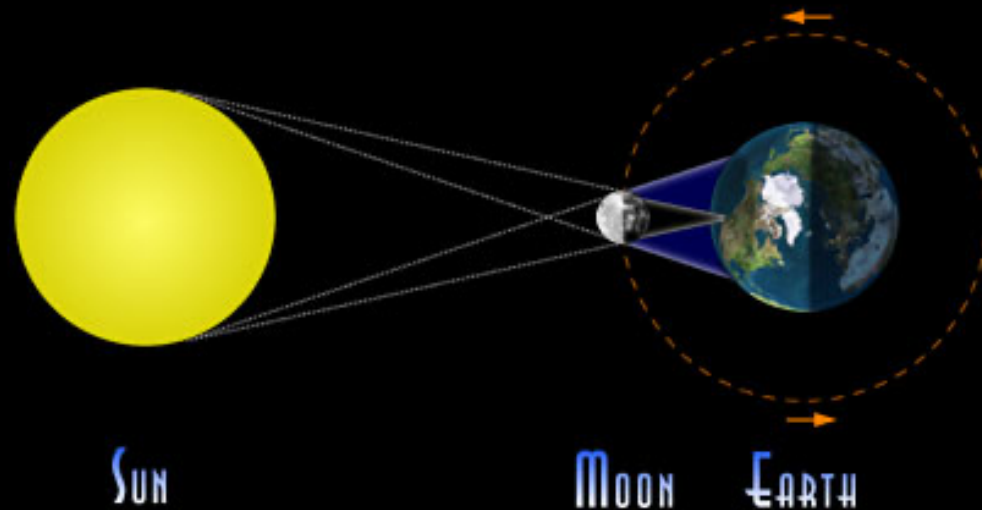


2024 Southern Illinois Crossroads Eclipse Festival



SOLAR ECLIPSE GEOMETRY



www.MrEclipse.com

©2000 F. Espenak

Types of Solar Eclipses



Uneclipsed



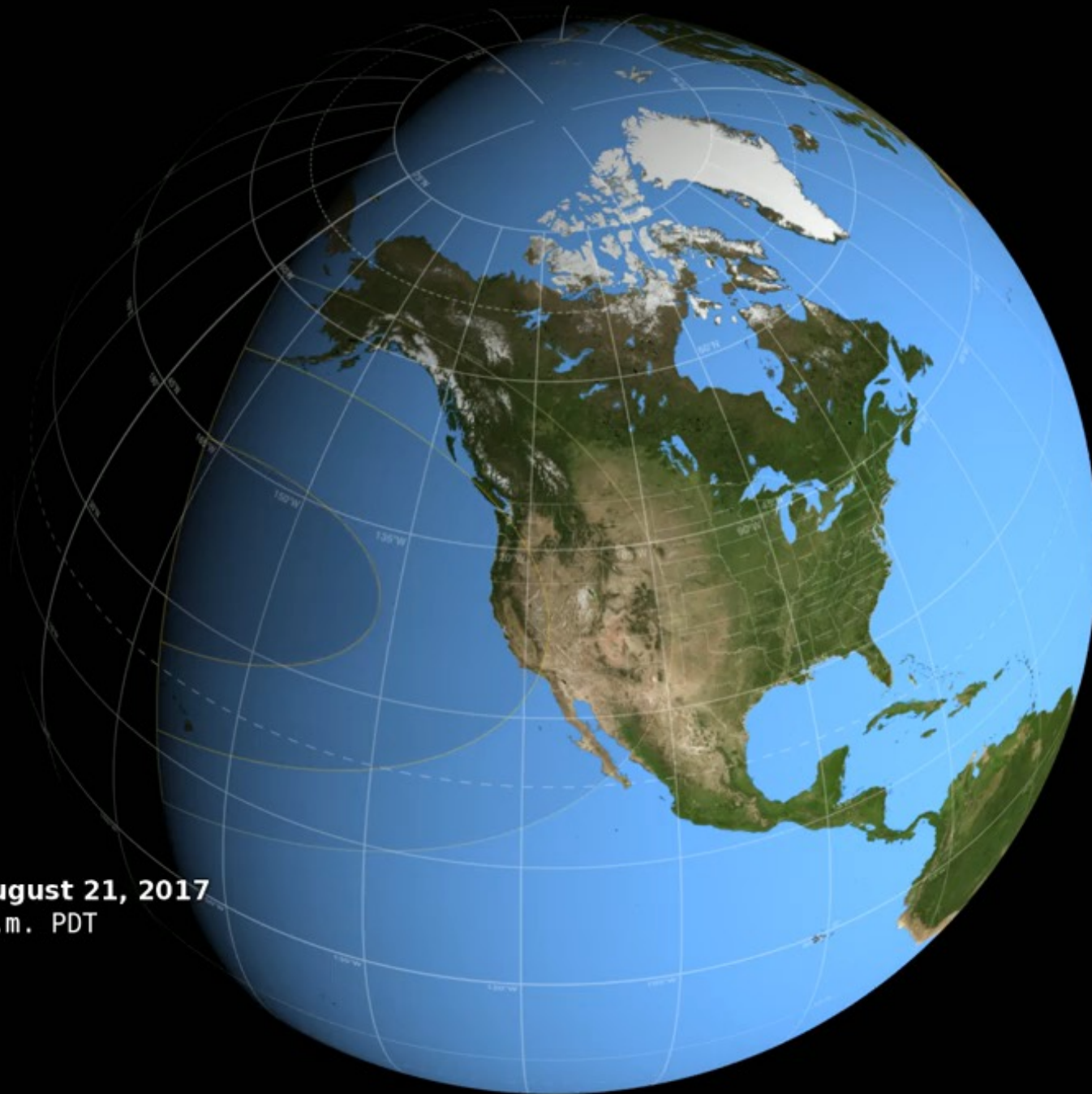
Partial Eclipse



Annular Eclipse



Total Eclipse



Monday, August 21, 2017

Time 09:25:40 a.m. PDT
Center
Duration
Sun Altitude



Annular Eclipse

Total Eclipse:

AMERICAN SOLAR ECLIPSES

- TOTAL SOLAR ECLIPSE OF 2017 AUGUST 21
- ANNULAR SOLAR ECLIPSE OF 2021 JUNE 10
- ANNULAR SOLAR ECLIPSE OF 2023 OCTOBER 14
- TOTAL SOLAR ECLIPSE OF 2024 APRIL 8

