

**Smoky Mountains
STEM Collaborative**

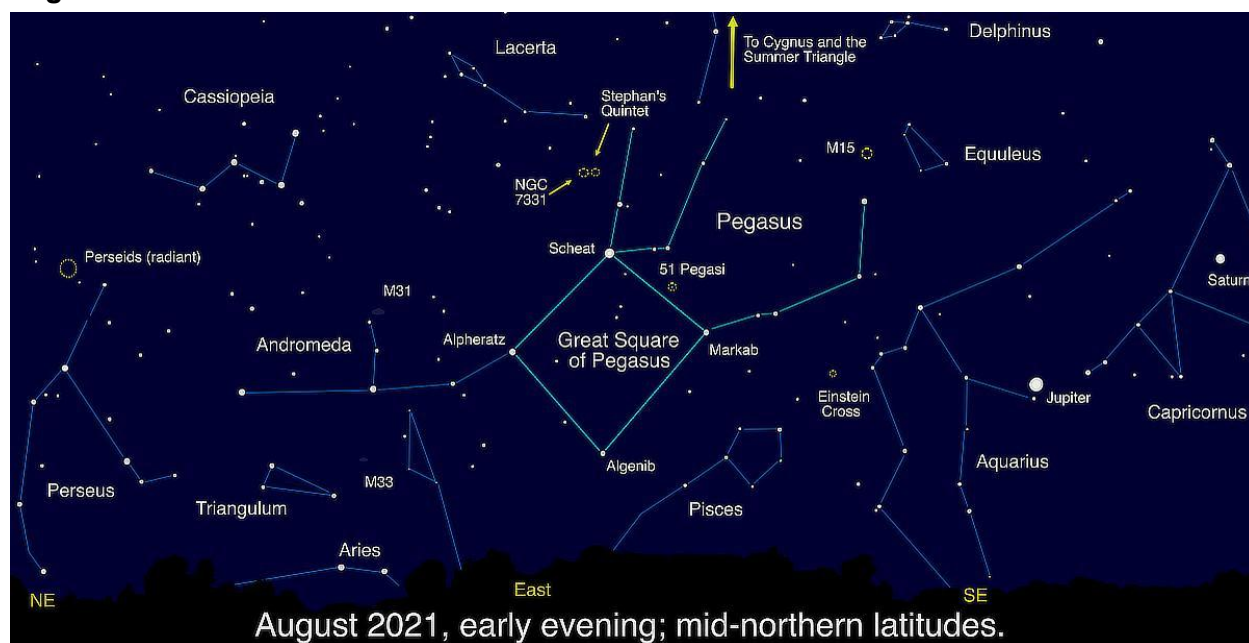
Southwestern
COMMUNITY COLLEGE

EXPLORE YOUR PATH TO SUCCESS

SMSC August 2021 Newsletter

News This Month

August skies



August evenings are an excellent time to look for the Great Square, as it will be rising in the east after sunset. If not obvious at first, wait for this star pattern to rise a bit above the murky air, and remember that depending on your point of view, it may appear more like a diamond than a square. Also this month - The best-known **meteor shower** of the year **peaks the night of Aug. 11**, with no bright Moon to interfere. Jupiter and Saturn are at their best all month long. And on Aug. 22, the full moon will be a "seasonal blue moon."

We have a slack channel - if you would like to be added to the channel to discuss ways to use NASA resources locally, or if you have questions about how we can help you meet your goals, please send an email to r_neff@southwesterncc.edu or you can follow us on [Facebook](#) or [Twitter](#).

NASA NEWS

NASA's ECOsystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS) - <https://ecostress.jpl.nasa.gov/>

ECOSTRESS is addressing three overarching science questions:

- How is the terrestrial biosphere responding to changes in water availability?
- How do changes in diurnal vegetation water stress impact the global carbon cycle?
- Can agricultural vulnerability be reduced through advanced monitoring of agricultural water consumptive use and improved drought estimation?

Career Connections - <https://nasaclips.arc.nasa.gov/careerconnection>



Downlinks with Astronauts [Oct. 2021 - April 2022] In-flight education downlinks are opportunities for students and educators to interact with astronauts aboard the International Space Station during a live, 20-minute question-and-answer session. The [planning guide](#) offers information about the process and requirements to host an In-flight Education downlink. Proposals open May 3rd and are due on June 30th for the opportunity to participate in this program. Email JSC-Downlinks@mail.nasa.gov for opportunities.

NASA's Curious Universe - Podcasts

[Latest episode](#) - **Building Highways in the Sky:** When you think of NASA, you probably think about outer space. But the first "A" in NASA - aeronautics - means we're busy crafting a lot closer to home. Aerospace engineers Shivanjli Sharma, David Zahn, and Mike Guminsky are hard at work inventing and testing new ways to fly.

Events

Save the Dates:

September 25th - Observe the Moon Night in Sylva

Oct. 1-3 - Space Apps Challenge at PARI.

Registration is now open - [see our website](#) to sign up. It's Free!

SMSC will be hosting events this fall to celebrate the launch of the James Webb Space Telescope.



K-12 Curriculum Materials



The Nature of Science - [NASA eClips](#) has a new video out with extension information and activities. Join NASA scientists to see the work they do, whether they're in the lab or at home. See the [latest eClips newsletter](#) for even more resources.

