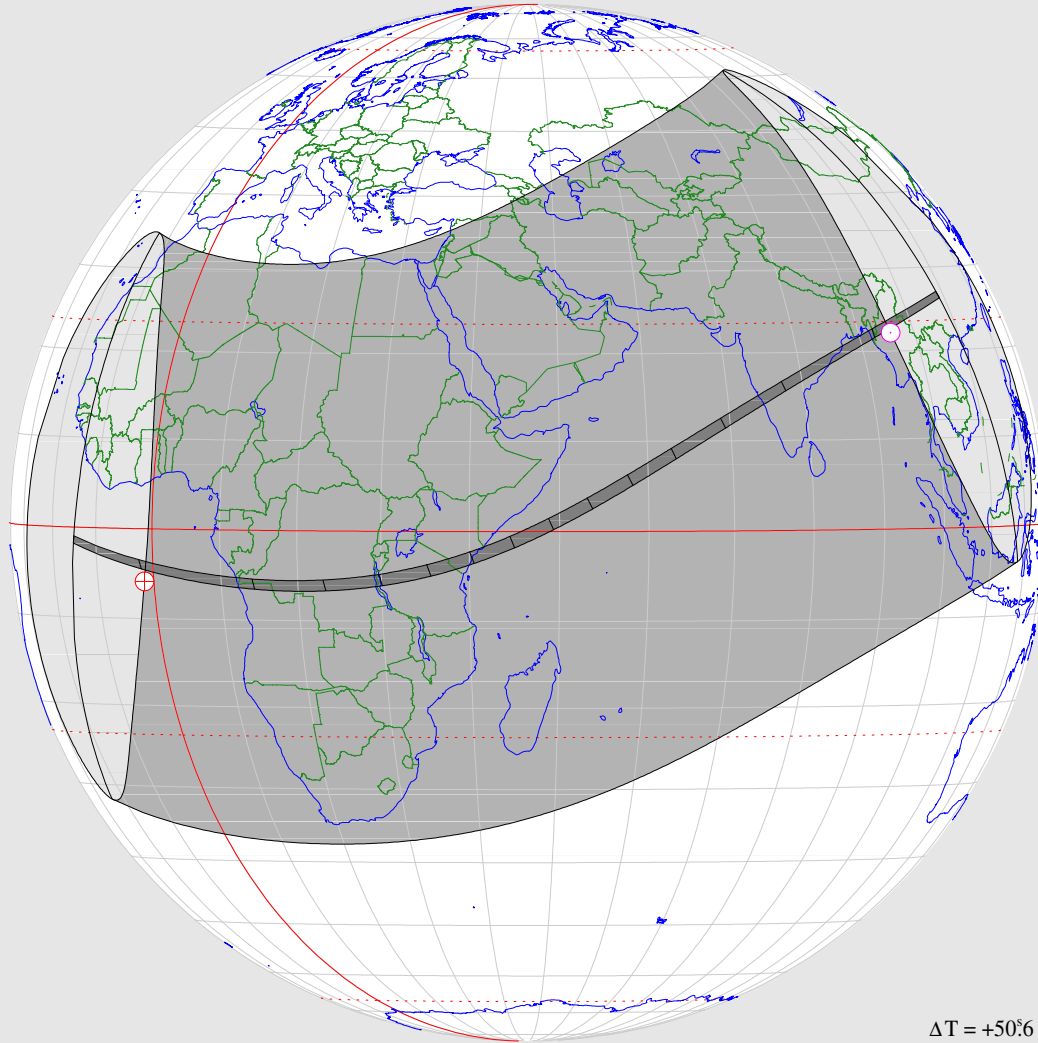


I. - Total Eclipse of the Sun

1980 February 16



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$\Delta T = +50.6$
Globe centred on E 46°5' and N 1°0'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	6	15.1	W 1	32.2	S 5	50.2
Beginning of southern limit of umbra	7	11.9	W 14	49.8	S 1	46.8
Beginning of centre line; central eclipse begins	7	12.0	W 14	45.8	S 1	23.0
Beginning of northern limit of umbra	7	12.1	W 14	41.9	S 0	59.0
Beginning of southern limit of penumbra	7	19.8	W 24	23.3	S 31	54.8
Beginning of northern limit of penumbra	7	42.0	W 13	07.3	N 34	30.7
Central eclipse at local apparent noon	8	59.0	E 48	47.0	N 0	42.3
End of northern limit of penumbra	10	04.0	E 98	25.8	N 61	24.1
End of southern limit of penumbra	10	26.7	E 117	45.4	S 3	59.5
End of northern limit of umbra	10	34.2	E 108	29.6	N 26	59.6
End of centre line; central eclipse ends	10	34.3	E 108	35.0	N 26	35.2
End of southern limit of umbra	10	34.3	E 108	40.4	N 26	10.8
⊙ Eclipse ends; last contact with Earth	11	31.1	E 95	33.5	N 22	09.6