA Johnson Space Center	Houston, TX
	Ms. Jaclyn Allen	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Everett Gibson	NASA Johnson Space Center	Houston, TX
	Dr. John Jones	NASA Johnson Space Center	Houston, TX
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Dr. Gary Lofgren	NASA Johnson Space Center	Houston, TX
	Dr. Gordon McKay	NASA Johnson Space Center	Houston, TX
	Dr. Glen Merrill	University of Houston-Downtown	Houston, TX
	Dr. Richard Morris	NASA Johnson Space Center	Houston, TX
	Dr. Penny Morris	University of Houston-Downtown	Houston, TX
	Dr. Craig Schwandt	Lockheed Martin ESC/JSC	Houston, TX
	Dr. Faith Vilas	NASA Johnson Space Center	Houston, TX
	Dr. Michael Zolensky	NASA Johnson Space Center	Houston, TX
Partner(s):	University of Houston-Downtown		Houston, TX

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
25 Aug 01	25 Aug 01	NASA Johnson Space Center	Houston, TX	-	100,000	-

## Live from Africa—Solar Eclipse

Theme(s): SEC

Msn/Prgm: STP, STEREO, SEC Forum

Description: NASA's Sun-Earth Connection Education Forum (SECEF), a partnership between the University of California at Berkeley Space Sciences Laboratory and NASA Goddard Space Flight Center, coordinated the Eclipse 2001 Webcast event as a national program for broad audiences. SECEF highlighted Sun-Earth Connection missions and research programs involving more than 70 space scientists in over 160 museums, planetariums, schools, and other venues. The space scientists included members of the National Society of Black Physicists, as well as astronauts aboard the International Space Station.

Lead: Ms. Diane Kisich, University of California, Berkeley, Berkeley, CA 94720

E-mail: [dianek@ssl.berkeley.edu](mailto:dianek@ssl.berkeley.edu). Phone: 510-643-7217.Primary URL: <http://www.exploratorium.edu/eclipse>2nd URL: <http://museumeclipse.org>

Scientist(s):			
Dr. David Alexander	Lockheed Martin Solar and Astrophysics Lab		Palo Alto, CA
Ms. Andrea Angrum	NASA Jet Propulsion Laboratory		Pasadena, CA
Dr. Gautam Badhwar	NASA Johnson Space Center		Houston, TX
Dr. Christopher Barrington-Leigh	University of California, Berkeley		Berkeley, CA
Dr. Gibor Basri	University of California, Berkeley		Berkeley, CA
Dr. John Beck	Stanford University		Stanford, CA
Dr. Jason Best	Shepherd College		Shepherdstown, WV
Dr. Manfred Bester	University of California, Berkeley		Berkeley, CA
Dr. Beth Brown	NASA Goddard Space Flight Center		Greenbelt, MD
Dr. Ken Brown	NASA Jet Propulsion Laboratory		Pasadena, CA
Dr. Yvonne Cagle	NASA Johnson Space Center		Houston, TX
Dr. George Carruthers	Naval Research Laboratory		Washington, DC
Dr. Hattie Carwell	Lawrence Berkeley National Laboratory		Berkeley, CA
Dr. Adrienne Cool	San Francisco State University		San Francisco, CA
Dr. Nahide Craig	University of California, Berkeley		Berkeley, CA
Dr. Francis Cucinotta	NASA Johnson Space Center		Houston, TX
Dr. Joseph Davila	NASA Goddard Space Flight Center		Greenbelt, MD
Dr. Paul Doherty	Exploratorium		San Francisco, CA
Dr. Roscoe Giles	Boston University		Boston, MA
Dr. Madhulika Guhathakurta	NASA Office of Space Science		Washington, DC
Dr. Xia Guo	Beijing Planetarium		Beijing, China
Dr. Isabel Hawkins	University of California, Berkeley		Berkeley, CA
Dr. Susan Helms	NASA Johnson Space Center		Houston, TX
Mr. Ron Hipschman	Exploratorium		San Francisco, CA
Dr. Jeffrey Hoffman	NASA Johnson Space Center		Houston, TX
Dr. Deborah Jackson	NASA Jet Propulsion Laboratory		Pasadena, CA
Dr. Keith Jackson	Lawrence Berkeley National Laboratory		Berkeley, CA
Dr. Floyd James	North Carolina A&T State University		Greensboro, NC
Dr. Christopher Johns-Krull	University of California, Berkeley		Berkeley, CA
Dr. Bertina Jones	University of North Carolina-Chapel Hill		Chapel Hill, NC
Dr. Abebe Kebede	North Carolina A&T State University		Greensboro, NC
Ms. Diane Kisich	University of California, Berkeley		Berkeley, CA
Dr. Gillian Knapp	Princeton University		Princeton, NJ
Dr. Paul Knappenberger	Adler Planetarium and Astronomy Museum		Chicago, IL
Dr. Rocky Kolb	Fermilab		Batavia, IL

Dr. Peter Kregel	TU Marburg	Dreis-Brueck, Germany
Dr. Therese Kucera	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Michelle Larson	University of California, Berkeley	Berkeley, CA
Dr. Davin Larson	University of California, Berkeley	Berkeley, CA
Dr. Paulett Liewer	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
Dr. Janet Luhmann	University of California, Berkeley	Berkeley, CA
Dr. Adrian Martin	University of California, Berkeley	Berkeley, CA
Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Charles McGruder	Western Kentucky University	Bowling Green, KY
Dr. Kevin McLin	University of Colorado	Boulder, CO
Dr. Donald Michels	Naval Research Laboratory	Washington, DC
Dr. Cherilynn Morrow	Space Science Institute	Boulder, CO
Dr. Dawn Myers	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Terrell Neal	California Institute of Technology	Pasadena, CA
Dr. Bahman Nejadi	Iranian Remote Sensing Center	Jandarmery Tehran, Iran
Ms. Carolyn Ng	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Lawrence Norris	United States Naval Academy	Annapolis, MD
Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Hakeem Oluseyi	Foothill College	Los Altos Hills, CA
Dr. Carl Rouse	California Institute of Technology	Pasadena, CA
Dr. Phil Sakimoto	NASA Office of Space Science	Washington, DC
Dr. Greg Schultz	University of California, Berkeley	Berkeley, CA
Dr. Rob Semper	Exploratorium	San Francisco, CA
Dr. Linda Shore	Exploratorium	San Francisco, CA
Dr. Leonard Strachan	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Edward Thomas	Auburn University	Auburn, AL
Dr. Valerie Thomas	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Neil Tyson	American Museum of Natural History	New York, NY
Dr. Yury Usachev	NASA Johnson Space Center	Houston, TX
Dr. John Vallerga	University of California, Berkeley	Berkeley, CA
Dr. Jose Villalobos	Universidad de Costa Rica	San Jose, CR
Dr. Jim Voss	NASA Johnson Space Center	Houston, TX
Dr. Elvira Williams	Shaw University	Raleigh, NC
Dr. Michael Williams	Clark Atlanta University	Atlanta, GA
Dr. Shonte Wright	NASA Jet Propulsion Laboratory	Pasadena, CA

## Partner(s):

AboveNet Communications, Inc  
 Adler Planetarium and Astronomy Museum  
 American Museum of Natural History  
 American Museum of Science and Energy  
 Arizona Science Center  
 Bishop Museum  
 BOAZ Enterprises  
 Buffalo Museum of Science  
 Casa de las Ciencias  
 Catawba Science Center  
 Chabot Space and Science Center  
 Children's Museum of Iredell County  
 Coca-Cola Space Science Center  
 Computraining Centre  
 Coronado Instruments  
 Discovery Museum  
 EcoTarium  
 Edward Zane Planetarium/The Natural Science Center  
 Exploradome  
 Exploratorium  
 Fernbank Science Center  
 San Francisco, CA  
 Chicago, IL  
 New York, NY  
 Oak Ridge, TN  
 Phoenix, AZ  
 Honolulu, HI  
 Marina del Rey, CA  
 Buffalo, NY  
 La Coruna, Spain  
 Hickory, NC  
 Oakland, CA  
 Statesville, NC  
 Columbus, GA  
 Dar es Salaam, Tanzania  
 Tucson, AZ  
 Bridgeport, CT  
 Worcester, MA  
 Greensboro, NC  
 Paris, France  
 San Francisco, CA  
 Atlanta, GA

Fundacion CIENTEC	San Jose, Costa Rica
G.WIZ (Gulfcoast Wonder and Imagination Zone)	Sarasota, FL
Henry Buhl, Jr. Planetarium and Observatory	Pittsburgh, PA
Imagination Station Science Museum	Wilson, NC
Israel Museum of Science Planning & Technology	Haifa, Isreal
Jeddah Science & Technology Centre	Jeddah, Saudi Arabia
Kalamazoo Valley Museum	Kalamazoo, MI
L'Hemisferic	Valencia, Spain
Las Cruces Museum of Natural History	Las Cruces, NM
Lawrence Hall of Science	Berkeley, CA
Louisville Science Center	Louisville, KY
Magnetic Image Video	San Francisco, CA
Maloka	Bogotá, Colombia
Maryland Science Center	Baltimore, MD
Milton Rubenstein Museum of Science & Technology	Syracuse, NY
Museo del Canal Interoceanico de Panama	Panama City, Panama
Museu de las Ciencias	Valencia, Spain
Museum of African American Technology Science Village	Oakland, CA
Museum of Discovery	Little Rock, AR
Museum of the Rockies	Bozeman, MT
Museum of Science and History	Fort Worth, TX
NASA Jet Propulsion Laboratory	Pasadena, CA
NASA Johnson Space Center	Houston, TX
NASA Marshall Space Flight Center	Huntsville, AL
NASA Office of Human Resources and Education	Washington, DC
NASA Office of Public Affairs	Washington, DC
NASA Office of Space Flight	Washington, DC
NASA Office of Space Science	Washington, DC
National Planetarium	Kuala Lumpur, Malaysia
National Science Centre	Kuala Lumpur, Malaysia
National Society of Black Physicists (NSBP)	Greensboro, NC
New Mexico Museum of Space History	Alamogordo, NM
Oregon Museum of Science and Industry	Portland, OR
Pavilhao do Conhecimento—Ciencia Viva	Lisboa, Portugal
Philippine Science Centrum	Manila, Philippines
Schreder Planetarium & Science Learning Center	Redding, CA
Science World	Vancouver, British Columbia
SciTech Hands On Museum	Aurora, IL
Smash TV	San Francisco, CA
Space Center Houston	Houston, TX
Strasenburgh Planetarium, Rochester Museum & Science Center	Rochester, NY
Sydney Observatory	Haymarket, Australia
Techniquest	Cardiff, United Kingdom
Technology Museum of Thessaloniki	Thessaloniki, Greece
Universum, Science Museum Zona Cultural de Ciudad	Mexico City, Mexico
Virginia Discovery Museum	Charlottesville, VA
Visvesvaraya Industrial and Technological Museum	Bangalore, India
Youth Activities Section and The Clore Garden of Science, Weizmann Inst.	Rehovot, Isreal

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Jun 01	18 Jun 01	S.M.A.R.T. Technology Learning Center	Lanham, MD	25	-	-
21 Jun 01	21 Jun 01	Adler Planetarium and Astronomy Museum	Chicago, IL	1,500	-	-
21 Jun 01	21 Jun 01	American Museum of Natural History	New York, NY	-	-	-
21 Jun 01	21 Jun 01	American Museum of Science and Energy	Oak Ridge, TN	450	-	-
21 Jun 01	21 Jun 01	Arizona Science Center	Phoenix, AZ	-	-	-

21 Jun 01	21 Jun 01	Bishop Museum	Honolulu, HI	106	-	-
21 Jun 01	21 Jun 01	Buffalo Museum of Science	Buffalo, NY	-	-	-
21 Jun 01	21 Jun 01	Cadette Girl Scout Troop 1760	York, PA	-	-	-
21 Jun 01	21 Jun 01	Cadette Girl Scout Troop 193	Horse Shoe, NC	-	-	-
21 Jun 01	21 Jun 01	Cadette Girl Scout Troop 264	Bostic, NC	100	-	-
21 Jun 01	21 Jun 01	Cadette Girl Scout Troop 7134	Stratford, CT	-	-	-
21 Jun 01	21 Jun 01	Casa de las Ciencias	La Coruna, Spain	100	-	-
21 Jun 01	21 Jun 01	Catawba Science Center	Hickory, NC	85	-	-
21 Jun 01	21 Jun 01	Cathy Romano Girl Scouts	Brookeville, MD	-	-	-
21 Jun 01	21 Jun 01	Chabot Space and Science Center	Oakland, CA	200	-	-
21 Jun 01	21 Jun 01	Children's Museum of Iredell County	Statesville, NC	-	-	-
21 Jun 01	21 Jun 01	Coca-Cola Space Science Center	Columbus, GA	-	-	-
21 Jun 01	21 Jun 01	Columbia University Biosphere 2 Center	Oracle, AZ	15	-	-
21 Jun 01	21 Jun 01	Columbus Astronomical Society	Columbus, OH	6	-	-
21 Jun 01	21 Jun 01	Computraining Centre	Dar es Salaam, Tanzania	-	-	-
21 Jun 01	21 Jun 01	Cumberland Science Museum	Nashville, TN	-	-	-
21 Jun 01	21 Jun 01	Discovery Museum	Bridgeport, CT	-	-	-
21 Jun 01	21 Jun 01	EcoTarium	Worcester, MA	-	-	-
21 Jun 01	21 Jun 01	Edward Zane Planetarium/The Natural Science Center	Greensboro, NC	-	-	-
21 Jun 01	21 Jun 01	Exploradome	Paris, France	-	-	-
21 Jun 01	30 Jun 01	Exploratorium	San Francisco, CA	1,000	125M	420,737
21 Jun 01	21 Jun 01	Ferbank Science Center	Atlanta, GA	-	-	-
21 Jun 01	21 Jun 01	Fundacion CIENTEC	San Jose, Costa Rica	150	-	-
21 Jun 01	21 Jun 01	G.WIZ (Gulfcoast Wonder and Imagination Zone)	Sarasota, FL	97	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 1485	Springfield, VA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 184	Summit, MS	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 246	Horsham, PA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 265	Clermont, FL	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 290	Sedalia, MO	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 3817	Silver Spring, MD	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 826	Missouri City, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 900	Alexandria, VA	5	-	-
21 Jun 01	21 Jun 01	Girl Scout Brownie Troop 96	Odenton, MD	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Junior Troop 555	Falmouth, VA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 106	Inman, SC	10	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 112	Lake Charles, LA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 11510	Spring, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 125	Deatsville, AL	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1260	Manassas, VA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1302	Dayton, NJ	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1322	Lusby, MD	40	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 14	Arlington, VA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 14	Oxly, MO	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1517	Friendswood, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1529	Novato, CA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 154	Sykesville, MD	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1570	Silver Spring, MD	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1586	Houston, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1714	Houston, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1771	Houston, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 178	Thomaston, GA	7	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 1901	Dickson, TN	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 23	Grand Forks AFB, ND	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 2463	Gaithersburg, MD	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 2791	Cutchogue, NY	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 3021	Westbury, NY	-	-	-

21 Jun 01	21 Jun 01	Girl Scout Troop 31/313	South Lake Tahoe, CA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 3250	Chesterfield, VA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 384	Lake Forest, CA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 458	West Hartford, CT	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 487	Lake Charles, LA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 510	North Las Vegas, NV	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 5121	Waller, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 5213	Wataga, IL	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 526	Mt. Gilead, NC	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 556	Lake Charles, LA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 6708	Snellville, GA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 695	Orangevale, CA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 73	Barnwell, SC	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 76	Hoover, AL	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 777	Westford, MA	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 883	Coral Springs, FL	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 95	Dallas, TX	-	-	-
21 Jun 01	21 Jun 01	Girl Scout Troop 965	Columbus, OH	-	-	-
21 Jun 01	21 Jun 01	Girl Scouts	Bartlesville, OK	-	-	-
21 Jun 01	21 Jun 01	Girl Scouts	Coral Springs, FL	-	-	-
21 Jun 01	21 Jun 01	Girl Scouts Overseas Cadette Troop 4	Santo Domingo, Dominican Republic	4	-	-
21 Jun 01	21 Jun 01	Girl Scouts, Hornet's Nest Council	Charlotte, NC	-	-	-
21 Jun 01	21 Jun 01	Girl Scouts—Columbia River Council	Portland, OR	-	-	-
21 Jun 01	21 Jun 01	Greater Latrobe School District/Mt View School	Greensburg, PA	-	-	-
21 Jun 01	21 Jun 01	Greendale Middle School	Lawrenceburg, IN	-	-	-
21 Jun 01	21 Jun 01	Henry Buhl, Jr. Planetarium and Observatory	Pittsburgh, PA	46	-	-
21 Jun 01	21 Jun 01	Imagination Station Science Museum	Wilson, NC	-	-	-
21 Jun 01	21 Jun 01	Israel Museum of Science Planning & Technology	Haifa, Isreal	-	-	-
21 Jun 01	21 Jun 01	Jeddah Science & Technology Centre	Jeddah, Saudi Arabia	-	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 10529	Houston, TX	-	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 1807	Houston, TX	40	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 2487	Houston, TX	4	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 302	Pensacola, FL	-	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 359	Davenport, FL	-	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 384	Morrisville, PA	-	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 471	Albion, IL	-	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 663	Voorhees, NJ	-	-	-
21 Jun 01	21 Jun 01	Junior Girl Scout Troop 988	Jacksonville, FL	-	-	-
21 Jun 01	21 Jun 01	Kalamazoo Valley Museum	Kalamazoo, MI	90	-	-
21 Jun 01	21 Jun 01	Kool Space Science Productions	Filmore, CA	-	-	-
21 Jun 01	21 Jun 01	L'Hemisferic	Valencia, Spain	-	-	-
21 Jun 01	21 Jun 01	Las Cruces Museum of Natural History	Las Cruces, NM	-	-	-
21 Jun 01	21 Jun 01	Lawrence Hall of Science	Berkeley, CA	630	-	-
21 Jun 01	21 Jun 01	Louisville Science Center	Louisville, KY	35	-	-
21 Jun 01	21 Jun 01	Maloka	Bogotá, Colombia	280	-	-
21 Jun 01	21 Jun 01	Maryland Science Center	Baltimore, MD	-	-	-
21 Jun 01	21 Jun 01	Milton Rubenstein Museum of Science & Technology	Syracuse, NY	250	-	-
21 Jun 01	21 Jun 01	Muncie Community Schools' Planetarium	Muncie, IN	400	-	-
21 Jun 01	21 Jun 01	Museo del Canal Interoceanico de Panama	Panama City, Panama	130	-	-
21 Jun 01	21 Jun 01	Museu de las Ciencias	Valencia, Spain	-	-	-
21 Jun 01	21 Jun 01	Museum of African American Technology Science Village	Oakland, CA	68	-	-
21 Jun 01	21 Jun 01	Museum of Discovery	Little Rock, AR	-	-	-
21 Jun 01	21 Jun 01	Museum of Science	Boston, MA	150	-	-

21 Jun 01	21 Jun 01	Museum of the Rockies	Bozeman, MT	300	-	-
21 Jun 01	21 Jun 01	Museum of Science and History	Fort Worth, TX	-	-	-
21 Jun 01	21 Jun 01	NASA Goddard Space Flight Center	Greenbelt, MD	150	-	-
21 Jun 01	21 Jun 01	NASA Jet Propulsion Laboratory	Pasadena, CA	64	5	-
21 Jun 01	21 Jun 01	NASA Marshall Space Flight Center	Huntsville, AL	-	-	-
21 Jun 01	21 Jun 01	National Planetarium	Kuala Lumpur, Malaysia	200	-	-
21 Jun 01	21 Jun 01	National Science Centre	Kuala Lumpur, Malaysia	-	-	-
21 Jun 01	21 Jun 01	New Mexico Museum of Space History	Alamogordo, NM	329	-	-
21 Jun 01	21 Jun 01	North Carolina A&T State University	Greensboro, NC	250	-	-
21 Jun 01	21 Jun 01	Oregon Museum of Science and Industry	Portland, OR	135	-	-
21 Jun 01	21 Jun 01	Palm Beach Community College	Lake Worth, FL	-	-	-
21 Jun 01	21 Jun 01	Pavilhao do Conhecimento—Ciencia Viva	Lisboa, Portugal	-	-	-
21 Jun 01	21 Jun 01	Philippine Science Centrum	Manila, PH	-	-	-
21 Jun 01	21 Jun 01	Pleasantville High School	Pleasantville, NY	-	-	-
21 Jun 01	21 Jun 01	Science World	Vancouver, British Columbia	-	-	-
21 Jun 01	21 Jun 01	SciTech Hands On Museum	Aurora, IL	-	-	-
21 Jun 01	21 Jun 01	Shaw University	Raleigh, NC	-	-	-
21 Jun 01	21 Jun 01	Smash TV	San Francisco, CA	-	-	-
21 Jun 01	21 Jun 01	South Carolina State University	Orangeburg, SC	-	-	-
21 Jun 01	21 Jun 01	Space Center Houston	Houston, TX	-	-	-
21 Jun 01	21 Jun 01	St. James School	Houston, TX	-	-	-
21 Jun 01	21 Jun 01	St. Paul's School	Richmond, British Columbia	-	-	-
21 Jun 01	21 Jun 01	Strasenburgh Planetarium, Rochester Museum & Science Center	Rochester, NY	12	-	-
21 Jun 01	21 Jun 01	Sydney Observatory	Haymarket, Australia	30	-	-
21 Jun 01	21 Jun 01	Techniquet	Cardiff, United Kingdom	15	-	-
21 Jun 01	21 Jun 01	Technology Museum of Thessaloniki	Thessaloniki, Greece	-	-	-
21 Jun 01	21 Jun 01	University of Washington, Bothell	Bothell, WA	-	-	-
21 Jun 01	21 Jun 01	Universum, Science Museum Zona Cultural de Ciudad	Mexico City, Mexico	-	-	-
21 Jun 01	21 Jun 01	Virginia Discovery Museum	Charlottesville, VA	-	-	-
21 Jun 01	21 Jun 01	Visalia Girl Scouts	Visalia, CA	-	-	-
21 Jun 01	21 Jun 01	Visvesvaraya Industrial and Technological Museum	Bangalore, India	-	-	-
21 Jun 01	21 Jun 01	WF West High School	Chehalis, WA	3	-	-
21 Jun 01	21 Jun 01	Youth Activities Section and The Clore Garden of Science, Weizmann Inst.	Rehovot, Isreal	200	-	-
		Girl Scout Brownie Troop 3521	Vienna, VA	-	-	-
		Schreder Planetarium & Science Learning Center	Redding, CA	-	-	-

## LPI Speakers Bureau

Theme(s): ASO, SEU, SSE

Msn/Prgm: LPI B/F

Description: Scientists and staff members of the Lunar and Planetary Institute (LPI) are available to give public presentations on a variety of scientific and public-interest topics to school, civic, and other groups. Our Web site contains information about the LPI, a list and description of the talks we offer, and biographical data about our speakers. There is no cost for this service. We tailor each presentation to match the background of the audience. Special topics and modifications of the talks may be available upon request.

Lead: Ms. Pamela Thompson, Lunar and Planetary Institute, Houston, TX 77058-1113.

