



فَرْسَاتُوْنَ اسْتَرُوْنَجِي تَكَارِابُونِي دَارُ السَّلَامِ

**PERSATUAN ASTRONOMI NEGARA BRUNEI DARUSSALAM
ASTRONOMICAL SOCIETY OF BRUNEI DARUSSALAM**

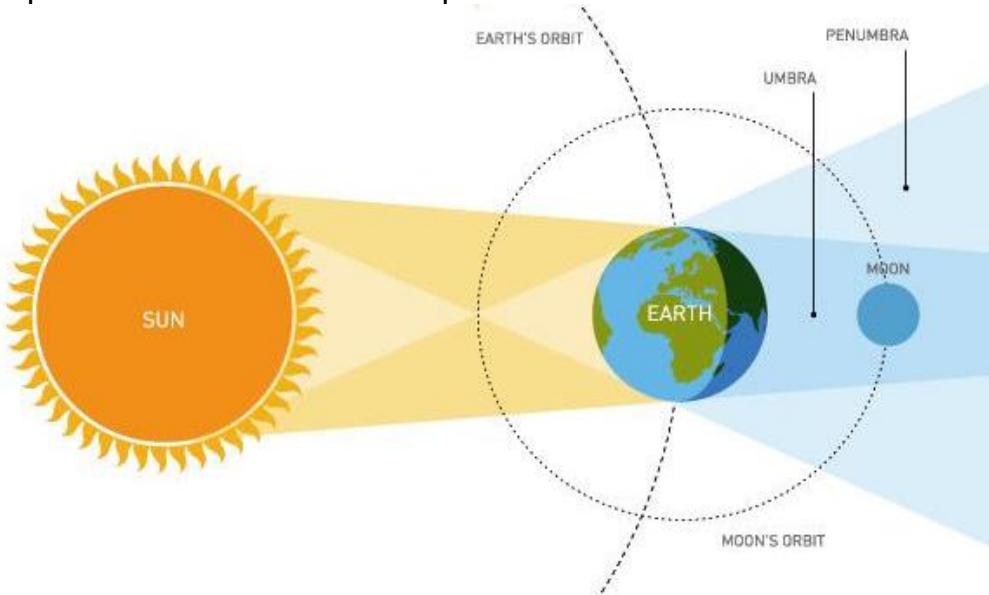
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17 JULY 2019 PARTIAL LUNAR ECLIPSE: INFORMATION FOR STUDENT

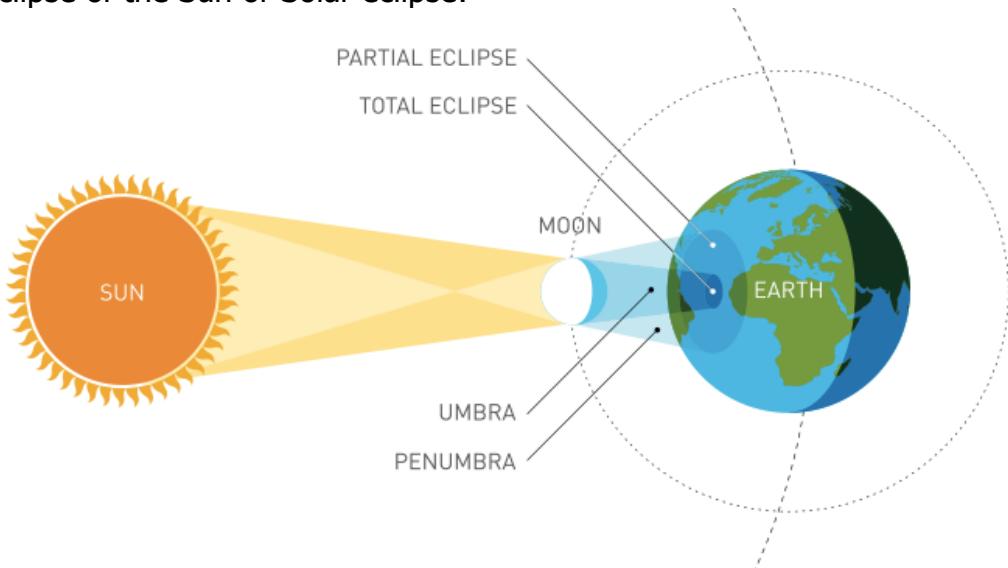
What is an Eclipse?

