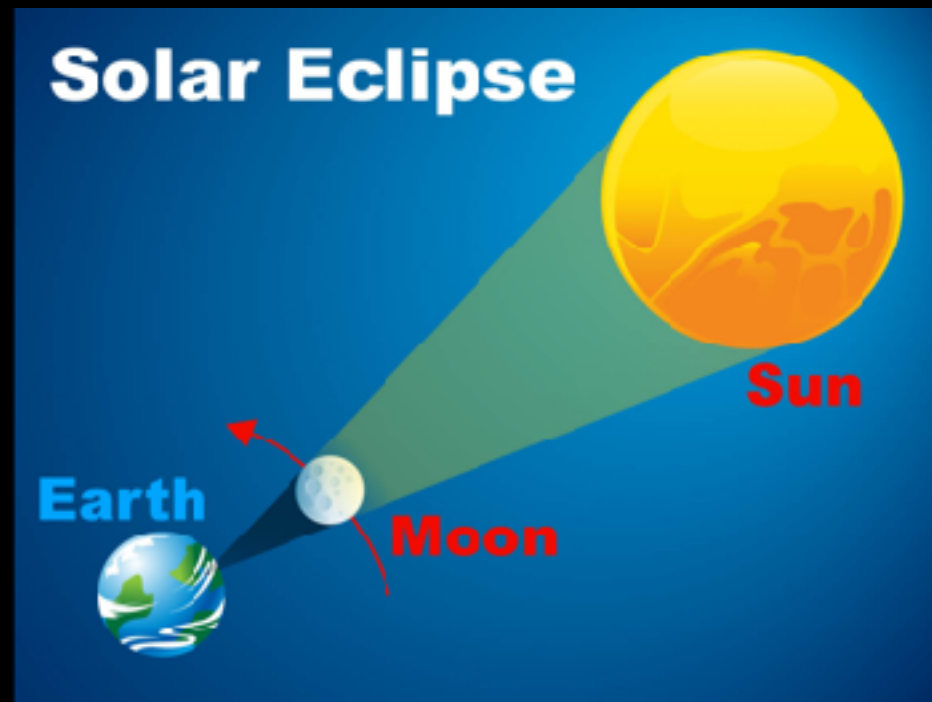


SOLAR ECLIPSE

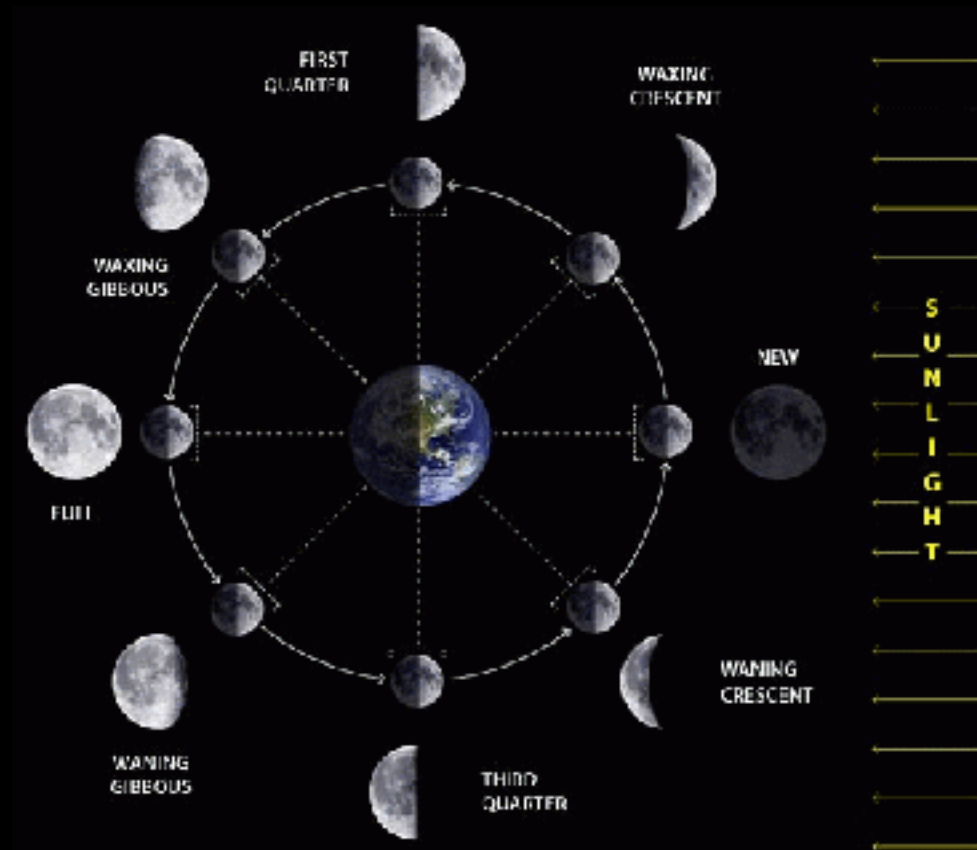
The solar eclipse of August 21, 2017, will be the first total solar eclipse to cross the continental U.S. since 1918.