Primary URL: <http://www.lpi.usra.edu>

Scientist(s):	Dr. Robert Herrick	Lunar and Planetary Institute	Houston, TX
	Dr. Walter Kiefer	Lunar and Planetary Institute	Houston, TX
	Dr. Laurel Kirkland	Lunar and Planetary Institute	Houston, TX

Dr. Patrick McGovern	Lunar and Planetary Institute	Houston, TX
Dr. Graham Ryder	Lunar and Planetary Institute	Houston, TX
Dr. Paul Spudis	Lunar and Planetary Institute	Houston, TX
Dr. Allan Treiman	Lunar and Planetary Institute	Houston, TX

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Oct 00	13 Oct 00	University of North Dakota	Grand Forks, ND	50	-	-
25 Oct 00	25 Oct 00	Block Middle School	Houston, TX	107	-	-
09 Nov 00	09 Nov 00	Texas Master Naturalists	Houston, TX	150	-	-
		Fraser Elementary	Cy-Fair, TX	56	-	-
		Friendswood Public Library	Friendswood, TX	90	-	-
		JSC Astronomical Society	Houston, TX	50	-	-
		Lunar and Planetary Institute	Houston, TX	30	-	-
		Odyssey Academy	Galveston, TX	152	-	-

## Mars Classroom Visits

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: Visits by scientists, engineers, or public engagement staff to classrooms for talks on Mars and Mars missions.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Scientist(s):	Mr. Mark Adler	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Todd Barber	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Leo Bister	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Derek Blackway	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Robert Bunker	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Phillip Callahan	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. John Callas	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Rebecca Castano	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Brian Cooper	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Vicky Hamilton	Arizona State University	Tempe, AZ
	Ms. Sheri Klug	Arizona State University	Tempe, AZ
	Mr. Richard Rainen	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Earl Scott	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Kathleen Spellman	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Arthur Thompson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Rick Welch	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Harry Woo	NASA Jet Propulsion Laboratory	Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	01 Oct 00	Linford Elementary School	Laramie, WY	59	-	-
18 Dec 00	18 Dec 00	Fees Middle School	Tempe, AZ	2	320	-
18 Dec 00	18 Dec 00	Sanborn Elementary	Chandler, AZ	77	-	-
01 Jan 01	01 Jan 01	Upland Jr. High School	Upland, CA	150	-	-
15 Mar 01	15 Mar 01	Las Colinas School	Las Colinas, CA	150	-	-
17 Mar 01	17 Mar 01	B'Nai Simchah Preschool	Arcadia, CA	50	-	-
26 Mar 01	26 Mar 01	Roosevelt Elementary School	Pasadena, CA	25	-	-
28 Mar 01	28 Mar 01	Sumner Elementary School	Claremont, CA	100	-	-
07 Apr 01	07 Apr 01	Pioneer Jr. High School	Upland, CA	225	-	-
16 Apr 01	16 Apr 01	Greenfield Elementary School	Phoenix, AZ	64	-	-
01 May 01	01 May 01	Castleberry Elementary School	Northridge, CA	264	-	-
01 May 01	01 May 01	Oak Knoll School	Arcadia, CA	300	-	-
24 May 01	24 May 01	Valley View Elementary School	Los Angeles, CA	90	-	-
25 May 01	25 May 01	Arkansas Space Grant Consortium	Little Rock, AR	-	3,500	-
01 Jun 01	01 Jun 01	Town & Country School	Pasadena, CA	30	-	-

17 Jun 01	17 Jun 01	Danube Elementary School	Granada Hills, CA	64	-	-
20 Jun 01	20 Jun 01	Sulfer Springs Elementary	Santa Clarita, CA	50	-	-
24 Aug 01	24 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	35	-	-
25 Aug 01	25 Aug 01	Noyes Elementary School	Altadena, CA	60	-	-
01 Sep 01	01 Sep 01	Glendale High School	Glendale, CA	35	-	-
		Camino Grove Elementary School	Arcadia, CA	32	-	-
		Cedar Wood Elementary	Bothell, WA	-	-	-

### Mars Media and Visualizations

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: This activity provides high-quality visualizations (artwork, animations, documentary footage, etc.) for crosscutting purposes, including education, museums, and other informal educational institutions, public outreach, Internet communications, and media support.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Scientist(s):	Mr. Mark Adler	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Arden Albee	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Gautam Badhwar	NASA Johnson Space Center	Houston, TX
	Dr. Alberto Behar	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Julia Bell	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Guy Beutelschies	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Bill Boynton	University of Arizona	Tucson, AZ
	Mr. Larry Bryant	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. John Callas	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Phil Christensen	Arizona State University	Tempe, AZ
	Dr. Ben Clark	Lockheed Martin Space Systems	Littleton, CO
	Ms. Heather Enos	University of Arizona	Tucson, AZ
	Mr. Joel Flanders	NASA Johnson Space Center	Houston, TX
	Dr. Jim Garvin	NASA Office of Space Science	Washington, DC
	Mr. Roger Gibbs	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Matt Golombek	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Zareh Gorjian	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jim Graf	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Scott Hubbard	NASA Office of Space Science	Washington, DC
	Mr. Ken Jewett	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jack Jones	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Carl Kloss	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Joel Krajewski	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Matt Landano	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Wayne Lee	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Lynn Lowry	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Rob Manning	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jim Martin (retired)	NASA Langley Research Center	Hampton, VA
	Mr. Bob Mase	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Firouz Naderi	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Ai Nakata	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jeffrey Plaut	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Peter Poon	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Fadi Rimam	NASA Johnson Space Center	Houston, TX
	Dr. Steve Saunders	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Richard Schmidt	University of Arizona	Tucson, AZ
	Mr. Chris Shinohara	University of Arizona	Tucson, AZ
	Mr. John Smith, Jr.	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Dave Spencer	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Marla Thornton	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Sam Thurman	NASA Jet Propulsion Laboratory	Pasadena, CA

Ms. Jennifer Trosper	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Mike Watkins	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Randii Wessen	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Tom Young (retired)	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Rich Zurek	NASA Jet Propulsion Laboratory	Pasadena, CA

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
04 Oct 00	04 Oct 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
01 Jan 01	31 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
01 Feb 01	15 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
22 Feb 01	22 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
06 Apr 01	06 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
07 Apr 01	07 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
12 Apr 01	19 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	774	-
01 Jun 01	30 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
15 Jun 01	19 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
20 Jun 01	20 Jun 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
01 Jul 01	30 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
09 Aug 01	09 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
20 Aug 01	22 Aug 01	Natural History Museum	Los Angeles, CA	-	-	-
30 Aug 01	30 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
30 Aug 01	30 Sep 01	PASSPORT TO KNOWLEDGE	Morristown, NJ	-	-	-
18 Sep 01	18 Sep 01	PASSPORT TO KNOWLEDGE	Morristown, NJ	-	-	-

## Mars Open Houses

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: These open houses give the public an opportunity to interact with Mars scientists and engineers and view Mars rovers, exhibits, labs, and test yards.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Scientist(s):	Mr. Mark Adler	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Bryan Allen	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Bob Anderson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Ron Baalke	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Erik Bailey	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jack Barengoltz	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Leo Bister	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Richard Brace	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Nathan Bridges	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. John Callas	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Nagin Cox	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Raymond Cozy	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Joy Crisp	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Scott Doudrick	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jim Erickson	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Mike Garrett	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Robert Gounley	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Martin Greco	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Doug Hughes	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Ken Jewett	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Carl Kloss	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Sheri Klug	Arizona State University	Tempe, AZ
	Mr. Joel Krajewski	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Geoffrey Lake	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Christopher Lewicki	NASA Jet Propulsion Laboratory	Pasadena, CA

Mr. Daniel Limonadi	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Lee Magnone	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Mark Maimone	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Justin Maki	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Kin Fung Man	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Terry Martin	NASA Jet Propulsion Laboratory	Pasadena, CA
Ms. Sylvia Miller	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Andy Morrison	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Vlad Patrangenaru	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Jeffrey Plaut	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Steve Ramsey	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Behzad Raofi	NASA Jet Propulsion Laboratory	Pasadena, CA
Ms. Julie Reiz	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. John Smith, Jr.	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Sue Smrekar	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Pete Theisinger	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Tom Thorpe	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Sam Thurman	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Ashitey Trebi-Ollenu	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Eddie Tunstel	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Adolfo Valerin	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Rick Welch	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Charles Whetsel	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Brian Wilcox	NASA Jet Propulsion Laboratory	Pasadena, CA
Mr. Joel Wilf	NASA Jet Propulsion Laboratory	Pasadena, CA

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Oct 00	14 Oct 00	Arizona State University	Tempe, AZ	-	1,285	-
26 Apr 01	26 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	500	-
03 May 01	03 May 01	Arizona State University	Tempe, AZ	-	600	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-

## Mars Tours

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: Tours of Mars-related facilities.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Scientist(s):	Ms. Kelly Bender	Arizona State University	Tempe, AZ
	Dr. Phil Christensen	Arizona State University	Tempe, AZ
	Dr. Vicky Hamilton	Arizona State University	Tempe, AZ
	Ms. Sheri Klug	Arizona State University	Tempe, AZ
	Mr. Greg Mehall	Arizona State University	Tempe, AZ
	Dr. Steve Ruff	Arizona State University	Tempe, AZ

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Arizona State University	Tempe, AZ	-	7,721	-
10 Nov 00	10 Nov 00	Arizona State University	Tempe, AZ	49	-	-
19 Nov 00	19 Nov 00	Arizona State University	Tempe, AZ	5	2M	-

## Mars Web Site

Theme(s): SSE

Msn/Prgm: Mars E/PO, MGS, 2001 Mars Odyssey, MER, Mars Express

Description: This Web site provides clear information about Mars and Mars missions to the general public, educators, and students.

Lead: Mars Theme Lead, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Primary URL: [http://www.jpl.nasa.gov/solar\\_system/planets/mars\\_index.html](http://www.jpl.nasa.gov/solar_system/planets/mars_index.html)

Scientist(s):	Dr. John Callas	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Tim Connors	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Joy Crisp	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jim Cutts	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Ken Edgett	Malin Space Science Systems	La Jolla, CA
	Mr. Roger Gibbs	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Vicky Hamilton	Arizona State University	Tempe, AZ
	Dr. Jack Jones	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Sam Kim	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Carl Kloss	NASA Jet Propulsion Laboratory	Pasadena, CA
	Ms. Sheri Klug	Arizona State University	Tempe, AZ
	Mr. Matt Landano	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Bob Mase	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Dan McCleese	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. George Pace	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Jeffrey Plaut	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Steve Saunders	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. John Smith, Jr.	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Dave Spencer	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Randii Wessen	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Charles Whetsel	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Jay Wu	NASA Jet Propulsion Laboratory	Pasadena, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
05 Dec 00	31 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
01 Feb 01	01 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
30 Mar 01	30 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
26 Apr 01	26 Apr 01	CNN		-	-	2.5M
18 Jun 01	18 Jun 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
04 Jul 01	04 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
10 Aug 01	10 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
20 Aug 01	30 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
30 Aug 01	30 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
		Saint Vincent College	Latrobe, PA	-	-	-

#### MESSENGER Public Outreach Presentations

Theme(s): SSE

Msn/Prgm: MESSENGER

Description: Events under this activity include public lectures given by Mercury Surface, Space ENvironment, GEOchemistry, and Ranging (MESSENGER) mission scientists and engineers.

Lead: Ms. Stephanie Stockman, Science Systems and Applications, Inc., Lanham, MD 20706.

Scientist(s): Dr. Robert Gold                      Johns Hopkins Applied Physics Laboratory                      Laurel, MD

#### Microwave Anisotropy Probe (MAP) Public Outreach

Theme(s): SEU

Msn/Prgm: MAP

Description: MAP uses the Public Outreach category to describe activities aimed at informing the public about the science and technology of the MAP mission. These usually include articles in all forms of media as well as events like press conferences.

Lead: Dr. David Spergel, Princeton University, Princeton, NJ 08544-1001

E-mail: [dns@astro.princeton.edu](mailto:dns@astro.princeton.edu). Phone: 609-258-3589.

Primary URL: <http://map.gsfc.nasa.gov>

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
29 Jun 01	30 Jun 01	CNN		-	-	-
		National Public Radio, StarDate	Austin, TX	-	-	-

## NAI Lectures and Interviews

Theme(s): ASO

Msn/Prgm: NAI

Description: NASA Astrobiology Institute Principal Investigators, Co-investigators, and educational specialists gave over 65 public talks, lectures, and interviews throughout the past year. Venues included national parks, science centers, community colleges, universities, community centers, and professional societies. Over 10 interviews were conducted with members of the press such as the Discovery Channel and Newsweek magazine.

Lead: Ms. Kristina Wilmoth, NASA Astrobiology Institute, Moffett Field, CA 94035

E-mail: [kwilmoth@mail.arc.nasa.gov](mailto:kwilmoth@mail.arc.nasa.gov). Phone: 650-604-6137.

## NASA Ames Research Center Air Show

Theme(s): ASO

Msn/Prgm: SOFIA

Description: NASA Ames Research Center hosted the second annual air show on August 11-12, and approximately 60,000 people attended. SOFIA had a large exhibit staffed by USRA scientists and engineers and the E/PO team. An IR camera was set up for the public to see themselves, paint their faces with ice, and generally learn about "invisible" astronomy. It was quite popular with children and adults as they experimented with the ice and developed an understanding that the IR camera sensed their temperature and did not image them with visible light.

Lead: Mr. Michael Bennett, Universities Space Research Association (USRA)/SOFIA, Moffett Field, CA 94035-1000

E-mail: [mbennett@astrosociety.org](mailto:mbennett@astrosociety.org). Phone: 650-604-2128.

Scientist(s):	Mr. Richard Bacher	Universities Space Research Association (USRA)/SOFIA	Moffett Field, CA
	Dr. Michael Bennett	NASA Ames Research Center	Moffett Field, CA
	Dr. Jacqueline Davidson	Universities Space Research Association (USRA)/SOFIA	Moffett Field, CA
	Dr. Edna DeVore	NASA Ames Research Center	Moffett Field, CA
	Mr. Patrick Waddell	Universities Space Research Association (USRA)/SOFIA	Moffett Field, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Aug 01	12 Aug 01	NASA Ames Research Center	Moffett Field, CA	-	60,000	-

## National Boy Scout Jamboree

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: OSS/Outreach, HST, Cassini/Huygens Probe, Voyager, MGS, 2001 Mars Odyssey, MER, CXO

Description: The NASA Office of Space Science and NASA Glenn Research Center sponsored a Space Exploration booth in the Merit Badge Midway at the National Boy Scout Jamboree, Fort A. P. Hill, Virginia. Over 40,000 Boy Scouts, leaders, and staff participated in the Jamboree, along with 10,000 to 20,000 daily visitors. Thousands of people visited the Space Exploration booth, and approximately 1,500 of the Scouts took the time to complete the 10 merit badge requirements. While at the Jamboree, the Scouts had opportunities to learn about the history and purpose of space exploration, rocketry principles, and Space Shuttle operations. They also had opportunities to discuss aerospace career opportunities and learn that over half of NASA's astronauts have been Boy Scouts. Twelve daily volunteers from NASA and the space industry, all of whom are or were in Boy Scouts, supported the booth. As a special treat, astronauts Guion Bluford and Roger Crouch visited and talked with the Scouts at this year's Jamboree. Plans have already begun for NASA's participation in the next Jamboree in 2005.

Lead: Mr. Dan Woods, NASA Office of Space Science, Washington, DC 20546

E-mail: [dwoods@hq.nasa.gov](mailto:dwoods@hq.nasa.gov). Phone: 202-358-0850.

Scientist(s):	Dr. Roger Crouch	NASA Office of Space Flight	Washington, DC
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Dr. Steve Gemeny Raytheon Company Lexington, MA  
 Mr. Steele Hill NASA Goddard Space Flight Center Greenbelt, MD  
 Dr. William Lee Virginia Air and Space Museum Hampton, VA  
 Dr. Stephen Nichols Orbital Sciences Corporation Dulles, VA  
 Dr. James Orban Orbital Sciences Corporation Dulles, VA

Partner(s): Harvard-Smithsonian Center for Astrophysics Cambridge, MA  
 NASA Goddard Space Flight Center Greenbelt, MD  
 NASA Jet Propulsion Laboratory Pasadena, CA  
 NASA Langley Research Center Hampton, VA  
 Space Telescope Science Institute Baltimore, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
22 Jul 01	01 Aug 01	2001 National Boy Scouts Jamboree	Fort A.P. Hill, VA	-	250,000	-

## NEAR Public Outreach

Theme(s): SSE

Msn/Prgm: NEAR

Description: The Near Earth Asteroid Rendezvous (NEAR) E/PO office helped scientists, engineers, and other team members become involved in the NEAR E/PO efforts by providing opportunities for general-public outreach. The E/PO office supported these events by providing the resources necessary for the team members to talk to the general public, provide demonstrations, and conduct activities related to the NEAR mission. The NEAR live event on February 12, 2001—coverage of the controlled descent on NASA TV—is an example of a high-impact, general-public outreach event.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099  
 E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://near.jhuapl.edu>

Scientist(s): Mr. Jason Jenkins Johns Hopkins Applied Physics Laboratory Laurel, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Feb 01	12 Feb 01	Johns Hopkins Applied Physics Laboratory	Laurel, MD	-	1,000	3.1M
26 May 01	26 May 01	Wyndham Hotel	Baltimore, MD	-	30	-
01 Jul 01	01 Jul 01	Howard County Community	Columbia, MD	-	50	-

## NEAR Senior Citizen Outreach

Theme(s): SSE

Msn/Prgm: NEAR

Description: The Near Earth Asteroid Rendezvous (NEAR) E/PO office helped scientists, engineers, and other team members become involved in the NEAR E/PO efforts by providing opportunities for senior citizen outreach. The E/PO office supported these events by providing the resources necessary for the team members to talk to these groups, provide demonstrations, and conduct activities related to the NEAR mission. These efforts were directed toward the senior citizen communities in order to provide opportunities to learn about the NEAR Mission. Their purpose was to make the materials widely available and easily accessible to all age groups.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099  
 E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.

Primary URL: <http://near.jhuapl.edu>Scientist(s): Dr. Robert Gold Johns Hopkins Applied Physics Laboratory Laurel, MD  
 Dr. Lucy McFadden University of Maryland College Park, MD

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
31 Oct 00	31 Oct 00	University of Maryland	College Park, MD	15	-	-
06 Nov 00	06 Nov 00	Comfort Suites Inn	Laurel, MD	40	-	-
19 Mar 01	19 Mar 01	Homewood Suites Hotel	Linthicum Heights, MD	40	-	-
21 May 01	21 May 01	Homewood Suites Hotel	Linthicum Heights, MD	40	-	-

## NEAR Special Interest Groups

Theme(s): SSE

Msn/Prgm: NEAR

Description: The Near Earth Asteroid Rendezvous (NEAR) E/PO office helped scientists, engineers, and other team members become involved in the NEAR E/PO efforts by providing opportunities for special-interest group visits. The E/PO office supported these events by providing the resources necessary for the team members to talk to these groups, provide demonstrations, and conduct activities related to the NEAR mission. Many of these special-interest groups included Girl Scouts, Boy Scouts, and astronomy clubs.

Lead: Ms. Kerri Beisser, Johns Hopkins Applied Physics Laboratory, Laurel, MD 20723-6099

E-mail: [kerri.beisser@jhuapl.edu](mailto:kerri.beisser@jhuapl.edu). Phone: 443-778-6050.Primary URL: <http://near.jhuapl.edu>

Scientist(s):	Mr. Mike Buckley	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Noam Izenberg	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Mr. Bill Owen	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Dennis Wellnitz	University of Maryland	College Park, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Apr 01	18 Apr 01	Youth Benefit Elementary School	Fallston, MD	12	-	-
04 May 01	04 May 01	University of Arizona	Tucson, AZ	-	50	-
16 Jun 01	16 Jun 01	Pine Hill Campground	Bruceton Mills, WV	-	50	-

## NGST Online Outreach

Theme(s): ASO

Msn/Prgm: NGST

Description: This program consists of online activities, geared toward the public, for dissemination of news and updates regarding the Next Generation Space Telescope.

Lead: Ms. Lydia Paddock, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [paddock@stsci.edu](mailto:paddock@stsci.edu). Phone: 410-338-4481.Primary URL: <http://nextgen.stsci.edu>

Scientist(s):	Dr. Mark Voit	Space Telescope Science Institute	Baltimore, MD
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Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Space Telescope Science Institute	Baltimore, MD	-	-	2,235

## Open Night at the Space Telescope Science Institute (STScI)

Theme(s): ASO

Msn/Prgm: HST

Description: Open night at STScI offers opportunities for the public to hear about the latest science results from the Hubble Space Telescope. Each month, a speaker gives a public presentation in the auditorium at STScI.

Lead: Dr. Ian Griffin, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [griffin@stsci.edu](mailto:griffin@stsci.edu). Phone: 410-338-4567.Primary URL: [http://hubble.stsci.edu/about\\_us/open-night.shtml](http://hubble.stsci.edu/about_us/open-night.shtml)

Scientist(s):	Dr. Howard Bond	Space Telescope Science Institute	Baltimore, MD
	Dr. Christopher Conzelmann	Space Telescope Science Institute	Baltimore, MD
	Dr. Megan Donahue	Space Telescope Science Institute	Baltimore, MD
	Dr. Brian Espey	Space Telescope Science Institute	Baltimore, MD
	Dr. Chris Fassnacht	Space Telescope Science Institute	Baltimore, MD
	Dr. Ian Griffin	Space Telescope Science Institute	Baltimore, MD
	Dr. Mario Livio	Space Telescope Science Institute	Baltimore, MD
	Dr. Frank Summers	Space Telescope Science Institute	Baltimore, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
03 Oct 00	03 Oct 00	Space Telescope Science Institute	Baltimore, MD	-	110	-

07 Nov 00	07 Nov 00	Space Telescope Science Institute	Baltimore, MD	-	90	-
05 Dec 00	05 Dec 00	Space Telescope Science Institute	Baltimore, MD	-	78	-
02 Jan 01	02 Jan 01	Space Telescope Science Institute	Baltimore, MD	-	66	-
06 Feb 01	06 Feb 01	Space Telescope Science Institute	Baltimore, MD	-	75	-
06 Mar 01	06 Mar 01	Space Telescope Science Institute	Baltimore, MD	-	80	-
03 Apr 01	03 Apr 01	Space Telescope Science Institute	Baltimore, MD	-	75	-
05 Jun 01	05 Jun 01	Space Telescope Science Institute	Baltimore, MD	-	90	-
07 Aug 01	07 Aug 01	Space Telescope Science Institute	Baltimore, MD	-	85	-

#### Origins Education Forum Online Outreach

Theme(s): ASO

Msn/Prgm: ASO Forum, HST, NGST, SIRTF, SOFIA, FUSE, FAME, Navigator, SIM, Keck, TPF, NAI, 2MASS, PI, ST-3

Description: This activity for the Astronomical Search for Origins Education Forum's public Web site.

Lead: Dr. Terry Teays, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [teays@stsci.edu](mailto:teays@stsci.edu). Phone: 410-338-4733.

Primary URL: <http://origins.stsci.edu>

Scientist(s):	Dr. Denise Smith	Space Telescope Science Institute	Baltimore, MD
	Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Space Telescope Science Institute	Baltimore, MD	-	-	195,938

#### Outreach for NASA'S Solar Missions

Theme(s): SEC

Msn/Prgm: SRT

Description: During this reporting period, for Fiscal Year (FY) 2001, the Principal Investigator (PI), Kenneth R. Lang, has provided comprehensive accounts of the discoveries of three modern solar spacecraft, SOHO, Yohkoh, and Ulysses. They have provided more important new information about the Sun than the entire century of previous observations. This has resulted in the publication of the PI's book "The Cambridge Encyclopedia of the Sun" (New York: Cambridge University Press, 2001). This volume contains more than a hundred spacecraft images, numerous informative line drawings, and a complete discussion of the major scientific accomplishments of modern solar spacecraft in a language suitable for the general public. It is completed by a full bibliography, a list of Internet sites, and a glossary so comprehensive as to constitute a dictionary of solar astronomy. The PI also has participated in the Discovery Channel television show "Our Savage Sun," shown at least ten times in several countries during the past two years, and in a BBC show on the Sun that is now in development. He has written the Sun contribution to the "Philip's Astronomy Encyclopedia," and published "The Sun From Space" in Springer-Verlag's prestigious Astronomy and Astrophysics Library Series. The latter volume places the main scientific results of NASA's solar missions in a historical and scholarly context, including hundreds of seminal references. The PI has additionally given the opening lecture, entitled "Latest Advances in Solar Astronomy," at the Second Granada Workshop: The Evolving Sun and Its Influence on Planetary Environments in June 2001.

Lead: Dr. Kenneth Lang, Tufts University, Medford, MA 02155

E-mail: [ken.lang@tufts.edu](mailto:ken.lang@tufts.edu). Phone: 617-627-3390.

Primary URL: <http://uk.cambridge.org/astronomy/features/sun>

#### Presenting Gravity Probe B at Science Education Conferences

Theme(s): SEU

Msn/Prgm: GP-B

Description: Conference presentations and exhibits demonstrate and distribute Gravity Probe B educational outreach materials. The teacher's guide/lesson plan is demonstrated and distributed in a presentation session. The guides and flyers are distributed in an exhibit booth. At both locations, we display models of the Gravity Probe B gyroscopes and rotors, as well as a brief, repeating PowerPoint slide show.

Lead: Mr. Shannon Range, Stanford University, Stanford, CA 94305

E-mail: [kdoah@stanford.edu](mailto:kdoah@stanford.edu). Phone: 415-824-1716.

Primary URL: <http://einstein.stanford.edu>

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	-	220	-
20 Mar 01	25 Mar 01	National Science Teachers Association (NSTA) National Conference	St. Louis, MO	-	-	-
21 Jul 01	25 Jul 01	American Association of Physics Teachers (AAPT) Conference	Rochester, NY	-	100	-

## Public Education in Astronomy

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: STARBASE

Description: STARBASE astronomers educate the general public about astronomy and NASA through events at public places timed to coincide with publicized astronomical events. Events such as eclipses and comet apparitions, which are already publicized by the media and which attract the public's attention, provide great opportunities for astronomers to increase the understanding and appreciation of the general public for scientific research and the activities of NASA. Our general approach is to make a presentation at a public place specifically about the event. As often as possible, we use NASA resources such as live broadcasts from observational sites or space-based instruments provided by NASA TV.

Lead: Dr. David Barnaby, Western Kentucky University, Bowling Green, KY 42101  
E-mail: [david.barnaby@wku.edu](mailto:david.barnaby@wku.edu). Phone: 270-745-4357.

Primary URL: [starbase.wku.edu](http://starbase.wku.edu)

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
21 Jun 01	21 Jun 01	Louisville Science Center	Louisville, KY	33	1	-

## Public Observing Nights at the Harvard-Smithsonian Center for Astrophysics

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: SEU Forum

Description: The Harvard-Smithsonian Center for Astrophysics in Cambridge sponsors free programs for the general public on the first and third Thursday of every month throughout the year. The first Thursday features science fiction movie night. At the beginning of each screening, a scientist examines the science wonders and blunders of science fiction. Next are "Observatory Nights," which feature a nontechnical lecture and telescopic observations from the observatory roof or remote viewing from the eastern slope of the Rocky Mountains using a host of telescopes supplied by Software Bisque, Inc. The lectures are intended for high school age and older audiences, but children are also welcome.

Lead: Mr. David Aguilar, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
E-mail: [daguilar@cfa.harvard.edu](mailto:daguilar@cfa.harvard.edu).

Primary URL: <http://cfa-www.harvard.edu/cfa/ep/obsnight.html>

Partner(s): Harvard-Smithsonian Center for Astrophysics Cambridge, MA

## Public Outreach by MIT Center for Space Research

Theme(s): SEU

Msn/Prgm: CXO

Description: Scientists from the MIT Center for Space Research contribute to public outreach with talks about Chandra at various venues such as museums, alumni associations, teacher meetings, and interviews for magazines and radio shows.

Lead: Dr. Irene Porro, Massachusetts Institute of Technology, Cambridge, MA 02139  
E-mail: [iporro@space.mit.edu](mailto:iporro@space.mit.edu). Phone: 617-258-7481.

