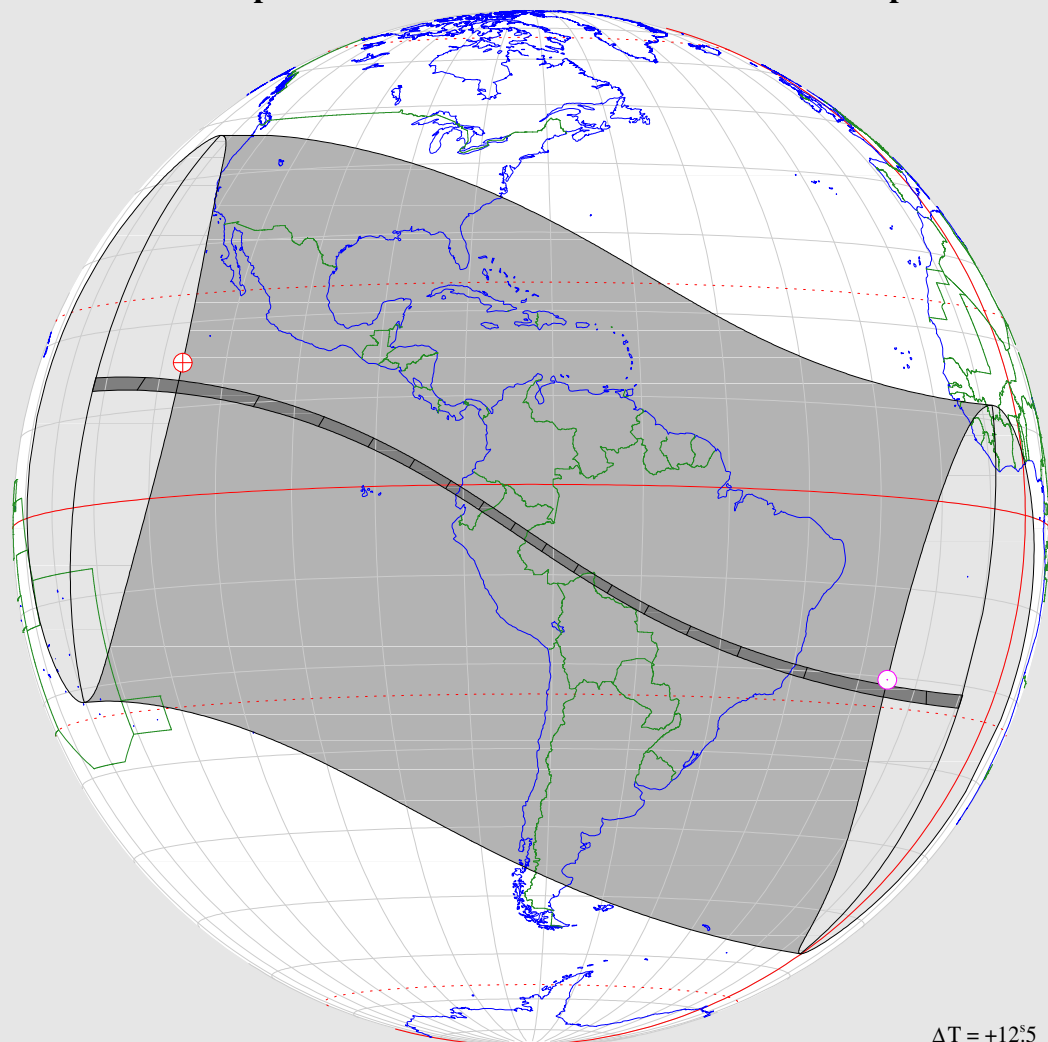


V. - Annular Eclipse of the Sun

1810 September 28



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$\Delta T = +12^s.5$
Globe centred on W 72°5' and S 4°9'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	13	39.3	W116	36.8	N15	11.1
Beginning of northern limit of umbra	14	43.2	W132	37.2	N14	31.3
Beginning of centre line; central eclipse begins	14	43.3	W132	40.7	N13	44.3
Beginning of southern limit of umbra	14	43.5	W132	44.4	N12	57.2
Beginning of northern limit of penumbra	14	56.9	W134	28.1	N47	13.6
Beginning of southern limit of penumbra	15	09.2	W140	22.9	S 21	30.7
Central eclipse at local apparent noon	16	39.7	W 72	15.2	S 6	10.5
End of southern limit of penumbra	18	04.8	W 0	31.0	S56	53.4
End of northern limit of penumbra	18	17.8	W 7	11.1	N11	45.3
End of southern limit of umbra	18	30.9	W 9	14.0	S22	31.9
End of centre line; central eclipse ends	18	31.0	W 9	18.0	S 21	46.2
End of northern limit of umbra	18	31.1	W 9	21.7	S 21	00.5
⊙ Eclipse ends; last contact with Earth	19	35.0	W 25	21.0	S 20	19.5