NASA@ My Library

A National Earth and Space Science Initiative that Connects NASA, Public Libraries and their Communities

NCIL National Center for Interactive Learning

A Universe of NASA Resources

The webinar will begin at 1:00 p.m. (MT) and will be recorded.

Audio problems? Click and highlight the  button at the top of your screen. You can also click “Meeting” > “Audio Setup Wizard”. You will not need microphone capabilities.

NASA ALA American Library Association Cornerstones of Science Pacific Science Center EDC Learning transforms lives. COSDA

Today's Agenda

- **Introduction and Reminders**
- **NASA's Museum Alliance - Amelia Chapman**
- **Solar System Ambassadors – Heather Doyle**
- **Night Sky Network – Vivian White**
- **Eyes On - Kevin Hussey**
- **NASA's Universe of Learning - Emma Marcucci**
- **NASA Solar System Trek Program – Brian Day**
- **Q&A**: All

Join the STAR Library Network!

Professional development resources, including webinars, newsletters, blogs, forums, videos, and much more!

Headed to ALA? Come See Us!

- **NASA Booth #1839 – Hyperwall talks, swag, and more!**
- **STEM Opportunities, Resources, and Partnerships between Public Libraries and Afterschool Providers**
  - Saturday, June 23; 1:00-2:00 p.m.; Room 288
- **Tech-time Fun with Real-world Connections**
  - Saturday, June 23; 2:30-3:30 p.m.; Room 386-387
- **Lessons Learned from the 2017 Eclipse: What Participation in Charismatic Events Can Do For Your Library**
  - Monday, June 25; 2:30-3:30 p.m.; Room 395-396

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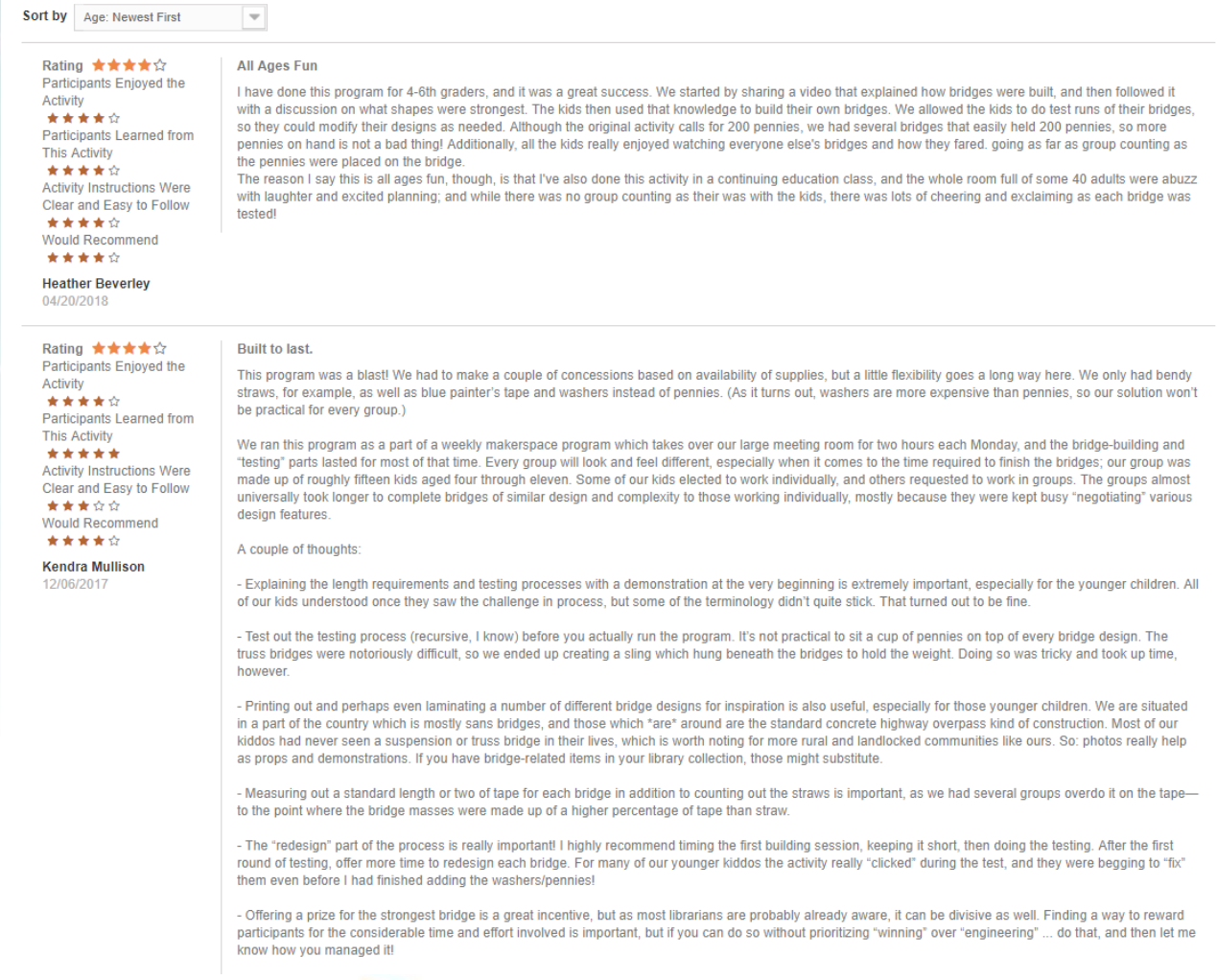
STEM ACTIVITY Clearinghouse

Like an activity and think other library staff should know how great it is? Didn't like an activity or have modifications to make it better? **Make sure to leave a review!**



Sort by Age: Newest First

Rating ★★★★☆
Participants Enjoyed the Activity ★★★★☆
Participants Learned from This Activity ★★★★☆
Activity Instructions Were Clear and Easy to Follow ★★★★☆
Would Recommend ★★★★☆

Heather Beverley
04/20/2018

All Ages Fun

I have done this program for 4-6th graders, and it was a great success. We started by sharing a video that explained how bridges were built, and then followed it with a discussion on what shapes were strongest. The kids then used that knowledge to build their own bridges. We allowed the kids to do test runs of their bridges, so they could modify their designs as needed. Although the original activity calls for 200 pennies, we had several bridges that easily held 200 pennies, so more pennies on hand is not a bad thing! Additionally, all the kids really enjoyed watching everyone else's bridges and how they fared. going as far as group counting as the pennies were placed on the bridge.
The reason I say this is all ages fun, though, is that I've also done this activity in a continuing education class, and the whole room full of some 40 adults were abuzz with laughter and excited planning; and while there was no group counting as their was with the kids, there was lots of cheering and exclaiming as each bridge was tested!

