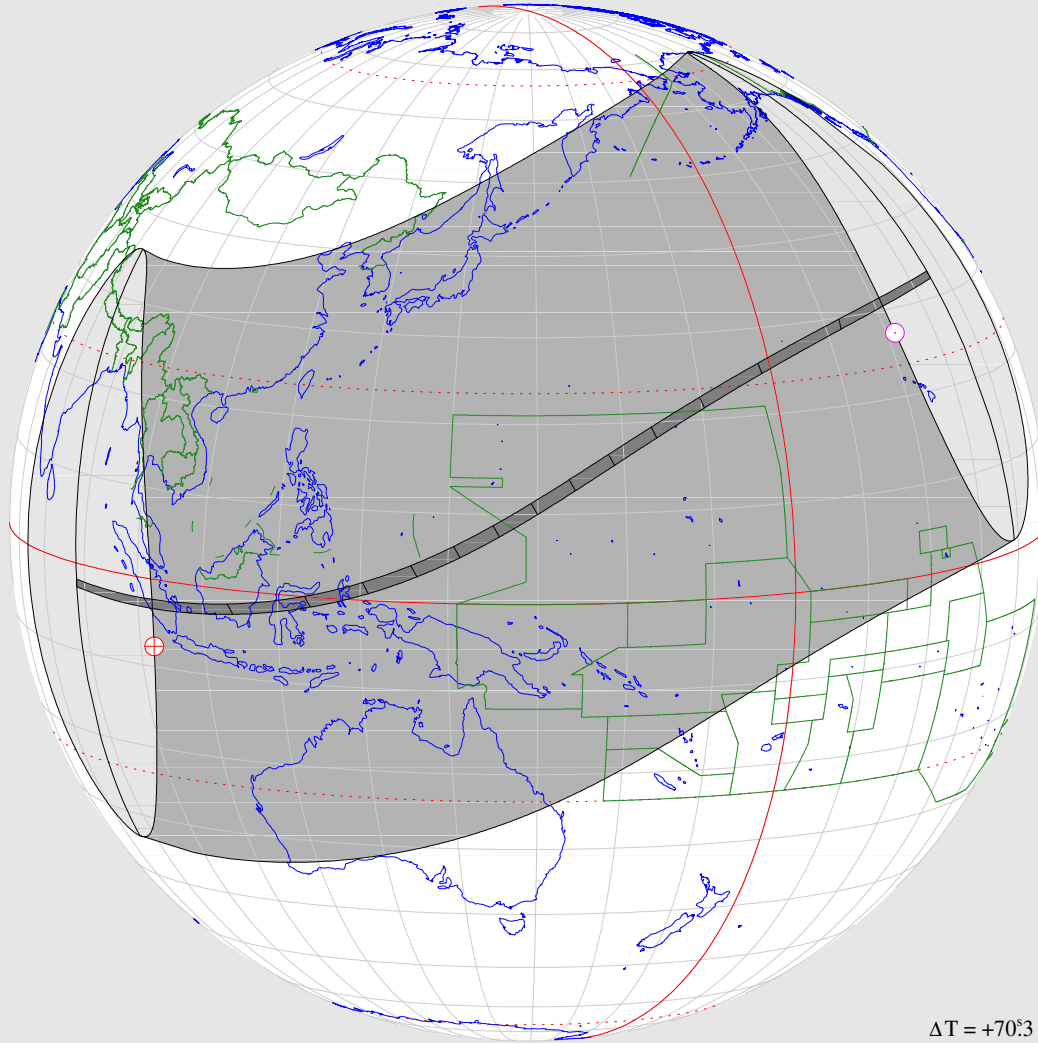


# I. - Total Eclipse of the Sun

2016 March 08-09



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$\Delta T = +70^s.3$   
Globe centred on E 148°9' and N 9°1'

Circumstances	Time (UT)		Longitude		Latitude	
	h	m	°	'	°	'
⊕ Eclipse begins; first contact with Earth	23	19.3	E 102	13.5	S 7	38.0
Beginning of southern limit of umbra	0	16.5	E 88	18.2	S 2	41.5
Beginning of centre line; central eclipse begins	0	16.7	E 88	17.6	S 2	15.2
Beginning of northern limit of umbra	0	16.9	E 88	16.9	S 1	48.8
Beginning of southern limit of penumbra	0	19.0	E 84	56.7	S 33	34.7
Beginning of northern limit of penumbra	0	53.5	E 82	26.1	N 35	52.7
Central eclipse at local apparent noon	2	05.6	E 151	13.3	N 11	33.7
End of northern limit of penumbra	3	00.3	W 144	47.3	N 70	20.0
End of southern limit of penumbra	3	35.4	W 141	19.1	N 1	15.5
End of northern limit of umbra	3	37.3	W 144	32.4	N 33	01.7
End of centre line; central eclipse ends	3	37.5	W 144	32.4	N 32	34.6
End of southern limit of umbra	3	37.7	W 144	32.3	N 32	07.5
⊙ Eclipse ends; last contact with Earth	4	34.9	W 158	20.1	N 27	12.6