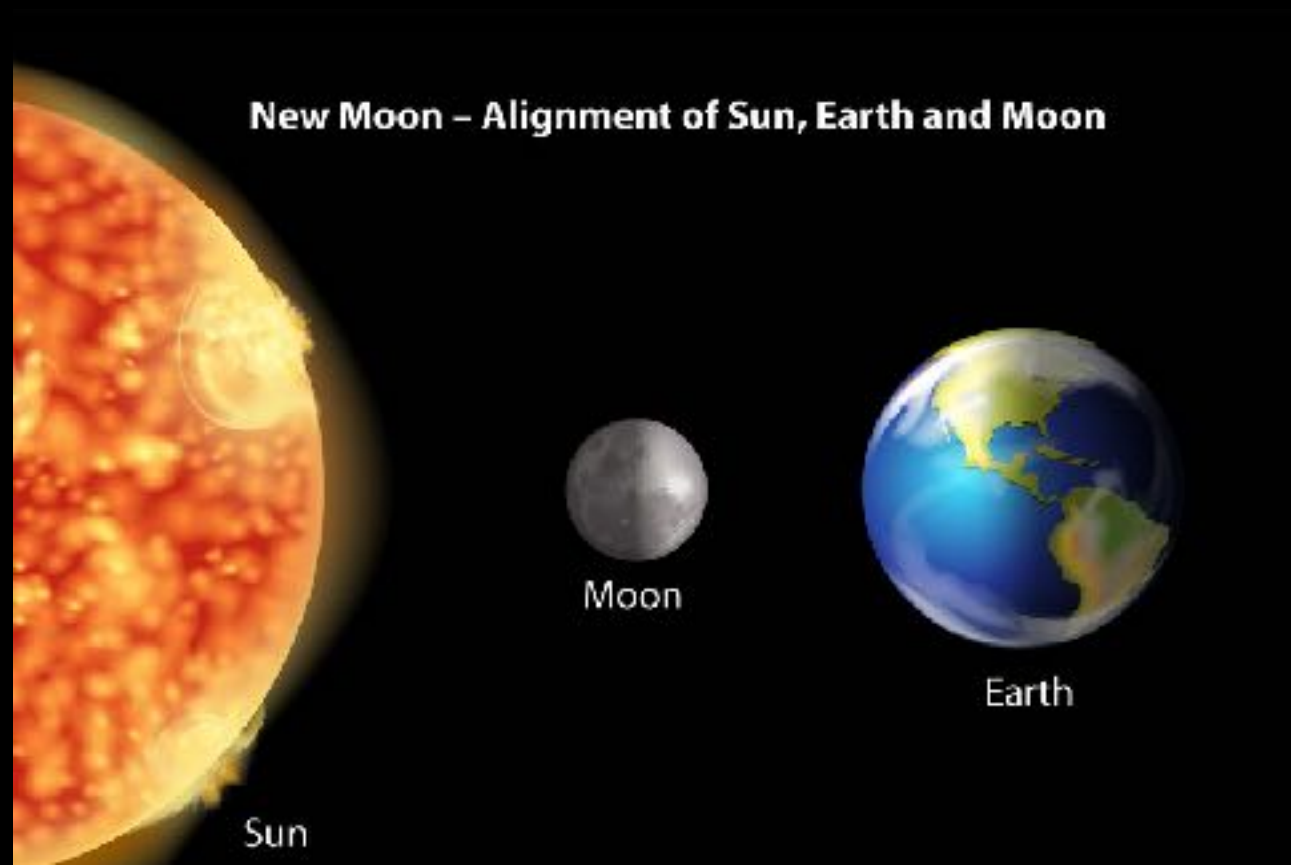
A solar eclipse happens when the sun casts the moon's shadow on the earth.



