

A Tour of the North American Solar Eclipses of 2023 and 2024

OCTOBER 14, 2023
ANNULAR SOLAR ECLIPSE



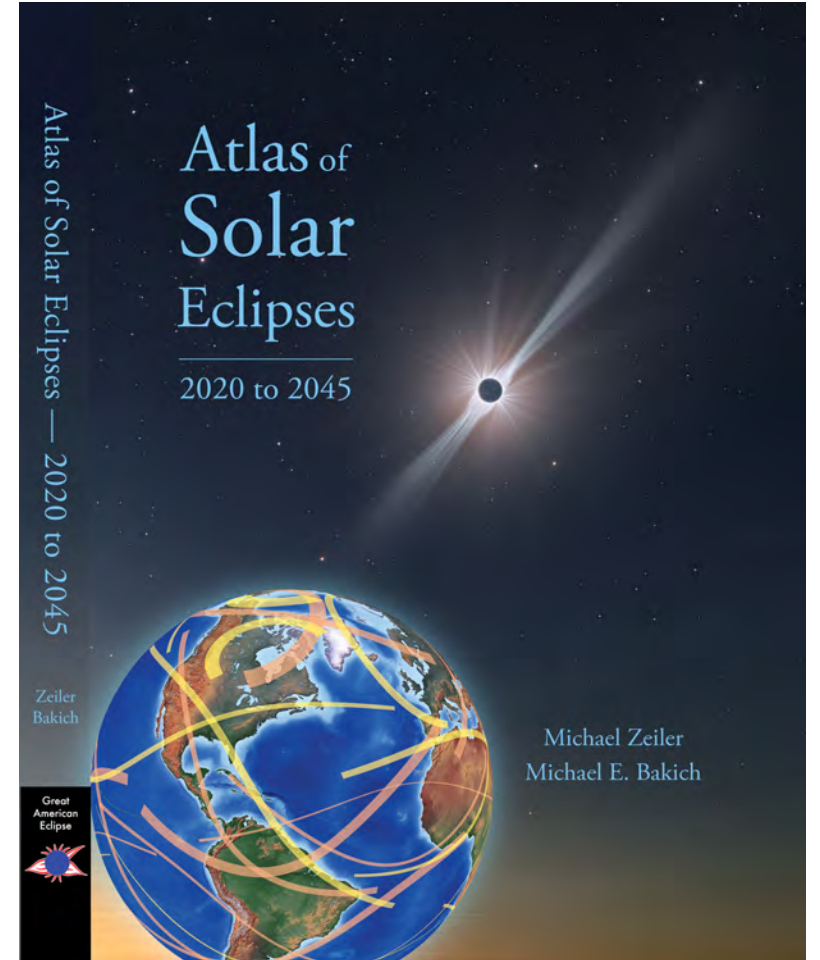
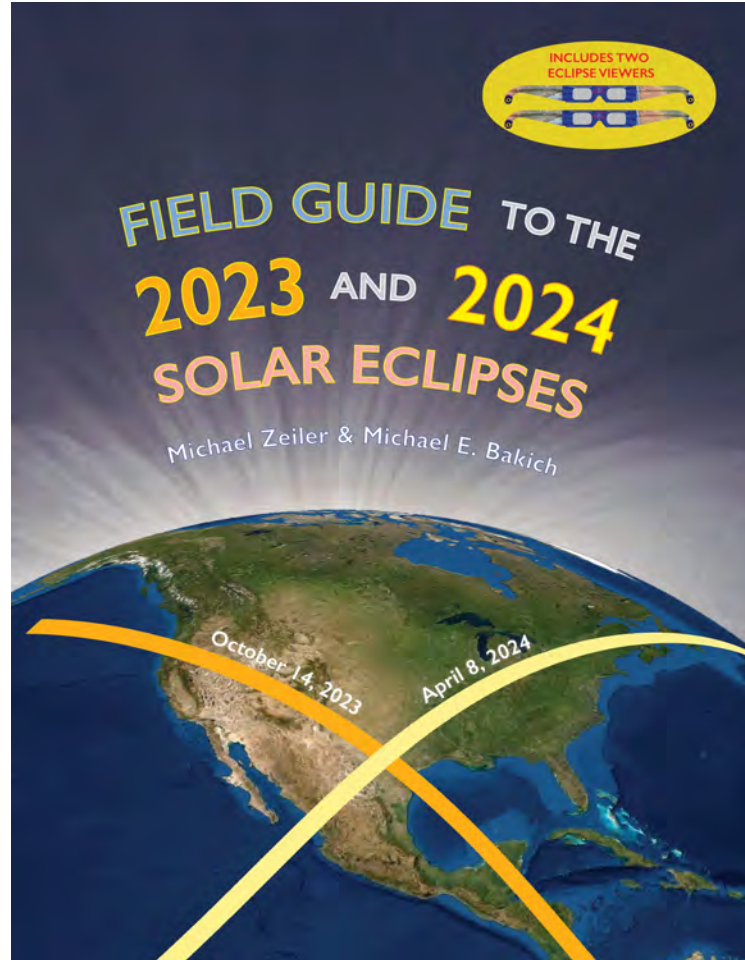
APRIL 8, 2024
TOTAL SOLAR ECLIPSE



Presentation at the
AAS Solar Eclipse
Planning Workshop

Michael Zeiler
April 8, 2022

Michael Zeiler, GreatAmericanEclipse.com





Annular Solar Eclipse
October 14, 2023



Total Solar Eclipse
April 8, 2024

What does an eclipse map tell you?



The times that the eclipse begins and ends

The times of peak eclipse

How long the eclipse lasts

The magnitude of partial eclipse

How high the eclipse is in the sky

Where the eclipse begins at sunrise and ends at sunset

1727, Mexico - Earliest eclipse map in the Americas. California as an island

Reading an eclipse map

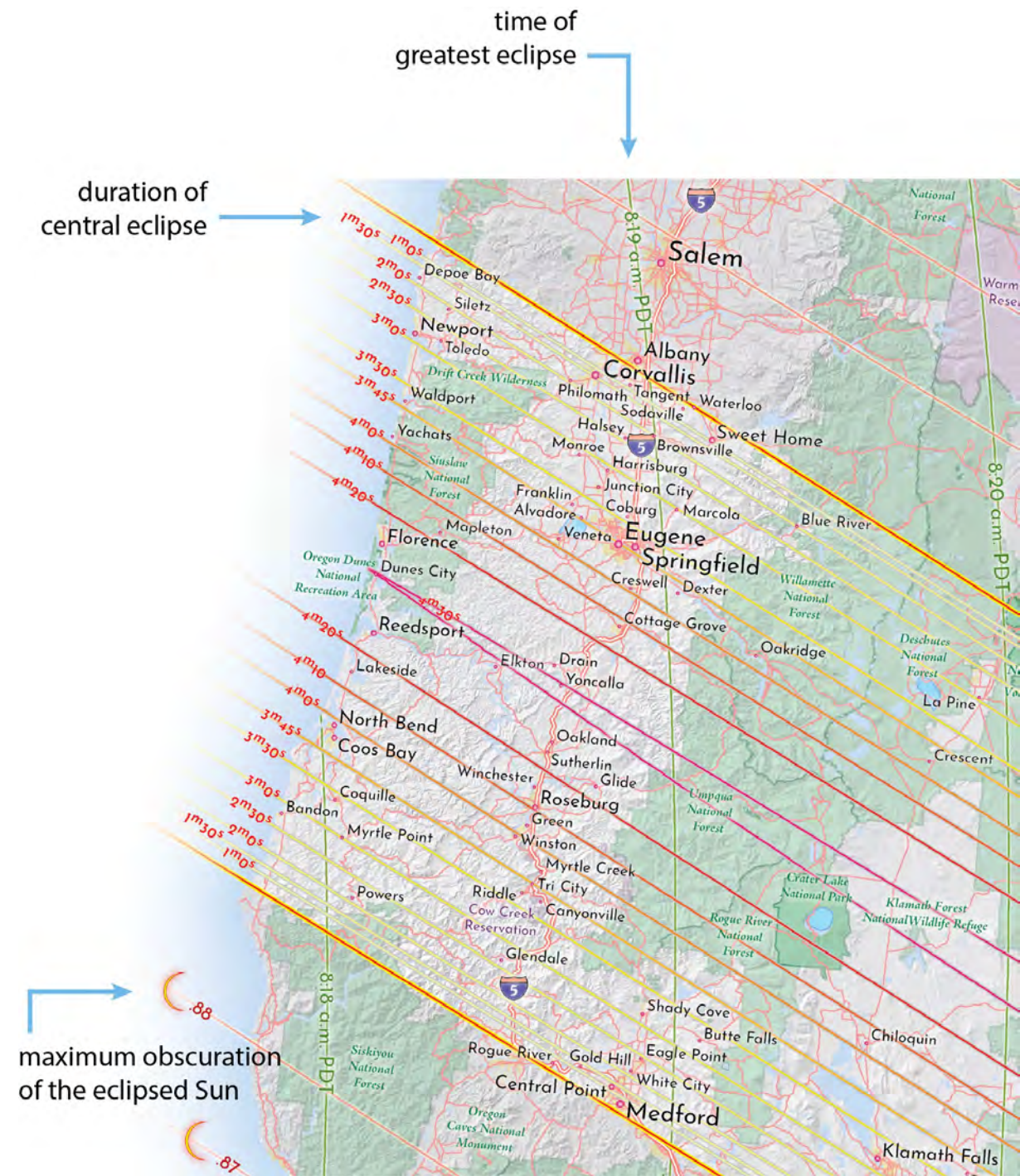
Precise limit lines between partial and total/annular eclipse

