

## II. - Annular Eclipse of the Sun

2048 June 11



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$\Delta T = +92^s.5$   
Globe centred on W 13°2' and N 48°5'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	10	08.2	W 73	08.4	N 24	10.6
Beginning of southern limit of penumbra	10	45.9	W 74	22.3	N 6	39.7
Beginning of southern limit of umbra	11	24.8	W 100	06.7	N 37	07.6
Beginning of centre line; central eclipse begins	11	27.0	W 101	34.3	N 38	22.4
Beginning of northern limit of umbra	11	29.3	W 103	06.3	N 39	38.5
Central eclipse at local apparent noon	12	54.7	W 13	42.2	N 63	45.5
End of northern limit of umbra	14	25.3	E 71	52.8	N 36	12.9
End of centre line; central eclipse ends	14	27.6	E 70	26.0	N 34	55.8
End of southern limit of umbra	14	29.9	E 69	03.1	N 33	40.2
End of southern limit of penumbra	15	08.7	E 44	05.0	N 3	01.8
⊙ Eclipse ends; last contact with Earth	15	46.5	E 42	36.3	N 20	36.0