



Sun, Planets and Transitions

The **Sun** will remain in Virgo (*Kanya*). On 1 October its angular diameter will be 31'56". On 31 October, its angular diameter will be 32'12".

In the first half of the month, we have Mercury and Venus above the western horizon. Both of them are quite close to the horizon. Saturn will be above the eastern horizon at dusk. Mars and Jupiter will be well above the eastern horizon at dawn. Both these planets are very close to the ecliptic, and so is Regulus (*Magha*). The red-hued Mars, yellowish Jupiter and brilliant white Regulus will be seen almost in one line, in the second half of the month. By the month-end the angular distance between Mars and Regulus will be about 12°, with Jupiter half way between them.

Mercury will be in Virgo on 1 October. It moves to Libra, the Scales (*Tula*) on 7 October.

For about a week or so, Mercury can be seen traveling southward, nearly parallel to the horizon. It then plunges down towards the horizon.

Ephemeris of Mercury:

Date	Alt*	Diam"	Mag	El°
01 Oct	+07°34'	5.7	-0.1	23 E
10 Oct	+07°08'	6.5	-0.0	25 E
20 Oct	+04°27'	7.9	0.3	23 E

Venus will remain in Virgo this month. It will be stationary on 2 October. Its current evening appearance is nearly over. Within a week's time it will be gone from the western sky. On 24 October Venus will be in inferior conjunction,

List of Events in October 2026 (Time in IST)

Dt	Dy	Time	Event
02	Fr	02:11	Moon perigee: 369300 km
02	Fr	17:05	Moon north dec: 28° N
02	Fr	19:08	Venus stationary in RA
03	Sa	18:55	Last quarter
04	Su	17:22	Saturn Opposition
05	Mo	11:00	Moon-Mars: 1.2° S
05	Mo	11:41	Mars 1°05' S of Moon
06	Tu	15:53	Jupiter 9.5' S of Moon
05	Mo	16:36	Moon-Beehive: 0.4° S
06	Tu	09:39	Mercury 5°2' N of Venus
06	Tu	15:48	Moon-Jupiter: 0.2° S
07	We	09:37	Regulus 33' N of Moon
07	We	06:49	Moon descending node
07	We	08:27	Moon-Regulus: 0.6° N
07	We	09:29	Mercury-Venus: 5° N
10	Sa	21:20	New Moon
10	Sa	21:25	Mars-Beehive: 0.4° S
11	Su	09:49	Spica 2°08' N of Moon
12	Mo	08:00	Moon-Venus: 3.3° S
12	Mo	15:29	Mercury elongation: 25.2° E
13	Tu	01:38	Moon-Mercury: 2.3° N
15	Th	01:55	Moon-Antares: 0.5° N
16	Fr	08:15	Moon south dec: 27.9° S
17	Sa	04:26	Moon apogee: 404600 km
18	Su	21:43	First quarter
21	We	14:23	Moon ascending node
21	We	23:46	Orionid shower: ZHR = 20
24	Sa	08:59	Venus inferior conjunction
24	Sa	16:14	Mercury stationary in RA
26	Mo	09:42	Full Moon
28	We	06:41	Moon-Pleiades: 1° S
28	We	23:31	Moon Perigee: 364400 km
29	Th	23:10	Moon north dec: 27.8° N

i.e. it will pass between us and the Sun. It will pass 6.5° south of the Sun.

It will reappear at dawn in the morning sky next month.

Ephemeris of Venus:

Date	Alt*	Diam"	Mag	El°
01 Oct	+09°04'	48.4	-4.5	31 E
10 Oct	+00°43'	55.2	-4.4	21 E

Mars will be Cancer, the Crab (*Karka*) on 1 October; it moves to Leo, the Lion (*Simha*) on 30 October.

Between 10 and 13 October, Mars passes though the beautiful Beehive cluster, an open cluster of stars. To the naked eye, the Beehive cluster looks like a small, nebulous object under a clear, dark sky. This has been known to many ancient civilisations. In India it is called the *Pushya nakshatra*. One should certainly attempt to take a sequence of pictures of Mars and the Beehive cluster.

Ephemeris of Mars:

Date	Alt*	Diam"	Mag	El°
01 Oct	+64° 59'	5.6	1.1	66 W
10 Oct	+68° 14'	5.8	1.1	70 W
20 Oct	+72° 07'	6.1	1.0	74 W
30 Oct	+76° 14'	6.5	0.9	79 W

Jupiter will remain in Leo in October.