An eclipse takes place when one astronomical body such as a moon or planet moves into the shadow of another astronomical body. There are two types of eclipses on Earth: an eclipse of the moon and an eclipse of the sun;

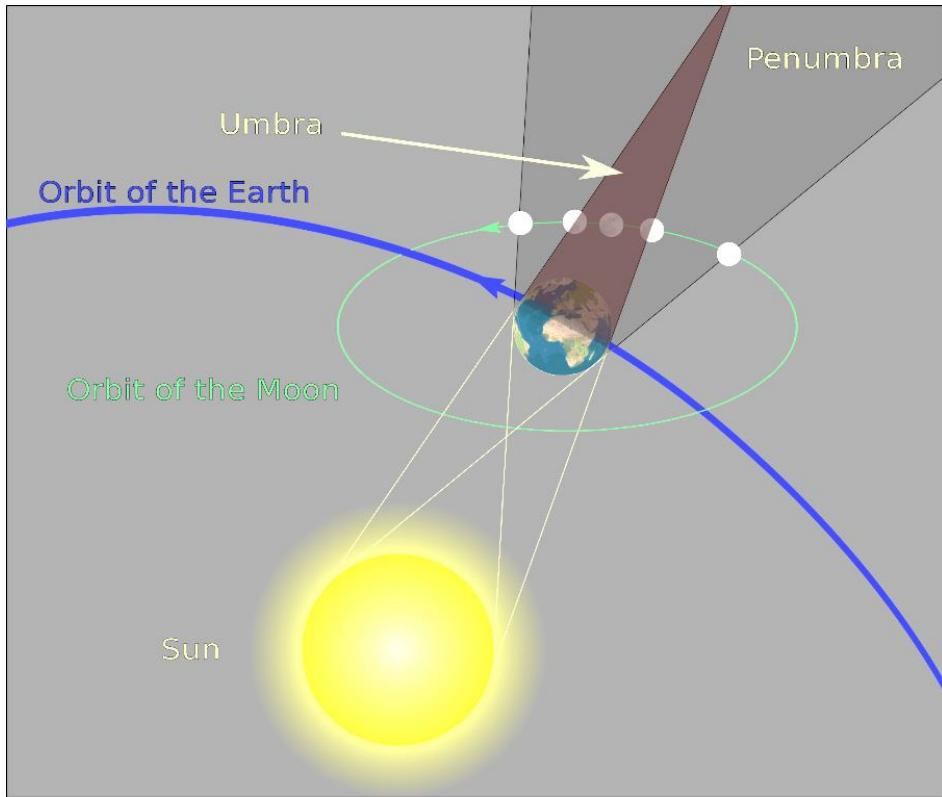
- (a) Eclipse of the Moon or Lunar eclipse:



- (b) Eclipse of the Sun or Solar eclipse:



What is a Lunar Eclipse?



The moon moves in an orbit around Earth, and at the same time, Earth orbits the sun. Sometimes Earth moves between the sun and the moon. When this happens, Earth blocks the sunlight that normally is reflected by the moon. Instead of light hitting the moon's surface, Earth's shadow falls on it. A lunar eclipse can occur only when the moon is full. There are two types of lunar eclipses: total lunar eclipses and partial lunar eclipses.