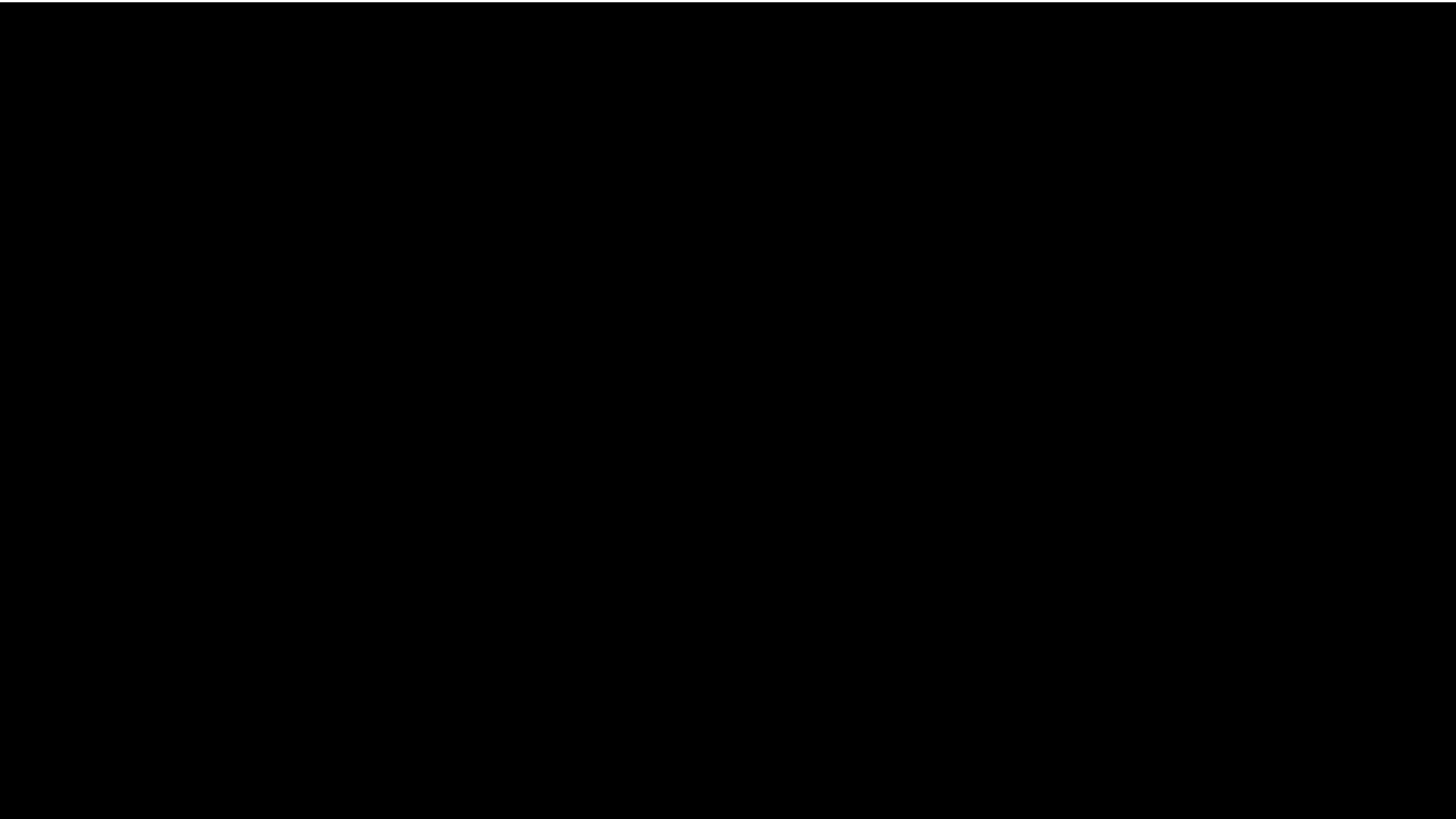


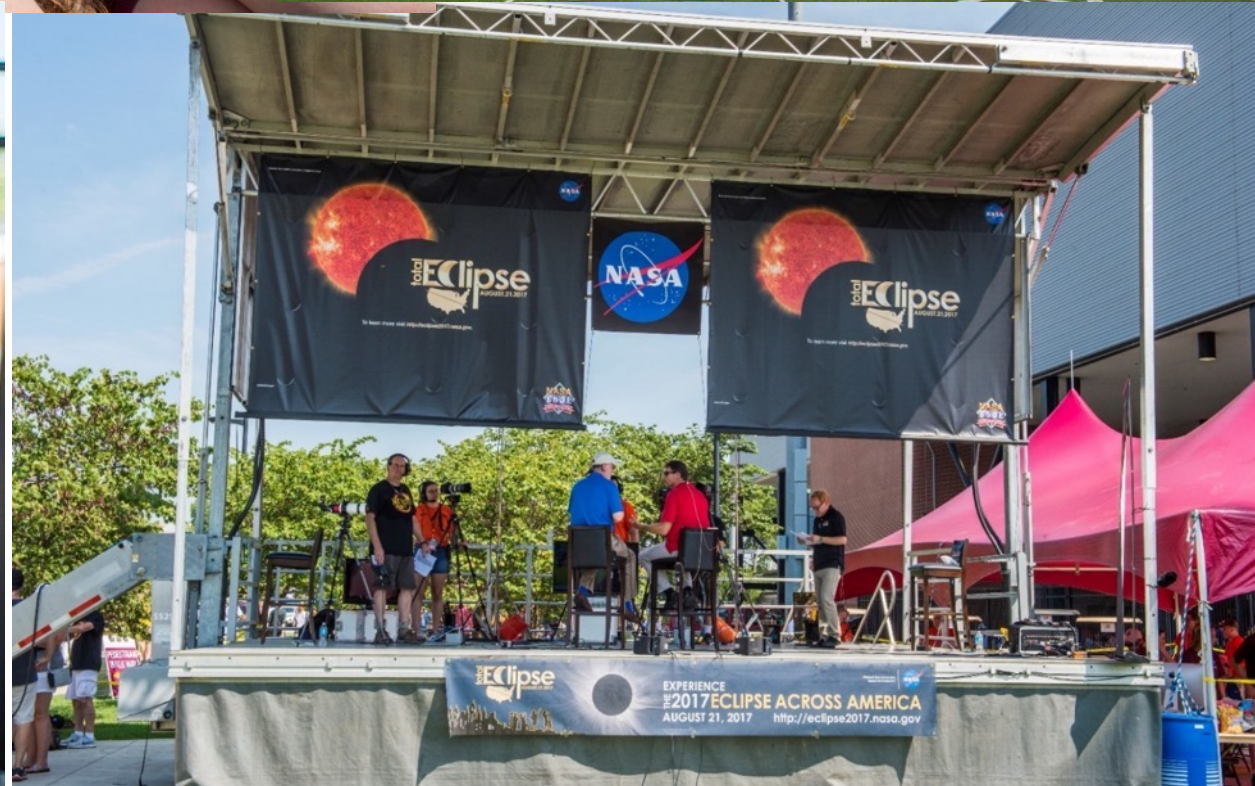
