

### **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





# Quick Guide for the Upcoming Solar Eclipses

### **Information for Schools**

## **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.



Partial Solar Eclipse

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

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

• Live Eclipse Show in Saluki Stadium:
Bring your students to SIU Carbondale campus to
experience the excitement of the eclipse. This show
will include high-altitude balloon launches from the
stadium field, a live discussion of the eclipse events
as they occur, and kid-friendly science activities.
Eclipse glasses will be provided.
April 8, 2024, gates open at 11 am
K-12 schools get a big discount of entrance fees:
\$5/student

CALL 877-SALUKIS (877-725-8547) to get tickets. No limit on the number of tickets purchased. Reserved bus parking for schools provided.

- Live streaming of the eclipse:
   If your school is 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 your students 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.
- Organize a watch party at your school:
   If you would like to plan a watch party at your school, SIU can help. SIU is part of a national effort to educate and enable groups to hold their own events.

   For more information, contact Dr. Harvey Henson at henson@siu.edu.

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



### Resources for Educators at eclipse.siu.edu

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

### Research Opportunities

If you have a group of students who are interested in conducting a research project related to the total solar eclipse, SIU can provide space for that research effort. For more information, contact Dr. Harvey Henson at henson@siu.edu.

#### **Eclipse Viewing**

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

Techniques to make inexpensive and safe solar viewers can be found at exploratorium.edu/eclipse/how-to-view-eclipse