The moon makes one orbit around the earth every 27.3 days.



A solar eclipse occurs during new moon phase if the moon is lined up directly between the sun and the earth.

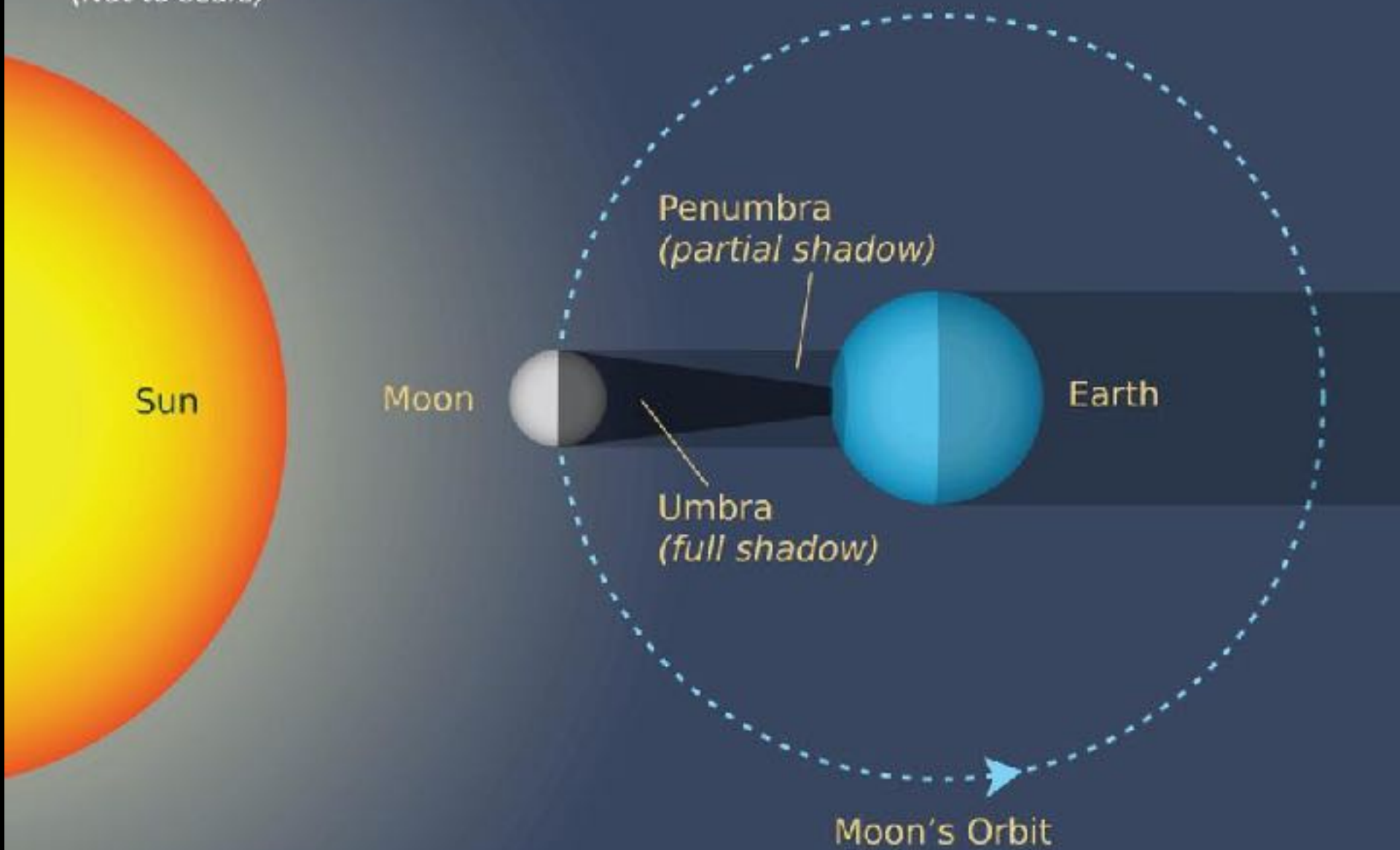


There are two major parts of the moon's shadow. The penumbra is the lighter outer part of the shadow, and the umbra is the dark inner part of the shadow.



