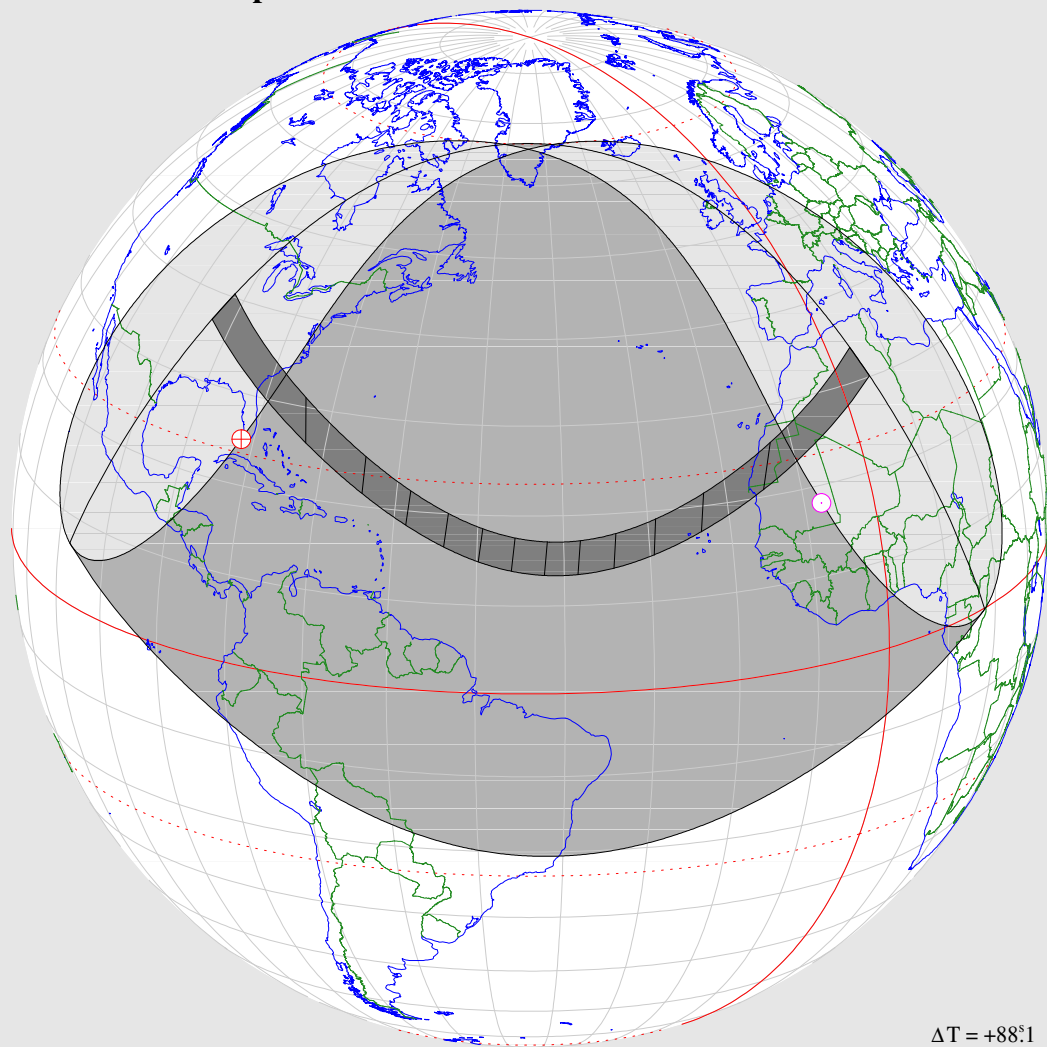


V. - Annular Eclipse of the Sun

1628 December 25



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$\Delta T = +88^s.1$
Globe centred on W 43°9' and N 18°6'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	12	15.2	W 81	49.2	N 25	00.8
Beginning of southern limit of penumbra	13	22.3	W 107	15.1	N 6	53.2
Beginning of southern limit of umbra	13	32.6	W 93	54.1	N 36	50.3
Beginning of centre line; central eclipse begins	13	34.6	W 93	05.7	N 38	36.7
Beginning of northern limit of umbra	13	36.8	W 92	14.2	N 40	25.5
Central eclipse at local apparent noon	15	02.3	W 45	14.5	N 15	35.0
End of northern limit of umbra	16	37.8	E 4	03.1	N 33	47.5
End of centre line; central eclipse ends	16	40.0	E 4	41.6	N 31	55.4
End of southern limit of umbra	16	42.0	E 5	18.5	N 30	05.9
End of southern limit of penumbra	16	52.3	E 17	20.5	S 0	09.8
⊙ Eclipse ends; last contact with Earth	17	59.4	W 7	38.1	N 18	04.7