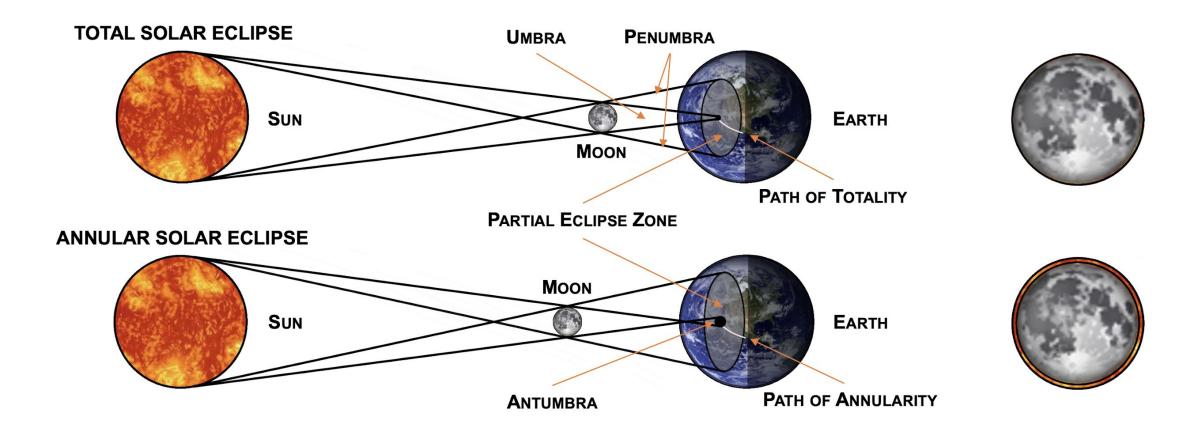


## Hill Country in the Path of Totality

## Meeting/Event Name Meeting/Event Date

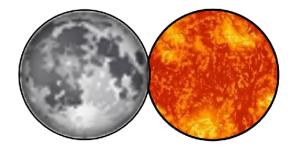
Presenter's Name, Presenter Title Presenter's Business/Organization Business/Organization Location

## **Anatomy of Solar Eclipses Total vs Annular**



## **Contact Total Solar Eclipse**

#### **FIRST CONTACT**



Start of Eclipse
Beginning of 1<sup>st</sup> Partial Phase
Moon Starts Covering Sun

#### SECOND CONTACT



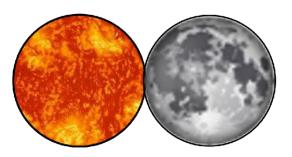
Beginning of Totality 1<sup>st</sup> Partial Phase Ends Moon Fully Covers Sun

#### THIRD CONTACT



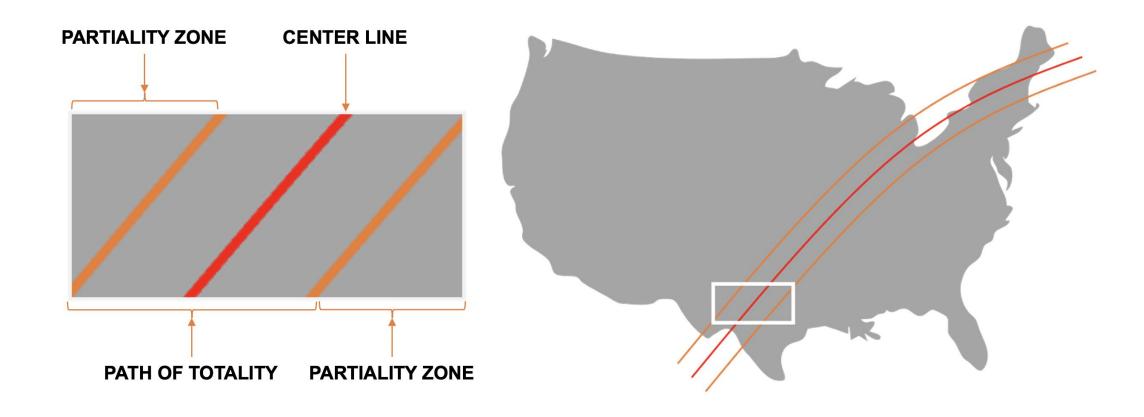
End of Totality 2<sup>nd</sup> Partial Phase Begins Moon Starts Uncovering Sun

