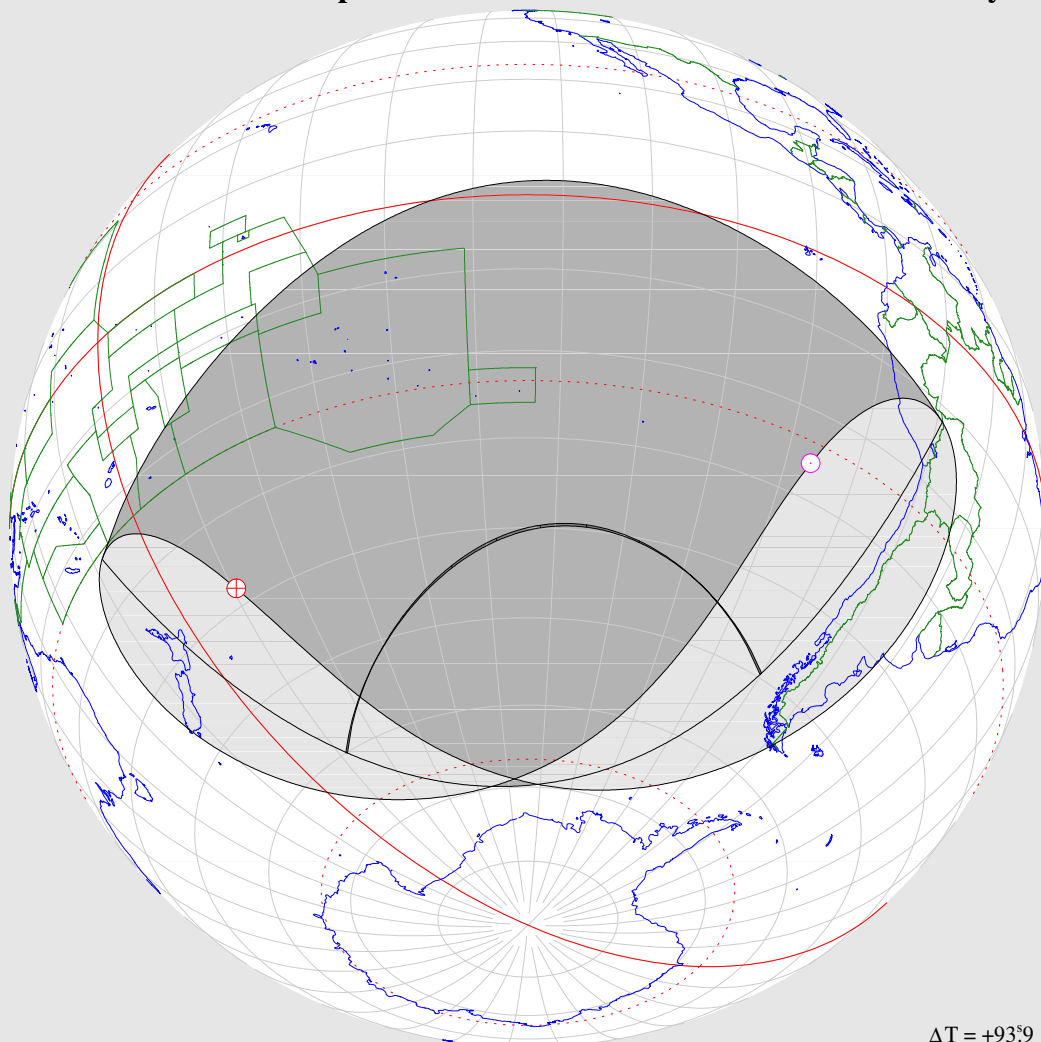


## II. - Annular-Total Eclipse of the Sun

2050 May 20



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$\Delta T = +93^s.9$   
Globe centred on W 123°9' and S 40°1'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	18	20.9	W169	26.8	S 37	59.1
Beginning of northern limit of penumbra	19	07.3	E 171	49.1	S 24	13.9
Beginning of northern limit of umbra	19	47.3	W168	23.2	S 59	55.0
Beginning of centre line; central eclipse begins	19	47.5	W168	17.1	S 59	59.5
Beginning of southern limit of umbra	19	47.6	W168	10.9	S 60	04.0
Central eclipse at local apparent noon	20	30.3	W128	25.0	S 41	11.1
End of southern limit of umbra	21	35.0	W 80	10.2	S 49	37.6
End of centre line; central eclipse ends	21	35.2	W 80	06.9	S 49	31.0
End of northern limit of umbra	21	35.4	W 80	03.7	S 49	24.5
End of northern limit of penumbra	22	15.3	W 69	06.1	S 11	54.2
⊙ Eclipse ends; last contact with Earth	23	01.7	W 86	34.5	S 25	55.6