EGF Academy for Environmental Science & Geography & Forestry



Affordable Preparation with Us

call us at +91- 7819030589 whatsApp at +91- 7819030589





Hybrid solar eclipse on April 20

The eclipse will be visible in East and South-East Asia, Singapore, Indonesia, Philippines, Australia, among other countries, but will not be visible in India

April 19, 2023 08:59 pm | Updated April 20, 2023 02:32 pm IST - Bengaluru:



A rare hybrid solar eclipse is observed at Jakarta Planetarium in Jakarta, Indonesia, April 20, 2023. | Photo Credit: Reuters



EGFAcademy

• A hybrid solar eclipse took place on April 20 lasting about 5 hours and 25 minutes.

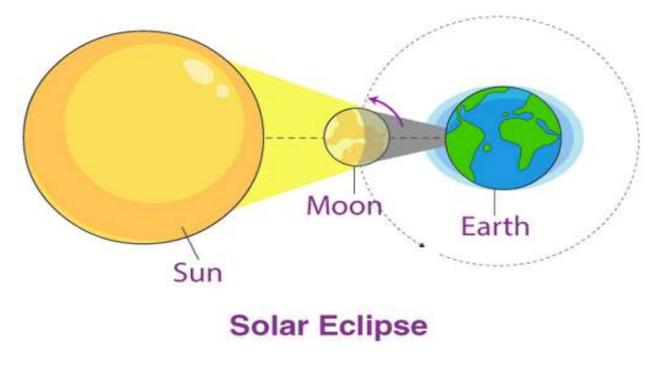
• It was visible in East and South-East Asia, Singapore, Indonesia, Philippines, Australia, among other countries, but not visible in India.



EGFAcademy

Solar Eclipse

- occurs when the moon comes in between the sun and the earth.
 - As a result, the moon blocks the light of the sun from reaching the earth's surface and casts a shadow on it.
 - We can observe up to 5 solar eclipses per year.





EGFAcademy

• What are the different types of solar eclipse?

• There are four types of solar eclipse:

• Total eclipse, Annular eclipse, Partial eclipse and Hybrid eclipse.

o Total Eclipse

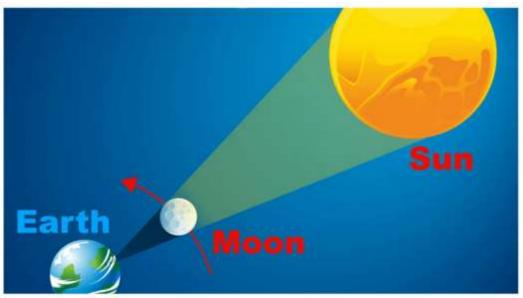


• When the sun is completely covered by the moon.

• The sky becomes so dark that it appears to be night.

• Only a small area of the earth can witness it.

• occur when the New Moon comes between the Sun and Earth and casts the darkest part of its shadow, the umbra,





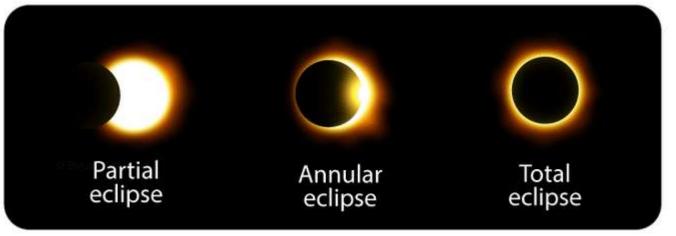
Illustrative image credit: NASA.

PARTIAL SOLAR ECLIPSE



occurs when the Moon passes between the Earth and the Sun but is not perfectly aligned.

• Hence, only a part of the Sun appears covered.





EGFAcademy

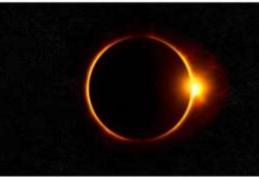
o Annular Eclipse



• happens when the Moon passes between the Sun and Earth, but is at its farthest point from Earth.

• So it appears smaller than the Sun and does not completely cover the Sun.

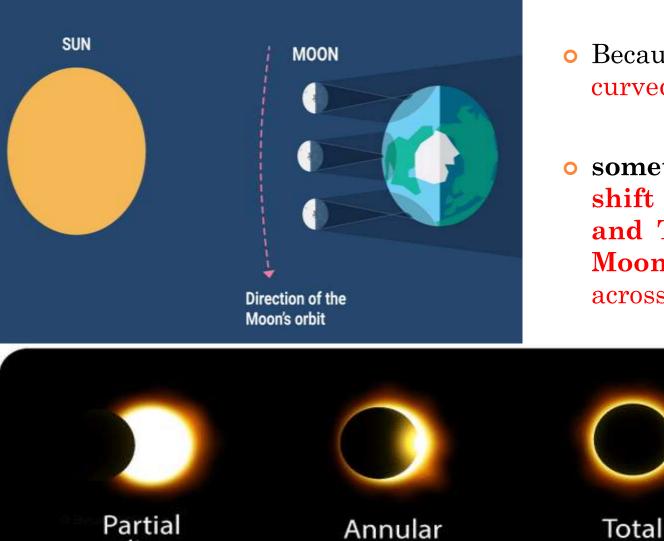




Disage credit 154 photo

Hybrid Solar Eclipse:

