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our Meridian at fo
first, and will rise
earlier every day,
pass our Meridian
Meridian four min

The Planets of the Solar System are *primary*, and our EARTH has one. Of the *primary* planets, *Mercury* and *Venus* are *terrestrial*; and others are *Jovian* like the *Sun* than the *Z*

Distance from the Sun

Mercury,	37 million
Venus,	68 millions
Earth,	95 millions
Mars,	142 millions
Jupiter,	485 million
Saturn,	890 millions
Uranus,	1800 millio

The *Solar year* is the time which elapses over the twelve signs of the zodiac. The *Civil year* is the time of three years in succession. The *Sidereal year* is the time which a *star* year is 365 days, 6h. 9m. 10s. The *Advance* of the orbit is the excess over the *Sidereal year* of the measure of the annual

[Mean Time at St. John's.]

First contact with Penumbra (14th)	11h, 31m, 0s, p.m.
First contact with Shadow (15th)	1h, 31m, 0s, a.m.
Middle of Eclipse	1h, 48m, 41s, "
Last contact with Shadow	2h, 6m, 23s, "
Last contact with Penumbra	4h, 6m, 23s, "

The Eclipses of Jupiter's Satellites (given in the Greenwich Almanac to the nearest tenth of one second of time) afford the easiest means of knowing the Greenwich time, and thence to determine the longitude of whatever place on the globe, the observer may be situated. No calculation is required, but they cannot be observed at sea, the motion of the Ship rendering it impossible to secure that steadiness of the instruments necessary to observe them.

VENUS will rise before the SUN, and thus will be a Morning Star till the ninth of July; from this date she will rise after the SUN, and thus will be an Evening Star to the end of the year.

MARS will rise after the SUN, and thus will be an Evening Star till the thirteenth of May; from this date he will rise before the SUN, and thus will be a Morning Star to the end of the year.

True Latitude of (

Longitude (West of