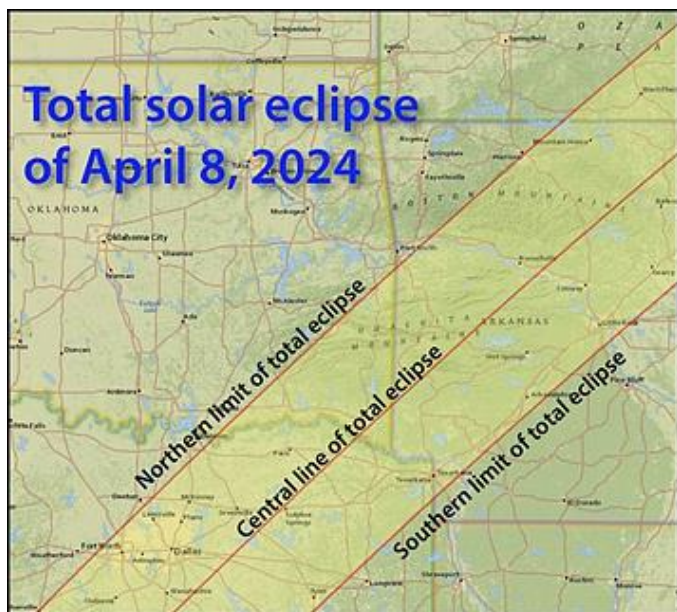


USA TOTAL SOLAR ECLIPSE – MONDAY APRIL 8, 2024

This page is a collection of resources about the eclipse from several sources. You will surely see more as the Eclipse approaches. Use good judgement about the source of the information. Social Media is likely not the most reliable source. I hope these help your planning efforts.



On April 8, 2024 Tulsa will experience a 95% partial Solar Eclipse.


Many people will be traveling to the path of the Total Solar Eclipse that sweeps a long path from SW Texas, across the SE tip of Oklahoma, through central Arkansas and on to Maine.

The next Total Eclipse in the USA occurs in Montana and NW border states August 22, 2044. **Tulsa will have a long Total Eclipse Aug 12, 2045 !!**

Click the map or this link to Zoom into a [Google Map style](#) to see exact times for any chosen location in or out of the path of Totality

Save it in your favorites on your phone, computer and other devices as you may need to be mobile on eclipse day.

Event Data for Tulsa area
Subtract 5 hours for Tulsa times

36° 09' 23.71" N <-> 36.15659°	Penumbral duration : 2h 36m 27.9s	Help				
96° 00' 10.74" W <-> -96.00298°	(partial solar eclipse)					
219.0m (719ft)						
Obscuration : 94.964%		Magnitude at maximum : 0.95070				
		Moon/Sun size ratio : 1.05524				
Event ($\Delta T = 69.1s$; alt. = 219m)	Date	Time (UT)	Alt	Azi	P	V
Start of partial eclipse (C1)	2024/04/08	17:30:41.4	+58.8°	153.0°	224°	03.8
Maximum eclipse (MAX)	2024/04/08	18:48:51.0	+61.0°	191.9°	138°	07.7
End of partial eclipse (C4)	2024/04/08	20:07:09.3	+53.2°	225.2°	054°	11.4

Tulsa Times are:

Begins at 12:30 PM Reaches **Maximum at 1:49 PM** and ends at 3:07 PM

At Maximum eclipse it shows the Sun's Altitude is 61° up just west of South - Azimuth 192°

The [HELP LINK](#) in the top right corner explains all the features and data information. It even has a geolocation feature for active navigation to your eclipse viewing spot.

EYE SAFETY –

Certified Safe Eclipse Glasses or Viewer Cards are essential to observe the eclipse.

These filters block not only Visible light but also Infrared and Ultraviolet light that can damage your eyes. Look for the ISO safety certificate - that block 99.99 % of the sun's various kinds of radiation. Do not attempt to use improvised materials that may make the sun appear darker but do not protect your eyes from the unseen harmful infrared and ultraviolet radiation. The same advice goes for trying to photograph the eclipse with your phone or camera. The sun can quickly damage the sensors in your device. Cameras require a different kind of filter

Be cautious about Online Ads online Ads – In 2017 unsafe “knock off” ones were being sold In Tulsa area Eclipse Glasses can be found (while supplies last) at Tulsa Air and Space Museum, Jenks High school Trojan shop. Also, Home Depot or Lowes may have them.

