

## ECLIPSES IN 1841.

There will be six Eclipses this year—four of the Sun and two of the Moon—as follows.

The first will be a small partial eclipse of the Sun, on Friday, January 22d, at the time of New Moon, visible only in the southern extremity of the Southern Ocean.

The second will be a total eclipse of the Moon, on Friday, February 5th, visible throughout the whole of the western continent and the Pacific Ocean.

First contact of the Moon with the	Total darkness ends, . . .	9h. 45m.
Earth's penumbra, . . . 6h. 14m.	End of the eclipse, . . .	10 43
Eclipse begins, . . . 7 10	Last contact of the Moon	
Total darkness begins, . . . 8 8	with the Earth's pe-	
Middle of the eclipse, . . . 8 56	numbra, . . . . .	11 39'

*Apparent, or Solar time, Evening.*

Depth of immersion in the Earth's shadow, 20.62 digits from the northern side.

The third will be a partial eclipse of the Sun, on Sunday, February 21st, early in the morning, at the time of New Moon; invisible in America; but visible in the North Atlantic Ocean, Iceland, and East Greenland.

The fourth will also be of the Sun, on the 18th of July, at 9h. 17m. in the morning, invisible in America, by reason of the Moon's south latitude; but may be seen at Greenland and in the northern European countries.

The fifth will be another great and total eclipse of the Moon, on Monday, August 2d, at the time of the Full; partially visible throughout the whole of the Western continent, and the Pacific Ocean.

First contact of the moon with the	Moon sets, . . . . .	5h. 2m.
Earth's penumbra, . . . 1h. 52m.	End of total darkness, . . .	5 51
Beginning of the eclipse, 3 1	End of the eclipse, . . .	6 56
Do. of total darkness, . . 4 6	Last contact of the Moon	
Middle of the eclipse, . . 4 59	with the Earth's penumbra, 8 5	

*Apparent, or solar time, in the morning.*

Digits eclipsed, 13.58—nearly in the centre of the Earth's shadow.

The sixth and last will be of the Sun, on Monday, August 16th, in the afternoon, at the time of New Moon, a very small eclipse, and invisible here by reason of the Sun's southern latitude. This eclipse will be visible in the South Pacific Ocean, and in some parts of the Southern Ocean.

## MORNING AND EVENING STARS.

The Planet Venus will be *Evening Star* till May 14th, thence *Morning Star* through the year.

Jupiter will be *Morning Star* till June 5th, thence *Evening Star* till December 22d, and then again *Morning Star*.

Mars will also be *Morning Star* till April 17th, thence *Evening Star* to the end of the year.

Saturn will be *Morning Star* till June 21st, thence *Evening Star* till December 27th, when he will again be *Morning Star*.