Easy to estimate durations

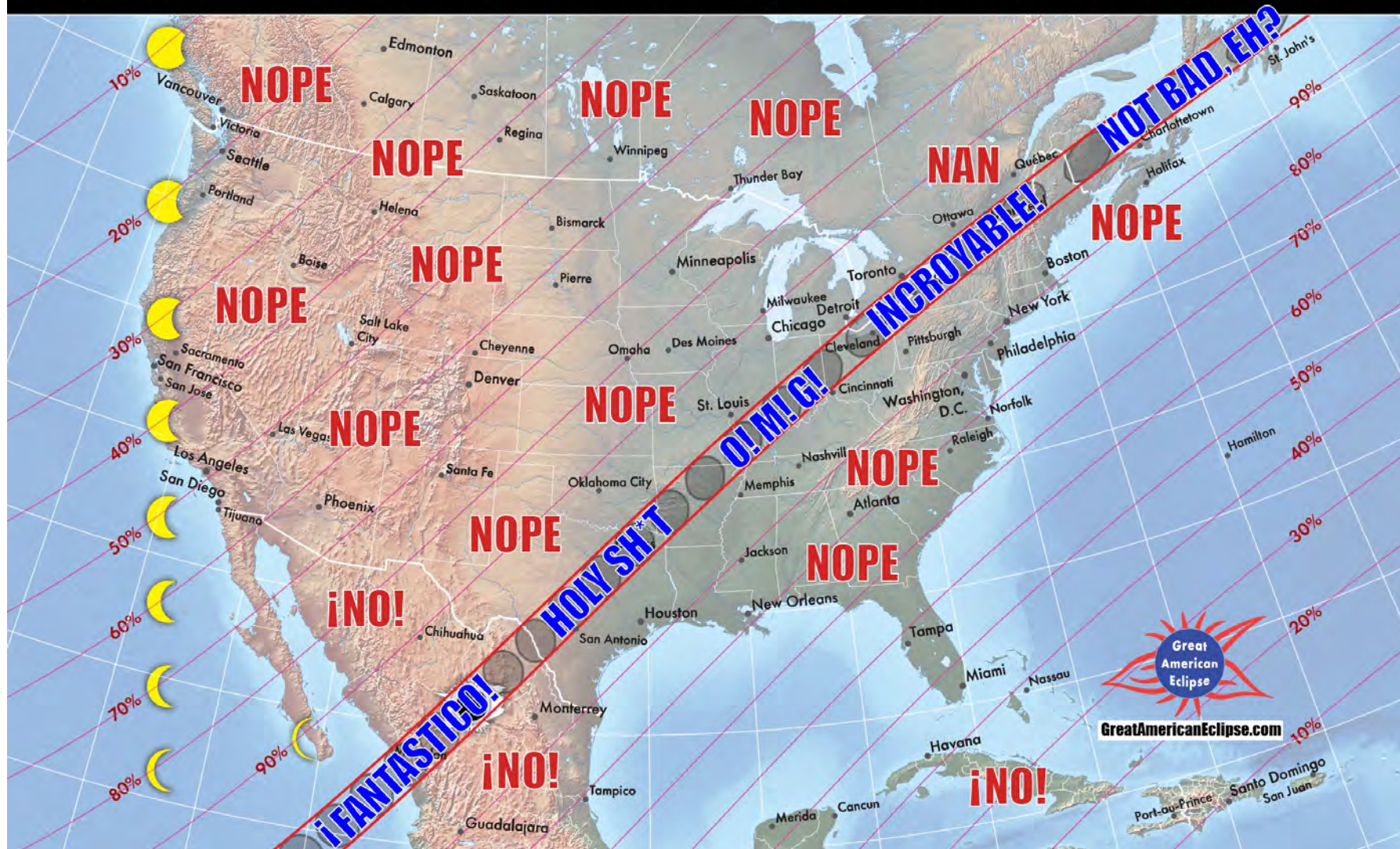
Local times of greatest eclipse

Target the center of the path while keeping mobility options open

Combine map reading with climate study, Eclipsophile.com

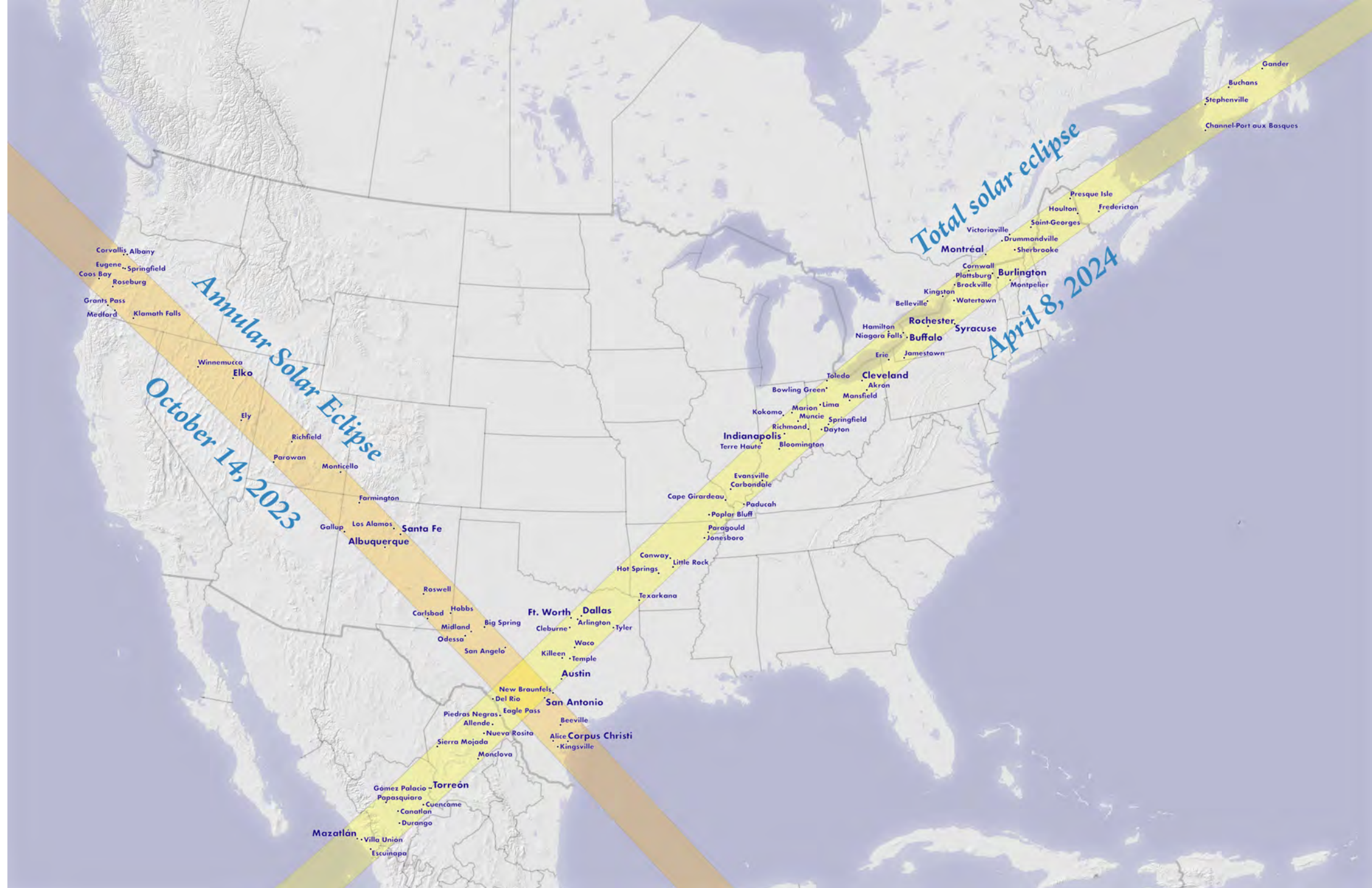


HOW TO READ A MAP OF THE APRIL 8, 2024 TOTAL SOLAR ECLIPSE



Essential resources

- [Eclipse.aas.org](https://eclipse.aas.org) - Eye-safety instructions, portal to trust-worthy sites and reliable sources of eclipse filters
- [Eclipsewise.com](https://eclipsewise.com) – Authoritative predictions of solar and lunar eclipses over millenia. By Fred Espenak
- [Eclipsophile.com](https://eclipsophile.com) – The single-best source for eclipse climate and weather. Each eclipse has a detailed synopsis on weather prospects. By Jay Anderson and Jennifer West
- [Eclipse2024.org](https://eclipse2024.org) - Excellent 3d and sky models of the eclipse plus comprehensive information on local events. By Dan McGlaun
- xjubier.free.fr - Eclipse maps implemented on the Google Maps platform. Whenever a location is selected, the app will calculate and display detailed eclipse circumstance. By Xavier Jubier
- GreatAmericanEclipse.com - Source of eclipse maps and information about solar eclipses, especially the coming North American solar eclipses of 2023 and 2024.





**National Parks
inside the paths
of the 2023 & 2024
solar eclipses**



GREATAMERICANECLIPSE.COM

OCTOBER 14
2023
★
APRIL 8
2024
2 GREAT TEXAN ECLIPSES

You solar eclipses visit Texas in 6 months! This is a rare and exceptional circumstance for any particular spot on Earth. Consequently, Texas will be a magnet for perhaps several million visitors from across the nation and around the world.

Millions of people saw the total solar eclipse of August 21, 2017 which crossed the USA from Oregon to South Carolina. Study everyone who saw it in 2017 agrees that it was a peak life experience and the most beautiful sight you can see in the sky. Texas is uniquely situated for repeat experience.

On October 14, 2023, an annular solar eclipse begins over the Pacific Ocean and reaches the USA in Oregon. After passing through California, Nevada, Utah, Colorado, Arizona, and New Mexico, the path of annular solar eclipse leaves Texas. People near the middle of the path of annular solar eclipse will see the dramatic view of the Sun as a 1-billion ring for nearly five minutes.

On April 8, 2024, a total solar eclipse first reaches the Pacific coast of Mexico at Mazatlan. After racing across Mexico the total solar eclipse first reaches Texas at Eagle Pass. People near the middle of the path of the total solar eclipse will enjoy a maximum duration of over four minutes, nearly twice the duration of totality as the August 21, 2017 eclipse.

Viewing the eclipses



Annular Solar Eclipse of October 14, 2023

The annular solar eclipse begins in Texas in the late morning. People inside the path of annular solar eclipse will have the opportunity to view the incredible sight of the Sun as a glowing ring with a maximum diameter of 4 minutes, 52 seconds.

At all stages of this eclipse, you must wear solar eclipse glasses or other safe solar viewing method. Look for more eclipse info at eclipse.nasa.gov/eye-safety. While you will miss the sky-dance and shadows usually cast by the Sun will not be completely eclipsed. The apparent solar disk is nearly 4% larger than the apparent disk of the Moon and the eclipse annulus.

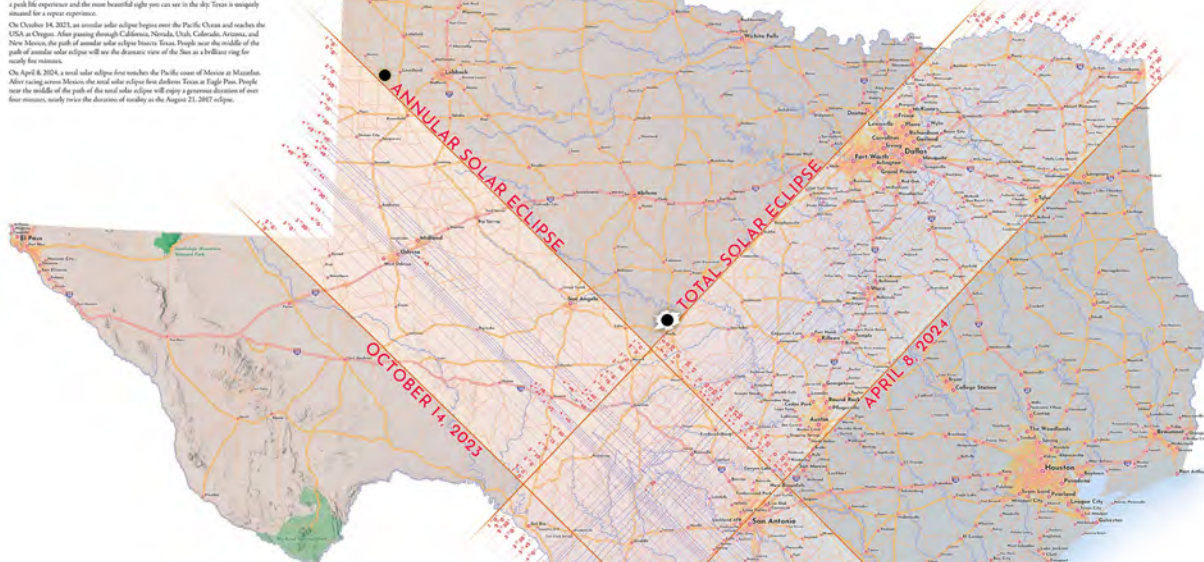
The eclipse will begin with a small nibble of the Moon's disk against the Sun's disk. The partial stage of eclipse will last about 1 hour and 20 minutes. The annular stage of eclipse in Texas will last up to 4 minutes and 52 seconds, as indicated on the map. After the annular stage of eclipse, the closing partial stage of eclipse will last about one hour and 20 minutes.

Total Solar Eclipse of April 8, 2024

The total solar eclipse of April 8, 2024 in Texas occurs in the early afternoon. People inside the path of total solar eclipse will see the sky suddenly darken and the sunning view of the Sun comes for up to 4 minutes, 20 seconds. This is nearly twice the duration of the total solar eclipse of August 21, 2017.

Whenever any part of the Sun is visible, you must wear solar eclipse glasses or other safe solar viewing method. You can find these at greatamericaneclipse.com. If you are inside the path of total solar eclipse, you may directly observe the corona with your eyes during the several minutes of totality.

A small bite of the Moon on the Sun is the start of eclipse. The partial stage of eclipse will last about 1 hour and 20 minutes. The total stage of eclipse in Texas will last up to 4 minutes and 20 seconds, as indicated on the map. After the annular stage of eclipse, the closing partial stage of eclipse will last about one hour and 20 minutes.



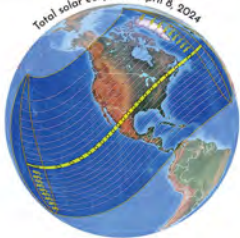
Hemispheric view of the eclipses

Both eclipses begin at sunrise on the left edge of the path of eclipse. Both eclipses end at sunset on the right edge of the path of eclipse. The Moon's shadow is shown as 10 minutes intervals to the central path.

