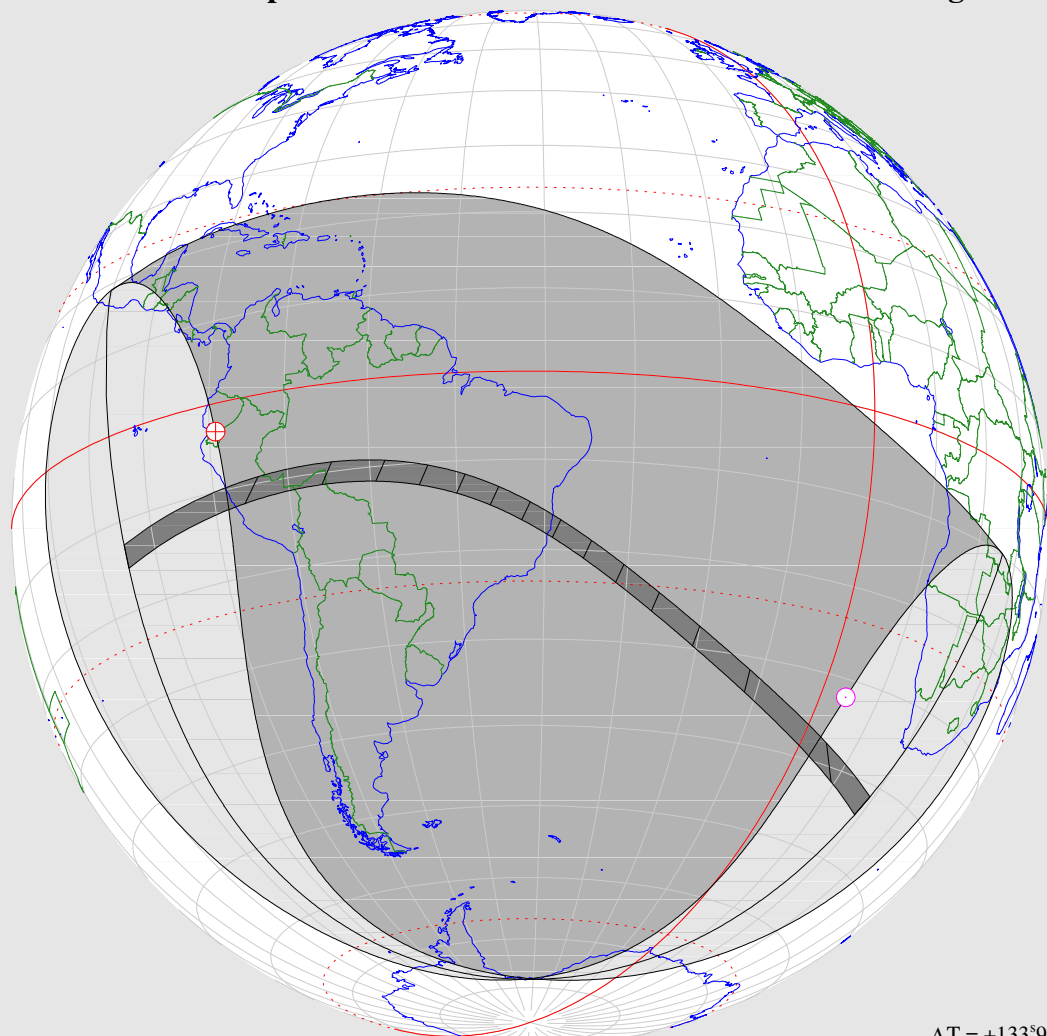


III. - Annular Eclipse of the Sun

1607 August 22



©HM Nautical Almanac Office

$\Delta T = +133^s.9$
Globe centred on W 41°7' and S 17°7'

Circumstances	Time (UT)	Longitude	Latitude
	h m	° /	° /
⊕ Eclipse begins; first contact with Earth	11 21.6	W 79 06.5	S 3 14.7
Beginning of northern limit of penumbra	12 27.3	W100 23.1	N19 00.6
Beginning of northern limit of umbra	12 33.6	W 95 03.9	S 12 39.9
Beginning of centre line; central eclipse begins	12 34.6	W 95 02.4	S 13 59.2
Beginning of southern limit of umbra	12 35.8	W 95 01.5	S 15 19.4
Central eclipse at local apparent noon	14 33.5	W 37 46.5	S 18 08.4
End of southern limit of umbra	16 01.1	E 18 39.1	S 43 53.0
End of centre line; central eclipse ends	16 02.2	E 18 53.5	S 42 34.6
End of northern limit of umbra	16 03.3	E 19 07.2	S 41 17.2
End of northern limit of penumbra	16 09.9	E 26 02.7	S 9 49.3
⊙ Eclipse ends; last contact with Earth	17 15.3	E 4 13.4	S 31 59.6