Rating ★★★★☆
Participants Enjoyed the Activity ★★★★☆
Participants Learned from This Activity ★★★★★
Activity Instructions Were Clear and Easy to Follow ★★★☆☆
Would Recommend ★★★★☆

Kendra Mullison
12/06/2017

Built to last.

This program was a blast! We had to make a couple of concessions based on availability of supplies, but a little flexibility goes a long way here. We only had bendy straws, for example, as well as blue painter's tape and washers instead of pennies. (As it turns out, washers are more expensive than pennies, so our solution won't be practical for every group.)

We ran this program as a part of a weekly makerspace program which takes over our large meeting room for two hours each Monday, and the bridge-building and "testing" parts lasted for most of that time. Every group will look and feel different, especially when it comes to the time required to finish the bridges; our group was made up of roughly fifteen kids aged four through eleven. Some of our kids elected to work individually, and others requested to work in groups. The groups almost universally took longer to complete bridges of similar design and complexity to those working individually, mostly because they were kept busy "negotiating" various design features.

A couple of thoughts:

- Explaining the length requirements and testing processes with a demonstration at the very beginning is extremely important, especially for the younger children. All of our kids understood once they saw the challenge in process, but some of the terminology didn't quite stick. That turned out to be fine.

- Test out the testing process (recursive, I know) before you actually run the program. It's not practical to sit a cup of pennies on top of every bridge design. The truss bridges were notoriously difficult, so we ended up creating a sling which hung beneath the bridges to hold the weight. Doing so was tricky and took up time, however.

- Printing out and perhaps even laminating a number of different bridge designs for inspiration is also useful, especially for those younger children. We are situated in a part of the country which is mostly sans bridges, and those which *are* around are the standard concrete highway overpass kind of construction. Most of our kiddos had never seen a suspension or truss bridge in their lives, which is worth noting for more rural and landlocked communities like ours. So: photos really help as props and demonstrations. If you have bridge-related items in your library collection, those might substitute.

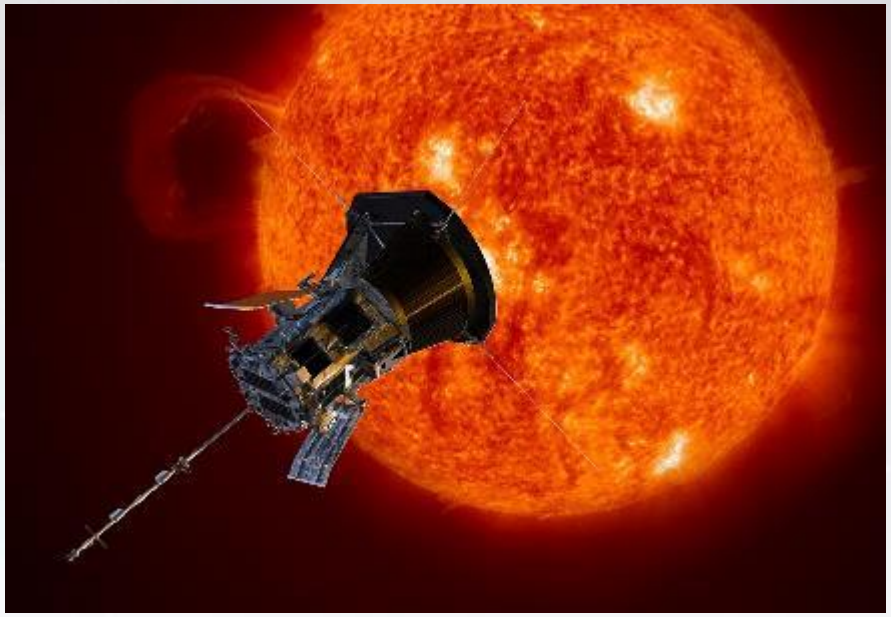
- Measuring out a standard length or two of tape for each bridge in addition to counting out the straws is important, as we had several groups overdo it on the tape—to the point where the bridge masses were made up of a higher percentage of tape than straw.

- The "redesign" part of the process is really important! I highly recommend timing the first building session, keeping it short, then doing the testing. After the first round of testing, offer more time to redesign each bridge. For many of our younger kiddos the activity really "clicked" during the test, and they were begging to "fix" them even before I had finished adding the washers/pennies!

- Offering a prize for the strongest bridge is a great incentive, but as most librarians are probably already aware, it can be divisive as well. Finding a way to reward participants for the considerable time and effort involved is important, but if you can do so without prioritizing "winning" over "engineering" ... do that, and then let me know how you managed it!

The Parker Solar Probe Launch

- Launch Window: 7/31 – 8/19
- Webinar Recording: https://youtu.be/sDxLulYT2-s
- Event Page: http://www.starnetlibraries.org/parker-solar-probe/
- Clearinghouse Sun Activities: http://clearinghouse.starnetlibraries.org/124-sun



NASA's Museum Alliance is an active community of practice that provides access to NASA resources for informal educators.

