



# NSSSEC

## NASA SPACE SCIENCE EDUCATION CONSORTIUM

(Formerly the Heliophysics Education Consortium)

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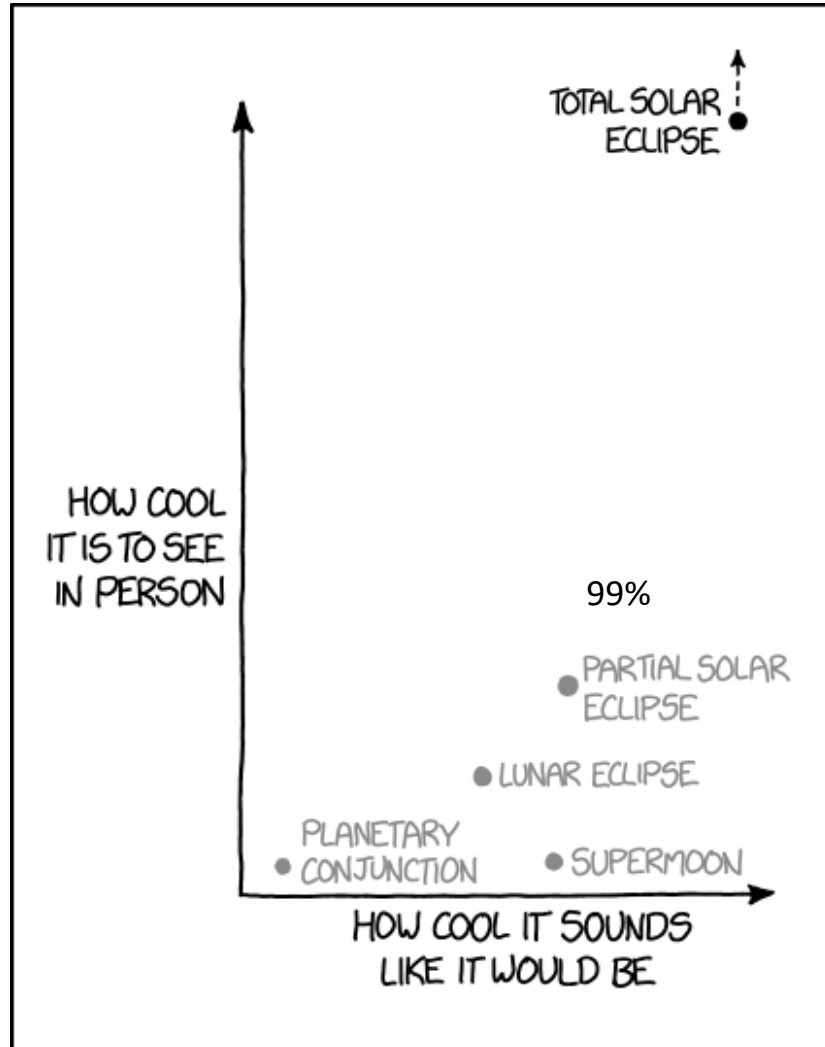
NASEM, Keck Center, April 8, 2019

We provide expertise and support to the SciAct across science and technology disciplines.

We are a research and application team for NASA space science education.

- NASA Space Science Content
- Citizen Science
- Education Technology
- Audience Reach
- Accessibility

What is a model for how we activate science engagement and learning across a nation and beyond?



