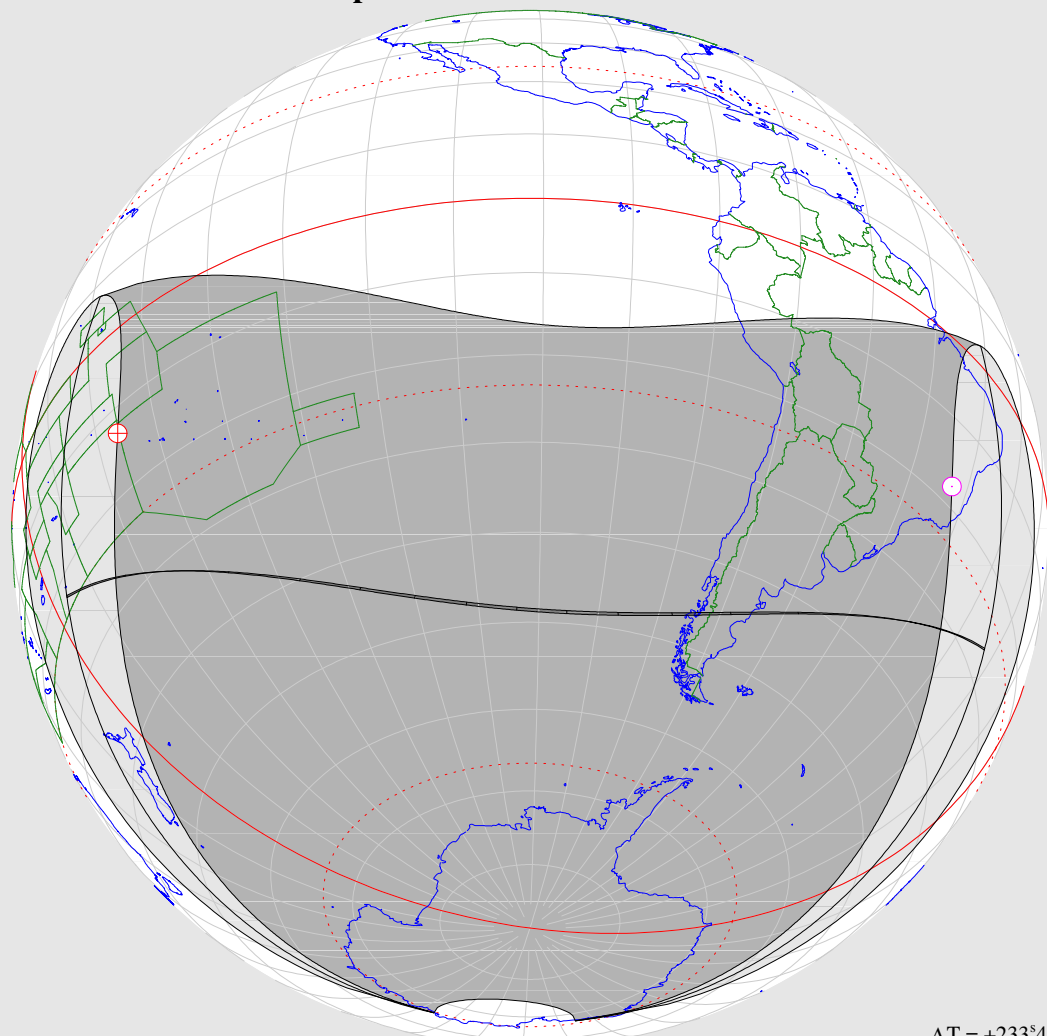


III. - Annular-Total Eclipse of the Sun

1527 November 23



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$\Delta T = +233^s.4$
Globe centred on W 101°5 and S 39°6

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	15	53.8	W156	15.3	S 13	05.0
Beginning of northern limit of penumbra	16	35.7	W158	13.4	N 7	32.7
Beginning of northern limit of umbra	16	56.6	W175	56.0	S 21	54.9
Beginning of centre line; central eclipse begins	16	56.7	W176	00.6	S 22	01.0
Beginning of southern limit of umbra	16	56.8	W176	05.3	S 22	07.1
Beginning of southern limit of penumbra	18	21.1	E 105	43.8	S 66	07.9
Central eclipse at local apparent noon	18	34.8	W101	04.2	S 48	37.4
End of southern limit of penumbra	18	44.3	E 65	16.7	S 67	30.1
End of southern limit of umbra	20	08.6	W 22	45.3	S 26	38.7
End of centre line; central eclipse ends	20	08.7	W 22	49.2	S 26	33.8
End of northern limit of umbra	20	08.8	W 22	53.2	S 26	29.0
End of northern limit of penumbra	20	29.7	W 40	58.7	N 2	53.5
⊙ Eclipse ends; last contact with Earth	21	11.5	W 42	47.8	S 17	41.3