Primary URL: <http://space.mit.edu/CSR/outreach>

Scientist(s):	Dr. Marshall Bautz	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Claude Canizares	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Irene Porro	Massachusetts Institute of Technology	Cambridge, MA

Partner(s): Massachusetts Institute of Technology

Cambridge, MA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Feb 01	13 Feb 01	Massachusetts Institute of Technology	Cambridge, MA	-	-	-
11 Apr 01	11 Apr 01	Massachusetts Institute of Technology	Cambridge, MA	-	200	-
26 Apr 01	26 Apr 01	Massachusetts Institute of Technology	Cambridge, MA	-	1,000,000	-
28 Apr 01	28 Apr 01	Massachusetts Institute of Technology	Cambridge, MA	-	50	-
01 May 01	01 May 01	Massachusetts Institute of Technology	Cambridge, MA	-	1,000	-
03 May 01	03 May 01	Massachusetts Institute of Technology	Cambridge, MA	-	1,000	-
30 May 01	30 May 01	Massachusetts Institute of Technology	Cambridge, MA	-	100	-
28 Jun 01	28 Jun 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	20	-	-
21 Jul 01	25 Jul 01	American Association of Physics Teachers (AAPT) Conference	Rochester, NY	90	-	-

## Public Outreach, Chandra X-Ray Center (CXC)

Theme(s): SEU

Msn/Prgm: CXO

Description: Scientists, engineers, and computer professionals actively involved with the Chandra mission deliver presentations to inform the general public about the status of the mission, new Chandra discoveries, and explanations of the various technologies and science concepts. A major component is the award-winning Chandra public Web site, which features all publicly released Chandra images, extensive background materials, and both downloadable and interactive space-science-related activities. Chandra materials are widely distributed at all public venues.

Lead: Ms. Kathleen Lestition, Chandra X-Ray Center, Cambridge, MA 02138

E-mail: [klestition@cfa.harvard.edu](mailto:klestition@cfa.harvard.edu). Phone: 617-495-7399.Primary URL: <http://chandra.harvard.edu>

Scientist(s)	Location	City, State
Dr. Roger Brissenden	Chandra X-Ray Center	Cambridge, MA
Mr. Thomas Calderwood	Chandra X-Ray Center	Cambridge, MA
Dr. Cady Coleman	NASA Johnson Space Center	Houston, TX
Dr. Jonathan Grindlay	Harvard University	Cambridge, MA
Dr. F. Rick Harnden, Jr.	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Eric Hooper	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Ms. Holly Jessop	Chandra X-Ray Center	Cambridge, MA
Ms. Kimberly Kowal	Chandra X-Ray Center	Cambridge, MA
Mr. Gary Meehan	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Stephen Murray	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Dr. Andrea Prestwich	Chandra X-Ray Center	Cambridge, MA
Dr. Eric Schlegel	Chandra X-Ray Center	Cambridge, MA
Dr. Patrick Slane	Chandra X-Ray Center	Cambridge, MA
Dr. Harvey Tananbaum	Chandra X-Ray Center	Cambridge, MA
Dr. Belinda Wilkes	Chandra X-Ray Center	Cambridge, MA
Dr. Martin Zombeck	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
Partner(s): Harvard University		Cambridge, MA
Harvard-Smithsonian Center for Astrophysics		Cambridge, MA
NASA Marshall Space Flight Center		Huntsville, AL

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Oct 00	06 Oct 00	Marblehead Community Charter Public School	Marblehead, MA	-	200	-
14 Oct 00	14 Oct 00	Seagrave Memorial Observatory	North Scituate, RI	-	80	-
28 Oct 00	29 Oct 00	Catalina Mountain Observatories (U. of AZ)	Tucson, AZ	20	-	-
31 Oct 00	31 Oct 00	SITRF Science Center	Palo Alto, CA	-	8	-
16 Nov 00	16 Nov 00	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	150	-
01 Dec 00	01 Dec 00	North Shore Amateur Astronomy Club	Groveland, MA	40	-	-
06 Dec 00	06 Dec 00	Flaschner Judicial Institute	Boston, MA	-	35	-
19 Jan 01	19 Jan 01	EMC Corporation	Framingham, MA	150	150	-

19 Jan 01	19 Jan 01	New England Air Museum	Windsor Locks, CT	-	200	-
02 Feb 01	02 Feb 01	St. Edward's University	Austin, TX	-	-	-
21 Mar 01	21 Mar 01	Jenks Community Center	Winchester, MA	-	20	-
21 Mar 01	21 Mar 01	Waltham Rotary Club	Waltham, MA	-	40	-
28 Mar 01	28 Mar 01	American Museum of Natural History	New York, NY	50	-	-
28 Mar 01	28 Mar 01	Space Telescope Science Institute	Baltimore, MD	-	10	-
12 Apr 01	12 Apr 01	Catalina Mountain Observatories (U. of AZ)	Tucson, AZ	20	-	-
19 Apr 01	19 Apr 01	University of California, Berkeley	Berkeley, CA	-	200	-
21 Apr 01	21 Apr 01	University of California, Berkeley	Berkeley, CA	-	-	-
28 Apr 01	28 Apr 01	Ipswich River Wildlife Sanctuary	Topsfield, MA	-	50	-
28 Apr 01	28 Apr 01	University of Wisconsin-Whitewater	Whitewater, WI	-	150	-
03 Jun 01	07 Jun 01	American Astronomical Society (AAS) Meeting	Pasadena, CA	-	800	-
19 Jun 01	19 Jun 01	Peabody-Essex Museum	Essex, MA	-	100	-
28 Jun 01	28 Jun 01	Catalina Mountain Observatories (U. of AZ)	Tucson, AZ	20	-	-
16 Jul 01	16 Jul 01	Astronomical Society of the Pacific (ASP)	San Francisco, CA	-	825	-
19 Jul 01	19 Jul 01	Nightsky 45 Astronomy Club	Salem, OR	-	50	-
05 Aug 01	05 Aug 01	Amos Fortune Forum	Jaffrey, NH	-	150	-
16 Aug 01	18 Aug 01	North York Astronomical Association	Mount Forest, ON	-	700	-
09 Sep 01	09 Sep 01	Peabody Institute Library	Danvers, MA	50	-	-

#### Regional Planetary Imaging Facilities' Open Houses

Theme(s): SSE

Msn/Prgm: SRT

Description: The Regional Planetary Image Facilities (RPIFs) are a network of libraries of planetary images, maps, and digital data, comprising 18 facilities around the world (10 domestic, 8 foreign). Although the principal mission of the RPIF system is to serve the data reference needs for the planetary science community, the RPIF have pioneered public outreach and education efforts since their establishment over 25 years ago. The RPIF system established a tradition of an annual open house in which local students and the public visit the data libraries, view the latest results from planetary exploration, and learn about the space program and scientific research from volunteer staff and scientists. The RPIFs also act as a repository and reference to local media when space-related stories break in the news and offer printed, video, audio, and commentary materials for media use. Finally, the RPIFs interact with the general public through the offering of informal tours, the tracking down of specific data requests, and the distribution of educational and public outreach materials such as posters. The RPIF system fully supports NASA's E/PO activities through a variety of means.

Lead: Dr. Paul Spudis, Lunar and Planetary Institute, Houston, TX 77058-1113

E-mail: [spudis@lpi.usra.edu](mailto:spudis@lpi.usra.edu). Phone: 281-486-2193.

Primary URL: <http://www.lpi.usra.edu/library/RPIF/RPIF.html>

Scientist(s):	Mr. Raymond Arvidson	Washington University	St. Louis, MO
	Dr. Ronald Greeley	Arizona State University	Tempe, AZ
	Ms. Mary Ann Hager	Lunar and Planetary Institute	Houston, TX
	Mr. B. Ray Hawke	University of Hawaii at Manoa	Honolulu, HI
	Mr. Charles Hewett	Arizona State University	Tempe, AZ
	Mr. Rick Kline	Cornell University	Ithaca, NY
	Mr. David Kring	University of Arizona	Tucson, AZ
	Ms. Margo Long	Washington University	St. Louis, MO
	Mr. Chris Peterson	University of Hawaii at Manoa	Honolulu, HI
	Ms. Maria Schuchardt	University of Arizona	Tucson, AZ
	Ms. Rosemary Steinat	Smithsonian National Air and Space Museum	Washington, DC
	Mr. Robert Sucharski	United States Geological Survey	Flagstaff, AZ
	Dr. Joseph Veverka	Cornell University	Ithaca, NY
	Ms. Adrienne Wasserman	United States Geological Survey	Flagstaff, AZ
	Dr. James Zimbelman	Smithsonian National Air and Space Museum	Washington, DC

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
06 Oct 00	06 Oct 00	University of Arizona	Tucson, AZ	-	700	-



## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	30 Sep 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	-	-
29 Apr 01	29 Apr 01	Museum of Science	Boston, MA	-	8,000	-

## SIRTF and Young Astronauts

Msn/Prgm: SIRTF

Scientist(s): Dr. Michelle Thaller California Institute of Technology Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Mar 01	14 Mar 01	Young Astronauts	Washington, DC	10,310	-	1,000

## SIRTF Conference Booths

Theme(s): ASO

Msn/Prgm: SIRTF

Description: Exhibit booth at large conferences and other venues.

Lead: Dr. Michelle Thaller, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [thaller@ipac.caltech.edu](mailto:thaller@ipac.caltech.edu). Phone: 626-395-8670.

Scientist(s): Dr. Michael Bicay California Institute of Technology Pasadena, CA  
 Dr. Rudolf Danner NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Michelle Thaller California Institute of Technology Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Oct 00	15 Oct 00	California Science Teachers Association (CSTA) 2000	Sacramento, CA	-	7,050	-
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	-	1,000	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	100	22,610	-
03 Jun 01	07 Jun 01	American Astronomical Society (AAS) Meeting	Pasadena, CA	-	22,350	-
13 Jul 01	18 Jul 01	Astronomical Society of the Pacific (ASP) Meeting	St. Paul, MN	150	1,370	-

## SIRTF Naming Contest

Theme(s): ASO

Msn/Prgm: SIRTF

Lead: Dr. Michelle Thaller, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [thaller@ipac.caltech.edu](mailto:thaller@ipac.caltech.edu). Phone: 626-395-8670.Primary URL: <http://sirtf.caltech.edu>

Scientist(s): Dr. Michael Bicay California Institute of Technology Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Sep 01	20 Dec 01	NASA Jet Propulsion Laboratory	Pasadena, CA	3,700	40,000	-

## SIRTF Teacher Inservice

Theme(s): ASO, SEU

Msn/Prgm: SIRTF

Description: Teacher inservice program on infrared radiation and the electromagnetic spectrum.

Lead: Dr. Michelle Thaller, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [thaller@ipac.caltech.edu](mailto:thaller@ipac.caltech.edu). Phone: 626-395-8670.

Scientist(s): Dr. Michelle Thaller California Institute of Technology Pasadena, CA  
 Partner(s): NASA Jet Propulsion Laboratory ERC Pomona, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
		NASA Jet Propulsion Laboratory	Pasadena, CA	30	-	-

## SIRTF Web Development

Theme(s): ASO

Msn/Prgm: SIRTF

Description: SIRTF develops and maintains a series of Web pages directed at the public, students, and teachers.

Lead: Dr. Michelle Thaller, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [thaller@ipac.caltech.edu](mailto:thaller@ipac.caltech.edu). Phone: 626-395-8670.Primary URL: <http://sirtf.caltech.edu/>

## Snowball Earth

Theme(s): ASO

Msn/Prgm: NAI

Description: Sponsored by the Santa Fe institute, Dan Schrag spent an evening with a public audience of 300 people in Santa Fe, NM, discussing the snowball Earth hypothesis, and how extreme environmental fluctuations affect biological evolution.

Lead: Dr. Dan Schrag, Boston University, Boston, MA 02215.

## SOFIA Informal Education Presentations

Theme(s): ASO

Msn/Prgm: SOFIA

Description: The Stratospheric Observatory for Infrared Astronomy (SOFIA) team of scientists, educators, and engineers present general talks about the SOFIA to informal groups of students, community members, amateur astronomers, and the general public. This activity includes talks for clubs, organizations, and other informal groups.

Lead: Mr. Michael Bennett, Astronomical Society of the Pacific (ASP), San Francisco, CA 94112

E-mail: [mbennett@astrosociety.org](mailto:mbennett@astrosociety.org). Phone: 650-604-2128.

Scientist(s): Dr. Michael Bennett NASA Ames Research Center

Moffett Field, CA

Partner(s): Astronomical Society of the Pacific (ASP)

San Francisco, CA

SETI Institute

Mountain View, CA

Universities Space Research Association (USRA)/SOFIA

Moffett Field, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
14 Nov 00	14 Nov 00	DeAnza College	Cupertino, CA	27	27	-

## SOFIA Seminar: Introduction to Airborne Astronomy

Theme(s): ASO

Msn/Prgm: SOFIA

Description: The "Introduction to Stratospheric Observatory for Infrared Astronomy (SOFIA)" seminar was presented to the general public but geared toward graduate students and educators.

Lead: Mr. Eric Wang, Universities Space Research Association (USRA)/SOFIA, Moffett Field, CA 94035-1000

E-mail: [ewang@waco.usra.edu](mailto:ewang@waco.usra.edu). Phone: 254-867-7132.

Scientist(s): Mr. Mick Edgar California Institute of Technology

Pasadena, CA

Mr. Eric Wang Universities Space Research Association/SOFIA

Moffett Field, CA

Dr. Jonas Zmuidzinas

California Institute of Technology

Pasadena, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
30 Oct 00	30 Oct 00	California Institute of Technology	Pasadena, CA	-	30	-

## SOHO Outreach Activities by the UVCS Group

Theme(s): SEC

Msn/Prgm: SOHO

**Description:** Members of the Solar and Heliospheric Observatory (SOHO) Ultra-Violet Coronagraph Spectrometer (UVCS) team are active in a number of outreach activities, featuring a full-scale UVCS instrument with three "stations" showing the SOHO highlights video, near-real-time solar images, SOHO presentations, and participation of UVCS scientists in public events hosted by schools and the Boston Museum of Science.

**Lead:** Dr. Leonard Strachan, Harvard-Smithsonian Center for Astrophysics, Cambridge, MA 02138  
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**Primary URL:** <http://cfa-www.harvard.edu/uvcs/>

<b>Scientist(s):</b>	Dr. Angela Ciaravella	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
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	Dr. John Kohl	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Mari Paz Miralles	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Mr. Daniel Phillips	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Ms. Jennifer Raymond	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Peter Smith	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Leonard Strachan	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Mr. Raid Suleiman	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA

**Event(s):**

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
24 Apr 01	24 Apr 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	60,000	-
25 Apr 01	25 Apr 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	5,000	-
26 Apr 01	26 Apr 01	H.R. MacMillan Space Centre	Vancouver, British Columbia	-	90	-
26 Apr 01	26 Apr 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	100	-
27 Apr 01	27 Apr 01	Christa McAuliffe Planetarium	Concord, NH	-	90	-
27 Apr 01	27 Apr 01	Concord-Carlisle High School	Concord, MA	200	-	-
27 Apr 01	27 Apr 01	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA	-	30,000	-
27 Apr 01	27 Apr 01	Melrose Middle School	Melrose, MA	100	-	-
27 Apr 01	27 Apr 01	Muskingum College	New Concord, OH	200	-	-
28 Apr 01	28 Apr 01	Museum of Science	Boston, MA	-	7,000	-
28 Apr 01	28 Apr 01	University of Maryland	College Park, MD	-	200	-
30 Apr 01	30 Apr 01	Wellesley College	Wellesley, MA	40	-	-

**Solar System Ambassadors Program**

**Theme(s):** ASO, SEC, SEU, SSE

**Msn/Prgm:** Challenger Center, Adler, SSE Forum, OAI B/F, SERCH B/F, SSI B/F, HST, SIRTF, SIM, TPF, SSE Theme, Cassini/Huygens Probe, Galileo, Voyager, DPSO, ASPERA-3, CONTOUR, Deep Impact, Genesis, MESSENGER, NEAR, Stardust, Mars E/PO, MGS, 2001 Mars Odyssey, MER, OP E/PO, Europa Orbiter, PKB, DS-1, DSMS, Mars Express, MUSES-CN, CXO, SP, Ulysses, SOHO, SEC Forum

**Description:** The Solar System Ambassadors Program is a public outreach effort accomplished by motivated volunteers across the Nation who organize and conduct public events that communicate our exciting discoveries and plans for future exploration of the solar system. These events are presented at nontraditional forums such as libraries, museums, planetariums, and shopping malls.

**Lead:** Ms. Kay Ferrari, NASA Jet Propulsion Laboratory, Pasadena, CA 91109  
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**Primary URL:** <http://www.jpl.nasa.gov/ambassador/front.html>

**2nd URL:** <http://www.jpl.nasa.gov/ambassador/ambassadoronlysection/front.html>

**Event(s):**

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
18 Aug 00	29 Jun 01	Andrews Middle School	Andrews, TX	-	300	-
28 Aug 00	06 Jun 01	Muncie Community Schools' Planetarium	Muncie, IN	-	17,000	-
01 Oct 00	30 Sep 01	Amateur Radio (RMRL 146.94 MHz & 449.825 MHz Repeaters)	Denver, CO	-	424	-
01 Oct 00	05 Nov 00	Castle Museum	Saginaw, MI	-	200	-
01 Oct 00	30 Sep 01	Museum of Science and History	Jacksonville, FL	-	200,000	-

01 Oct 00	30 Sep 01	Youngstown Vindicator	Youngstown, OH	-	400,000	-
02 Oct 00	02 Oct 00	Capri Elementary School	Encinitas, CA	-	68	-
02 Oct 00	14 Sep 01	University of North Texas	Denton, TX	-	-	-
03 Oct 00	03 Oct 00	Mark Sylvester Planetarium	Plymouth, NH	-	30	-
04 Oct 00	04 Oct 00	San Elijo State Beach Park Campfire	San Elijo, CA	-	35	-
05 Oct 00	05 Oct 00	Hayes Middle School	Albuquerque, NM	-	125	-
05 Oct 00	12 Oct 00	Manzanita Elementary School	Grants Pass, OR	-	20	-
06 Oct 00	06 Oct 00	Sugar Grove Park District	Sugar Grove, IL	-	-	-
06 Oct 00	07 Oct 00	Ward Beecher Planetarium	Youngstown, OH	-	80	-
07 Oct 00	07 Oct 00	Cincinnati Observatory Center	Cincinnati, OH	-	-	-
10 Oct 00	10 Oct 00	Casper Planetarium	Casper, WY	-	3	-
10 Oct 00	10 Oct 00	Fleming Middle School	Grants Pass, OR	-	183	-
10 Oct 00	10 Oct 00	Mt. Tabor Middle School	Portland, OR	-	-	-
10 Oct 00	09 Sep 01	Planetarium	Norwood, OH	-	23,000	-
10 Oct 00	09 Sep 01	University of North Texas	Denton, TX	-	-	-
12 Oct 00	12 Oct 00	Northern Essex Community College	Haverhill, MA	-	17	-
12 Oct 00	12 Oct 00	Palo Verde Middle School	Phoenix, AZ	-	6	-
12 Oct 00	13 Oct 00	Roswell Convention Center	Roswell, NM	-	-	-
13 Oct 00	13 Oct 00	Kopernik Space Education Center	Vestal, NY	-	8	-
14 Oct 00	14 Oct 00	Conclave Science Fiction Convention	Lansing, MI	-	-	-
16 Oct 00	16 Oct 00	Wickman Spacecraft & Propulsion Company	Casper, WY	-	23	-
18 Oct 00	18 Oct 00	Andrews ISD Planetarium	Andrews, TX	-	-	-
18 Oct 00	18 Oct 00	Casper Planetarium	Casper, WY	-	-	-
20 Oct 00	20 Oct 00	Franklin Institute Science Museum	Philadelphia, PA	-	-	-
20 Oct 00	20 Oct 00	Lockwood Park Observatory	Rockford, IL	-	-	-
20 Oct 00	05 May 01	University of North Texas	Denton, TX	-	-	-
21 Oct 00	21 Oct 00	Andrews ISD Planetarium	Andrews, TX	-	20	-
21 Oct 00	21 Oct 00	Cherry Hills Library	Albuquerque, NM	-	24	-
21 Oct 00	21 Oct 00	Conclave Science Fiction Convention	Lansing, MI	-	40	-
21 Oct 00	21 Oct 00	New Space Society Meeting	Albuquerque, NM	-	15	-
21 Oct 00	21 Oct 00	Punahou School	Honolulu, HI	-	-	-
23 Oct 00	23 Oct 00	Fernbank Science Center	Atlanta, GA	-	-	-
24 Oct 00	24 Oct 00	Air Force Institute of Technology	WPAFB, OH	-	-	-
26 Oct 00	26 Oct 00	New Mexico Museum of Space History	Alamogordo, NM	-	21	-
27 Oct 00	27 Oct 00	Arizona State University	Tempe, AZ	-	400	-
27 Oct 00	27 Oct 00	Kopernik Space Education Center	Vestal, NY	-	22	-
27 Oct 00	27 Oct 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8	-
30 Oct 00	30 Oct 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	17	-
01 Nov 00	01 Nov 00	Casper Planetarium	Casper, WY	-	-	-
02 Nov 00	02 Nov 00	Middletown Times Star Newspaper	Middletown, CA	-	1,000	-
03 Nov 00	03 Nov 00	Georgia Southern University	Statesboro, GA	-	60	-
03 Nov 00	03 Nov 00	New Mexico Museum of Space History	Alamogordo, NM	-	-	-
04 Nov 00	04 Nov 00	Pioneer Ridge Science Education Center	Independence, MO	-	300	-
04 Nov 00	04 Nov 00	Scottsdale Community College	Scottsdale, AZ	-	23	-
04 Nov 00	30 Nov 00	Statesboro Regional Library	Statesboro, GA	-	312	-
04 Nov 00	04 Nov 00	Ward Beecher Planetarium	Youngstown, OH	-	30	-
07 Nov 00	07 Nov 00	Mark Sylvester Planetarium	Plymouth, NH	-	6	-
08 Nov 00	08 Nov 00	Scottsdale Community College	Scottsdale, AZ	-	85	-
09 Nov 00	10 Nov 00	Atlantic City New Convention Hall	Atlantic City, NJ	-	5,000	-
09 Nov 00	10 Nov 00	New Mexico Museum of Space History	Alamogordo, NM	-	-	-
10 Nov 00	10 Nov 00	Cibola High School	Albuquerque, NM	-	-	-
10 Nov 00	10 Nov 00	Cibola High School	Albuquerque, NM	-	50	-
10 Nov 00	10 Nov 00	Kopernik Space Education Center	Vestal, NY	-	8	-
10 Nov 00	10 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	20	-
10 Nov 00	10 Nov 00	University of Oklahoma	Norman, OK	-	52	-
10 Nov 00	11 Nov 00	University of Oklahoma	Norman, OK	-	52	-
11 Nov 00	11 Nov 00	Anderson Independent Newspaper	Anderson, SC	-	45,000	-

11 Nov 00	11 Nov 00	Mall of New Hampshire	New Hampshire, NH	-	175	-
11 Nov 00	11 Nov 00	Perkins Observatory	Delaware, OH	-	-	-
11 Nov 00	11 Nov 00	Private Residence	Granada Hills, CA	-	13	-
11 Nov 00	11 Nov 00	University of Oklahoma	Norman, OK	-	52	-
11 Nov 00	11 Nov 00	Windycon 28 Science Fiction Convention	Schaumburg, IL	-	-	-
13 Nov 00	13 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	24	-
14 Nov 00	14 Nov 00	Casper Planetarium	Casper, WY	-	-	-
14 Nov 00	15 Nov 00	Douglas Grade School	Douglas, WY	-	-	-
14 Nov 00	14 Nov 00	Exploration Science Center and Children's Museum of Albuquerque	Albuquerque, NM	-	50	-
16 Nov 00	16 Nov 00	Prairie Lakes Community Center	Des Plaines, IL	-	-	-
17 Nov 00	17 Nov 00	University of Wyoming	Laramie, WY	-	-	-
18 Nov 00	18 Nov 00	Lockwood Park Observatory	Rockford, IL	-	-	-
19 Nov 00	19 Nov 00	Moorpark College	Moorpark, CA	-	-	-
20 Nov 00	20 Nov 00	Casper Planetarium	Casper, WY	-	10	-
20 Nov 00	20 Nov 00	Parkway Plaza	Casper, WY	-	25	-
20 Nov 00	20 Nov 00	Schreiner College	Kerrville, TX	-	35	-
21 Nov 00	21 Nov 00	Casper Planetarium	Casper, WY	-	10	-
21 Nov 00	21 Nov 00	Scottsdale Community College	Scottsdale, AZ	-	-	-
22 Nov 00	22 Nov 00	Scottsdale Community College	Scottsdale, AZ	-	150	-
26 Nov 00	26 Nov 00	Mark Sylvester Planetarium	Plymouth, NH	-	-	-
01 Dec 00	01 Dec 00	Arizona State University	Tempe, AZ	-	250	-
01 Dec 00	01 Dec 00	Arizona State University	Tempe, AZ	-	400	-
01 Dec 00	02 Dec 00	Killeen Independent School District	Killeen, TX	-	-	-
01 Dec 00	30 Jul 01	New Mexico Museum of Space History	Alamogordo, NM	-	20,079	-
04 Dec 00	04 Dec 00	Cibola High School	Albuquerque, NM	-	-	-
04 Dec 00	04 Dec 00	Cibola High School	Albuquerque, NM	-	50	-
04 Dec 00	04 Dec 00	Vorhees High School	Glen Gardener, NJ	-	-	-
05 Dec 00	05 Dec 00	Kiwanis Club of Chatam, NJ	Florham Park, NJ	-	-	-
07 Dec 00	07 Dec 00	Kiwanis Club of Coral Springs	Coral Springs, FL	-	-	-
07 Dec 00	07 Dec 00	Lewiston Middle School	Lewiston, ME	-	61	-
07 Dec 00	07 Dec 00	North Hills High School	Pittsburgh, PA	-	-	-
12 Dec 00	12 Dec 00	Andrews ISD Planetarium	Andrews, TX	-	6	-
12 Dec 00	12 Dec 00	Mark Sylvester Planetarium	Plymouth, NH	-	9	-
13 Dec 00	13 Dec 00	Scottsdale Community College	Scottsdale, AZ	-	100	-
13 Dec 00	13 Dec 00	Scottsdale Community College	Scottsdale, AZ	-	175	-
14 Dec 00	17 Dec 00	Holiday Inn	Rapid City, SD	-	90	-
22 Dec 00	22 Dec 00	Scottsdale Community College	Scottsdale, AZ	-	150	-
26 Dec 00	31 Dec 00	Boy Scout Winter Camp	Mathis, TX	-	-	-
27 Dec 00	27 Dec 00	Sun River Nature Center	Sun River, OR	-	75	-
31 Dec 00	31 Dec 00	United States Naval Observatory	Washington, DC	-	1,000	-
01 Jan 01	01 Jan 01	Casa de Amparo	Oceanside, CA	-	30	-
01 Jan 01	30 May 01	South Florida Science Museum	West Palm Beach, FL	-	1,320	-
03 Jan 01	28 May 01	San Bernardino County Museum	Redlands, CA	-	200	-
04 Jan 01	04 Jan 01	Brownsville City Library	Brownsville, TX	-	27	-
04 Jan 01	04 Jan 01	Hyde Park Methodist Church	Cincinnati, OH	-	-	-
04 Jan 01	29 May 01	Monterey Elementary/Curtis Middle/Cajon High Schools	San Bernardino, CA	-	2,000	-
06 Jan 01	03 Aug 01	Ancient City Astronomy Club	St. Augustine, FL	-	25	-
06 Jan 01	07 Jan 01	New Jersey State Museum & Planetarium	Trenton, NJ	-	500	-
06 Jan 01	07 Jan 01	Trenton State Museum	Trenton, NJ	-	-	-
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	-	-	-
08 Jan 01	04 May 01	Astronomy 1 (a college course in astronomy)	Abington, PA	-	70	-
08 Jan 01	08 Jan 01	Blakemore Planetarium	Midland, TX	-	40	-
08 Jan 01	08 Jan 01	Crossroads Astronomy Club	Victoria, TX	-	-	-
08 Jan 01	04 Apr 01	KCSOS Learning Center	Bakersfield, CA	-	-	-

