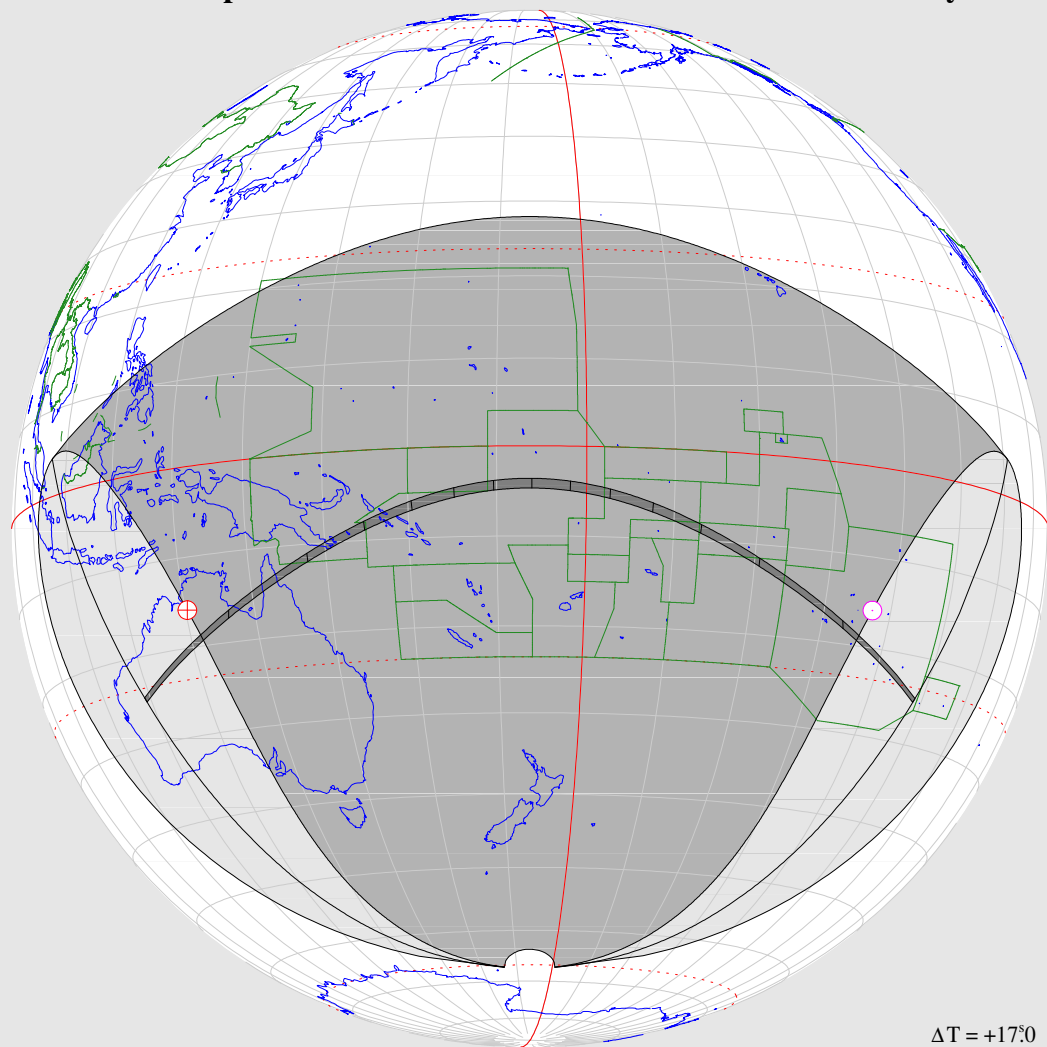


III. - Total Eclipse of the Sun

1777 July 04-05



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$\Delta T = +17^s 0$
Globe centred on E 173°7' and S 9°2'

Circumstances	Time (UT)	Longitude	Latitude
	^h ^m	^o /	^o /
⊕ Eclipse begins; first contact with Earth	21 50.2	E 130 17.8	S 15 48.7
Beginning of northern limit of penumbra	22 51.9	E 106 13.5	N 4 16.7
Beginning of northern limit of umbra	22 52.9	E 118 51.6	S 24 33.8
Beginning of centre line; central eclipse begins	22 53.1	E 118 57.2	S 24 49.1
Beginning of southern limit of umbra	22 53.2	E 119 02.8	S 25 04.4
Beginning of southern limit of penumbra	0 21.7	E 166 28.1	S 66 55.5
Central eclipse at local apparent noon	0 29.2	E 173 41.8	S 4 09.6
End of southern limit of penumbra	0 36.6	W 179 15.6	S 66 56.2
End of southern limit of umbra	2 05.2	W 131 39.4	S 25 06.4
End of centre line; central eclipse ends	2 05.3	W 131 34.3	S 24 52.3
End of northern limit of umbra	2 05.4	W 131 29.1	S 24 38.3
End of northern limit of penumbra	2 06.5	W 118 50.3	N 4 14.9
⊙ Eclipse ends; last contact with Earth	3 08.3	W 142 55.7	S 15 51.6