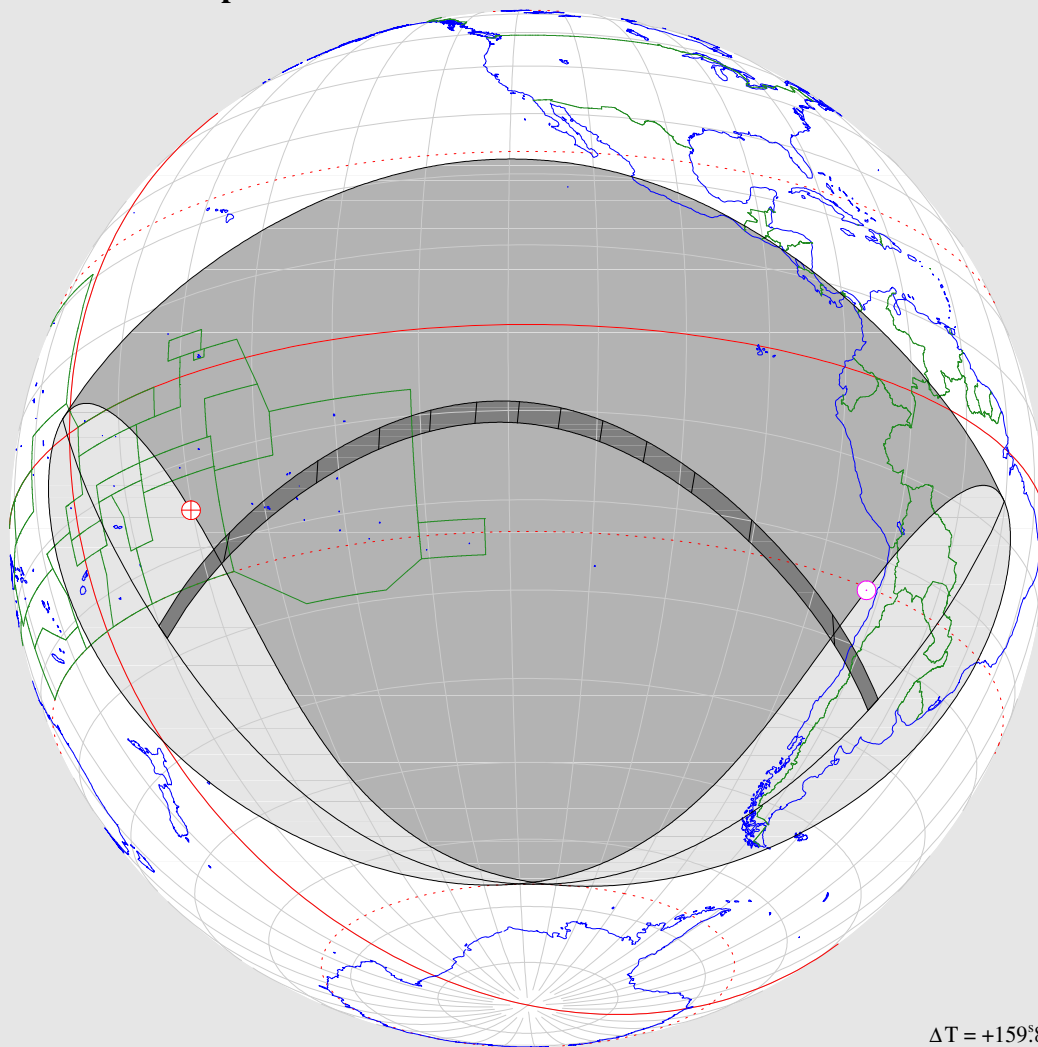


III. - Total Eclipse of the Sun

1583 June 19



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$\Delta T = +159^{\text{s}}.8$
Globe centred on W $117^{\circ}8'$ and S $23^{\circ}2'$

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	$^{\circ}$	'	$^{\circ}$	'
⊕ Eclipse begins; first contact with Earth	17	08.6	W160	12.4	S 15	27.0
Beginning of northern limit of penumbra	18	02.9	E 178	17.4	N 2	25.9
Beginning of northern limit of umbra	18	10.1	W170	12.7	S 26	01.9
Beginning of centre line; central eclipse begins	18	10.8	W169	55.4	S 26	51.7
Beginning of southern limit of umbra	18	11.5	W169	38.0	S 27	42.1
Central eclipse at local apparent noon	19	41.5	W115	18.7	S 10	39.3
End of southern limit of umbra	21	02.1	W 63	45.2	S 35	50.8
End of centre line; central eclipse ends	21	02.9	W 63	22.7	S 35	02.3
End of northern limit of umbra	21	03.5	W 63	00.7	S 34	14.4
End of northern limit of penumbra	21	10.8	W 50	16.4	S 6	02.7
⊙ Eclipse ends; last contact with Earth	22	05.0	W 72	14.8	S 23	49.3