A Teacher's **Guide To Educational Media For Diversity And Equity**

This Guide introduces relevant, research-based, actionable principles to support science educators in selecting and contextualizing media to promote culturally and linguistically responsive teaching and learning in their classrooms. Available from [this website](#).

NASA Citizen Science projects - <https://science.nasa.gov/citizenscience> - are collaborations between scientists and interested members of the public. The projects offer learning resources to help you connect citizen science experiences with the learning objectives or standards of your curriculum.

REPOSITORY ALIGNED TO NC STATE STANDARDS (currently under revision)
<https://www.southwesterncc.edu/stem-repository>

MATERIALS AVAILABLE FOR CLASSROOMS

(send an email to r_neff@southwesterncc.edu to claim these for your classroom)

- The GLOBE Program information guide & activity connections to NGSS
- Astrobiology Curriculum guide and graphic story books
- Far Out Math Activities for grades 9-12
- Far Out Math Activities for grades 5-12

ONLINE

Learn basic coding using data from [NASA's Chandra X-ray Observatory](#) and other satellites on exploded stars, star-forming regions, and black holes.

Professional Development

8/3/21 [1pm] [Webinar](#) - Explore Moon to Mars: Artemis Outreach Resources

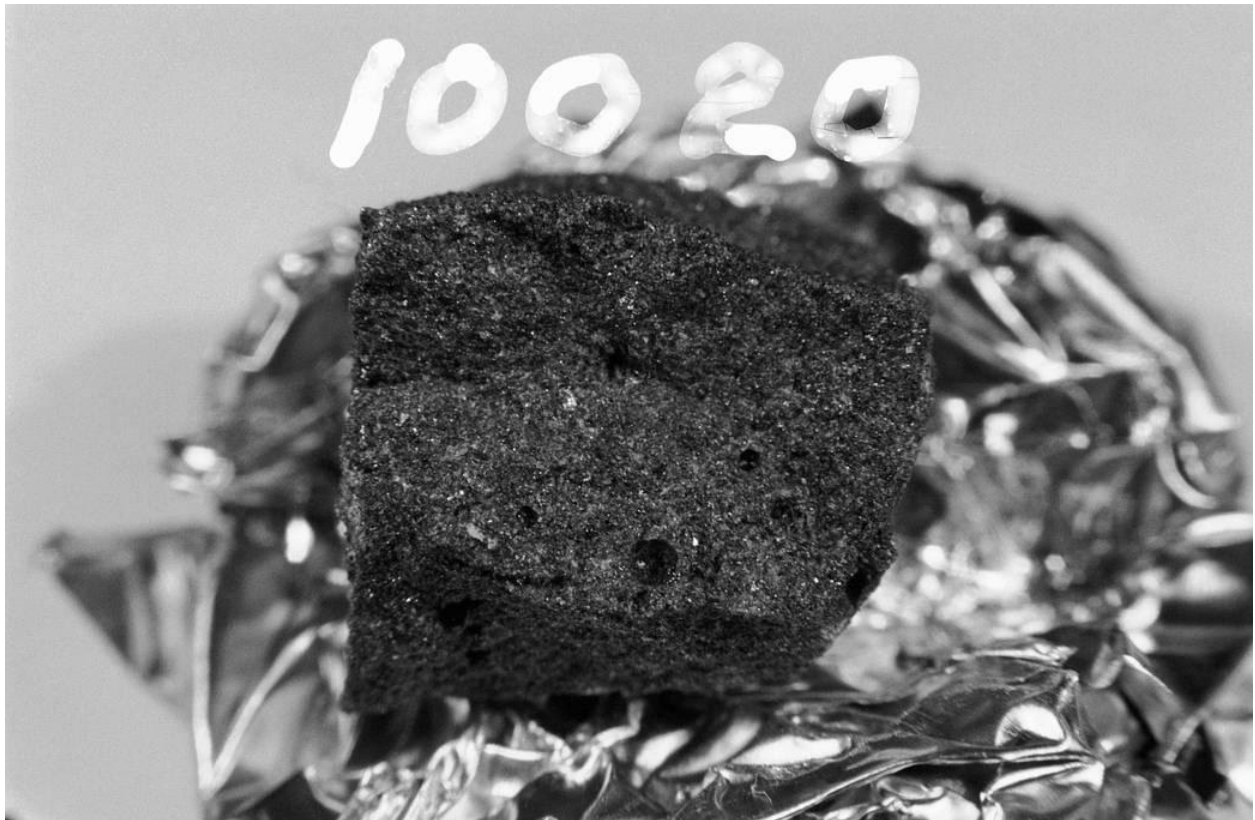
8/5/21 [1pm] [Webinar](#) - Moon to Mars Exploring the Rock Cycle

Opportunities For Libraries & Community Groups

[Mosquito Tracking and Elimination Activities](#) - Activity guides to build a simple trap to capture mosquito eggs and larvae using recycled and inexpensive materials, learn about the mosquito life cycle, habitat and play some games.

NASA's Astrophoto Challenges event for summer 2021 has begun and will run until August 16. Participants will be able to process real NASA astronomical image data. This challenge will focus on Messier 87 home to one of the biggest known black holes. [To learn how to participate visit here](#)

Image Spotlight



On July 20, 1969, Commander Neil Armstrong and lunar module pilot Buzz Aldrin became the first humans to set foot on another celestial body when they landed on Earth's only natural satellite. This image is of lunar sample #10020, one of many brought back for research.

Image Credit: NASA