Annular solar eclipse of October 14, 2023



Total solar eclipse of April 8, 2024



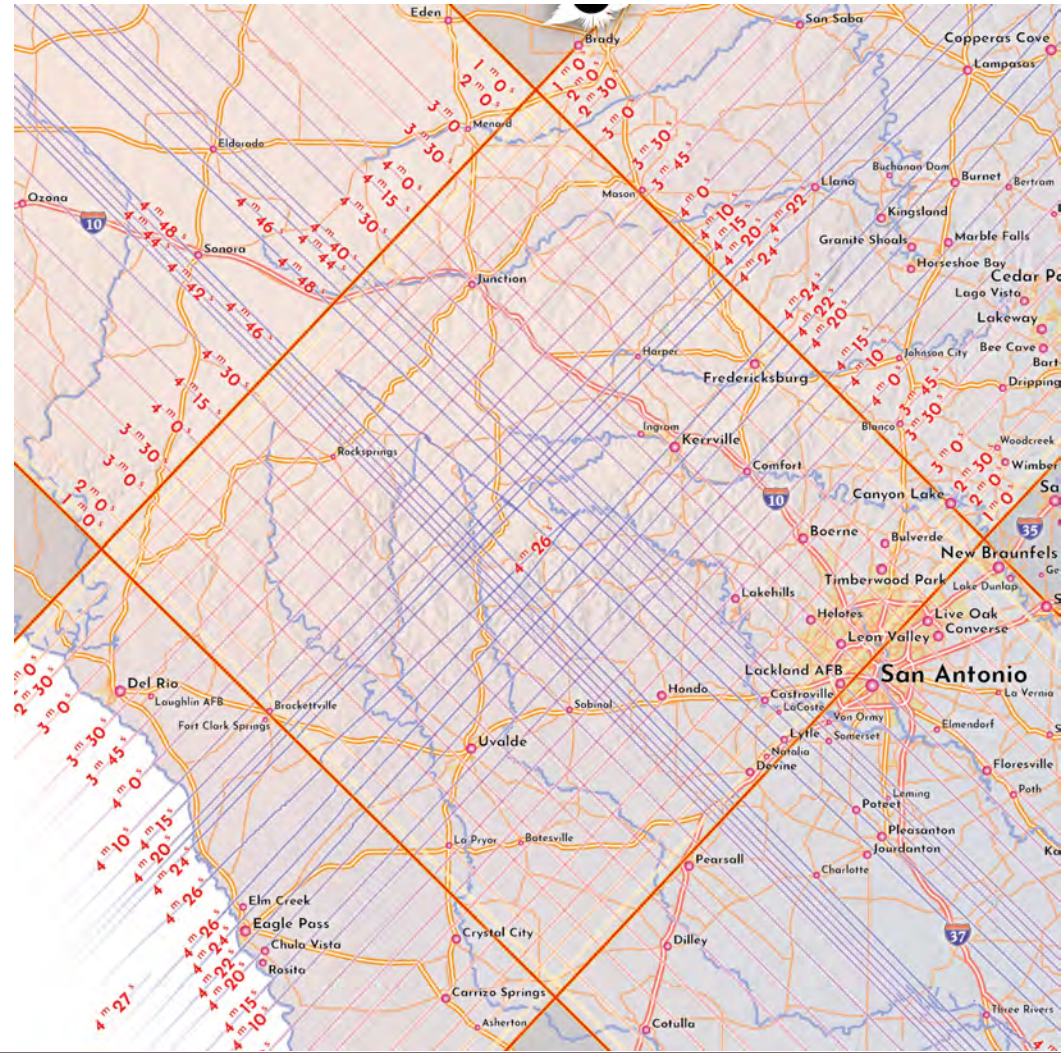
Eclipse times and durations

Annular Solar Eclipse of October 14, 2023

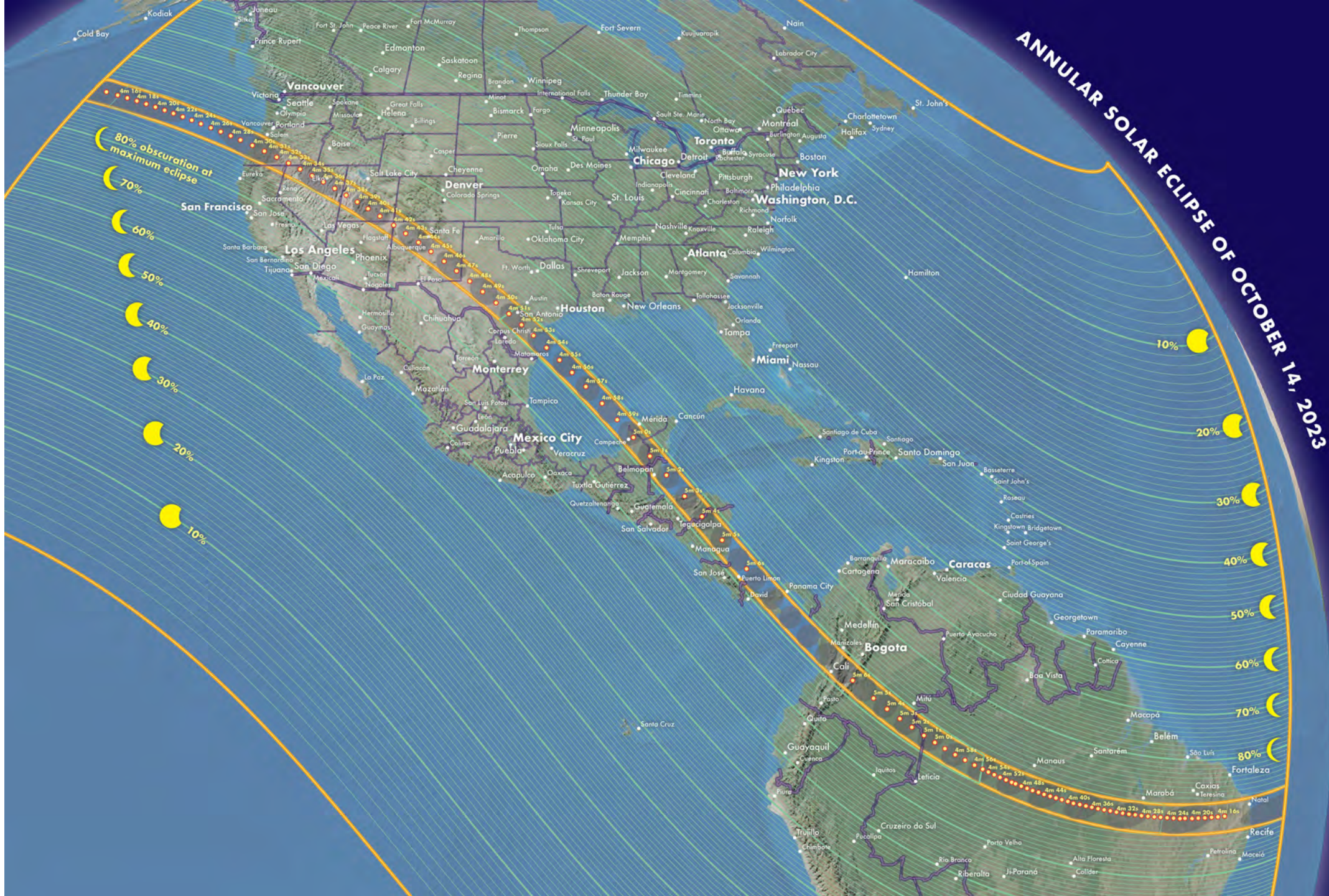
City	Eclipse	Time	Duration
Eden	Annular	10:00 am	4:52
Brady	Annular	10:00 am	4:52
San Saba	Annular	10:00 am	4:52
Copperas Cove	Annular	10:00 am	4:52
Lampasas	Annular	10:00 am	4:52
Menard	Annular	10:00 am	4:52
San Angelo	Annular	10:00 am	4:52
Fredericksburg	Annular	10:00 am	4:52
San Antonio	Annular	10:00 am	4:52
Del Rio	Annular	10:00 am	4:52
Comstock	Annular	10:00 am	4:52
Chlorita	Annular	10:00 am	4:52
Chlorita	Annular	10:00 am	4:52

Total Solar Eclipse of April 8, 2024

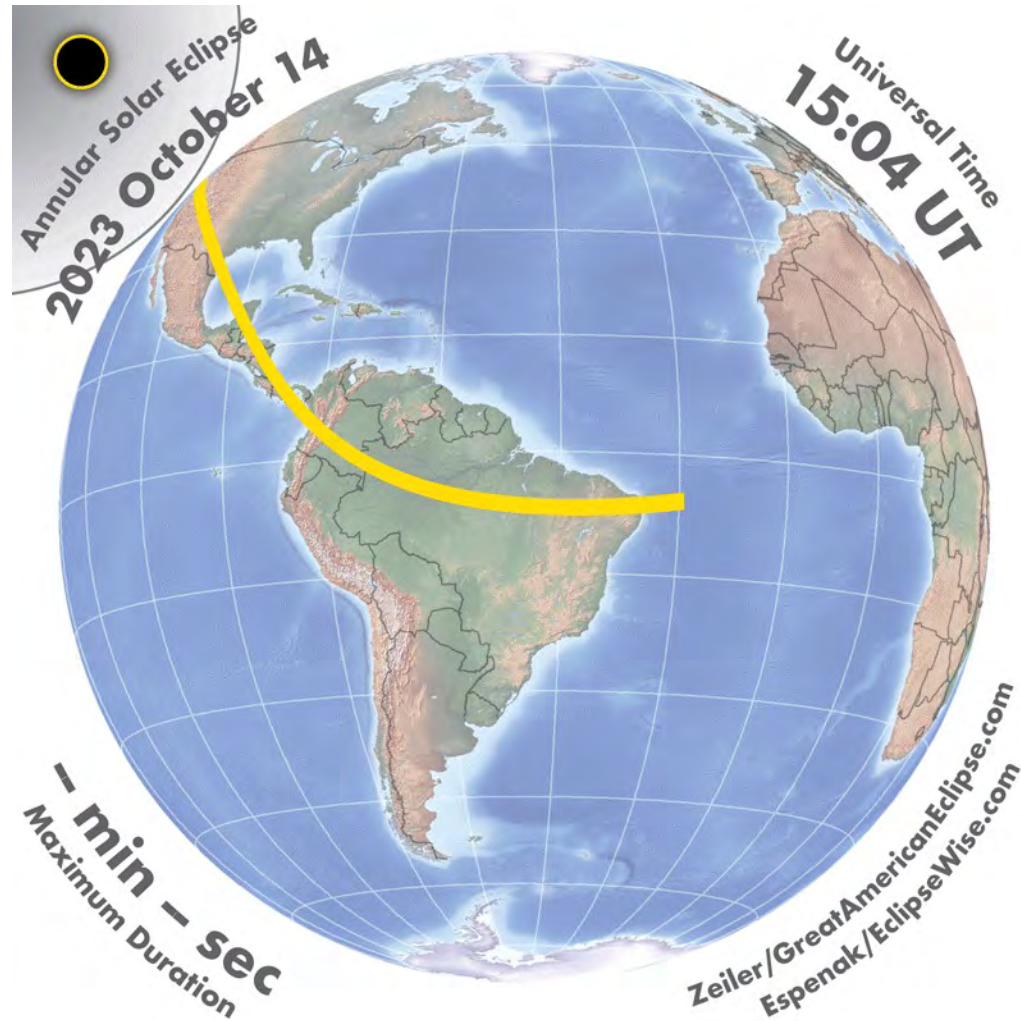
City	Eclipse	Time	Duration
Eden	Total	1:00 pm	4:20
Brady	Total	1:00 pm	4:20
San Saba	Total	1:00 pm	4:20
Copperas Cove	Total	1:00 pm	4:20
Lampasas	Total	1:00 pm	4:20
Menard	Total	1:00 pm	4:20
San Angelo	Total	1:00 pm	4:20
Fredericksburg	Total	1:00 pm	4:20
San Antonio	Total	1:00 pm	4:20
Del Rio	Total	1:00 pm	4:20
Comstock	Total	1:00 pm	4:20
Chlorita	Total	1:00 pm	4:20
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ANNULAR SOLAR ECLIPSE OF OCTOBER 14, 2023



Annular Solar Eclipse of October 14, 2023



A century of solar eclipses

Animated GIFs of
224 partial, annular, and total solar eclipses

A collaboration between
Fred Espenak, eclipsewise.com, and
Michael Zeiler, greatamericaneclipse.com

