

# ANNULAR SOLAR ECLIPSE



# Annular Solar Eclipse

An Annular Solar Eclipse is much more rare than a partial solar eclipse. There are times when the new moon is located farther away from Earth than at other times.

When moon is at farthest approach means smallest angular size than Sun. Moon does not exactly cover the Sun.

# Annular Solar Eclipse

An Annular Solar Eclipse is witnessed due to the Moon appearing slightly smaller than the Sun. The main shadow of the Moon, the umbra, does not reach the Earth, allowing sunlight to peer around the complete circumference of the Moon.

Therefore able to block the central region, leaving the outer ring (annulus of Sun's photosphere) un-covered.



# Why the name “Annular” Solar Eclipse?

## **Annular Means Ring-Shaped**

The name “Annular” comes from the Latin word for ring, “Annulus”. These eclipses are named for their darkest, or maximum, point even if it only lasts less than a second. If the characteristic ring of fire is visible from even just one location, the whole eclipse is called an annular solar eclipse.

# Ring Of Fire

This bright ring of sunlight around the moon at the height of the annular solar eclipse is how it earned the nickname the "ring of fire" eclipse.



# Bailey's Bead

The Bailey's beads effect or diamond ring effect is a feature of total and annular solar eclipses. As the Moon covers the Sun during a solar eclipse, the rugged topography of the lunar limb allows beads of sunlight to shine through in some places while not in others. The effect is named after **Francis Baily**, who explained the phenomenon in 1836.

# Diamond Ring

The diamond ring effect is seen when only one bead is left, appearing as a shining "diamond" set in a bright ring around the lunar silhouette

