

10 Facts About the Eclipse



- 1. This will be the first total solar eclipse in the continental U.S. in 38 years.** The last one occurred February 26, 1979. Unfortunately, not many people saw it because it clipped just five states in the Northwest and the weather for the most part was bleak. Before that one, you have to go back to March 7, 1970.
- 2. A solar eclipse is a lineup of the Sun, the Moon, and Earth.** The Moon, directly between the Sun and Earth, casts a shadow on our planet. If you're in the dark part of that shadow (the umbra), you'll see a total eclipse. If you're in the light part (the penumbra), you'll see a partial eclipse.
- 3. Everyone in the continental U.S. will see at least a partial eclipse.** In fact, if you have clear skies on eclipse day, the Moon will cover at least 48 percent of the Sun's surface.
- 4. First contact is in Oregon.** If you want to be the first person to experience totality in the continental U.S., be on the waterfront at Government Point, Oregon, at 10:15:56.5 a.m. PDT. There, the total phase lasts 1 minute, 58.5 seconds.
- 5. Totality lasts a maximum of 2 minutes and 40.2 seconds.** That's it. To experience that length, you'll need to be slightly south of Carbondale, Illinois, in Giant City State Park. You might think about getting there early.
- 6. The end of the eclipse for the U.S. is not on land.** The center line's last contact with the U.S. occurs at the Atlantic Ocean's edge just southeast of Key Bay, South Carolina.
- 7. This eclipse will be the most-viewed ever.** I base this proclamation on four factors: 1) the attention it will get from the media; 2) the superb coverage of the highway system in our country; 3) the typical weather on that date; and 4) the vast number of people who will have access to it from nearby large cities.
- 8. Yes, the Sun's a lot bigger.** Our daytime star's diameter is approximately 400 times larger than that of the Moon. What a coincidence that it also lies roughly 400 times farther away. This means both disks appear to be the same size.
- 9. Nature will take heed.** Depending on your surroundings, as totality nears you may experience strange things. Look. You'll notice a resemblance to the onset of night, though not exactly. Shadows look different. Listen. Usually, any breeze will dissipate and birds (many of whom will come in to roost) will stop chirping. It is quiet. Feel. A 10°–15° F drop in temperature is not unusual.
- 10. The future is bright but long.** The next total solar eclipse over the continental U.S. occurs April 8, 2024. It's a good one, too. Depending on where you are (on the center line), the duration of totality lasts at least 3 minutes and 22 seconds on the east coast of Maine and stretches to 4 minutes and 27 seconds in southwestern Texas. After that eclipse, it's a 20-year wait until August 23, 2044 (and, similar to the 1979 event, that one is visible only in Montana and North Dakota). Total solar eclipses follow in 2045 and 2078.