

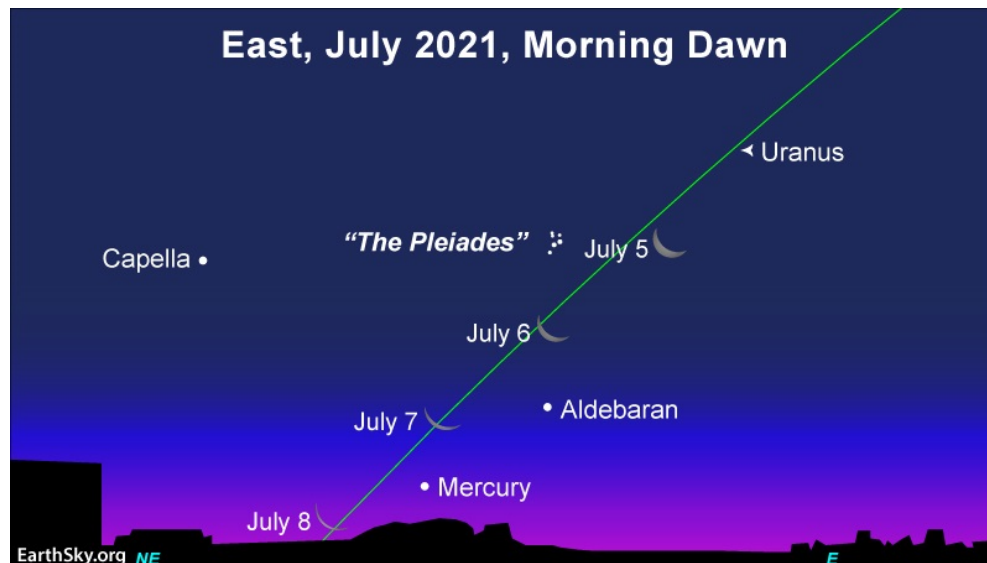
**Smoky Mountains  
STEM Collaborative**

**Southwestern**  
COMMUNITY COLLEGE  
EXPLORE YOUR PATH TO SUCCESS

# SMSC July 2021 Newsletter

## This Month

### July skies



Before sunup July 5 to 8, 2021, watch for the waning crescent moon to flit by the Pleiades star cluster, red star Aldebaran and then the planet Mercury. Golden Capella in Auriga – often called the Goat Star – will be northward from

the moon. Uranus is in this part of the sky, too, though difficult to see without very [dark skies](#) and a [finder chart](#). Source: <https://earthsky.org/>

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](mailto:r_neff@southwesterncc.edu) or you can follow us on [Facebook](#) or [Twitter](#).

## NASA NEWS

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

**Eyes on the Earth** – Scientists have developed a new way to use NASA satellite data to [track ocean microplastics from space](#). The technique relies on data from our Cyclone Global Navigation Satellite System, a constellation of satellites that measures wind speeds above Earth's oceans.

**NASA's Self-Driving Perseverance Mars Rover 'Takes the Wheel'** - The agency's newest rover is trekking across the Martian landscape using a newly enhanced auto-navigation system. [Watch Here!](#)



**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](mailto:JSC-Downlinks@mail.nasa.gov) for opportunities.

## Events

Join NASA's Universe of Learning for an exciting opportunity to use real astronomical data and tools to create your own images of the iconic active galaxy M87, home to a supermassive black hole. Watch an [introductory video](#) to learn more. [Entries](#) are due **Aug. 16**.



What is a Summer without...BUGS! The GLOBE Program needs your help with the [Mosquito Habitat Photo Challenge](#) (July 25 to Aug 25). Put your selfie skills to work and help NASA identify mosquito larvae that can prevent outbreaks of mosquito-borne disease!