What happens during the 2024 Total Solar Eclipse?

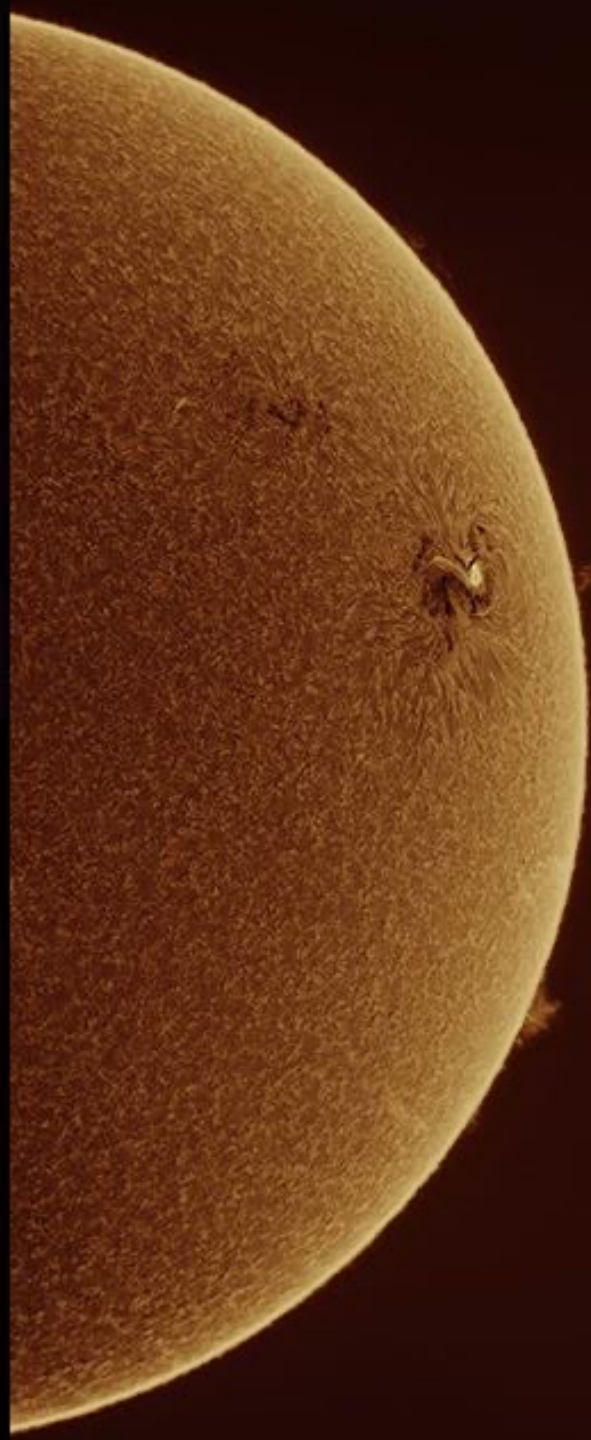
