

ECLIPSES IN 1849.

There will be four Eclipses this year; two of the Sun, and two of the Moon.

I. An Eclipse of the Sun will happen on the 22nd of February, at the time of New Moon, in the evening, invisible. It will be visible in the eastern parts of Asia, in the North Pacific Ocean, and in Russian America. It will be central and annular on the meridian in longitude 153 deg. 9 min. east from Greenwich, and latitude 41 deg. 22 min. north.

II. There will be an Eclipse of the Moon on Thursday, March 8th, in the evening, commencing at 6 h. 14 m.; middle, 7h. 44m.; end, 9h. 14 m.; visible wholly or in part, throughout the United States and Mexico, and in the greater part of British America.

Magnitude at the middle of the Eclipse, 8.86 digits on the Moon's southern limb.

III. There will be an Eclipse of the Sun at the time of the New Moon, on the 18th of August, in the morning, invisible. This Eclipse will be visible in most of the Indian Ocean, in the south-eastern part of Africa, in Madagascar, and in the southern parts of Australia. It will be central and total on the meridian in longitude 91 deg. 0 min. east from Greenwich, and latitude 30 deg. 8 min. north.

IV. There will be an Eclipse of the Moon on the 2nd of September, at the time of Full Moon in the morning, invisible. It will therefore be visible in the opposite hemisphere, in latitude 7.90 digits on the Moon's northern limb.

CHRONOLOGICAL CYCLES, AND MOVEABLE FEASTS OF THE CHURCH.

Dominical Letter	G	Shrove Sunday	Feb. 18
Golden Number.....	7	Easter Sunday	April 8
Epact	6	Rogation Sunday	May 13
Solar Cycle	10	Ascension Day	May 17
Roman Indiction	7	Whit Sunday	May 27
Julian Period	6562	Trinity Sunday.....	June 3
Septuagesima Sunday	Feb. 4	Advent Sunday.....	Dec. 2

CUSTOMARY NOTES.

1. Venus will be Evening Star until May 12th, then Morning Star until March 2nd, 1850.
2. The Moon will run highest, this year, about the 7th degree of Cancer, and lowest about the 7th degree of Capricorn.
3. Latitude of Herschel, about 36 min. south this year.
4. Longitude of the Moon's Ascending Node in the middle of this year, 5 signs, 6 degrees, or 156 degrees.
- 5 Mean obliquity of the Ecliptic in the middle of this year, 23 deg. 27 min. 32.2 sec. True obliquity at the same time, 23 deg. 27 min. 23.2 sec.

EQUINOXES AND SOLSTICES.

		D.	H.	M.	
Vernal Equinox	March	20	11	43	Morning.
Summer Solstice	June	21	8	38	Morning.
Autumnal Equinox	Sept.	22	10	33	Evening.
Winter Solstice	Dec.	21	4	12	Evening.

H. M. MAGNETICAL OBSERVATORY, TORONTO.

Director—Captain J. H. Lefroy, R.A., F.R.S.

Establishment—Four Non-commissioned Officers of the Royal Artillery, as Assistants.

BRITISH AMERICAN ATLANTIC STEAM PACKETS,

Known as the CUNARD LINE, leave Liverpool every Saturday, from 1st April to 1st of December, and on every second Saturday from 1st December to 1st April. Leave New York and Boston alternately on Wednesdays. The steamers call at Halifax on their route each way, to land and receive mails and passengers.

UNITED STATES ATLANTIC STEAM PACKETS

Leave Bremen on the 15th, and Southampton and New York on the 20th of each month.