Learn how to join and what you can do in this free GLOBE Mission Mosquito Webinar for all ages. July 8 at 2 PM ET. [Register Here](#) (FREE)

## 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. The matrix below shows the grades served by each project.

### REPOSITORY ALIGNED TO NC STATE STANDARDS

<https://www.southwesterncc.edu/stem-repository>

### MATERIALS AVAILABLE FOR CLASSROOMS

(send an email to [r\\_neff@southwesterncc.edu](mailto: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
- Class set (20) TI-84 graphing calculators

### 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

NASA webinars on STEM education topics at no cost- Learn Wherever You Are!

Search for what you want [HERE](#)

Or check out these opportunities in July:

- 7/12 - [Explore: Our Earth, the Moon, and the Sun](#)

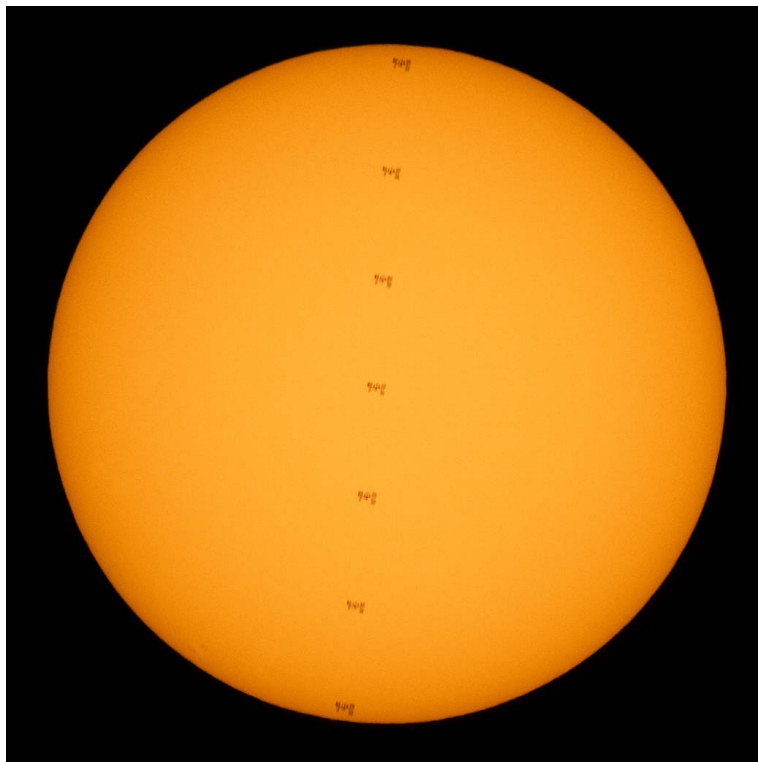


- 7/13 - [Explore Humans In Space: Biotechnical and Medical Science Spinoffs](#)
- 7/15 - [Aeronaut-X: Electricity, Circuits, and the X-57 Maxwell](#)
- 7/20 - [Explore Space Tech: Robotics on the International Space Station](#)
- 7/22 - [NASA STEM: The Unseen and Extreme World of Microbes](#)
- 7/27 - [Explore Space Tech: Making it Culturally Relevant](#)
- 7/28 - [NASA's Best: Engineering Design Process](#)
- 7/29 - [Explore Moon to Mars: Landing Humans on the Moon](#)

## Opportunities For Libraries & Community Groups

**Free Online Workshop:** [Confidence and Curiosity: Girls at the Telescope](#) In this online workshop, you will be able to explore some Girl Scout-tested, effective ways to interact with girls in informal learning environments. You can master techniques to help create an inviting environment where everyone has the opportunity to learn more about space science. August 8th - 28th, 2021. Live sessions will be on Tuesdays at 12 noon Pacific / 3 pm Eastern on August 10, 17 and 24th. **DEADLINE to apply: July 25th, sign up for the August workshop [here](#)**

## Image Spotlight



This composite image made from seven frames shows the International Space Station, with a crew of seven aboard, in silhouette as it transits the Sun at roughly five miles per second on Friday, June 25.

Image Credit: NASA/Joel Kowsky