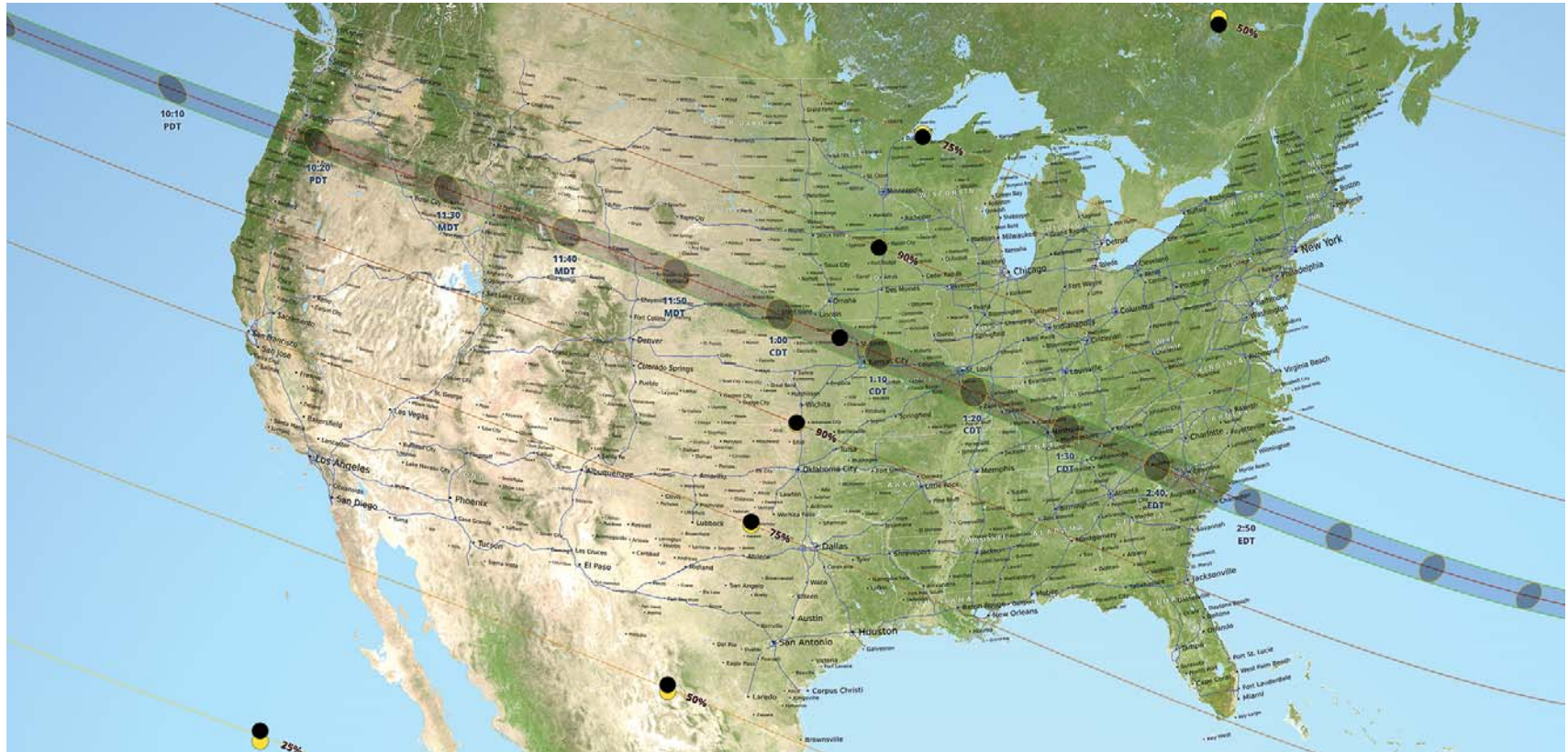




Where were you August 21, 2017?

AUGUST 21, 2017: First total solar eclipse visible in the contiguous United States in 38 years.

First coast-to-coast since 1918.





## Partnerships were the Key

### Federal Agencies

NASA Headquarters and all 10 Field Centers  
Department of Transportation  
National Park Service  
National Science Foundation  
NOAA  
Smithsonian Astrophysical Observatory

### Government funded projects

AURA/ Citizen CATE  
NASA Museum Alliance  
Night Sky Network  
Radio Jove  
Space Grant  
STARNet/NASA@MyLibrary

### Communities

Astronomers without Borders  
Astronomical League  
Boy Scouts USA  
Charleston River Dogs  
Exploratorium  
Girl Scouts USA  
Idaho Falls Chukars  
Museum of Science Fiction  
Planet Radio