eclipse



eclipse

D Because Earth's surface is curved,

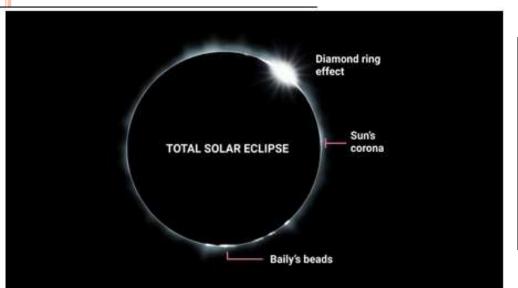
 sometimes an eclipse can shift between annular and Total eclipse as the Moon's shadow moves across the globe.

eclipse



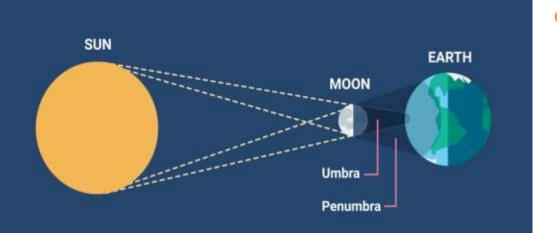
• The hybrid eclipse is called a Ningaloo eclipse because it appeared either as a total eclipse or an annular eclipse depending on where and when you viewed it.

• It is named "Ningaloo" after the western coast of Australia because that is was best visible.





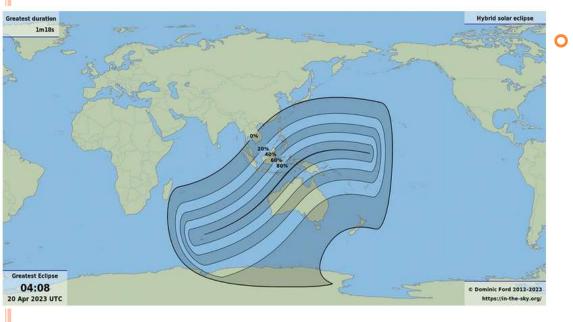




• Why will the eclipse only be visible in small parts of the world?

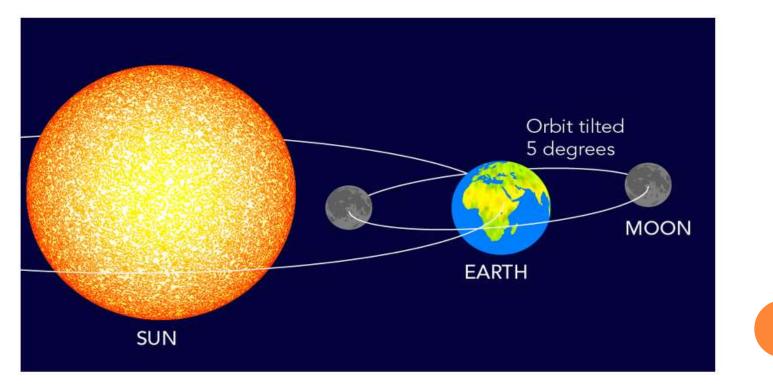
• the Moon's "umbral" shadow, which is only about 40 kilometres wide.

• This means that the path of the total eclipse will only travel a very narrow path on the map.



Why are solar eclipses relatively rare?

- The Moon's orbit is tilted about 5 degrees relative to the Earth's orbit around the Sun.
- This means that the Sun, the Earth and the Moon only align with the right conditions about once every 18 months to produce a solar eclipse.





The solar eclipse as seen from Indonesia

The solar eclipse is pictured here, as seen from West Sumatra in Indonesia.





The eclipse in Indonesia

Here is a partial eclipse through the clouded skies, as seen from Jakarta, Indonesia.

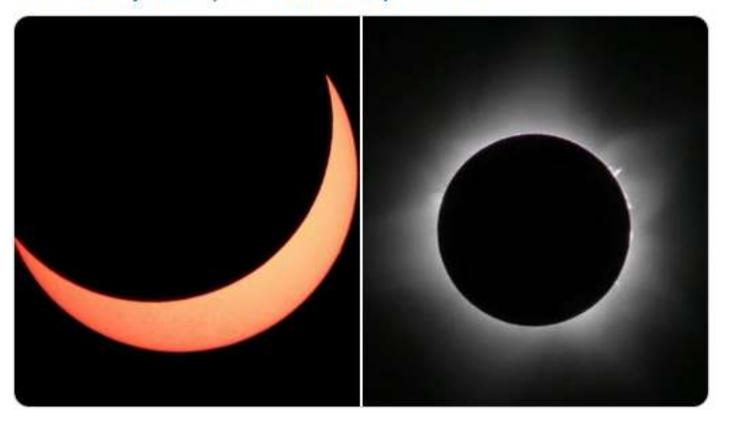






EGF

Darkness has descended on the remote Western Australia town of Exmouth as a total solar eclipse formed. Read more: bit.ly/3Aeq16c #SolarEclipse2023





• the Annular eclipse from Australia



Affordable Preparation with Us

EGF

join our online courses (interactive classes on Zoom/Google-meet)

