

III. - Total Eclipse of the Sun

2045 August 12



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$\Delta T = +90^s.6$
Globe centred on W 80°1' and N 22°4'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	15	05.5	W144	12.4	N31	01.6
Beginning of southern limit of penumbra	15	57.5	W149	34.9	N 5	31.9
Beginning of southern limit of umbra	16	00.4	W159	08.4	N34	16.3
Beginning of centre line; central eclipse begins	16	00.9	W159	36.1	N35	07.6
Beginning of northern limit of umbra	16	01.4	W160	04.8	N35	59.0
Beginning of northern limit of penumbra	16	36.4	E163	47.4	N67	05.8
Central eclipse at local apparent noon	17	31.4	W 81	36.5	N28	15.1
End of northern limit of penumbra	18	46.3	W 3	55.8	N23	03.0
End of northern limit of umbra	19	21.0	W 21	50.8	S 10	43.7
End of centre line; central eclipse ends	19	21.5	W 22	12.9	S 11	36.0
End of southern limit of umbra	19	22.0	W 22	34.6	S 12	28.1
End of southern limit of penumbra	19	24.5	W 33	04.4	S 41	03.9
⊙ Eclipse ends; last contact with Earth	20	16.8	W 37	12.3	S 15	45.4