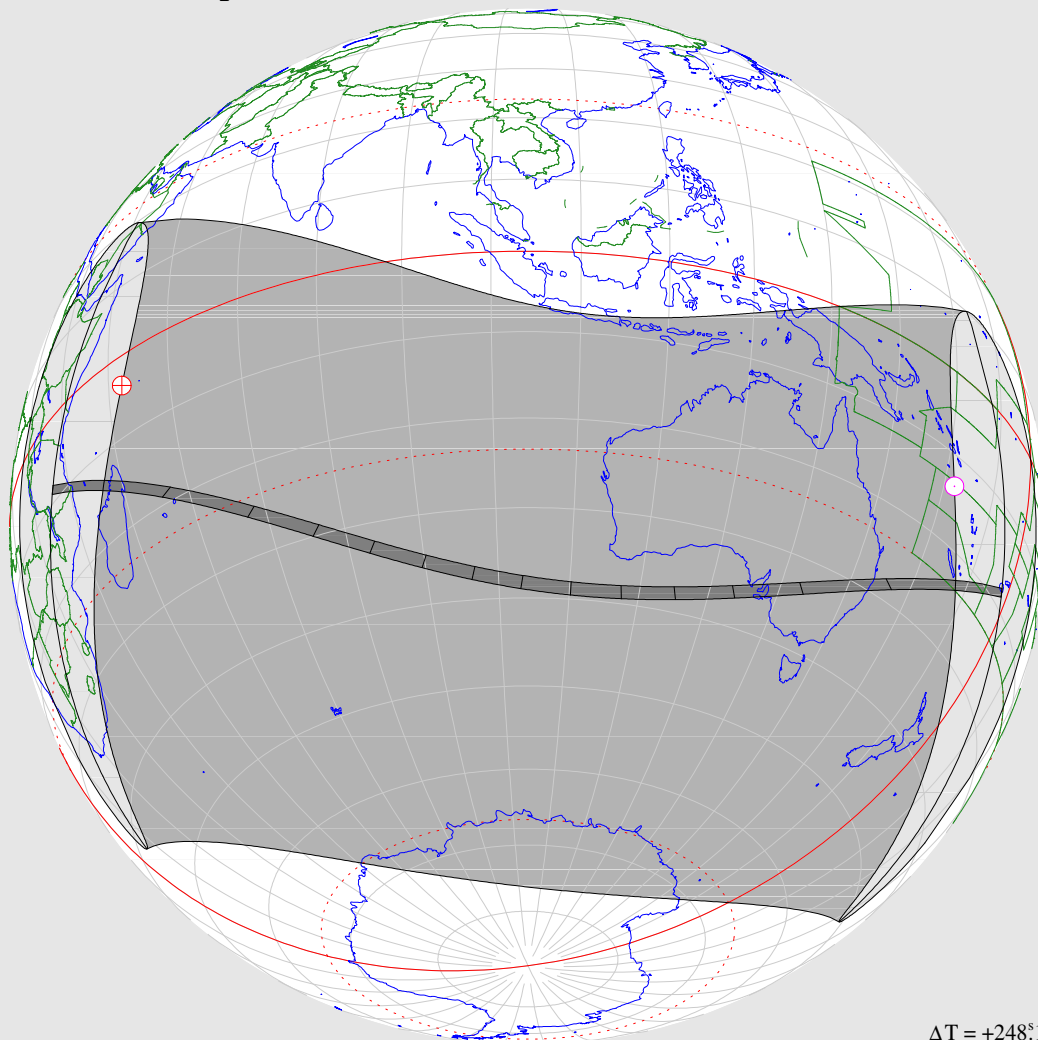


VI. - Total Eclipse of the Sun

1517 December 13



$\Delta T = +248^s.1$

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Globe centred on E 104°1' and S 32°1'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	2	23.8	E 52	20.7	S 3	47.3
Beginning of northern limit of penumbra	3	11.2	E 51	05.9	N19	40.4
Beginning of northern limit of umbra	3	20.1	E 36	21.7	S 8	08.6
Beginning of centre line; central eclipse begins	3	20.4	E 36	05.3	S 8	34.1
Beginning of southern limit of umbra	3	20.8	E 35	48.7	S 8	59.5
Beginning of southern limit of penumbra	4	02.2	E 6	15.8	S 42	06.9
Central eclipse at local apparent noon	5	02.4	E 104	21.2	S 38	22.0
End of southern limit of penumbra	5	57.8	W147	23.2	S 50	42.5
End of southern limit of umbra	6	39.3	E 178	35.5	S 18	39.1
End of centre line; central eclipse ends	6	39.6	E 178	17.9	S 18	13.9
End of northern limit of umbra	6	40.0	E 178	00.6	S 17	48.7
End of northern limit of penumbra	6	48.9	E 163	19.9	N 10	01.4
⊙ Eclipse ends; last contact with Earth	7	36.2	E 161	53.8	S 13	29.1