

# What is a Solar Eclipse?

A solar eclipse is a rare natural phenomenon that occurs when the Moon is directly between the Sun and Earth and blocks all or part of the Sun. If all of the Sun is covered it is a total solar eclipse which can last for several minutes. If part of the Sun is covered it is a partial solar eclipse which can last for several hours.

For a solar eclipse to occur, the Moon has to be between the Sun and Earth in the lunar phase called the New Moon. Although Earth observes a New Moon every month, we don't experience a solar eclipse every month. This is because the Moon usually passes a little higher or lower on its orbit.

On August 21, 2017, a total solar eclipse will appear over a 70-mile wide path that crosses the United States from Oregon to South Carolina, starting in Oregon. When a total solar eclipse occurs then the moon covers the bright light from the sun, but the outer part of the sun's atmosphere, the corona, is visible. During an eclipse when that light is cut off, we will experience a change in air temperature, surface temperature, wind speed, and wind direction changes. Some animals may react as well as if a disaster will soon occur. The sky will darken too. Don't worry though!

It is important to be safe during an eclipse. Never look at the Sun directly without specialized glasses to protect your eyes or serious damage may occur, You can only safely view the Sun during the 100% coverage during the few minutes of the total solar eclipse. Are you ready for this scientific phenomenon?