

BEGINNING AND LENGTH OF THE SEASONS.

Winter begins Dec. 21, 1852, at 10h 59m M. mean time.
 Spring begins March 29, 1853, at 0h 11m A.
 Summer begins June 21, 1853, at 9h 9m M.
 Autumn begins Sept. 22, 1853, at 11h 22m A.
 Winter begins Dec. 21, 1853, at 4h 58m A.

D. H. M.
 Length of the Winter of 1852-53, 89 1 12

“ Spring of 1853, 92 20 58

“ Summer of 1853, 93 14 13

“ Autumn of 1853, 93 14 13

Length of the Tropical Year, 1853, 365 5 59

Mean length of the Tropical Year, 365 5 48 19.20.

ECLIPSES IN 1853.

There will be three this year—two of the Sun and one of the Moon.

1. June 6—An annular eclipse of the sun, invisible in the British Provinces, but central and visible in the North and South Pacific Oceans, and in South America. It will be partial in some of the Southern and Western parts of the United States.

2. June 20 and 21—a partial eclipse of the Moon.

First contact with Penumbra, 20th, 11h 38m A.

First contact with the shadow, 21st, 0 50 M.

Middle of the Eclipse, 1 47 M.

Last contact with the shadow, 2 35 M.

Last contact with the Penumbra, 3 56 M.

Magnitude of the Eclipse (Moon's diameter equal to 1) 0.204 on the Northern limb.

3. November 30—a total Eclipse of the Sun, invisible in the British Provinces, but central and total in the Pacific Ocean and South America. It will be partial in the Southern part of California and in part of Texas.

Mercury will be a Morning Star until Feb. 20; after which it will be an Evening Star until April 10; thence a Morning Star until June 13; after which it will be an Evening Star until August 17; thence a Morning Star until Oct. 2; thence it will be an Evening Star until Dec. 3; after which it will be a Morning Star.

Venus will be a Morning Star until May 16; after which it will be an Evening Star to the close of the year.

the old mode of reckoning by apparent time.