

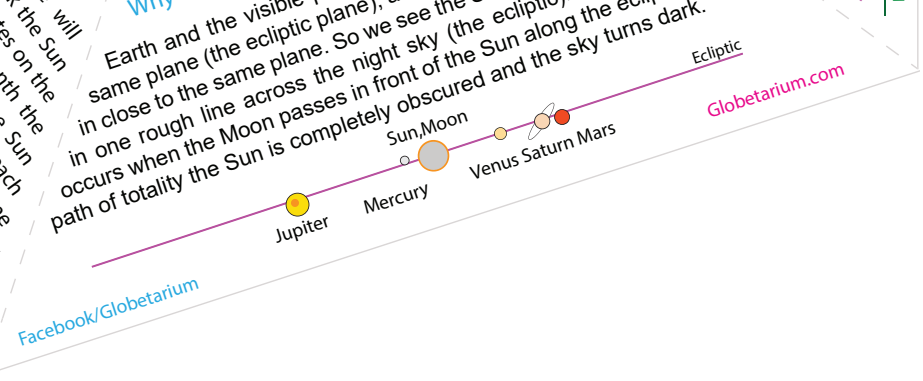


During a Solar Eclipse the Moon blocks the Sun in a small region that moves across Earth. About 300X closer. About 300X larger diameter. Although the Sun is much larger than the Moon, they appear to be about the same size in the sky because the Sun is also much more distant. During a solar eclipse if the Moon is relatively slightly closer the Moon blocks the Sun entirely (total eclipse of the Sun uncovered (annular eclipse this past October).

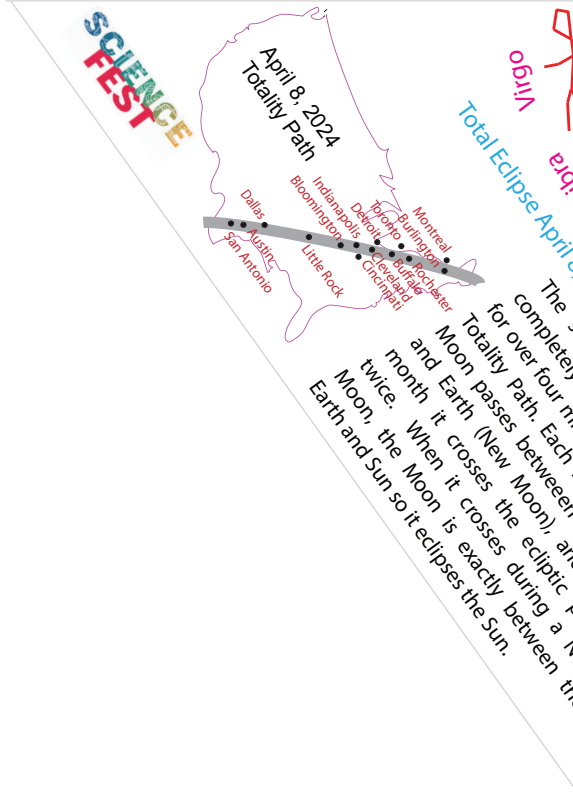


Why do the Sun and Moon look the same size? After the partial eclipse starts at 1:50 pm from the right side of the Sun, the Moon will totally obscure the Sun in Bloomington starting at about 3:06 pm for 4 minutes. During the total eclipse Venus and Jupiter, and maybe Mercury, Mars, and Saturn, will appear along the ecliptic.

Sky During Total Eclipse April 8, 2024 starting 3:06 pm



Why are the Sun, Moon, and Planets in a line? Earth and the visible planets orbit the Sun in nearly the same plane (the ecliptic plane), and the Moon orbits the Earth in close to the same plane. So we see the Sun, Moon, and planets in one rough line across the night sky (the ecliptic). A solar eclipse occurs when the Moon passes in front of the Sun along the ecliptic. In the path of totality the Sun is completely obscured and the sky turns dark.



April 8, 2024 Totality Path

The solar eclipse will completely block the Sun for over four minutes on the Totality Path. Each month the Moon passes between the Sun and Earth (New Moon), and each month it crosses the ecliptic plane twice. When it crosses between the Earth and Sun so it eclipses the Sun.

Looking West
Looking South
Looking East

