

IV. - Annular Eclipse of the Sun

1644 September 01



$\Delta T = +54^s 3$

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Globe centred on E 111°4 and N 15°1

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	1	43.7	E 60	47.8	N 21	02.1
Beginning of southern limit of umbra	2	49.0	E 44	09.7	N 22	49.2
Beginning of centre line; central eclipse begins	2	49.4	E 43	54.8	N 23	44.0
Beginning of northern limit of umbra	2	49.8	E 43	39.4	N 24	39.0
Beginning of southern limit of penumbra	2	55.1	E 47	25.4	S 9	07.3
Beginning of northern limit of penumbra	3	24.3	E 24	43.9	N 59	27.7
Central eclipse at local apparent noon	4	40.1	E 109	51.5	N 16	04.7
End of northern limit of penumbra	6	05.1	W 177	10.2	N 27	22.7
End of southern limit of penumbra	6	33.7	E 164	10.1	S 41	35.8
End of northern limit of umbra	6	39.3	E 168	54.0	S 7	53.3
End of centre line; central eclipse ends	6	39.7	E 168	39.9	S 8	49.6
End of southern limit of umbra	6	40.1	E 168	26.2	S 9	45.8
⊙ Eclipse ends; last contact with Earth	7	45.5	E 151	49.3	S 11	32.0