Rural Educator Network Newsletter

Connecting Educators and Sharing Resources

NASA SciAct

NAU NORTHERN ARIZONA UNIVERSITY

Hello Educators!

This Newsletter is dedicated to providing:

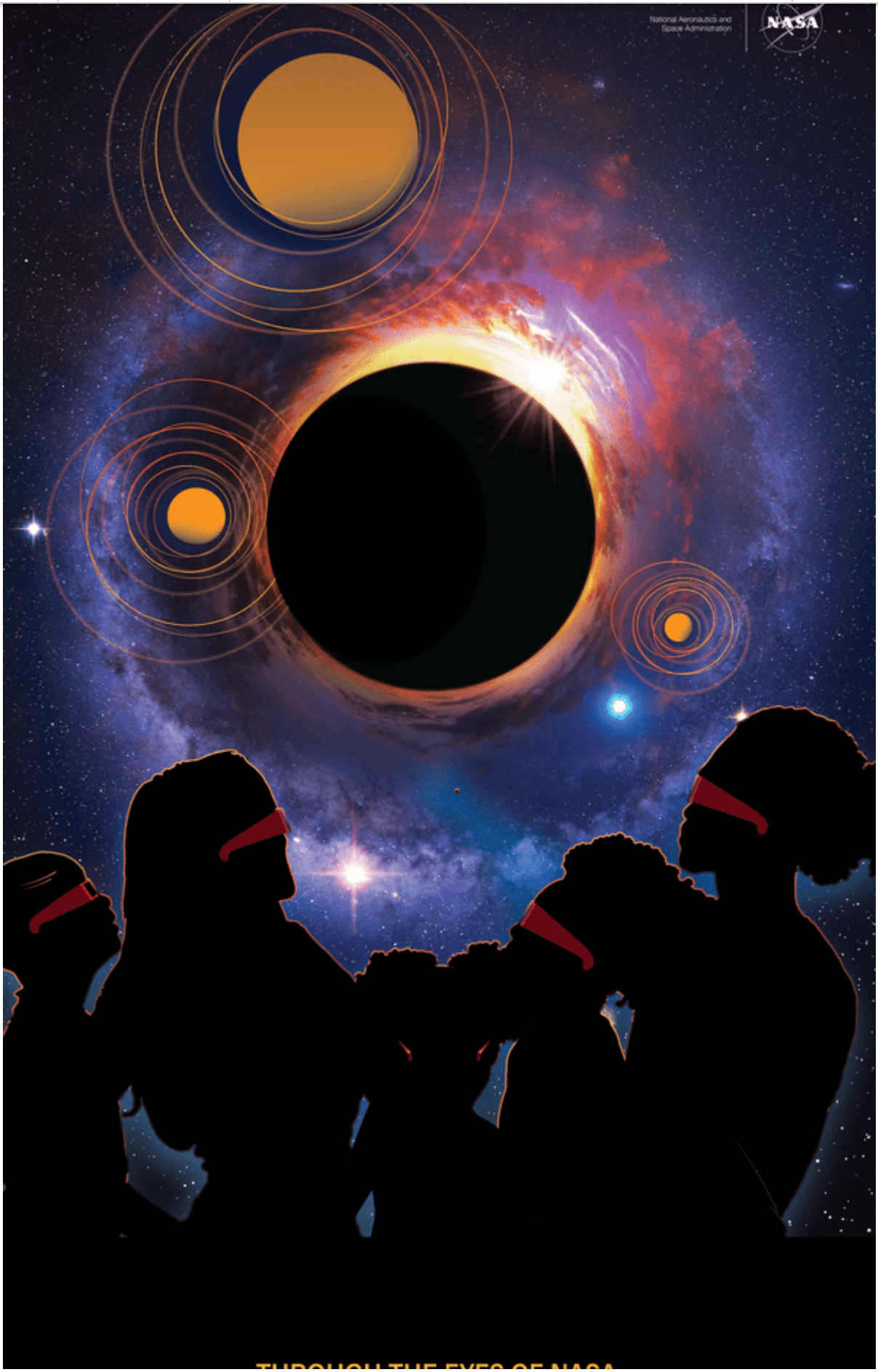
1. NASA resources modified to the needs of rural audiences
2. Upcoming NASA events, webinars, and opportunities
3. Partnership highlights
4. Expressing your current needs and successes

You're invited to contribute content to a future newsletter...

Tell us a story, share an activity, photo, lesson plan, or resource.

Share with Us!

