

ASTRONOMICAL AND NAUTICAL INFORMATION.

EXPLANATION OF ASTRONOMICAL SYMBOLS AND ABBREVIATIONS.

☉ The Sun.	Astræa.	♋ Ascending Node.	♈ Aries.	0
☽ New Moon.	Junô.	♌ Descending Node.	♉ Taurus.	30
☾ First Quarter.	Ceres.	° Degrees	♊ Gemini.	60
☾ Full Moon.	♀ Pallas.	' Minutes } of Arc.	♋ Cancer.	90
☾ Last Quarter.	Metis.	" Seconds	♌ Leo.	120
☿ Mercury.	Dianna.	H. or h. Hours	♍ Virgo.	150
♃ Venus.	♃ Jupiter.	M. or m. Minutes } of	♎ Libra.	180
♁ The Earth.	♄ Saturn.	S. or s. Seconds } Time.	♏ Scorpio.	210
♂ Mars.	♅ Uranus.	N. North. E. East.	♐ Sagittarius.	240
♁ Flora.	♆ Neptune.	S. South. W. West.	♑ Capricornus.	270
♁ Vestu.	♁ Conjunction.	M. or m. Morning.	♒ Aquarius.	300
♁ Iris.	☐ Quadrature.	A. or a. Afternoon.	♓ Pisces.	330
♁ Hebo.	♁ Opposition.			

BEGINNING AND LENGTH OF THE SEASONS.

Sun enters ♋, Winter commences	Dec. 21, 1849,	at 5 18 Afternoon	} Mean Time at St. John.
" ♈, Spring "	Mar. 20, 1850,	" 6 37 Afternoon	
" ♊, Summer "	June 21, "	" 3 36 Afternoon	
" ♋, Autumn "	Sept. 23, "	" 5 36 Morning	
" ♌, Winter "	Dec. 21, "	" 11 14 Afternoon	

Length of the Winter of 1849-50,	- - -	n. h. m.	89 1 21
" " Spring of 1850,	- - -	- - -	92 20 57
" " Summer "	- - -	- - -	93 14 0
" " Autumn "	- - -	- - -	89 17 38
Length of the Tropical Year 1850,	- - -	- - -	365 5 56
Mean Length of the Tropical Year,	- - -	- - -	365 5 48 ⁴ / ₅

ECLIPSES OF THE SUN.

In the year 1850, there will be only two Eclipses, both of the Sun.

I. An Annular Eclipse of the Sun, February 11, 1850, invisible in New-Brunswick. The central line of this Eclipse passes over the Earth, from West to East, beginning in Southern Africa, in Lat. 10° 21' S., and Long. 22° 53' E., traversing the Indian Ocean, and East Indian Islands, and ending in the North Pacific, in Lat. 15° 49' N., and Long. 143° 6' E. The Northern limit, or the line traversed by the Northern edge of the Moon's Penumbra, begins in Lat. 24° 20' N., and Long. 25° 29' E., passes over the Southern part of Arabia and the Chinese Empire, and ends in Lat. 50° 3' N., and Long. 136° 28' E. The Southern line of simple contact begins in Lat. 46° 36' S., and Long. 7° 43' E., passes over the Southern Ocean and Australia, and ends in Lat. 17° 49' S., and Long. 155° 50' E.

II. A total Eclipse of the Sun, August 7, 1850, invisible in New-Brunswick. The centre of the shadow in this Eclipse passes over the Earth, from West to East, beginning in Lat. 12° 17' N., and Long. 150° 5' E., traversing the Pacific Ocean and ending off the Western coast of South America, in Lat. 9° 42' S., and Long. 80° 28' West. The Northern line of simple contact begins in Lat. 43° 8' N., and Long. 133° 30' E., passes over the North Pacific and South-Western parts of the United States, and ends in the Atlantic, in Lat. 41° 20' N., and Long. 66° 36' W. The Southern line begins in Lat. 18° 33' S., and Long. 156° 46' E., passes over the South Pacific, and ends in Lat. 40° 13' S., and Long. 98° 17' W.

TIMES O

AND OF ITS G

The Pole Star revolves round its meridian only twice in each passage, and also of each month, true meridian. day in each mon

	BEL.
Jan. 1	h. 6
Feb. 1	4
Mar. 1	2
Apr. 1	0
May 1	10
June 1	8
July 1	6
Aug. 1	4
Sept. 1	2
Oct. 1	0
Nov. 1	10
Dec. 1	8
.. 31	6

DIRECTIONS

The variation and then if the b. The meridian u. Pole Star is at its in the true time observation not t. time of elongati somewhat the fo

1. Drive two uppermost ends, posts about four smooth on the u
2. Prepare a p side. Let one o of the beard, an the plank resting
3. At about t a plumb be susp should be of suc and the plumb s

These prepar elongation, plac plank, and slide