

[View this email in your browser](#)

Rural Educator Network Newsletter

Connecting Educators and
Sharing Resources

NASA SciAct



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>



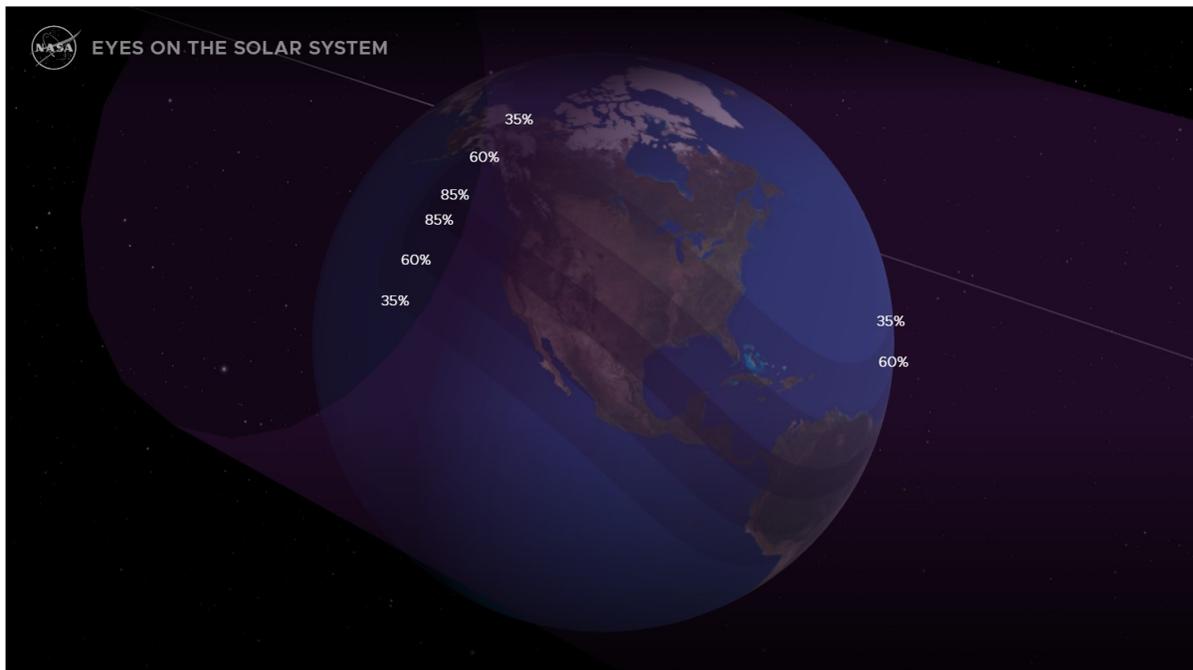
Annular Solar Eclipse on October 14, 2023

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.

The graphic has a black background. On the left is a white icon of a vintage-style microphone with a pair of headphones over it. To the right of the icon, the text '3-D THURSDAYS FOR RURAL EDUCATORS' is written in large, bold, white, uppercase letters. Below this, a smaller line of text reads 'A monthly webinar series that enhances rural teachers' access to NASA resources, networking, and professional development opportunities.' in a white, italicized font. In the top right corner of the graphic is the NASA logo (a blue circle with a red swoosh and the word 'NASA' in white) and the word 'Partner' in white below it.

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



Working Session

October 18, 2023

Would you like to contribute YOUR expertise to professional development for out-of-school time STEM educators like yourself?

Planetary Learning that Advances the Nexus of Engineering, Technology, and Science (PLANETS) is a NASA-funded collaboration between Museum of Science, Boston, the Center for Science Teaching & Learning at Northern Arizona University, U.S. Geological Survey Astrogeology Science Center, and WestEd Making Sense of Science to develop and support three new out-of-school time engineering and planetary science units.

Our professional development team is seeking enthusiastic and dedicated educators interested in contributing to the growing field of out-of-school time STEM education.

As a STEM Education partner, you will:

- Explore and develop educator support materials for a planetary science and engineering curriculum for grades 3-8.
- Work with us to co-create relevant and useable educator support materials for this curriculum, providing valuable feedback before, during and after the working session.
- Grow as an out-of-school time educator through engagement with other diverse educators and new curriculum!