Ring of Fire Eclipse

OVER THE WESTERN USA

OCTOBER 14, 2023



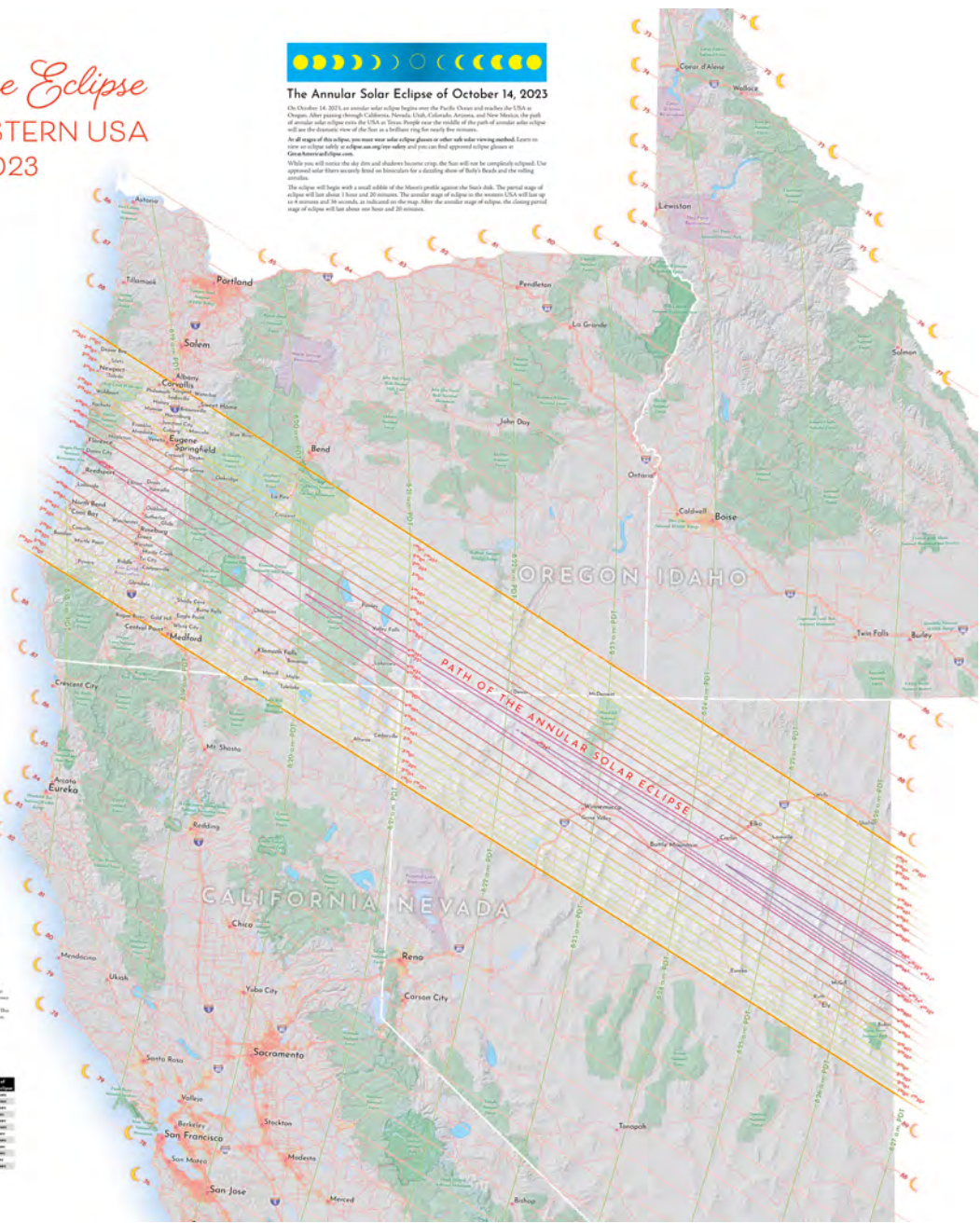
The Annular Solar Eclipse of October 14, 2023

On October 14, 2023, an annular solar eclipse begins over the Pacific Ocean and reaches the USA as Oregon. After passing through California, Nevada, Utah, Colorado, Arizona, and New Mexico, the path of annular solar eclipse exits the USA at Texas. People near the middle of the path of annular solar eclipse will see the Sun as a "beauty ring" for nearly two minutes.

At all edges of this eclipse, you may wear solar eclipse glasses or other safe solar viewing method. Learn to view an eclipse safely at eclipse.sas.astro.wisc.edu and you can find approved eclipse glasses at GreatAmericanEclipse.com.

While you will notice the sky dim and shadows become crisp, the Sun will not be completely eclipsed. The apparent size of the Sun exceeds that of the Moon for a duration of about 1 hour and 20 minutes.

The eclipse will begin with a small sliver of the Moon's disk against the Sun's disk. The general stage of eclipse will last about 1 hour and 20 minutes. The annular stage of eclipse in the western USA will last for 10 minutes and 30 seconds, as indicated on the map. After the annular stage of eclipse, the closing partial stage of eclipse will last about one hour and 20 minutes.

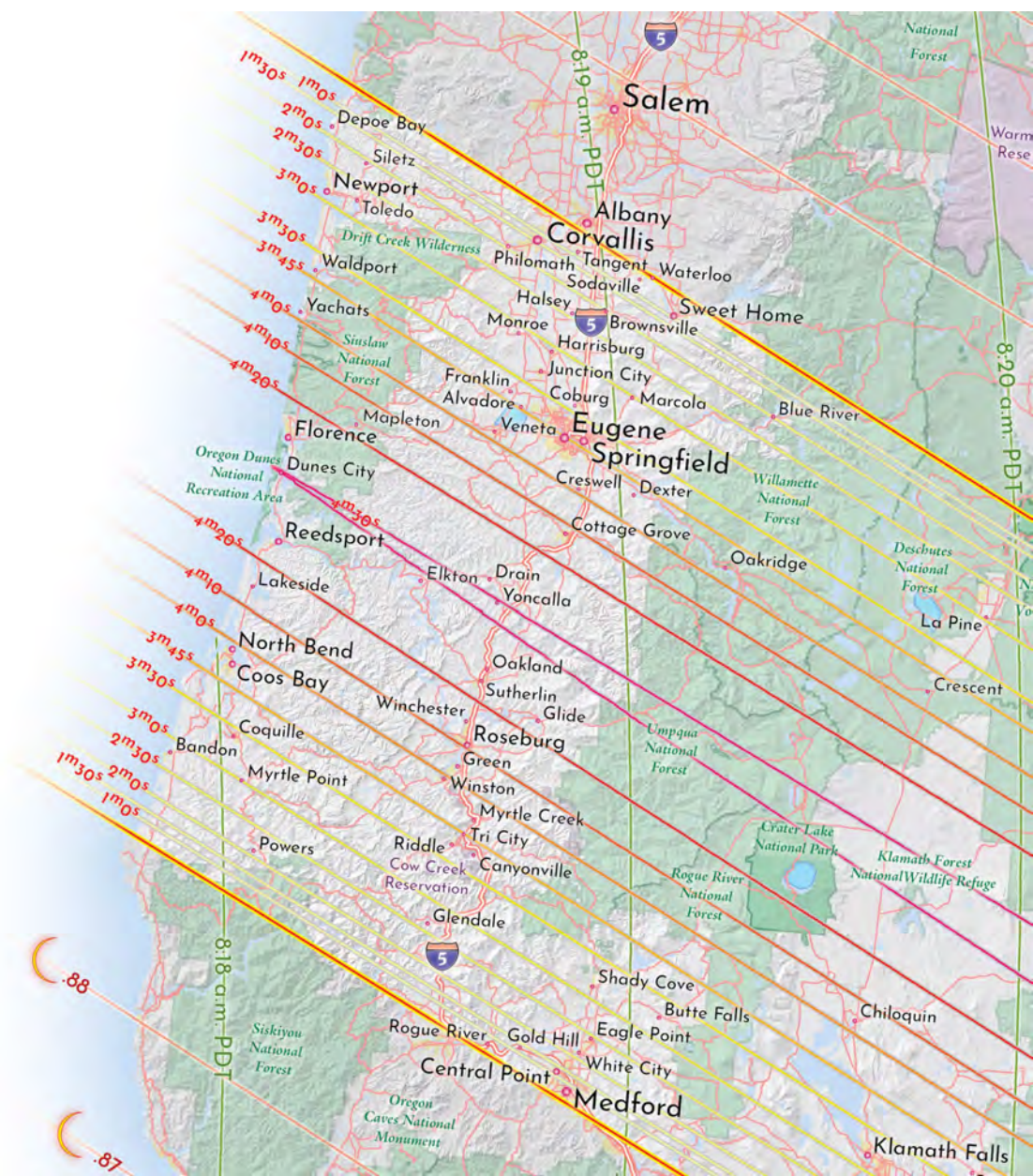


Key to eclipse features

- How long will the annular eclipse last?** The number represents the length of time the Sun is completely eclipsed.
- What time is the peak eclipse?** The number represents the time of maximum eclipse.
- How much will sunlight dim?** The number represents the magnitude of the eclipse.

Eclipse times and durations

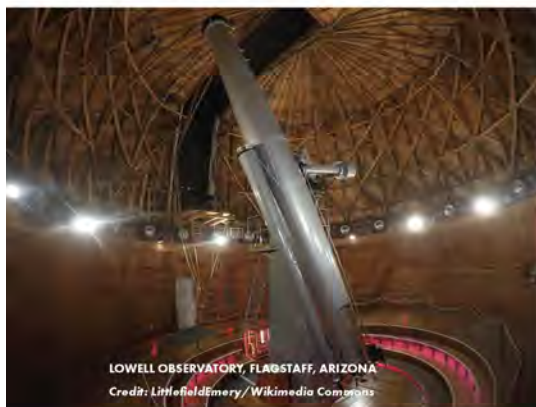
City	Annular	Annular	Eclipse	Duration
Depoe Bay OR	1:30	1:00	1:00	1:00
Siletz OR	2:00	1:30	1:30	1:00
Newport OR	2:30	2:00	2:00	1:00
Toledo OR	3:00	2:30	2:30	1:00
Waldport OR	3:30	3:00	3:00	1:00
Yachats OR	4:00	3:30	3:30	1:00
Mapleton OR	4:10	3:45	3:45	1:00
Mapleton OR	4:20	3:55	3:55	1:00
North Bend OR	4:30	4:00	4:00	1:00
Coos Bay OR	3:45	3:15	3:15	1:00
Coquille OR	3:30	3:00	3:00	1:00
Bandon OR	2:30	2:00	2:00	1:00
Myrtle Point OR	1:30	1:00	1:00	1:00



Arizona

The lunar antumbra touches the Arizona border at 9:29 a.m. MDT approximately 37 miles east of Page, a city of some 7,500 residents. This location was one site where numerous observers gathered to watch the May 20, 2012, annular eclipse beneath a completely clear sky. The antumbra covers a section of northeastern Arizona that measures slightly less than 6,200 square miles. This region contains about a dozen small towns.

Page itself lies outside the path. Anyone there will see the Moon cover 89 percent of the Sun's disk. Eclipse chasers who base there probably will choose to drive south 72 miles along State Route 98 and then another 93 miles east on U.S. Highway 160 to Red Mesa, a census-designated place with a population of 386. From that location along the center line, annularity will last 4 minutes 41 seconds with the Sun 33° high in the southeast.



Flagstaff will be another base of operations for eclipse chasers. Although this city is not favored by the lunar antumbra, anyone staying there can drive 68 miles north on U.S. Hwy. 89, and then take U.S. Hwy. 160 to the path. And if you prefer to view an extended display of Bailey's beads, just drive eight miles past Shonto Marketplace, which will place you at the southern limit.

Colorado

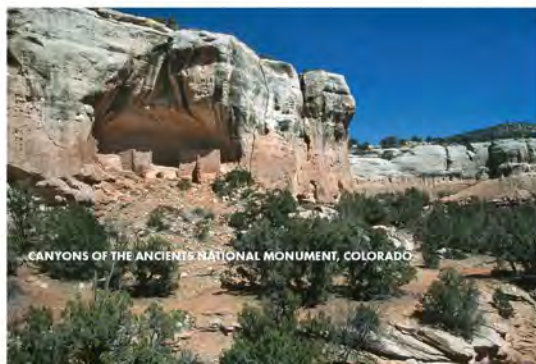
Three minutes after the antumbra touches Arizona, it enters Colorado about 12 miles northwest of Dove Creek. The best spot in the state to view the



eclipse is the far southwestern corner, where U.S. Highway 160 crosses over into Arizona. At that point, annularity will last 4 minutes 30 seconds.

Photographers who wish to include some historical terrain in their eclipse shots might want to head to Canyons of the Ancients National Monument. The duration of annularity drops to 3 minutes 15 seconds, but the density of archaeological remains is the highest of any region in the U.S. Framing the Sun 33° above Painted Hand Pueblo, for example, would capture a dramatic scene.

Eclipse chasers wishing to spend some time in this area might base in Durango, a city of nearly 20,000. It lies just off the path's northern limit and will receive an 89-percent partial eclipse. One option for travelers is to head a few miles west to the path's edge at the unincorporated community of Hesperus, where a worthy display of Bailey's beads is guaranteed with the Sun 33° high at mid-eclipse.



