

# I. - Annular-Total Eclipse of the Sun

1585 April 29



©HM Nautical Almanac Office

$\Delta T = +157^s.6$   
Globe centred on W 103°8 and N 38°2

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	15	45.8	W149	08.4	N 7	21.6
Beginning of southern limit of penumbra	16	28.3	W154	28.5	S 12	44.8
Beginning of southern limit of umbra	16	53.3	W169	16.3	N 19	11.1
Beginning of centre line; central eclipse begins	16	53.6	W169	25.0	N 19	25.5
Beginning of northern limit of umbra	16	53.9	W169	33.8	N 19	40.0
Central eclipse at local apparent noon	18	40.1	W100	48.1	N 48	44.4
End of northern limit of umbra	19	58.6	W 15	39.2	N 44	24.0
End of centre line; central eclipse ends	19	58.9	W 15	49.9	N 44	11.4
End of southern limit of umbra	19	59.2	W 16	00.5	N 43	58.8
End of southern limit of penumbra	20	24.3	W 33	33.3	N 12	27.3
⊙ Eclipse ends; last contact with Earth	21	06.6	W 37	54.6	N 32	23.5