

Annular Solar Eclipse On October 03

September 29 2005

On Monday, October 03, an annular¹ eclipse of the Sun will be visible from within a narrow corridor which traverses the Iberian Peninsula and stretches across the African continent. A partial eclipse will be seen within the much broader path of the Moon's penumbral shadow, which includes Europe, western Asia, the Middle East, India and most of Africa.

The path of the annular eclipse begins in the North Atlantic at 08:41 UT. Rushing southeast, the antumbra quickly reaches the northern coast of Spain and Portugal (08:51 UT). Bisecting the Iberian Peninsula, the antumbra engulfs Madrid (08:56 UT) which lies near the central line. The annular phase will last 04m 11s from this capital city with 90% of the Sun's surface being obscured by the Moon.

Isla de Ibiza straddles the northern path limit as the shadow crosses the western Mediterranean. Upon reaching the African continent, Algiers lies within the shadow's trajectory (09:05 UT) and will experience an annularity of 03m 51s.

Following a southeastern course, the antumbra passes through southern Tunisia and central Libya where the Moon's umbral shadow will return six months later during the total eclipse of 2006 Mar 29. After briefly skirting northern Chad, the antumbra sweeps across central Sudan where greatest eclipse occurs at 10:31:42 UT.

The annular duration is 4m 31s, and the Sun is 71° above the desolate desert landscape. The central track runs along the southern Sudanese-

Ethiopian border before entering northern Kenya where it engulfs much of Lake Rudolf (11:10 UT). Southernmost Somalia is the antumbra's final landfall (11:30 UT) before heading east across the Indian Ocean where the path ends at local sunset (12:22 UT).

This web site has been established for the purpose of providing detailed predictions, maps, figures and information about this important event. Additional and supplemental material for the 2005 Annular eclipse will be published here as it becomes available.

1An annular eclipse differs from a total eclipse in that the Moon appears too small to completely cover the Sun. As a result, the Moon is surrounded by an intensely brilliant ring or annulus formed by the uneclipsed outer perimeter of the Sun's disk. The solar corona is not visible during annular eclipses. Furthermore, a solar filter or projection is needed to observe all phases of an annular eclipse (see: Safe Solar Viewing).

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