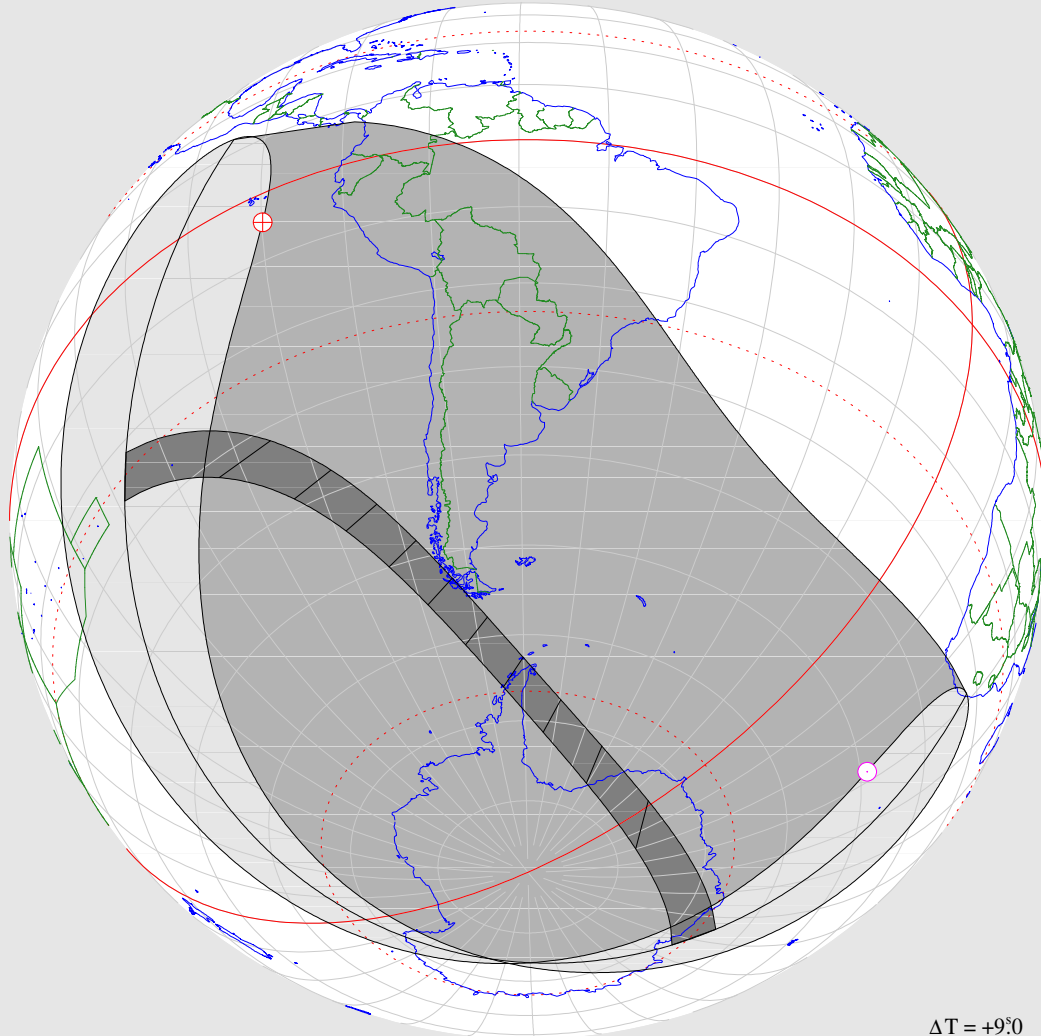


IV. - Annular Eclipse of the Sun

1706 November 05



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$\Delta T = +9^s 0$
Globe centred on W 59°0 and S 47°3

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	11	38.5	W 89	53.9	S 4	29.3
Beginning of northern limit of penumbra	12	17.2	W 94	35.1	N 13	03.7
Beginning of northern limit of umbra	13	00.2	W 115	23.2	S 21	24.6
Beginning of centre line; central eclipse begins	13	03.9	W 117	01.2	S 23	33.6
Beginning of southern limit of umbra	13	07.8	W 118	46.5	S 25	48.4
Central eclipse at local apparent noon	15	02.0	W 49	31.0	S 69	53.1
End of southern limit of umbra	15	39.3	E 74	09.7	S 67	35.7
End of centre line; central eclipse ends	15	43.3	E 69	06.4	S 65	53.6
End of northern limit of umbra	15	47.0	E 64	46.9	S 64	10.8
End of northern limit of penumbra	16	30.3	E 28	34.7	S 32	06.4
⊙ Eclipse ends; last contact with Earth	17	08.8	E 27	42.0	S 49	02.4