New Mexico

The first large city covered by the antumbra during this eclipse will be Albuquerque. Its half million residents will enjoy 4 minutes 44 seconds of annularity with the Sun 36° above the southeastern horizon.

Santa Fe lies closer to the northern limit of the eclipse, with an inviting view of Bailey's beads a short distance northwards. An enticing venue will be St John's College which hosts the world's only operational armillary sphere, modeled after the historic instrument used by 16th century astronomer Tycho Brahe. Annularity in Santa Fe will be a bit shorter than in Albuquerque, lasting 2 minutes 44 seconds. Still, at mid-eclipse, 10:37 MDT, 90 percent of the solar disk will be hidden by the Moon.

For seasoned eclipse chasers looking to try something new, perhaps this is the eclipse to view from one of its limits. For example, from Santa Fe, one could head up the nearby Sangre de Cristos mountains to Ski Santa Fe. This location will provide dazzling views of Bailey's beads along with panoramic views. From this vantage, viewers with approved filters on binoculars or telescopes will be able to experience an extended progression of Bailey's beads, perhaps as long as a minute. This also might provide a wonderful opportunity to record a video of the event.

New Mexico will be a prime destination for eclipse chasers, and both Albuquerque and Santa Fe will serve as the base for many. It's a good bet that lots of eclipse-related community activities will occur, especially along three major highways that cut through the eclipse path: Interstate 40, Interstate 25, and U.S. Hwy. 54. I-40 alone stretches more than 250 miles diagonally through the antumbra.

Those with a sense of irony might choose to view the annular eclipse from the village of Corona. Or perhaps you have a sense of humor and would enjoy the festivities in Roswell, where, in 1947, a "flying disc" supposedly crashed about 30 miles north of the city. Roswell businesses now target tourists interested in science fiction and extraterrestrial life. As far as the eclipse is concerned, however, Corona will enjoy 4 minutes 36 seconds of annularity, and downtown Roswell will enjoy 4 minutes 30 seconds with the Sun nearly 40° above the southeastern horizon in both locations.

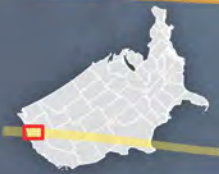
Chaco Cultural National Historic Park will be an appealing venue for eclipse viewing. These are the best-preserved pre-Columbian ruins in the country with sites of archaeo-astronomical significance.

Climate data for the entire path through New Mexico is quite favorable. Albuquerque, Santa Fe, and Roswell boast October monthly precipitation totals of 1.02, 1.33, and 1.23 inches, and a percent of possible sunshine around 80 percent.

Annular Solar Eclipse
October 14, 2023



Oregon
California



Annular Solar Eclipse
October 14, 2023



Nevada
Utah • Arizona



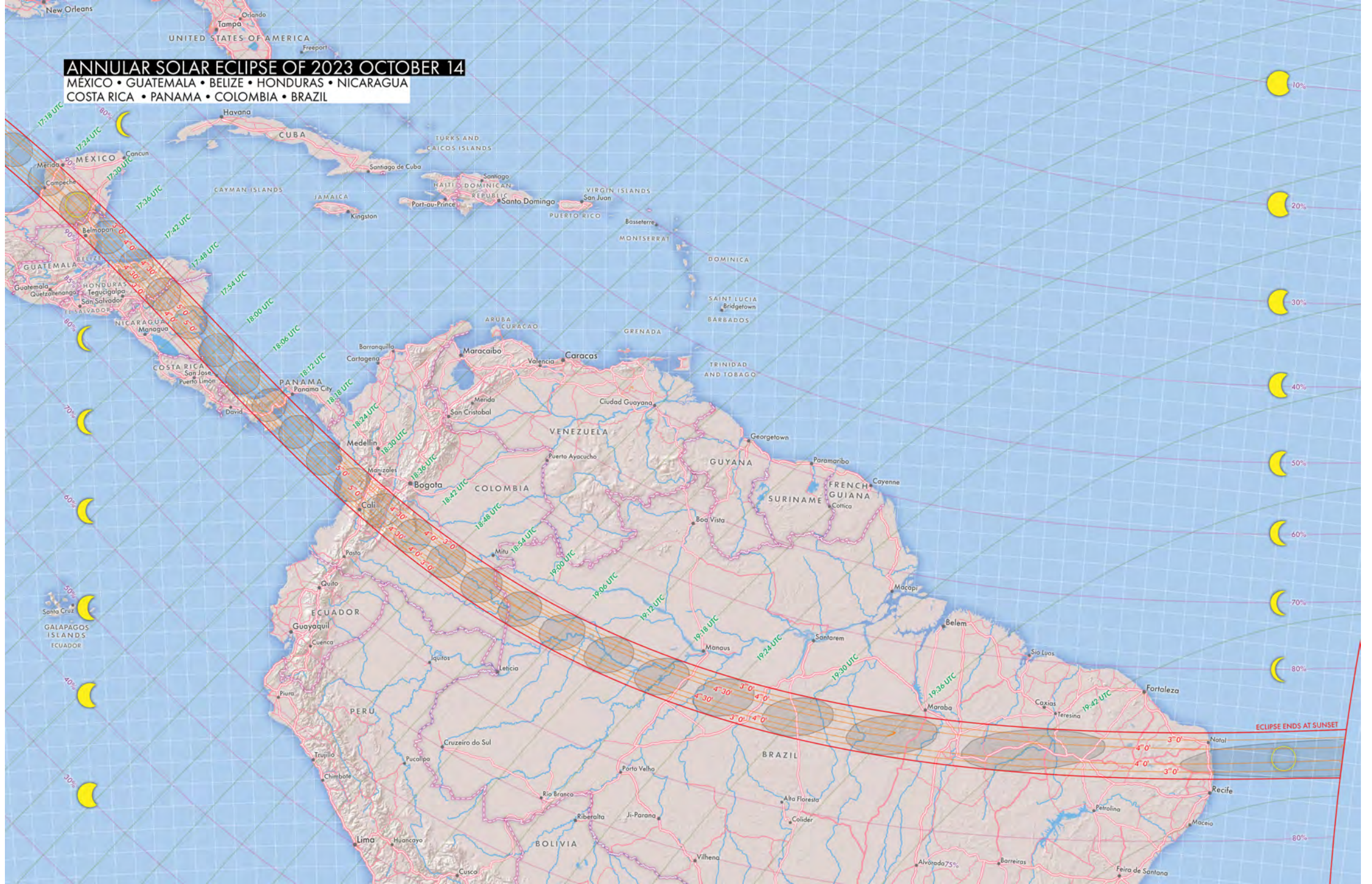
Greatest eclipse at
10:27 a.m. MDT

Greatest eclipse at
10:27 a.m. MDT

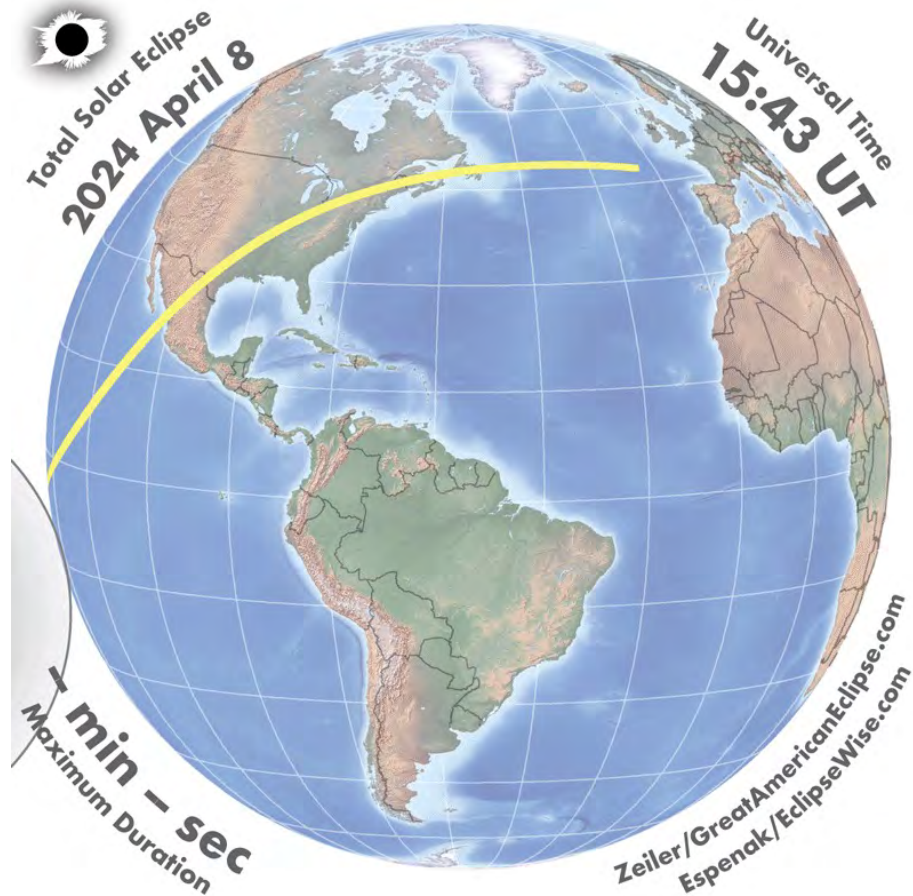
Greatest eclipse at
10:31 a.m. MDT

ANNULAR SOLAR ECLIPSE OF 2023 OCTOBER 14

MEXICO • GUATEMALA • BELIZE • HONDURAS • NICARAGUA
COSTA RICA • PANAMA • COLOMBIA • BRAZIL



Total Solar Eclipse of April 8, 2024

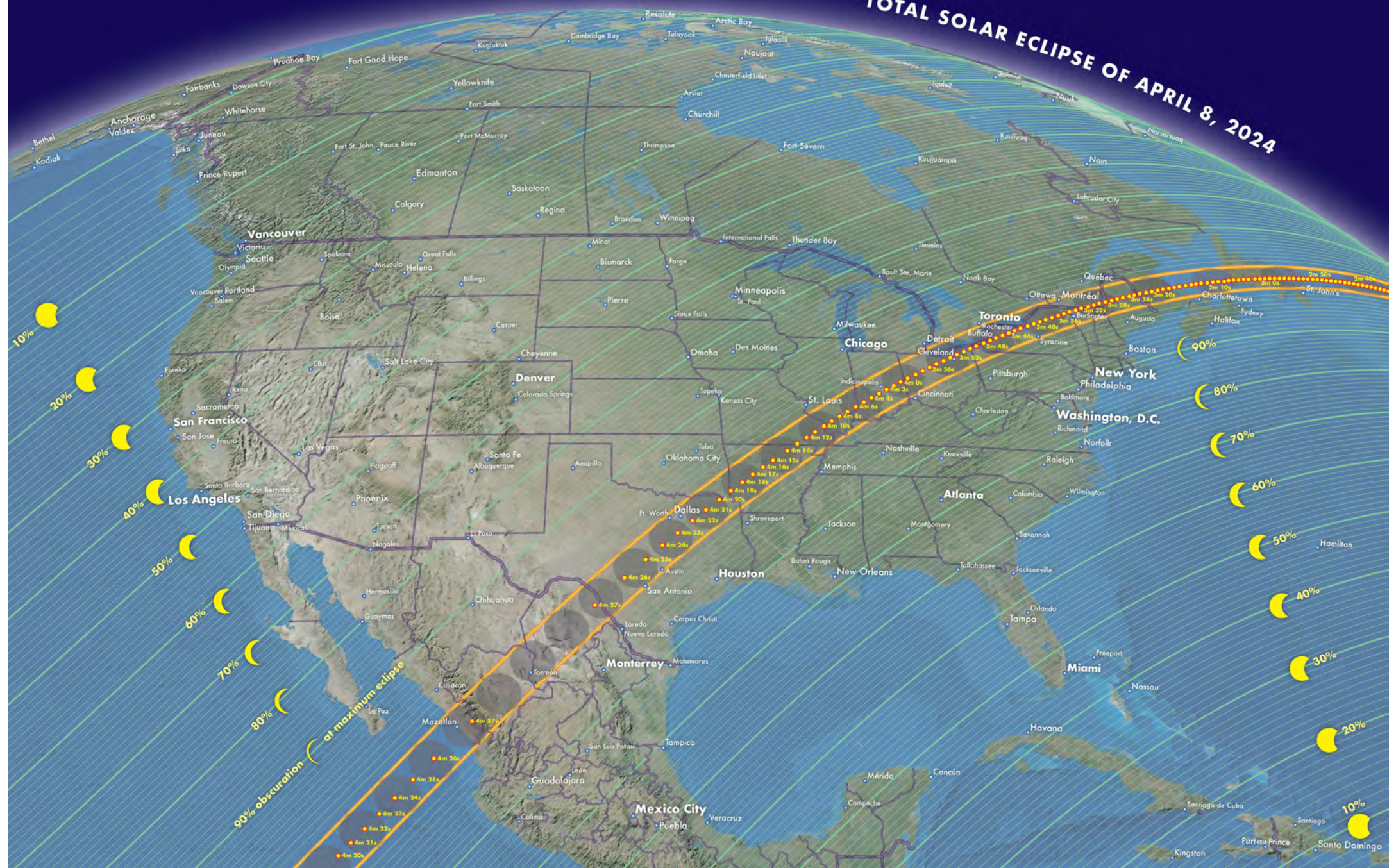


A century of solar eclipses

Animated GIFs of
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TOTAL SOLAR ECLIPSE OF APRIL 8, 2024

