

Astronomy News

Night Sky 2019 - April

Sunrise	Sunset	Mercury Rises	Venus Rises
1 st – 6:48am	1 st – 7:43pm	1 st – 6:12am	1 st – 5:58am
10 th – 6:28am	10 th – 7:58pm	5 th – 6:05am	5 th – 5:52am
20 th – 6:07am	20 th – 8:14pm	10 th – 5:57am	10 th – 5:44am
30 th – 5:47am	30 th – 8:31pm	15 th – 5:49am	15 th – 5:36am
		20 th – 5:41am	20 th – 5:27am
			25 th – 5:18am
			30 th – 5:09am
Moon Rise	Moon Set	Moon Rise	Moon Set
1 st – 5:48am	1 st – 3:30pm (WSW)	17 th – 5:34pm	18 th – 6:15am (W)
2 nd – 6:12am (ESE)	2 nd – 4:35pm	18 th – 6:56pm (E)	19 th – 6:38am
3 rd – 6:34am	3 rd – 5:41pm	19 th – 8:16pm	20 th – 7:03am
4 th – 6:53am	4 th – 6:48pm (W)	20 th – 9:35pm (ESE)	21 st – 7:30am (WSW)
5 th – 7:13am (E)	5 th – 7:55pm	21 st – 10:51pm	22 nd – 8:02am
6 th – 7:32am	6 th – 9:04pm	23 rd – 12:02am	23 rd – 8:39am
7 th – 7:54am	7 th – 10:14pm (WNW)	24 th – 1:05am	24 th – 9:24am
8 th – 8:18am (ENE)	8 th – 11:25pm	25 th – 2:00am	25 th – 10:15am
9 th – 8:48am	10 th – 12:36am	26 th – 2:45am	26 th – 11:12am
10 th – 9:24am	11 th – 1:43am	27 th – 3:22am	27 th – 12:13pm
11 th – 10:10am	12 th – 2:44am	28 th – 3:52am	28 th – 1:17pm
12 th – 11:07am	13 th – 3:37am	29 th – 4:17am (ESE)	29 th – 2:22pm (WSW)
13 th – 12:14pm	14 th – 4:20am	30 th – 4:39am	30 th – 3:27pm
14 th – 1:19pm	15 th – 4:55am (WNW)		
15 th – 2:49pm (ENE)	16 th – 5:25am	New Moon – 5th	Full Moon – 19th

16 th – 4:12pm	17 th – 5:51am	First Quarter – 12 th	Last Quarter – 26 th
A useful site: www.heavens-above.com	A S Zielonka	All times are set from Somerton	

There is a planned launch (no earlier than April) from Cape Canaveral, Florida. An uncrewed SpaceX Dragon cargo spacecraft will lift off on a Falcon 9 rocket from Launch Complex 40. It will deliver supplies and equipment to the ISS.

There is a planned launch this month from Cape Canaveral, Florida. NASA and industry partners are targeting the return of human spaceflight from Florida's Space Coast. These flight tests will prove the space systems meet NASA's requirements for certification to carry astronauts to and from the ISS. For this uncrewed flight test, Boeing's Starliner spacecraft will launch on a United Launch Alliance Atlas V rocket from Space Launch Complex 41.

From the 29th March - 2nd April at 8:00pm Venus passes to the lower left, and to within 3 degrees of the visible star cluster Pleiades.

From the 31st March - 4th April there is a very close conjunction between Mercury and Neptune. By 6:30am they are a couple of degrees above the horizon and lost in the mornings glow from the Sun. On the 2nd & 3rd they are ½ a degree apart. Neptune is also very in close conjunction with the star Phi Aquarii (4.2 mag) in Aquarius.

On the 1st at 6:10am Venus is in the ESE with the crescent Moon 11 degrees to the right of it. Both only 2 degrees above the horizon.

At 6:20am on the 2nd Venus is in the ESE and 3½ degrees above the horizon with the thin crescent Moon 3½ degrees to the lower right just above the horizon.

Venus will be 2½ degrees above the ESE horizon at 6:10am on the 5th. Mercury is 7 degrees to the left of Venus and just 1 degree above the horizon (100 degrees azimuth) with Neptune just 1½ degrees to the right of Mercury.

The Kappa Serpentids meteor shower reaches its peak through the night of the 5th at around 3:00am.

On the 6th at 8:45pm in the west (279 degrees azimuth) and just 2 degrees above the horizon you may see a very thin crescent Moon. Uranus is 5½ degrees to the upper right of it and just 3½ degrees above the horizon.

At 8:30pm on the 7th the thin crescent Moon is due west with the Pleiades star cluster 18½ degrees directly above it.

On the 8th at 8:30pm Mars will be 9 degrees directly above the crescent Moon. The star Lambda Tauri (3.4 mag) in Taurus is just 4 degrees to the left of the Moon.