Note: It is perfectly safe to be out in the sunlight on an eclipse day. It the same sun as any day It just that on eclipse days people want to see what the sun is doing.

NASA – EYE SAFETY VIEWING A SOLAR ECLIPSE

<https://science.nasa.gov/eclipses/future-eclipses/eclipse-2024/safety/>

Here is an article on reliable sources of Safe Tested Material for viewing the Sun.

Suppliers of Safe Solar Filters & Viewers | Solar Eclipse Across America

<https://eclipse.aas.org/resources/solar-filters>

One reliable source our club has used several times is Rainbow Symphony

<https://www.rainbowsymphony.com/collections/eclipse-glasses-safe-solar-viewers>

Other Eclipse Resources - This is a collection of articles I have come across. I haven't read them thoroughly, but they seem to be from reliable sources. J. Land

TULSA ECLIPSE VIEWING OPPORTUNITIES

Monday April 8 Join Us for the April 8th 95% Solar Eclipse at Guthrie Green !

On April 8th, the **Astronomy Club of Tulsa** invites guests to join them at **Guthrie Green** for an unforgettable eclipse experience . From 10:30 a.m. onwards, volunteers will set up telescopes and prepare for the main event, which runs from 12:00 PM to 3:00 PM Maximum at 1:49 PM. Alongside food trucks and live music, attendees can look forward to viewing the eclipse through telescopes and possibly on a large 16 x 9 LED wall, with discussions underway about live streaming the event.

**** You can view the eclipse anywhere using safe solar eclipse viewers**

DISCOVERY LAB <https://www.discoverylab.org/>

- Has plans for eclipse day. Plans include creating a giant set of Solar Eclipse Glasses, on the order of 8 feet across, so whole families will be able to stand in the shadow cast by the glasses and see the eclipse as it unfolds. In addition, we will have educators with demonstrations of pinhole viewing and the geometry of indirect measurement of the diameter of the sun and moon.

EDUCATOR RESOURCES

Eclipses Teaching Resources and Activities for Educators

<https://eclipse.aas.org/sites/eclipse.aas.org/files/Eclipse-Activities-for-Educators.pdf>

[Eclipse Projection with a hand mirror](#) [YouTube Video demo](#)

Hands-On Teacher Tested Activities

<https://www.exploratorium.edu/eclipse/activities>

Total solar eclipse 2024: How to watch online for free | Space

<https://www.space.com/watch-total-solar-eclipse-april-8-online-free-livestreams>

Sights and Sounds of an Eclipse -- [Eclipse Sound Scapes](#) is a national Citizen Science Initiative to observe and record how the world of Nature responds to the mid-day darkening of an eclipse. Look and Listen to the world around you.

Sky and Telescope has an extensive set of links to pages about the eclipse, planning your trip, safety tips, photography tips and more. (Note: some sites have ads)

<https://skyandtelescope.org/total-solar-eclipse-2024/>

TRAVELING TO THE ECLIPSE PATH

FILL UP your CAR and **Pack Food and Drinks** as Cafes and Gas stations in small towns may not be able to serve the large numbers of people coming to the eclipse.

Plan well in advance where you want to go. Many locations are already sold out and camp sites as well. If you plan to drive on Eclipse Day allow at 2 to 3 times your driving time. During the 2017 eclipse major highways in the eclipse zone experienced heavy traffic especially after the eclipse as everyone was headed home at the same time.

Why you don't need to get to the centerline for April's total solar eclipse — and what will happen at the edge | Space

<https://www.space.com/april-2024-total-solar-eclipse-why-to-avoid-the-centerline-of-totality>

25 Tips for the best Eclipse Photos.

<https://www.astronomy.com/observing/25-tips-for-the-best-eclipse-photos/>

Cloud expectations on eclipse day.

1. Start checking local weather forecasts a few days before
2. Remember that the “eclipse cooling” effect of the sun being blocked by the moon can itself cause certain types of clouds to develop.
3. Follow the local meteorologist along the eclipse path on TV.
4. <https://www.accuweather.com/> Lets you choose a location’s forecast and has map options for current cloud conditions.