Our Platforms

- Member **website** of searchable resources

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- **Calendar** of mission events, deadlines, etc

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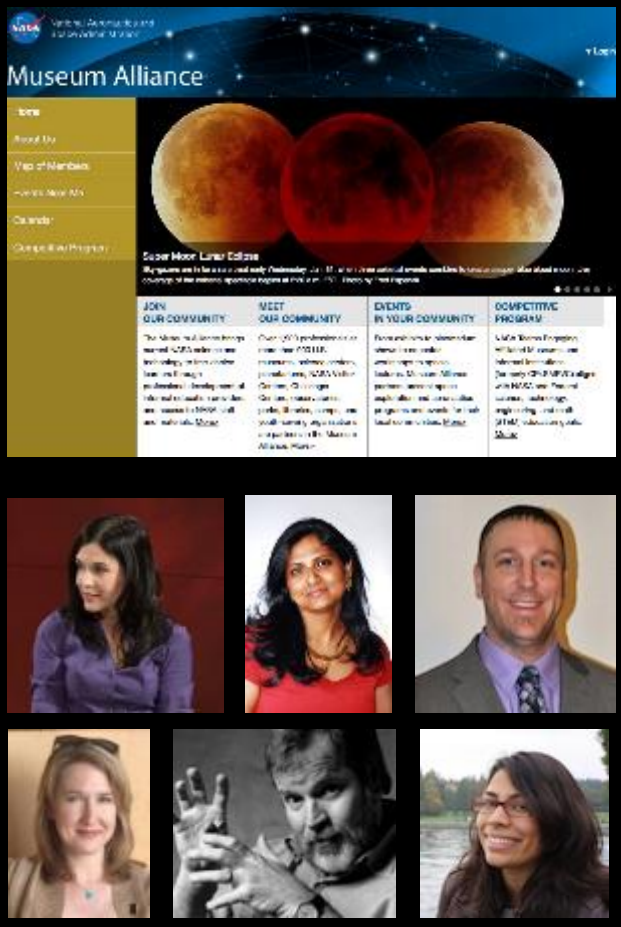
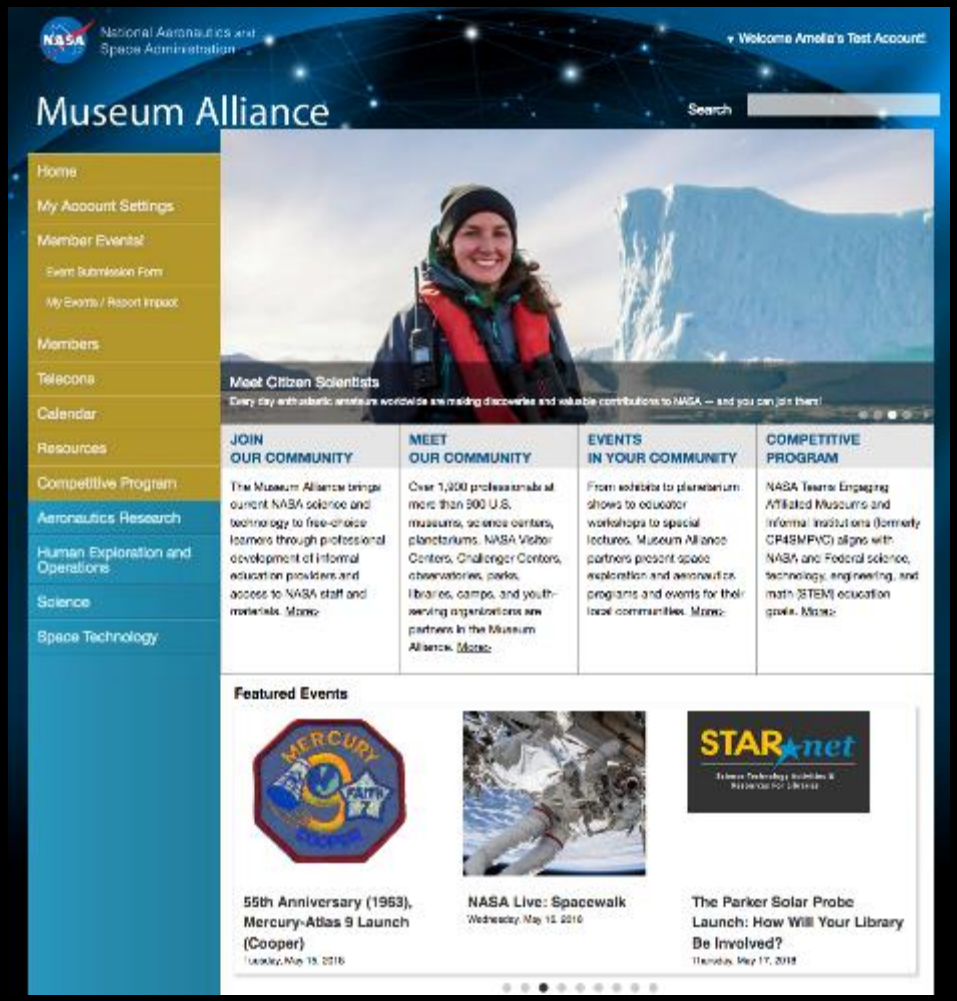
- Regular live **briefings** by NASA experts
- Direct **assistance** to members



Member Website



Member Website

Member Website

Searchable collections of resources (activities, printables, videos, games, lesson plans, websites, etc)

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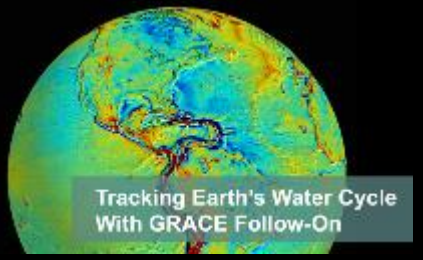
Searchable collections of resources (activities, printables, videos, games, lesson plans, websites, etc)
Themes include:

- Apollo 50th Anniversary
- Teen Tech Week
- Virtual Reality/360 Videos
- Girls in STEM
- Spanish Resources
- Summer Reading
- Space/Sport Connection
- Star Wars and NASA
- Earth Day
- Citizen Science

