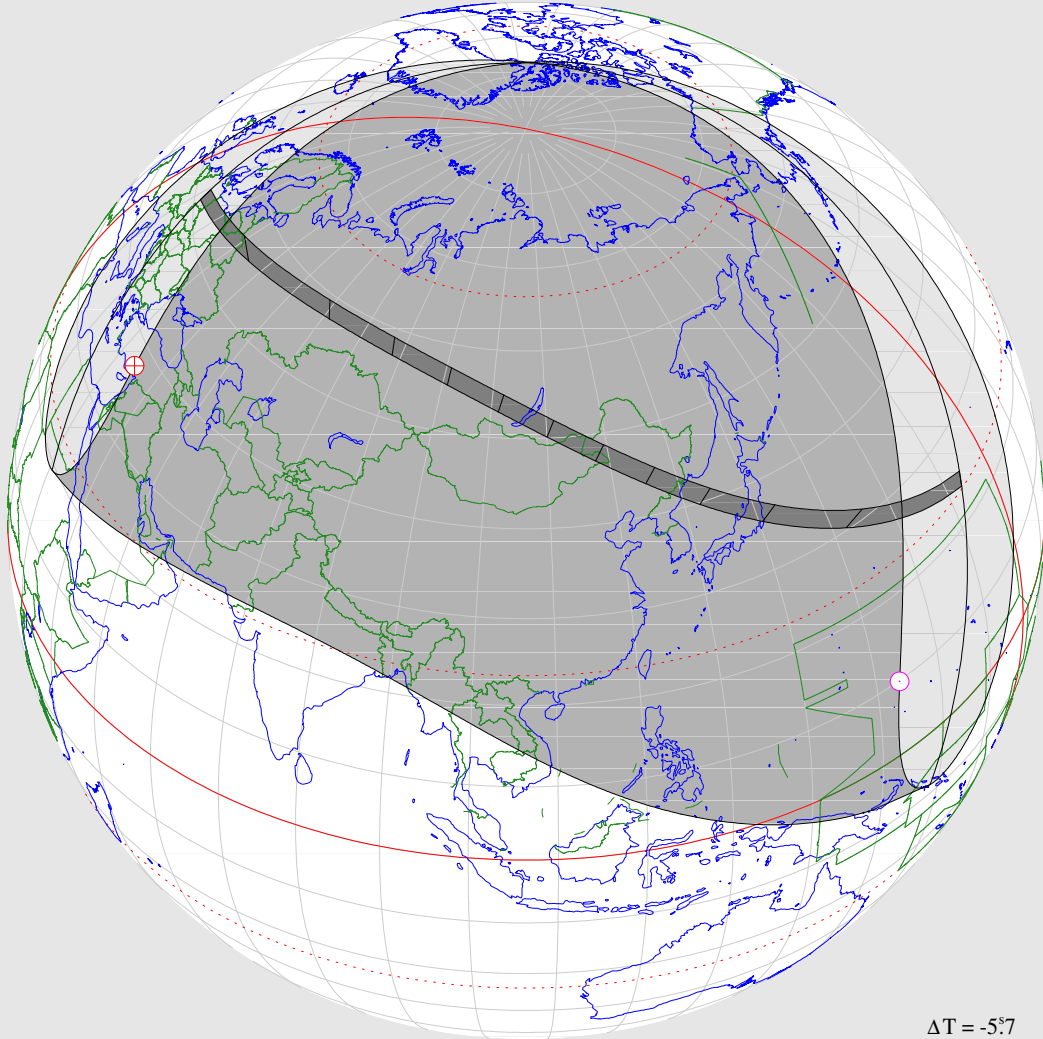


# IV. - Total Eclipse of the Sun

1887 August 19



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$\Delta T = -5^s 7$   
Globe centred on E 106°4 and N 40°9

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	3	05.5	E 34	24.3	N 37	26.4
Beginning of southern limit of penumbra	3	42.1	E 30	44.8	N 19	20.5
Beginning of southern limit of umbra	4	10.2	E 11	55.3	N 50	56.8
Beginning of centre line; central eclipse begins	4	11.1	E 11	16.1	N 51	38.1
Beginning of northern limit of umbra	4	12.1	E 10	35.5	N 52	19.8
Central eclipse at local apparent noon	5	15.5	E 102	01.1	N 53	48.2
End of northern limit of umbra	6	52.4	E 173	56.9	N 25	11.3
End of centre line; central eclipse ends	6	53.4	E 173	29.9	N 24	26.9
End of southern limit of umbra	6	54.3	E 173	03.6	N 23	42.9
End of southern limit of penumbra	7	22.2	E 158	23.5	S 8	24.1
⊙ Eclipse ends; last contact with Earth	7	58.9	E 153	25.2	N 9	52.7