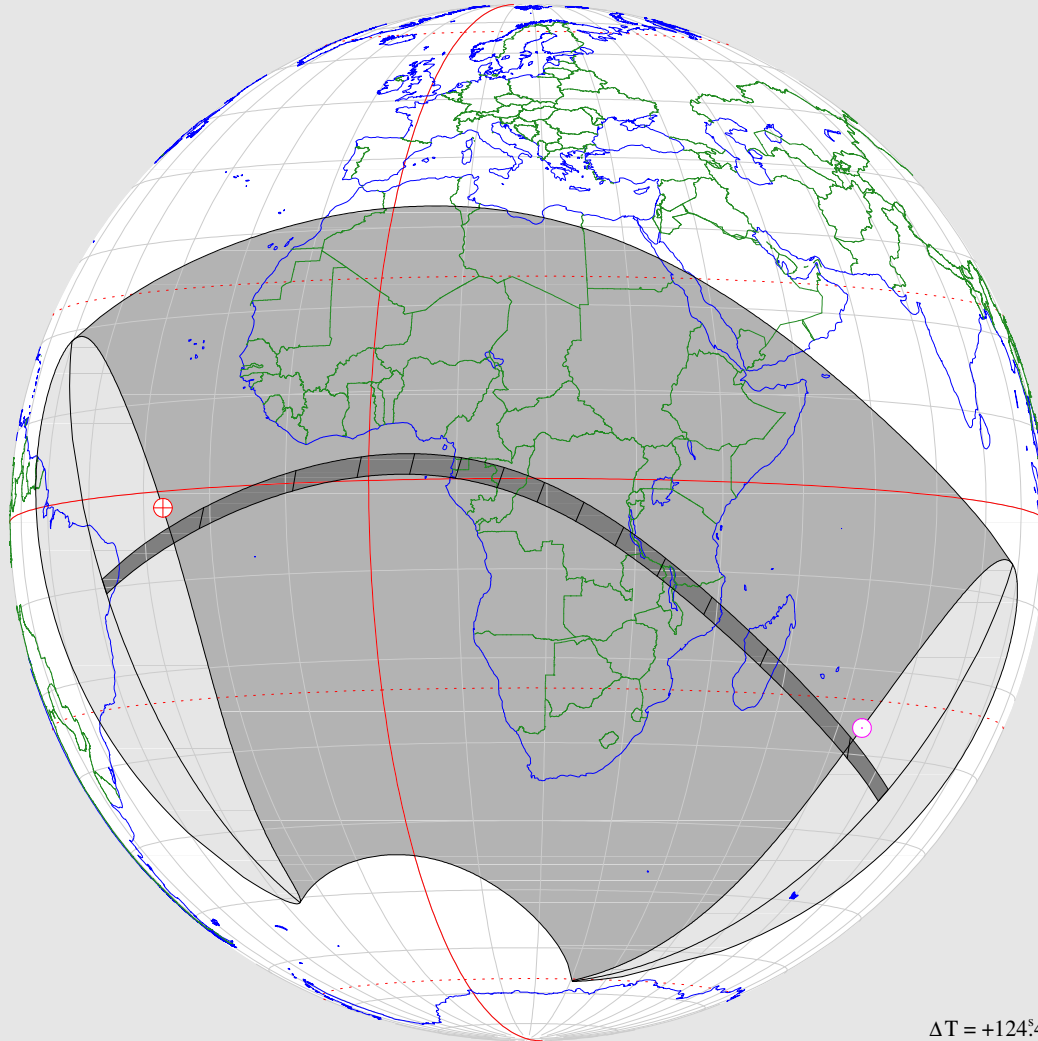


IV. - Total Eclipse of the Sun

1619 July 11



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$\Delta T = +124^s.4$
Globe centred on E 17°9' and S 4°9'

Circumstances	Time (UT)	Longitude	Latitude
	^h ^m	^o /	^o /
⊕ Eclipse begins; first contact with Earth	7 55.1	W 26 53.7	S 1 50.1
Beginning of northern limit of umbra	8 53.0	W 38 24.3	S 9 01.3
Beginning of centre line; central eclipse begins	8 53.4	W 38 09.3	S 9 50.9
Beginning of southern limit of umbra	8 53.9	W 37 54.6	S 10 41.0
Beginning of northern limit of penumbra	8 54.1	W 50 21.5	N 18 44.6
Beginning of southern limit of penumbra	9 48.9	W 26 06.5	S 50 44.8
Central eclipse at local apparent noon	10 38.0	E 21 38.1	S 2 36.6
End of southern limit of penumbra	11 06.5	E 30 32.1	S 66 59.5
End of northern limit of penumbra	12 01.7	E 88 07.6	S 6 19.6
End of southern limit of umbra	12 01.8	E 73 52.2	S 35 20.8
End of centre line; central eclipse ends	12 02.2	E 74 15.8	S 34 33.4
End of northern limit of umbra	12 02.6	E 74 39.1	S 33 46.2
⊙ Eclipse ends; last contact with Earth	13 00.6	E 64 06.4	S 26 47.0