Help to Grow the Network: Share this sign-up link with friends: http://eepurl.com/h1xxQ9


National Aeronautics and Space Administration
NASA

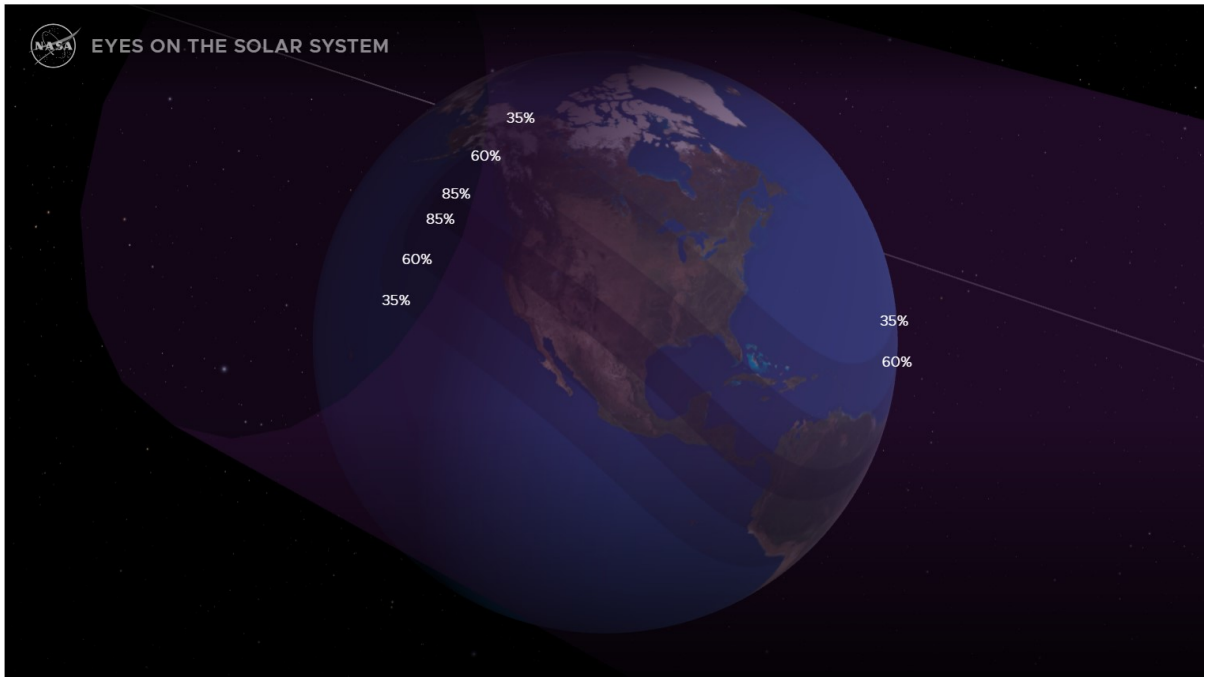
Annular Solar Eclipse on October 14, 2023

On October 14, 2023, an annular solar eclipse will be visible from parts of North America, Mexico, and South America. This will be the last annular solar eclipse visible in the United States until 2039!

An annular solar eclipse creates a spectacular **ring-of-fire** effect in the sky, because this type of solar eclipse, unlike a total solar eclipse, does not fully cover the Sun. Annular solar eclipses occur when the Moon is at its farthest point away from Earth (also called apogee). Because of this, the Moon will appear smaller in the sky than the Sun, and won't fully cover the sun.

Remember, looking directly at the Sun is never safe, even during a solar eclipse. Please take necessary safety precautions when viewing the eclipse yourself and with youth.

Poster image credit: Kirsten Perrin



NASA Rural at NSTA23 - Kansas City
October 28th at 1:20 pm Central Time at the Kansas City Convention Center in Kansas City, MO
Room: 2202

Did you miss us at the National Rural STEM Summit in Flagstaff? Then join Dr. Rachael Arens and Matt Cass for a discussion on how NASA Science Activation connects NASA Science to rural learners. We will go over promising practices and areas of concern as well as shine a spotlight on successes within NASA Science Activation. Participants will leave with a better understanding of how to work with rural communities and how to connect with NASA Science Activation.

Join NASA's Science Mission Directorate for a monthly series that connects rural educators to resources, networking, and professional development opportunities.

environments. Educators will discover a variety of NASA Citizen Science projects that foster hands-on science opportunities that can be conducted within their unique geographic locations and meet the content and age-level needs of their classrooms.