#### **FOURTH CONTACT**

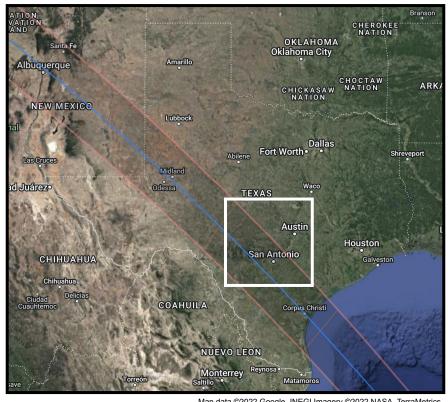


End of Eclipse End of 2<sup>nd</sup> Partial Phase Moon Fully Uncovers Sun

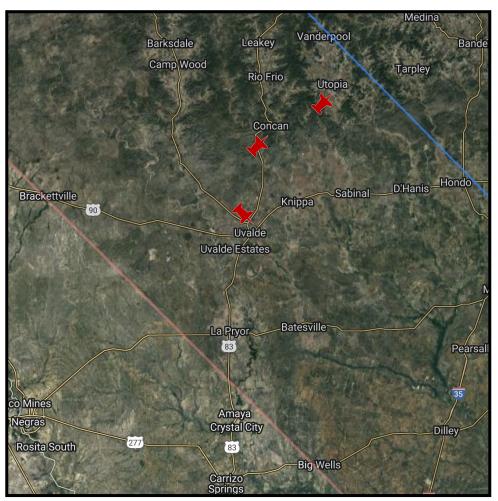
## Path of an Eclipse



# Annular Solar Eclipse October 14, 2023



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Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/ASE\_2023\_GoogleMapFull.html

## Annular Solar Eclipse – Concan October 14, 2023

EVENT	Тіме	Azimuth	ALTITUDE
1 <sup>st</sup> Contact	10:22:31 AM	123.3°	32.2°
2 <sup>nd</sup> Contact	11:49:56 AM	145.1°	45.9°
Maximum	11:52:18 AM	145.8°	46.2°
3 <sup>rd</sup> Contact	11:54:39 AM	146.5°	46.5°
4 <sup>th</sup> Contact	1:30:34 PM	182.3°	52.2°

90° 80° 70° 60° 40° 20° 110° 0°

270° Third Crossing

0°

**Eclipse Duration** 3h 8m **Annularity** 4m 43s

180°

Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/ASE\_2023\_GoogleMapFull.html

90°

# Annular Solar Eclipse – Utopia October 14, 2023

EVENT	Тіме	Azimuth	ALTITUDE
1 <sup>st</sup> Contact	10:22:37 AM	123.6°	32.3°
2 <sup>nd</sup> Contact	11:49:58 AM	145.4°	45.9°
Maximum	11:52:27 AM	146.2°	46.2°
3 <sup>rd</sup> Contact	11:54:56 AM	146.9°	46.5°
4 <sup>th</sup> Contact	1:30:44 PM	182.7°	52.1°

**Eclipse Duration** 

**Annularity** 

3h 8m

4m 58s

90° 80° 70° 60° 50° 40° 10° 0°

270°

0°

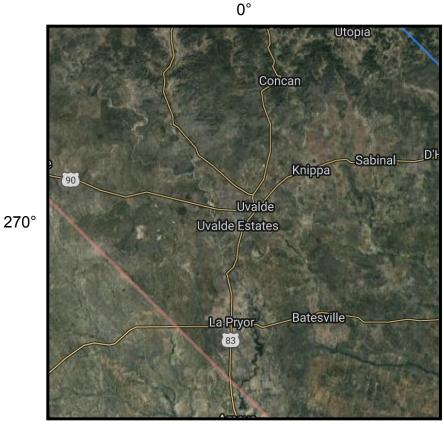
180°

Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/ASE\_2023\_GoogleMapFull.html

