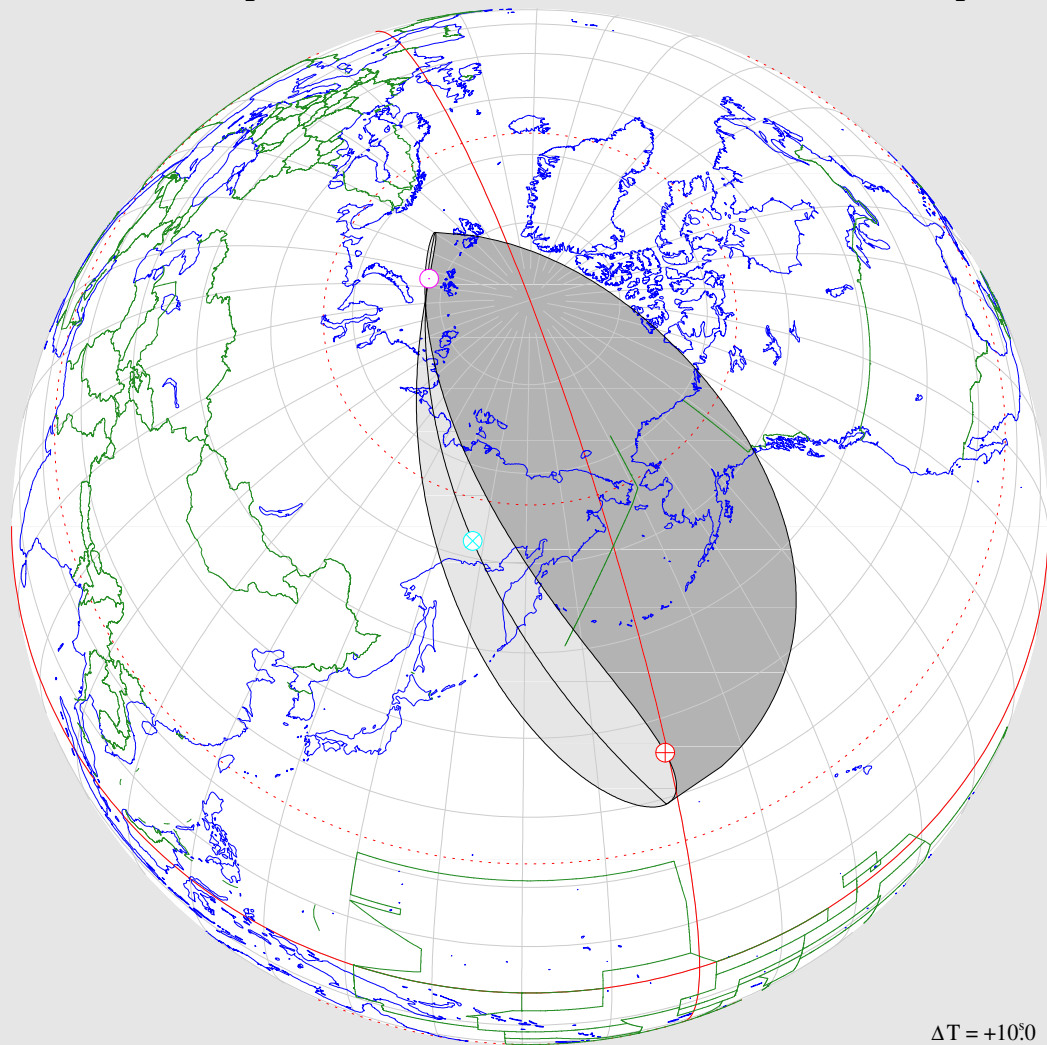


### III. - Partial Eclipse of the Sun

1689 April 19



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$\Delta T = +10^s$   
Globe centred on E 160°9' and N 64°1'

Circumstances	Time (UT)	Longitude	Latitude
	<sup>h</sup> <sup>m</sup>	<sup>o</sup> /	<sup>o</sup> /
⊕ Eclipse begins; first contact with Earth	17 26.3	E 179 38.7	N 35 45.5
Beginning of southern limit of penumbra	17 38.6	E 178 27.6	N 29 13.5
⊗ Greatest eclipse (magnitude = 0.3315)	18 39.2	E 147 21.7	N 61 50.6
End of southern limit of penumbra	19 39.2	E 29 46.7	N 75 54.9
○ Eclipse ends; last contact with Earth	19 51.6	E 54 44.6	N 78 18.6