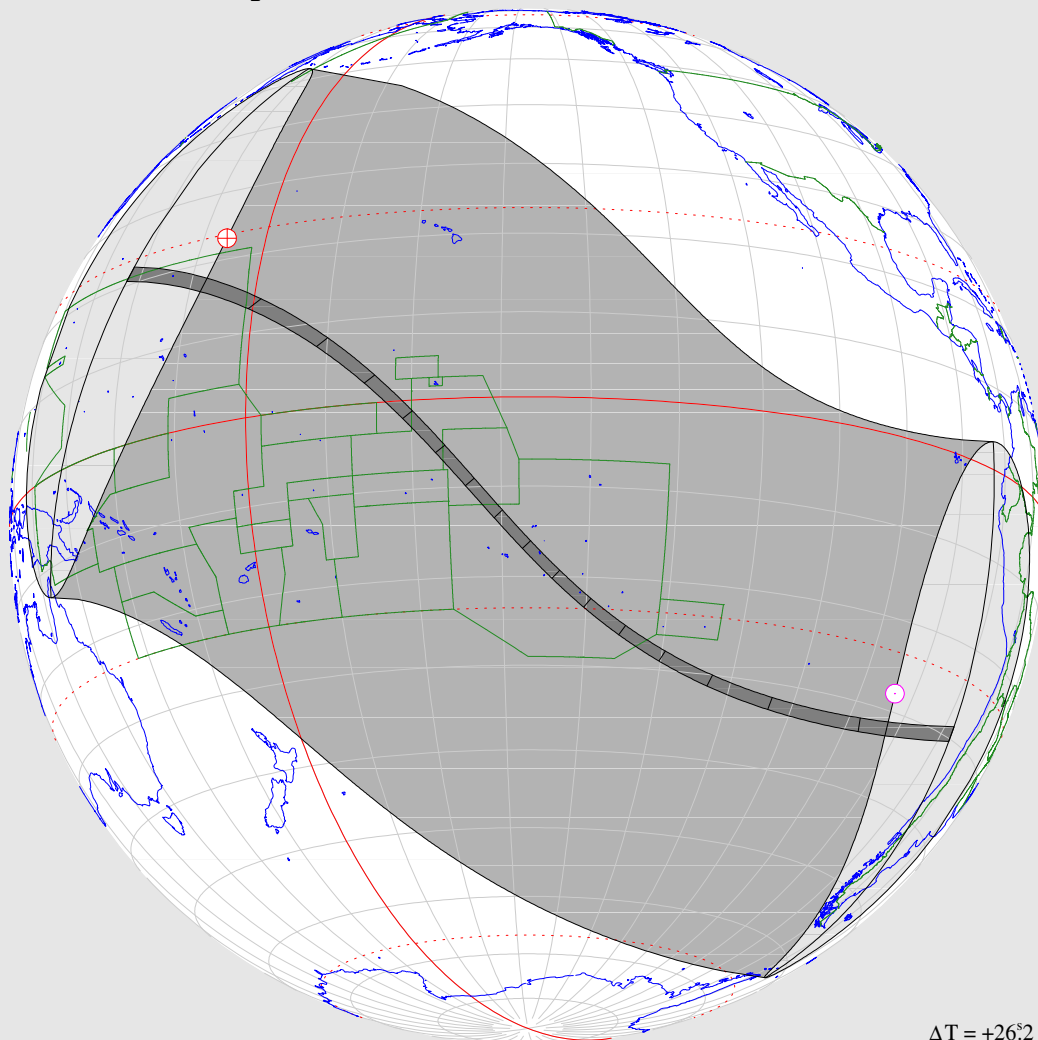


V. - Annular Eclipse of the Sun

1669 October 24-25



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$\Delta T = +26^s.2$
Globe centred on W 147°0 and S 14°5

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	18	29.6	E 173	55.2	N 22	57.0
Beginning of northern limit of umbra	19	33.5	E 157	47.1	N 22	22.5
Beginning of centre line; central eclipse begins	19	33.8	E 157	29.5	N 21	30.2
Beginning of southern limit of umbra	19	34.1	E 157	11.7	N 20	37.8
Beginning of northern limit of penumbra	19	42.0	E 167	34.8	N 53	36.9
Beginning of southern limit of penumbra	20	03.9	E 142	14.8	S 12	59.0
Central eclipse at local apparent noon	21	31.6	W 146	49.1	S 16	50.1
End of southern limit of penumbra	22	50.9	W 51	54.6	S 62	39.5
End of northern limit of penumbra	23	13.6	W 83	01.1	N 3	12.4
End of southern limit of umbra	23	21.0	W 76	55.7	S 30	16.4
End of centre line; central eclipse ends	23	21.3	W 77	15.2	S 29	25.6
End of northern limit of umbra	23	21.6	W 77	34.2	S 28	34.8
⊙ Eclipse ends; last contact with Earth	0	25.5	W 93	42.3	S 27	59.1