# **Annular Solar Eclipse – Uvalde** October 14, 2023

EVENT	Тіме	Azimuth	ALTITUDE
1 <sup>st</sup> Contact	10:22:42 AM	123.2°	32.3°
2 <sup>nd</sup> Contact	11:50:36 AM	145.0°	46.2°
Maximum	11:52:34 AM	145.6°	46.4°
3 <sup>rd</sup> Contact	11:54:32 AM	146.3°	46.7°
4 <sup>th</sup> Contact	1:30:58 PM	182.4°	52.5°

90° 80° 70° 60° 40° 20° 10° 0°



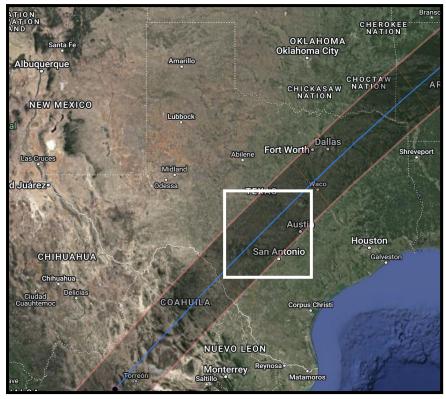
**Eclipse Duration** 3h 8m **Annularity** 3m 55s

180°

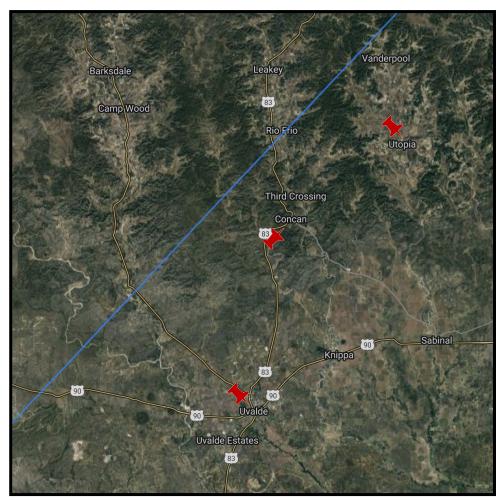
Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/ASE\_2023\_GoogleMapFull.html

90°

## Total Solar Eclipse April 8, 2024



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# Total Solar Eclipse – Concan April 8, 2024

EVENT	Тіме	Azimuth	ALTITUDE
1 <sup>st</sup> Contact	12:12:53 PM	132.4°	59.9°
2 <sup>nd</sup> Contact	1:30:13 PM	173.2°	68.0°
Maximum	1:32:25 PM	174.6°	68.0°
3 <sup>rd</sup> Contact	1:34:38 PM	176.1°	68.0°
4 <sup>th</sup> Contact	2:53:50 PM	221.9°	62.1°

90° 80° 70° 60° 40° 20° 10° 0°

270° 90° 180°

0°

Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/TSE\_2024\_GoogleMapFull.html

**Eclipse Duration** 2h 40m **Totality** 4m 24s

# Total Solar Eclipse – Utopia April 8, 2024

EVENT	Тіме	Azimuth	ALTITUDE
1 <sup>st</sup> Contact	12:13:22 PM	131.1°	60.0°
2 <sup>nd</sup> Contact	1:30:45 PM	174.1°	67.9°
Maximum	1:32:56 PM	175.5°	67.9°
3 <sup>rd</sup> Contact	1:35:08 PM	177.0°	68.0°
4 <sup>th</sup> Contact	2:54:19 PM	222.3°	61.9°