Museum Alliance Calendar

Presentations by NASA Experts

- Live conversations, Q&A
- Presentation materials
- Key links and websites
- Average of 4 a month
- Archived recording and transcript



How to Find Us

https://informal.jpl.nasa.gov/museum/

Amelia.J.Chapman@jpl.nasa.gov


NASA

Solar System Ambassadors

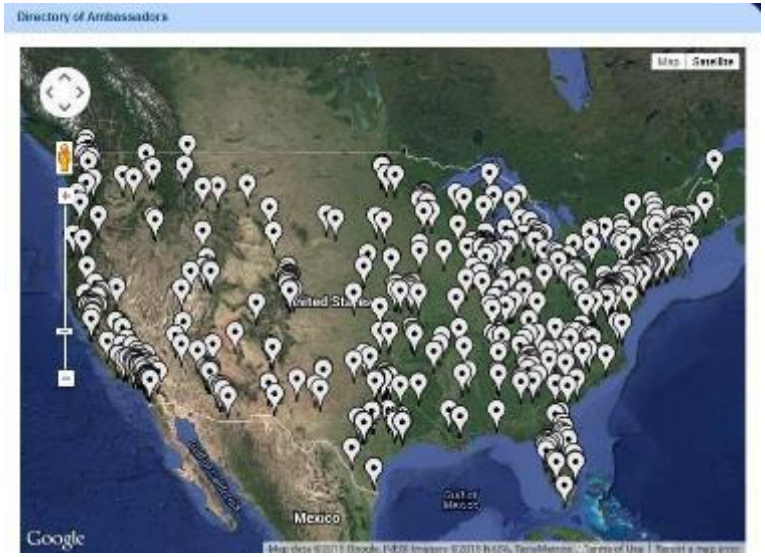
www.solarsystem.nasa.gov/ssa/home.cfm

Jet Propulsion Laboratory
California Institute of Technology

Solar System Ambassadors

JPL
Jet Propulsion Laboratory
California Institute of Technology

Who We Are



- **SSA is 21 years old, having started as the Galileo Ambassador program in 1997**
- **908 space enthusiast volunteers**
- **50 states, DC, Puerto Rico, Guam, US Virgin Islands and US citizens living abroad: Canada, Germany, Haiti, Netherlands, New Zealand, Republic of Korea, Singapore, United Kingdom**

What We Do

- **Public engagement in a variety of venues**
- **CY2017 Events: 3,820**
  - **Direct Audience: 1,037,795**
  - **Indirect Audience: 20,067,574 readers/viewers/listeners**
- **Library events since 2001: 2,473 events reaching 282,569 people**
- **Some of us specialize…**

How We Train

- **NASA Nationwide - formerly SSA professional development**
- **More than 500 archived telecons since 1999**
- **Collaborate with NASA Museum Alliance**
- **Now available to other NASA volunteers and networks, including STAR_Net librarians**

How to Find A Local Solar System Ambassador

- **SSA Website: https://solarsystem1.jpl.nasa.gov/ssa/home.cfm**
- **Directory Search by State or by SSA Name**
- **Email Ambassador using website form**
- **If seeking several Ambassadors in an area, contact SSA Leads at: ambassad@jpl.nasa.gov**

How We Can Serve Your Library

- **NASA Milestones: InSight Landing, New Horizons MU-69 Flyby**
- **Speakers: NASA Presentations, Summer Reading Programs**
- **Hands-on Activities: Science Days, Summer Camps**
- **Celestial Viewing: Solar Viewing, Evening Star Parties**
- **Your suggestions…**

Why We're Ambassadors

If what I do makes a difference in the life of just one child, then it was worth doing. --Sr. Clarice Lolich, Solar System Ambassador

Update…

Gene and Danielle during their visit to JPL in 2017. Danielle has completed her first year at Case Western Reserve University in Ohio, majoring in engineering. She's looking into NASA internships…

