

III. - Total Eclipse of the Sun

1647 July 02



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$\Delta T = +50^s 5$
Globe centred on E 11°0' and N 9°0'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	8	42.2	W 35	45.8	S 9	19.5
Beginning of northern limit of umbra	9	39.0	W 48	17.2	S 13	03.4
Beginning of centre line; central eclipse begins	9	39.0	W 48	00.6	S 13	42.4
Beginning of southern limit of umbra	9	39.1	W 47	44.1	S 14	21.4
Beginning of northern limit of penumbra	9	49.6	W 62	57.7	N 14	32.4
Beginning of southern limit of penumbra	10	05.9	W 34	34.5	S 45	55.3
Central eclipse at local apparent noon	11	19.9	E 10	47.7	N 9	35.5
End of southern limit of penumbra	12	35.0	E 57	52.8	S 43	48.7
End of northern limit of penumbra	12	51.4	E 85	20.9	N 16	50.3
End of southern limit of umbra	13	01.8	E 70	06.0	S 12	03.4
End of northern limit of umbra	13	02.0	E 70	39.2	S 10	43.5
End of centre line; central eclipse ends	13	01.9	E 70	22.5	S 11	23.4
⊙ Eclipse ends; last contact with Earth	13	58.7	E 58	06.8	S 7	00.3