Anatomy of a Solar Eclipse

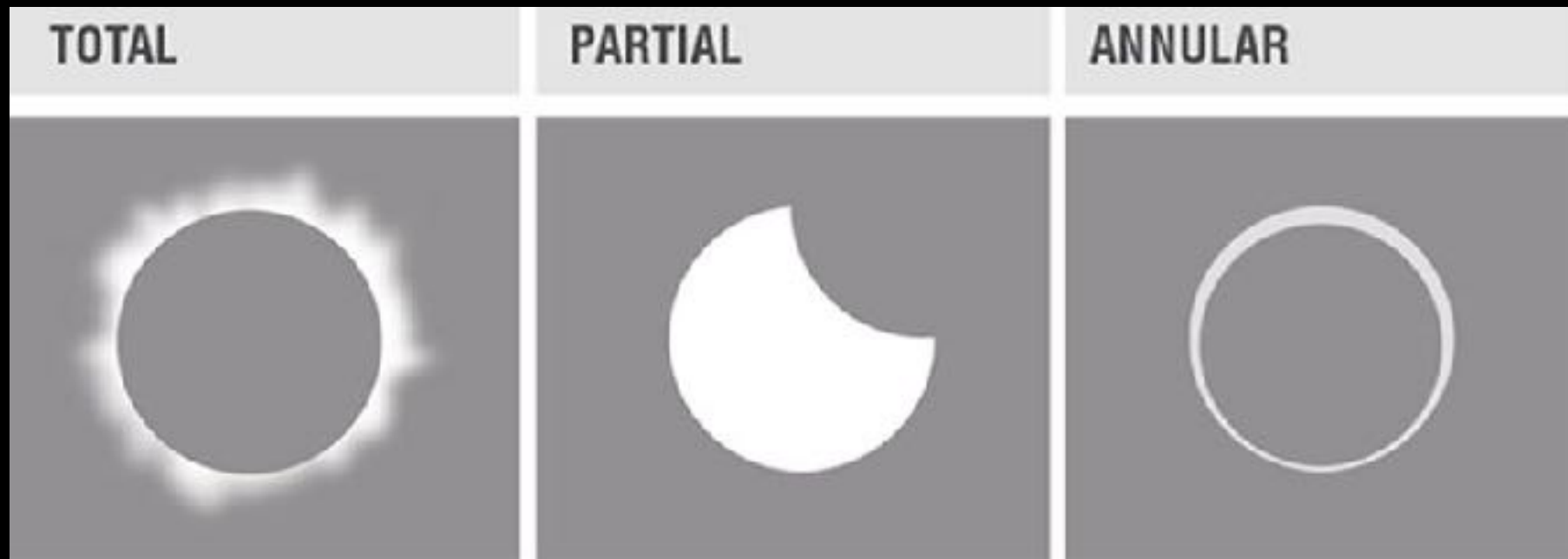
(Not to scale)