Jet Propulsion Laboratory
California Institute of Technology

jpl.nasa.gov

Resources and Potential Partnerships with Astronomy Clubs

Vivian White

nightskyinfo@astrosociety.org

Astronomical Society of the Pacific

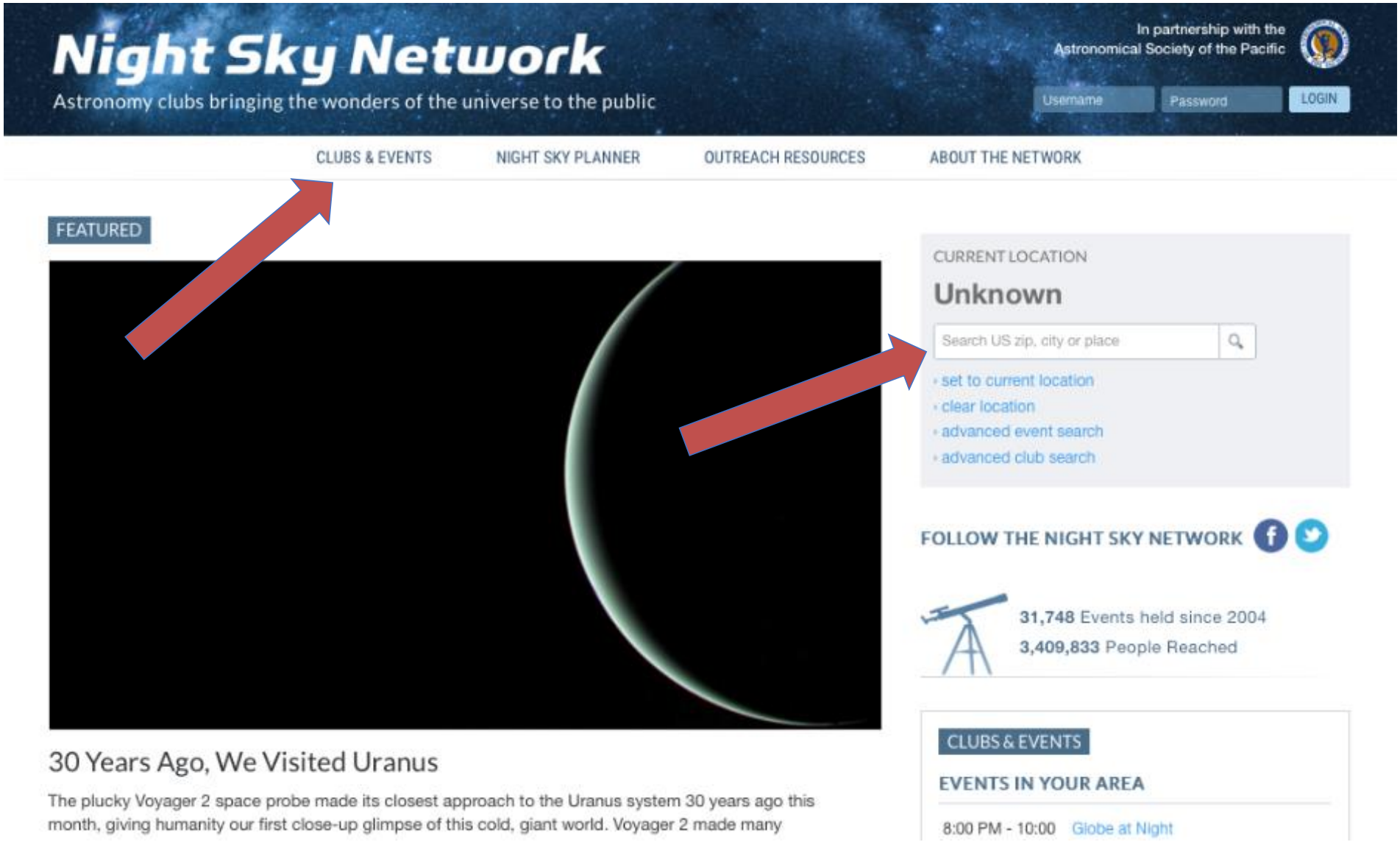
Resources Beyond Your Fingertips

Night Sky Network

Astronomy Clubs bringing the wonders of the universe to the public

More than 450 clubs in the network

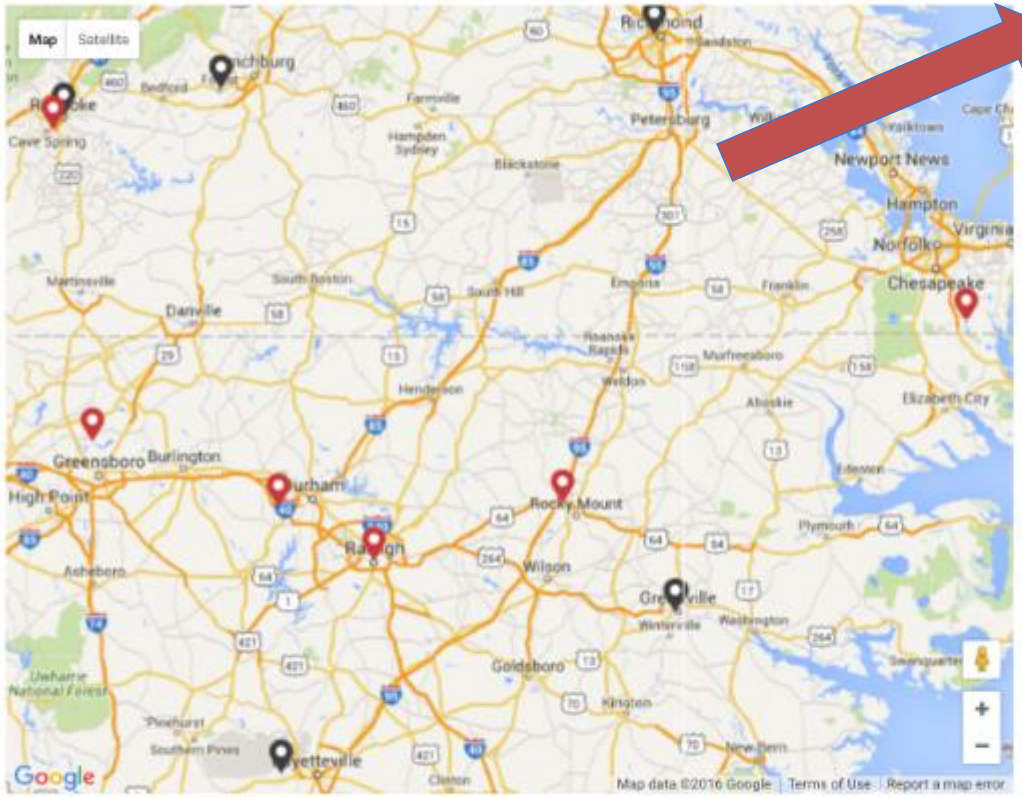
nightskynetwork.org



Find Local Clubs

CLUBS & EVENTS NIGHT SKY PLANNER OUTREACH RESOURCES ABOUT THE NETWORK

ASTRONOMY CLUBS IN YOUR AREA



This website uses GeoIP2 JavaScript from MaxMind.

club with upcoming events Night Sky Network member club

+ more clubs

CLUBS NEAR YOU

4 miles	Tar River Astronomy Club	ROCKY MOUNT, NC 27804
33 miles	Carolina Skies Astronomy Club	Greenville, NC 27834
49 miles	Raleigh Astronomy Club	Raleigh, NC, NC 27603
70 miles	Chapel Hill Astronomical and Observational Society	Chapel Hill, NC 27514

+ more clubs

Night Sky Network

Astronomy Clubs bringing the wonders of the universe to the public

CLUBS & EVENTS | NIGHT SKY PLANNER | OUTREACH RESOURCES | ABOUT THE NETWORK

Tri-State Astronomers

SHARE Recommend

About TSA | Club Website | Events | Locations | Request an Event | Join Club | Register | Contact Club

FOLLOW THE NIGHT

About Us

"To bring together those who appreciate the night sky!"The TriState Astronomers is a group of amateur astronomers from the area surrounding Hagerstown, MD. & Washington County. Since 1985, we enjoy sharing the ageless wonders of the night sky.

