SkyNews Astronomical events for Indian observers

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Events Involving the Moons of Jupiter (September 2022)

The table below gives timings of eclipses, occultations, transits and shadow transits of the moons of Jupiter, suitable for Indian observers. The timings are given in Indian Standard Time (IST).

The output is given as per the following abbreviations and notations:

Columns: **1** = date; **2** = time; **3** = satellite number; **4** = event type; and **5** = phase.

Satellite numbers: **1** = Io; **2** = Europa;

3 = Ganymede; and **4** = Callisto.

Event type: **Ec** = eclipse; **Oc** = occultation; **Tr** = transit; and **Sh** = shadow transit.

Phase: **D** = disappear; **R** = reappear;

I = ingress; and **E** = egress.

Satellites of Jupiter in September 2022

1	2	3	4	5	1	2	3	4	5
10	05:48:42	1	Sh	E	19	02:12:18	1	Sh	E
10	20:33:42	2	Sh	I	19	02:24:06	1	Tr	E
10	21:27:12	2	Tr	I	19	20:27:00	2	Oc	R
10	23:07:06	2	Sh	E	19	21:15:30	1	Ec	D
10	23:52:54	2	Tr	E	19	23:39:48	1	Oc	R
11	00:52:30	1	Ec	D	20	20:41:06	1	Sh	E
11	03:30:30	1	Oc	R	20	20:50:06	1	Tr	E
11	22:02:42	1	Sh	I	21	05:35:54	3	Sh	I
11	22:27:18	1	Tr	I	24	19:32:24	3	Ec	D
12	00:17:24	1	Sh	E	24	22:31:06	3	Oc	R
12	00:40:06	1	Tr	E	25	01:44:12	2	Sh	I
12	21:56:24	1	Oc	R	25	01:53:12	2	Tr	I
13	01:34:24	3	Sh	I	25	04:16:54	2	Sh	E
13	03:08:30	3	Tr	I	25	04:19:48	2	Tr	E
13	04:30:06	3	Sh	E	25	04:41:24	1	Ec	D
14	05:40:24	3	Tr	E	26	01:52:36	1	Sh	I
15	04:13:24	2	Ec	D	26	01:54:48	1	Tr	I
16	05:28:54	1	Sh	I	26	04:07:18	1	Sh	E
17	05:45:18	1	Tr	I	26	04:08:00	1	Tr	E
17	19:14:06	3	Oc	R	26	20:10:06	2	Ec	D
17	23:08:54	2	Sh	I	26	22:44:54	2	Ec	R
17	23:40:30	2	Tr	I	26	23:10:00	1	Ec	D
18	01:42:00	2	Sh	E	27	01:23:54	1	Ec	R
18	02:06:42	2	Tr	E	27	20:20:48	1	Tr	I
18	02:46:54	1	Ec	D	27	20:21:30	1	Sh	I
18	05:14:00	1	Oc	R	27	22:34:00	1	Tr	E
18	23:57:36	1	Sh	I	27	22:36:06	1	Sh	E
19	00:11:12	1	Tr	I	28	19:52:30	1	Ec	R

Example 1: An event listed as

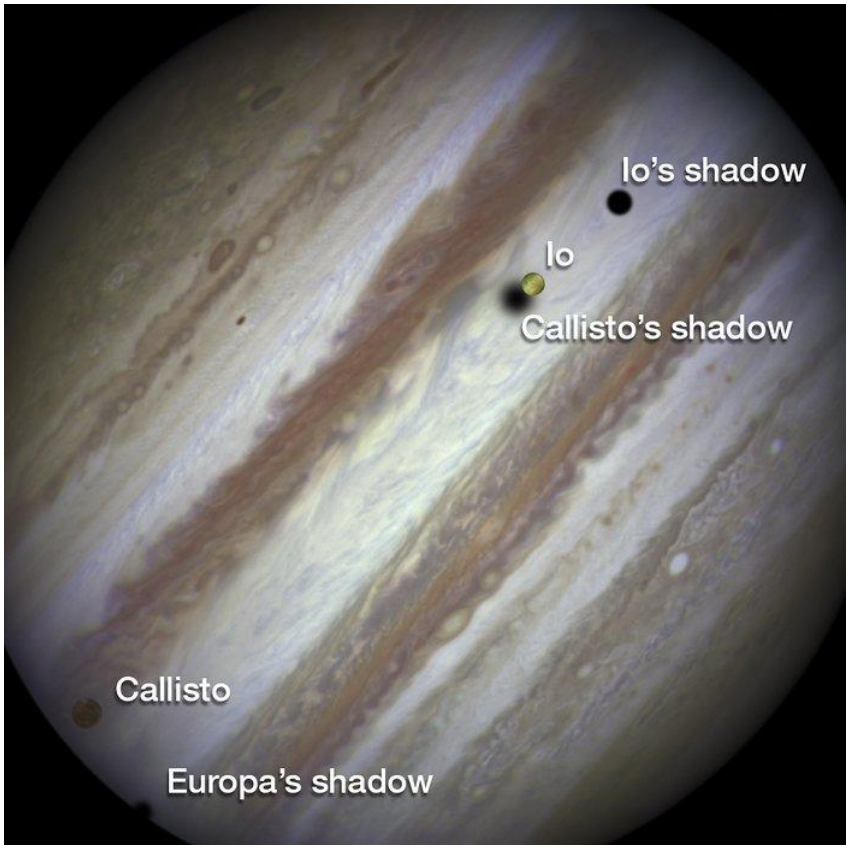
11 22:27:18 1 Tr I

means that on 11 September, the satellite Io will transit Jupiter with ingress at 22h 28m 18s IST.

Example2: an event listed as

27 01:23:54 1 Ec R

means that this event will take place on the night of 26 September. It is a reappearance of the satellite Io from the shadow of Jupiter at 01h 23m 54s IST. Note from the table that the eclipse started on 26 September at 23h 10m 00s.



This NASA/ESA Hubble Space Telescope image captures a rare occurrence as three of Jupiter's largest moons parade across the giant gas planet's banded face. The image shows the Hubble observation at the beginning of the event. On the left is the moon Callisto and on the right, Io. The shadows from Europa, which cannot be seen in the image, Callisto and Io are strung out from left to right. Picture courtesy: https://esahubble.org/images/heic1504e/

For notes on stargazing click here.

Or visit https://skytonight.wordpress.com/monthly-sky-notes-and-links/

Acknowledgements:

http://www.lunar-occultations.com/iota/occult4.htm

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https://www.gimp.org/

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