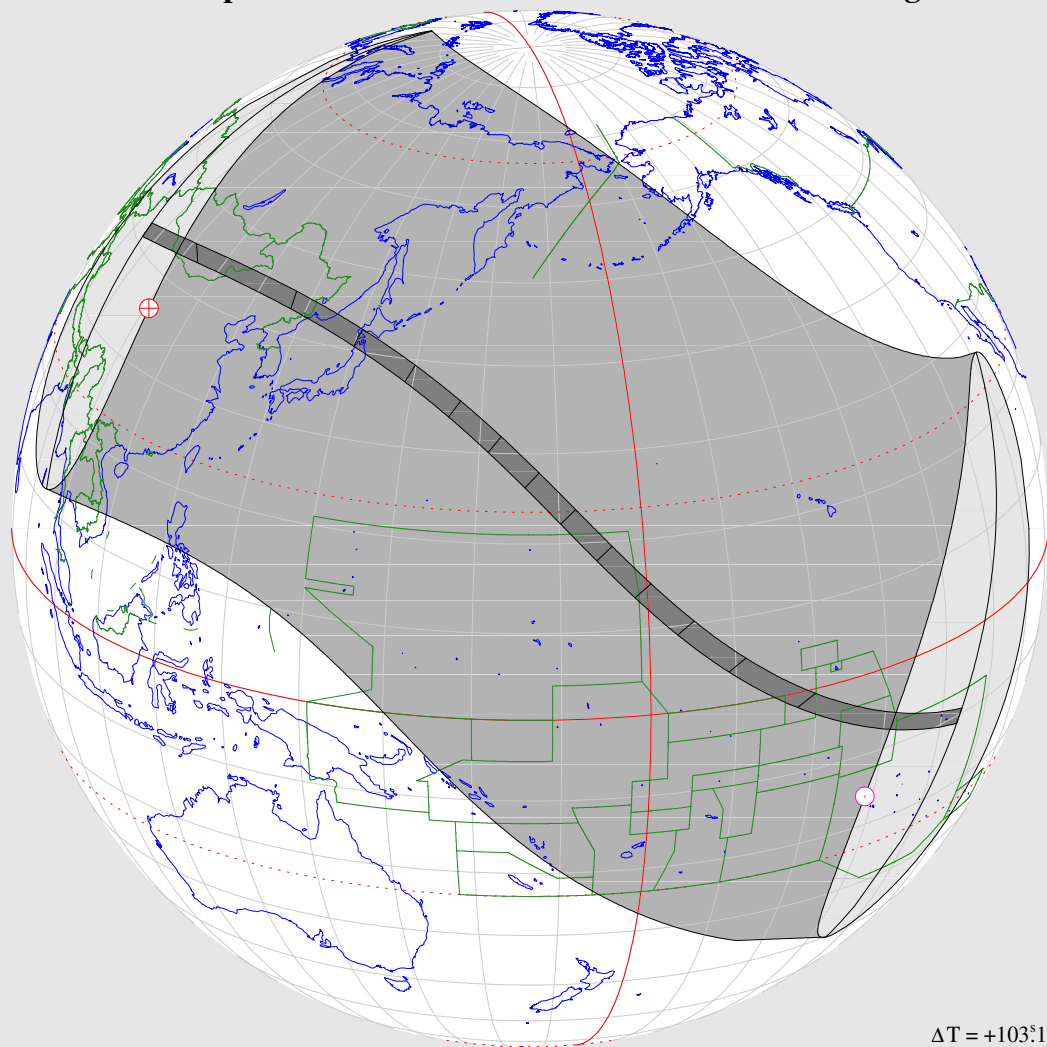


III. - Total Eclipse of the Sun

2063 August 23-24



$\Delta T = +103^s.1$

©HM Nautical Almanac Office

Globe centred on E 166°5 and N 21°7

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	22	45.8	E 100	53.1	N 36	10.5
Beginning of southern limit of penumbra	23	36.3	E 94	14.9	N 11	37.0
Beginning of southern limit of umbra	23	41.3	E 85	29.7	N 40	50.2
Beginning of centre line; central eclipse begins	23	41.9	E 85	03.2	N 41	41.5
Beginning of northern limit of umbra	23	42.5	E 84	35.7	N 42	33.0
Beginning of northern limit of penumbra	0	23.0	E 35	29.0	N 75	27.6
Central eclipse at local apparent noon	1	06.3	E 164	03.2	N 29	19.7
End of northern limit of penumbra	2	18.3	W 118	10.8	N 27	08.1
End of northern limit of umbra	2	58.6	W 135	51.6	S 9	19.2
End of centre line; central eclipse ends	2	59.1	W 136	10.8	S 10	11.6
End of southern limit of umbra	2	59.7	W 136	29.7	S 11	03.9
End of southern limit of penumbra	3	04.4	W 145	03.7	S 40	18.1
⊙ Eclipse ends; last contact with Earth	3	55.1	W 151	20.4	S 15	47.1