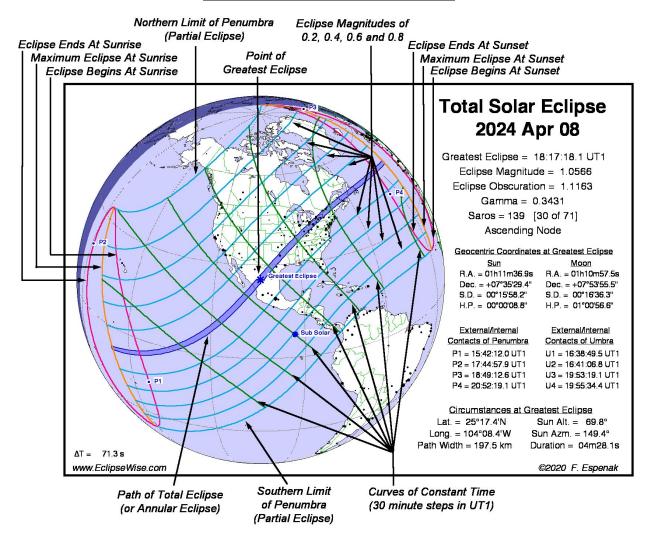
## **Global Solar Eclipse Maps**

## **Key to Global Solar Eclipse Maps**



## **Explanation of Terms Used in Global Solar Eclipse Maps**

**Greatest Eclipse** – The instant when the distance between the axis of the Moon's shadow cone and the center of Earth reaches a minimum (in Universal Time<sup>6</sup> or UT1).

**Eclipse Magnitude** – The fraction of the Sun's diameter occulted by the Moon at the instant of greatest eclipse (for total and annular eclipses this value is the ratio of diameters of the Moon and the Sun).

**Eclipse Obscuration** – The fraction of the Sun's area occulted by the Moon at the instant of greatest eclipse.

**Gamma** – The minimum distance from the lunar shadow axis to the center of Earth (units of Earth equatorial radii). **Saros Series** – The Saros series that the eclipse belongs to. The numbers in "[]" are the eclipse's sequential position and the number of eclipses in the Saros series.

Node - The orbital node near which the eclipse takes place (Ascending Node or Descending Node).

## Geocentric Coordinates of the Sun and the Moon at Greatest Eclipse

**R.A.** – Right Ascension **S.D.** – Semi-Diameter (i.e. - radius)

**Dec. –** Declination **H.P. –** Horizontal Parallax

**External/Internal Contacts of Penumbra and Umbra** – Instants when each shadow enters or exits the surface of Earth (Penumbral contacts shown on map as: P1, P2, P3, and P4; umbral contacts are located at the ends of the central path). All times are in Universal Time (UT1)

**Circumstances of Greatest Eclipse** – Geographic location (Lat., Long.) of the shadow axis, the altitude and azimuth of the Sun, width of the central path, and the central duration of totality or annularity.

<sup>&</sup>lt;sup>6</sup> Universal Time or UT1 is the modern replacement for Greenwich Mean Time