

The April Eclipse

John Westerkamp, [W8LRJ](#)

The Eclipse

It's only one month away! The Miami Valley and a large portion of Ohio will experience a total eclipse of the sun on Monday, April 8, 2024. The partial eclipse will begin at approximately 17:50 UTC (1:50 pm Dayton time) and will end at 20:25 UTC (4:25 pm Dayton time). If you are lucky enough to be near the centerline of the eclipse path in the Miami Valley, you will get about 4 minutes of total eclipse beginning around 19:09 UTC (3:09 pm Dayton time) and ending at 19:13 UTC (3:13 pm Dayton time). In the Beavercreek area, we will only get 2 minutes of totality beginning just before 19:10 UTC (3:10 pm Dayton time) and ending just before 19:12 UTC (3:12 pm Dayton time). So be ready around 3 pm on April 8 and let's hope for clear skies!



Eye Safety

Now that you have the details, let's talk about the eclipse itself and go over some good websites for more information. First of all, be safe, and **DO NOT LOOK DIRECTLY AT THE SUN AT ANY TIME DURING THE EVENT!** There are several sites where you can get sun safe glasses to wear. You can also get sun safe covers that fit over your binoculars so that you can view the partial eclipse as it develops. Be sure that they meet ISO 12312-2 certification. Good welder's glass can also do the trick, but I would not trust it unless it was certified for solar viewing. During the two minutes of totality, you can view the event directly, but be ready to put your sun safe glasses back on as the end of the two minutes approaches. Many county organizations are offering free sun safe glasses (including Greene County).

Ohio Eclipse Information

The Ohio Emergency Management Association has lots of information about the eclipse and various resources if you are looking for a place to view it.

[Ohio EMA Eclipse Information](#)

The Dayton Daily News has a page with all the scheduled events by county.

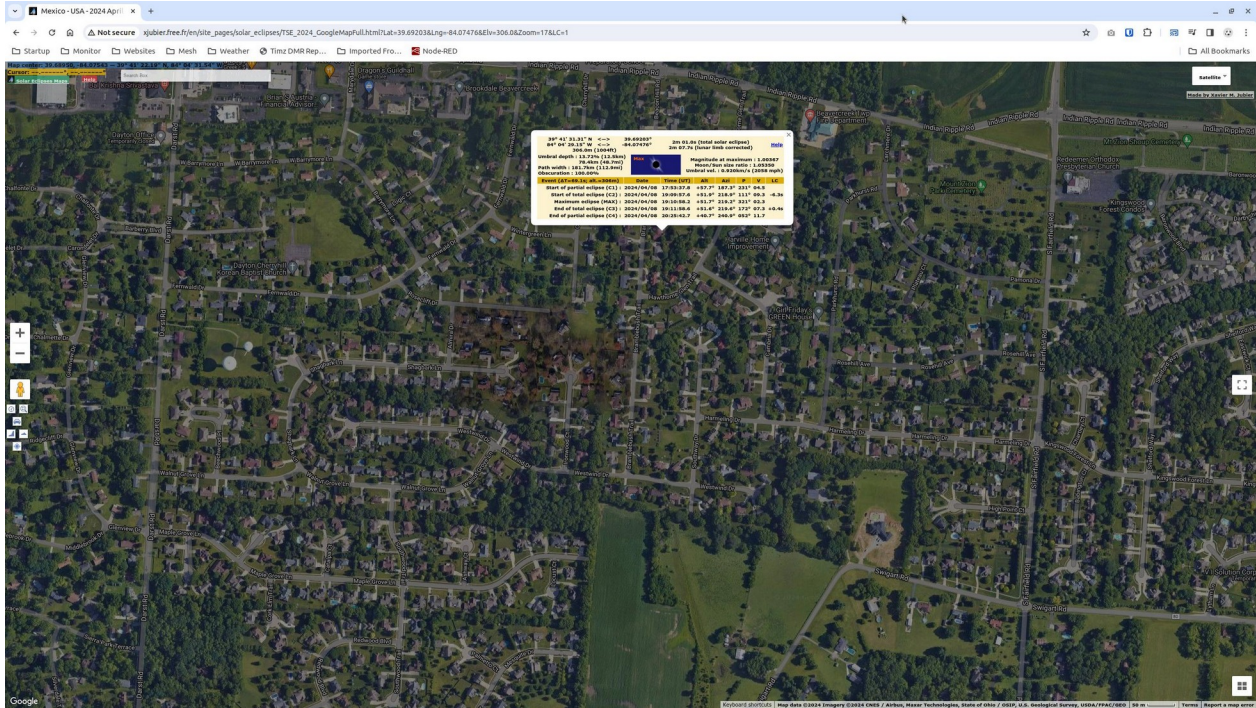
[Dayton Daily News Eclipse Events](#)

What Time Do Things Happen?

