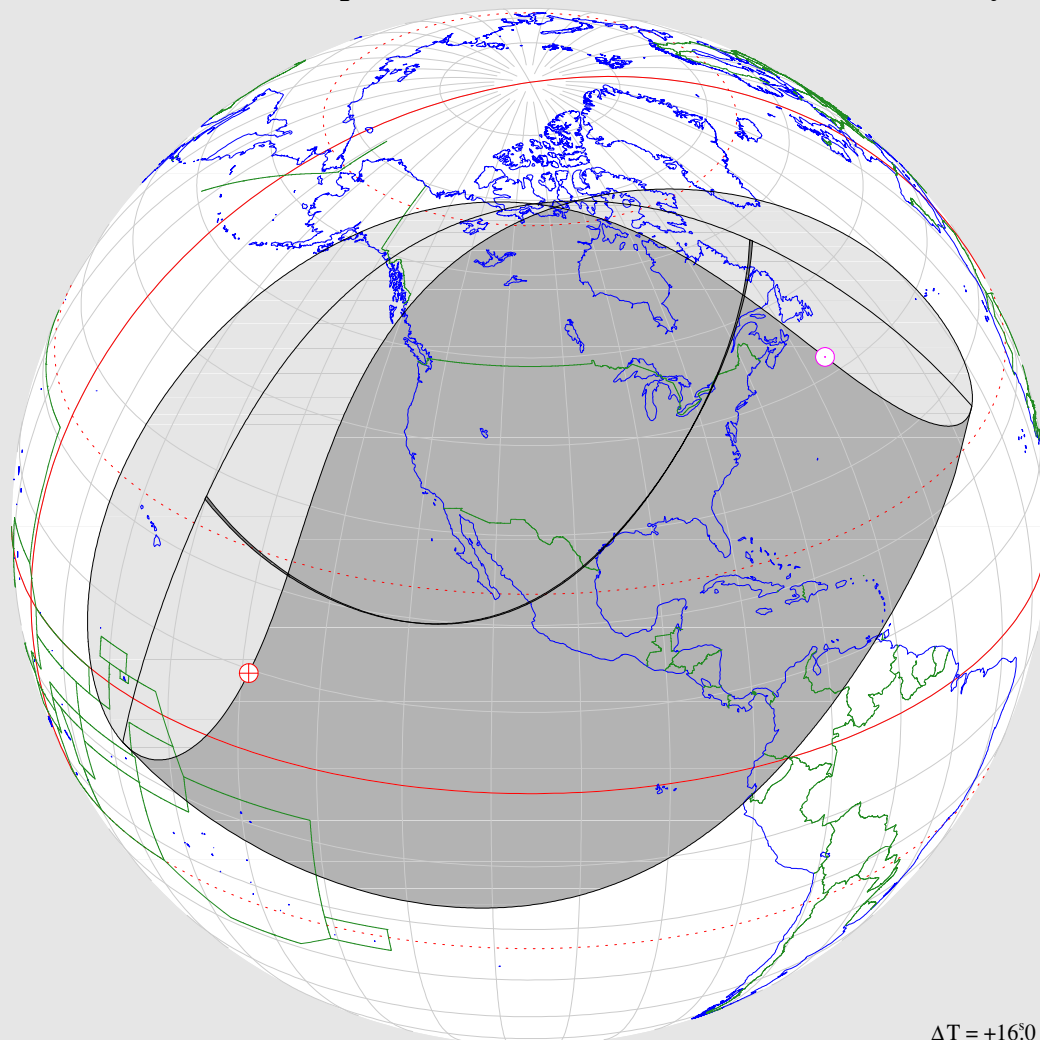


## II. - Annular-Total Eclipse of the Sun

1768 January 19



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$\Delta T = +16^s$   
Globe centred on W 105°7' and N 31°0'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	15	41.8	W139	04.3	N 9	30.9
Beginning of southern limit of penumbra	16	33.0	W158	00.5	S 6	56.2
Beginning of southern limit of umbra	16	54.4	W150	09.2	N26	28.4
Beginning of centre line; central eclipse begins	16	54.7	W150	07.4	N26	40.1
Beginning of northern limit of umbra	16	54.9	W150	05.7	N26	51.8
Central eclipse at local apparent noon	18	33.7	W 95	36.5	N28	54.2
End of northern limit of umbra	19	23.2	W 53	31.8	N57	31.0
End of centre line; central eclipse ends	19	23.4	W 53	21.6	N57	22.4
End of southern limit of umbra	19	23.7	W 53	11.6	N57	13.8
End of southern limit of penumbra	19	45.3	W 33	58.4	N26	08.6
⊙ Eclipse ends; last contact with Earth	20	36.3	W 55	42.6	N41	59.9