10 Jan 01	10 Jan 01	Lockwood Park Observatory	Rockford, IL	-	-	-
10 Jan 01	10 Jan 01	Rotary Club	Omaha, NE	-	45	-
10 Jan 01	10 Jan 01	Scottsdale Community College	Scottsdale, AZ	-	100	-
12 Jan 01	12 Jan 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	200	-
12 Jan 01	12 Jan 01	Georgia Southern University	Statesboro, GA	-	200	-
12 Jan 01	12 Jan 01	Planetarium	Torrance, CA	-	100	-
12 Jan 01	13 Jan 01	University of Texas at El Paso	El Paso, TX	-	30	-
12 Jan 01	14 Jan 01	University of Texas at El Paso	El Paso, TX	-	30	-
13 Jan 01	13 Jan 01	Chappell Hall	Milledgeville, GA	-	-	-
13 Jan 01	13 Jan 01	Hob Nob Restaurant	Crystal Lake, IL	-	370	-
13 Jan 01	13 Jan 01	IMAX	Tempe, AZ	-	700	-
15 Jan 01	15 Jan 01	Morrow Observatory	Bedford, IN	-	-	-
15 Jan 01	15 Jan 01	Universe Today Web Site		-	35,000	-
16 Jan 01	16 Jan 01	Phenix City Intermediate School	Phenix City, AL	-	-	-
16 Jan 01	16 Jan 01	Sirloin Stockade	Alamogordo, NM	-	-	-
16 Jan 01	16 Jan 01	St. Elizabeth's School	Kansas City, MO	-	45	-
18 Jan 01	18 Jan 01	Brownsville City Library	Brownsville, TX	-	25	-
18 Jan 01	18 Jan 01	Space Night	Middletown, CA	-	-	-
18 Jan 01	18 Jan 01	Universe Today Web Site		-	35,000	-
19 Jan 01	19 Jan 01	Boyd School	Omaha, NE	-	-	-
19 Jan 01	19 Jan 01	Friends University	Wichita, KS	-	-	-
19 Jan 01	19 Jan 01	Friends University	Wichita, KS	-	30	-
19 Jan 01	19 Jan 01	Physics Teacher's Club Meeting	New York, NY	-	50	-
20 Jan 01	20 Jan 01	Cherry Hills Library	Albuquerque, NM	-	24	-
20 Jan 01	20 Jan 01	Greenwood Civic Center	Laurens, SC	-	182	-
20 Jan 01	20 Jan 01	Loblolly Starparty	Nursery, TX	-	6	-
21 Jan 01	21 Jan 01	University of Wyoming	Laramie, WY	-	15	-
22 Jan 01	22 Jan 01	Greenville Public Library	Greenville, SC	-	62	-
23 Jan 01	23 Jan 01	Boy Scout Troop #282	Leawood, KS	-	10	-
23 Jan 01	23 Jan 01	Laurens Emergency Operating Center	Laurens, SC	-	38	-
25 Jan 01	25 Jan 01	Lockheed Martin Astronautics	San Diego, CA	-	-	-
25 Jan 01	25 Jan 01	New Mexico Museum of Space History	Alamogordo, NM	-	13	-
25 Jan 01	25 Jan 01	New Mexico Museum of Space History	Alamogordo, NM	-	18	-
25 Jan 01	25 Jan 01	Scottsdale Community College	Scottsdale, AZ	-	150	-
26 Jan 01	26 Jan 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	200	-
26 Jan 01	26 Jan 01	Sacramento Elementary	Alamogordo, NM	-	164	-
27 Jan 01	27 Jan 01	Andrews ISD Planetarium	Andrews, TX	-	15	-
27 Jan 01	27 Jan 01	University of Hawaii at Hilo	Hilo, HI	-	-	-
29 Jan 01	29 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	96	-
29 Jan 01	29 Jan 01	St. Mary's School	Bordentown, NJ	-	-	-
31 Jan 01	31 Jan 01	Alta Vista Middle School	Carlsbad, NM	-	-	-
31 Jan 01	31 Jan 01	Casper Planetarium	Casper, WY	-	-	-
31 Jan 01	31 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	115	-
01 Feb 01	01 Feb 01	Brownsville City Library	Brownsville, TX	-	-	-
01 Feb 01	01 Feb 01	Casper Planetarium	Casper, WY	-	-	-
01 Feb 01	17 Jun 01	San Bernardino County Museum	Redlands, CA	-	-	-
02 Feb 01	02 Feb 01	Babb Middle School	Forest Park, GA	-	-	-
02 Feb 01	02 Feb 01	Christ The King School	Rutland, VT	-	1	-
02 Feb 01	02 Feb 01	County Fire Headquarters	Greenwood, SC	-	48	-
02 Feb 01	02 Feb 01	Georgia Southern University	Statesboro, GA	-	150	-
02 Feb 01	02 Feb 01	Jackson Astronomical Association	Jackson, MS	-	-	-
02 Feb 01	02 Feb 01	Metropolitan Community College	Elkhorn, NE	-	40	-
02 Feb 01	03 Feb 01	Mt. Hood Community College Planetarium	Gresham, OR	-	200	-

02 Feb 01	02 Feb 01	Muncie Community Schools' Planetarium	Muncie, IN	-	65	-
03 Feb 01	03 Feb 01	Kelly Walsh High School	Casper, WY	-	375	-
03 Feb 01	03 Feb 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
03 Feb 01	03 Feb 01	Richland Astronomical Society	Mansfield, OH	-	-	-
04 Feb 01	09 Feb 01	Muncie School District	Muncie, IN	-	-	-
06 Feb 01	06 Feb 01		Sheboygan, WI	-	20	-
06 Feb 01	06 Mar 01	American Museum of Natural History	New York, NY	-	24	-
06 Feb 01	06 Feb 01	Boeing Company	Everett, WA	-	-	-
07 Feb 01	07 Feb 01	McMillian Junior High School	Omaha, NE	-	-	-
07 Feb 01	22 Feb 01	Rancho San Diego	El Cajon, CA	-	-	-
08 Feb 01	08 Feb 01	Arabica Coffee House	Medina, OH	-	-	-
08 Feb 01	08 Feb 01	Middletown Times Star Newspaper	Middletown, CA	-	1,000	-
08 Feb 01	11 Feb 01	Oaks Mall	Thousand Oaks, CA	-	1,000	-
08 Feb 01	15 Feb 01	Solar Webchat Newspaper Article	Middletown, CA	-	600	-
09 Feb 01	09 Feb 01	Hoosier Association of Science Teachers Annual Convention	Indianapolis, IN	-	-	-
09 Feb 01	20 Apr 01	Mark Smith Planetarium	Macon, GA	-	-	-
09 Feb 01	10 Feb 01	Space Center Houston	Houston, TX	-	-	-
09 Feb 01	09 Feb 01	University of North Texas	Denton, TX	-	100	-
09 Feb 01	09 Feb 01	Willow Creek Elementary School	Centennial, CO	-	-	-
10 Feb 01	10 Feb 01	Capricon Science Fiction Convention	Arlington Heights, IL	-	-	-
10 Feb 01	10 Feb 01	Morehead Planetarium	Chapel Hill, NC	-	200	-
10 Feb 01	10 Feb 01	Museum of Science and Industry	Chicago, IL	-	-	-
10 Feb 01	10 Feb 01	Sam Sneed Restaurant	St. Augustine, FL	-	-	-
10 Feb 01	10 Feb 01	Windward Community College	Kaneohe, HI	-	-	-
11 Feb 01	11 Feb 01	New Jersey State Museum & Planetarium	Trenton, NJ	-	50	-
12 Feb 01	12 Feb 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	300	-
12 Feb 01	12 Feb 01	American Museum of Natural History	New York, NY	-	3,500	-
12 Feb 01	12 Feb 01	Andrews ISD Planetarium	Andrews, TX	-	10	-
12 Feb 01	12 Feb 01	Andrews ISD Planetarium	Andrews, TX	-	1,200	-
12 Feb 01	16 Feb 01	Curtis Middle School	San Bernardino, CA	-	-	-
12 Feb 01	12 Feb 01	East Brunswick Public Library	East Brunswick, NJ	-	50	-
12 Feb 01	12 Feb 01	Georgia Southern University	Statesboro, GA	-	75	-
12 Feb 01	13 Feb 01	Killeen Independent School District	Killeen, TX	-	-	-
12 Feb 01	12 Feb 01	Middle School	Forest Park, GA	-	-	-
12 Feb 01	16 Feb 01	Monterey Elementary School	San Bernardino, CA	-	-	-
12 Feb 01	14 Feb 01	Noble Planetarium	Fort Worth, TX	-	250	-
12 Feb 01	12 Feb 01	Palisade High School	Palisade, CO	-	5	-
12 Feb 01	12 Feb 01	Ruben H. Fleet Space Theatre	San Diego, CA	-	50	-
12 Feb 01	12 Feb 01	Wellwood Middle School	Fayetteville, NY	-	-	-
13 Feb 01	13 Feb 01		Middletown, CA	-	10	-
13 Feb 01	13 Feb 01	Barnes and Noble Bookstore	Jenkintown, PA	-	35	-
13 Feb 01	13 Feb 01	Casper Planetarium	Casper, WY	-	-	-
13 Feb 01	13 Feb 01	Doyle Conner Building	Gainesville, FL	-	10	-
13 Feb 01	13 Feb 01	Manatee Community College	Bradenton, FL	-	-	-
13 Feb 01	13 Feb 01	Mark Sylvester Planetarium	Plymouth, NH	-	7	-
13 Feb 01	13 Feb 01	Washington Cathedral	Redmond, WA	-	11	-
14 Feb 01	14 Feb 01	Cary Elementary School	Cary, NC	-	3	-
14 Feb 01	14 Feb 01	Lawrence Livermore National Laboratory	Livermore, CA	-	-	-
14 Feb 01	15 Feb 01	Marine Corps Logistics Base Library	Barstow, CA	-	26	-
14 Feb 01	14 Feb 01	Mark Sylvester Planetarium	Plymouth, NH	-	-	-
14 Feb 01	14 Feb 01	Northrop High School	Fort Wayne, IN	-	20	-
14 Feb 01	14 Feb 01	San Bernardino Valley College	San Bernardino, CA	-	707	-
14 Feb 01	14 Feb 01	Scottsdale Community College	Scottsdale, AZ	-	50	-
14 Feb 01	14 Feb 01	Scottsdale Community College	Scottsdale, AZ	-	100	-
14 Feb 01	15 Feb 01	Shaker Heights High School	Shaker Heights, OH	-	-	-
15 Feb 01	15 Feb 01	Comets and Asteroids	Sheboygan, WI	-	-	-

15 Feb 01	15 Feb 01	County Fire Headquarters	Greenwood, SC	-	34	-
15 Feb 01	15 Feb 01	Macomb County Community College	Warren, MI	-	-	-
15 Feb 01	15 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	40	-
15 Feb 01	15 Feb 01	Raritan Valley Community College	Somerville, NJ	-	50	-
15 Feb 01	15 Feb 01	Senior Health Foundation	Omaha, NE	-	20	-
16 Feb 01	16 Feb 01	Carlsbad Medical Center	Carlsbad, NM	-	-	-
16 Feb 01	16 Feb 01	Florida Fish and Wildlife Conservation Commission	West Palm Beach, FL	-	-	-
16 Feb 01	16 Feb 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	200	-
16 Feb 01	16 Feb 01	Mark Smith Planetarium	Macon, GA	-	-	-
16 Feb 01	16 Feb 01	National Severe Storms Laboratory	Norman, OK	-	51	-
16 Feb 01	16 Feb 01	University of Oklahoma	Norman, OK	-	34	-
17 Feb 01	17 Feb 01	Air Station Flying Museum	Arlington, WA	-	-	-
17 Feb 01	17 Feb 01	San Bernardino County Museum	Redlands, CA	-	30	-
18 Feb 01	18 Feb 01	Grain Valley Cub Scouts	Grain Valley, MO	-	-	-
18 Feb 01	18 Feb 01	New Jersey State Museum & Planetarium	Trenton, NJ	-	50	-
19 Feb 01	19 Feb 01	Morrow Observatory	Bedford, IN	-	100	-
19 Feb 01	19 Feb 01	Schreiner College	Kerrville, TX	-	30	-
20 Feb 01	20 Feb 01	Bradbury Science Museum	Los Alamos, NM	-	23	-
21 Feb 01	21 Feb 01	Lions Club West	Omaha, NE	-	34	-
21 Feb 01	03 May 01	Mark Smith Planetarium	Macon, GA	-	4	-
21 Feb 01	21 Feb 01	Mark Sylvester Planetarium	Plymouth, NH	-	-	-
21 Feb 01	21 Feb 01	New Mexico State University-Carlsbad	Carlsbad, NM	-	30	-
21 Feb 01	21 Feb 01	North Hills High School	Pittsburgh, PA	-	-	-
22 Feb 01	24 Feb 01	Austin High School	El Paso, TX	-	145	-
22 Feb 01	25 Feb 01	Austin High School	El Paso, TX	-	150	-
22 Feb 01	22 Feb 01	Aviara Oaks Elementary School	Carlsbad, CA	-	17	-
22 Feb 01	22 Feb 01	Mercer Elementary School	Shaker Heights, OH	-	-	-
22 Feb 01	22 Feb 01	New Mexico Museum of Space History	Alamogordo, NM	-	12	-
22 Feb 01	22 Feb 01	New Mexico Museum of Space History	Alamogordo, NM	-	16	-
22 Feb 01	22 Feb 01	Scottsdale Community College	Scottsdale, AZ	-	175	-
23 Feb 01	23 Feb 01	Arizona State University	Tempe, AZ	-	100	-
23 Feb 01	23 Feb 01	Arizona State University	Tempe, AZ	-	200	-
23 Feb 01	24 Feb 01	California State University, Bakersfield	Bakersfield, CA	-	-	-
23 Feb 01	25 Feb 01	Molokai Ranch	Moana Loa, Molokai, HI	-	26	-
23 Feb 01	23 Feb 01	Northcountry Planetarium	Plattsburgh, NY	-	44	-
23 Feb 01	23 Feb 01	Wilderness Center Astronomy Club	Wilmot, OH	-	35	-
24 Feb 01	24 Feb 01	HTV Channel 51	Kerrville, TX	-	-	-
24 Feb 01	24 Feb 01	Museum of Science and History	Jacksonville, FL	-	250	-
24 Feb 01	24 Feb 01	Sandburg Junior High	Alexandria, VA	-	300	-
26 Feb 01	26 Feb 01	Alta Vista Middle School	Carlsbad, NM	-	-	-
26 Feb 01	26 Feb 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	200	-
26 Feb 01	28 Feb 01	Orpheum	Omaha, NE	-	-	-
26 Feb 01	26 Feb 01	Ryan's of Greenville	Greenville, SC	-	39	-
26 Feb 01	25 Feb 01	Wade Carpenter Middle Academy	Nogales, AZ	-	10	-
27 Feb 01	27 Feb 01	Hyde Observatory	Lincoln, NE	-	4	-
27 Feb 01	27 Feb 01	Rio Rico High School/Calabasas Middle School	Rio Rico, AZ	-	100	-
27 Feb 01	27 Feb 01	Rutland City Library	Rutland, VT	-	6	-
28 Feb 01	28 Feb 01	Claim Restaurant	Roswell, NM	-	-	-
28 Feb 01	28 Feb 01	Drake Planetarium	Cincinnati, OH	-	520	-
28 Feb 01	28 Feb 01	Sociedad Astronomica De Baja California	Tijuana, Mexico	-	-	-
01 Mar 01	01 Mar 01	Benedictine University	Lisle, IL	-	80	-
01 Mar 01	01 Mar 01	Calusa Nature Center & Planetarium	Fort Myers, FL	-	50	-
01 Mar 01	26 Apr 01	Casper Planetarium	Casper, WY	-	279	-
01 Mar 01	01 Mar 01	Harris Corporation HQ	Melbourne, FL	-	-	-

01 Mar 01	01 Mar 01	Nogales High School	Nogales, AZ	-	200	-
01 Mar 01	01 Mar 01	University of North Texas	Denton, TX	-	-	-
01 Mar 01	01 Mar 01	University of North Texas	Denton, TX	-	500	-
01 Mar 01	01 Mar 01	Williamson County Astronomy Club	Round Rock, TX	-	-	-
02 Mar 01	02 Mar 01	Florida Gulf Coast University	Ft. Myers, FL	-	135	-
02 Mar 01	02 Mar 01	Senior Health Foundation	Omaha, NE	-	100	-
02 Mar 01	02 Mar 01	University of North Texas	Denton, TX	-	-	-
03 Mar 01	03 Mar 01	Blakemore Planetarium	Midland, TX	-	80	-
03 Mar 01	03 Mar 01	Casper Planetarium	Casper, WY	-	6	-
03 Mar 01	31 Mar 01	Casper Planetarium	Casper, WY	-	10	-
03 Mar 01	03 Mar 01	Museum of Science and History	Jacksonville, FL	-	200	-
03 Mar 01	03 Mar 01	Northrop High School	Fort Wayne, IN	-	38	-
03 Mar 01	03 Mar 01	Riverside Astronomical Society	Riverside, CA	-	10	-
03 Mar 01	03 Mar 01	Round Rock Public Library	Round Rock, TX	-	15	-
03 Mar 01	03 Mar 01	St. Augustine High School	St. Augustine, FL	-	-	-
04 Mar 01	04 Mar 01	Manor Heights Grade School	Casper, WY	-	300	-
04 Mar 01	04 Mar 01	Poland Presbyterian Church	Poland, OH	-	30	-
04 Mar 01	04 Mar 01	Science Night	Norwood, OH	-	420	-
04 Mar 01	04 Mar 01	W.D. Hall Elementary School	El Cajon, CA	-	2	-
05 Mar 01	05 Mar 01	Huntsville Educational Television Studio	Huntsville, AL	-	50	-
05 Mar 01	07 May 01	McKee Intermediate School	Bakersfield, CA	-	178	-
05 Mar 01	29 May 01	McKee Intermediate School	Bakersfield, CA	-	-	-
06 Mar 01	06 Mar 01	Blandy Hills Elementary School	Milledgeville, GA	-	20	-
06 Mar 01	06 Mar 01	Goodland High School	Goodland, KS	-	2	-
06 Mar 01	06 Mar 01	Mark Sylvester Planetarium	Plymouth, NH	-	7	-
06 Mar 01	06 Mar 01	Powered.com	Austin, TX	-	-	-
06 Mar 01	06 Mar 01	Western Colorado Astronomy Club	Fruita, CO	-	45	-
07 Mar 01	07 Mar 01	Goodland High School	Goodland, KS	-	-	-
08 Mar 01	08 Mar 01	Columbia Elementary School	Kaysville, UT	-	-	-
08 Mar 01	08 Mar 01	Flandrau Science Center	Tucson, AZ	-	-	-
08 Mar 01	08 Mar 01	Shonto School	Shonto, AZ	-	300	-
09 Mar 01	16 Mar 01	Flandrau Science Center	Tucson, AZ	-	10	-
09 Mar 01	09 Mar 01	T'iis NasBas School	NM	-	300	-
10 Mar 01	10 Mar 01	Austin Library-Cepeda Branch	Austin, TX	-	20	-
10 Mar 01	10 Mar 01	Austin Library-Manchaca Branch	Austin, TX	-	-	-
10 Mar 01	10 Mar 01	Austin Library-Oak Springs Branch	Austin, TX	-	20	-
10 Mar 01	10 Mar 01	Fullerton State College	Fullerton, CA	-	60	-
10 Mar 01	10 Mar 01	Private School	San Diego, CA	-	-	-
10 Mar 01	10 Mar 01	Windward Community College	Kaneohe, HI	-	-	-
14 Mar 01	14 Mar 01	Northrop High School Planetarium	Fort Wayne, , IN	-	50	-
14 Mar 01	14 Mar 01	Scottsdale Community College	Scottsdale, AZ	-	100	-
15 Mar 01	14 Mar 01	Mountain View Elementary School	Simi Valley, CA	-	-	-
15 Mar 01	15 Mar 01	North Hills High School	Pittsburgh, PA	-	-	-
15 Mar 01	15 Mar 01	University of Nebraska at Omaha	Omaha, NE	-	600	-
16 Mar 01	16 Mar 01	Church of Jesus Christ of Latter Day Saints	Fayetteville, NY	-	-	-
16 Mar 01	16 Mar 01	Coquina Crossing Club House	Elkton, FL	-	29	-
16 Mar 01	16 Mar 01	North Hills High School	Pittsburgh, PA	-	-	-
17 Mar 01	17 Mar 01	Private Residence	Granada Hills, CA	-	15	-
19 Mar 01	19 Mar 01	Seoul American High School	APO AP, South Korea	-	-	-
20 Mar 01	20 Mar 01	Boeing Company	Everett, WA	-	-	-
20 Mar 01	20 Mar 01	Greenville News Piedmont	Greenville, SC	-	120,000	-
20 Mar 01	22 Mar 01	Noel Wien Library	Fairbanks, AK	-	12	-
20 Mar 01	20 Mar 01	Steere Farm Elementary School	Harrisville, RI	-	200	-
21 Mar 01	21 Mar 01	STEP Technology	Portland, OR	-	35	-

21 Mar 01	21 Mar 01	WSPA-TV	Spartanburg, SC	-	-	-
22 Mar 01	23 Mar 01	Babb Middle School	Forest Park, GA	-	-	-
22 Mar 01	31 Dec 01	Bowie Blade-News Newspaper	Bowie, MD	-	35,588	-
22 Mar 01	22 Mar 01	Goddard Planetarium	Roswell, NM	-	-	-
23 Mar 01	23 Mar 01	STEP Technology	Portland, OR	-	35	-
24 Mar 01	24 Mar 01	Casper Planetarium	Casper, WY	-	45	-
26 Mar 01	30 Mar 01	Chappell Hall	Milledgeville, GA	-	1	-
26 Mar 01	26 Mar 01	Marine Corps Logistics Base Library	Barstow, CA	-	-	-
26 Mar 01	26 Mar 01	Ryan's of Greenville	Greenville, SC	-	39	-
27 Mar 01	27 Mar 01	Callahan School	Harrisville, RI	-	250	-
27 Mar 01	27 Mar 01	Coquina Crossing Club House	Elkton, FL	-	37	-
27 Mar 01	27 Mar 01	Marine Corps Logistics Base Library	Barstow, CA	-	25	-
27 Mar 01	27 Mar 01	Senior Health Foundation	Omaha, NE	-	25	-
28 Mar 01	28 Mar 01	Exploring Our Solar System	Reno, NV	-	65	-
28 Mar 01	28 Mar 01	Killeen Independent School District	Killeen, TX	-	65	-
28 Mar 01	28 Mar 01	Ruben H. Fleet Space Theatre	San Diego, CA	-	30	-
28 Mar 01	28 Mar 01	Ruben H. Fleet Space Theatre	San Diego, CA	-	50	-
28 Mar 01	28 Mar 01	Santa Fe Community College	Santa Fe, NM	-	100	-
28 Mar 01	28 Mar 01	Seagrave Memorial Observatory	North Scituate, RI	-	-	-
29 Mar 01	29 Mar 01	Casper Planetarium	Casper, WY	-	64	-
29 Mar 01	29 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
29 Mar 01	29 Mar 01	New Mexico Museum of Space History	Alamogordo, NM	-	13	-
29 Mar 01	29 Mar 01	New Mexico Museum of Space History	Alamogordo, NM	-	17	-
30 Mar 01	30 Mar 01	Arizona State University	Tempe, AZ	-	175	-
30 Mar 01	30 Mar 01	Arizona State University	Tempe, AZ	-	400	-
30 Mar 01	30 Mar 01	Kopernik Space Education Center	Vestal, NY	-	6	-
30 Mar 01	30 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	26	-
30 Mar 01	30 Mar 01	North Hills High School	Pittsburgh, PA	-	-	-
30 Mar 01	30 Mar 01	Roosevelt Elementary School	Omaha, NE	-	-	-
31 Mar 01	31 Mar 01	Lockwood Park Observatory	Rockford, IL	-	25	-
01 Apr 01	01 Apr 02	Bishop Museum	Honolulu, HI	-	40	-
01 Apr 01	30 Apr 01	Bowie Public Library	Bowie, MD	-	3,000	-
01 Apr 01	31 May 01	New Mexico Museum of Space History	Alamogordo, NM	-	1,000	-
01 Apr 01	01 Apr 01	Rotary International at Manchester Country Club	Manchester, CT	-	100	-
02 Apr 01	02 Apr 01	North Hills High School	Pittsburgh, PA	-	75	-
02 Apr 01	02 Apr 01	Wellington Elementary School	Wellington, MO	-	40	-
03 Apr 01	11 Apr 01	Casper Planetarium	Casper, WY	-	-	-
03 Apr 01	03 Apr 01	Hills Farm Orchard	South Boston, VA	-	8	-
03 Apr 01	03 Apr 01	Mark Sylvester Planetarium	Plymouth, NH	-	15	-
04 Apr 01	04 Apr 01	American Museum of Natural History	New York, NY	-	1,200	-
04 Apr 01	04 Apr 01	Bismarck High School	Bismarck, ND	-	-	-
04 Apr 01	04 Apr 01	Crestline Elementary School	Barstow, CA	-	-	-
04 Apr 01	04 Apr 01	Environmental Expo-Earthfest 2001	Phoenix, AZ	-	5,000	-
04 Apr 01	04 Apr 01	Northrop High School	Fort Wayne, IN	-	27	-
04 Apr 01	04 Apr 01	Northrop High School	Fort Wayne, IN	-	52	-
04 Apr 01	04 Apr 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
04 Apr 01	04 Apr 01	San Bernardino County Museum	Redlands, CA	-	400	-
05 Apr 01	05 Apr 01	Anaheim Kiwanis Club Meeting	Anaheim, CA	-	-	-
05 Apr 01	05 Apr 01	Binghamton University	Vestal, NY	-	-	-
05 Apr 01	05 Apr 01	Century High School	Bismarck, ND	-	-	-
05 Apr 01	05 Apr 01	Somerset County Library	Bridgewater, NJ	-	40	-
05 Apr 01	05 Apr 01	Somerset County Library	Bridgewater, NJ	-	50	-
05 Apr 01	05 Apr 01	Valley Academy Charter School	Phoenix, AZ	-	30	-
05 Apr 01	05 Apr 01	Valley Academy Charter School	Phoenix, AZ	-	175	-
06 Apr 01	06 Apr 01	Corning Astronomical Society	Corning, NY	-	35	-
06 Apr 01	06 Apr 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	40	-

