

ECLIPSES FOR THE YEAR 1890.

During this year there will be three eclipses, two of the Sun, and one of the Moon.

I. January 16-17, there will be an Annular Eclipse of the Sun, not visible in Canada.

This Eclipse begins on the earth generally, June 16th, 18 h. 55 m., meantime at Greenwich, in longitude $13^{\circ} 58'$ west of Greenwich and latitude $0^{\circ} 47'$ North.

This Eclipse ends on the earth generally June 17th, $0^{\circ} 55'$ in longitude $82^{\circ} 44'$ east of Greenwich, and latitude $14^{\circ} 27'$ North.

II. December 25-26, there will be a partial Eclipse of the Moon, invisible in Canada.

The details of this Eclipse are not of much importance to us in Canada. The first contact with the shadow occurs at 14° from the Northernmost point of the Moon's limb towards the West. The last contact at 19° towards the West, in each case for *direct* image.

III. December 15th, there will be a total Eclipse of the Sun, invisible in Canada.

This Eclipse begins on the earth generally, December 11th, 12 h. 28 m., meantime at Greenwich, in longitude $77^{\circ} 46'$ east of Greenwich, and in latitude $8^{\circ} 19'$ South.

This Eclipse ends on the earth generally, December 11th, 17 h. 42 m., in longitude $165^{\circ} 0'$ west of Greenwich, and in latitude $26^{\circ} 31'$ South.

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