

Jupiter's Triple Shadow Transit on October 12, 2013 (Eastern Daylight Time)

Originally noticed in the October 2013 issue of Astronomy magazine, page 43. The event times were compared with Sky & Telescope's online [Jupiter's Moons utility](#), the [RASC Observer's Handbook 2013](#) (data from the [IMCCE](#)), [SkyTools 3](#), and online articles by S&T's [Sean Walker](#).

Callisto's Shadow (IV)	Enter, Oct 11th	Exit, Oct 12th
Astronomy Magazine	11:12 pm	1:37 am
RASC Handbook 2013	11:12 pm	1:37 am
Sky & Telescope Jupiter's Moons utility Sean Walker	<i>11:34 pm</i> 11:05 pm	<i>1:06 am</i> 1:37 am
SkyTools 3	11:07 pm	1:39 am

Europa's Shadow (II)	Enter, Oct 11th	Exit, Oct 12th
Astronomy Magazine	11:24 pm	2:01 am
RASC Handbook 2013	11:24 pm	2:01 pm
Sky & Telescope Jupiter's Moons utility Sean Walker	11:16 pm 11:25 pm	2:04 am --
SkyTools 3	11:23 pm	2:00 am

Io's Shadow (I)	Enter, Oct 12th	Exit, Oct 12th
Astronomy Magazine	12:32 am	<i>1:48 am</i>
RASC Handbook 2013	12:32 am	2:44 am
Sky & Telescope Jupiter's Moons utility Sean Walker	12:28 am 12:32 am	2:44 am --
SkyTools 3	12:30 am	2:44 am

The S&T values for Callisto (italicized in red) look unreliable. Astronomy magazine's data appears to be from the RASC Handbook, although the Io exit time (italicized in bold red) looks like a typo. It's actually the same as the ingress time of Io itself. In any case, 12:32 am is a reasonable prediction for the starting time of the triple shadow event, and 1:37 am the end, as highlighted in the rose-colored boxes.

However, a major difficulty for observers in New Jersey will be Jupiter's position. On October 11th for 40°N, 75°W, Jupiter rises at 11:38 pm. At 12:30 am on October 12th, Jupiter will be at a mere 8½° altitude, and at 1:30 am, 19½° altitude, so seeing conditions will not be ideal, especially at the start.