

# 20120725 IIXI IIXI TwXI

**Event date:** 2012-Jul-25 UT

**Predicted event times:** 00:40 to 13:25 UT

**Recommended wing data outside event:** +/- 30 minutes

**Predicted photographic magnitude drop:** 0.200

**Event Type:** Io intensity extinction twice by Europa's atmosphere and then Io's Torus tip

**Extinction source:** Europa's atmosphere and Io's western Torus tip

**Photometric target:** Io

**Predicted target photographic magnitude at minima:** 5.849, 5.813, 5.940

**Photometric reference:** Europa

**Separation of bodies at minima:** 4.4"

**Radii at minima:** 11.4 Europa radii

**Special situation:** This is likely the most interesting JEE of this part of JEE2012! Europa passes in front of Io twice, and shortly after the second conjunction Io traverses the western Torus tip.

|          | UT day time       | II Radii<br>Separation | Bodies<br>Sep " | Event Type  | Target<br>P mag | Predicted<br>mag drop |
|----------|-------------------|------------------------|-----------------|-------------|-----------------|-----------------------|
| Start    | 2012-Jul-25 00:40 | 25.0                   | 9.7             | II X I TwXI | 5.740           |                       |
| Minima 1 | 2012-Jul-25 03:15 | 11.4                   | 4.4             | II X I TwXI | 5.849           | 0.108                 |
| Minima 2 | 2012-Jul-25 08:20 | 15.9                   | 6.2             | II X I TwXI | 5.813           | 0.073                 |
| Minima 3 | 2012-Jul-25 12:40 |                        | 28.7            | II X I TwXI | 5.940           | 0.200                 |
| End      | 2012-Jul-25 13:25 |                        | 36.6            | II X I TwXI | 5.781           |                       |



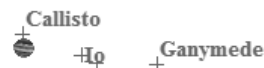
Start 2012-Jul-25 00:40



Minima 1 2012-Jul-25 03:15



Minima 2 2012-Jul-25 08:20

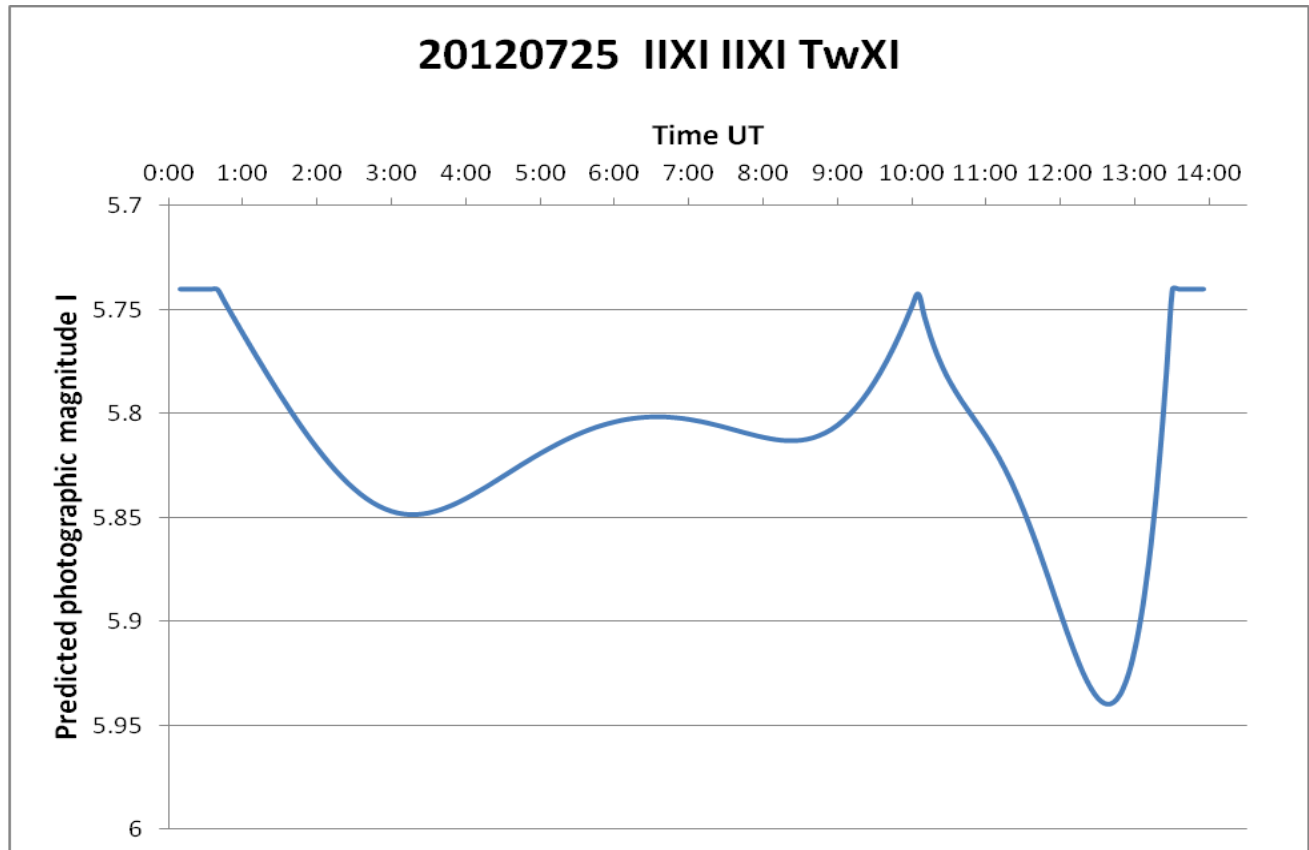


Minima 3 2012-Jul-25 12:40



End 2012-Jul-25 13:25

### Predicted Lightcurve



#### Jovian Extinction Event Predictions:

Scott Degenhardt June 15, 2012

Send data correspondence to [scotty@scottysmightymini.com](mailto:scotty@scottysmightymini.com)

<http://scottysmightymini.com/JEE/>

Predictions package: <http://scottysmightymini.com/JEE/JEE2012.PDF>

#### Ephemeris Source:

<http://ssd.jpl.nasa.gov/horizons.cgi>

Solar System Dynamics Group, Horizons On-Line Ephemeris System

4800 Oak Grove Drive, Jet Propulsion Laboratory

Pasadena, CA 91109 USA

Information: <http://ssd.jpl.nasa.gov/>

Connect : telnet://ssd.jpl.nasa.gov:6775 (via browser)

telnet ssd.jpl.nasa.gov 6775 (via command-line)

Author : [Jon.Giorgini@jpl.nasa.gov](mailto:Jon.Giorgini@jpl.nasa.gov)

#### Jovian Moon Configuration Graphic:

Guide 8 by Bill Gray

<http://www.projectpluto.com/>