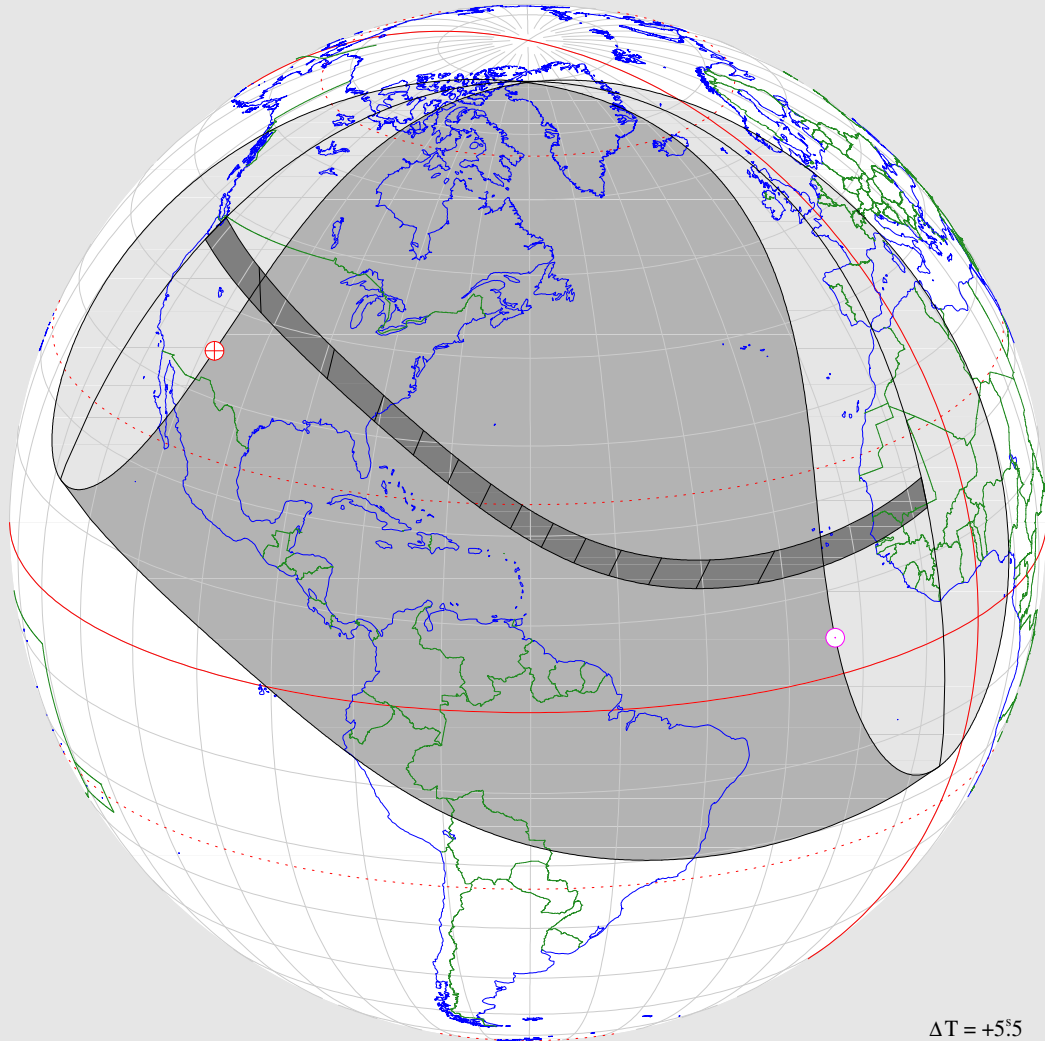


IV. - Annular Eclipse of the Sun

1865 October 19



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$\Delta T = +5^s.5$
Globe centred on W 60°3 and N 21°5

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	13	25.3	W107	53.6	N35	01.1
Beginning of southern limit of penumbra	14	28.2	W128	20.3	N13	28.1
Beginning of southern limit of umbra	14	39.3	W123	03.8	N45	33.2
Beginning of centre line; central eclipse begins	14	40.9	W122	50.2	N47	12.5
Beginning of northern limit of umbra	14	42.7	W122	35.3	N48	53.5
Central eclipse at local apparent noon	16	03.4	W 64	36.3	N23	50.2
End of northern limit of umbra	17	59.8	W 7	09.7	N18	30.9
End of centre line; central eclipse ends	18	01.5	W 7	15.5	N16	47.7
End of southern limit of umbra	18	03.2	W 7	20.1	N15	06.5
End of southern limit of penumbra	18	14.0	W 4	04.4	S 17	12.5
⊙ Eclipse ends; last contact with Earth	19	17.0	W 23	49.4	N 4	26.0