Find us on facebook

CLUB CONTACT INFO

Tri-State Astronomers
William Brish Planetarium
823 Commonweatlth Ave
Hagerstown MD 21740

Phone: N/A

Chairman@TriStateAstronomers.org

UPCOMING EVE

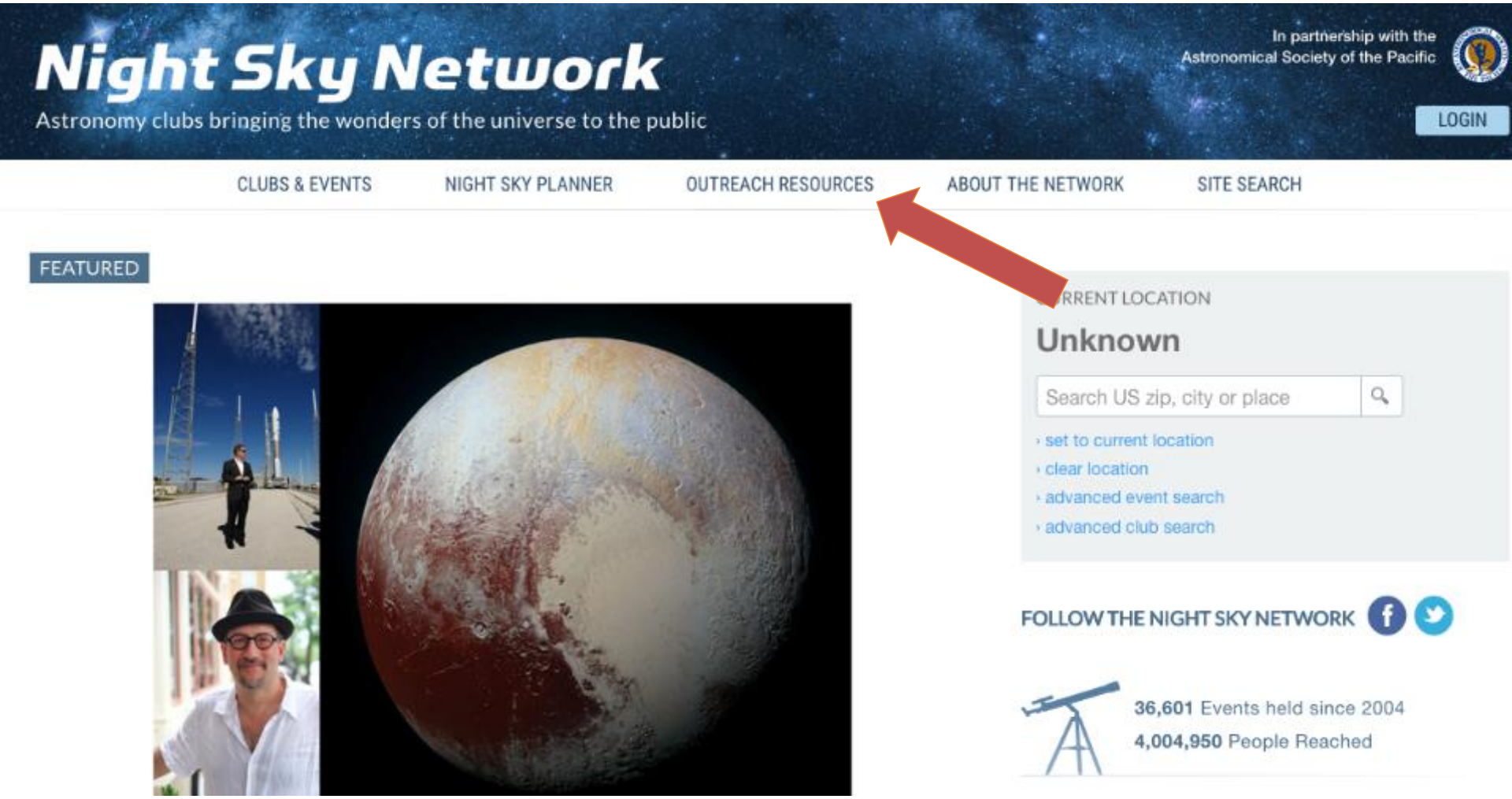
6:00 PM - 8:00 PM
Thu 2/11/16
community event