06 Apr 01	06 Apr 01	Northcountry Planetarium	Plattsburgh, NY	-	64	-
07 Apr 01	07 Apr 01	Buchanan Street School	Los Angeles, CA	-	-	-
07 Apr 01	07 Apr 01	Delta College	Bay City, MI	-	-	-
07 Apr 01	07 Apr 01	Georgia Southern University	Statesboro, GA	-	500	-
07 Apr 01	07 Apr 01	Jetty Park	Cocoa Beach, FL	-	3,000	-
07 Apr 01	08 Apr 01	New Mexico Museum of Space History	Alamogordo, NM	-	58	-
08 Apr 01	08 Apr 01	Trenton State Museum	Trenton, NJ	-	50	-
09 Apr 01	09 Apr 01	Acreage Pines Elementary School	Loxahatchee, FL	-	-	-
09 Apr 01	13 Apr 01	American Museum of Natural History	New York, NY	-	-	-
09 Apr 01	09 Apr 01	Lewis and Clark Junior High School	Omaha, NE	-	-	-
09 Apr 01	09 Apr 01	Mountain View Elementary School	Elko, NV	-	-	-
09 Apr 01	09 Apr 01	North Hills High School	Pittsburgh, PA	-	13	-
10 Apr 01	10 Apr 01	Best Opportunities	Barstow, CA	-	18	-
10 Apr 01	10 Apr 01	Golden Kiwanis Club	Mount Vernon, WA	-	-	-
11 Apr 01	11 Apr 01	New Mexico State University-Carlsbad	Carlsbad, NM	-	10	-
11 Apr 01	11 Apr 01	Ponce Fairways Grill	St. Augustine, FL	-	-	-
11 Apr 01	11 Apr 01	Scottsdale Community College	Scottsdale, AZ	-	100	-
11 Apr 01	11 Apr 01	Scottsdale Community College	Scottsdale, AZ	-	200	-
12 Apr 01	12 Apr 01	Black Hawk Astronomy Club	Waterloo, IA	-	-	-
12 Apr 01	12 Apr 01	Middletown Times Star Newspaper	Middletown, CA	-	1,000	-
13 Apr 01	13 Apr 01	Austin Astronomical Society	Austin, TX	-	3	-
13 Apr 01	13 Apr 01	Northern Essex Community College	Haverhill, MA	-	17	-
14 Apr 01	14 Apr 01	Arizona Science Center	Phoenix, AZ	-	175	-
14 Apr 01	14 Apr 01	Arizona Science Center	Phoenix, AZ	-	2,000	-
14 Apr 01	14 Apr 01	San Bernardino County Museum	Redlands, CA	-	100	-
16 Apr 01	16 Apr 01	Mountain View Elementary School	Elko, NV	-	-	-
16 Apr 01	16 Apr 01	University of Nebraska at Omaha	Omaha, NE	-	400	-
17 Apr 01	17 Apr 01	Berne Town Park	Berne, NY	-	-	-
17 Apr 01	17 Apr 01	Florida Museum of Natural History	Gainesville, FL	-	-	-
19 Apr 01	19 Apr 01	Casper Planetarium	Casper, WY	-	43	-
19 Apr 01	19 Apr 01	Middletown Times Star Newspaper	Middletown, CA	-	1,000	-
19 Apr 01	19 Apr 01	Morrow Observatory	Bedford, IN	-	2	-
20 Apr 01	20 Apr 01	East Elementary School	St. George, UT	-	62	-
20 Apr 01	20 Apr 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	30	-
20 Apr 01	20 Apr 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	200	-
21 Apr 01	21 Apr 01	Andrews ISD Planetarium	Andrews, TX	-	30	-
21 Apr 01	21 Apr 01	Chabot Space and Science Center	Oakland, CA	-	12	-
21 Apr 01	21 Apr 01	Chabot Space and Science Center	Oakland, CA	-	38	-
21 Apr 01	21 Apr 01	Coronado Mall	Albuquerque, NM	-	1,100	-
21 Apr 01	21 Apr 01	Sky Meadows State Park	Delaplane/Paris, VA	-	125	-
21 Apr 01	21 Apr 01	Space Day	University Park, PA	-	1,000	-
21 Apr 01	21 Apr 01	Wilderness Center Astronomy Club	Wilmot, OH	-	-	-
23 Apr 01	27 Apr 01	Cajon High School	San Bernardino, CA	-	30	-
23 Apr 01	27 Apr 01	Curtis Middle School	San Bernardino, CA	-	778	-
23 Apr 01	04 May 01	NASA Exhibit	Bridgewater, NJ	-	625	-
23 Apr 01	23 Apr 01	Southwest Research Station	Portal, AZ	-	-	-
24 Apr 01	24 Apr 01	Broome-Tioga Board of Cooperative Educational Services (BOCES)	Binghamton, NY	-	-	-
24 Apr 01	24 Apr 01	Church	San Marcos, CA	-	6	-
24 Apr 01	24 Apr 01	Hyde Observatory	Lincoln, NE	-	3	-
24 Apr 01	24 Apr 01	Irvine Vista Verde Elementary School	Irvine, CA	-	240	-

25 Apr 01	25 Apr 01	Casper Planetarium	Casper, WY	-	9	-
25 Apr 01	25 Apr 01	El Marina Language Elementary School	Culver City, CA	-	4	-
25 Apr 01	25 Apr 01	Joyner Elementary School	Raleigh, NC	-	18	-
25 Apr 01	25 Apr 01	Pioneer Ridge Science Education Center	Independence, MO	-	-	-
25 Apr 01	25 Apr 01	Rotary Club Meeting	Elko, NV	-	-	-
26 Apr 01	26 Apr 01	Microsoft Latin America Headquarters	Fort Lauderdale, FL	-	-	-
27 Apr 01	27 Apr 01	Arizona State University	Tempe, AZ	-	400	-
27 Apr 01	27 Apr 01	Camden County Library	Voorhees, NJ	-	50	-
27 Apr 01	28 Apr 01	Florida Gulf Coast University	Ft. Myers, FL	-	160	-
27 Apr 01	27 Apr 01	Georgia Southern University	Statesboro, GA	-	40	-
27 Apr 01	27 Apr 01	Kopernik Space Education Center	Vestal, NY	-	4	-
27 Apr 01	27 Apr 01	Pennsylvania Association of Student Councils	Sidman, PA	-	5	-
27 Apr 01	27 Apr 01	Round Valley School	Bishop, CA	-	225	-
28 Apr 01	28 Apr 01	Harper College	Palatine, IL	-	47	-
28 Apr 01	28 Apr 01	Martha Manson Academy and Oak Hall School	Gainesville, FL	-	150	-
28 Apr 01	28 Apr 01	Museum of Science	Boston, MA	-	-	-
28 Apr 01	28 Apr 01	Museum of Science and Industry	Tampa, FL	-	133	-
28 Apr 01	29 Apr 01	National Astronomy Day	Sheboygan, WI	-	3,925	-
28 Apr 01	28 Apr 01	National Western Stock Show Complex	Denver, CO	-	800	-
28 Apr 01	28 Apr 01	National Western Stock Show Complex	Denver, CO	-	7,000	-
28 Apr 01	28 Apr 01	Pacific Science Center	Seattle, WA	-	15	-
28 Apr 01	29 Apr 01	Pacific Science Center	Seattle, WA	-	-	-
28 Apr 01	28 Apr 01	Pioneer Ridge Science Education Center	Independence, MO	-	50	-
28 Apr 01	28 Apr 01	Pioneer Ridge Science Education Center	Independence, MO	-	300	-
28 Apr 01	28 Apr 01	Savannah Mall	Savannah, GA	-	300	-
28 Apr 01	28 Apr 01	Stone City Mall	Bedford, IN	-	71	-
28 Apr 01	28 Apr 01	Wolcott Mill Metro Park	Ray, MI	-	1,300	-
29 Apr 01	29 Apr 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	-	-
30 Apr 01	30 Apr 01	Mountain View Elementary School	Elko, NV	-	2	-
01 May 01	01 May 01	Casper Planetarium	Casper, WY	-	50	-
01 May 01	30 Apr 02	Center for Educational Multimedia USAF Academy	USAF Academy, CO	-	295	-
01 May 01	01 May 01	Naperville Astronomical Association	Naperville, IL	-	100	-
01 May 01	01 May 01	Rotary International at Manchester Country Club	Manchester, CT	-	-	-
01 May 01	01 May 01	Seagrave Memorial Observatory	North Scituate, RI	-	-	-
02 May 01	02 May 01	Bevis Elementary School	Cincinnati, OH	-	26	-
02 May 01	02 May 01	Casper Planetarium	Casper, WY	-	9	-
02 May 01	02 May 01	Casper Planetarium	Casper, WY	-	37	-
02 May 01	02 May 01	Corinne A. Seeds University Elementary School,	UCLA	-	-	-
			Los Angeles, CA	-	1	-
02 May 01	02 May 01	Killingly Public Library	Danielson, CT	-	2	-
02 May 01	02 May 01	National Guard Armory	Casper, WY	-	30	-
02 May 01	02 May 01	University of Nevada Las Vegas	Las Vegas, NV	-	-	-
03 May 01	03 May 01	Boonshoft Museum of Discovery	Dayton, OH	-	-	-
03 May 01	03 May 01	Casper Planetarium	Casper, WY	-	33	-
03 May 01	03 May 01	Goodland High School	Goodland, KS	-	15	-
03 May 01	03 May 01	LodeStar Astronomy Center	Albuquerque, NM	-	378	-
03 May 01	10 May 01	Lyman Trumbull Elementary School	Chicago, IL	-	678	-
03 May 01	03 May 01	Mars Elementary School	Omaha, NE	-	24	-
03 May 01	03 May 01	National Atomic Museum	Albuquerque, NM	-	100	-
03 May 01	03 May 01	Schlow Library	State College, PA	-	5	-
03 May 01	03 May 01	Sheila Tarr Elementary School	Las Vegas, NV	-	345	-
03 May 01	03 May 01	Smithsonian National Air and Space Museum	Washington, DC	-	3,650	-
04 May 01	10 May 01	Austin High School	El Paso, TX	-	10	-
04 May 01	04 May 01	Berryville Elementary School	Berryville, AR	-	-	-
04 May 01	04 May 01	Casper Planetarium	Casper, WY	-	48	-
04 May 01	04 May 01	George F. Beattie Planetarium and N.A. Richardson Observatory				

			San Bernardino, CA	-	30	-
04 May 01	04 May 01	George F. Beattie Planetarium and N.A. Richardson Observatory	San Bernardino, CA	-	52	-
04 May 01	04 May 01	North Woods Park	Sumner, IA	-	-	-
04 May 01	04 May 01	Public School Number 6-Jersey City	Jersey City, NJ	-	-	-
05 May 01	05 May 01	Brownsville City Library	Brownsville, TX	-	8	-
05 May 01	05 May 01	Environmental Studies Center	Mobile, AL	-	500	-
05 May 01	05 May 01	Lewiston Middle School	Lewiston, ME	-	-	-
05 May 01	05 May 01	Local Park	Morrow, GA	-	420	-
05 May 01	05 May 01	Maple Grove Middle School	Battle Ground, WA	-	23	-
05 May 01	05 May 01	McKinley High School	Honolulu, HI	-	-	-
05 May 01	15 May 01	North Hills High School	Pittsburgh, PA	-	12	-
05 May 01	05 May 01	Rainwater Planetarium and Observatory	French Camp, MS	-	-	-
05 May 01	05 May 01	St. Augustine High School	St. Augustine, FL	-	25	-
06 May 01	06 May 01	Family Center at the Thousand Trails	Cottonwood, AZ	-	77	-
08 May 01	08 May 01	Casper Planetarium	Casper, WY	-	8	-
08 May 01	08 May 01	Casper Planetarium	Casper, WY	-	33	-
08 May 01	08 May 01	Ocean Knoll Elementary School	Encinitas, CA	-	66	-
08 May 01	08 May 01	Seagrave Memorial Observatory	North Scituate, RI	-	-	-
09 May 01	09 May 01	Casper Planetarium	Casper, WY	-	53	-
09 May 01	09 May 01	Muncie Community Schools' Planetarium	Muncie, IN	-	61	-
09 May 01	09 May 01	Scottsdale Community College	Scottsdale, AZ	-	80	-
09 May 01	09 May 01	Scottsdale Community College	Scottsdale, AZ	-	400	-
09 May 01	31 May 01	Shaker Heights High School	Shaker Heights, OH	-	400	-
10 May 01	10 May 01	Carver High School Science Magnet	Columbus, GA	-	-	-
11 May 01	11 May 01	Casper Planetarium	Casper, WY	-	123	-
11 May 01	11 May 01	Civil Air Patrol	Los Alamitos, CA	-	-	-
11 May 01	11 May 01	Museum of Science and Industry	Tampa, FL	-	-	-
11 May 01	11 May 01	Northcountry Planetarium	Plattsburgh, NY	-	90	-
12 May 01	12 May 01	Andrews ISD Planetarium	Andrews, TX	-	15	-
12 May 01	12 May 01	Bemis Public Library	Littleton, CO	-	30	-
12 May 01	12 May 01	Museum of Science and History	Jacksonville, FL	-	225	-
12 May 01	12 May 01	Museum of Science and History	Jacksonville, FL	-	1,800	-
12 May 01	12 May 01	United States Naval Observatory	Washington, DC	-	900	-
12 May 01	12 May 01	United States Naval Observatory	Washington, DC	-	2,000	-
15 May 01	15 May 01	Barstow Christian Academy	Barstow, CA	-	40	-
15 May 01	15 May 01	Casper Planetarium	Casper, WY	-	38	-
16 May 01	16 May 01	Northrop High School Planetarium	Fort Wayne, , IN	-	16	-
16 May 01	19 May 01	Rockets-for-Schools	Sheboygan, WI	-	3,275	-
16 May 01	16 May 01	Rose Hills Recreation Center	Los Angeles, CA	-	39	-
16 May 01	16 May 01	Rose Hills Recreation Center	Los Angeles, CA	-	100	-
16 May 01	16 May 01	Silver Valley High School	Yermo, CA	-	200	-
16 May 01	16 May 01	Woods Learning Center	Casper, WY	-	35	-
17 May 01	17 May 01	College of New Jersey	Ewing, NJ	-	-	-
17 May 01	17 May 01	Kiwanis Club of Laurens	Laurens, SC	-	1	-
17 May 01	17 May 01	McKee Intermediate School	Bakersfield, CA	-	800	-
17 May 01	17 May 01	Wilderness Center's Astronomy Education Center	Wilmot, OH	-	10	-
18 May 01	18 May 01	Casper Planetarium	Casper, WY	-	-	-
18 May 01	18 May 01	First Presbyterian Church	Statesboro, GA	-	-	-
18 May 01	18 May 01	Gault Middle School	Tacoma, WA	-	2	-
18 May 01	18 May 01	George F. Beattie Planetarium and N.A. Richardson Observatory				

18 May 01	18 May 01	Kopernik Space Education Center	San Bernardino, CA	-	150	-
19 May 01	20 May 01	Camp Celebrate	Vestal, NY	-	10	-
19 May 01	19 May 01	Clackamas Community College	Chapel Hill, NC	-	170	-
19 May 01	19 May 01	DuckKon Science Fiction Convention	Oregon City, OR	-	100	-
19 May 01	19 May 01	NASA Jet Propulsion Laboratory	Lisle, IL	-	40	-
19 May 01	19 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	300	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	20,000	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	25,000	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	35,000	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	63,000	-
19 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	65,000	-
19 May 01	19 May 01	Private Residence	Jackson, WY	-	40	-
19 May 01	19 May 01	Sky Meadows State Park	Delaplane/Paris, VA	-	36	-
20 May 01	20 May 01	DuckKon Science Fiction Convention	Lisle, IL	-	58	-
20 May 01	20 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	25,000	-
21 May 01	21 May 01	Cincinnati Observatory Center	Cincinnati, OH	-	12	-
21 May 01	15 Jun 01	Curtis Middle School	San Bernardino, CA	-	-	-
22 May 01	22 May 01	Dunellen Public Library	Dunellen, NJ	-	-	-
22 May 01	22 May 01	Olympic Park Institute	Port Angeles, WA	-	-	-
23 May 01	23 May 01	Casper Planetarium	Casper, WY	-	19	-
23 May 01	23 May 01	Rainwater Planetarium and Observatory	French Camp, MS	-	-	-
23 May 01	23 May 01	Rancho Santa Fe Middle School	Rancho Santa Fe, CA	-	24	-
23 May 01	23 May 01	Rose Hills Recreation Center	Los Angeles, CA	-	50	-
23 May 01	23 May 01	Rose Hills Recreation Center	Los Angeles, CA	-	100	-
24 May 01	24 May 01	Brooks Elementary School	Raleigh, NC	-	-	-
24 May 01	24 May 01	Casper Planetarium	Casper, WY	-	41	-
24 May 01	24 May 01	Killeen Independent School District	Killeen, TX	-	90	-
24 May 01	24 May 01	Pioneer Ridge Science Education Center	Independence, MO	-	25	-
25 May 01	28 May 01	Baycon 2001-Science Fiction Convention	San Jose, CA	-	6,000	-
25 May 01	25 May 01	Casper Planetarium	Casper, WY	-	-	-
25 May 01	25 May 01	St. Collette School	Rolling Meadows, IL	-	-	-
25 May 01	28 May 01	Vern Burton Center	Port Angeles, WA	-	500	-
26 May 01	26 May 01	Bryce Canyon National Park	Bryce Canyon, UT	-	225	-
26 May 01	26 May 01	Hilton Hotel-Albuquerque	Albuquerque, NM	-	53	-
26 May 01	26 May 01	Hurricane Ridge	Port Angeles, WA	-	60	-
26 May 01	27 May 01	Model Solar System	Big Bear, CA	-	105	-
26 May 01	26 May 01	Pioneer Ridge Science Education Center	Independence, MO	-	100	-
27 May 01	27 May 01	Riverside Telescope Makers Conference	Big Bear Lake, CA	-	100	-
28 May 01	28 May 01	International Space Development Conference	Albuquerque, NM	-	200	-
30 May 01	30 May 01	Liberty Science Center	Jersey City, NJ	-	100	-
31 May 01	31 May 01	Adelphia Norwich Cable Television	Norwich, CT	-	5,000	-
31 May 01	31 May 01	Mount Vernon Kiwanis Club	Mount Vernon, WA	-	-	-
31 May 01	31 May 01	Windham Middle School	Willimantic, CT	-	50	-
01 Jun 01	01 Jun 01	American Red Cross, Saginaw Chapter	Saginaw, MI	-	-	-
01 Jun 01	17 Jun 01	Grout Museum of History and Science	Waterloo, IA	-	3,400	-
01 Jun 01	30 Aug 01	JTB Star Tours	Honolulu, HI	-	-	-
01 Jun 01	01 Jun 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
01 Jun 01	01 Jun 01	St. Huber School	Hoffman Estates, IL	-	-	-
02 Jun 01	02 Jun 01	Ancient City Astronomy Club	St. Augustine, FL	-	10	-
03 Jun 01	05 Jun 01	Cowan Lake Sailing Association	Wilmington, OH	-	58	-
04 Jun 01	15 Jun 01	Museum of Science and History	Jacksonville, FL	-	15	-
04 Jun 01	04 Jun 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
04 Jun 01	04 Jun 01	Southern Research Institute	Birmingham, AL	-	-	-
04 Jun 01	17 Aug 01	University of Nebraska at Omaha	Omaha, NE	-	-	-
04 Jun 01	04 Jun 01	Woodland Elementary School	East Syracuse, NY	-	-	-
05 Jun 01	05 Jun 01	Naperville Astronomical Association	Naperville, IL	-	200	-

05 Jun 01	05 Jun 01	Shriners Hospital for Children	Chicago, IL	-	-	-
05 Jun 01	05 Jun 01	Walnut Grove Library	Walnut Grove, MS	-	-	-
06 Jun 01	06 Jun 01	Charlottesville Astronomical Society Club Meeting	Charlottesville, VA	-	40	-
06 Jun 01	06 Jun 01	Como Library	Como, MS	-	-	-
06 Jun 01	06 Jun 01	Lake Afton Public Observatory	Goddard, KS	-	65	-
06 Jun 01	06 Jun 01	Scout Park	Hobbs, NM	-	120	-
06 Jun 01	06 Jun 01	University of Hawaii at Hilo	Hilo, HI	-	-	-
07 Jun 01	07 Jun 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
07 Jun 01	07 Jun 01	Olive Branch Library	Olive Branch, MS	-	-	-
08 Jun 01	08 Jun 01	Choctaw County Library	Ackerman, MS	-	-	-
08 Jun 01	09 Jun 01	Schreder Planetarium & Science Learning Center	Redding, CA	-	120	-
09 Jun 01	09 Jun 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	14	-
09 Jun 01	29 Jun 01	Mississippi University for Women	Columbus, MS	-	-	-
09 Jun 01	09 Jun 01	Moorpark College	Moorpark, CA	-	40	-
10 Jun 01	12 Jun 01	International Science Discovery & Learning Center	Inglewood, CA	-	25	-
11 Jun 01	15 Jun 01	Curtis Middle School	San Bernardino, CA	-	728	-
11 Jun 01	11 Jun 01	Georgia Southern University	Statesboro, GA	-	-	-
11 Jun 01	11 Jun 01	Lamoille Lion's Camp	Lamoille, NV	-	-	-
11 Jun 01	15 Jun 01	Museum of Science and History	Jacksonville, FL	-	12	-
11 Jun 01	15 Jun 01	Shaker Heights High School	Shaker Heights, OH	-	16	-
11 Jun 01	11 Jun 01	Unisys	Mission Viejo, CA	-	15	-
11 Jun 01	25 Jun 01	University of North Texas	Denton, TX	-	-	-
12 Jun 01	12 Jun 01	Columbus Public Library	Columbus, MS	-	-	-
12 Jun 01	12 Jun 01	Golden Key Kiwanis Club	Omaha, NE	-	-	-
12 Jun 01	12 Jun 01	Lockheed Martin Astronautics	San Diego, CA	-	-	-
12 Jun 01	12 Jun 01	Mount Vernon Early Risers Toastmasters	Mount Vernon, WA	-	-	-
12 Jun 01	12 Jun 01	NW Kansas Technical School	Goodland, KS	-	-	-
12 Jun 01	12 Jun 01	Okolona Public Library	Okolona, MS	-	-	-
13 Jun 01	13 Jun 01	North Jersey Astronomical Group	Clifton, NJ	-	25	-
13 Jun 01	13 Jun 01	Scottsdale Community College	Scottsdale, AZ	-	60	-
14 Jun 01	14 Jun 01	Georgia Southern University	Statesboro, GA	-	-	-
14 Jun 01	14 Jun 01	Neshoba County Public Library	Philadelphia, MS	-	-	-
14 Jun 01	14 Jun 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
15 Jun 01	15 Jun 01	Casper Planetarium	Casper, WY	-	-	-
15 Jun 01	15 Jun 01	Lake Afton Public Observatory	Goddard, KS	-	100	-
16 Jun 01	16 Jun 01	Newark State Museum	Newark, NJ	-	10	-
16 Jun 01	16 Jun 01	Science Center of Connecticut	West Hartford, CT	-	900	-
17 Jun 01	17 Jun 01	Skagit Valley Herald	Mount Vernon, WA	-	50,000	-
18 Jun 01	18 Jun 01	Rose City Astronomers	Portland, OR	-	300	-
19 Jun 01	19 Jun 01	Bradbury Science Museum	Los Alamos, NM	-	50	-
19 Jun 01	28 Jun 01	Georgia Southern University	Statesboro, GA	-	-	-
19 Jun 01	19 Jun 01	Grout Museum of History and Science	Waterloo, IA	-	3,400	-
19 Jun 01	19 Jun 01	Library Headquarters	Gainesville, FL	-	4	-
19 Jun 01	19 Jun 01	San Bernardino County Library	Yucca, CA	-	30	-
19 Jun 01	19 Jun 01	Senior Health Foundation	Omaha, NE	-	20	-
19 Jun 01	19 Jun 01	Vardaman Public Library	Vardaman, MS	-	-	-
20 Jun 01	20 Jun 01	Knox Town Park	Knox, NY	-	52	-
20 Jun 01	20 Jun 01	LodeStar Astronomy Center	Albuquerque, NM	-	200	-
20 Jun 01	20 Jun 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
21 Jun 01	21 Jun 01	La Fiesta Restaurant	Artesia, NM	-	25	-
21 Jun 01	21 Jun 01	Landers Branch Library	Landers, CA	-	100	-
21 Jun 01	21 Jun 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
21 Jun 01	21 Jun 01	Sedro-Woolley Rotary Club	Sedro-Woolley, WA	-	-	-
21 Jun 01	21 Jun 01	Service Corps Of Retired Executives (SCORE)	Omaha, NE	-	50	-