Register for the Nov. 2nd webinar here: https://forms.gle/4DLUjVmNvVF9d5ZC9
Image credit: NASA SMD/SciAct

Learning Ecosystems Northeast

Maine Eclipse Events

Maine has a variety of fun events developing related to the eclipses, including snowshoe walks, runs, and more. Activities will occur through libraries, classrooms, and community events. Connect with formal and informal educators in your region of Maine through the Learning Ecosystems Northeast website.

Not in Maine? Tell us about an eclipse event or activity taking place in your classroom or community HERE!

PLANETS Spokane Out of School Time Educator Working Session

Join the PLANETS team in Spokane on October 18 for a working session. Earn a $400 stipend while co-designing PLANETS materials and growing as an out-of-school time educator through engagement with other diverse educators and a new

Lesson Plans and Materials

1. New Solar Eclipse Educational Materials from My NASA Data and NASA HEAT

Access these NGSS-supported solar eclipse activities for multiple grade levels in the forms of 5 Mini-Lessons, 6 Interactives, 1 Story Map, and 4 Lesson Plans. NASA HEAT also

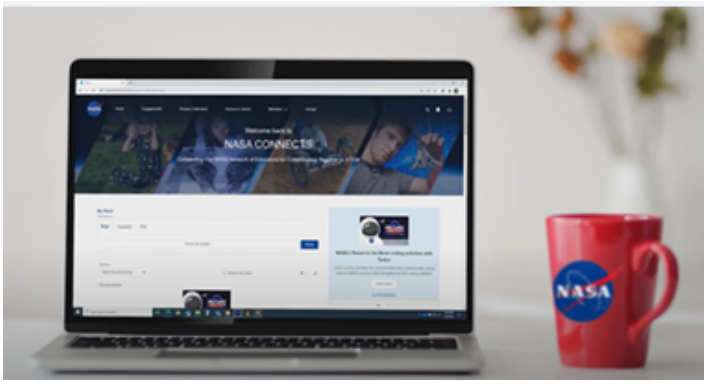
2. Annular Solar Eclipse Training

Ever wondered about solar eclipses, why there are two types, and how to view them? With two solar eclipses happening within the next 8 months, NASA has resources to help educate about eclipses and how to safely enjoy these eclipses.

3. Fiske Planetarium Science Through Shadows Ring of Fire

On October 14, 2023, individuals and communities across North America will have the chance to see an annular solar eclipse. This type of eclipse is commonly referred to as a "ring of fire" eclipse and is different from a "total" solar eclipse. The Ring of Fire video outlines the differences between the two, discusses best practices for viewing the eclipse, and prepares audience members to have an amazing experience on eclipse day!

4. NASA Connects



NASA Connects is a partnership between NASA educators, scientists and educators, librarians and anyone wanting to utilize NASA resources. NASA Connects serves as a hub for lesson plans, webinars, tool kits, videos, subject matter experts, and more that are organized according to your needs. You can sign up as a teacher, informal educator,

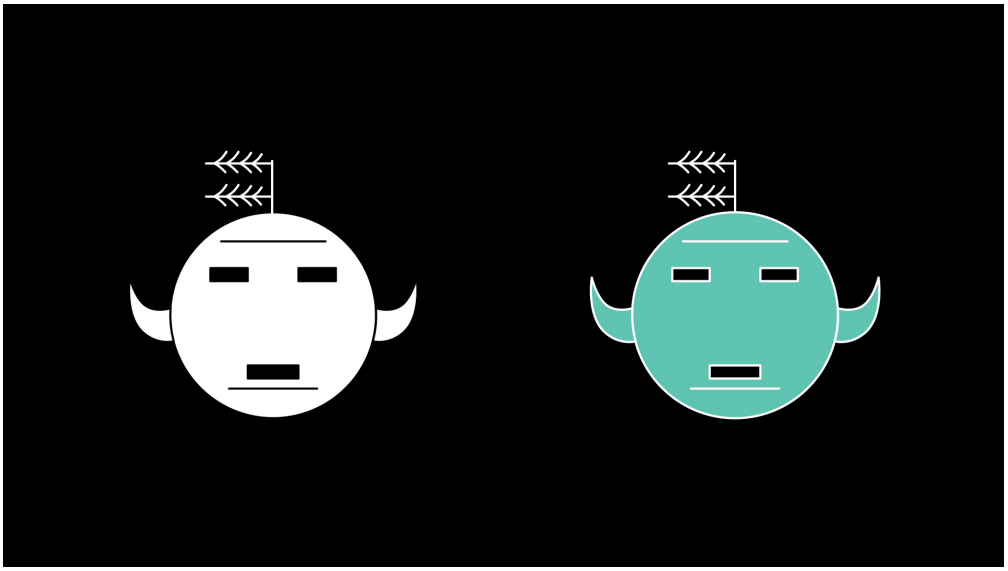
professional development to staff.

