

### III. - Annular Eclipse of the Sun

2088 October 14



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$\Delta T = +120^s.7$   
Globe centred on W 52°9' and S 32°9'

Circumstances	Time (UT)	Longitude	Latitude
	h m	° /	° /
⊕ Eclipse begins; first contact with Earth	12 01.0	W 94 24.3	S 3 52.1
Beginning of northern limit of penumbra	12 48.5	W102 59.0	N17 18.1
Beginning of northern limit of umbra	13 09.9	W113 25.3	S 15 19.3
Beginning of centre line; central eclipse begins	13 10.8	W113 45.7	S 16 04.2
Beginning of southern limit of umbra	13 11.7	W114 06.4	S 16 49.5
Central eclipse at local apparent noon	15 03.6	W 49 27.5	S 42 45.8
End of southern limit of umbra	16 20.2	E 31 24.8	S 48 47.4
End of centre line; central eclipse ends	16 21.1	E 30 54.8	S 48 01.4
End of northern limit of umbra	16 22.0	E 30 25.8	S 47 15.8
End of northern limit of penumbra	16 43.7	E 17 49.9	S 14 51.5
⊙ Eclipse ends; last contact with Earth	17 31.0	E 10 02.1	S 35 57.1