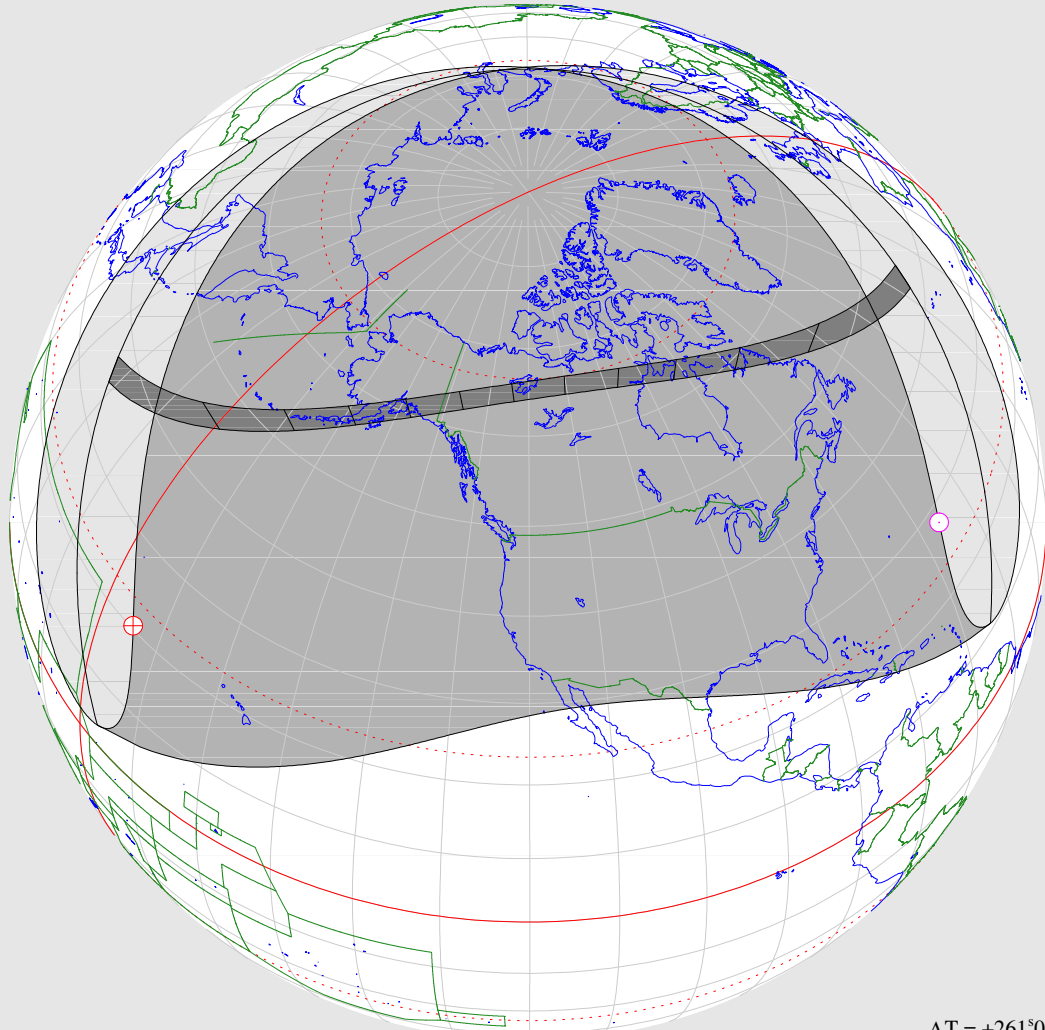


I. - Annular Eclipse of the Sun

1509 May 18



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$\Delta T = +261^{\circ}0$
Globe centred on W 120°2 and N 50°4

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	17	00.9	W174	33.0	N20	23.9
Beginning of southern limit of penumbra	17	37.3	W176	31.8	N 3	14.6
Beginning of southern limit of umbra	18	18.2	E 158	28.7	N35	05.6
Beginning of centre line; central eclipse begins	18	20.2	E 157	17.0	N36	13.1
Beginning of northern limit of umbra	18	22.3	E 156	02.1	N37	22.0
Central eclipse at local apparent noon	19	51.0	W118	41.8	N65	14.6
End of northern limit of umbra	21	08.0	W 25	06.3	N44	38.3
End of centre line; central eclipse ends	21	10.1	W 26	32.8	N43	31.0
End of southern limit of umbra	21	12.1	W 27	55.2	N42	24.8
End of southern limit of penumbra	21	53.2	W 54	51.6	N10	58.7
⊙ Eclipse ends; last contact with Earth	22	29.6	W 56	15.2	N28	00.6