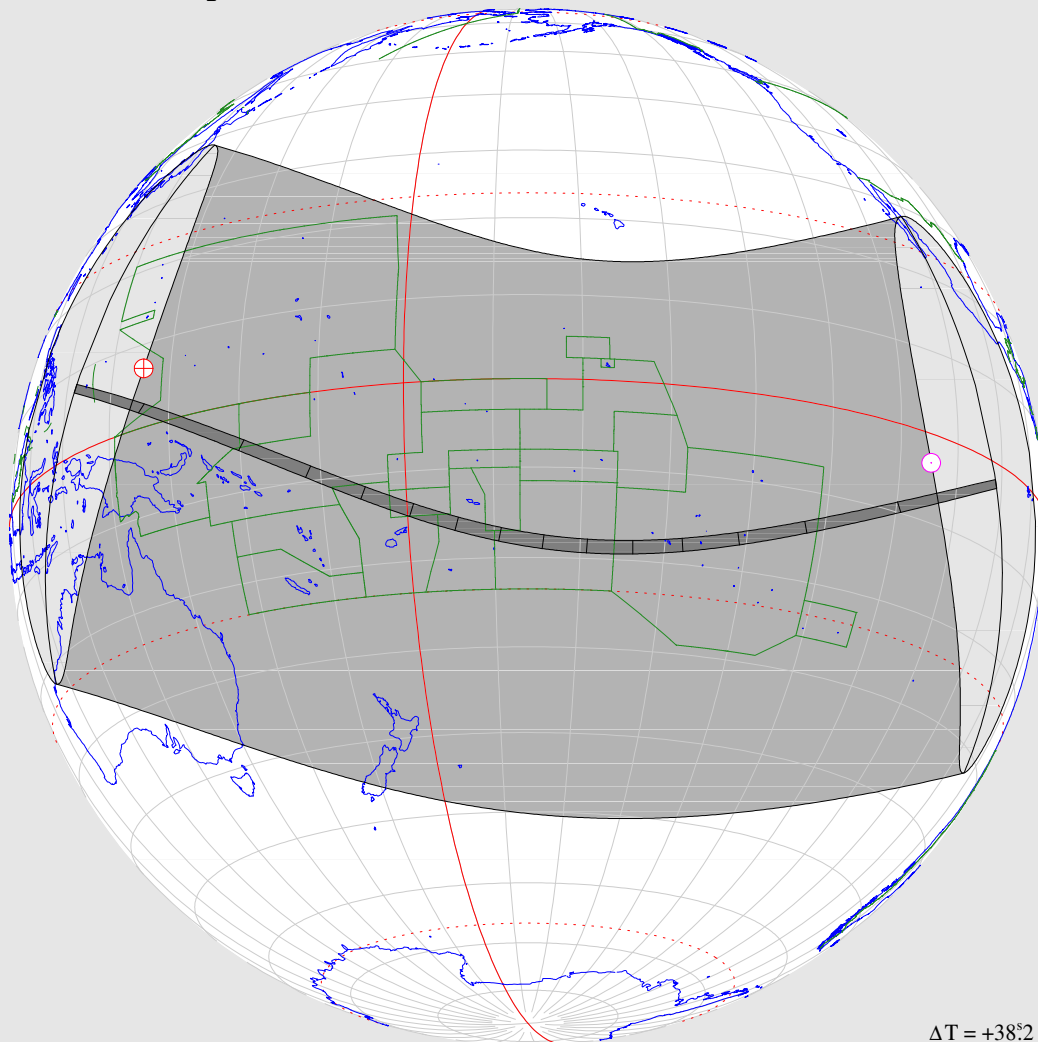


# V. - Total Eclipse of the Sun

## 1658 November 24-25



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$\Delta T = +38^s.2$   
Globe centred on W 166°1 and S 16°6

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	20	15.9	E 145	33.9	N 6	59.8
Beginning of northern limit of umbra	21	11.2	E 132	17.4	N 8	24.4
Beginning of centre line; central eclipse begins	21	11.3	E 132	05.3	N 7	56.9
Beginning of southern limit of umbra	21	11.4	E 131	53.2	N 7	29.5
Beginning of northern limit of penumbra	21	22.7	E 143	34.5	N 38	13.2
Beginning of southern limit of penumbra	21	31.0	E 115	22.9	S 21	50.4
Central eclipse at local apparent noon	22	53.5	W 166	30.5	S 17	56.8
End of southern limit of penumbra	0	17.0	W 83	40.6	S 31	57.0
End of northern limit of penumbra	0	25.4	W 111	15.4	N 28	14.2
End of southern limit of umbra	0	36.7	W 101	13.3	S 2	50.0
End of northern limit of umbra	0	36.9	W 101	37.1	S 1	54.9
End of centre line; central eclipse ends	0	36.8	W 101	25.3	S 2	22.5
⊙ Eclipse ends; last contact with Earth	1	32.2	W 114	54.1	S 3	19.7