90° 80° 70° 60° 40° 110° 110°

270°

J Crossing

1can
127

90°

180°

0°

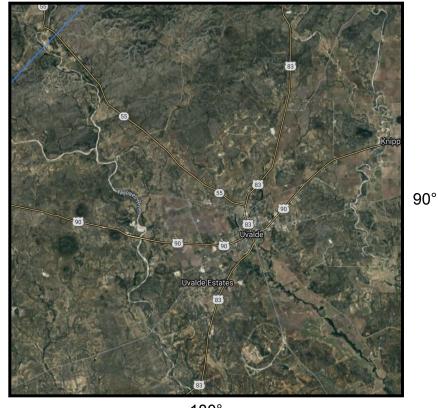
Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/TSE\_2024\_GoogleMapFull.html

Eclipse Duration2h 40mTotality4m 22s

### **Total Solar Eclipse – Uvalde April 8, 2024**

EVENT	Тіме	Azimuth	ALTITUDE
1 <sup>st</sup> Contact	12:12:13 PM	131.7°	60.0°
2 <sup>nd</sup> Contact	1:29:41 PM	172.6°	68.2°
Maximum	1:31:48 PM	174.0°	68.3°
3 <sup>rd</sup> Contact	1:33:56 PM	175.4°	68.3°
4 <sup>th</sup> Contact	2:53:19 PM	221.9°	62.5°

270°



0°

180°

Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/TSE\_2024\_GoogleMapFull.html

**Eclipse Duration** 2h 41m **Totality** 4m 15s

# Total Solar Eclipse August 21, 2017

CITY/COUNTY	STATE	Population	VISITOR EST.
City of Madras	OR	7,456	100,000
Cook County	OR	21,580	30,000
City of Fruitland	ID	6,027	70,000
Jefferson County	ID	26.139	130,000
City of Beatrice	NE	12,270	12,000+
City of Athens	TN	14.084	25,500

<b>County of Uvalde Population</b>	24,729
City of Concan Population	200
City of Utopia Population	227
City of Uvalde Population	15,312



Map data ©2022 Google, INEGI Imagery ©2022 NASA, TerraMetrics, http://xjubier.free.fr/en/site\_pages/solar\_eclipses/TSE\_2017\_GoogleMapFull.html

