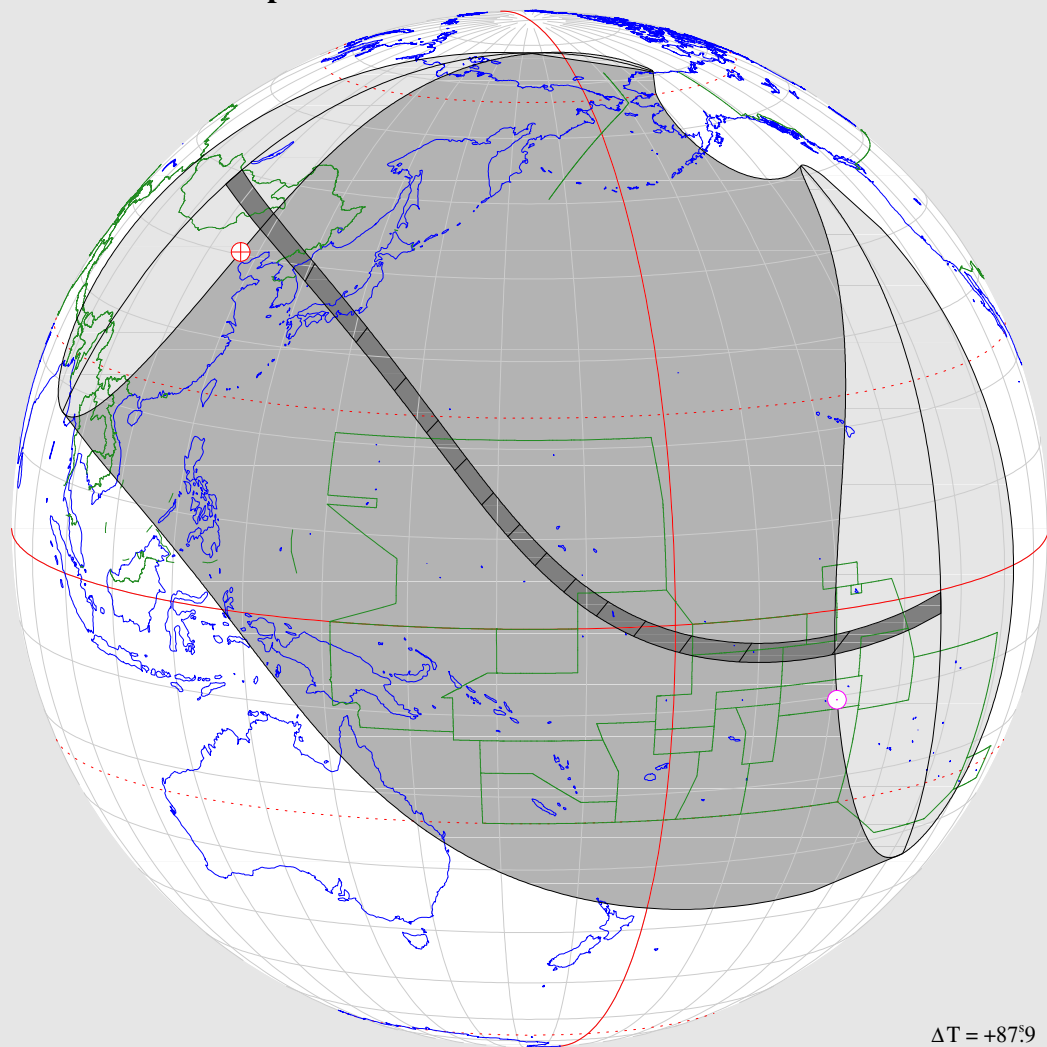


### III. - Annular Eclipse of the Sun

2041 October 24-25



$\Delta T = +87^s.9$

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Globe centred on E 163°7' and N 11°2'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	22	39.6	E 116	38.9	N 40	19.4
Beginning of southern limit of penumbra	23	46.7	E 93	07.4	N 17	01.3
Beginning of southern limit of umbra	23	48.6	E 102	39.5	N 47	53.1
Beginning of centre line; central eclipse begins	23	49.3	E 103	02.9	N 49	02.6
Beginning of northern limit of umbra	23	50.2	E 103	27.5	N 50	12.5
Central eclipse at local apparent noon	1	11.5	E 158	08.1	N 15	17.6
Beginning of northern limit of penumbra	1	11.6	W 150	09.3	N 70	48.7
End of northern limit of penumbra	1	59.0	W 139	24.1	N 51	22.3
End of northern limit of umbra	3	19.8	W 143	52.9	S 0	17.5
End of centre line; central eclipse ends	3	20.6	W 143	49.6	S 1	29.0
End of southern limit of umbra	3	21.4	W 143	45.6	S 2	39.7
End of southern limit of penumbra	3	22.9	W 136	23.2	S 33	48.3
⊙ Eclipse ends; last contact with Earth	4	30.3	W 159	16.3	S 10	25.5