Fri 3/4/16 - Sun 3/6/16
club event

6:00 PM - 7:30 PM
Tue 3/15/16
community event

6:30 PM - 10:00

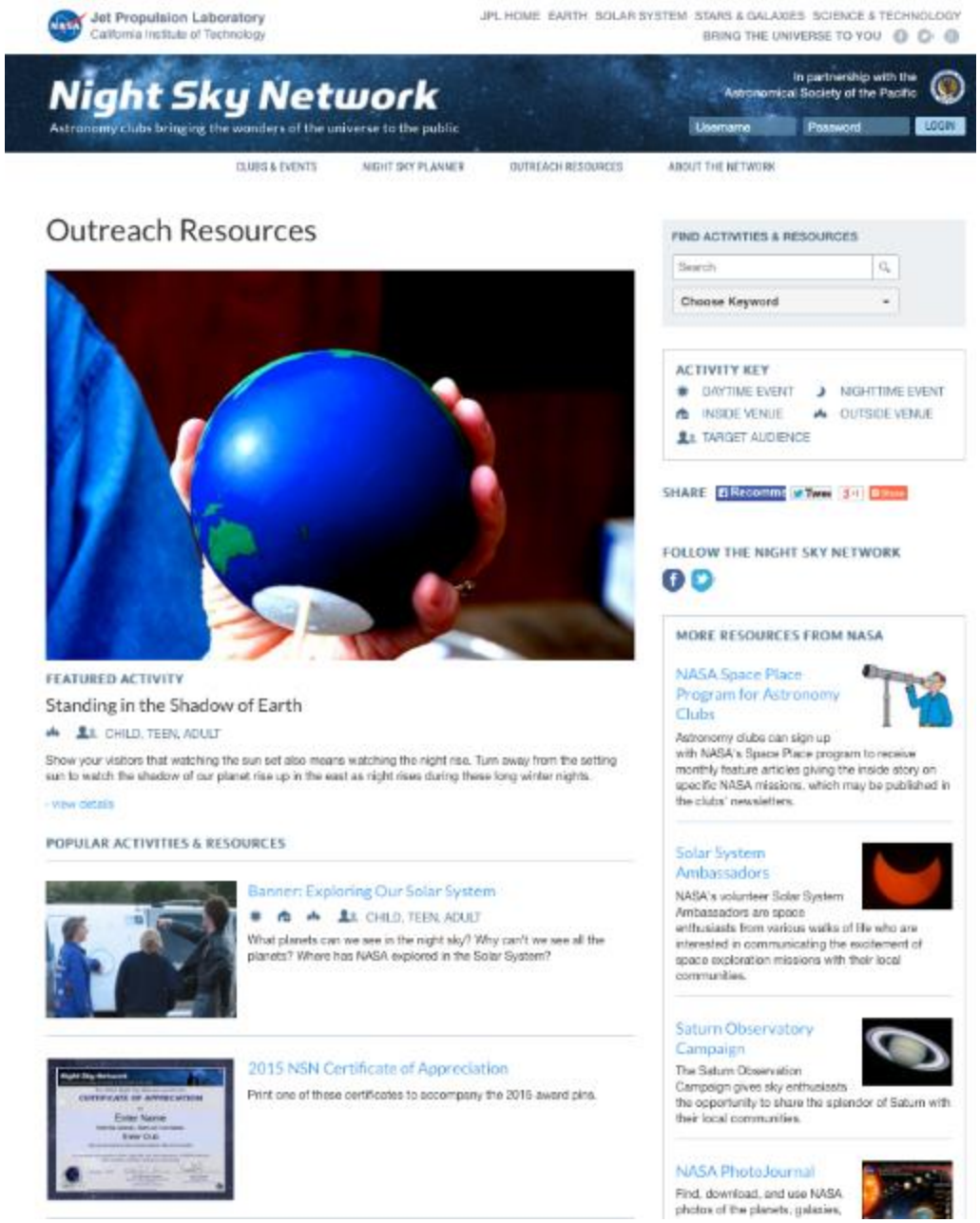
Astronomy Demos and Activities



Featured Activities

Night Sky Planner

And Other Resources



Tips for Working with Clubs

- Plan ahead
- Visit a club star party or meeting
- Feed them
- Show Appreciation
  - Bookmarks
  - Thank you notes
  - Library swag

Astronomy Clubs are a Local Resource!

Vivian White
nightskyinfo@astrosociety.org

Night Sky Network
http://nightskynetwork.org

Astronomical Society of the Pacific
http://astrosociety.org

Jet Propulsion Laboratory
California Institute of Technology

NASA's Eyes

Presented by Kevin Hussey, Manager
Visualization Technology Applications & Development

NASA's Universe of Learning Connecting with Libraries

STAR Net Webinar
June 6, 2018

Emma Marcucci
emarcucci@stsci.edu

NASA'S UNIVERSE OF LEARNING

Learners of all ages and backgrounds are engaged and immersed in exploring the universe for themselves.

STScI | SPACE TELESCOPE SCIENCE INSTITUTE

ipac

JPL
Jet Propulsion Laboratory
California Institute of Technology

Smithsonian Astrophysical Observatory

SONOMA STATE UNIVERSITY

Our Portfolio

A science-driven, audience-driven, and learning-driven program in NASA Astrophysics

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A science-driven, audience-driven, and learning-driven program in NASA Astrophysics

