

Astronomy News

Night Sky 2021 - March

Sunrise	Sunset	Mercury Rises	Moon Phases
1 st – 6:55am	1 st – 5:52pm	1 st – 6:03am	Last Quarter – 6 th
10 th – 6:36am	10 th – 6:07pm	5 th – 6:00am	New Moon – 13 th
20 th – 6:13am	20 th – 6:24pm	10 th – 5:57am	First Quarter – 21 st
30 th – 6:51am	30 th – 7:41pm	15 th – 5:53am	Full Moon – 28 th
Moon Rise	Moon Set	Moon Rise	Moon Set
-----	1 st – 8:14am (W)	20 th – 9:13am	21 st – 2:09am
1 st – 8:47pm (E)	2 nd – 8:33am	21 st – 9:50am	22 nd – 3:07am
2 nd – 10:11pm	3 rd – 8:53am (WSW)	22 nd – 10:38am	23 rd – 3:57am
3 rd – 11:36pm (ESE)	4 th – 9:16am	23 rd – 11:38am	24 th – 4:38am
5 th – 1:00am	5 th – 9:44am	24 th – 12:48pm	25 th – 5:10am
6 th – 2:21am	6 th – 10:21am	25 th – 2:06pm	26 th – 5:36am (WNW)
7 th – 3:34am	7 th – 11:09am	26 th – 3:28pm (ENE)	27 th – 5:58am
8 th – 4:35am	8 th – 12:09pm	27 th – 4:52pm	28 th – 7:17am
9 th – 5:22am	9 th – 1:18pm	28 th – 7:18pm (E)	29 th – 7:35am (W)
10 th – 5:58am	10 th – 2:32pm	29 th – 8:45pm	30 th – 7:55am
11 th – 6:24am	11 th – 3:48pm (WSW)	30 th – 10:13pm (ESE)	31 st – 8:17am (WSW)
12 th – 6:46am (ESE)	12 th – 5:01pm	31 st – 11:41pm	-----
13 th – 7:03am	13 th – 6:13pm		
14 th – 7:18am	14 th – 7:23pm (W)	-----	-----
15 th – 7:33am (E)	15 th – 8:32pm	All times	Please note
16 th – 7:48am	16 th – 9:40pm	in notes are set	that the clocks
17 th – 8:04am (ENE)	17 th – 10:49pm (WNW)	for	go 1 hour forward
18 th – 8:22am	18 th – 11:57pm	Somerton	on the night
19 th – 8:45am	20 th – 1:04am	unless stated	of the 27 th

A useful site: www.heavens-above.com	A S Zielonka		
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On the 1st at 11:00pm the star Theta Virginis (4.38 mag) in Virgo is 2 degrees below right of the Moon.

From the 1st – 9th Mars passes near to The Pleiades. On the 4th at 8:00pm their just 2½ degrees apart. At 8:00pm on the 9th the star 19038 (4.3 mag) “Hipparcus Catalogue” in Taurus is less than a ¼ of a degree to the left of Mars.

From the 1st – 10th the asteroid Vesta will pass close to the star Chertan (3.3 mag) in Leo. On the 4th at 9:00pm Vesta will be 1¼ degrees to the left of Chertan in the ESE.

The Moon is at perigee (365,423km) on the 2nd at 5:19am. At midnight on the 2nd the star Kappa Virginis (4.18 mag) in Virgo is 2 degrees below left of the Moon... then at 5:00am on the 3rd Kappa Virginis is 1 degree above right of the Moon.

From the 2nd – 7th Mercury passes close to Jupiter. A close conjunction occurs at 6:15 on the 5th when they are less than a ¼ of a degree apart. Their position are 2 degrees above the horizon at 118.5 degrees azimuth.

On the night of the 3rd at 1:00am the star Zubenelgenubi (2.7 mag) in Libra is 3 degrees to the right of the Moon and 1 degree above.

At 5:30am on the 5th the star Omega Scorpii (4.2 mag) in Scorpius is a ¼ of a degree to the right of the Moon. An occultation of its neighbouring star Omega Scorpii (3.9 mag) occurs at 4:24:49am and ends at 5:33:02am. (These times are set for Yeovilton)

On the 6th at 5:30am the star Theta Ophiuchi (3.2 mag) in Ophiuchus is 3 degrees to the left of the Moon and 1½ degrees below.

Mercury is at maximum western elongation (27.3 degrees) from the Sun on the 6th.

At 5:30am on the 7th the star Kaus Borealis (2.8 mag) in Sagittarius is 4 degrees to the left of the Moon and 1 degree below.

On the 8th at 5:30am the star Tau Sagittarii (3.3 mag) in Sagittarius is 2 degrees below right of the crescent Moon, with the star Nunki (2 mag) 3½ degrees to the right of the Moon and 1 degree above.

At 5:47am on the 9th the crescent Moon is due south east and just 2 degrees above the horizon. Saturn is 11 degrees left of the Moon at 124 degrees azimuth and just 2½ degrees above the horizon.

Comet C/2021 A2 Neowise (10.5 mag – Feb 13th*) is in the constellation of Auriga the best part of this month. On the 9th at 8:00pm (and virtually overhead looking westwards) Neowise is just ½ a degree from the star Eta Aurigae (next to four 8/9 mag stars in a row). On the 14th and 15th Neowise passes within ½ a degree of the star Epsilon Aurigae (3 mag). (for further information on this comet or others please see the 'Comet' section in the website above)

On the 10th at 6:00am Saturn is at 127 degrees azimuth and 5 degrees above the horizon with Jupiter at 118 degrees azimuth and 2 degrees above the horizon. Mercury is also nearby at 114.5 degrees azimuth and barely half a degree above the horizon.