From the 8th - 12th at 10:00pm in the south east the asteroid Pallas passes close by to the star Muphrid (2.6 mag) in Bootes. They are closest on the 10th. (For further information please see the 'Asteroids' section in the website above)

At 8:30pm on the 9th the bright star Aldebaran in Taurus is just 3 degrees below the crescent Moon. Mars is 7 degrees to the right of the Moon.

Mercury reaches aphelion on the 10th (Its furthest point from the Sun in its orbit).

There is a very close conjunction between Venus and Neptune at 6:00am on the 10th. Their position are 2½ degrees above the eastern horizon (103 degrees Azimuth).

On the evening of the 10th around 8:45pm the star Zeta Tauri (2.9 mag) in Taurus is just 1 degree to the right of the Moon.

Mercury is at maximum western elongation on the 11th.

At 8:45pm on the 11th the star Nu Geminorum (4.1 mag) in Gemini is just 2½ degrees to the lower right of the Moon.

On the 12th around 9:30pm the star Kappa Tauri (4.2 mag) in Taurus is a ¼ of a degree above Mars.

On the 12th at 10:00pm the star Kappa Geminorum (3.5 mag) in Gemini is just 3½ degrees to the upper right of the Moon.

At 10:00pm on the 13th the Moon passes in front of some of the fainter stars of the star cluster M44 in Cancer.

On the 14th at 10:00pm the bright star Regulus in Leo is 8 degrees to the lower left of the Moon.

At 10:00pm on the 15th Regulus in Leo is 7½ degrees to the right of the Moon.

On the 16th at 10:00pm the bright star Denebola (2.1 mag) in Leo is 8 degrees to the upper left of the Moon.

There is a scheduled launch on the 17th* at 11:56am* from Wallops Flight Facility in Virginia. Northrop Grumman's eleventh contracted commercial resupply services mission, launching aboard an Antares rocket will deliver several tons of cargo including crew supplies and science experiments to the International Space Station (ISS).

At midnight on the 17th the star Porrima (2.7 mag) in Virgo is just 3 degrees to the lower left of the Moon.

Venus reaches aphelion on the 18th (Its furthest point from the Sun in its orbit).

On the 18th at midnight the star Zeta Virginis (3.3 mag) in Virgo is 4¼ degrees to the upper left of the Moon.

At midnight on the 20th the star Zubeneschamali (2.6 mag) in Libra is 5 degrees to the upper left of the Moon.

On the 21st at midnight the star Nu Scorpii (4 mag) in Scorpius is just 1¼ degrees below right of the Moon.

The Lyrids meteor shower reaches its peak through the night of the 22nd at around 4:00am.

Uranus is at superior conjunction (with the Sun) on the 23rd.

At 5:00am on the 23rd Jupiter is 4 degrees to the lower left of the Moon. The star Xi Ophiuchi (4.3 mag) in Ophiuchus is just 1 degree upper left of the Moon.

The Pi Puppids Meteor shower reaches its peak through the night of the 23rd at around 1:00am.

On the 24th at 5:00am Jupiter is 8 degrees to the right of the Moon. The star Mu Sagittarii (3.8 mag) in Sagittarius is 1¾ degrees above the Moon.

An occultation of Saturn by the Moon is on the 25th. It will be visible from Eastern Australia, New Zealand and from Mexico down to mid-South America.

An occultation of Pluto also occurs on the 25th. This will be visible mainly from Australia and the Indonesian islands.

At 5:00am on the 25th Saturn is 5¼ degrees to the left of the Moon. The star Omicron Sagittarii (3.7 mag) is just 1¼ degrees above the Moon.

On the 26th at 5:00am Saturn is 7 degrees to the upper right of the Moon.

At 5:00am on the 28th the star Nashira (3.6 mag) in Capricornus is 1 degree to the upper left of the Moon.

On the 30th at 5:15am low in the south east the crescent Moon is 4 degrees above the horizon. Neptune is 5 degrees above left of the Moon and 1 degree left of the star Phi Aquarii (4.2 mag) in Aquarius.

* = Dates and times are subject to change.

News: On the 14th March it was announced that NASA is going back to the Moon. The agency has made their goal of a return moon mission, building a new rocket to carry astronauts and planning a space station in orbit around the Moon for the mid 2020s. But during a senate meeting on the 13th, NASA administrator Jim Bridenstine made a surprising announcement: while humans might be returning to the Moon, it won't be NASA that gets them there.

NASA's InSight Lander has only been on the surface of Mars for a few months, but it seems to already be running into problems. According to an announcement from NASA on the 6th, the lander's ground probe, which was designed to tunnel several feet into the ground, has hit some sort of obstacle and got stuck after reaching just one foot down.

Facts: Minor planet Sedna discovered in 2003 is the most remote object to be found in our Solar System (other than comets). It's at a distance of about 86 Astronomical Units (AU) from the Sun, and that's three times as far as Neptune. It's orbital period is approximately 11,408 years.