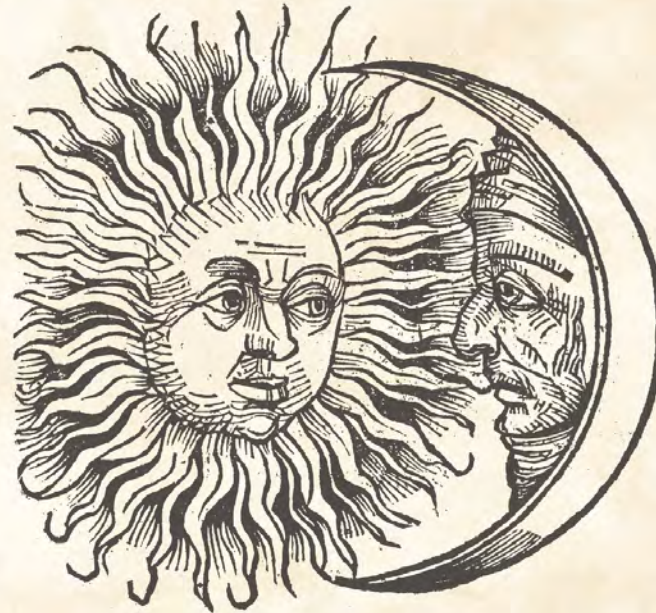




Save the Date

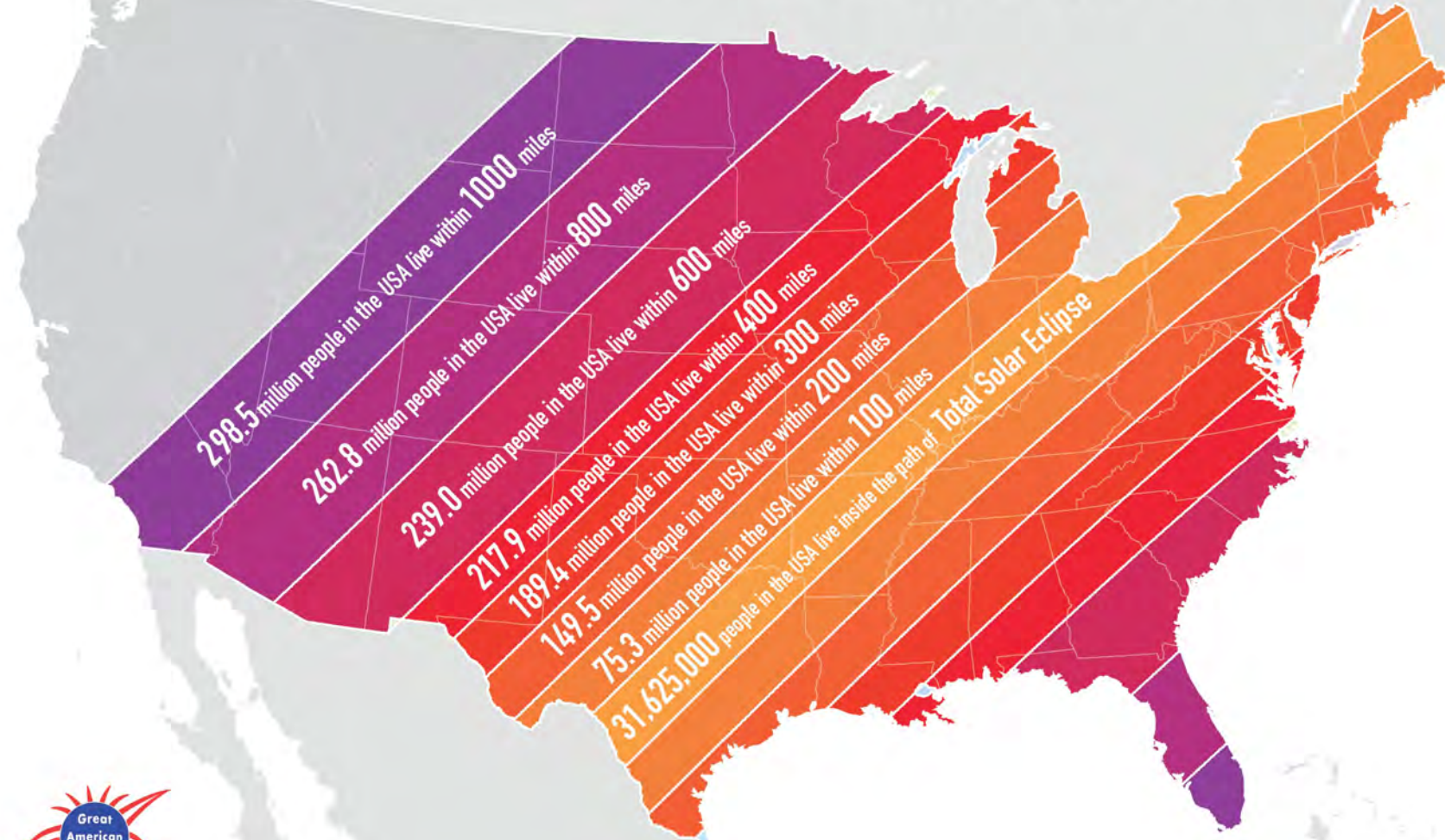
Join Us in Celebrating
the Union of the
Sun and Moon

April 8, 2024



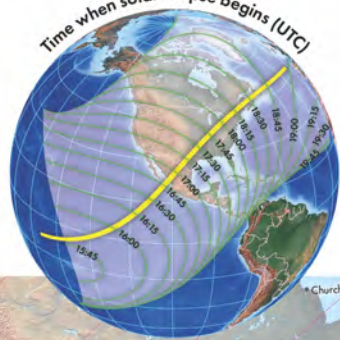
RSVP at [GreatAmericanEclipse.com](https://www.GreatAmericanEclipse.com)

U.S. population counts inside and near the Total Solar Eclipse of April 8, 2024

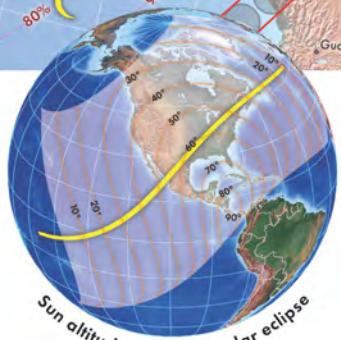
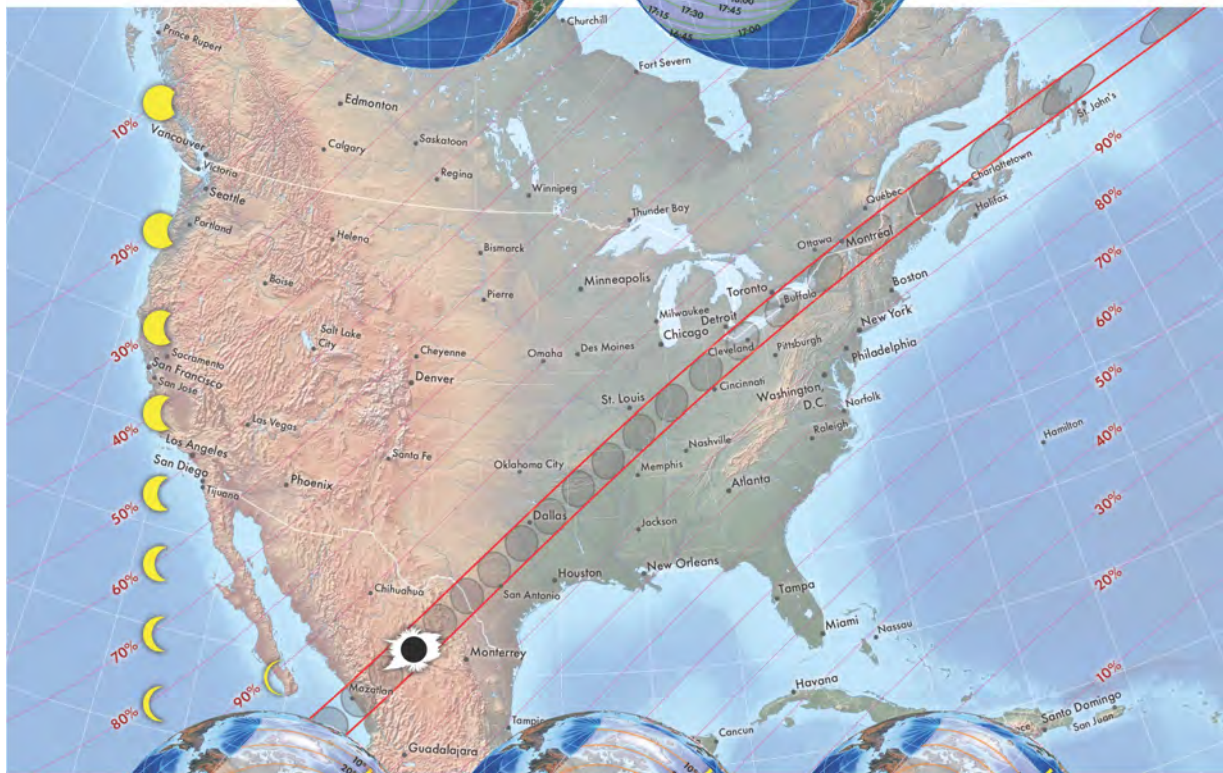
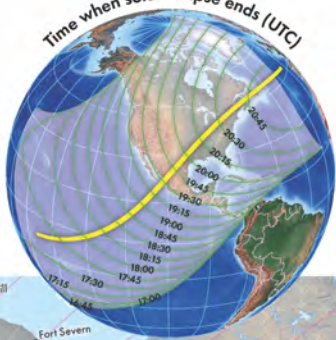


GreatAmericanEclipse.com

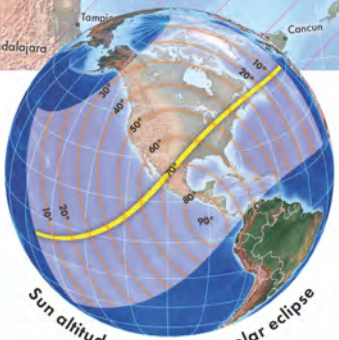
Time when solar eclipse begins (UTC)



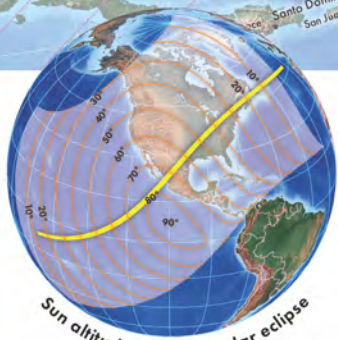
Time when solar eclipse ends (UTC)



