

Comet ISON (C/2012 S1) In 2013-2014

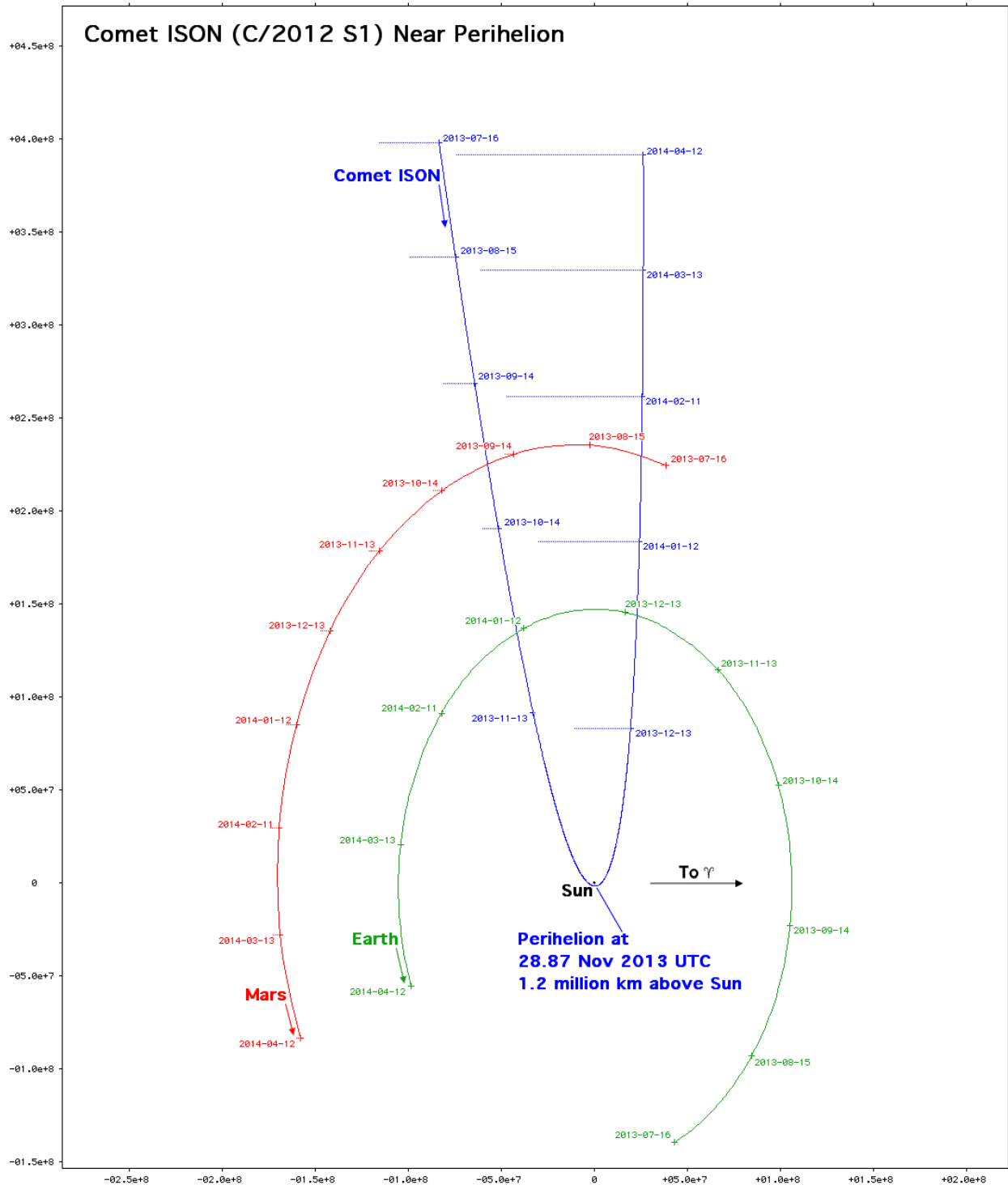


Figure 1. This heliocentric plot is viewed from a perspective 45° north of Earth's orbit plane (the ecliptic) with Comet ISON's orbit plane nearly face-on and inclined 61.8° to the ecliptic. Dotted lines are projections from ISON's orbit onto the ecliptic, indicating both of the comet's nodes are inside Earth's orbit. Except for a brief period in late November 2013, ISON will remain well north of the ecliptic plane. This geometry will favor viewing from Earth's northern hemisphere.