21 Jun 01	21 Jun 01	Twentynine Palms Branch Library	Twentynine Palms, CA	-	100	-
22 Jun 01	22 Jun 01	Boy Scout program	Littleton, CO	-	75	-
22 Jun 01	22 Jun 01	Georgia Southern University	Statesboro, GA	-	-	-
22 Jun 01	22 Jun 01	Museum of Arts & Sciences	Macon, GA	-	1	-
23 Jun 01	23 Jun 01	Georgia Southern University	Statesboro, GA	-	-	-
23 Jun 01	23 Jun 01	Georgia Southern University	Statesboro, GA	-	60	-
23 Jun 01	23 Jun 01	Rainwater Planetarium and Observatory	French Camp, MS	-	-	-
23 Jun 01	23 Jun 01	Sky Meadows State Park	Delaplane/Paris, VA	-	75	-
25 Jun 01	25 Jun 01	Georgia Southern University	Statesboro, GA	-	2	-
25 Jun 01	25 Jun 01	La Conner Rotary Club	Mount Vernon, WA	-	-	-
25 Jun 01	26 Jun 01	New Mexico Museum of Space History	Alamogordo, NM	-	-	-
26 Jun 01	26 Jun 01	Coca-Cola Space Science Center	Columbus, GA	-	-	-
27 Jun 01	27 Jun 01	Alachua County Public Library Millhopper Branch	Gainesville, FL	-	-	-
27 Jun 01	27 Jun 01	Belen Public Library	Belen, NM	-	-	-
27 Jun 01	27 Jun 01	Boy Scout program	Littleton, CO	-	60	-
27 Jun 01	27 Jun 01	Casper Planetarium	Casper, WY	-	-	-
28 Jun 01	28 Jun 01	Meridian-Lauderdale County Public Library	Meridian, MS	-	6	-
28 Jun 01	28 Jun 01	Montana State University	Bozeman, MT	-	100	-
29 Jun 01	29 Jun 01	North Harrison Elementary School	Ramsey, IN	-	25	-
30 Jun 01	30 Jun 01	Cincinnati Observatory Center	Cincinnati, OH	-	-	-
01 Jul 01	17 Aug 01	Boy Scout program	Santa Ysabel, CA	-	2,100	-
01 Jul 01	18 Aug 01	Boy Scout program	Santa Ysabel, CA	-	2,100	-
01 Jul 01	15 Jul 01	Grout Museum of History and Science	Waterloo, IA	-	3,400	-
01 Jul 01	31 Jul 01	Radio and Television Museum	Bowie, MD	-	200	-
02 Jul 01	02 Jul 01	Alexandra Park	Auckland, New Zealand	-	25	-
02 Jul 01	02 Jul 01	Alexandra Park	Auckland, New Zealand	-	80	-
03 Jul 01	03 Jul 01	Rust College	Holly Springs, MS	-	-	-
04 Jul 01	04 Jul 01	Montana State University	Bozeman, MT	-	-	-
05 Jul 01	05 Jul 01	Attalla County Library	Kosciusko, MS	-	-	-
05 Jul 01	08 Jul 01	Roswell Convention Center	Roswell, NM	-	1,600	-
07 Jul 01	07 Jul 01	USS Hornet	Alameda, CA	-	3,100	-
09 Jul 01	10 Aug 01	American Museum of Natural History	New York, NY	-	-	-
09 Jul 01	09 Jul 01	Georgia Southern University	Statesboro, GA	-	-	-
10 Jul 01	10 Jul 01	Berne International Graduate University	St. Kitts	-	60	-
10 Jul 01	16 Jul 01	Emergency Center	Laurens, SC	-	107	-
10 Jul 01	10 Jul 01	Golden Kiwanis Club	Mount Vernon, WA	-	2	-
11 Jul 01	11 Jul 01	Elizabeth Jones Public Library	Grenada, MS	-	-	-
11 Jul 01	11 Jul 01	Loma Linda Library	Loma Linda, CA	-	100	-
11 Jul 01	11 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
11 Jul 01	11 Jul 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
11 Jul 01	11 Jul 01	Scottsdale Community College	Scottsdale, AZ	-	80	-
11 Jul 01	11 Jul 01	Scottsdale Community College	Scottsdale, AZ	-	100	-
12 Jul 01	12 Jul 01	Alamogordo Public library	Alamogordo, NM	-	-	-
12 Jul 01	12 Jul 01	Clarence Fitzroy Bryant University	St. Kitts	-	-	-
12 Jul 01	12 Jul 01	Market Fest	Redding, CA	-	500	-
12 Jul 01	12 Jul 01	Market Fest	Redding, CA	-	5,000	-
12 Jul 01	12 Jul 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
13 Jul 01	13 Jul 01	Moravia Church Camp	Kernersville, NC	-	12	-
13 Jul 01	13 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
13 Jul 01	13 Jul 01	Private Residence	Granada Hills, CA	-	10	-
13 Jul 01	13 Jul 01	Shore Leave Science Fiction Convention	Hunt Valley, MD	-	5	-
14 Jul 01	14 Jul 01	Pennsylvania Festival of the Arts	University Park, PA	-	600	-
14 Jul 01	14 Jul 01	Shore Leave Science Fiction Convention	Hunt Valley, MD	-	35	-
14 Jul 01	14 Jul 01	Shore Leave Science Fiction Convention	Hunt Valley, MD	-	249	-
15 Jul 01	20 Jul 01	Camp Twin Echo	New Florence, PA	-	-	-

16 Jul 01	17 Jul 01	Bank Street College of Education	New York, NY	-	-	-
17 Jul 01	17 Jul 01	Clarence Fitzroy Bryant University	St. Kitts	-	-	-
17 Jul 01	17 Jul 01	Desert Museum	Barstow, CA	-	-	-
17 Jul 01	17 Jul 01	Eisenhower Community Center	Hopkins, MN	-	100	-
17 Jul 01	17 Jul 01	Eisenhower Observatory	Hopkins, MN	-	100	-
17 Jul 01	17 Jul 01	Okeehelie Park	W. Palm Beach, FL	-	-	-
18 Jul 01	18 Jul 01	Franklin Institute Science Museum	Philadelphia, PA	-	80	-
18 Jul 01	18 Jul 01	Lakewood Country Club	Lakewood, CA	-	100	-
18 Jul 01	18 Jul 01	Rainwater Planetarium and Observatory	French Camp, MS	-	-	-
19 Jul 01	19 Jul 01	Camp St. Vincent	Philadelphia, PA	-	-	-
19 Jul 01	19 Jul 01	Flora Public Library	Flora, MS	-	-	-
20 Jul 01	20 Jul 01	Berne International Graduate University	St. Kitts	-	14	-
20 Jul 01	20 Jul 01	Environmental Workshop	WY	-	-	-
20 Jul 01	20 Jul 01	Rainwater Planetarium and Observatory	French Camp, MS	-	-	-
20 Jul 01	20 Jul 01	Riverbend Music Center	Cincinnati, OH	-	3,000	-
20 Jul 01	20 Jul 01	Southwest Montana Astronomical Society	Virginia City, MT	-	40	-
21 Jul 01	21 Jul 01	Bryce Canyon National Park	Bryce Canyon, UT	-	420	-
21 Jul 01	21 Jul 01	Museum of Science and Industry	Chicago, IL	-	14	-
21 Jul 01	21 Jul 01	Rock Springs Presbyterian Church	Laurens, SC	-	68	-
21 Jul 01	21 Jul 01	Society of Women Engineers Chapter Meeting	Phoenix, AZ	-	1	-
24 Jul 01	24 Jul 01	M.R. Dye Public Library	Horn Lake, MS	-	5	-
24 Jul 01	24 Jul 01	Senatobia Public Library	Senatobia, MS	-	5	-
25 Jul 01	25 Jul 01	Victorville Branch of San Bernadino Library	Victorville, CA	-	-	-
26 Jul 01	26 Jul 01	Madison, MS Library	Madison, MS	-	-	-
26 Jul 01	26 Jul 01	Stanwood Kiwanis Club	Stanwood, WA	-	-	-
27 Jul 01	27 Jul 01	American Museum of Natural History	New York, NY	-	-	-
27 Jul 01	27 Jul 01	Berne International Graduate University	St. Kitts	-	14	-
27 Jul 01	27 Jul 01	Liberty Science Center	Jersey City, NJ	-	110	-
28 Jul 01	28 Jul 01	Cherry Creek State Park	Denver, CO	-	40	-
28 Jul 01	28 Jul 01	Clarence Fitzroy Bryant University	St. Kitts	-	-	-
28 Jul 01	28 Jul 01	Museum of Science and History	Jacksonville, FL	-	1,600	-
28 Jul 01	28 Jul 01	Sheraton North	Cincinnati, OH	-	-	-
28 Jul 01	28 Jul 01	University of Redlands	Redlands, CA	-	13	-
30 Jul 01	08 Aug 01	Adler Planetarium and Astronomy Museum	Chicago, IL	-	1,000	-
30 Jul 01	03 Aug 01	American Museum of Natural History	New York, NY	-	-	-
30 Jul 01	30 Jul 01	Birmingham News	Birmingham, AL	-	175,000	-
30 Jul 01	30 Jul 01	Chabot Space and Science Center	Oakland, CA	-	-	-
30 Jul 01	30 Jul 01	Grand Terrace Library	Grand Terrace, CA	-	86	-
30 Jul 01	30 Jul 01	Grand Terrace Library	Grand Terrace, CA	-	100	-
30 Jul 01	30 Jul 01	Summer Camp	Stonybrook, NY	-	42	-
31 Jul 01	31 Jul 01	Challenger Elementary School	Huntsville, AL	-	1,000	-
31 Jul 01	31 Jul 01	Coca-Cola Space Science Center	Columbus, GA	-	-	-
31 Jul 01	31 Jul 01	Li'l Rascals Academy	Sunrise, FL	-	75	-
01 Aug 01	01 Aug 01	Espanola Public Library	Espanola, NM	-	-	-
01 Aug 01	15 Aug 01	Grout Museum of History and Science	Waterloo, IA	-	3,400	-
01 Aug 01	01 Aug 01	Hayden Planetarium	New York, NY	-	-	-
01 Aug 01	01 Aug 01	La Conner Retirement Inn	La Conner, WA	-	-	-
01 Aug 01	01 Aug 01	La Joya Independent School District	La Joya, TX	-	35	-
03 Aug 01	03 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
04 Aug 01	04 Aug 01	Mancelona Village Park (Palmer Park)	Mancelona, MI	-	55	-
04 Aug 01	04 Aug 01	San Bernardino County Museum	Redlands, CA	-	100	-
04 Aug 01	04 Aug 01	U.S. Space and Rocket Center	Huntsville, AL	-	-	-
06 Aug 01	07 Aug 01	Curtis Middle School	San Bernardino, CA	-	120	-
06 Aug 01	06 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	-
06 Aug 01	01 Oct 01	Princeton Channel 30	Princeton, NJ	-	6,800	-
07 Aug 01	07 Aug 01	Science Museum of Minnesota	St. Paul, MN	-	-	-
08 Aug 01	08 Aug 01	Bates College	Lewiston, ME	-	-	-

08 Aug 01	08 Aug 01	Bowie Public Library	Bowie, MD	-	150	-
08 Aug 01	08 Aug 01	Brownsville City Library	Brownsville, TX	-	-	-
08 Aug 01	08 Aug 01	Chabot Space and Science Center	Oakland, CA	-	4	-
08 Aug 01	08 Aug 01	Cranberrytree Restaurant	Mount Vernon, WA	-	-	-
08 Aug 01	08 Aug 01	Gottchaunks	Redding, CA	-	300	-
08 Aug 01	08 Aug 01	Jetty Park	Cocoa Beach, FL	-	2,500	-
08 Aug 01	08 Aug 01	Northeastern University	Chicago, IL	-	39	-
08 Aug 01	08 Aug 01	Schreder Planetarium & Science Learning Center	Redding, CA	-	64	-
08 Aug 01	08 Aug 01	Scottsdale Community College	Scottsdale, AZ	-	75	-
08 Aug 01	08 Aug 01	Scottsdale Community College	Scottsdale, AZ	-	100	-
09 Aug 01	09 Aug 01	Fayetteville Elementary School	Fayetteville, NY	-	-	-
09 Aug 01	09 Aug 01	Hilton Oceanfront Hotel	Cocoa Beach, FL	-	100	-
10 Aug 01	12 Aug 01	Olympic Park Institute	Port Angeles, WA	-	10	-
11 Aug 01	11 Aug 01	Imerman Park	Saginaw Township, MI	-	450	-
11 Aug 01	12 Aug 01	Southern Park Mall	Boardman, OH	-	40	-
14 Aug 01	14 Aug 01	Boeing Company	Everett, WA	-	-	-
15 Aug 01	15 Aug 01	Benavides Elementary School	Brownsville, TX	-	-	-
15 Aug 01	09 Sep 01	Constellation Aerospace Newsletter	Huntsville, AL	-	1,300	-
15 Aug 01	16 Aug 01	Tri County Fair	Altamont, NY	-	550	-
17 Aug 01	17 Aug 01	Chabot Space and Science Center	Oakland, CA	-	35	-
18 Aug 01	18 Aug 01	Bryce Canyon National Park	Bruce Canyon, UT	-	440	-
18 Aug 01	18 Aug 01	Falls of the Ohio State Park	Clarksville, IN	-	32	-
18 Aug 01	18 Aug 01	North Carolina Museum of Life and Science	Durham, NC	-	40	-
18 Aug 01	19 Aug 01	Palomar Mountain Observatory Campground	Palomar Mountain, CA	-	195	-
18 Aug 01	18 Aug 01	Project Astro Workshop	La Jolla, CA	-	-	-
18 Aug 01	18 Aug 01	Redlands University	Redlands, CA	-	200	-
18 Aug 01	18 Aug 01	University of Redlands	Redlands, CA	-	200	-
20 Aug 01	20 Aug 01	Skokie Public Library	Chicago, IL	-	50	-
20 Aug 01	20 Aug 01	Skokie Public Library	Skokie, IL	-	100	-
20 Aug 01	24 Aug 01	Vinton Elementary School	Lafayette, IN	-	25	-
22 Aug 01	07 Dec 01	Astronomy 1 (a college course in astronomy)	Abington, PA	-	189	-
22 Aug 01	22 Aug 01	NASA Ames Research Center	Moffett Field, CA	-	30	-
22 Aug 01	22 Aug 01	Purdue University	West Lafayette, IN	-	25	-
23 Aug 01	23 Aug 01	Brownsville City Library	Brownsville, TX	-	15	-
24 Aug 01	24 Aug 01	Goddard Planetarium	Roswell, NM	-	46	-
24 Aug 01	24 Aug 01	Pinellas Science Center	St. Petersburg, FL	-	-	-
24 Aug 01	24 Aug 01	YMCA of the Rockies	Estes Park, CO	-	55	-
25 Aug 01	25 Aug 01	Albuquerque Tribune	Albuquerque, NM	-	-	-
25 Aug 01	25 Aug 01	Lockwood Park Observatory	Rockford, IL	-	45	-
25 Aug 01	25 Aug 01	Public Park	Goshen, IN	-	122	-
28 Aug 01	30 Aug 01	Austin High School	El Paso, TX	-	-	-
29 Aug 01	29 Aug 01	Hills Farm Orchard	South Boston, VA	-	-	-
30 Aug 01	30 Aug 01	Bowie Blade-News Newspaper	Bowie, MD	-	35,000	-
31 Aug 01	31 Aug 01	Mahoning County Fairgrounds	Canfield, OH	-	15	-
31 Aug 01	02 Sep 01	Philadelphia Convention Center	Philadelphia, PA	-	100	-
31 Aug 01	31 Aug 01	Wilderness Center Astronomy Club	Wilmot, OH	-	-	-
01 Sep 01	02 Sep 01	Artsplash	Sioux City, IA	-	-	-
01 Sep 01	01 Sep 01	Cherry Creek State Park	Denver, CO	-	30	-
01 Sep 01	01 Sep 01	Durham Museum of Life and Science	Durham, NC	-	150	-
01 Sep 01	01 Jun 02	Maureen Joy Charter School	Durham, NC	-	150	-
06 Sep 01	10 Sep 01	Austin High School	El Paso, TX	-	140	-
06 Sep 01	06 Sep 01	Calusa Nature Center & Planetarium	Fort Myers, FL	-	35	-
06 Sep 01	06 Sep 01	Lockwood Park Observatory	Rockford, IL	-	66	-
07 Sep 01	07 Sep 01	Casa de Amparo	Oceanside, CA	-	28	-
07 Sep 01	07 Sep 01	McCormick Observatory	Charlottesville, VA	-	40	-
08 Sep 01	10 Sep 01	Goddard Planetarium	Roswell, NM	-	26	-

09 Sep 01	09 Sep 01	Manzanita Elementary School	Grants Pass, OR	-	160	-
09 Sep 01	05 May 02	Palisade High School	Palisade, CO	-	40	-
09 Sep 01	09 Sep 01	University of Nebraska at Omaha	Omaha, NE	-	82	-
10 Sep 01	10 Sep 01	Lower Pines Campground	Yosemite Valley, CA	-	8	-
12 Sep 01	12 Sep 01	New Mexico State University-Carlsbad	Carlsbad, NM	-	9	-
12 Sep 01	12 Sep 01	Scottsdale Community College	Scottsdale, AZ	-	175	-
13 Sep 01	13 Sep 01	Cascade Natural Gas Co.	Bellingham, WA	-	-	-
14 Sep 01	14 Sep 01	Black Forest Star Party	Potter County, PA	-	380	-
14 Sep 01	14 Sep 01	Fleming Middle School	Grants Pass, OR	-	125	-
15 Sep 01	15 Sep 01	Bryce Canyon National Park	Bryce Canyon, UT	-	400	-
17 Sep 01	17 Sep 01		Reno, NV	-	28	-
17 Sep 01	17 Sep 01	Morrow Observatory	Bedford, IN	-	32	-
17 Sep 01	17 Sep 01	University of Colorado	Boulder, CO	-	80	-
18 Sep 01	18 Sep 01	Easton CT Preschool	Easton, CT	-	-	-
19 Sep 01	19 Sep 01	Randy's Pier 61	Anacortes, WA	-	-	-
20 Sep 01	25 Sep 01	Babb Middle School	Forest Park, GA	-	-	-
20 Sep 01	20 Sep 01	San Leandro Main Library	San Leandro, CA	-	35	-
21 Sep 01	21 Sep 01	Clackamas Community College	Oregon City, OR	-	50	-
21 Sep 01	21 Sep 01	Georgia Southern University	Statesboro, GA	-	101	-
21 Sep 01	21 Sep 01	McCormick Observatory	Charlottesville, VA	-	40	-
21 Sep 01	21 Sep 01	University of Redlands	Redlands, CA	-	42	-
22 Sep 01	22 Sep 01	Imaginarium	Fort Myers, FL	-	250	-
22 Sep 01	22 Sep 01	NASA Ames Research Center	Moffett Field, CA	-	-	-
24 Sep 01	24 Sep 01	Ekorn Beach Fire Station	Laurens, SC	-	16	-
25 Sep 01	25 Sep 01	Florida Gulf Coast University	Ft. Myers, FL	-	30	-
25 Sep 01	26 Sep 01	Georgia Southern University	Statesboro, GA	-	-	-
25 Sep 01	25 Sep 01	Rydal Park Retirement Home	Rydal, PA	-	180	-
25 Sep 01	25 Sep 01	San Andres Elementary School	Andrews, TX	-	105	-
26 Sep 01	26 Sep 01	Norwich Free Academy Television Station	Norwich, CT	-	-	-
27 Sep 01	27 Sep 01	Buchanan School	Los Angeles, CA	-	-	-
27 Sep 01	29 Sep 01	Kalkaska County Public Library	Kalkaska, MI	-	100	-
27 Sep 01	27 Sep 01	Lincoln Park Recreational Center	Los Angeles, CA	-	-	-
28 Sep 01	28 Sep 01	Arizona State University	Tempe, AZ	-	200	-
28 Sep 01	28 Sep 01	Floyd Central High School	Floyds Knobs, IN	-	30	-
28 Sep 01	28 Sep 01	Floyd Central High School	Floyds Knobs, IN	-	75	-
28 Sep 01	28 Sep 01	Martin Elementary School	Manchester, CT	-	42	-
28 Sep 01	28 Sep 01	Maryville College	Maryville, TN	-	50	-
28 Sep 01	28 Sep 01	Northcountry Planetarium	Plattsburgh, NY	-	29	-
28 Sep 01	28 Sep 01	Rose Hills Recreation Center	Los Angeles, CA	-	-	-
29 Sep 01	29 Sep 01	Maryville College	Maryville, TN	-	75	-
29 Sep 01	29 Sep 01	Oxnard College	Oxnard, CA	-	150	-
30 Sep 01	30 Sep 02	University of North Texas	Denton, TX	-	24,000	-
		Brookwood Baptist Church	Birmingham, AL	-	30	-
		Southern Research Institute	Birmingham, AL	-	-	-
		Wright Patterson Air Force Base Educational Outreach Office	WPAFB, OH	-	-	-

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#### Solar-B Focal Plane Web site

Theme(s): SEC

Msn/Prgm: Solar-B

Description: The Solar-B Focal Plane Package Web site provided by the Lockheed E/PO team as part of the Chabot Space and Science Center Web site provides information on the Sun, the Sun-Earth Connection, Solar-B, and E/PO activities/programs at Chabot.

Lead: Mr. Benjamin Burress, Chabot Space and Science Center, Oakland, CA 94619

E-mail: [bburress@chabotspace.org](mailto:bburress@chabotspace.org). Phone: 510-336-7308.

Primary URL: <http://www.chabotspace.org/vsc/exhibits/solarb/default.asp>

Scientist(s): Dr. Gibor Basri

University of California, Berkeley

Berkeley, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
10 Oct 00	09 Sep 01	Chabot Space and Science Center	Oakland, CA	-	-	1,990

## Space Day 2001 at Lunar and Planetary Institute

Theme(s): SEU, SSE

Msn/Prgm: LPI B/F

Description: Annual celebration of Space Day at LPI.

Lead: Dr. Kathleen Johnson, Lunar and Planetary Institute, Houston, TX 77058-1113

E-mail: [johnson@lpi.usra.edu](mailto:johnson@lpi.usra.edu). Phone: 281-244-2014.

Scientist(s):	Dr. Carlton Allen	NASA Johnson Space Center	Houston, TX
	Dr. Joe Hahn	Lunar and Planetary Institute	Houston, TX
	Dr. Paul Schenk	Lunar and Planetary Institute	Houston, TX
	Dr. Paul Spudis	Lunar and Planetary Institute	Houston, TX
	Dr. Allan Treiman	Lunar and Planetary Institute	Houston, TX

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
03 May 01	03 May 01	K.E. Little Elementary	Baycliff, TX	950	-	-

## Space Day 2001 at Penn State

Theme(s): ASO

Msn/Prgm: NAI

Description: This annual one-day event, sponsored by the Pennsylvania Space Grant Consortium, is designed to showcase the exciting space-related research being carried out at Penn State. We displayed an overview of the research goals of the Penn State Astrobiology Research Center and distributed informational literature. Several faculty, postdoctoral students, and graduate students exhibited posters describing their astrobiology research: Dr. Jim Kasting, Dr. Lee Kump, Dr. Bob Minard, Dr. Chris House, Dr. Peter Sheridan, Dr. Vanya Miteva, Deneysel Churchill, Jamie Blair, Maria Venturi, Laura Poling, Jen Eigenbrode, Matt Hurtgen, Pushker Kharecha, Kosei Yamaguchi, and Yumiko Watanabe. Two teachers from the 2000 Teacher Workshop demonstrated astrobiology-related, hands-on activities. We conducted drawings to distribute educator kits that included the Educator Guides "Astrobiology in Your Classroom: Life on Earth . . . and Elsewhere?" and "Astrobiology: Studying the Origin, Evolution, Distribution;" Research Penn State publication "Astrobiology: The Search for Life in the Universe;" and brochures/flyers about NASA Online Educational Resources, How to Access Information on NASA's Education Program, Materials, and Services; NASA Central Operation of Resources for Education; Space Science Education Resource Directory; Pennsylvania Space Grant Consortium; Penn State Workshops for Science Teachers (one of which is Astrobiology).

Lead: Dr. Angela Phelps, Pennsylvania State University, State College, PA 16803.

## Space Place Contributions to ITEA's "The Technology Teacher" Magazine

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: Keck, DS-1, ST-5

Description: Eight times a year, Diane Fisher submits articles to "The Technology Teacher" magazine. Each article refers to a particular mission and is published under the Space Place header. Ms. Fisher presents complicated science concepts in simple terms that children can understand. Each publication reaches an estimated 8,000 teachers and their students (possibly 224,000 children). Each article is also put up on ITEA's Web site, which reaches an even wider audience. The exact number is impossible to calculate but is quite easily in the thousands.

