

# eclipse™

2017-2024

## SOUTHERN ILLINOIS

*Eclipse Crossroads of America*

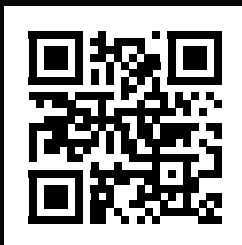
### IMPORTANT DATES:

- **October 14, 2023** – An annular solar eclipse will occur along a line between Oregon and Texas. The rest of the U.S., including all of Illinois, will see a partial solar eclipse.
- **April 8, 2024** – A total solar eclipse will occur along a line between Texas and Maine, including Southern Illinois. The rest of the U.S. will see a partial solar eclipse.

This is the last total solar eclipse in the contiguous U.S. until August 12, 2045.

For more information and a complete schedule of activities, go to:

[eclipse.siu.edu](http://eclipse.siu.edu)



## Quick Guide for the Upcoming Solar Eclipses

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### Information for Libraries

### Types of Solar Eclipses

- **Total solar eclipse:** The Sun and Moon align, and the Moon completely covers the disk of the Sun. Protective eyewear is required to view the event during the partial eclipse phases as the Moon slowly moves to cover the Sun and then slowly moves to uncover the Sun. Protective eyewear can be removed during the few minutes of totality when the Sun is completely covered. In order to view the total solar eclipse, the observer must be located inside the path of totality. This is the path that the Moon's shadow traces across the Earth. The closer the observer is to the centerline of the path of totality, the longer the total solar eclipse will last. Anyone outside the path of totality will view a partial solar eclipse.



Annular Solar Eclipse



Total Solar Eclipse

- **Annular solar eclipse:** The Sun and Moon align, but the Moon appears too small to cover the entire disk of the Sun, leaving a "ring of fire" around the Moon. This occurs because the Moon is at the farthest point of its orbit during alignment, causing it to appear slightly smaller than normal in the sky. Protective eyewear is required at all times to view an annular solar eclipse.
- **Partial solar eclipse:** The Sun and Moon are not in perfect alignment, and a portion of the Sun is visible behind the Moon. Protective eyewear is required to view a partial solar eclipse.

### Resources for Educators at [eclipse.siu.edu](http://eclipse.siu.edu)

- Request an eclipse-presenter visit your library to give a public talk
- Request SIU's inflatable planetarium for an event
- Find book lists, activities, recommended websites, and other online resources. These lists will be continually updated as more material becomes available.



## **Experience a Total Solar Eclipse In-Person**

All families are encouraged to get involved in this amazing experience. SIU is here to help make that happen.

- **Live Eclipse Show in Saluki Stadium:**  
The public is invited to the SIU Carbondale campus to experience the excitement of the total solar eclipse. This show will include high-altitude balloon launches from the stadium field, live discussion of the eclipse events as they occur, and family-friendly science activities. Eclipse glasses will be provided. April 8, 2024, gates open at 11 am  
Tickets are available  
\$25 with chair, bleacher, and berm options.
- **Live streaming of the eclipse:**  
If you are not in the path of totality, and you can't make it to SIU to participate in person, SIU will be offering a live-streaming event so you can watch the eclipse in real-time. This will include feeds from across the U.S. so weather will not affect your ability to experience this amazing phenomenon.
- **Consider organizing a watch party for your library and inviting families to attend.** Anyone can observe an eclipse. They just need to follow proper eye safety.

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The Eclipse Festival held on the SIU campus is 4 days of family-friendly events.

- Crossroads Eclipse Research Workshop - April 6
- Eclipse Saluki Con - April 6 & 7
- Crossroads Arts and Craft Fair - April 7 & 8
- Crossroads Astronomy, Science, and Technology Expo - April 7 & 8
- Eclipse Day at Saluki Stadium - April 8

In Carbondale:

Total Solar Eclipse begins 12:42 pm

Totality begins 1:59 pm

Totality lasts for 4 min, 9 sec

## **Eclipse Viewing**

Viewing a solar eclipse can be an amazing, life-changing experience. All people should have the chance to view this amazing natural phenomenon in a way that is safe and healthy.

Libraries can request eclipse glasses for distribution to patrons through the STAR Library Network. Visit [starnetlibraries.org/about/our-projects/solar-eclipse-activities-libraries-seal/](http://starnetlibraries.org/about/our-projects/solar-eclipse-activities-libraries-seal/)

Techniques to make inexpensive and safe solar viewers can be found at [exploratorium.edu/eclipse/how-to-view-eclipse](http://exploratorium.edu/eclipse/how-to-view-eclipse)"

### **Eclipse books for young readers (fiction and non-fiction)**

Arnold, S. M. (1995). *Child of the Sun: A Cuban legend*. Troll Associates.

Bennett, J. (2022). *Totality!: An Eclipse Guide in Rhyme and Science*. Big Kid Science

Brezina, C. (2019). *Eclipses*. Britannica Educational Publishing

Coffelt, N. (2016). *The Big Eclipse*. Orbit Oregon  
Desimini, L. (1999). *Sun & moon: A giant love story*. Scholastic

Fox, K. A. (2023). *A Few Beautiful Minutes: Experiencing a Solar Eclipse*. Little Brown & Co.

Fraknoi, A. (2017). *When the Sun Goes Dark*. NSTA Kids

Hamberger, J. (1964). *The Day the Sun Disappeared*. W.W. Norton

Hoult, J.C. (2013). *Where Did the Sun Go? Myths and Legends of Solar Eclipses Around the World Told with Poetry and Puppetry*. Outskirts Press

Hunter, N. (2013). *Eclipses*. Heinemann Library

Loomis, I. (2019). *Eclipse Chaser: Science in the Moon's Shadow*. Houghton Mifflin Harcourt

Mass, W. (2010). *Every Soul a Star*. Little Brown & Co.

Pattison, D. (2019). *Eclipse: How the 1919 Solar Eclipse Proved Einstein's Theory of General Relativity (Moments in Science)*. Mims House

Rao, J. (2017). *Looking up!: The Science of Stargazing*. Simon Spotlight

Rau, D. M. (2024). *What is a Solar Eclipse?* Penguin Workshop

Sonneborn, R. A. (1974). *Someone is Eating the Sun*. Random House

Whitethorne, B. (2002). *Sunpainters: Eclipse of the Navajo sun*. Salina Bookshelf