To receive the \$400 stipend, you must agree to:

- Review curriculum and supplementary materials before October 18
- Attend the full session on October 18, 2023



Make a difference & join our team to develop high quality STEM educator support materials!

—
Wednesday, October 18, 2023

8:00 AM-2:00 PM

Includes lunch!

The Community Building
Third Floor Learning Studio
45 W Main Ave
Spokane, WA 99201

—
\$400 stipend for full participation

—
Only 20 seats available.

APPLY NOW

<https://forms.gle/pYbNjBDmZdJtba2L8>



QUESTIONS?

lauren.shollenberger@nau.edu

928-523-9079

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

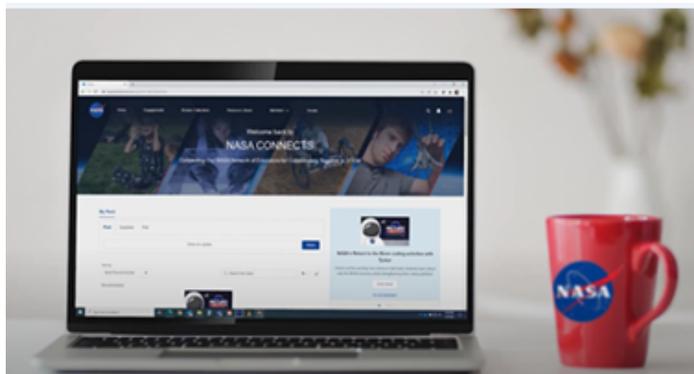
Ever wondered about solar eclipses, why there are two types, and how to view them? With two solar eclipses happening within the next 8 months, NASA has [resources](#) to help educate about eclipses and how to safely enjoy these eclipses.



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,

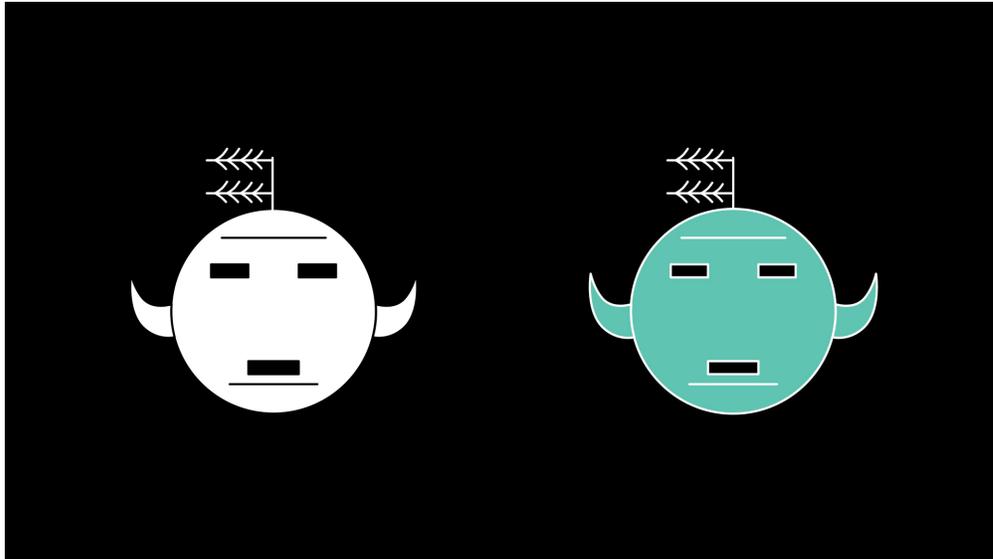
professional development to staff.

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
 - Spotlight Design Challenge: Can Plants Dance?
 - Spotlight 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.



“The material contained in this document is based upon work supported by a National Aeronautics and Space Administration (NASA) grant or cooperative agreement. Any opinions, findings, conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of NASA.”

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.

Copyright © 2023 Center for Science Teaching and Learning, NAU, All rights reserved.

Want to change how you receive these emails?
You can [update your preferences](#) or [unsubscribe from this list](#).

