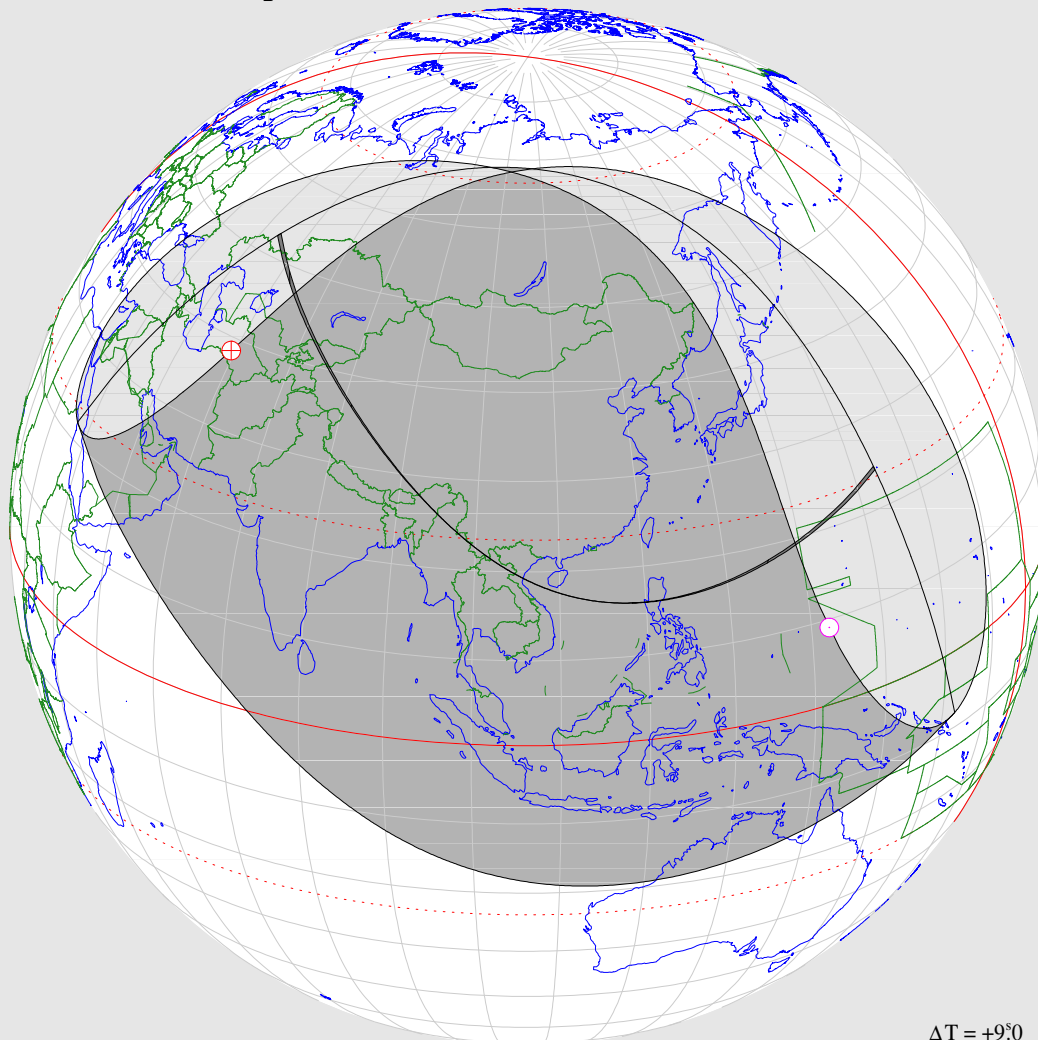


# IV. - Annular Eclipse of the Sun

1704 November 27



©HM Nautical Almanac Office

$\Delta T = +9^s 0$   
Globe centred on E 106°3' and N 25°0'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	3	03.0	E 59	13.9	N 38	33.0
Beginning of southern limit of penumbra	3	56.7	E 36	49.5	N 21	56.8
Beginning of southern limit of umbra	4	13.7	E 53	51.0	N 52	27.0
Beginning of centre line; central eclipse begins	4	14.0	E 54	02.1	N 52	39.7
Beginning of northern limit of umbra	4	14.3	E 54	13.5	N 52	52.4
Central eclipse at local apparent noon	5	12.9	E 98	48.4	N 23	18.7
End of northern limit of umbra	6	53.3	E 153	26.3	N 24	38.6
End of centre line; central eclipse ends	6	53.6	E 153	28.8	N 24	25.3
End of southern limit of umbra	6	53.9	E 153	31.2	N 24	12.1
End of southern limit of penumbra	7	10.7	E 162	28.5	S 8	01.0
⊙ Eclipse ends; last contact with Earth	8	04.4	E 142	22.1	N 9	04.1