Here is a great website that lets you click on any location in Google Maps and it will display all the times for the eclipse at that location including the beginning of the partial eclipse, the

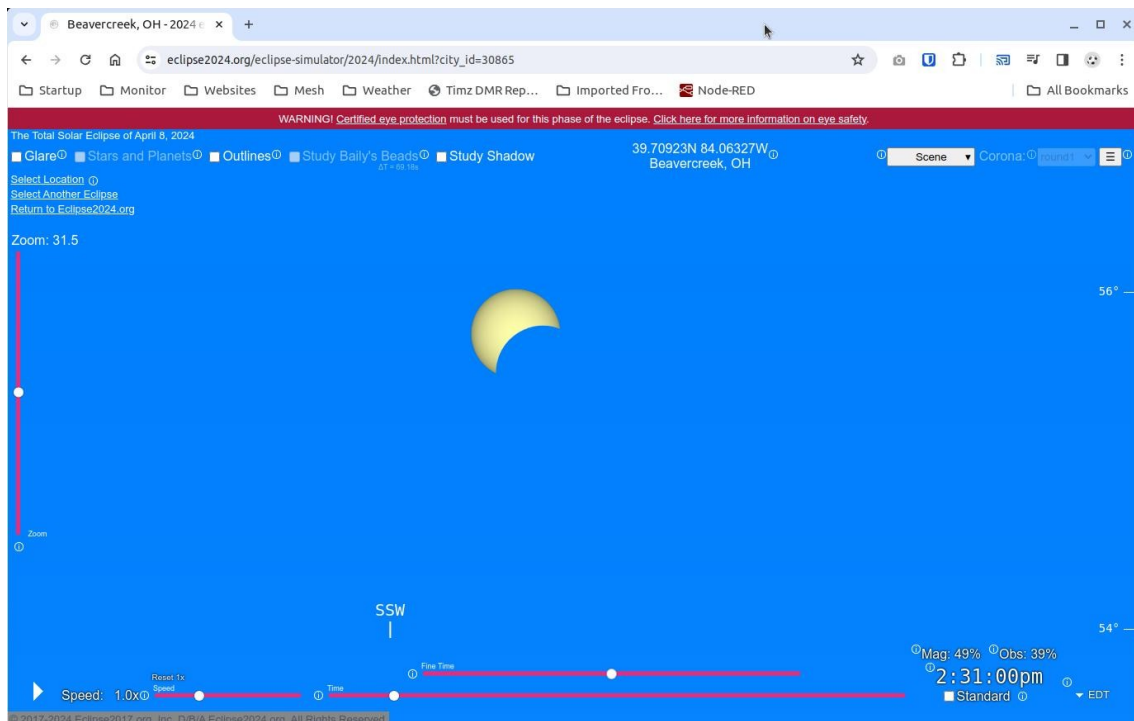
beginning of the total eclipse, the end of the total eclipse, and the end of the partial eclipse. This is the site I used to get the times at the beginning of this article.

[Mexico - USA - 2024 April 8 Total Solar Eclipse - Interactive Google Map - Xavier Jubier](#)



What Will I See?

Here is a site that provides a simulation of the sky during the eclipse event. Just type in your location, then select *Launch the Eclipse Simulator* in the pop-up window.



What Else Can I Expect?

Here are some things you can expect to see and hear during the eclipse.