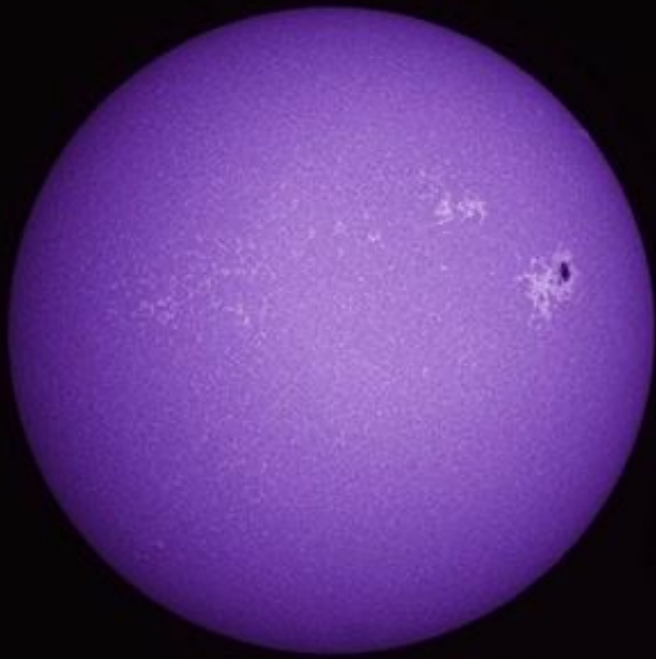
Güneş Tutulması, 29 Mart 2006, Çolaklı/Side, Türkiye

