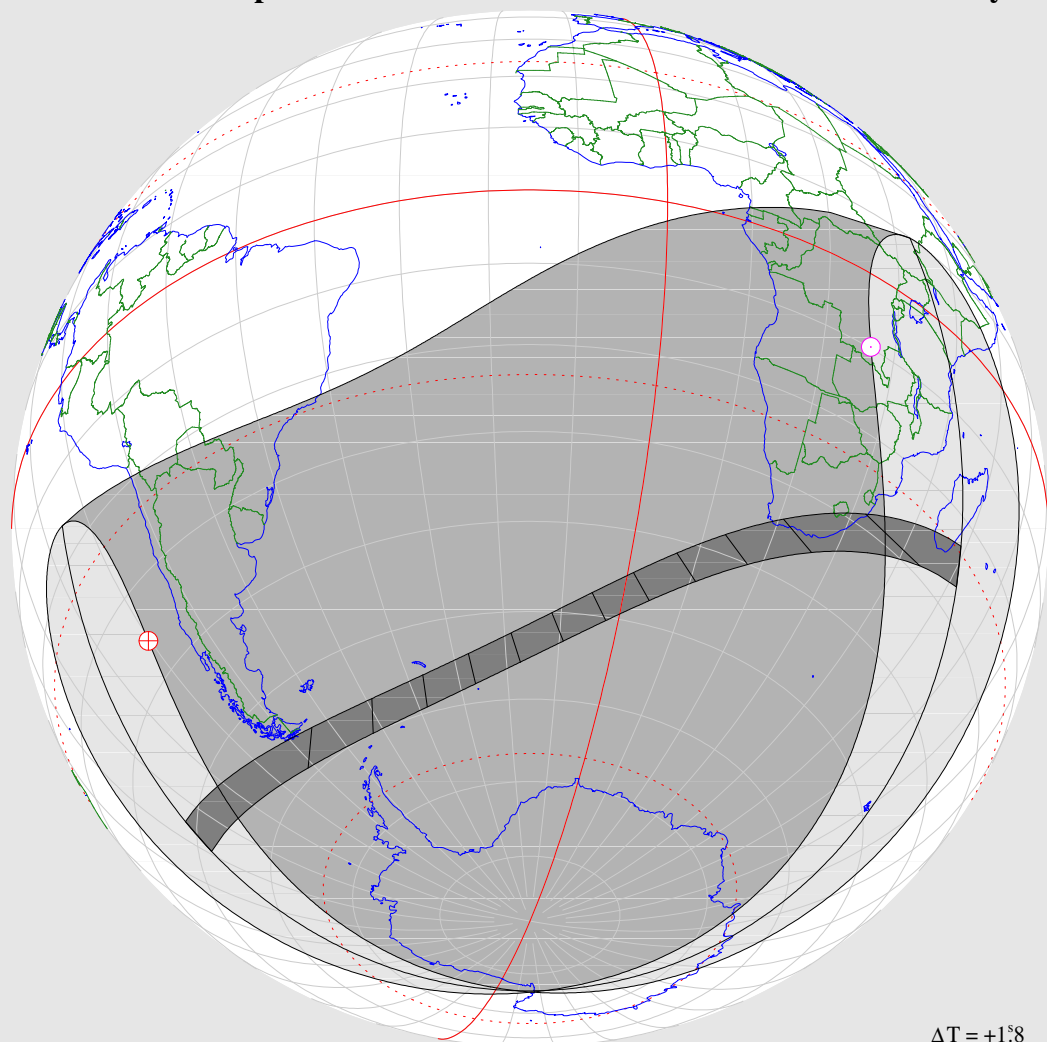


## II. - Annular Eclipse of the Sun

1869 February 11



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$\Delta T = +1^s 8$   
Globe centred on W 15°4 and S 40°8

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	10	55.0	W 80	21.9	S 35	39.0
Beginning of northern limit of penumbra	11	39.4	W 85	19.1	S 16	07.5
Beginning of northern limit of umbra	12	11.3	W105	20.6	S 48	20.1
Beginning of centre line; central eclipse begins	12	14.1	W107	09.1	S 50	09.6
Beginning of southern limit of umbra	12	17.1	W109	07.4	S 52	01.6
Central eclipse at local apparent noon	13	29.0	W 18	37.4	S 54	09.1
End of southern limit of umbra	15	16.4	E 51	39.0	S 26	40.6
End of centre line; central eclipse ends	15	19.3	E 50	18.5	S 24	43.1
End of northern limit of umbra	15	22.1	E 49	02.4	S 22	48.7
End of northern limit of penumbra	15	53.9	E 32	41.1	N 9	54.8
⊙ Eclipse ends; last contact with Earth	16	38.4	E 26	28.2	S 9	48.4