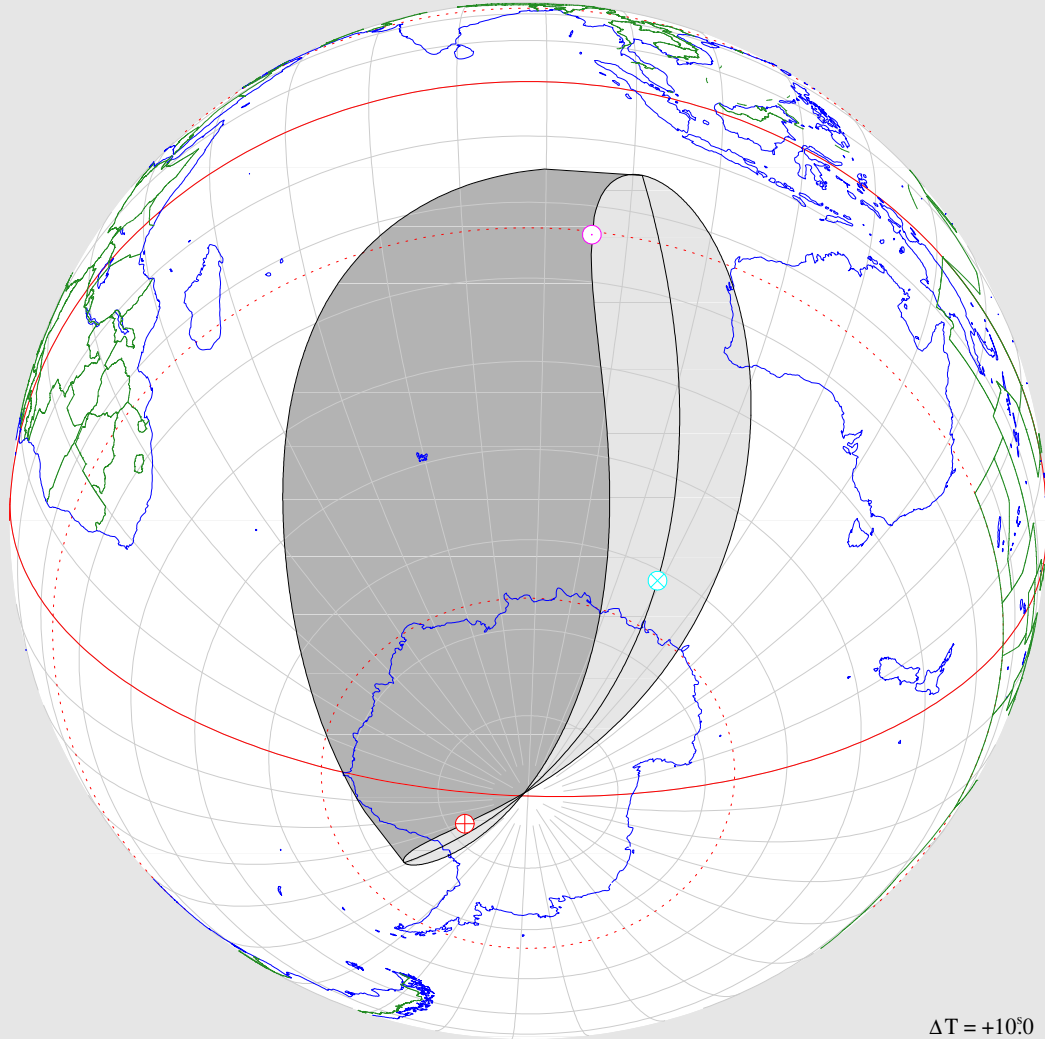


I. - Partial Eclipse of the Sun

1689 March 21



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$\Delta T = +10^s$
Globe centred on E 87°9' and S 57°9'

Circumstances	Time (UT)	Longitude	Latitude
	^h ^m	^o /	^o /
⊕ Eclipse begins; first contact with Earth	8 30.0	W 31 41.8	S 81 56.8
Beginning of northern limit of penumbra	8 51.2	W 39 11.0	S 72 36.2
⊗ Greatest eclipse (magnitude = 0.5868)	10 06.5	E 119 06.0	S 61 09.2
End of northern limit of penumbra	11 22.2	E 101 04.6	S 14 26.9
○ Eclipse ends; last contact with Earth	11 43.5	E 95 39.0	S 23 55.5