- Eclipse crosses North America from SW to NE starting in Mexico.
- Partial Phase
 - C1 First Contact
 - Need glasses when looking at Sun
 - Starts to get dark, Crisp shadows. Shadowbands.
- Totality C2 to C3 4min, 9 seconds.
 - Must be in the ~ 115 mile wide path
 - 1st Diamond Ring (3-5 seconds)
 - **Darkness & Corona** – Spectacular, awesome, sublime, emotional overload. Take off Glasses
 - 2nd Diamond Ring (Put on Glasses)
- Partial Phase
 - Starts to get light.
 - Need eclipse glasses to see the partial eclipse









2023 ASE

- “Practice event”
 - Remote streams
 - Lunt SunLab
 - DEB Initiative
 - Training
 - Promotion







Campus wide activities

- Salukicon
- Research Presentations
- Art and Craft Fair
- Expo
- Carbondale – Concert
- Eclipse Eve Live Radio Show
- Eclipse Day at Saluki Stadium
- Engagement beyond campus
 - Broadcast, streaming, national feeds
 - WSIU / TV & Radio
 - NASA EDGE
 - Adler Sky Observers Hangout
 - Web, social media
 - DEB-I live telescope feeds
 - Cosmic Picture
 - Lunt SunLab Imagery

SIU Carbondale Eclipse 2024 Events

- 1 Crossroads Astronomy Science and Technology Expo
- 2 Crossroads Art and Craft Fair
- 3 Eclipse Day at Saluki Stadium
- 4 Eclipse Comic Con
Planetary Radio Live with Mat Kaplan
Crossroads Eclipse 2024 Research Presentations

 Demo/Vendor Area

 Ticket Required


2017 2024
SOUTHERN ILLINOIS
Eclipse Crossroads of America



How can you participate?

- Suggest / contribute an event
- Host an event over the weekend – let us know
- Volunteer and encourage volunteerism – extra credit.