

# SOLAR AND LUNAR ECLIPSES

IN THE YEAR 1830.

*Feb. 22—The Sun Eclipsed, invisible.*

♂ at 11h. 19m. in Lon. 11 S. 4° 7½' ☉'s Lat. 1° 23½' N.

*March 9—The Moon Eclipsed, partly visible.*

Beginning of the Eclipse.....6h. 17m. morn.

Beginning of total darkness.....7h. 22m.

Ecliptic ☾ .....8h. 13m.

Middle .....8h. 14m.

End of total darkness.....9h. 16m.

End of the Eclipse.....10h. 11m.

Digits Eclipsed 20° 0' from the Southern side of the ☉'s shadow.

*March 24—The Sun Eclipsed, invisible.*

♂ at 9h. 24m. Morn. in Lon. 0 S. 3° 28' ☉'s Lat. 1° 17½' S.

*Aug. 18—The Sun Eclipsed, invisible.*

♂ at 6h. 36m. Morn. in Lon. 4 S. 24° 38' ☉'s Lat. 1° 23' S.

*Sept. 2—The Moon Eclipsed, partly visible.*

Beginning of the Eclipse.....3h. 33m. Even.

Beginning of total darkness.....4h. 30m.

Ecliptic ☾ .....5h. 20m.

Middle.....5h. 21m.

End of total darkness.....6h. 11m.

End of Eclipse.....7h. 9m.

Digits Eclipsed 21° 40' from the Northern side of the ☉'s shadow.

*Sept. 16—The Sun Eclipsed.*

♂ at 9h. 11m. Even. in Lon. 5 S. 23° 39' ☉'s Lat. 1° 13' N.

## SIGNS OF THE ZODIAC.

First, ♈ Aries.

2, ♉ Taurus.

3, ♊ Gemini.

4, ♋ Cancer.

5, ♌ Leo.

6, ♍ Virgo.

Seventh, ♎ Libra.

8, ♏ Scorpio.

9, ♐ Sagittarius.

10, ♑ Capricornus.

11, ♒ Aquarius.

12, ♓ Pisces.

## NAMES AND CHARACTERS OF THE PLANETS.

☉ The Sun.

☾ The Moon.

☿ Mercury.

♀ Venus.

♁ The Earth.

♂ Mars.

♃ Jupiter.

♄ Saturn.

♅ Georgian.

## NAMES AND

♁ A Planet's

☾ The Descen

♂ Conjunction

☐ Quadrature

three sign

♂ Opposition,

or differi

N. North.

S. South.

The Planet (☉)  
of February—M  
Evening Star to

The Eclipses a  
so near the horiz  
is clear.