### Communities (cont.)

Salem Volcanoes  
Science Friday  
WGBH

### Industry

Google  
Lunt Solar Systems

### Professional Societies and Organizations

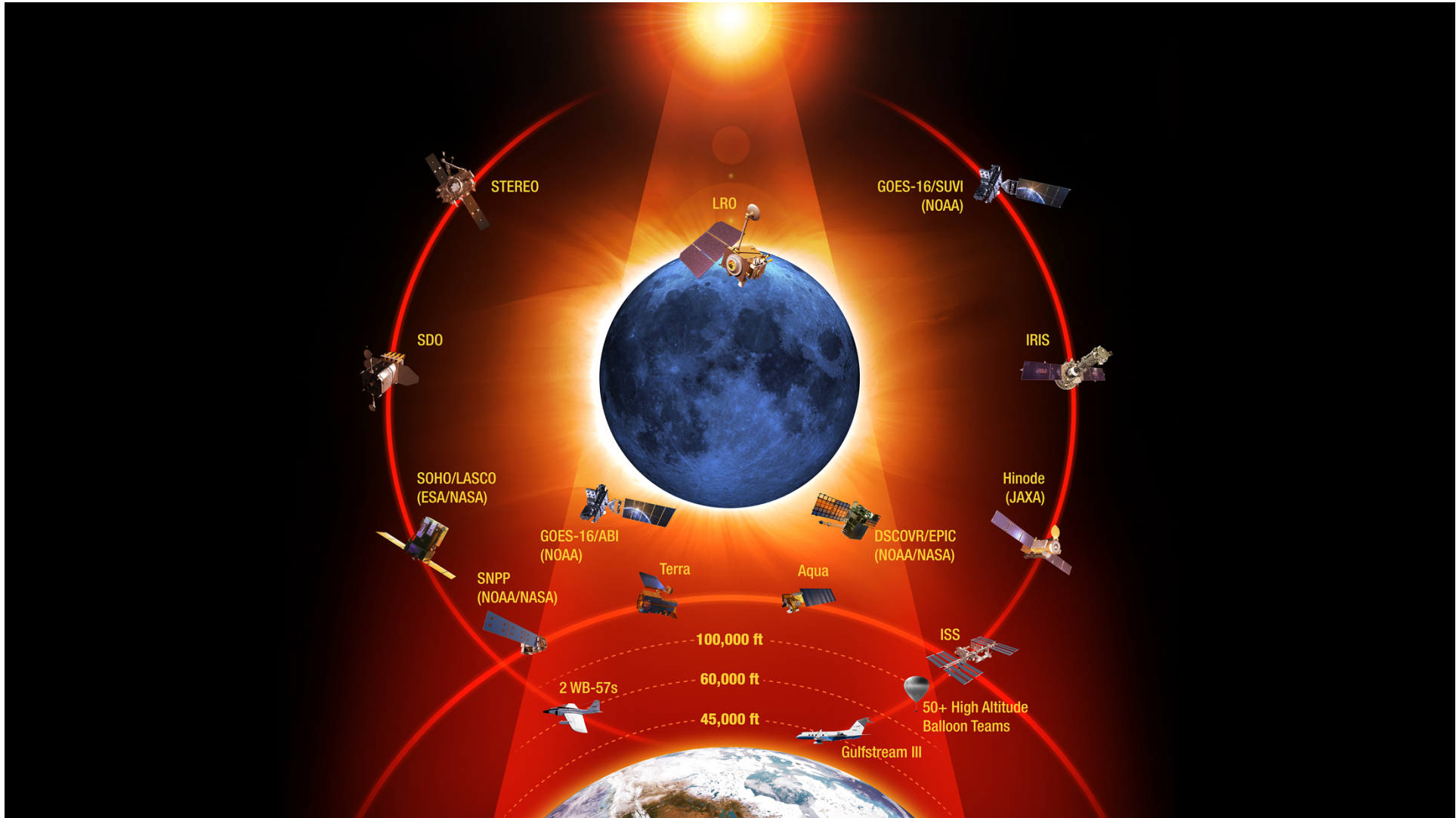
American Astronomical Society  
Indigenous Education Institute  
National Society of Hispanic Physicists  
Pisgah Astronomical Research Institute  
SETI Institute  
Space Science Institute

