SkyNews Astronomical events for Indian observers

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Sun, Planets and Transitions

The Sun will be in Aries, the Ram (*Mesha*) on 1 May, with an angular diameter of 31’45”. On 14 May it will move to Taurus, the Bull (*Vrushabha*). On 31 May its angular diameter will be 31’33”.

Mercury will be in Pisces, the Fishes (*Meena*) on 1 May. It will move to Aries on 12 May and then to Taurus on 23 May.

Ephemeris of Mercury:

Date	Alt*	Mag	Diam"	El°
01 May	+07°30'	0.1	6.77	25.5 W
10 May	+05°45'	-0.3	5.94	20.6 W
20 May	+01°18'	-1.1	5.32	11.8 W
30 May	-06°58'	-2.3	5.08	0.6 W

Venus remains in Pisces this month. It crosses over to Cetus, the Whale (*Timingila*) on 12 May and then moves back into the boundaries of Pisces.

Ephemeris of Venus:

Date	Alt*	Mag	Diam"	El°
01 May	+21° 27'	-4.5	36.47	40.7 W
10 May	+24° 39'	-4.5	31.80	43.6 W
20 May	+27° 19'	-4.4	27.67	45.3 W
30 May	+29° 16'	-4.3	24.43	45.9 W

Mars is in Cancer, the Crab (*Karka*) on 1 May. It moves to Leo, the Lion (*Simha*) on 24 May.

Ephemeris of Mars:

Date	Alt*	Mag	Diam"	El°
01 May	+76° 51'	1.0	6.56	84.4 E
10 May	+72° 39'	1.1	6.20	80.0 E
20 May	+67° 56'	1.2	5.86	75.3 E
30 May	+63° 12'	1.3	5.56	70.9 E

List of Events in May 2025 (Time in IST)

Dt	Dy	Time	Event
01	Th	12:05	Moon north declination: 28.6° N
03	Sa	19:53	Venus 2.1° N of Neptune
03	Sa	05:32	Moon-Pollux: 2.2° N
04	Su	04:42	Moon-Mars: 2.2° S
04	Su	04:57	Moon-Beehive: 2.6° S
04	Su	17:29	Mars-Beehive: 0.4° N
04	Su	19:22	First quarter
05	Mo	07:37	Eta Aquarid shower: ZHR = 60
05	Mo	23:28	Moon-Regulus: 2.2° S
08	Th	05:14	Moon descending node
10	Sa	13:13	Moon-Spica: 0.4° N
11	Su	06:19	Moon apogee: 406200 km
12	Mo	22:26	Full Moon
14	We	09:40	Moon-Antares: 0.3° N
16	Fr	00:14	Moon south declination: 28.5° S
18	Su	06:25	Uranus conjunction
20	Tu	17:29	Last quarter
22	Th	13:35	Moon ascending node
22	Th	23:21	Moon-Saturn: 2.8° S
23	Th	00/:28	Neptune 1.9° S of Moon
24	Sa	05:22	Moon-Venus: 4° S
25	Su	04:52	Mercury 0.1° S of Uranus
26	Mo	07:07	Moon perigee: 359000 km
26	Mo	19:03	Uranus 4.7° S of Moon
27	Tu	08:32	New Moon
28	We	19:03	Jupiter 5.2° S of Moon
28	We	21:46	Moon north declination: 28.4° N
30	Fr	09:37	Mercury superior conjunction
30	Fr	14:43	Moon-Pollux: 2.4° N
31	Sa	13:30	Moon-Beehive: 2.3° S

Jupiter remains in Taurus. See below for some interesting eclipses, transits and occultations of Jupiter’s moons.

Ephemeris of Jupiter:

Date	Alt*	Mag	Diam"	El°
01 May	+32° 32'	-2.0	33.63	40.0 E
10 May	+26° 20'	-2.0	33.13	33.2 E
20 May	+19° 35'	-1.9	32.68	25.7 E
30 May	+12° 58'	-1.9	32.35	18.3 E

Saturn moves from Aquarius, the Water-bearer (*Kumbha*) to Pisces on 19 April.

Ephemeris of Saturn:

Date	Alt*	Mag	Diam"	El°
01 May	+20° 58'	1.2	16.06	43.1 W
10 May	+28° 32'	1.1	16.23	50.9 W
20 May	+36° 53'	1.1	16.45	59.7 W
30 May	+45° 07'	1.1	16.70	68.5 W

(*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 1 May, the approximately 20% illuminated lunar disk can be seen below Kappa Aurigae. On 3 May, the approximately 40% illuminated Moon will be north-west of Mars. On 5 May it passes north of Regulus (*Magha*).

