

## II. - Annular Eclipse of the Sun

1781 April 23



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$\Delta T = +17^m 0$   
Globe centred on W 79°0 and N 9°3

Circumstances	Time (UT)	Longitude	Latitude
	h m	° /	° /
⊕ Eclipse begins; first contact with Earth	14 16.8	W117 58.5	S 27 16.9
Beginning of southern limit of umbra	15 23.6	W133 57.3	S 29 37.5
Beginning of centre line; central eclipse begins	15 23.6	W134 18.5	S 28 31.4
Beginning of northern limit of umbra	15 23.8	W134 39.9	S 27 25.4
Beginning of southern limit of penumbra	15 43.2	W121 17.0	S 61 45.1
Beginning of northern limit of penumbra	15 45.3	W147 49.4	N 4 26.6
Central eclipse at local apparent noon	17 17.6	W 79 53.7	N 8 55.7
End of northern limit of penumbra	18 56.6	E 3 32.7	N53 51.5
End of southern limit of penumbra	18 59.5	W 18 22.1	S 12 54.0
End of northern limit of umbra	19 18.5	W 14 39.4	N22 38.5
End of centre line; central eclipse ends	19 18.6	W 14 59.0	N21 33.1
End of southern limit of umbra	19 18.7	W 15 17.9	N20 27.5
⊙ Eclipse ends; last contact with Earth	20 25.4	W 31 20.0	N22 47.8