### Higher Education

Rice University  
Southern Illinois University  
Southwest Community College  
UC Berkeley  
University of Alaska  
University of North Texas  
Tennessee State University

## Key partnerships across the SciAct Collective

- NASA Science Content – WGBH, e-Clips
- Citizen Science – Aurorasaurus, Radio Jove, Sensor development, GLOBE
- Education Technology – STEM Innovation Lab, ASU, WGBH
- Audience Reach – WGBH, NASA @ My Libraries, SETI Girl Scouts
- Accessibility – Eclipse Soundscapes, Smithsonian, Universe of Learning, Technology Spinoffs





## NASA BROADCASTS

- 1 ISS (JSC) – May have live imagery
- 2 50+ High Altitude Balloon Teams – Managed by Montana State University, MT
- 3 Gulfstream III (AFRC)
- 4 State Fair Grounds/Oregon Museum of Science and Industry (ARC) – Salem, OR
- 5 Exploratorium – Madras, OR
- 6 Museum of Idaho (JPL) – Idaho Falls, ID
- 7 Exploratorium – Casper, WY
- 8 Homestead National Monument of America (LaRC/NPS) – Beatrice, NE
- 9 State Capitol (GRC) – Jefferson City, MO
- 10 Southern Illinois University Carbondale (NASA Edge) – Carbondale, IL
- 11 Summer Salute Festival (MSFC) – Hopkinsville, KY
- 12 Austin Peay State University (MSFC) – Clarksville, TN
- 13 Great Smoky Mountains National Park (NASA 360/NIA) – NC
- 14 College of Charleston (HQ/KSC) – Charleston, SC
- 15 Coast Guard Ship (NASA 360/NIA) – Atlantic Ocean

## WEBSITES

<http://eclipse2017.nasa.gov>  
[www.nasa.gov/eclipselive](http://www.nasa.gov/eclipselive)  
<http://eclipse.stream.live>



# NASA GENERAL EVENTS



- Marker Legend:
- Community Events
  - Observing Events
  - Informal Education Venues
  - Formal Education Venues

398

COMMUNITY EVENTS

402

OBSERVING EVENTS

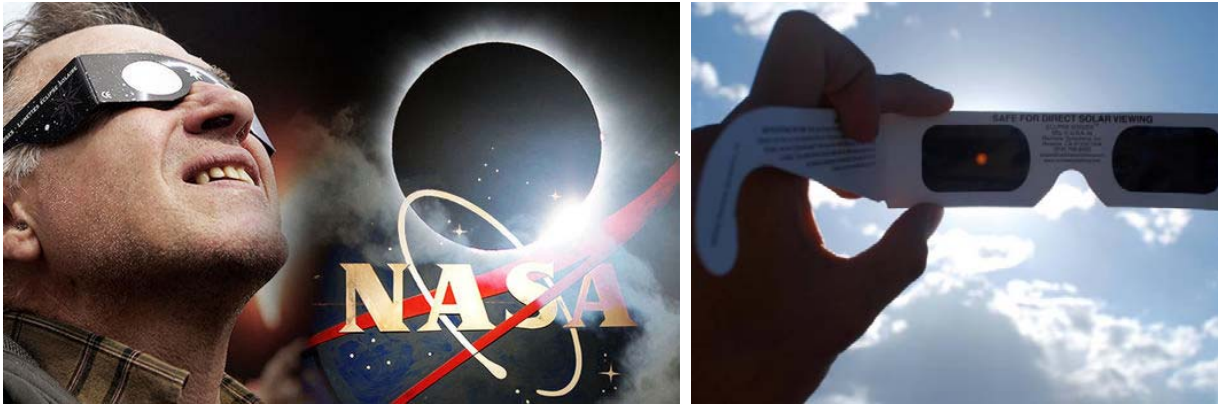
182

INFORMAL EDUCATION VENUES

51

FORMAL EDUCATION VENUES

# Safety!



## SAFELY observing THE SUN

**WARNING!** Never look directly at the sun without proper eye protection. You can **seriously** injure your eyes.



Check with local science museums, schools and astronomy clubs for eclipse glasses—or purchase an ISO 12312-2 compliant pair of these special shades!



