Eclipses Over The Hill Country

- Annular solar eclipse
  - October 14, 2023
- Total solar eclipse
  - April 8, 2024
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<th>Month</th>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
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<th>June</th>
<th>July</th>
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At perigee, the Moon is closer to the Earth and looks slightly larger.

At apogee, the Moon is farther from the Earth and looks slightly smaller.

Moon's Orbit is elliptical (greatly exaggerated here).
Annular Solar Eclipses

When Earth is near perihelion, and the moon is near apogee, we see an annular solar eclipse.

The angular sizes of the moon and the sun vary, depending on their distance from Earth.
CREDIT: Rick Fienberg
(AAS Press Officer)
Total solar eclipse of April 8, 2024

After an interval of seventy years since 2017, a total solar eclipse visits North America again. This is a rarity nature’s most spectacular sight. To see the beauty of the eclipse and its shadow in a completely darkened sky, you must travel to the path of total solar eclipse.

The gray oval shapes show the Moon’s shadow at six minutes apart. Times of greatest eclipse are shown in local time along the purple curves. Phases of partial solar eclipse observations are shown along the orange curves.
Total solar eclipse of April 8, 2024
Safety!

Never look directly at the sun nor any part of it without eye protection!

Silly me, Hank! I got it backwards... It's CARDBOARD for a SOLAR ECLIPSE and BINOCULARS for a LUNAR ECLIPSE!

RING OF FIRE" SOLAR ECLIPSE
SEE THE ALL-AMERICAN
TOTAL SOLAR ECLIPSE
AT THE
UNIVERSITY OF MISSOURI
ON THE MID-LINE
OF TOTALITY

EXPERIENCE
THE CENTER
OF TOTALITY
FROM THE
CENTER OF
AMERICA!

AUGUST 21, 2017

COLUMBIA, MISSOURI
2017

TOTAL ECLIPSE

MIZZOU
Case Study: St Louis Eclipse Task Force
Timeline

<table>
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<tr>
<th>Year</th>
<th>Milestone</th>
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| 2014 | • AAS ECLIPSE PLANNING WORKSHOP (August)  
• First Task Force Meeting – Eight attended (October) |
| 2015 | • Website launched (March)  
• Eclipse Workshop – 60 attended (October) |
| 2016 | • Outreach/Resource Center Launched  
• First order of eclipse glasses – 5,000 (April – Debut at Airshow) |
| 2017 | • Inexpensive Eclipse Activities by Adler – 100 attended (January)  
• Eclipse Expo – 5,000 attended (June)  
• FREE Eclipse Glasses to Schools – 163,000 glasses (June – July)  
• TOTAL SOLAR ECLIPSE (August 21)  
• Last Task Force Meeting (September)  
• AWB Eclipse Glasses Recycle Program - 35,000 glasses (September) |
Task Force Final Results

Final Task Force Tally:
• 160 organizations
• 300 people

Eclipse Glasses:
• 500,000 through discount program
• 160,000 FREE to schools

Education:
• Workshops/Expo
• Hundreds of programs

Media:  Good coverage

• 44 government (includes cities, parks, SEMA, county emergency management, law enforcement)
• 33 businesses/associations
• 33 school districts
• 25 library systems
• 11 university/colleges
• 4 media organizations
• 4 astronomy clubs
Self-Evaluation

Did well:
- Started early, persistent
- Focused, limited goals
- Large, cross-sectional team
- Significant outreach
- Workshops, “Expo”
- Solar glasses, viewing tools
- Web resource center
- Media coverage

Not so well:
- Lousy job of using social media
- Website overwhelmed in final weeks
- Task force communication system caused complaints
- Mixed bag with schools
- Lack of corporate support
https://eclipse.aas.org/
HOW TO READ AN ECLIPSE MAP OF THE APRIL 8, 2024 TOTAL SOLAR ECLIPSE

O.M.G.!

NOT BAD. EH?

FANTASTICO!

NADA

NOPE

NOPE

NOPE

NOPE

NOPE

NOPE

NOPE