Neptune is at superior conjunction on the 11th.

Venus and Neptune are in close conjunction on the 14th though to near the Sun for observing.

Mercury is at aphelion on the 14th.

At 6:45pm on the 14th the a very thin crescent Moon is 5 degrees above the horizon at 262 degrees azimuth.

On the 15th at 7:30pm the star Nu Piscium (4.4 mag) in Pisces is $3\frac{1}{4}$ degrees above the thin crescent Moon and $2\frac{1}{4}$ degrees to the left.

From the 16th – 20th Mars passes close to the two stars Kappa Tauri (4.2 mag) and Upsilon Tauri in Taurus. On the 18th at 8:00pm Upsilon Tauri is less than $\frac{1}{2}$ a degree to the lower left of Mars. Kappa Tauri is 1 degree to the lower left of Mars.

At 8:00pm on the 16th the star Xi Ceti (4.3 mag) in Cetus is just $\frac{3}{4}$ of a degree to the left of the thin crescent Moon, with Uranus $5\frac{1}{2}$ degrees above the Moon and $\frac{1}{2}$ a degree to the right.

On the 17th at 8:00pm the star Mu Ceti (4.2 mag) in Cetus is 5 degrees below the crescent Moon, with Uranus 6 degrees right of Mu Ceti.

The Moon is at apogee (405,253km) on the 18th at 5:03am. At 8:00pm the Pleiades star cluster is 6 degrees above right of the crescent Moon.

On the 19th at 8:30pm Mars will be $2\frac{1}{2}$ degrees to the upper right of the Moon. The star Kappa Tauri (4.1 mag) in Taurus is 2 degrees to the right of the crescent Moon with the star Upsilon Tauri (4.2 mag) 1 degree below Mars.

At midnight on the 20th the star Zeta Tauri (2.9 mag) is 3 degrees to the left of the crescent Moon and $\frac{1}{2}$ a degree below.

On the 21st at 8:00pm the two stars Nu Geminorum (4.1 mag) and Mu Geminorum (2.8 mag) in Gemini point the way to the Moon.

At midnight on the 22nd the star Wasat (3.5 mag) in Gemini is $2\frac{1}{2}$ degrees below left of the Moon.

From the 23rd – 24th Mars passes close to the star Tau Tauri (4.2 mag) in Taurus. On the 24th at 8:00pm Tau Tauri is $\frac{3}{4}$ of a degree to the lower left of Mars.

On the 24th at 8:00pm the Beehive star cluster is $5\frac{1}{2}$ degrees to the right of the Moon.

There is a scheduled test flight on the 25th* from Cape Canaveral, Florida. NASA and Boeing are targeting the launch of Starliner's second uncrewed flight test as part of the agency's Commercial Crew Program. Boeing's Orbital Flight Test-2 (OFT-2) is a critical developmental milestone on the company's path to fly crew missions for NASA to the International Space Station (ISS). The mission will launch Starliner on a United Launch Alliance Atlas V rocket to dock with the space station and return to land in the western United States about a week later as part of an end-to-end test flight to prove the system is ready to fly crew.

At midnight on the 25th the star Eta Leonis (3.4 mag) in Leo is $\frac{3}{4}$ of a degree above the Moon.

Venus is at superior conjunction on the 26th and is therefore not visible this month.

On the 26th at midnight the stars Chertan (3.3 mag) and Iota Leonis (4 mag) both in Leo, form an equilateral triangle ($5\frac{1}{2}$ degrees apart) in the night sky looking south.

At 8:00pm on the 27th the star Nu Virginis (4 mag) in Virgo is 1 degree above right of the Moon

On the 28th at 11:00pm the star Porrima (2.7 mag) in Virgo is $1\frac{1}{2}$ degrees to the right of the full Moon.

At 5:30am on the 30th the star Kappa Virginis (4.1 mag) is $5\frac{1}{4}$ degrees to the left of the Moon and 1 degree above. The Moon is at perigee (360,309km) at 7:17am.

On the 31st at 5:30am the star Zubenelgenubi (2.7 mag) in Libra is 1½ degrees below left of the Moon. At 6:00am in the south east Saturn is 7 degrees above the horizon at 130 degrees azimuth with Jupiter 4 degrees above the horizon at 119 degrees azimuth.

* = Dates and times are subject to change.

News: The nearest solar system to our own may actually host two potentially life-supporting planets as a new candidate emerges around Alpha Centauri A, a new study reports.

The first United Arab Emirate's Hope Probe made it to the red planet on Feb 9th. It will stay in orbit and study its atmosphere for one complete Martian year (687 days).

China's first fully homegrown Mars mission, Tianwen-1, arrived in orbit around the red planet on Feb 10th. It will begin scouting the potential landing site for its Mars rover, due to be deployed in May.

NASA has selected SpaceX to deliver the first two segments of the moon-orbiting Gateway space station for its upcoming Artemis program, which aims to put astronauts back on the Moon.

NASA's Europa Clipper probe is scheduled to lift off in October 2024 and arrive in orbit around Jupiter in April 2030. Getting to Jupiter will be just the beginning for Clipper. The probe will then perform nearly 50 flybys of Europa over about four Earth years, studying the thickness of the moon's ice shell and assessing the habitability of its huge, buried ocean of salty liquid water, among other tasks. Clipper's observations will also help mission planners pick out promising sites for the Europa lander, if that latter mission does indeed get off the ground in the coming years.

Facts: The oldest active probe – Mars Odyssey – has been orbiting the planet for 20 years. It currently holds the record for the longest surviving continually active spacecraft in orbit around a planet other than Earth. As of October 2019 it is in a polar orbit around Mars with a semi-major axis of about 3,800 km or 2,400 miles. It has enough propellant to function until 2025.