On 10 May the Moon can be seen east of Spica (*Chitra*). Between 13 and 14 May the Moon can be seen passing south of Antares (*Jyeshtha*). On 13 May it is in the direction of the southern claw of Scorpio (*Vrishchika*). On 16 May it is at the spout of the tea pot asterism in Sagittarius (*Dhanu*); the next day it moves to its handle.

On 20 May the Moon passes south of Deneb Algedi; the name means ‘the tail of the goat’. It is the fourth brightest star in the constellation Capricornus (*Makara*). Deneb Algedi, also known as Delta Capricorni, is an eclipsing variable star with a 1d32m47s period. Its magnitude varies between 2.81 and 3.05.

On 23 May, the approximately 23% illuminated lunar disk can be seen between Saturn and Venus. The next day on 24 May, the crescent Moon is less than 4° south of Venus, offering a beautiful photo-opportunity. On 28 May it will reappear above the western horizon and can be seen soon after sunset as a thin lunar crescent.

On 30 May the Moon can be seen south of Pollux. And on the last day of the month, it will be about 3° north-east of the Beehive cluster.

Events Involving the Moons of Jupiter

In the table below, we have listed events that can be seen 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 = Callisto; 3 = Europa; and 4 = Ganymede.

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

Phase: D = disappear; R = reappear; I = ingress; and E = egress.

Example:

Events for 1 May and what they mean:

1 19:48:54 1.Tr.E

1 20:40:18 1.Sh.E

Means that

At 19:48:54 hours on 1 May, Io, which is in transit across Jupiter’s disk, will exit the disk. Later at 20:40:18 hours the transit of its shadow will also end.

Satellites of Jupiter in May 2025													
1	**2**	**3**		**1**	**2**	**3**		**1**	**2**	**3**		**1**	**2**	**3**
1	19:48:54	1.Tr.E		8	20:21:48	1.Sh.I		15	20:16:42	3.Sh.I		23	20:49:00	1.Oc.D
1	20:40:18	1.Sh.E		9	19:45:12	1.Ec.R		15	20:17:48	3.Tr.E		24	20:24:18	1.Tr.E
8	19:36:18	1.Tr.I		11	20:23:06	2.Sh.E		18	20:18:00	2.Sh.I		31	20:11:42	1.Tr.I

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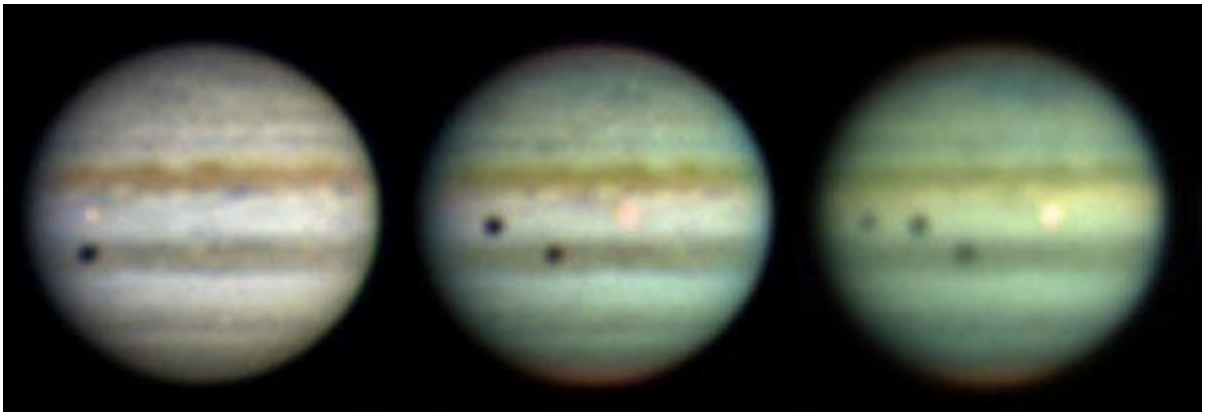
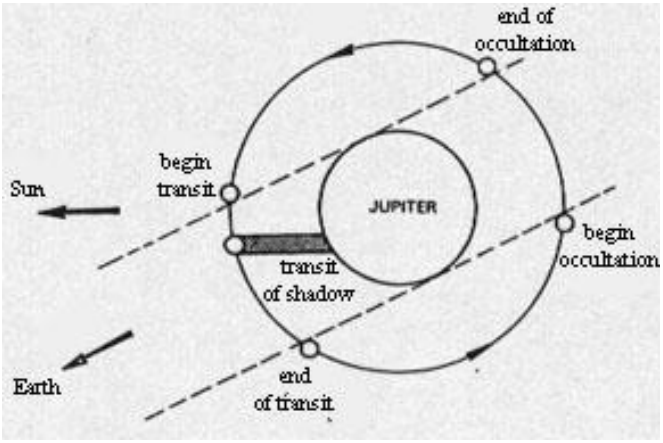