1. As the partial eclipse begins, you won't notice much of anything different, other than the sun beginning to be obstructed by the moon when viewed through sun safe binoculars.
2. As the partial phase progresses, you may begin to notice mini-eclipses on the ground. These are caused by the pinhole effect as light from the sun passes through trees. You can also make a pinhole viewer by pushing a pencil tip barely through a piece of paper. Look at the image on the ground (do not look at the sun!) and you will start to see the partial eclipse of the sun.
3. At some point, you will suddenly realize that it is indeed getting darker, almost like early evening. The temperature will also begin to drop (so be prepared with a good jacket).
4. As you approach the time of the eclipse, animals will start behaving differently as though preparing for evening by suddenly disappearing and getting very quiet. You may begin to hear crickets as you would near twilight. It is now getting very cool.
5. As totality approaches, you may be able to see the shadow of the eclipse moving toward you by looking off to the southwest if you have a good view of the horizon.
6. Once the total eclipse phase begins, the sun will go completely black, and I mean black hole black. You will see the very white corona around the sun and maybe even some solar flares. The sky will darken to almost night and stars and planets will come out. This year, you should be able to see Mercury, Venus, and possibly Jupiter! It is truly awe inspiring!

Here is a link to a website that describes the timeline of the eclipse and what to expect.

[Great American Eclipse Phenomena](#)

My Experience In 2017

The last total eclipse in the United States went from the northwest to the southeast and passed through Kentucky in August of 2017 (this one is moving from the southwest to the northeast). My XYL, Lori, and I visited Franklin, Kentucky, on the border with Tennessee pretty much in the center of the eclipse. We left the day before and stayed overnight so we could set up early the next day to view the eclipse. Traffic the night before was normal. Luckily, the Dueling Grounds Distillery is located in Franklin so we were able to entertain ourselves the night before the eclipse.

On the morning of the eclipse (totality was not until about 2:30 pm), we set out for a Drive-In Theater just down the road from our hotel at about 10 am. They advertised \$5 per carload to set up in the parking lot. Plus they had running water and flush toilets since we would be there all day. Traffic was already horrible! It took us about one-half hour to go the approximately one mile to the drive-in as cars slowly made it into the parking lot and paid at the entry booth.

Once in the parking lot, we parked in a space and opened the back trunk door on my Honda CRV and set out a table and chairs so we could be in the shade (it was very warm as one might expect in August in Kentucky). Lori was smart enough to pack lots of sandwiches, snacks, and drinks for the day and we settled in around 10:30 am.



It was a very family atmosphere with lots of music and kids wandering around with their parents to check out all the telescopes and binoculars that others had brought. I had a very nice pair of astronomy binoculars with sun safe covers that I set up on a tripod so the view would be steady. There was lots of interest in my set up and by the time the partial eclipse started, we had a crowd.

We experienced many of the items listed above and made pinhole viewers for the kids to see the crescent sun. As totality approached, there was a very eerie feeling, maybe because subtle changes in the air, light, and animals were occurring and our brains knew something was wrong. As totality began, we saw the sun go black surrounded by the white corona, it was beautiful. Several stars appeared in the sky near the sun in the middle of the afternoon. Amazing!

It was all over in a few minutes and the sun peeked out from behind the moon and began to grow again. Some people left, but many stayed behind for the rest of partial eclipse phase, as we

did. Later in the afternoon as the parking lot emptied out, we headed out ourselves and the nightmare began!

Although people arrive in the area over several days and hours before the eclipse begins, they all leave at exactly the same time! What was normally a 4 hour trip took us 8 hours, most of which was just standing completely stopped in traffic. And that was before we even got to the highway! We thought we would be smart and take backroads to a highway entrance further north, but that strategy also failed. The traffic volume in all directions was just more than the roads could handle. Until all the traffic finally merged onto the interstate and moved further north, it was a standstill or barely moving. We got home after midnight.

Some tips based on our experience.

1. Expect friends and relatives to call to see if they can stay with you during the event.
2. A few days before the eclipse, be sure to hit the grocery store, fill up your gas tank, and charge all your radios. The store shelves will be empty and there will be no water (although April is cooler so water may be more available).
3. If you are leaving your home and going to another area to watch the eclipse, be sure to bring coolers with food and drinks and bring a jacket as well as sun safe glasses or sun safe covers for your binoculars. Make sure they have toilets!
4. Bring a chair and maybe a table.
5. It is tempting to take pictures or videos, but I suggest just taking in the event.
6. Expect traffic after the eclipse to be a nightmare.
7. Expect cell phone service to be limited (including 9-1-1).
8. Schools and many businesses may be closed on April 8.
9. It is April in Ohio, if you are at an outdoor venue away from home, know your escape route in case of bad weather, or worse, a tornado.

A total eclipse is a once in a lifetime event and we are fortunate to have one passing through Ohio. We plan to cookout and party on our deck and view the eclipse with friends and relatives. Have a great time but be prepared! Here's to clear skies and warm weather!