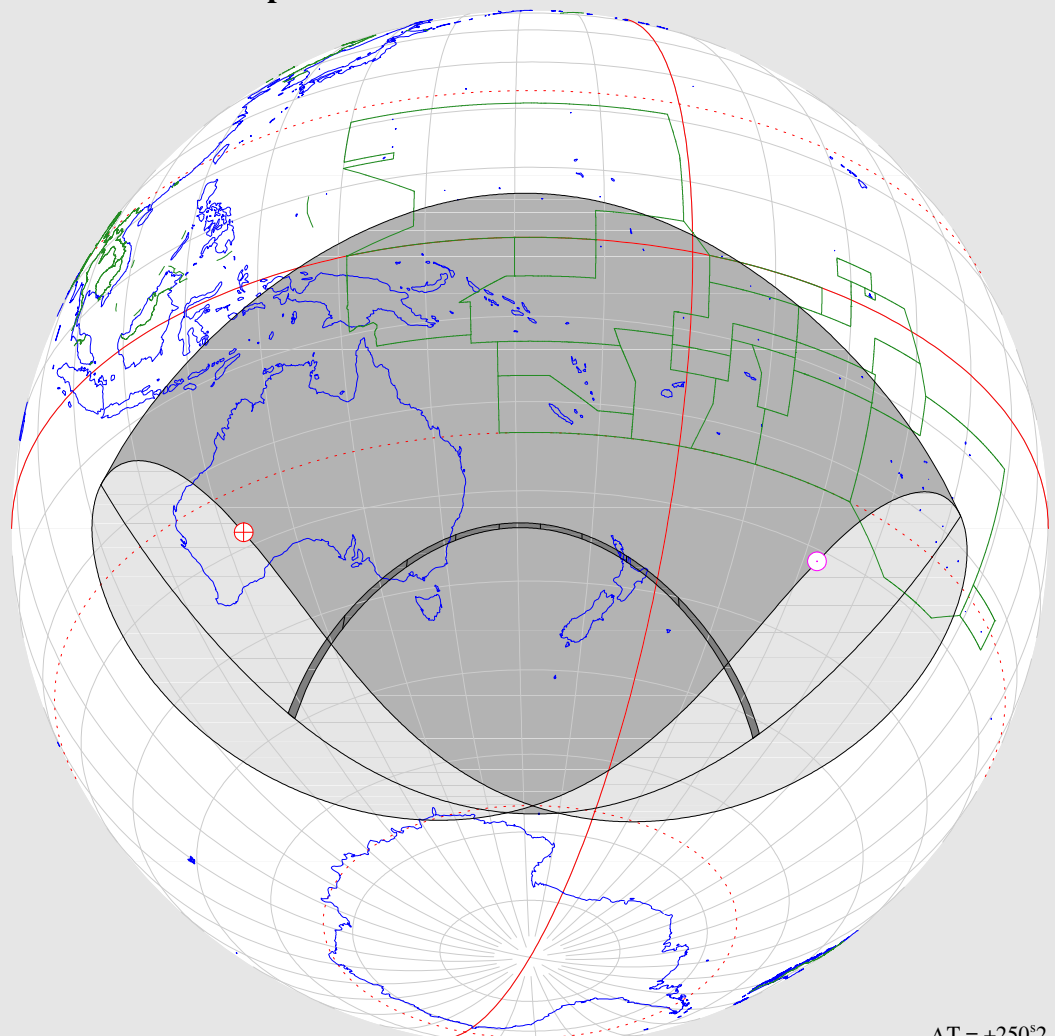


### III. - Annular Eclipse of the Sun

1516 June 29-30



©HM Nautical Almanac Office

$\Delta T = +250^s.2$   
Globe centred on E 161°7 and S 34°2

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	22	44.1	E 122	50.6	S 28	18.9
Beginning of northern limit of penumbra	23	35.0	E 103	09.7	S 13	59.2
Beginning of northern limit of umbra	0	08.0	E 116	53.2	S 48	34.0
Beginning of centre line; central eclipse begins	0	08.8	E 117	09.3	S 48	59.9
Beginning of southern limit of umbra	0	09.6	E 117	26.0	S 49	26.1
Central eclipse at local apparent noon	1	13.7	E 162	36.3	S 33	54.3
End of southern limit of umbra	2	12.5	W 153	57.9	S 52	00.6
End of centre line; central eclipse ends	2	13.3	W 153	38.8	S 51	36.4
End of northern limit of umbra	2	14.1	W 153	20.3	S 51	12.3
End of northern limit of penumbra	2	47.0	W 137	58.1	S 17	00.0
⊙ Eclipse ends; last contact with Earth	3	37.9	W 157	55.7	S 31	15.2