5. Bring the Universe to America's Classrooms

Engage K–12 students with phenomena and science practices using this collection of supplementary digital media resources created by GBH in collaboration with NASA. The resources align with key NGSS Earth, space, and physical science disciplinary core ideas. To ensure that science content is accessible for all students, support is included for students with disabilities or who are English learners; many resources have Spanish translations. You can browse by topic or by grade level. Check out the resource here, from PBS.

6. Navajo Knowledge of the Cosmos

For generations, Navajo (Diné) people have studied the sky and passed down its stories. The Exploratorium, based in California, has created a website and resources with information about Diné culture in relationship to eclipses and astronomy. There are videos and free downloadable posters! Click here for more.



7. Lunar Surface Exploration

Four standards-aligned activities help students learn about the STEM needed for NASA to overcome several challenges to explore and inhabit the surface of the Moon. This free NASA guide is intended for grades 5-8.

NASA eClips Back to School Newsletter

The NASA eClips Educators remember the excitement of beginning a new school

edition:

- New NASA eClips Resources
  - Spotlite Design Challenge: Can Plants Dance?
  - Spotlite Design Challenge: Solar Eclipse Chasers
- Preparing for Upcoming Events
  - Annular Solar Eclipse
  - STEM Exploration Community Events
- Partner Resources

Access the newsletter here.

Individual and Program Spotlights

Maine Teacher of the Year Finalist from Washington County, Maine

Colleen Maker, teacher at Washington Academy, is an amazing educator who is dedicated to her students and easily and readily makes and seeks out community connections. She is involved in so many projects and networks, including but not limited to the Washington County Connected Learning Ecosystem, part of the

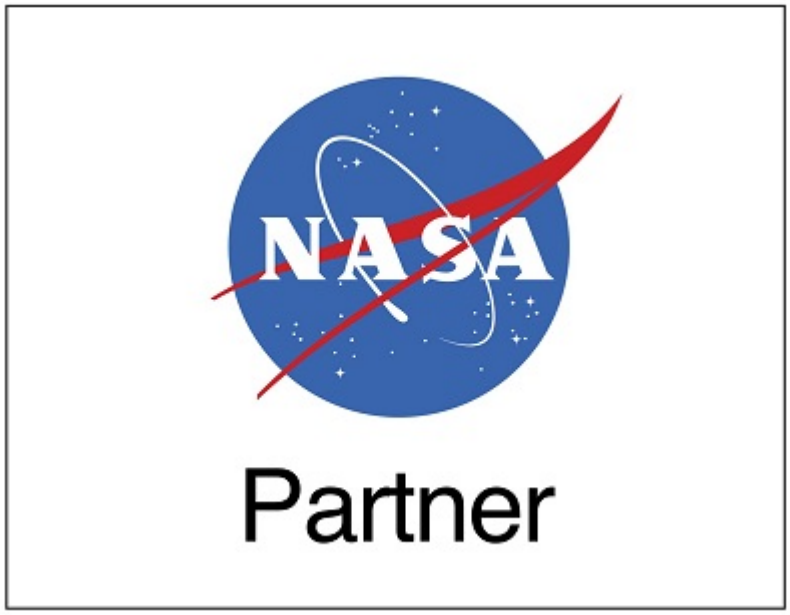
NASA Science Activation Preparing Libraries for Upcoming Solar Eclipses

STAR Net Libraries, NASA Earth Science Education Collaborative (NESEC), and GLOBE Mission EARTH are working with librarians to prepare them for the upcoming solar eclipses (October 14, 2023 and April 8, 2024). Libraries across the US applied to be part of the training and to receive kits to help their patrons take weather observations during the solar eclipses and to contribute to the GLOBE database.

Hundreds of Students Return to Earth Heart Farms 3 Months after a Tornado Destroyed the Farmhouse

On June 15, 2023, an EF2 tornado destroyed the farmhouse at Earth Heart Farms 3 hours after GLOBE Mission EARTH's teacher professional development wrapped

came back to the farm to study the land, atmosphere, biosphere, and water bodies using GLOBE protocols as the farm has transformed from a prairie into a wetland through an Ohio conservation program.



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The Rural Education Network team serves as volunteer representatives from NASA Partner projects funded through SciAct. We are aiming to amplify and elevate the voice of rural educators while providing access to resources that support educators in engaging youth in planetary science and STEM.