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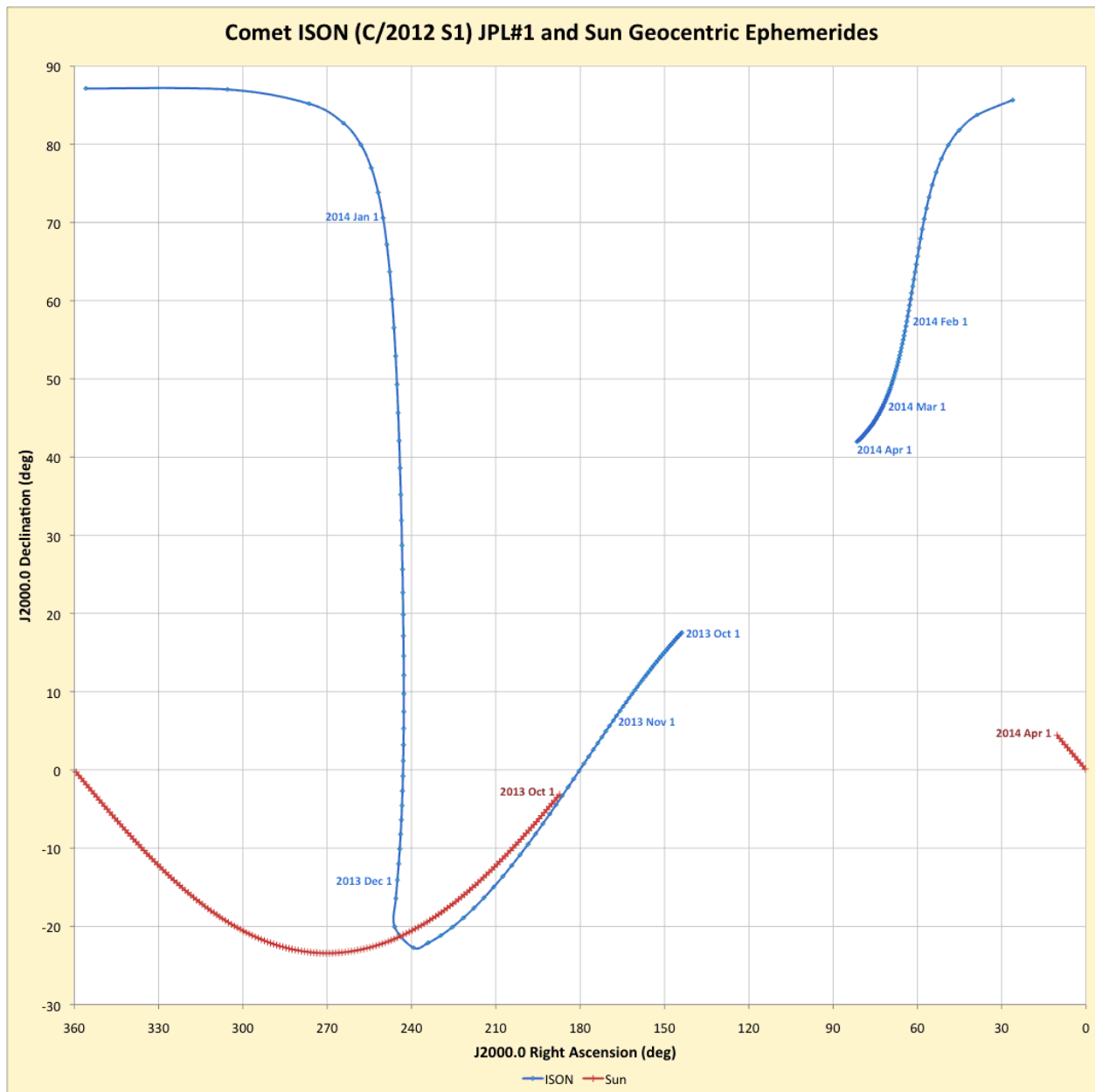


Figure 2. The apparent paths of ISON (blue) and the Sun (red) are plotted from 2013 October 1 to 2014 April 1 on the geocentric celestial sphere's interior (east is left and north is up). Note the Sun's path coincides with a sector of the ecliptic plane projected onto this sphere. Prior to perihelion in late November, ISON will be visible to earthbound observers above the eastern horizon before sunrise. After perihelion, ISON rapidly moves north to become circumpolar at U.S. latitudes by late December 2013. As ISON moves south in early 2014, it enters the evening sky to become visible above the western horizon after sunset.