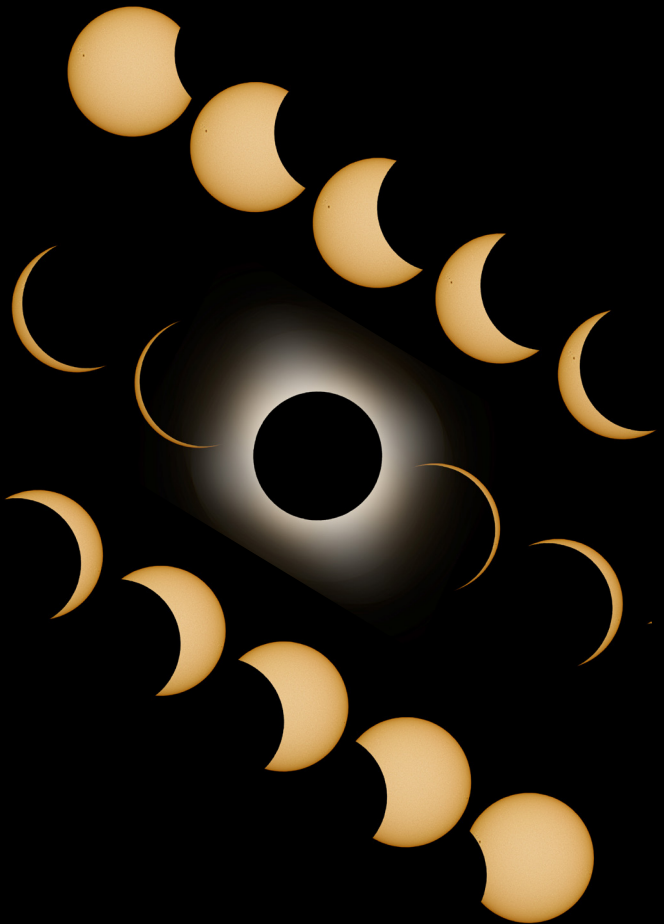


BECHTEL NATIONAL PLANETARIUM

SOLAR ECLIPSE

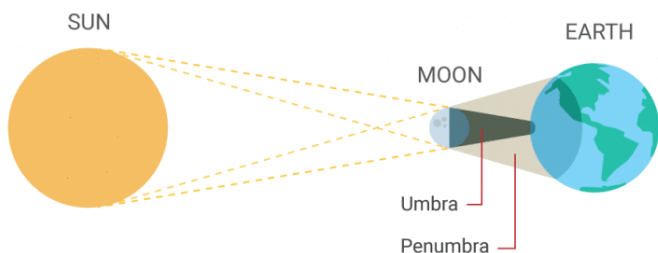
AUGUST 21, 2017

COLUMBIA BASIN COLLEGE
9AM-12PM OBSERVATORY/PLANETARIUM



WHAT IS A TOTAL SOLAR ECLIPSE?

A total solar eclipse is when the moon completely covers the disk of the sun from our point of view here on Earth. The shadow directly under the moon is called the umbra. The path of the moon's umbra as it moves across the surface of the Earth is called the path of totality. Any location along this path, which is about 70 miles wide, will see the sun 100% covered by the moon; locations directly outside of this path, in what we call the moon's penumbra, will see only a partial solar eclipse.



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On average, a total solar eclipse occurs somewhere on Earth around every 18 months. The August 21 eclipse will be rare, as it will be the first time the path of totality will eclipse only the contiguous U.S., from Oregon to South Carolina. The last total solar eclipse here was in 1979; the next will occur in 2024. However, the next total solar eclipse to run from coast to coast won't be until 2045, and there will only be 8 total solar eclipses in the contiguous U.S. in the next 100 years!

WHEN AND HOW DO WE SEE IT?

In the Tri-Cities, the entire length of the eclipse will run from 9:10am-11:44am PDT. At its maximum, the sun will be 96% obscured by the moon at 10:24am for about 2 minutes. If you can make your way into the path of totality, during maximum eclipse the sky will darken, birds may stop singing, and some bright stars and planets will become visible!

While it is safe to view a lunar eclipse with the unaided eye, proper eye protection is essential for viewing a solar eclipse! Sunglasses are not sufficient protection. Solar eclipse glasses are available online.

