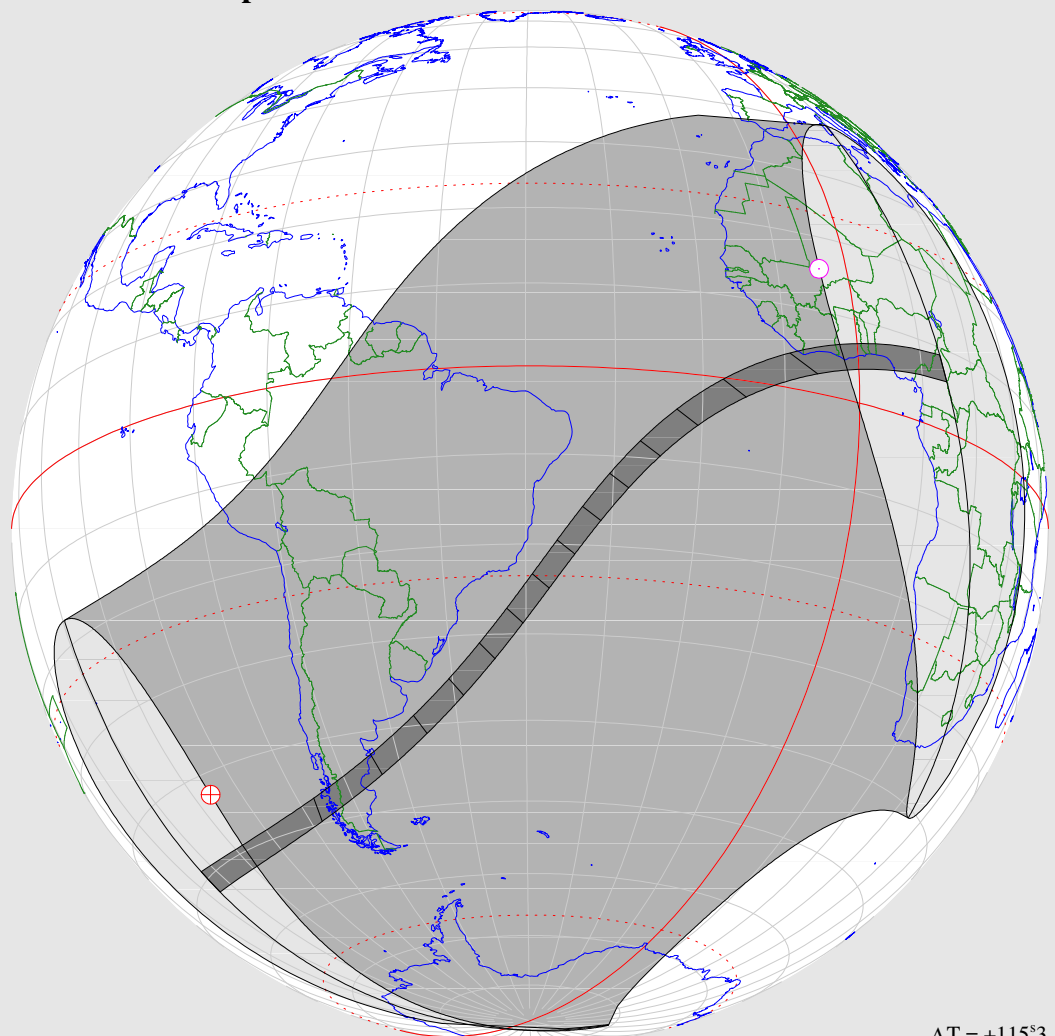


I. - Annular Eclipse of the Sun

2081 March 10



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$\Delta T = +115^{\text{s}}.3$
Globe centred on W 39°5' and S 18°3'

Circumstances	Time (UT)	Longitude	Latitude
	h m	° /	° /
⊕ Eclipse begins; first contact with Earth	12 20.8	W 96 06.9	S 42 27.3
Beginning of northern limit of penumbra	13 23.4	W109 28.8	S 17 07.9
Beginning of northern limit of umbra	13 30.4	W114 21.7	S 48 56.0
Beginning of centre line; central eclipse begins	13 31.6	W114 53.8	S 50 26.3
Beginning of southern limit of umbra	13 32.9	W115 28.2	S 51 57.4
Beginning of southern limit of penumbra	14 41.9	E 74 28.4	S 80 26.0
Central eclipse at local apparent noon	14 57.7	W 41 55.3	S 28 32.0
End of southern limit of penumbra	16 02.0	E 35 09.8	S 40 49.9
End of southern limit of umbra	17 10.5	E 14 28.6	N 6 01.1
End of centre line; central eclipse ends	17 11.8	E 14 03.8	N 7 32.2
End of northern limit of umbra	17 12.9	E 13 40.2	N 9 02.3
End of northern limit of penumbra	17 19.6	E 9 26.2	N 40 53.0
⊙ Eclipse ends; last contact with Earth	18 22.4	W 4 07.8	N 15 33.2