View the eclipse with special eclipse glasses.



Regular sunglasses are not safe to view the eclipse.

SUN FUNNEL



Inexpensive and easy to build, the sun funnel is a device that completely encloses the light coming from a telescope and projects a magnified image of the sun, large enough for many people to view at once.  
<http://eclipse2017.nasa.gov/make-sun-funnel>

A critical partnership with AAS

# ECLIPSE 2017: By the Numbers

- The largest NASA event ever with many firsts for the agency
- Agency's most-watched and most-followed Social Media event.
- 0.7 PBytes of data downloaded from [eclipse2017.nasa.gov](http://eclipse2017.nasa.gov).
- [Eclipse2017.nasa.gov](http://Eclipse2017.nasa.gov) and [www.nasa.gov](http://www.nasa.gov) had over 90 million unique page views.
- Teletrax estimates our television content was aired in 22 countries worldwide Yielding a potential audience of more than 600 million.



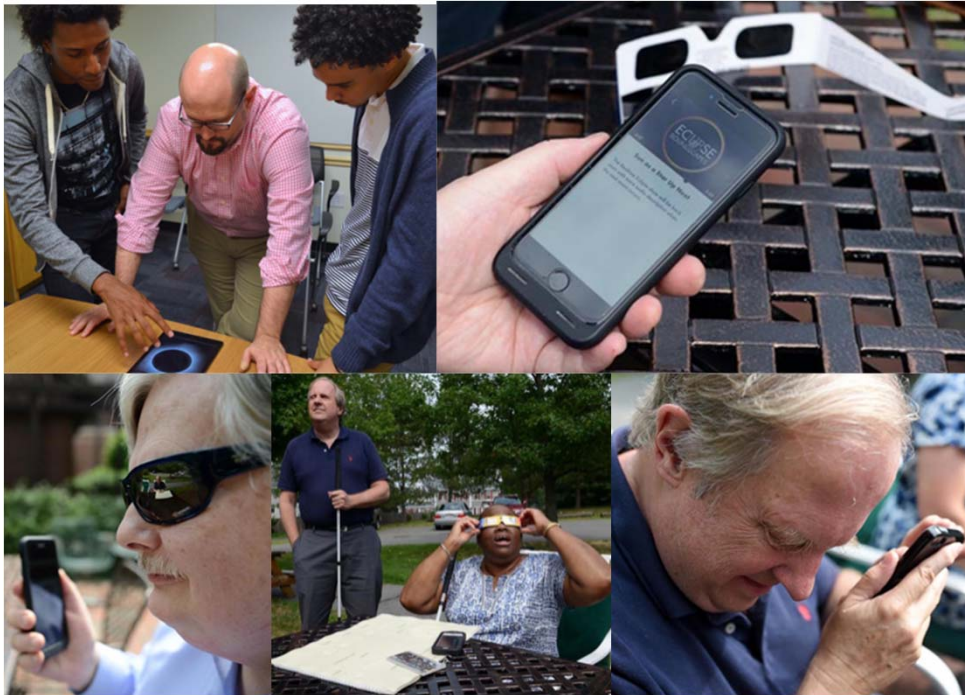
How did we reach audiences for whom space science is not normally accessible?