THE PROGRESSION OF A TOTAL SOLAR ECLIPSE



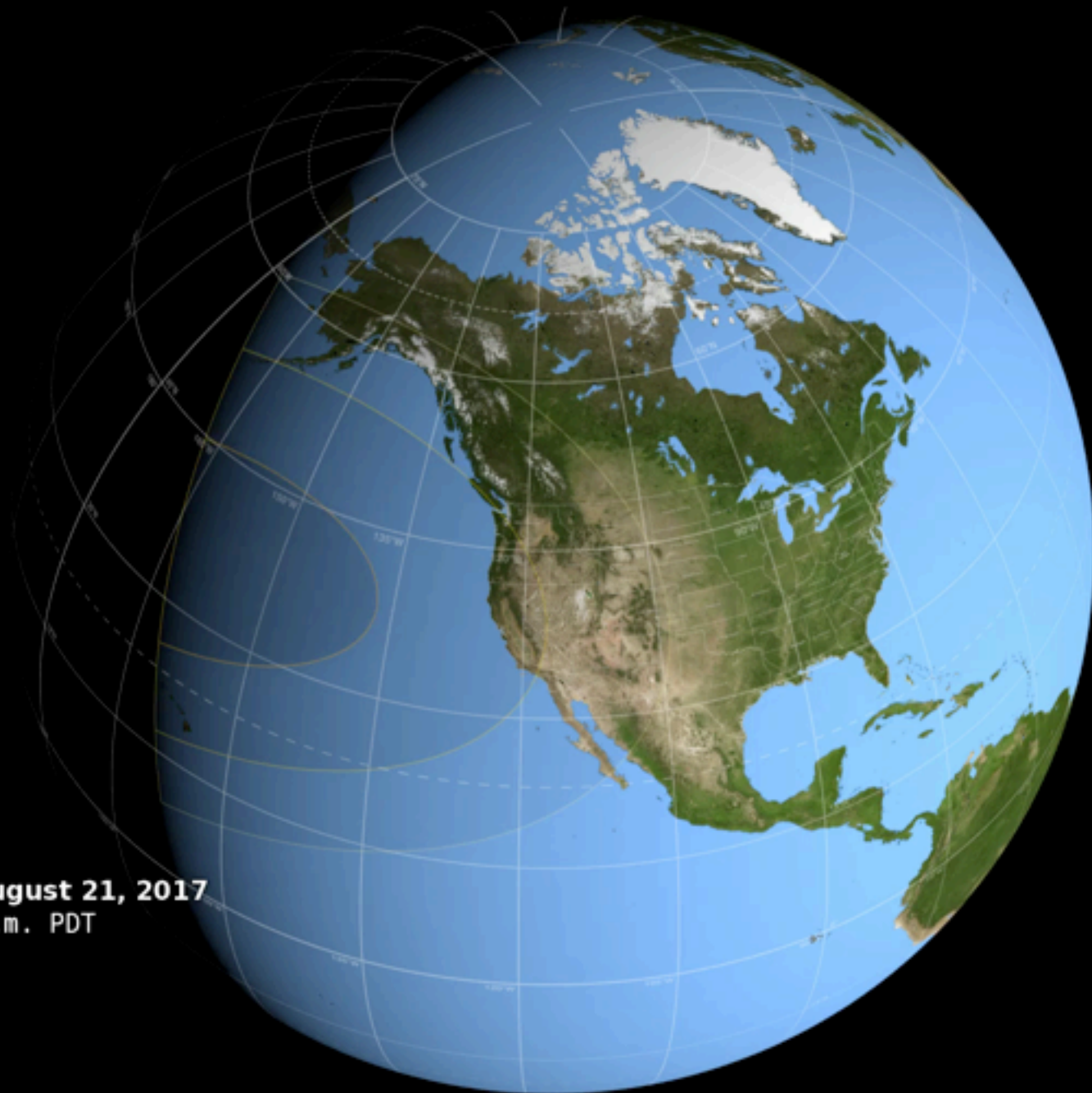
There are three types of solar eclipses: total, partial, and annular.



PARTIAL SOLAR ECLIPSE

AUGUST 21, 2017

A partial solar eclipse occurs when only part of the sun is blocked by the moon. It is visible wherever the penumbra (the lighter part of the moon's shadow) hits the earth.



