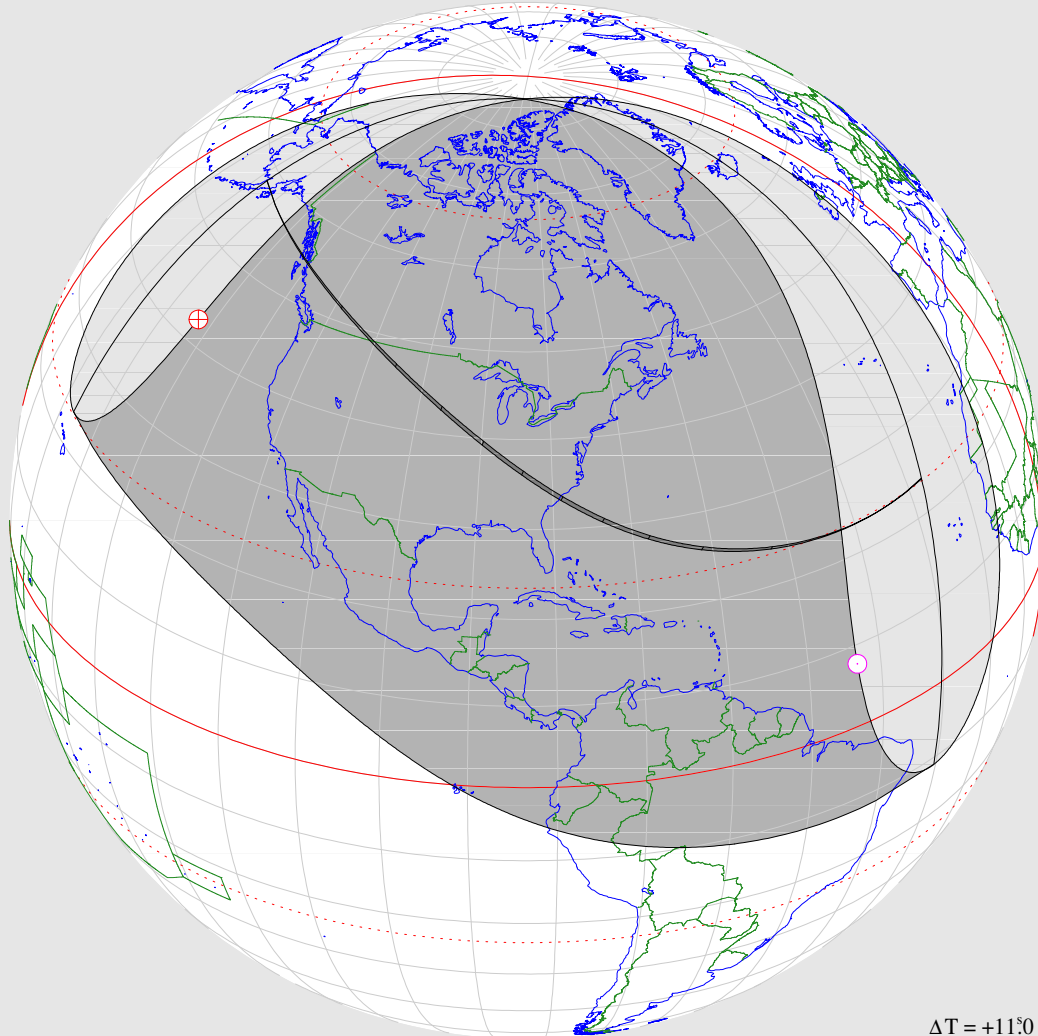


IV. - Annular-Total Eclipse of the Sun

1717 October 04



©HM Nautical Almanac Office

$\Delta T = +11^s 0$
Globe centred on W 83°3 and N 31°0

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	15	37.0	W142	59.2	N42	33.5
Beginning of southern limit of penumbra	16	22.9	W156	35.7	N23	46.3
Beginning of centre line; central eclipse begins	16	47.0	W157	16.6	N58	24.7
Beginning of southern limit of umbra	16	47.0	W157	16.6	N58	23.3
Beginning of northern limit of umbra	16	47.1	W157	16.6	N58	26.0
Central eclipse at local apparent noon	17	46.0	W 89	21.0	N39	12.8
End of northern limit of umbra	19	29.7	W 27	16.2	N23	45.5
End of centre line; central eclipse ends	19	29.8	W 27	16.7	N23	42.7
End of southern limit of umbra	19	29.8	W 27	17.3	N23	39.9
End of southern limit of penumbra	19	53.6	W 30	22.2	S 11	08.4
⊙ Eclipse ends; last contact with Earth	20	39.7	W 43	24.3	N 7	44.0