Credit : Karkoshka et Murrell, NMSU (tel. de 60cm). Shadows of the Galilean satellites Io, Callisto and Ganymede on 10 November 1987 on Jupiter. (Picture courtesy: https://promenade.imcce.fr/en/pages3/365.html)



Transits of shadow occur when the shadow of a satellite passes over the apparent disk of Jupiter. (Picture courtesy: https://promenade.imcce.fr/en/pages3/365.html)

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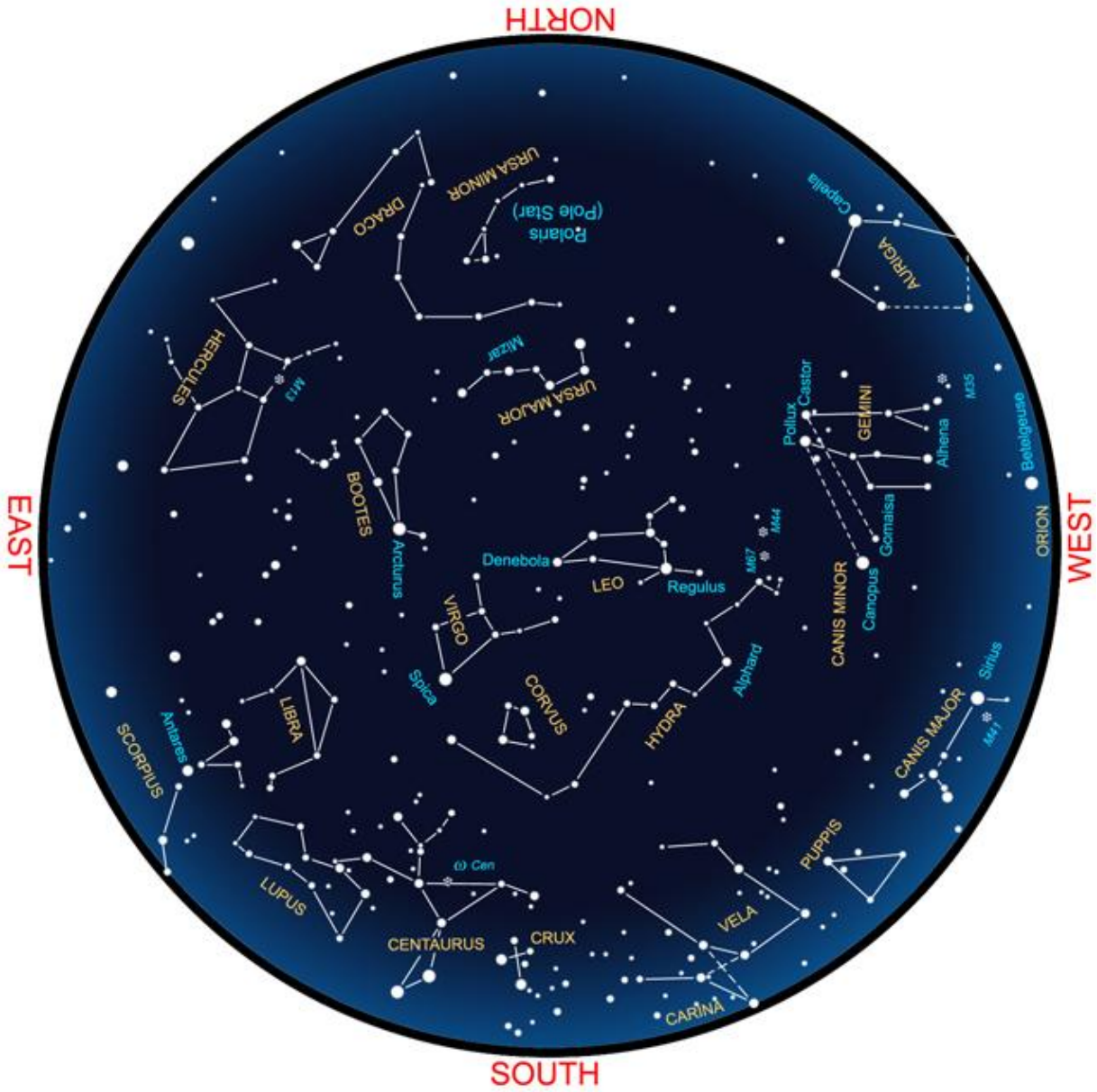
This sky map for May is drawn for mid-northern latitudes, to be used around 9:30 p.m. local time



For notes on stargazing click here.
Or visit https://skytonight.wordpress.com/monthly-sky-notes-and-links/

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