# We Engaged Special Interest Groups



# We Developed Assistive Technologies



Since its creation in late June 2017 The Eclipse Soundscapes Facebook page @EclipseSoundSAO has received 671 likes, 552 page followers, and a reach, the number of unique people who saw the content, of 24,028

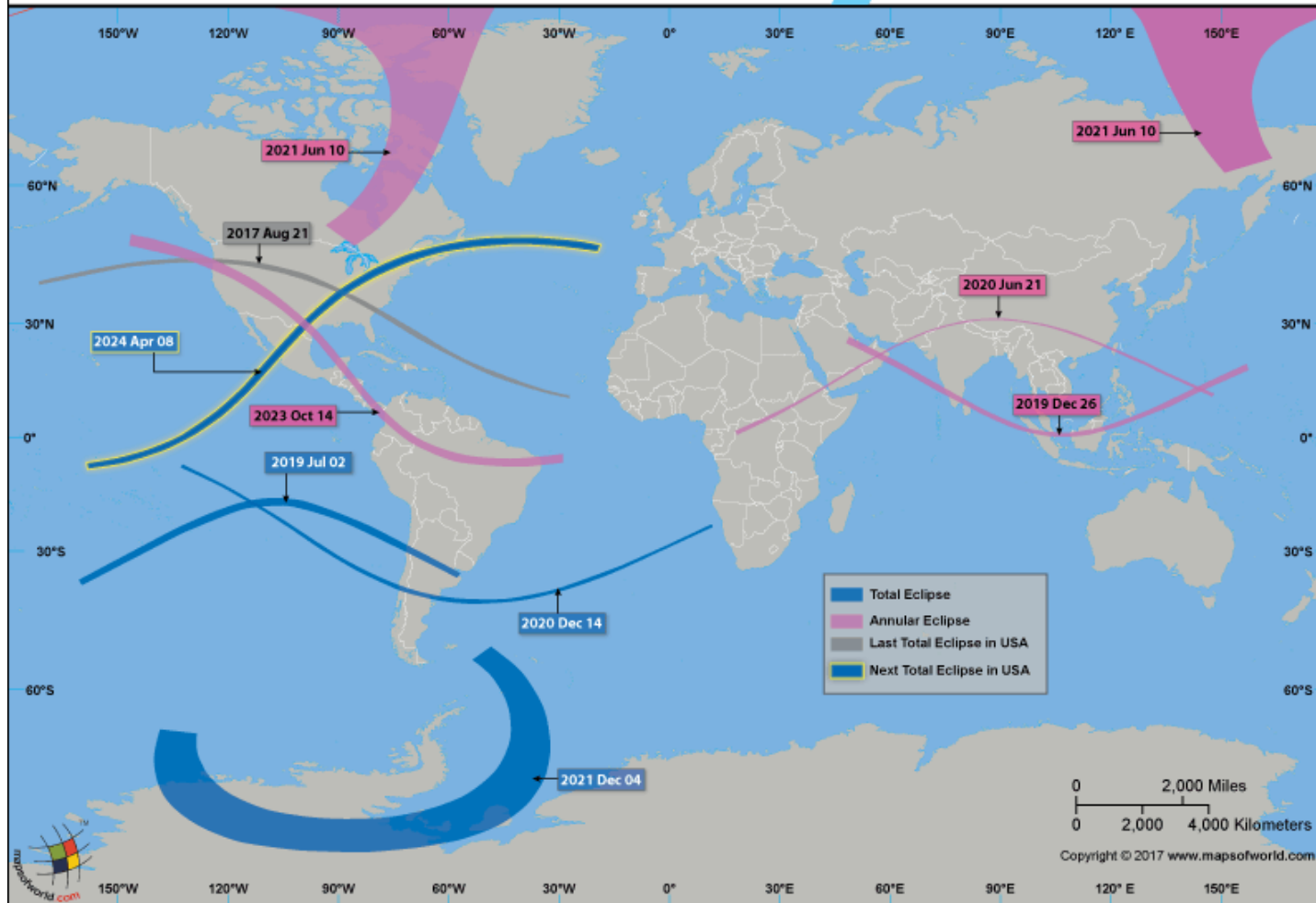
Since its creation in late June 2017 The Eclipse Soundscapes Twitter account @EclipseSoundSAO has received 50,374 tweet impressions, 562 profile visits, 135 mentions, and 186 followers. 28 stories were published by local and national news sources, 6 of which cater specifically to people who are blind and visually impaired



