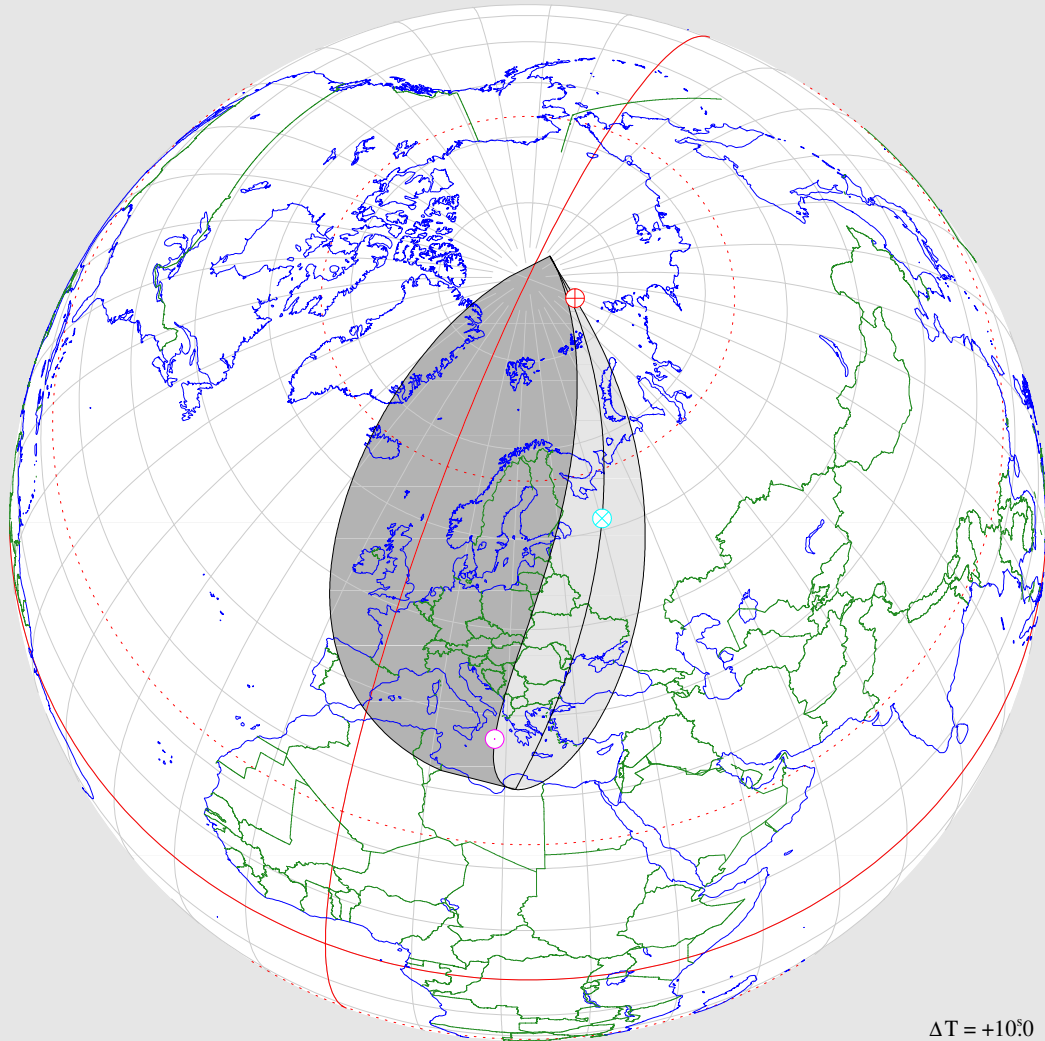


# IV. - Partial Eclipse of the Sun

1689 September 13



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$\Delta T = +10^s0$   
Globe centred on E 23°0' and N 61°9'

Circumstances	Time (UT)		Longitude	Latitude
	h	m	<sup>o</sup> /	<sup>o</sup> /
⊕ Eclipse begins; first contact with Earth	14	26.9	E 89 04.5	N 84 18.1
Beginning of southern limit of penumbra	14	41.1	E 162 38.2	N 86 14.7
⊗ Greatest eclipse (magnitude = 0.2397)	15	39.2	E 40 17.9	N 61 16.2
End of southern limit of penumbra	16	38.0	E 21 23.2	N 30 53.6
○ Eclipse ends; last contact with Earth	16	52.1	E 18 22.7	N 37 05.1