Lead: Ms. Nancy Leon, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Nancy.J.Leon@jpl.nasa.gov](mailto:Nancy.J.Leon@jpl.nasa.gov). Phone: 818-354-1067.Primary URL: <http://spaceplace.jpl.nasa.gov>2nd URL: <http://www.iteawww.org>

Scientist(s):	Dr. Marc Rayman	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Richard Shope III	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	International Technology Education Association (ITEA)		Reston, VA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	01 Oct 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-
01 Nov 00	01 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-
01 Dec 00	01 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-
01 Feb 01	01 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-
01 Mar 01	01 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-
01 Apr 01	01 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-
01 May 01	01 Jun 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-
01 Sep 01	01 Sep 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	8,000	-

## Space Place Newspaper Contributions

Theme(s): SEC, SEU, SSE

Msn/Prgm: Galileo, Voyager, DS-1, DSMS, ST-5

Description: Every month, Space Place provides articles for the "Kids' Reading Room" in five newspapers around the country. The articles cover technology, missions, astronauts' food, and much, much more. The purpose of these articles is to educate children in small manageable chunks. The articles always end with information on activities and a link to the Space Place Web site.

Lead: Ms. Nancy Leon, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Nancy.J.Leon@jpl.nasa.gov](mailto:Nancy.J.Leon@jpl.nasa.gov). Phone: 818-354-1067.Primary URL: <http://spaceplace.jpl.nasa.gov>

Scientist(s):	Dr. Marc Rayman	NASA Jet Propulsion Laboratory	Pasadena, CA
Partner(s):	Columbus Dispatch		Columbus, OH
	Dallas/Ft. Worth Star Telegram		Fort Worth, TX
	Denver Post		Denver, CO
	Hartford Courant		Hartford, CT
	Los Angeles Times		Los Angeles, CA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	01 Oct 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
01 Nov 00	01 Nov 00	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
01 Jan 01	01 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
24 Jan 01	24 Jan 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
01 Feb 01	01 Feb 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
01 Mar 01	01 Mar 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
01 Apr 01	01 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
30 May 01	30 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
01 Jul 01	01 Jul 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-
01 Aug 01	01 Aug 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	2,304,000	-

## Space Place Web Site

Theme(s): SEC, SEU, SSE

Msn/Prgm: HST, SIM, Keck, Cassini/Huygens Probe, Galileo, Voyager, DS-1, CXO, LISA, ST-5, ST-3

Description: The Space Place Web site is located at <http://spaceplace.jpl.nasa.gov>. This dynamic and colorful site offers computer and real-world interactive experiences and fun facts for children and adults. For example, Web site visitors can build a balloon-powered planetary rover model or a beautiful mobile of different types of galaxies. They can play an online picture memory game or work an online crossword puzzle. The Space Place is supported by the New Millennium Program. NMP not only includes ST5 and DS1, but also Earth Observing 1 and Earth Observing 3. Also represented on the Space Place Web site are the following missions: ASTER, Cloudsat, Comet Nucleus Sample Return, Deep Space Network, E-Nose, Fundamental Physics Program, Galaxy Evolution Explorer, Helios Prototype Airplane, Mars Exploration Program, MISR, MUSES/CN, SRTM, Solar System Exploration, Space Program Spinoffs, SVLBI, TOPEX/Poseidon, Urbie Tactical Mobile Robot, Wide Field and Planetary Camera 2, and X2000.

Lead: Ms. Nancy Leon, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [Nancy.J.Leon@jpl.nasa.gov](mailto:Nancy.J.Leon@jpl.nasa.gov). Phone: 818-354-1067.

Primary URL: <http://spaceplace.jpl.nasa.gov>

2nd URL: <http://spaceplace.nasa.gov>

Scientist(s): Dr. Marc Rayman NASA Jet Propulsion Laboratory Pasadena, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
16 Oct 00	15 Oct 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	-	500,414

Space Telescope Science Institute: Speakers Bureau

Theme(s): ASO

Msn/Prgm: HST

Lead: Mr. Ian Griffin, Space Telescope Science Institute, Baltimore, MD 21218

E-mail: [griffin@stsci.edu](mailto:griffin@stsci.edu). Phone: 410-338-4394.

Scientist(s): Dr. Megan Donahue Space Telescope Science Institute Baltimore, MD  
 Ms. Helen Hart Space Telescope Science Institute Baltimore, MD  
 Dr. Massimo Stiavelli Space Telescope Science Institute Baltimore, MD  
 Dr. Alex Storrs Towson University Towson, MD  
 Dr. Mark Voit Space Telescope Science Institute Baltimore, MD  
 Dr. Nolan Walborn Space Telescope Science Institute Baltimore, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
30 Oct 00	30 Oct 00	Catonsville Elementary School	Catonsville, MD	31	-	-
04 Nov 00	04 Nov 00	National Capital Astronomers Speakers Series	Washington, DC	-	30	-
11 Feb 01	11 Feb 01	National Space Society/DC-L5 Chapter	Falls Church, VA	-	50	-
01 Mar 01	01 Mar 01	Victory Villa Senior Center	Middle River, MD	-	35	-
09 Mar 01	09 Mar 01	Central Alleghany Astronomy Club	Alleghany County, MD	-	75	-
13 Mar 01	13 Mar 01	Anne Arundel County Public Schools	Anne Arundel County, MD	-	30	-
12 Apr 01	12 Apr 01	Broadmead Retirement Center	Baltimore, MD	-	-	-
19 Apr 01	19 Apr 01	Towson University	Towson, MD	30	-	-
06 May 01	06 May 01	Center for Talented Youth at Johns Hopkins University	Baltimore, MD	-	-	-
18 May 01	18 May 01	Harford County Astronomy Club	Harford County, MD	-	30	-
31 May 01	31 May 01	Woodlawn High School	Baltimore County, MD	31	-	-
01 Jun 01	01 Jun 01	Woodhome Elementary School	Baltimore, MD	61	-	-
20 Jun 01	20 Jun 01	Catholic High School	Baltimore, MD	20	-	-
27 Jun 01	27 Jun 01	Chabot Space and Science Center	Oakland, CA	-	-	-
20 Jul 01	20 Jul 01	Maryland Science Center	Baltimore, MD	-	300	-

Stardust Conference Participation

Theme(s): SSE

Msn/Prgm: Stardust

Scientist(s): Dr. Jacklyn Green NASA Jet Propulsion Laboratory Pasadena, CA  
 Mr. Ray Newburn NASA Jet Propulsion Laboratory Pasadena, CA

Stardust Media

Msn/Prgm: Stardust

Lead: Ms. Aimee Whalen, NASA Jet Propulsion Laboratory, Pasadena, CA 91109.

Scientist(s): Dr. Donald Brownlee University of Washington, Bothell Bothell, WA  
 Mr. Thomas Duxbury NASA Jet Propulsion Laboratory Pasadena, CA  
 Mr. Ray Newburn NASA Jet Propulsion Laboratory Pasadena, CA

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	01 Jan 01	BBC Discovery Channel/Soap Box Productions	West Vancouver, British Columbia	-	-	-

01 Feb 01	01 Feb 01	Learning Channel		-	-	-
18 Apr 01	18 Apr 01	Discovery Channel (US)/Film Oasis	Hollywood, CA	-	-	-
05 Sep 01	05 Sep 01	National Geographic		-	-	-

## STEREO Mission Lectures and Hands-On Application

Theme(s): SEC

Msn/Prgm: STP, STEREO

Description: Solar Terrestrial Relations Observatory (STEREO) scientists participate in lecture series and hands-on activities to increase the understanding of the science for the general public and professional groups. The lectures are in support of universities, planetariums, museums, and other organizations that request solar science as part of a program.

Lead: Dr. Antoinette Galvin, University of New Hampshire, Durham, NH 03824  
E-mail: [toni.galvin@unh.edu](mailto:toni.galvin@unh.edu). Phone: 603-862-3511.

Primary URL: <http://stp.gsfc.nasa.gov/missions/stereo/stereo/htm>

Scientist(s):	Dr. Nahide Craig	University of California, Berkeley	Berkeley, CA
	Dr. Antoinette (Toni) Galvin	University of New Hampshire	Durham, NH
	Dr. Yan Li	University of California, Berkeley	Berkeley, CA
	Dr. Eberhard Moebius	University of New Hampshire	Durham, NH

Partner(s):	NASA Goddard Space Flight Center	Greenbelt, MD
	University of California, Berkeley	Berkeley, CA

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
11 Nov 00	11 Nov 00	Christa McAuliffe Planetarium	Concord, NH	-	30	-
15 Nov 00	15 Nov 00	University of New Hampshire	Durham, NH	60	-	-
15 Aug 01	15 Aug 01	Lawrence Hall of Science	Berkeley, CA	71	-	-

## STP Student Challenges and Competitions

Theme(s): SEC

Msn/Prgm: STP

Description: The Solar Terrestrial Probes Program office sponsors various competitions to entice artistically talented students to learn more about solar science through the creation of posters depicting scientific themes. This year, the competition was advertised via the Web and involved entries from numerous K-12 students.

Lead: Ms. Barbara Lambert, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [blambert@hst.nasa.gov](mailto:blambert@hst.nasa.gov). Phone: 301-286-1275.

Scientist(s):	Mr. Gilberto Colon	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Barbara Lambert	NASA Goddard Space Flight Center	Greenbelt, MD

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	09 Aug 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	100	-

## Sun-Earth Day

Theme(s): SEC

Msn/Prgm: Ulysses, ACE, FAST, HESSI, IMAGE, TRACE, Cluster II, SOHO, STP, STEREO, TIMED, Yohkoh, SEC Forum

Description: The Sun-Earth Connection Education Forum (SECEF), a partnership between NASA Goddard Space Flight Center and the University of California at Berkeley, provides Sun-Earth Day as an annual national event. Through this annual event, opportunities to share the science of the Sun with educators, students, and the general public are provided. Webcast technology is used to bring the science into the classroom and to the general public in real time. Support materials are available through the NASA Central Operation of Resources for Educators (CORE), NASA Centers, and NASA Educator Resource Centers (ERC). The theme is new each year, as are the featured activities. Activities include telescopes on the Web, Webcasts, Web chats, teacher training workshops, museum activities, and sharing data through the featured activities. Scientists are involved through classroom and museum presentations, answering questions during the Webcast and Web chats.

Lead: Ms. Elaine Lewis, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [lewis@mail630.gsfc.nasa.gov](mailto:lewis@mail630.gsfc.nasa.gov). Phone: 301-286-3337.

Primary URL: [http://sunearth.gsfc.nasa.gov/SECEF\\_SunEarthDay/](http://sunearth.gsfc.nasa.gov/SECEF_SunEarthDay/)

Scientist(s):	Dr. Claudia Alexander	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. David Alexander	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA
	Ms. Andrea Angrum	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. John Beck	Stanford University	Stanford, CA
	Dr. Jennifer Birriel	Carleton College	Northfield, MN
	Dr. Donald Brautigam	Air Force Research Laboratory/VSBXR	Hanscom AFB, MA
	Dr. Pal Brekke	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Michael Carlowicz	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Nahide Craig	University of California, Berkeley	Berkeley, CA
	Dr. Carol Crannell	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Brian Dennis	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Bart DePontieu	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA
	Dr. Samuel Dupree	Lockheed Martin Management and Data Systems	Philadelphia, PA
	Dr. Michael Fauerbach	Florida Gulf Coast University	Ft. Myers, FL
	Dr. Bernard Fleck	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Nicola Fox	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Dave Gilhousen	NASA Stennis Space Center	Stennis SC, MS
	Dr. Charles Goodrich	University of Maryland	College Park, MD
	Dr. Isabel Hawkins	University of California, Berkeley	Berkeley, CA
	Mr. Steele Hill	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. George Ho	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Robert Hoffman	NASA Goddard Space Flight Center	Greenbelt, MD
	Mr. Nathan James	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Abebe Kebede	North Carolina A&T State University	Greensboro, NC
	Dr. Yuan-Kuen Ko	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Therese Kucera	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Barbara Lambert	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Marilyn Lindstrom	NASA Johnson Space Center	Houston, TX
	Dr. Robert Luke	NASA Stennis Space Center	Stennis SC, MS
	Dr. Will Marchant	University of California, Berkeley	Berkeley, CA
	Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Vessie Means	NASA Stennis Space Center	Stennis SC, MS
	Dr. Donald Michels	Naval Research Laboratory	Washington, DC
	Dr. Keith Mitchell	Lockheed Martin Advanced Technology Center	Palo Alto, CA
	Dr. Eberhard Moebius	University of New Hampshire	Durham, NH
	Dr. Thomas Moore	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. David Morabito	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Paul Morgan	Northern Arizona University	Flagstaff, AZ
	Dr. Penny Morris	University of Houston-Downtown	Houston, TX
	Dr. Paul Mortfield	Stanford University	Stanford, CA
	Dr. Amy Muller	NASA Stennis Space Center	Stennis SC, MS
	Ms. Carolyn Ng	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Sten Odenwald	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Carmen Pantoja	University of Puerto Rico	San Juan, Puerto Rico
	Dr. Art Poland	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Joachim Raeder	University of California, Los Angeles	Los Angeles, CA
	Dr. Sherrill Reynolds	NASA Stennis Space Center	Stennis SC, MS
	Dr. Emilio Rodriguez	University of Puerto Rico	San Juan, Puerto Rico
	Dr. Greg Schultz	University of California, Berkeley	Berkeley, CA
	Mr. David Seidel	NASA Jet Propulsion Laboratory	Pasadena, CA
	Mr. Richard Shope III	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Kristine Sigsbee	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Peter Smith	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. Harlan Spence	Boston University	Boston, MA
	Dr. Leonard Strachan	Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
	Dr. A Tan	Alabama A&M University	Normal, AL
	Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD

Partner(s):	Dr. Richard Vondrak	NASA Goddard Space Flight Center	Greenbelt, MD
	Ms. Charlotte Weiss	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. James Weygand	University of California, Los Angeles	Los Angeles, CA
	Dr. Kelly Witherspoon	NASA Stennis Space Center	Stennis SC, MS
	Dr. Martin Wuest	Southwest Research Institute	San Antonio, TX
	Dr. E. Zita	Evergreen State University	Olympia, WA
	Chabot Space and Science Center		Oakland, CA
	City College of New York		New York, NY
	Harvard-Smithsonian Center for Astrophysics		Cambridge, MA
	Houston Museum of Natural Science		Houston, TX
	Maryland Science Center		Baltimore, MD
	NASA Ames Research Center		Moffett Field, CA
	NASA Goddard Space Flight Center		Greenbelt, MD
	NASA Jet Propulsion Laboratory		Pasadena, CA
	NASA Johnson Space Center		Houston, TX
	NASA Kennedy Space Center		Kennedy SC, FL
	NASA Langley Research Center		Hampton, VA
	NASA Marshall Space Flight Center		Huntsville, AL
	Rhode Island College ERC		Providence, RI
	Stanford University		Stanford, CA
University of Pittsburgh		Pittsburgh, PA	
West Virginia University/NASA Independent Verification and Validation Facility ERC		Farimont, WV	

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
10 Mar 01	10 Mar 01	NASA Goddard Space Flight Center	Greenbelt, MD	9	-	-
13 Mar 01	13 Mar 01	NASA Goddard Space Flight Center	Greenbelt, MD	35	-	-
17 Mar 01	17 Mar 01	NASA Goddard Space Flight Center	Greenbelt, MD	15	-	-
16 Apr 01	27 Apr 01	NASA Stennis Space Center	Stennis SC, MS	2,031	-	-
19 Apr 01	19 Apr 01	Ripplingwoods Elementary School	Glen Burnie, MD	10	-	-
20 Apr 01	28 Apr 01	Carleton College	Northfield, MN	129	100	-
20 Apr 01	28 Apr 01	Discovery Channel (US)/Film Oasis	Hollywood, CA	-	100,000	-
20 Apr 01	28 Apr 01	NASA Ames Research Center	Moffett Field, CA	-	300	-
20 Apr 01	28 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	5,000	-
20 Apr 01	28 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	-	67,500	-
21 Apr 01	21 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	642	-	-
23 Apr 01	28 Apr 01	NASA Langley Research Center	Hampton, VA	23	-	-
27 Apr 01	28 Apr 01	Bridgewater State College	Bridgewater, MA	418	200	-
27 Apr 01	27 Apr 01	Chabot Space and Science Center	Oakland, CA	31	-	-
27 Apr 01	27 Apr 01	Chabot Space and Science Center	Oakland, CA	50	-	-
27 Apr 01	27 Apr 01	Delaware Aerospace Center	Wilmington, DE	52	-	-
27 Apr 01	27 Apr 01	Eastern Connecticut State University	Willimantic, CT	101	-	-
27 Apr 01	27 Apr 01	Georgian Court College	Lakewood, NJ	8	-	-
27 Apr 01	27 Apr 01	Hanson Planetarium	Salt Lake City, UT	-	100	-
27 Apr 01	27 Apr 01	Horizon Day School	Falls Church, VA	23	-	-
27 Apr 01	27 Apr 01	NASA Ames Research Center	Moffett Field, CA	117	10,160	-
27 Apr 01	28 Apr 01	NASA Dryden Flight Research Center	Edwards, CA	-	525	-
27 Apr 01	27 Apr 01	NASA Glenn Research Center	Cleveland, OH	104	-	-
27 Apr 01	27 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	104	-	-
27 Apr 01	27 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	157	-	200,000
27 Apr 01	28 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	500	-
27 Apr 01	28 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	323	-	-
27 Apr 01	28 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	1,500	-	-
27 Apr 01	27 Apr 01	NASA Kennedy Space Center	Kennedy SC, FL	104	-	-
27 Apr 01	28 Apr 01	NASA Kennedy Space Center	Kennedy SC, FL	51	-	-
27 Apr 01	27 Apr 01	NASA Marshall Space Flight Center	Huntsville, AL	-	355	-
27 Apr 01	27 Apr 01	NASA Stennis Space Center	Stennis SC, MS	-	152	-

27 Apr 01	28 Apr 01	Rhode Island College ERC	Providence, RI	105	-	-
27 Apr 01	28 Apr 01	University of Idaho	Moscow, ID	-	100	-
27 Apr 01	27 Apr 01	University of Pittsburgh	Pittsburgh, PA	150	-	-
28 Apr 01	28 Apr 01	Astronomical League	Las Cruces, NM	-	40,000	-
28 Apr 01	28 Apr 01	Louisiana State University	Baton Rouge, LA	-	200	-
28 Apr 01	28 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	69	-	-
28 Apr 01	28 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	512	-	-
28 Apr 01	28 Apr 01	NASA Johnson Space Center	Houston, TX	-	3,046	-
28 Apr 01	28 Apr 01	Smithsonian National Air and Space Museum	Washington, DC	29	-	-
30 Apr 01	30 Apr 01	NASA Goddard Space Flight Center	Greenbelt, MD	136	-	-
01 May 01	01 May 01	NASA Goddard Space Flight Center	Greenbelt, MD	19	-	-
05 May 01	05 May 01	NASA Jet Propulsion Laboratory	Pasadena, CA	-	100	-

#### Swift Public Outreach Activities

Theme(s): SEU

Msn/Prgm: Swift

Description: The Swift mission supports outreach to the general public and the informal education communities through participation in festivals, television shows, and radio programs.

Lead: Dr. Laura Whitlock, Sonoma State University, Rohnert Park, CA 94928. Phone: 707-664-2256.

Primary URL: <http://witn.psu.edu/>

Scientist(s):	Dr. Lynn Cominsky	Sonoma State University	Rohnert Park, CA
	Dr. Eric Feigelson	Pennsylvania State University	State College, PA
	Dr. Joanne Hill	Pennsylvania State University	State College, PA
	Dr. John Nousek	Pennsylvania State University	State College, PA
	Dr. Laura Whitlock	Sonoma State University	Rohnert Park, CA

#### Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Jan 01	30 Apr 01	Sonoma State University	Rohnert Park, CA	-	-	5,000
19 Jan 01	19 Jan 01	WPSX-Penn State Public Broadcasting	University Park, PA	-	5,700,000	-
21 Jan 01	21 Jan 01	KQED-TV	San Francisco, CA	-	100,000	-
27 Apr 01	27 Apr 01	WPSX-Penn State Public Broadcasting	University Park, PA	-	5,700,000	-

#### Tours of the Chandra Operations Control Center by MIT Center for Space Research

Theme(s): SEU

Msn/Prgm: CXO

Description: Scientists from the Massachusetts Institute of Technology (MIT) Center for Space Research (CSR) take our visitors on a tour of the Chandra X-ray Observatory (CXO) Operations Control Center (OCC) and show the visitors where scientists and engineers direct the flight and execute the observing plan of Chandra, and where they receive the scientific data from the observatory. During the tour, the visitors learn about the basics of X-ray astronomy and about the latest exciting discoveries made by MIT scientists with data acquired by Chandra. Chandra is the world's most powerful x-ray telescope which allows scientists to study the origin, structure, and evolution of our universe in greater detail than ever before. The science instruments on board are controlled by commands transmitted from the OCC in Cambridge, MA. This is the first time that NASA has allowed a satellite of this class to be controlled from a facility outside one of the NASA Centers. This program is coordinated with SAO personnel of the CXO OCC.

Lead: Dr. Irene Porro, Massachusetts Institute of Technology, Cambridge, MA 02139

E-mail: [iporro@space.mit.edu](mailto:iporro@space.mit.edu). Phone: 617-258-7481.

Primary URL: <http://space.mit.edu/CSR/outreach>

Scientist(s):	Dr. Claude Canizares	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Kathryn Flanagan	Massachusetts Institute of Technology	Cambridge, MA
	Ms. Amy Fredericks	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Mario Jimenez-Garate	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Herman Marshall	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Thomas Pannuti	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Irene Porro	Massachusetts Institute of Technology	Cambridge, MA
	Dr. Peter Young	Massachusetts Institute of Technology	Cambridge, MA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Oct 00	20 Oct 00	Massachusetts Institute of Technology	Cambridge, MA	25	-	-
27 Oct 00	27 Oct 00	Massachusetts Institute of Technology	Cambridge, MA	12	-	-
19 Jan 01	19 Jan 01	Massachusetts Institute of Technology	Cambridge, MA	20	-	-
08 Feb 01	08 Feb 01	Massachusetts Institute of Technology	Cambridge, MA	8	-	-
04 Apr 01	04 Apr 01	Massachusetts Institute of Technology	Cambridge, MA	24	-	-
25 Apr 01	25 Apr 01	Massachusetts Institute of Technology	Cambridge, MA	13	-	-
01 Jun 01	01 Jun 01	Massachusetts Institute of Technology	Cambridge, MA	3	-	-
08 Jun 01	08 Jun 01	Massachusetts Institute of Technology	Cambridge, MA	-	-	-
24 Jun 01	24 Jun 01	Massachusetts Institute of Technology	Cambridge, MA	-	-	-
27 Jun 01	27 Jun 01	Massachusetts Institute of Technology	Cambridge, MA	12	-	-
06 Jul 01	06 Jul 01	Massachusetts Institute of Technology	Cambridge, MA	6	-	-
09 Jul 01	09 Jul 01	Massachusetts Institute of Technology	Cambridge, MA	20	-	-
12 Jul 01	12 Jul 01	Massachusetts Institute of Technology	Cambridge, MA	22	-	-
24 Aug 01	24 Aug 01	Massachusetts Institute of Technology	Cambridge, MA	6	-	-
29 Aug 01	29 Aug 01	Massachusetts Institute of Technology	Cambridge, MA	-	-	-

## Tours of the HETE-2 Command and Control Center

Theme(s): SEU

Msn/Prgm: HETE-2

Description: Scientists of the High Energy Transient Explorer (HETE)-2 team take visitors on a tour of the HETE-2 Command and Control Center, where scientists and engineers direct the flight and execute the observing plan of HETE-2 and where they receive the scientific data from the satellite. During the tour, the visitors learn about the basics of gamma-ray astronomy and about the exciting discoveries that Massachusetts Institute of Technology (MIT) scientists are expecting to make with data acquired by HETE-2 (the satellite was launched in October 2000).

Lead: Dr. Kathryn Flanagan, Massachusetts Institute of Technology, Cambridge, MA 02139

E-mail: [kaf@space.mit.edu](mailto:kaf@space.mit.edu). Phone: 617-258-7324.Primary URL: <http://space.mit.edu/HETE>2nd URL: <http://space.mit.edu/CSR/outreach>

Scientist(s): Dr. Irene Porro Massachusetts Institute of Technology Cambridge, MA  
 Dr. Roland Vanderspek Massachusetts Institute of Technology Cambridge, MA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
20 Oct 00	20 Oct 00	Massachusetts Institute of Technology	Cambridge, MA	15	-	-
28 Mar 01	28 Mar 01	Massachusetts Institute of Technology	Cambridge, MA	20	-	-

## Universe in the Park-Wisconsin

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IDEAS

Description: The program established a public outreach effort of hands-on astronomy during the summer months in Wisconsin state parks. Each session consisted of a short, informal talk and presentation showcasing recent discoveries from NASA missions followed by viewing astronomical objects through binoculars and a moderate aperture telescope.

Lead: Dr. Karen Bjorkman, University of Wisconsin-Madison, Madison, WI 53715.

## Von Karman Public Lecture Program (SIRTF)

Theme(s): ASO, SEU, SSE

Msn/Prgm: SIRTF

Description: The Von Karman Public Lectures are a prestigious lecture series based at JPL. Michelle Thaller presented a multimedia tour of the infrared universe, as well as an introduction to NASA's infrared and interferometry missions.

Lead: Dr. Michelle Thaller, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [thaller@ipac.caltech.edu](mailto:thaller@ipac.caltech.edu). Phone: 626-395-8670.