# STEM Innovation Lab

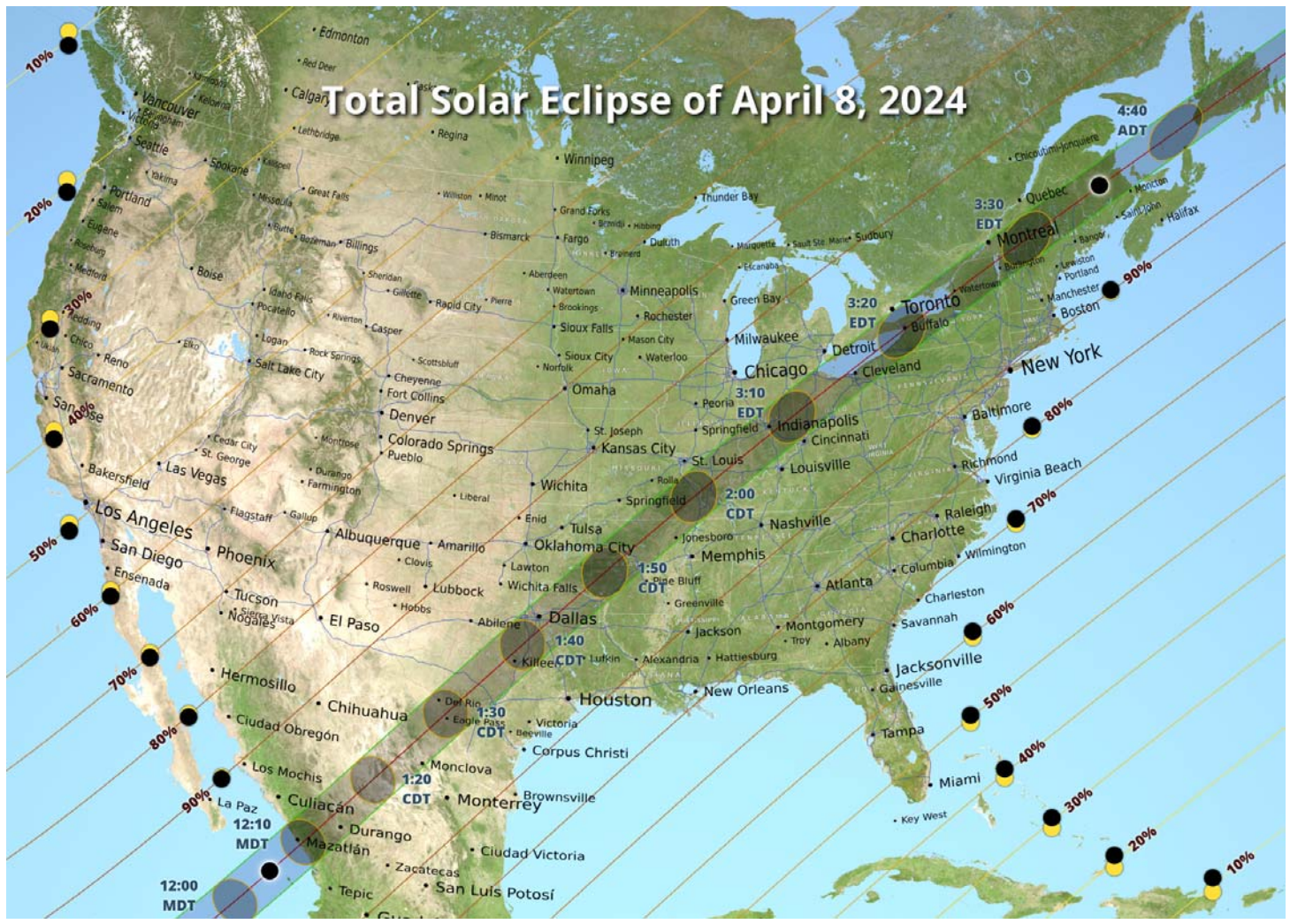


# When is the next solar eclipse?



Where will you be exactly 5 years from today?!

# Total Solar Eclipse of April 8, 2024



Thank You!!  
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