Direct Connection to NASA Astrophysics Science, Technology, and Content Experts

Community Program

Girls STEAM Ahead with NASA

Community Program

Girls STEAM Ahead with NASA

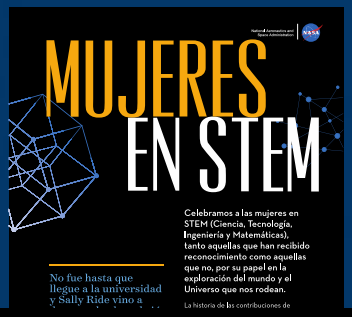
Exhibits and Posters

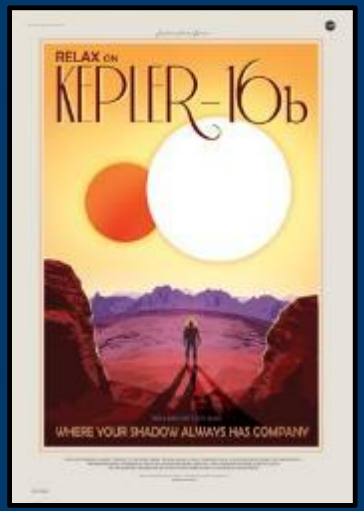
Community Program

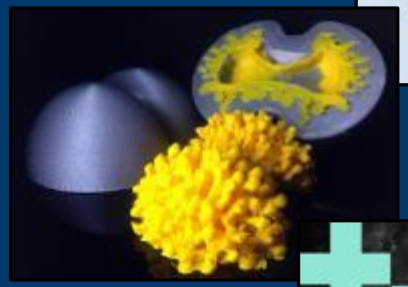
Girls STEAM Ahead with NASA

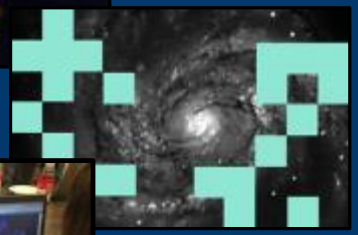
3D Learning and Coding

Exhibits and Posters





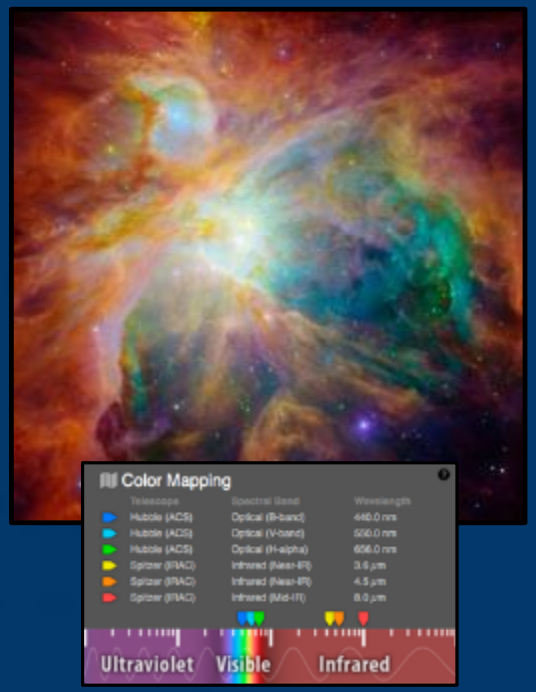




Data Tools

Astropix

Credit: NASA, ESA, SSC, CXC, and STScI



Credit: G. Dubner (IAFE, CONICET-University of Buenos Aires) et al.; NRAO/AUI/NSF; A. Loll et al.; T. Temim et al.; F. Seward et al.; Chandra/CXC; Spitzer/JPL-Caltech; XMM-Newton/ESA; and Hubble/STScI

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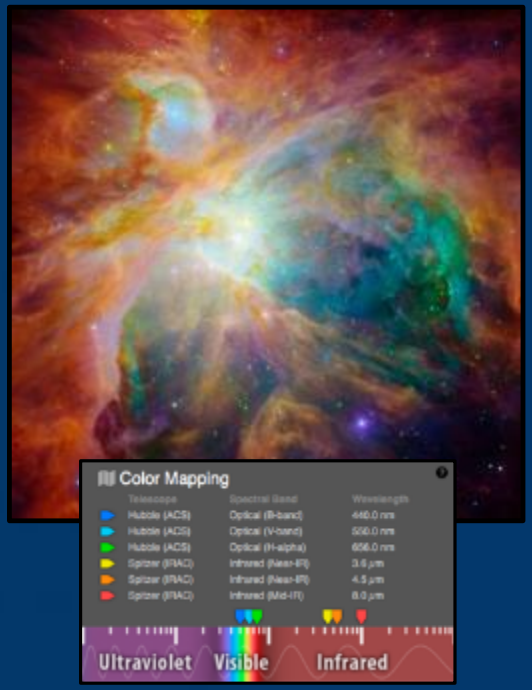
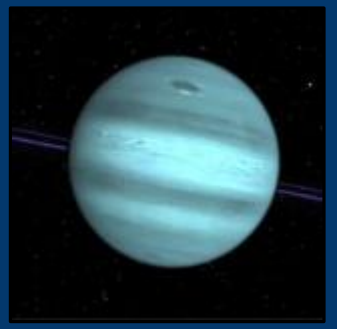
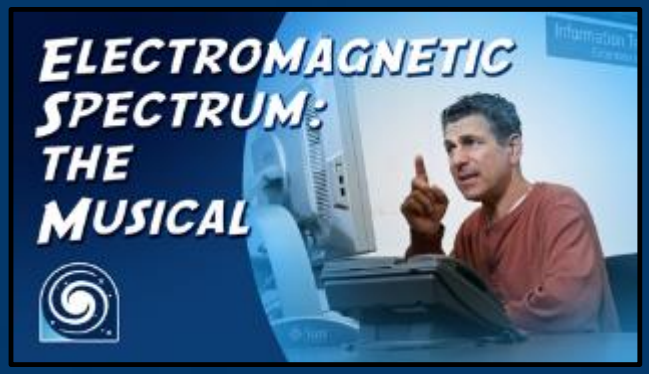


MicroObservatory



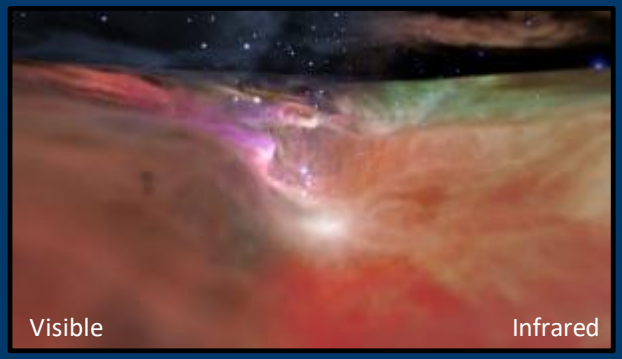
Multimedia



Universe Unplugged

ViewSpace

AstroViz



Eyes on Exoplanets

Professional Learning

Science Briefings

Credit: U.S. Naval Research Laboratory

Credit: NASA

Credit: NASA/ESA/STScI

Learn more at: *https://www.universe-of-learning.org/*

Get involved: *info@www.universe-of-learning.org*

NASA'S UNIVERSE OF LEARNING

This work supported by NASA under award number NNX16AC65A to the Space Telescope Science Institute, working in partnership with Caltech/IPAC, Jet Propulsion Laboratory, Smithsonian Astrophysical Observatory, and Sonoma State University.

STScI | SPACE TELESCOPE SCIENCE INSTITUTE

Jet Propulsion Laboratory
California Institute of Technology

Smithsonian Astrophysical Observatory

NASA Solar System Trek

Brian Day
NASA Ames Research Center

https://science.nasa.gov/science-activation-team/solar-system-trek