Scientist(s): Dr. Michelle Thaller California Institute of Technology Pasadena, CA

## Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
13 Apr 01	13 Apr 01	NASA Jet Propulsion Laboratory	Pasadena, CA	380	-	1,000
17 Apr 01	17 Apr 01	Pasadena City College	Pasadena, CA	1,265	-	-
02 May 01	02 May 01	Chapman University	Orange, CA	200	-	-
06 May 01	06 May 01	Moorpark High School	Moorpark, CA	165	-	-
		Santa Monica College	Santa Monica, CA	140	-	-

## Window on the Universe

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: Challenger Center, MESSENGER

Description: In 1999, the Challenger Center for Space Science Education launched "Window on the Universe"— an initiative to establish a network of communities committed to sustainable communitywide science, mathematics, and technology education. Funded by grants from NASA's Office of Space Flight and Office of Space Science, "Window on the Universe" uses human space flight and the space sciences as a multidisciplinary (cross-curricular) context, to engage entire communities. The Challenger Center provides diverse national resources. "Window" communities integrate these resources into existing communitywide science, math, and technology educational programming and extend this programming in creative and sustainable new ways. The unique programming resulting from this partnership is meant to reflect the strengths and capabilities of the community. Specifically, the resources provided to a "Window" community are to be used to 1) establish a long-lasting (sustainable) local infrastructure (the Local Team) to carry out "Window" programming proposed by the community, 2) promote communitywide awareness of the proposed programming, and 3) carry out communitywide programming that is ongoing throughout the year and over many years. The core goals of the "Window on the Universe" program are to use human space flight and the space sciences to take entire communities on a journey of exploration by providing students, educators, and families with a window on the universe, the nature of science, and the lives of modern-day explorers; and to provide participants with a conceptual understanding of what we know about Earth's place in space and how we've come to know it, in a manner fully consistent with national science, math, and technology standards and curricular reform efforts.

Lead: Ms. Stacy Smith, Challenger Center for Space Science Education, Alexandria, VA 22314

E-mail: [stacysmith@challenger.org](mailto:stacysmith@challenger.org). Phone: 703-683-9740.Primary URL: <http://www.challenger.org/wotu>

Scientist(s):	Dr. Connie Bertka	American Association for the Advancement of Science (AAAS)	Washington, DC
	Dr. John Blackwood	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. William Blair	Johns Hopkins University	Baltimore, MD
	Dr. Matthew Bobrowsky	Challenger Center for Space Science Education	Alexandria, VA
	Dr. Steve Brody	NASA Office of Space Science	Washington, DC
	Dr. Taft Broome	Howard University	Washington, DC
	Dr. Scott Budzein	Naval Research Laboratory	Washington, DC
	Dr. George Carruthers	Naval Research Laboratory	Washington, DC
	Dr. Geoff Chester	United States Naval Observatory	Washington, DC
	Dr. William Clancey	NASA Ames Research Center	Moffett Field, CA
	Dr. Jim Cline	Retired,	
	Dr. Carol Crannell	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Grace Deming	University of Maryland	College Park, MD
	Dr. Charles Dobson	Howard University	Washington, DC
	Dr. Joseph Dolan	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Deborah Domingue	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Dr. Megan Donahue	Space Telescope Science Institute	Baltimore, MD
	Dr. Rob Eppler	Swales Aerospace	Beltsville, MD
	Dr. Brad Files	NASA Johnson Space Center	Houston, TX
	Dr. Herb Frey	NASA Goddard Space Flight Center	Greenbelt, MD
	Dr. Harold Geller	George Mason University	Fairfax, VA
	Dr. Jeffrey Goldstein	Challenger Center for Space Science Education	Alexandria, VA
	Dr. Kevin Grazier	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Wanda Harding	NASA Office of Human Resources and Education	Washington, DC

Dr. James Harrington	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Ilana Harrus	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Robert Hindsley	United States Naval Observatory	Washington, DC
Dr. Steve Hopkins	American Institute for Aeronautics and Astronautics	Reston, VA
Mr. Nathan James	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Michael Johnson	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Andrew Johnston	Smithsonian National Air and Space Museum	Washington, DC
Dr. Ramona Kessel	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Walter Kiefer	Lunar and Planetary Institute	Houston, TX
Dr. Adam Korona	University of Maryland at Baltimore County	Baltimore, MD
Dr. Robert Kozon	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Sidambi Kumar	Howard University	Washington, DC
Dr. Brooke Lakew	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. David Leisawitz	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Timothy Livengood	Challenger Center for Space Science Education	Alexandria, VA
Mr. Louis Mayo	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. James Momoh	Howard University	Washington, DC
Dr. Marla Moore	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Vernon Morris	Howard University	Washington, DC
Ms. Carolyn Ng	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Adriana Ocampo	NASA Office of Space Science	Washington, DC
Dr. Agnes Pasco Conaty	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Jean-Marc Perelmuter	Challenger Center for Space Science Education	Alexandria, VA
Dr. Art Poland	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Benjamin Reed	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Jason Rhodes	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Nancy Grace Roman	Retired	
Dr. Paul Romani	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Andrew Seacord	Retired	
Dr. Amy Simon-Miller	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Sonya Smith	Howard University	Washington, DC
Dr. Denise Smith	Space Telescope Science Institute	Baltimore, MD
Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD
Dr. Michelle Thaller	California Institute of Technology	Pasadena, CA
Dr. James Thieman	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Jacqueline Townsend	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Tom Troland	University of Kentucky	Lexington, KY
Dr. Robin Vaughan	Johns Hopkins University	Baltimore, MD
Dr. John Wallin	George Mason University	Fairfax, VA
Dr. Pete Wasilewski	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Kim Weaver	NASA Goddard Space Flight Center	Greenbelt, MD
Dr. Harold Williams	Montgomery College	Takoma Park, MD
Dr. Nathaniel Woodrick	Howard University	Washington, DC
Dr. Aileen Yingst	Space Explorers, Inc.	De Pere, WI
Partner(s):	American Association for the Advancement of Science (AAAS)	Washington, DC
	American Astronomical Society (AAS)	Washington, DC
	Challenger Center for Space Science Education	Alexandria, VA
	Gayle Planetarium	Montgomery, AL
	George Mason University	Fairfax, VA
	Johns Hopkins Applied Physics Laboratory	Laurel, MD
	Johns Hopkins University	Baltimore, MD
	Kennedy Space Center Visitor Center	Kennedy SC, FL
	Lewis-Clark College	Lewiston, ID
	Lunar and Planetary Institute	Houston, TX
	Montgomery College	Germantown, MD
	Muncie Community Schools' Planetarium	Muncie, IN

NASA Ames Research Center	Moffett Field, CA
NASA Goddard Space Flight Center	Greenbelt, MD
NASA Jet Propulsion Laboratory	Pasadena, CA
NASA Office of Space Flight	Washington, DC
National Science Foundation	Arlington, VA
Naval Research Laboratory	Washington, DC
Smithsonian National Air and Space Museum	Washington, DC
Space Explorers, Inc.	De Pere, WI
Space Telescope Science Institute	Baltimore, MD
United States Naval Observatory	Washington, DC
University of Arizona	Tucson, AZ
University of California, Berkeley	Berkeley, CA
University of Idaho	Moscow, ID
University of Maryland	College Park, MD
University of Maryland at Baltimore County	Baltimore, MD
University of Virginia	Charlottesville, VA

## Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
		Window Community: Broken Arrow, OK	Broken Arrow, OK	6,116	262,585	-
		Window Community: Moscow, ID	Moscow, ID	8,081	251,195	-
		Window Community: Muncie, IN	Muncie, IN	9,234	65,870	-
		Window Community: Washington, DC	Washington, DC	14,615	502,625	-

## XMM-Newton Exhibit Booth

Theme(s): ASO, SEU

Msn/Prgm: XMM-Newton

Description: An exhibit for XMM-Newton E/PO as a part of the AAS and AAPT meetings in San Diego, January 2001. The goal for the booth was to inform physics teachers about the XMM mission and its E/PO Web site. Electronic demonstrations of the Web site and teacher lesson plans were featured.

Lead: Dr. Ilana Harrus, NASA Goddard Space Flight Center, Greenbelt, MD 20771  
E-mail: [imh@milkyway.gsfc.nasa.gov](mailto:imh@milkyway.gsfc.nasa.gov). Phone: 301-286-9649.

Primary URL: <http://outreach.ucsb.edu/xm/>2nd URL: [http://heasarc.gsfc.nasa.gov/docs/xmm\\_lc/](http://heasarc.gsfc.nasa.gov/docs/xmm_lc/)

Partner(s): NASA Goddard Space Flight Center

Greenbelt, MD

## Yellowstone National Park Interpretive Program

Theme(s): ASO

Msn/Prgm: NAI

Description: The Ames Astrobiology team has been working at Yellowstone National Park and would like to extend the research project into an integrated plan with outreach. Yellowstone National Park has close to three million visitors of all ages experiencing this diverse environment. The NASA Ames Astrobiology team and its NAI lead team partners see the potential for investing their energy in an activity that has a large impact. The National Park organizations are actively engaged in program and project development of educational materials and activities that contribute to education and public understanding of science. Collaborating across the team and with the National Park system provides astrobiology research with the potential to reach audiences of up to three million per year. The Ames Astrobiology team, with Dr. Lynn Rothschild and Dr. David Ward from Montana State, in partnership with Arizona State and Dr. Jack Farmer, plans to bring astrobiology into the Interpretive Research Program at Yellowstone National Park. The Ames Astrobiology team and its partners will support the NASA mission by providing access to NASA information in science, mathematics, technology, engineering, and geography.

Lead: Dr. Lynn Rothschild, NASA Astrobiology Institute, Moffett Field, CA 94035  
E-mail: [lrothschild@mail.arc.nasa.gov](mailto:lrothschild@mail.arc.nasa.gov).

## Yohkoh Public Outreach Project

Theme(s): SEC

Msn/Prgm: Yohkoh  
 Description: Yohkoh Public Outreach Project is a Web-based project that includes a range of activities for students, parents, teachers, and anyone interested in learning more about the Sun.  
 Lead: Dr. David Alexander, Lockheed Martin Solar and Astrophysics Lab, Palo Alto, CA 94304  
 E-mail: [alexander@lmsal.com](mailto:alexander@lmsal.com). Phone: 650-424-2047.  
 Primary URL: <http://solar.physics.montana.edu/YPOP>

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
01 Oct 00	30 Sep 01	Lockheed Martin Solar and Astrophysics Lab	Palo Alto, CA	-	-	2,680,000

## Scientist Involvement

American Astronomical Society/American Association of Physics Teachers Conference

Theme(s): ASO, SEU

Msn/Prgm: OSS/Outreach, ASO Forum, HST, NGST, SIRTF, SOFIA, FUSE, FAME, Navigator, SIM, Keck, TPF, NAI, 2MASS, Constellation-X, GLAST, GP-B, LISA, CATSAT, CHIPS, EUVE, GALEX, HETE-2, MAP, RXTE, SWAS, Swift, HEASARC, FIRST, INTEGRAL, Planck, BeppoSAX, SXG, VSOP, XMM-Newton, PI, ST-3

Description: The American Astronomical Society held a joint meeting with the American Association of Physics Teachers in San Diego, CA, in January 2001. Having this rare opportunity to interact with over 1,200 physics teachers in addition to the 2,000 astronomers who regularly come to the AAS meeting, OSS participated in the conference by having an exhibit that highlighted the strategy of OSS and its education and public outreach program. At this meeting, we also debuted the new OSS Strategic Plan, held a NASA town meeting to provide a status report on the NASA Space Science program, and conducted various educational workshops.

Lead: Mr. Dan Woods, NASA Office of Space Science, Washington, DC 20546  
 E-mail: [dwoods@hq.nasa.gov](mailto:dwoods@hq.nasa.gov). Phone: 202-358-0850.

Primary URL: <http://www.aapt.org/>

Scientist(s):

Dr. Marc Allen	NASA Office of Space Science	Washington, DC
Dr. Alan Bunner	NASA Office of Space Science	Washington, DC
Dr. Phil Crane	NASA Office of Space Science	Washington, DC
Dr. Hashima Hasan	NASA Office of Space Science	Washington, DC
Dr. Paul Hertz	NASA Office of Space Science	Washington, DC
Dr. Lou Kaluzienski	NASA Office of Space Science	Washington, DC
Dr. Anne Kinney	NASA Office of Space Science	Washington, DC
Dr. Don Kniffen	NASA Office of Space Science	Washington, DC
Dr. Jeff Rosendhal	NASA Office of Space Science	Washington, DC
Dr. Phil Sakimoto	NASA Office of Space Science	Washington, DC
Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD
Dr. Edward Weiler	NASA Office of Space Science	Washington, DC

Partner(s):

Harvard-Smithsonian Center for Astrophysics	Cambridge, MA
NASA Ames Research Center	Moffett Field, CA
NASA Goddard Space Flight Center	Greenbelt, MD
NASA Jet Propulsion Laboratory	Pasadena, CA
NASA Marshall Space Flight Center	Huntsville, AL
Space Telescope Science Institute	Baltimore, MD

Event(s):

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
07 Jan 01	11 Jan 01	American Association of Physics Teachers (AAPT) Conference	San Diego, CA	-	1,200	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	-	2,000	-

JSC Outreach to Scientists

Theme(s): ASO, SSE

Msn/Prgm: SRT, NAI, Astromaterials

Description: Encouraging scientists to participate in E/PO activities, both by example and through presentations, is an ongoing activity at NASA Johnson Space Center (JSC). We have made various types of presentations at scien-

tific meetings (exhibits, talks, posters) to promote participation in E/PO. Our key focus is the annual Lunar and Planetary Science Conference, co-sponsored by JSC and the Lunar and Planetary Institute (LPI). This year, we gave a talk on getting funding for E/PO activities at the E/PO workshop for scientists and presented a poster at the E/PO session. We also had an exhibit at the Geological Society of America meetings, gave a talk at the Near Earth Asteroid Sample Return Workshop, and contributed to a poster session at the NASA Astrobiology Institute meeting. We collaborated with the JSC Education Office in planning and presenting five science talks and tours at the NASA Opportunities for Visionary Academics (NOVA) university educators' workshop.

Lead: Dr. Marilyn Lindstrom, NASA Johnson SC, Houston, TX 77058  
E-mail: [marilyn.m.lindstrom1@jsc.nasa.gov](mailto:marilyn.m.lindstrom1@jsc.nasa.gov). Phone: 281-483-5135.

#### Products and Services in Support of Scientist Involvement in Education and Public Outreach

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: ASO Forum, SSE Forum, DePaul B/F, LPI B/F, SERCH B/F, SSI B/F, Navigator

Description: The Space Science Institute (SSI) Broker/Facilitator is creating and widely distributing products and services designed to facilitate and encourage effective scientist involvement in education and public outreach (E/PO) and to address common misconceptions concerning E/PO. Several papers and Web-based resources of practical value to those doing E/PO planning, proposing, and partnering in association with OSS flight projects and research programs are available. These include 1) "The Explanatory Guide to the NASA Office of Space Science E/PO Evaluation Criteria" (Web resource), 2) "Menu of Opportunities for Scientist Involvement in Education (MOSIE)," 3) "Matrix of Profiles of Scientists Involved in Education and Public Outreach" (web-based), 4) "Scientist Involvement in Education and Public Outreach: Making the Case" (30-slide presentation), 5) "The Diversity of Roles for Scientists in K-14 Education and Public Outreach" (paper), 6) "A Framework for Education and Public Outreach Programs Associated with Scientific Research Programs" (paper), 7) "Misconceptions Scientists Often Have About the National Science Education Standards" (paper), 8) "What Are the Similarities Between Scientific Research and Science Education Reform?" (paper), and 9) "So You Want to Make a CD-ROM: Ten Questions to Consider" (paper). These resources are available on the Web at the URL listed below and on a CD-ROM entitled, "Resources for Scientists in Education and Public Outreach," that is distributed at sessions, talks, tutorials, and exhibits at professional conferences, and at other seminars and workshops where there are scientists interested in E/PO partnerships. These resources also support consulting services for programs that are engaging space scientists in E/PO. Examples include the E/PO strategic planning effort at the Laboratory for Atmospheric and Space Physics, the Navigator E/PO planning at JPL, and the scientist outreach efforts in the planetary science community at NASA Ames.

Lead: Dr. Cheryl Lynn Morrow, Space Science Institute, Boulder, CO 80309  
E-mail: [camorrow@colorado.edu](mailto:camorrow@colorado.edu). Phone: 303-492-7321.

Primary URL: <http://www.spacescience.org/Education/ResourcesForScientists/1.html>

Scientist(s):	Dr. Rudolf Danner	NASA Jet Propulsion Laboratory	Pasadena, CA
	Dr. Frank Eparvier	University of Colorado	Boulder, CO
	Dr. Charles McGruder	Western Kentucky University	Bowling Green, KY
	Dr. Cheryl Lynn Morrow	Space Science Institute	Boulder, CO
	Dr. Elizabeth Roettger	DePaul University	Chicago, IL
	Dr. Jose Francisco Salgado	Adler Planetarium and Astronomy Museum	Chicago, IL
	Dr. Terry Teays	Space Telescope Science Institute	Baltimore, MD
	Dr. Grace Wolf-Chase	Adler Planetarium and Astronomy Museum	Chicago, IL
	Dr. Guy Worthey	St. Ambrose University	Davenport, IA
Partner(s):	Biological Sciences Curriculum Study		Colorado Springs, CO
	NASA Ames Research Center		Moffett Field, CA
	NASA Jet Propulsion Laboratory		Pasadena, CA
	Pompea & Associates		Tucson, AZ
	Space Science Institute		Boulder, CO
	University of Colorado		Boulder, CO

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
27 Apr 01	27 Apr 01	University of Colorado	Boulder, CO	15	-	-
		NASA Jet Propulsion Laboratory	Pasadena, CA	15	-	-

## Solar System Exploration Forum Promotion of Scientist Involvement—DPS

Theme(s): SSE

Msn/Prgm: SSE Forum, SERCH B/F, SSI B/F, SEC Forum

Description: About 10 different poster papers were presented by members of the OSS Support Network at the American Astronomical Society/Division for Planetary Sciences (DPS) Meeting in Pasadena, CA, during the week-long conference. An OSS E/PO Support Network booth with Internet access and handouts was adjacent to the conference registration booth. A video depicting DPS scientists involved in E/PO activities was distributed to all participants at NASA Night. Dr. Edward Weiler, NASA Associate Administrator for Space Science, spoke in glowing terms about scientist involvement in E/PO. There were about 300 people present at NASA Night. Subsequent to the DPS Meeting, SSE Forum-produced CD-ROMs containing the same video and information on the Support Network, including Internet hot links, were sent to all 1,200 members of the DPS worldwide.

Lead: Dr. Ellis Miner, NASA Jet Propulsion Laboratory, Pasadena, CA 91109

E-mail: [ellis.d.miner@jpl.nasa.gov](mailto:ellis.d.miner@jpl.nasa.gov). Phone: 818-354-4450.Primary URL: <http://www.aas.org/dps/dps.html>

Scientist(s): Dr. Rosaly Lopes NASA Jet Propulsion Laboratory Pasadena, CA  
 Dr. Ellis Miner NASA Jet Propulsion Laboratory Pasadena, CA

Partner(s): American Astronomical Society (AAS) Washington, DC

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
23 Oct 00	27 Oct 00	AAS/Division for Planetary Sciences (DPS) Meeting	Pasadena, CA	205	650	-

## Space Science E/PO in the Midwest: Focus on Involvement of Research Scientists

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: DePaul B/F, LPI B/F, OAI B/F, SEC Forum

Description: On January 27, 2001, the Space Science Center at DePaul University held the first annual conference for space scientists interested in education and public outreach. The event was funded by OSS's Broker/Facilitator program. The 48 participants represented all major research institutions in the Chicago area and also included science faculty from minority-serving institutions and small liberal arts colleges, as well as science educators from regional science museums and planetariums. Highlights of the agenda included an introduction by physics Nobel Laureate Leon Lederman and a keynote address by cosmologist Rocky Kolb. The agenda and a list of participants can be found at the URL below.

Lead: Dr. Bernhard Beck-Winchatz, DePaul University, Chicago, IL 60614-2458

E-mail: [bbeck@condor.depaul.edu](mailto:bbeck@condor.depaul.edu). Phone: 773-325-4545.Primary URL: [http://analyzer.depaul.edu/scientists\\_epo/](http://analyzer.depaul.edu/scientists_epo/)

Scientist(s): Dr. Michael Faison Northwestern University Evanston, IL  
 Dr. Evalyn Gates Adler Planetarium and Astronomy Museum Chicago, IL  
 Dr. Rocky Kolb Fermilab Batavia, IL  
 Dr. Richard Kron University of Chicago Chicago, IL  
 Dr. Jesus Pando DePaul University Chicago, IL

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
27 Jan 01	27 Jan 01	DePaul University	Chicago, IL	49	-	-

## Undergraduate Courses in Astrobiology

Theme(s): ASO

Msn/Prgm: NAI

Description: An undergraduate course entitled "ET Life" is offered on the CU campus to upper-division undergraduates during the fall and spring semesters. The course addresses a broad range of astrobiology issues, including origins of life, planetary system formations, and the sociological implications of extraterrestrial life and the search for it. The class consists of lecture and discussion of the topics, with student participation highly encouraged.

Lead: Dr. Bruce Jakosky, University of Colorado, Boulder, CO 80309.

## Workshops for Scientists

Theme(s): ASO, SEU, SSE

Msn/Prgm: LPI B/F

Description: Workshops for scientists are held annually, immediately preceding the Lunar and Planetary Science Conference in Houston. Topics in education and public outreach vary from year to year. The goal is to make scientists aware of the range of activities they may undertake in E/PO and to share ideas and information to make their involvement more effective.

Lead: Dr. Kathleen Johnson, Lunar and Planetary Institute, Houston, TX 77058-1113.

Primary URL: <http://www.lpi.usra.edu/meetings>

Event(s):

Dates		Location	Participants			
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
12 Mar 01	16 Mar 01	Lunar and Planetary Science Conference (LPSC), March 2001	Houston, TX	85	-	-

## Workshops, Sessions, and Seminars for Scientists on K-14 Education and Public Outreach

Theme(s): ASO, SEC, SEU, SSE

Msn/Prgm: IDEAS, ASO Forum, SSE Forum, DePaul B/F, OAI B/F, SSI B/F, HST, SIRTf, FUSE, FAME, Navigator, SIM, Cassini/Huygens Probe, Galileo, Voyager, DPSO, MGS, OP E/PO, PKB, DS-1, EUVE, GALEX, Astro-E, SP, Ulysses, ACE, HESSI, TRACE, ISTP, Polar, SOHO, Wind, STEREO, Yohkoh, SEC Forum, ST-3

Description: The Space Science Institute (SSI) of Boulder, CO, and its Broker program conduct four-day workshops, conference sessions/tutorials, and local seminars for space scientists, engineers and managers of K-14 education and public outreach (E/PO) programs. Approximately 500 participants and guest presenters have been served. The goals of the four-day workshop are 1) to enhance and sustain a national cadre of well-informed NASA scientists, engineers, and E/PO managers who can act as advocates and leaders for effective science education and as role models for colleagues engaged in E/PO activities; 2) to strengthen and increase the effectiveness of the education activities involving the NASA science and engineering communities that are presently (and soon-to-be) under way; and 3) to provide scientists, engineers, and E/PO managers who are active in E/PO with focused and ongoing opportunities for showcasing their work and networking with colleagues and education experts. The SSI Broker has also conducted E/PO tutorials for space scientists at the January 2001 American Astronomical Society/American Association of Physics Teachers conference in San Diego: "Becoming Actively Involved in K-12 Education," and "Writing Winning E/PO Supplements for NASA Sponsored Projects." In addition, the SSI Broker convened two highly successful 11-paper sessions on "American Geophysical Union (AGU) Scientists: Roles and Partnerships in K-12 Education and Public Outreach" at the Spring 2001 meeting of AGU in Boston, and has planned a Part II to this session at the December 2001 meeting in San Francisco. The SSI Broker also initiated a monthly Earth and Space Science Education seminar for scientists and educators in the Boulder/Denver region, which has proven to be a valuable means of learning, networking, and partnering. The SSI Broker is also seeking opportunities to provide seminars and workshops in other western cities where there are relatively large clusters of space scientists who have E/PO options associated with their research grants.

Lead: Dr. Cheryl Lynn Morrow, Space Science Institute, Boulder, CO 80309

E-mail: [camorrow@colorado.edu](mailto:camorrow@colorado.edu). Phone: 303-492-7321.

Scientist(s)	Address	City, State
Dr. Susan Buhr	University of Colorado	Boulder, CO
Dr. Laura Danly	Denver Museum of Nature and Science	Denver, CO
Dr. Paul Dusenbery	Space Science Institute	Boulder, CO
Dr. Frank Eparvier	University of Colorado	Boulder, CO
Dr. Ed Geary	Center for Science, Mathematics, and Technology	Ft. Collins, CO
Dr. Roberta Johnson	University Corporation for Atmospheric Research	Boulder, CO
Dr. Ramon Lopez	University of Texas at El Paso	El Paso, TX
Dr. Ellis Miner	NASA Jet Propulsion Laboratory	Pasadena, CA
Dr. Cheryl Lynn Morrow	Space Science Institute	Boulder, CO
Dr. Stephen Pompea	Pompea & Associates	Tucson, AZ
Dr. Barbara Poppe	National Oceanic and Atmospheric Administration	Boulder, CO
Dr. Timothy Slater	University of Arizona	Tucson, AZ

Partner(s): Dr. Wil van der Veen Columbia University New York, NY  
 Dr. Mark Voit Space Telescope Science Institute Baltimore, MD  
 Dr. Thomas Windham University Corporation for Atmospheric Research Boulder, CO  
 NASA Office of Human Resources and Education Washington, DC

Dates		Location		Participants		
Start Date	End Date	Venue	City, State	DRT	ANY	WEB
23 Oct 00	27 Oct 00	AAS/Division for Planetary Sciences Meeting	Pasadena, CA	-	400	-
15 Dec 00	19 Dec 00	American Geophysical Union (AGU) Meeting	San Francisco, CA	100	-	-
07 Jan 01	11 Jan 01	American Astronomical Society (AAS) Meeting	San Diego, CA	80	-	-
23 Jan 01	23 Jan 01	National Oceanic and Atmospheric Administration (NOAA)	Boulder, CO	25	-	-
02 Mar 01	02 Mar 01	University of Colorado	Boulder, CO	25	-	-
24 Apr 01	24 Apr 01	University of Colorado	Boulder, CO	25	-	-
14 May 01	17 May 01	Boulder Ramada Inn	Boulder, CO	56	-	-
29 May 01	02 Jun 01	American Geophysical Union (AGU) Meeting	Boston, MA	100	-	-