Monday, August 21, 2017

Time 09:25:40 a.m. PDT

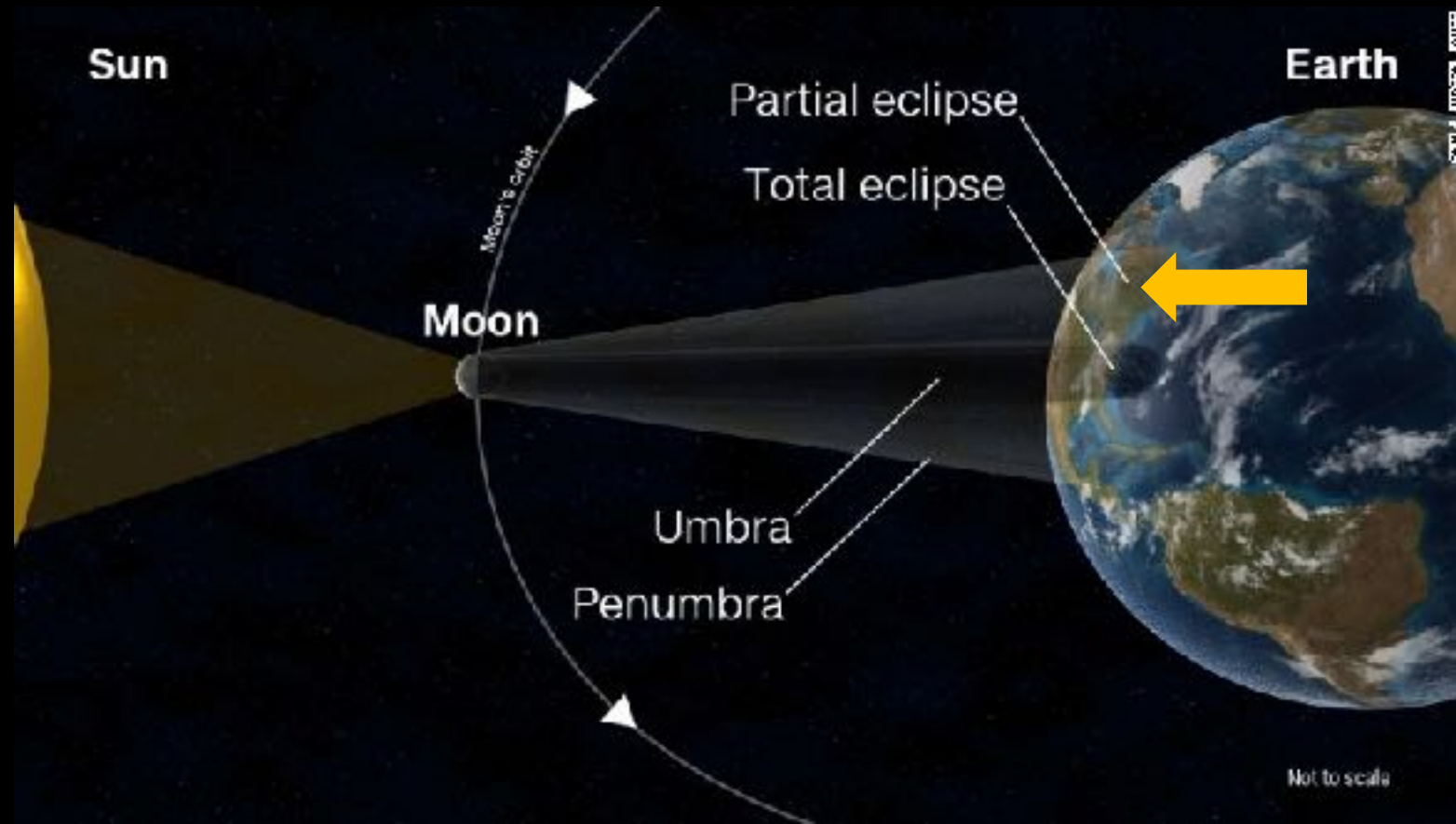
Center

Duration

Sun Altitude

At least a partial eclipse will be visible from everywhere on the continental U.S.

A partial solar eclipse is visible from the penumbra of the moon's shadow.



<http://www.cnn.com/2017/05/12/us/solar-eclipse-2017/>



This map shows how much coverage of the sun is visible across the U. S.

WARNING

Never look at the sun without proper eye protection because permanent eye damage could result.



There is basically one rule for safely viewing a partial solar eclipse:

- 1. Use proper eye protection at ALL times.**
- 2. Stay indoors and watch it LIVE! :)**



Images of a Partial Solar Eclipse









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Images of a Total Solar Eclipse





A graphic featuring a bright orange and yellow ring of light, resembling a solar eclipse, against a black background. The ring is composed of many small, glowing segments. In the center of the ring is a solid black circle.

2017

SOLAR ECLIPSE