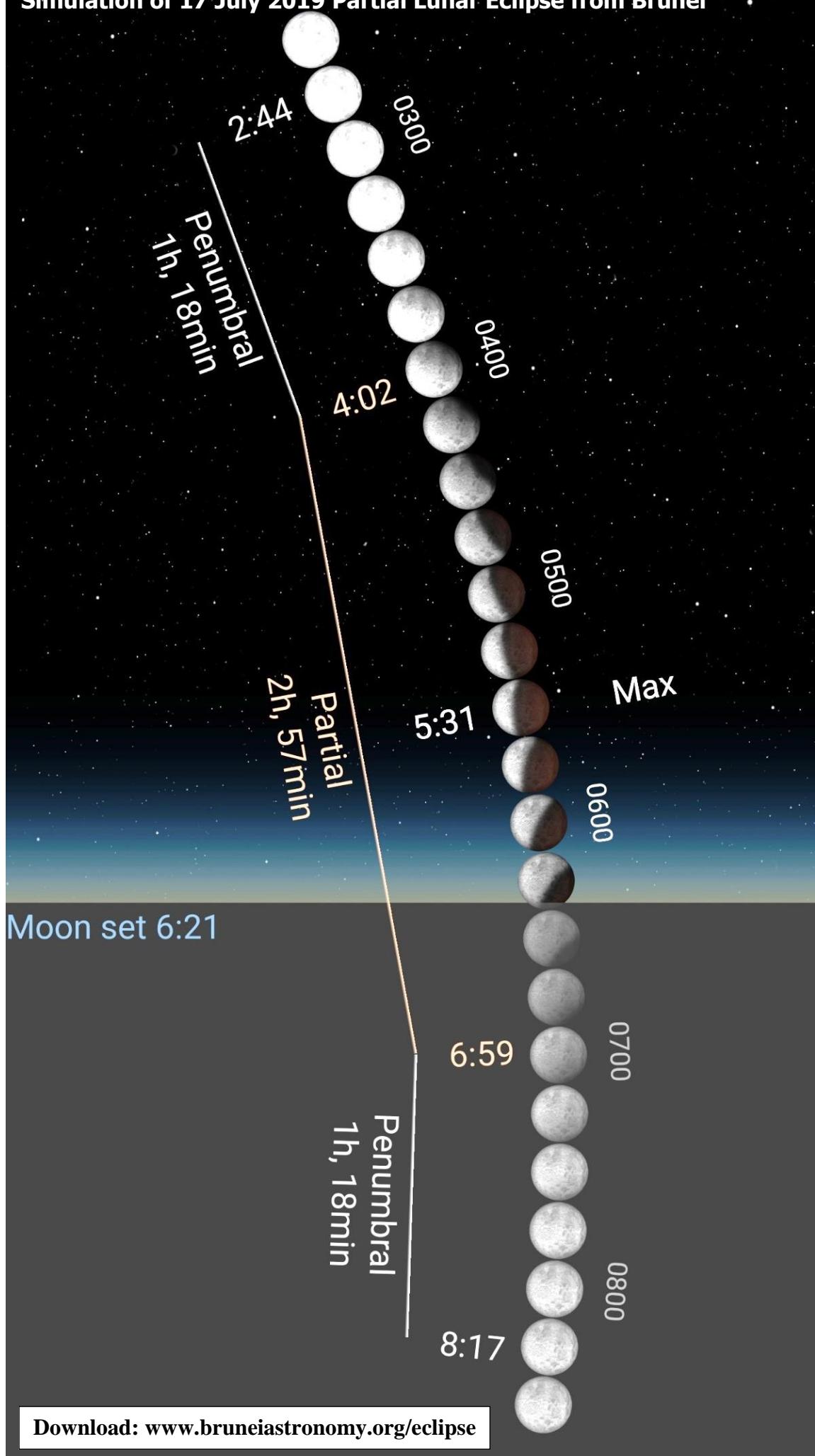
A total lunar eclipse occurs when the moon and the sun are on exact opposite sides of Earth. Although the moon is in Earth's shadow, some sunlight reaches the moon. The sunlight passes through Earth's atmosphere, which causes Earth's atmosphere to filter out most of the blue light. This makes the moon appear red to people on Earth.

A partial lunar eclipse happens when only a part of the moon enters Earth's shadow. In a partial eclipse, Earth's shadow appears very dark on the side of the moon facing Earth. What people see from Earth during a partial lunar eclipse depends on how the sun, Earth and moon are lined up.

How to watch a Lunar Eclipse on Wednesday, July 17, 2019?

Wake up early and look at western sky! If you watch a lunar eclipse closely, first you'll see the moon will go into partial shadow (the penumbra) at 02:44 am, and then into full shadow (the umbra) from 04:02 am when partial eclipse begins, and the Full Moon will be partially darkened. From Brunei Darussalam, the phenomenon can only be observed until moonset at around 6 am.

Simulation of 17 July 2019 Partial Lunar Eclipse from Brunei



RESOURCE:

<https://www.britannica.com/science/eclipse>