Sun altitude at start of solar eclipse



Sun altitude at middle of solar eclipse



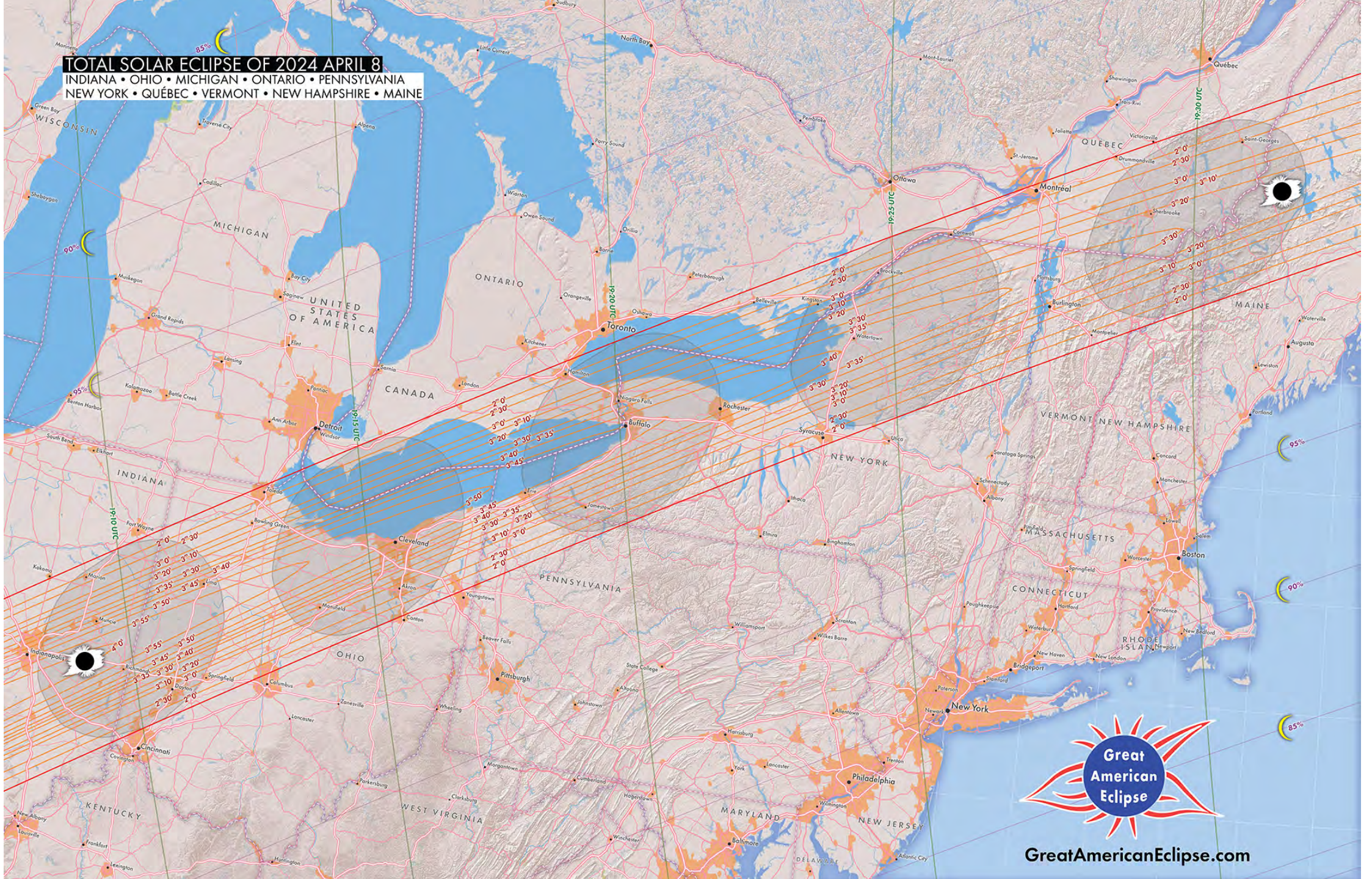
Sun altitude at end of solar eclipse

Times and durations of eclipse

City inside path	Duration of totality	Partial eclipse begins	Total eclipse begins	Partial eclipse ends
Mazatlán, Sinaloa	4m 14s	10:51 am MDT	12:07 pm MDT	1:32 pm MDT
Durango, Durango	3m 51s	11:55 am CDT	1:12 pm CDT	2:36 pm CDT
Nazas, Durango	4m 27s	11:58 am CDT	1:15 pm CDT	2:39 pm CDT
Torreón, Coahuila	4m 15s	11:59 am CDT	1:16 pm CDT	2:41 pm CDT
Zaragoza, Coahuila	4m 27s	12:09 pm CDT	1:26 pm CDT	2:50 pm CDT
Eagle Pass, Texas	4m 23s	12:10 pm CDT	1:27 pm CDT	2:51 pm CDT
Uvalde, Texas	4m 16s	12:12 pm CDT	1:29 pm CDT	2:53 pm CDT
Kerrville, Texas	4m 23s	12:14 pm CDT	1:32 pm CDT	2:55 pm CDT
Austin, Texas	1m 53s	12:17 pm CDT	1:36 pm CDT	2:58 pm CDT
Killeen, Texas	4m 17s	12:18 pm CDT	1:36 pm CDT	2:59 pm CDT
Fort Worth, Texas	2m 34s	12:22 pm CDT	1:40 pm CDT	3:01 pm CDT
Dallas, Texas	3m 47s	12:23 pm CDT	1:40 pm CDT	3:02 pm CDT
Little Rock, Arkansas	2m 33s	12:33 pm CDT	1:51 pm CDT	3:11 pm CDT
Jonesboro, Arkansas	2m 24s	12:37 pm CDT	1:55 pm CDT	3:14 pm CDT
Poplar Bluff, Arkansas	4m 08s	12:39 pm CDT	1:56 pm CDT	3:15 pm CDT
Cape Girardeau, Missouri	4m 06s	12:41 pm CDT	1:58 pm CDT	3:17 pm CDT
Carbondale, Illinois	4m 08s	12:42 pm CDT	1:59 pm CDT	3:18 pm CDT
Mt Vernon, Illinois	3m 40s	12:44 pm CDT	2:00 pm CDT	3:18 pm CDT
Evansville, Indiana	3m 02s	12:45 pm CDT	2:02 pm CDT	3:20 pm CDT
Terre Haute, Indiana	2m 57 s	1:48 pm EDT	3:04 pm EDT	4:21 pm EDT

City inside path	Duration of totality	Partial eclipse begins	Total eclipse begins	Partial eclipse ends
Indianapolis, Indiana	3m 46s	1:50 pm EDT	3:06 pm EDT	4:23 pm EDT
Dayton, Ohio	2m 46s	1:53 pm EDT	3:09 pm EDT	4:25 pm EDT
Wapakoneta, Ohio	3m 55s	1:54 pm EDT	3:09 pm EDT	4:25 pm EDT
Toledo, Ohio	1m 54s	1:56 pm EDT	3:12 pm EDT	4:26 pm EDT
Cleveland, Ohio	3m 50s	1:59 pm EDT	3:13 pm EDT	4:28 pm EDT
Erie, Pennsylvania	3m 43s	2:02 pm EDT	3:16 pm EDT	4:30 pm EDT
Buffalo, New York	3m 45s	2:04 pm EDT	3:18 pm EDT	4:32 pm EDT
Rochester, New York	3m 40s	2:06 pm EDT	3:20 pm EDT	4:33 pm EDT
Syracuse, New York	1m 26s	2:09 pm EDT	3:23 pm EDT	4:34 pm EDT
Hamilton, Ontario	1m 45s	2:03 pm EDT	3:18 pm EDT	4:31 pm EDT
Burlington, Vermont	3m 14s	2:14 pm EDT	3:26 pm EDT	4:37 pm EDT
Montréal, Québec	1m 12s	2:14 pm EDT	3:26 pm EDT	4:36 pm EDT
Lac-Mégantic, Québec	3m 25s	2:18 pm EDT	3:28 pm EDT	4:38 pm EDT
Island Falls, Maine	3m 20s	2:21 pm EDT	3:31 pm EDT	4:40 pm EDT
Presque Island, Maine	2m 47s	2:22 pm EDT	3:32 pm EDT	4:40 pm EDT
Grand Falls, New Brunswick	1m 10s	3:22 pm ADT	3:33 pm ADT	5:40 pm ADT
Fredericton, New Brunswick	2m 16s	3:23 pm ADT	3:33 pm ADT	5:41 pm ADT
Tignish, Prince Edward Island	3m 13s	3:27 pm ADT	3:35 pm ADT	5:43 pm ADT
Channel Port aux Basques, Labrador	2m 43s	4:02 pm NDT	5:09 pm NDT	6:15 pm NDT
Bonavista, Labrador	2m 51s	4:03 pm NDT	5:13 pm NDT	6:17 pm NDT

TOTAL SOLAR ECLIPSE OF 2024 APRIL 8
INDIANA • OHIO • MICHIGAN • ONTARIO • PENNSYLVANIA
NEW YORK • QUÉBEC • VERMONT • NEW HAMPSHIRE • MAINE



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Michigan

Like Tennessee, Michigan will receive a minuscule amount of totality. Across roughly 50 square miles in the state's southeastern corner, where U.S. Hwy. 24 and Interstate 75 cross its border with Ohio, viewers will experience a maximum duration of 1 minute with the Sun 50° high in the southwest. Unfortunately, Detroit lies outside of the path, although it gets a 99.4-percent partial eclipse along the banks of the Detroit River.

Pennsylvania

Totality begins in the Commonwealth of Pennsylvania at 3:15:38 p.m. EDT, just south of where Interstate 90 crosses the border from Ohio. Anyone at that point will enjoy 3 minutes 44 seconds of totality with the Sun 48° high. Just east of there, the small town of West Springfield, which has a population around 3,300, receives 1 second less beneath the umbra.

The largest city in the state to enjoy totality will be Erie, which has some 100,000 residents. Residents in the downtown area will be treated to 3 minutes 42 seconds of totality. Numbers here surely will swell on eclipse day because the great city of Pittsburgh lies only 128 miles south and eclipse chasers who don't drive to Cleveland may choose instead to make the easy drive to Erie via I-79.

The longest durations of totality in the state will occur along the shore of Lake Erie. Fortunately, this 45-mile stretch is paralleled by I-90, so access is not difficult.



LIGHTHOUSE AT ST. CATHARINES, ONTARIO



Ontario

Almost simultaneously with touching Michigan, at 3:14 p.m. EDT, the umbra enters Ontario, Canada's most populous province. The first large city covered by the umbra is Hamilton. Any of its metropolitan population of 750,000 can experience 2 minutes 15 seconds of totality from the southeastern part of the city. There, the Sun will stand 46° above the southwestern horizon. St. Catharines, with its 1.4 million people, will add a minute to that duration from its southeastern reaches.

Unfortunately, Canada's largest city, Toronto, with a population approaching 3 million (and a metro population of 6 million), lies just outside the path of totality. Residents who remain there on eclipse day will see the Moon cover 99.9 percent of the solar disk, surely with an extended display of Bailey's beads.

Most eclipse chasers in Toronto, however, probably will head for Hamilton. Or, they'll continue farther south to the shore of Lake Erie. If it's clear on eclipse day, a great view will come from Long Point Provincial Park, which is famous for sightings of migratory birds. There totality will last 3 minutes 42 seconds with the Sun 47° high in the southwest. Other residents throughout this province who want the maximum amount of time beneath the umbra should head to Fort Erie, which lies at Ontario's border with New York. At the shoreline south of this town of 30,000, totality will last 3 minutes 45 seconds.

New York, Vermont, and New Hampshire

The next big city that will experience the Moon's umbra is Buffalo, New York, with its metropolitan population of 1.1 million. The center line passes right through downtown, bringing this city 3 minutes 46 seconds of totality. Travelers desiring information about the eclipse might want to check with the staff of Zygmunt Planetarium, which is part of the Buffalo Museum of Science.

Rochester, on the shore of Lake Ontario, also is well positioned for totality. From Strasenburgh Planetarium, part of the Rochester Museum and Science Center, the Moon will cover the Sun for 3 minutes 40 seconds. Attend a program and ask what eclipse related activities the staff has planned a day or so before the great event.

The umbra next covers upstate New York and the northern parts of Vermont and New Hampshire before entering Maine. No sizable cities lie in this region. Even Montpelier, the capital of Vermont, has only 7,500 residents who, if it's clear, will enjoy 1 minute 42 seconds of totality with the Sun 40° high in the southwest.