### **Opportunities and Achievements**













### **Uncertainties and Challenges**





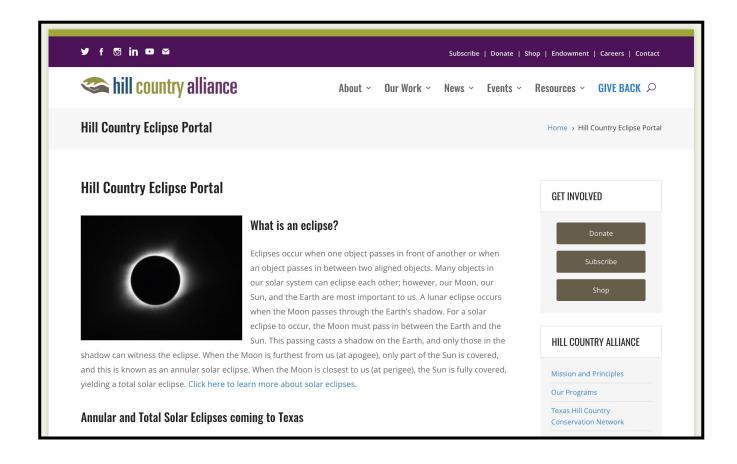




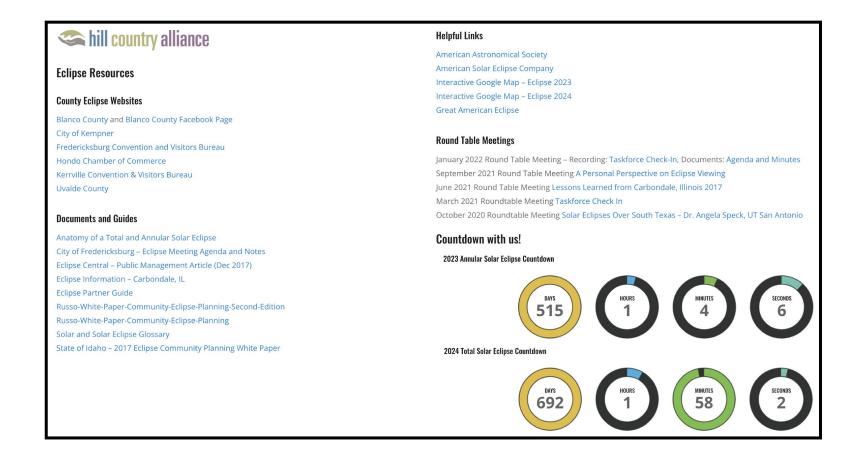




# Hill Country Eclipse Portal Eclipses Across Texas



## Hill Country Eclipse Portal Resources



### Hill Country Eclipse Portal **Eclipse Partners**



#### **ECLIPSE PARTNERS**

City and County Services: city services will play critical roles in both publicizing the eclipse events and preparing for the influx of visitors

- · Chamber of Commerce
- City Council
- City Hall/Office of the Mayor
- Commissioners Court
- · Parks and Recreation

Commerce: the anticipated increase in visitors to the hill country can mean a higher than average volume of local business patronage. Expect a shortage of fuel and groceries and increased usage of ATMs. Eclipses are unique events and can confuse wild and domesticated animals when nearing the period of totality (during first and second contact), at totality, and following totality (during third to fourth

- · Animal Kennels/Animal Shelters
- Banks/Credit Unions
- Business Associations
- Gas Stations/Automobile Repair
- Grocery Stores/Convenience Stores Local Retails/Chain Rusinesses
- · Parking Facilities

Education: education facilities are encouraged to educate their students and patrons on eclipses and safe solar viewing. Due to the 2024 eclipse occurring on a Monday and in the early afternoon, school

- · Independent School Districts
- Institution of Higher Learning

Emergency Management: the anticipated increase in visitors to the hill country can mean a higher than average volume of incidents. Some entities may just need a heads up to the upcoming events; the involvement of others will be heavier during the days before, during, and after the eclipses.

- Fire Department
- Health Department
- Hospitals/Clinics
- Office of Emergency Management/Emergency Management Services
- Police Department

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#### a hill country alliance

Hospitality/Recreation: expect booking of most lodging accommodations to begin soon if not already in progress. Activities and entertainment following the eclipses will help to ease traffic flow and stagger departures from the area. Food and beverage businesses may consider limited menus during the eclipse events to accommodate increased patronage

- Community Centers
- Hotels/Motels
- Restaurants/Bars/Cafés/Caterers
- · RV Parks/Camp Facilities
- State Parks
- Entertainment
- Vacation Rentals/Air B&Bs

Media: due to the nature of these two events, getting the word out means relying heavily on local and regional media. Leading up to the eclipses, keep in communication with your news outlets, informing them of scheduled festivals, activities, road route changes/detours, and general education about these

- Magazines
- News Stations
- Newspapers
- Radio Stations

Residents: residents may not be aware of these two eclipse events and how drastically they will impact where they live. Use your city and county services, local media, and educational facilities to inform them accordingly. Private landowners may open their space to visitors as camping and lodging grounds or as eclipse viewing areas. This may be a challenge for traffic flow and waste manage

- · Private Land Owners/Residents
- · Retirement Facilities/Senior Centers

Transportation: not all visitors to the hill country will be driving to their eclipse viewing destinations. Some will come to the region via plane, train, and bus, putting a possible strain on vehicle rental facilities, transportation services, and rideshares. Traffic during these event times may lead to delays of busses, trains, and other vehicles that adhere to specific routes and timetables

