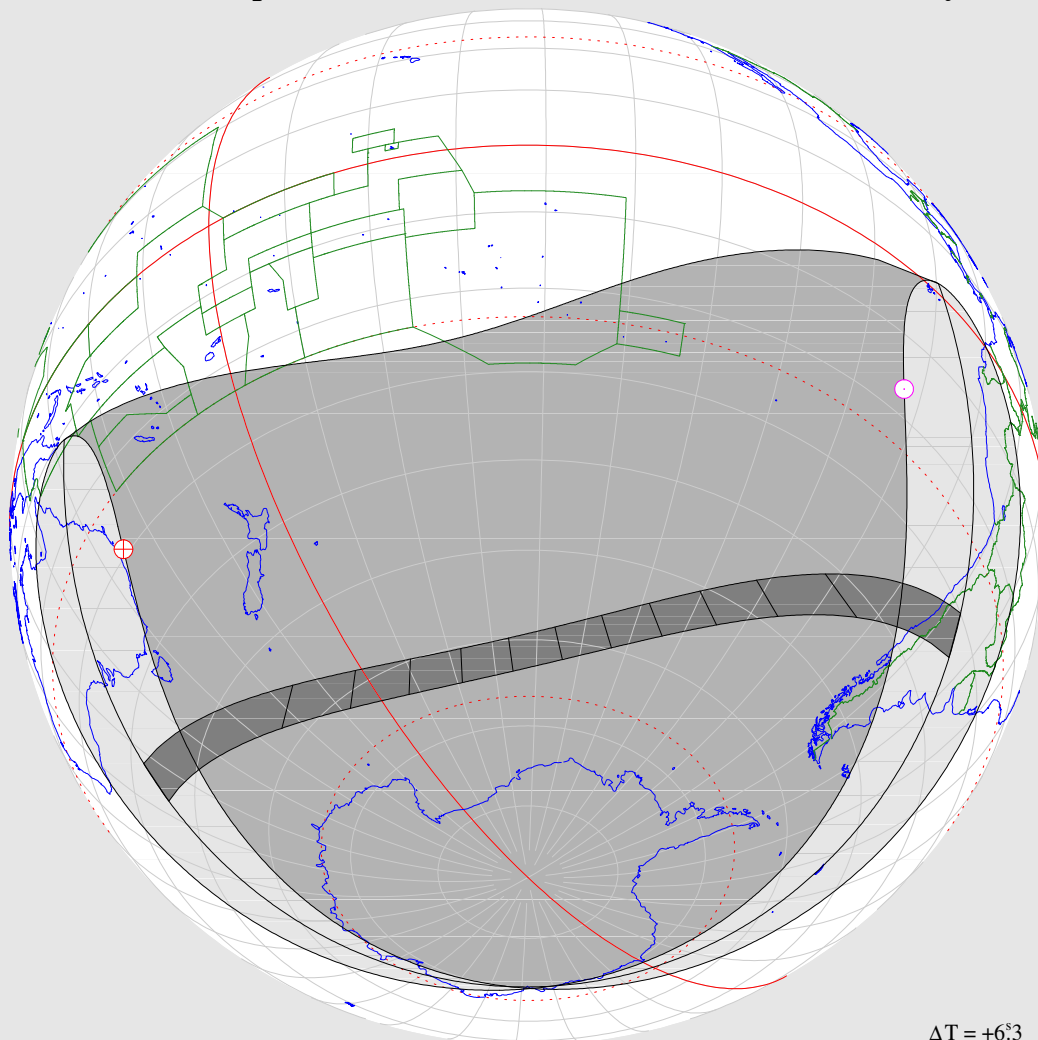


II. - Annular Eclipse of the Sun

1833 January 20-21



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$\Delta T = +6^s.3$
Globe centred on W 142°0 and S 47°4

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	19	06.1	E 154	33.5	S 29	15.1
Beginning of northern limit of penumbra	19	46.1	E 152	16.2	S 11	01.6
Beginning of northern limit of umbra	20	23.5	E 127	42.2	S 42	10.4
Beginning of centre line; central eclipse begins	20	26.8	E 125	31.8	S 44	02.5
Beginning of southern limit of umbra	20	30.2	E 123	10.3	S 45	57.4
Central eclipse at local apparent noon	21	47.6	W 144	01.5	S 61	25.6
End of southern limit of umbra	23	23.5	W 63	49.3	S 33	54.4
End of centre line; central eclipse ends	23	26.9	W 65	44.8	S 31	54.0
End of northern limit of umbra	23	30.1	W 67	32.9	S 29	57.2
End of northern limit of penumbra	0	07.5	W 89	36.3	N 1	41.4
⊙ Eclipse ends; last contact with Earth	0	47.6	W 92	44.5	S 16	42.8