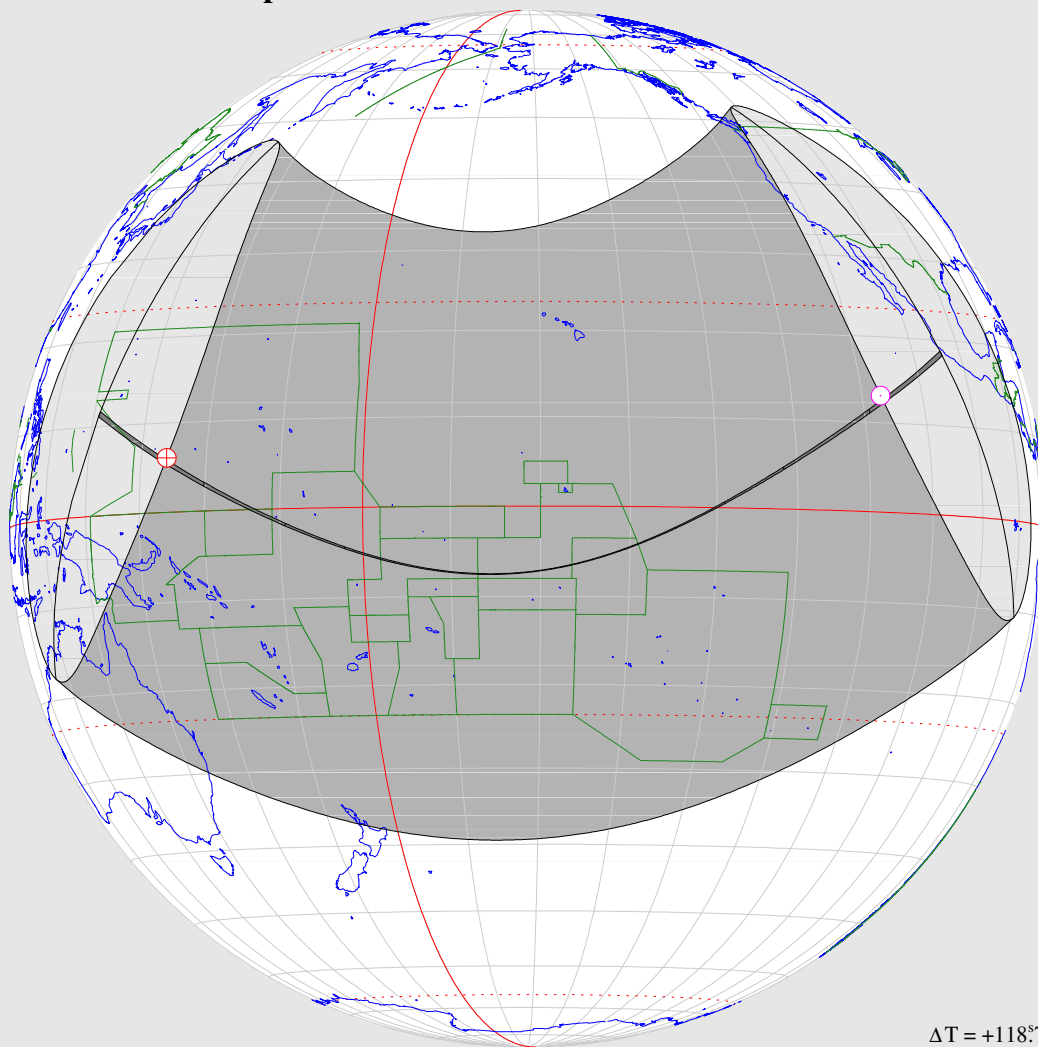


VI. - Annular Eclipse of the Sun

2085 December 16-17



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$\Delta T = +118^s.7$
Globe centred on W 161^o.4 and S 2^o.5

Circumstances	Time (UT)		Longitude	Latitude
	h	m	^o /	^o /
⊕ Eclipse begins; first contact with Earth	19	50.0	E 154 06.8	N 6 04.1
Beginning of southern limit of umbra	20	51.5	E 141 00.4	N 11 08.6
Beginning of centre line; central eclipse begins	20	51.5	E 141 07.2	N 11 25.6
Beginning of northern limit of umbra	20	51.6	E 141 14.1	N 11 42.6
Beginning of southern limit of penumbra	21	01.2	E 125 47.9	S 17 38.3
Beginning of northern limit of penumbra	21	27.4	E 154 12.8	N 46 29.4
Central eclipse at local apparent noon	22	37.8	W 160 26.9	S 7 11.6
End of northern limit of penumbra	23	44.1	W 121 17.0	N 52 30.3
End of southern limit of penumbra	0	10.4	W 88 56.0	S 10 37.5
End of northern limit of umbra	0	20.0	W 104 22.5	N 18 40.3
End of southern limit of umbra	0	20.1	W 104 08.9	N 18 09.0
End of centre line; central eclipse ends	0	20.0	W 104 15.7	N 18 24.6
⊙ Eclipse ends; last contact with Earth	1	21.4	W 117 06.4	N 13 05.2