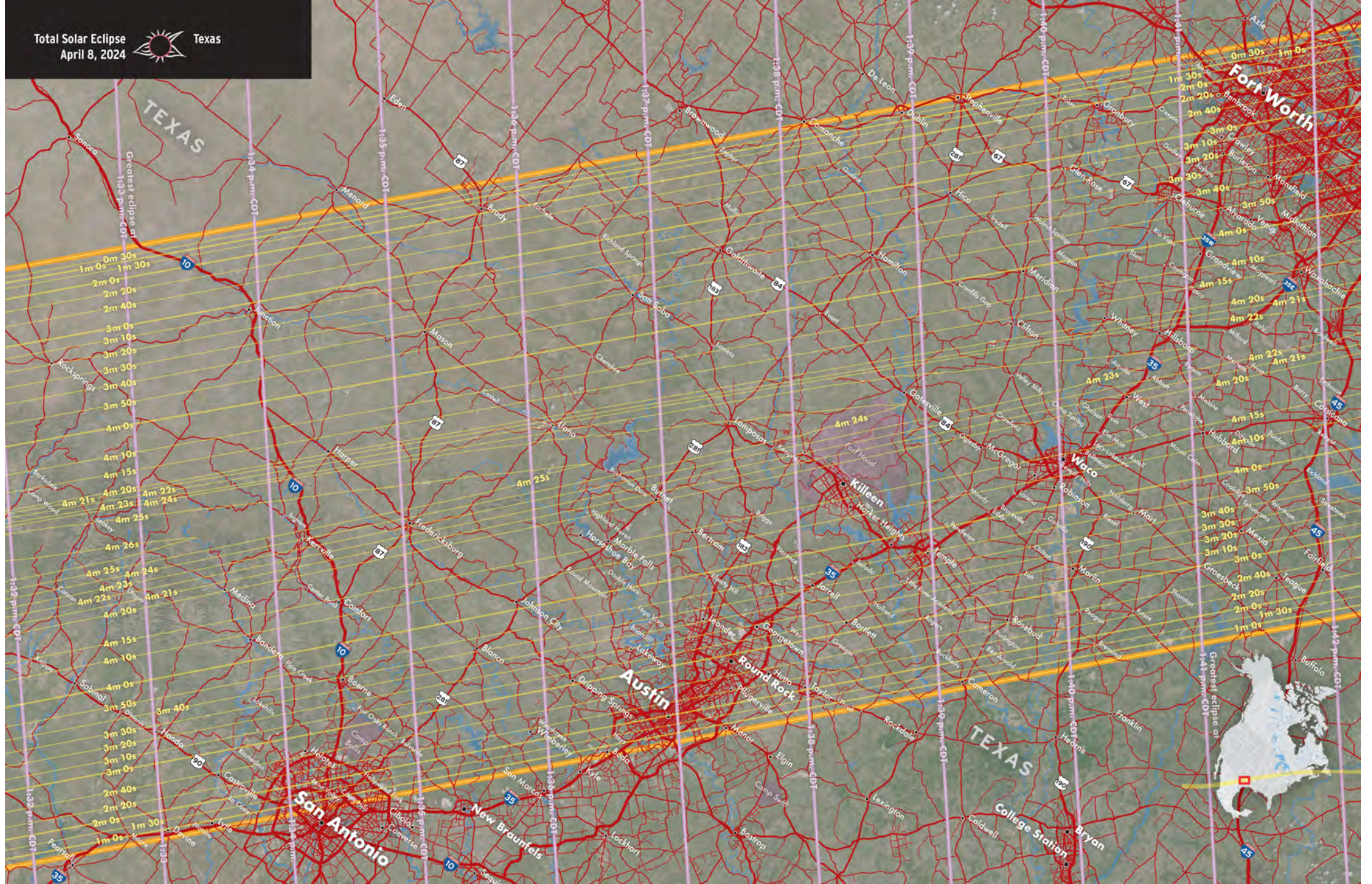
ROCHESTER, NEW YORK

If the Northeastern United States has good weather on eclipse day, the most picturesque images of the event might come from Niagara Falls. From the outlook called Terrapin Point, an eclipse watcher will enjoy 3 minutes 28 seconds of totality. Almost as important, the Sun will hang 46° high in the southwest — directly over the Falls!

Science buffs who observe or photograph the eclipse from this area surely will want to visit the Nikola Tesla Monument within Queen Victoria Park on the Canadian side of Niagara Falls. It lies only 1500 feet north of Terrapin Point.



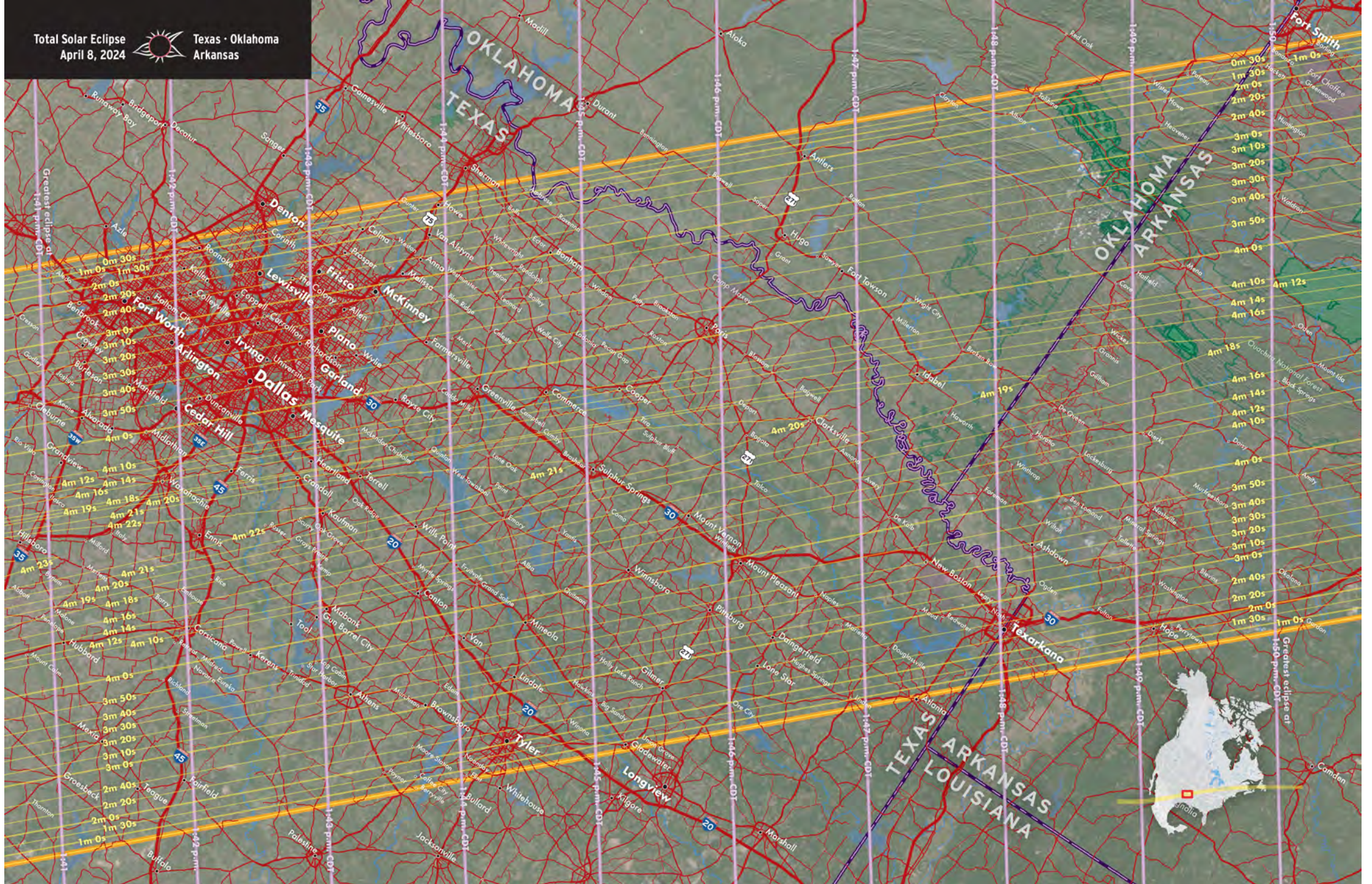
NIAGARA FALLS, NEW YORK AND ONTARIO



Total Solar Eclipse
April 8, 2024



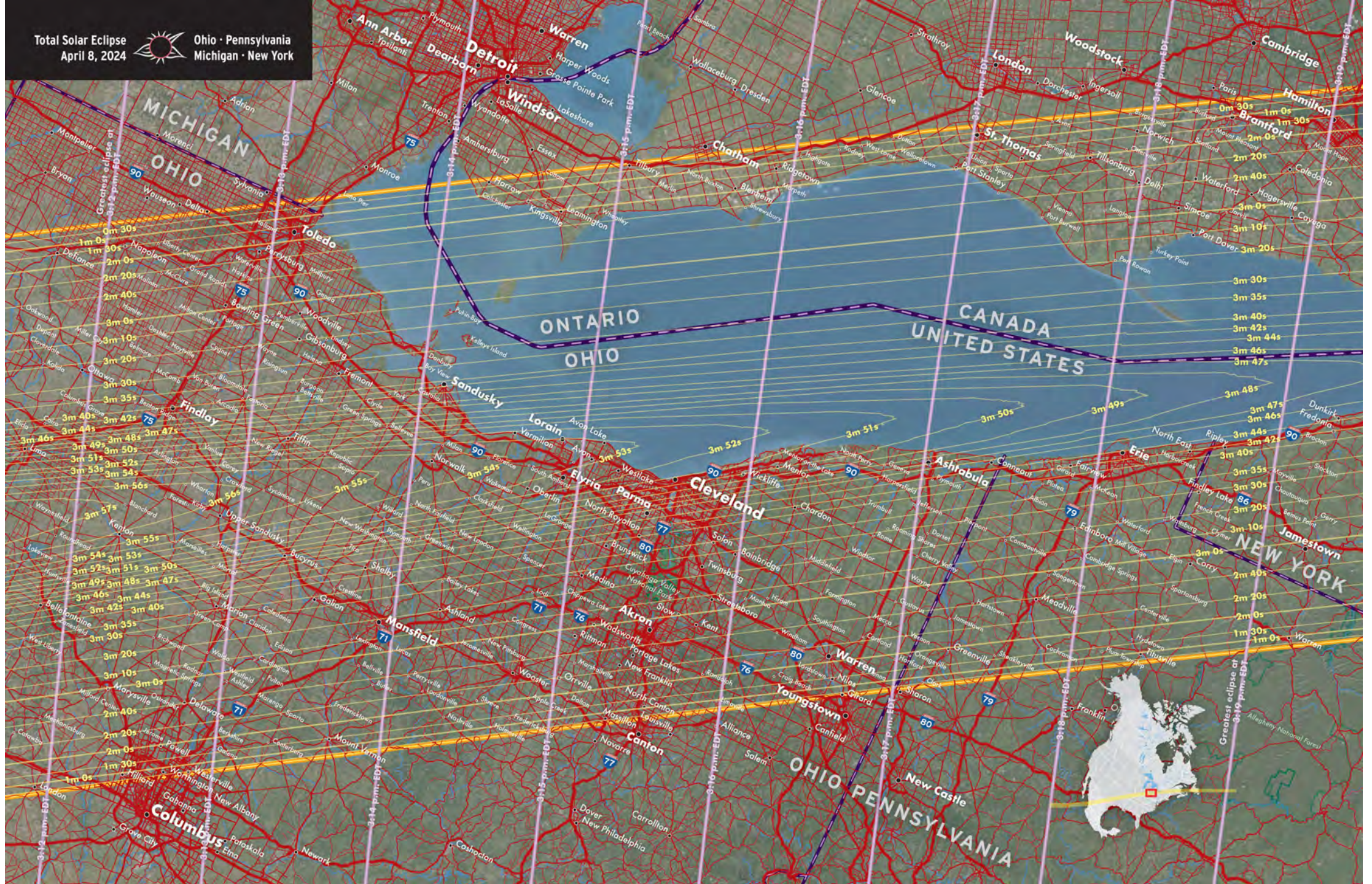
Texas · Oklahoma
Arkansas



Total Solar Eclipse
April 8, 2024



Ohio · Pennsylvania
Michigan · New York





Great American Eclipse.com

Total solar eclipse of April 8, 2024

After an interval of seven years since 2017, a total solar eclipse visits North America again. This is easily nature's most spectacular sight. To see the beauty of the Sun's corona in the suddenly darkened sky, you must travel to the path of total solar eclipse.

Durations of total solar eclipse are given inside the path of totality. The gray oval shapes show the Moon's shadow at five minute intervals. Times of greatest eclipse are shown in local time along the purple curves. Degrees of partial eclipse (obscuration) are shown along the orange curves.

Map by Michael Zeiler, GreatAmericanEclipse.com, Dec 2016
Eclipse computations by Xavier Jubier, xjubier.free.fr
Eclipse predictions by Fred Espenak, eclipsewise.com

Ten-foot long eclipse map

Digital map that is ideal for education and conferences can be downloaded at the bottom of www.greatamericaneclipse.com/april-8-2024