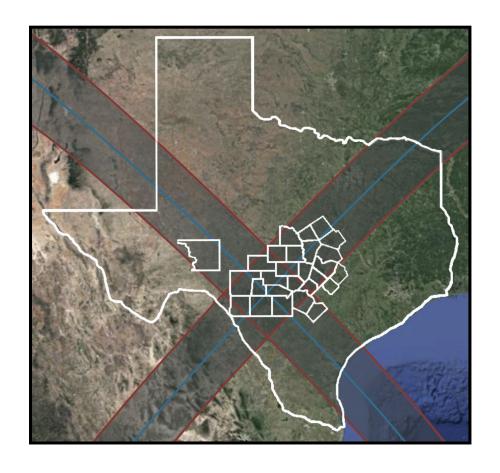
- Airports Ruses
- · Train Stations
- · Texas Department of Transportation · Vehicle Rentals/Transportation Services

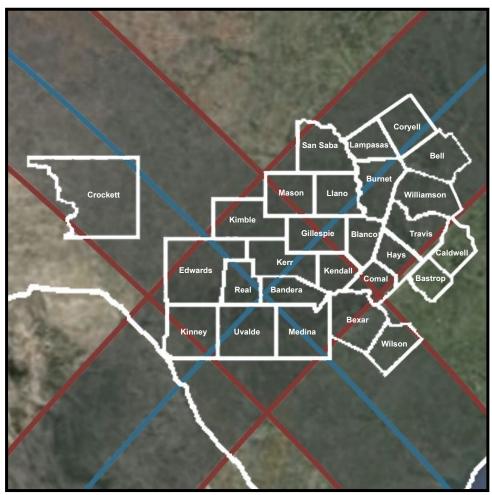
Utilities: expect the anticipated volume of visitors to strain the electrical grid, water use, and waste services. Consider adding extra water stations and portable restrooms at event sites

- Electrical Cooperatives · Waste Management
- Water Districts

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Hill Country Eclipse Team Regional Representation





# American Astronomical Society Solar Eclipse Across America

### **Eclipse America**

What, where, why, and how

### **Eye Safety**

Safe practices, methods, and vetted vendors

### **Imaging & Video**

How to, and royalty-free images & videos

#### Resources

Apps, software, books, calculators, websites...

### **Solar Eclipse Task Force**

Charter, members, liaisons, and working groups

### **Planning Workshops**

Upcoming events and past workshop recordings



## Meeting and Workshop Calendar 2022 - 2024

DATE	Ноѕт	Торіс	Location
October 18, 2022	HCA	Round Table Meeting – Committees & 1 Year to Annular Solar Eclipse	Virtual/Zoom
October 21 –22, 2022	AAS	AAS Solar Eclipse Planning Workshop	Rochester, NY
January 17, 2023	HCA	Round Table Meeting - Event Planning & Programming	Virtual/Zoom
Spring 2023	AAS	AAS Solar Eclipse Planning Workshop	Cleveland, OH
April 18, 2023	HCA	Round Table Meeting - 1 Year Countdown to 2024 Total Solar Eclipse	Virtual/Zoom
July 18, 2023	HCA	Round Table Meeting - TBD	Virtual/Zoom
October 17, 2023	HCA	Round Table Meeting - Annular Solar Eclipse Review	Virtual/Zoom
October 27 – 28, 2023	AAS	AAS Solar Eclipse Planning Workshop	Bretton Woods, NH
January 6 -7, 2024	AAS	AAS Annual Meeting & Solar Eclipse Planning Workshop	New Orleans, LA
January 16, 2024	HCA	Round Table Meeting – Final Preparations	Virtual/Zoom
April 16, 2024	HCA	Round Table Meeting - Total Solar Eclipse Review	Virtual/Zoom

### Thank you.

**Eclipse Website** 

**Presenter Name** 

**Presenter Email** 

Presenter Phone Number