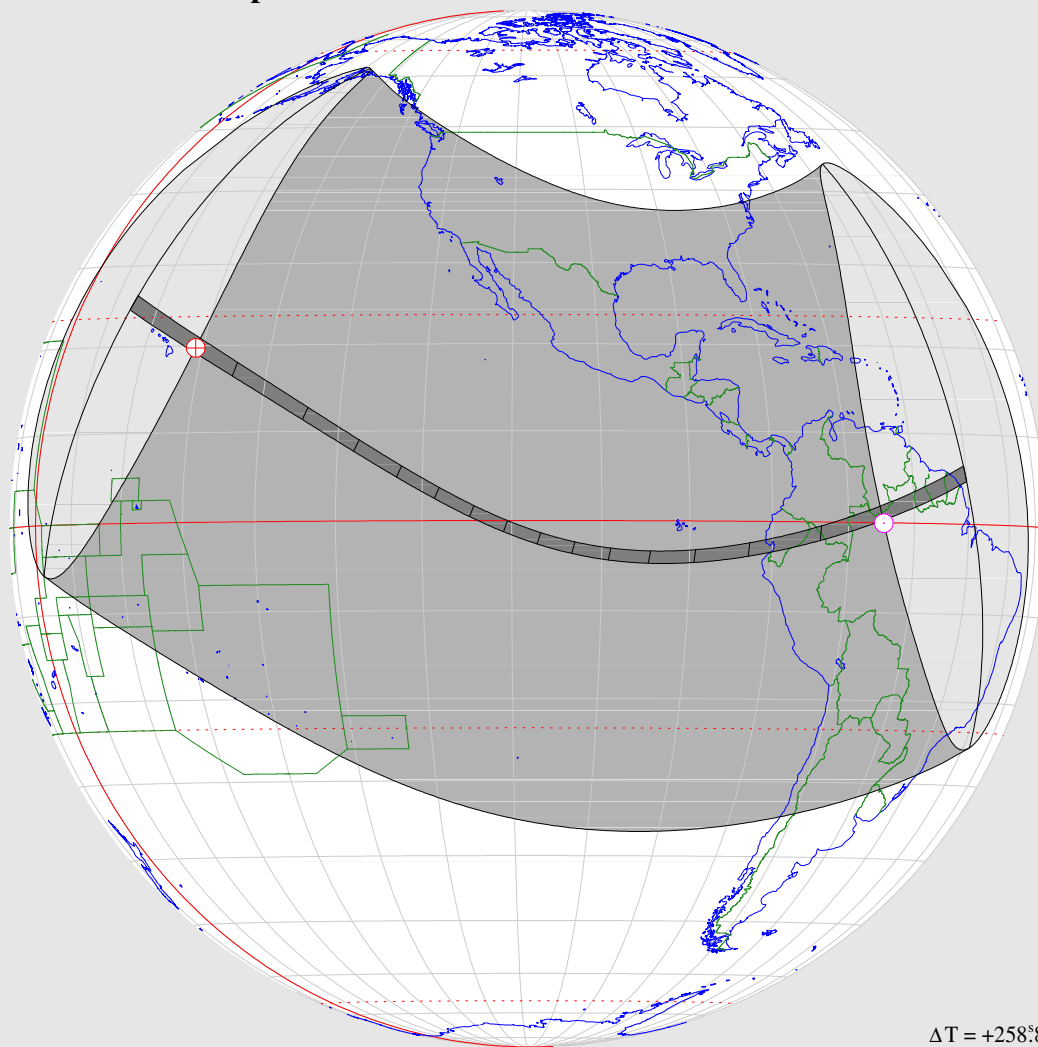


V. - Annular Eclipse of the Sun

1510 November 01



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$\Delta T = +258^s.8$
Globe centred on W 108°2 and S 0°9

Circumstances	Time (UT)	Longitude	Latitude
	h m	° /	° /
⊕ Eclipse begins; first contact with Earth	16 14.9	W151 07.4	N19 45.4
Beginning of southern limit of umbra	17 20.2	W165 42.7	N24 28.5
Beginning of centre line; central eclipse begins	17 20.4	W165 26.2	N25 20.9
Beginning of northern limit of umbra	17 20.7	W165 09.6	N26 13.5
Beginning of southern limit of penumbra	17 28.9	W177 50.4	S 5 36.7
Beginning of northern limit of penumbra	18 02.1	W148 26.1	N61 55.7
Central eclipse at local apparent noon	19 03.7	W109 46.9	S 0 58.8
End of northern limit of penumbra	20 17.2	W 55 51.2	N44 07.7
End of southern limit of penumbra	20 50.0	W 37 48.0	S25 20.2
End of northern limit of umbra	20 58.3	W 50 28.3	N 6 27.4
End of centre line; central eclipse ends	20 58.6	W 50 15.6	N 5 35.5
End of southern limit of umbra	20 58.8	W 50 02.8	N 4 43.9
⊙ Eclipse ends; last contact with Earth	22 04.0	W 64 50.8	S 0 02.8