Ephemeris of Jupiter:

Date	Alt*	Diam"	Mag	El°
01 Oct	+47°25'	33.2	-1.9	48 W
10 Oct	+54°15'	33.9	-1.9	56 W
20 Oct	+62°00'	34.7	-2.0	64 W
30 Oct	+69°53'	35.6	-2.0	72 W

Saturn will be in Cetus, the Whale (*Timingal*) in October. Saturn is in opposition on 4 October. This means that from our vantage point on Earth, we are between Saturn and the Sun, and the planet will certainly be visible for at least 10 hours.

Ephemeris of Saturn:

Date	Alt*	Diam"	Ring#	Mag	El°
01 Oct	+04°37'	19.6	44.5	0.3	176 W
10 Oct	+13°25'	19.6	44.5	0.3	173 W
20 Oct	+23°15'	19.5	44.3	0.4	163 W
30 Oct	+32°57'	19.4	44.0	0.5	152 W

Angular diameter of the major axis of the ring in arcseconds.

* Altitudes of a planet are given for the beginning of civil twilight if the planet is to the west of the Sun, or for the end of civil twilight if the planet is to the east of the Sun.

(Disclaimer: We categorically mention here that we do not believe in astrology and believe that the only influence a planet has on us is to give us the viewing pleasure of its beauty. The sole purpose of giving the transition of planets and the Sun is to acquaint the reader with the Indian nomenclature of planets and constellations and also to show that the actual positions of the Sun and planets, which are based on modern computing, are very different from those given in astrology tables.)

March of the Moon

On 4 October, the Moon can be seen entering the Gateway of Heaven, a parallelogram-shaped asterism formed by joining Castor and Pollux of Gemini, and Procyon and Gomeisa of Canis Minor, in that order.

On 5 October the Moon will be above Mars. On the 6th it will be above Jupiter; and the next day it will be above Regulus (*Magha*). The Moon will pass north of Regulus.



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After New Moon on 10 October, the Moon will reappear above the western horizon at sunset. At this time of the year, the ecliptic is highly inclined to the south at the western horizon. Even though the lunar elongation is 11°, it will set less than 10 minutes after sunset. On 12 October, just after sunset, it might be possible to see a very thin lunar crescent with Mercury above it.

On 14 October, the Moon will be below Antares (*Jyeshtha*), the bright red star of Scorpio (*Vrushchika*); and the next day it will be to its east. The Moon then passes through Sagittarius, the Archer (*Dhanu*). On 24 October, the 97% illuminated lunar disk will be north of Saturn.

The next day's Full Moon is a celebrated celestial event, '*Sharad Poornima*' or *Kojagiri Poornima*. The Sharad Poornima Moon has its own charm. The sky is clean; the departed monsoon has cleaned the smog and dust from the atmosphere, and winter is yet to set in. People make the most of the night by getting together at night, singing, telling stories, and enjoying the revelry.

On 28 October, two days after Full Moon, the Moon will be due west of the Pleiades.

Events Involving the Moons of Jupiter

In the table below, we list the events visible from India. The table gives the 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; and 3 = satellite number.event type.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.

Example:

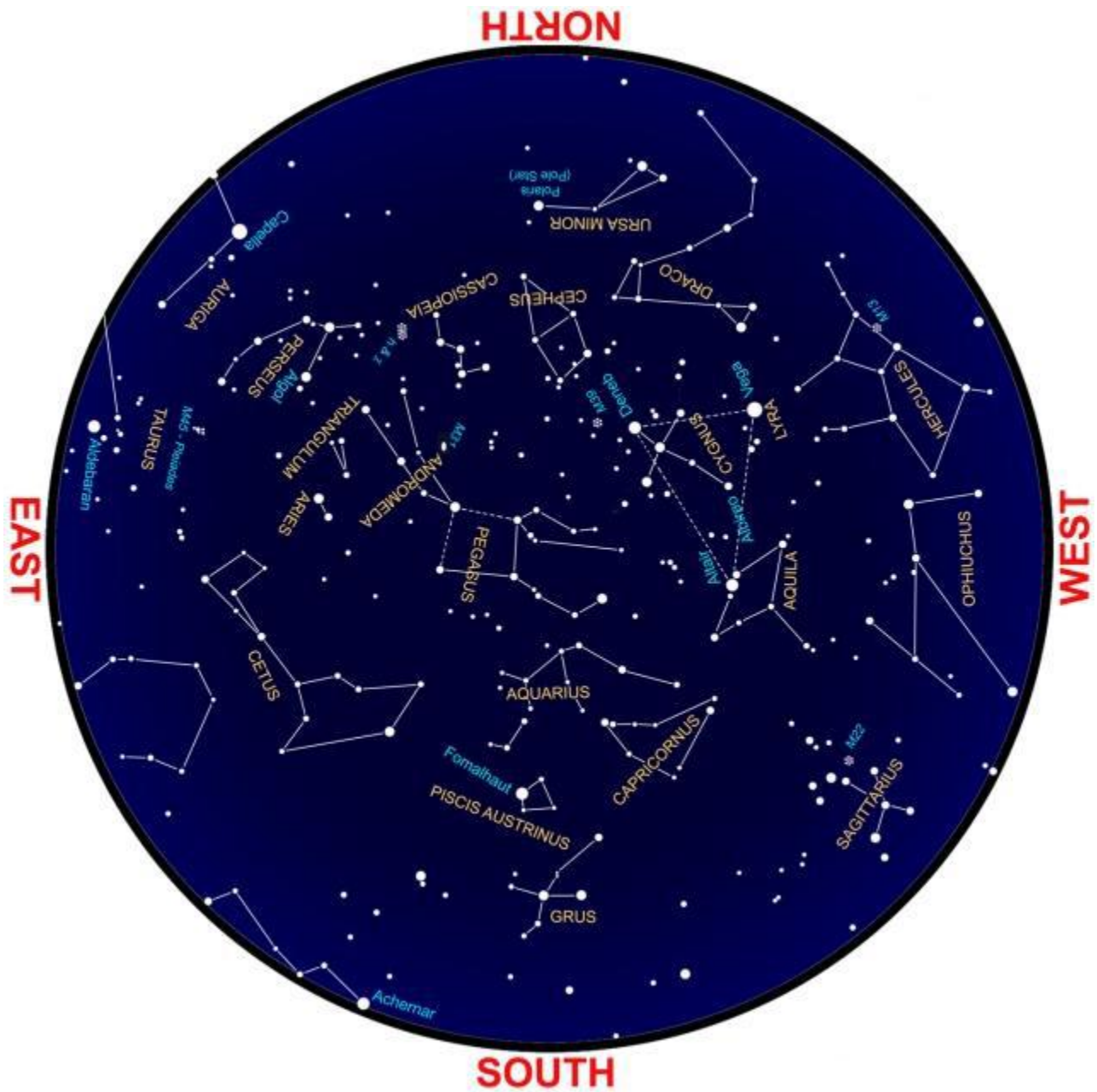
02 03:56:54 2.Tr.E

Means that

At 03:56:54 hours on the night of 2 October, Europa will end its transit across Jupiter's disk.

Satellites of Jupiter in October 2026											
<u>1</u>	<u>2</u>	<u>3</u>		<u>1</u>	<u>2</u>	<u>3</u>		<u>1</u>	<u>2</u>	<u>3</u>	
02	03:56:54	2.Tr.E		09	04:36:00	2.Sh.E		20	01:54:42	1.Tr.I	
03	04:33:42	3.Ec.R		10	04:54:06	3.Ec.D		20	03:04:30	1.Sh.E	
03	04:53:00	3.Oc.D		11	04:25:48	1.Sh.I		20	04:11:48	1.Tr.E	
03	05:10:48	1.Ec.D		11	05:28:24	1.Tr.I		21	02:38:30	3.Sh.E	
04	02:32:24	1.Sh.I		12	04:56:12	1.Oc.R		21	03:38:36	3.Tr.I	
04	03:30:42	1.Tr.I		13	02:15:00	1.Tr.E		25	01:55:48	2.Ec.D	
04	04:49:42	1.Sh.E		14	03:03:36	3.Tr.E		26	05:19:54	1.Ec.D	
05	02:58:06	1.Oc.R		16	04:18:18	2.Sh.I		27	01:28:36	2.Tr.E	* Night of 31 October and 1 November
06	03:10:42	4.Tr.E		18	04:28:48	2.Oc.R		27	02:40:48	1.Sh.I	
09	03:48:30	2.Tr.I		19	03:26:18	1.Ec.D		27	03:50:48	1.Tr.I	

**This sky map for October is drawn for mid-northern latitudes,
to be used around 9:30 p.m. local time**



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