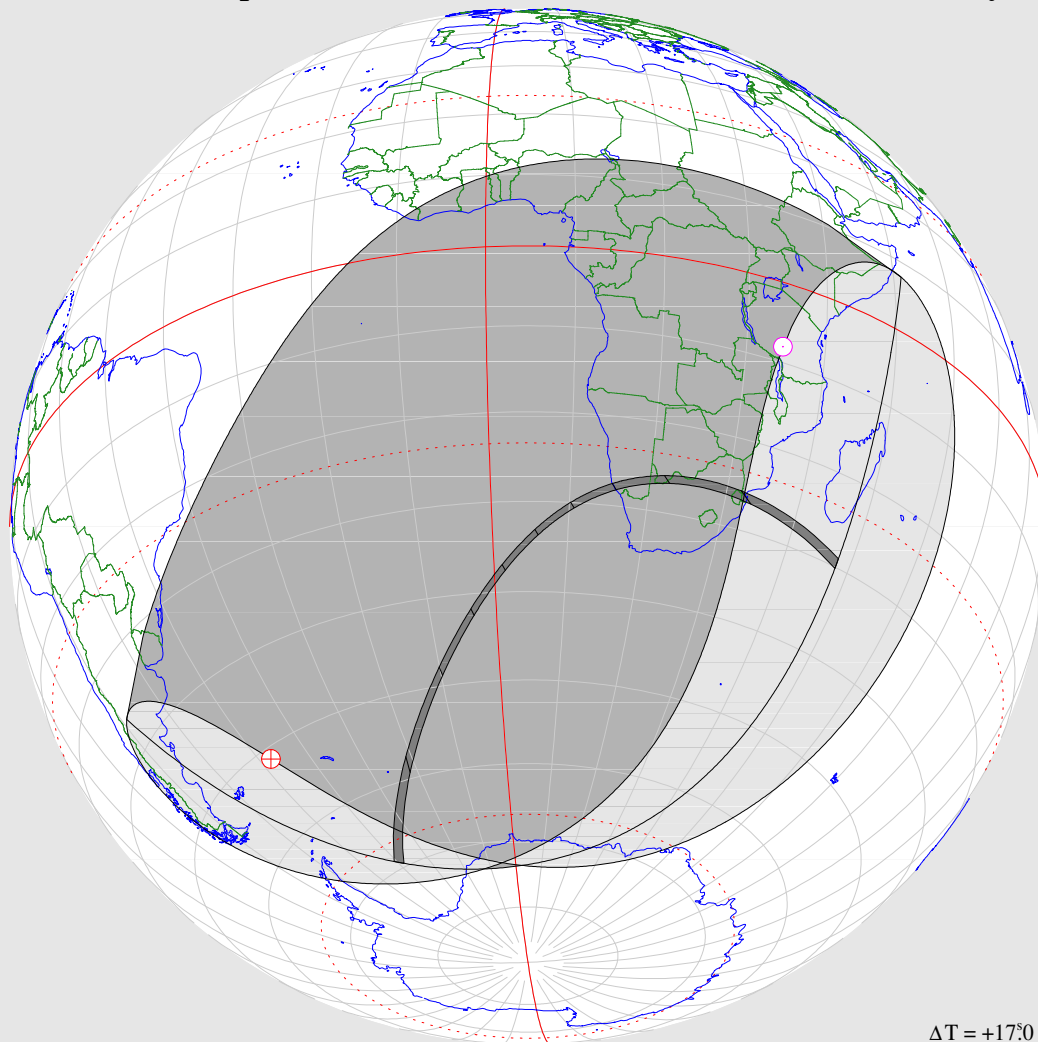


I. - Annular Eclipse of the Sun

1780 May 04



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$\Delta T = +17^s 0$
Globe centred on E $4^{\circ}7'$ and S $32^{\circ}8'$

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	10	32.0	W 47	40.0	S 51	13.6
Beginning of northern limit of penumbra	11	20.6	W 68	46.2	S 36	09.4
Beginning of northern limit of umbra	11	53.5	W 40	48.6	S 68	45.7
Beginning of centre line; central eclipse begins	11	54.5	W 39	41.6	S 69	09.1
Beginning of southern limit of umbra	11	55.4	W 38	30.7	S 69	32.2
Central eclipse at local apparent noon	12	22.4	W 6	30.0	S 44	56.5
End of southern limit of umbra	14	05.8	E 47	54.6	S 30	08.5
End of centre line; central eclipse ends	14	06.7	E 47	54.8	S 29	34.0
End of northern limit of umbra	14	07.6	E 47	54.9	S 29	00.0
End of northern limit of penumbra	14	40.3	E 51	17.9	N 7	41.0
⊙ Eclipse ends; last contact with Earth	15	29.0	E 34	29.3	S 8	05.3