

# [Astronomy Things To See During March 2017 \(For UK Observers\)](#)

The Vernal Equinox is on 20<sup>th</sup> March. British Summer Time begins on 26<sup>th</sup> March when the clocks go forward 1 hour

## **Moon:**

First Quarter: 5<sup>th</sup> March 11:32am  
Full: 12<sup>th</sup> March 2:54pm  
Last Quarter: 20<sup>th</sup> March 3:58pm  
New: 28<sup>th</sup> March 3:57am

The Lunar “X” and “V” are visible at around 09:00 UT which is an hour before the Moon rises so we can’t observe them from the UK this month

## **Lunar conjunctions & occultations:**

**Note:** When the Moon is waxing it is visible in the western sky after sunset. When near Full Moon it is visible most of the night.

When it is waning, it is visible in the eastern sky before sunrise

1 <sup>st</sup> March	Waxing Crescent Moon lies close to Venus, Mars & Uranus
4 <sup>th</sup> March	Thick Waxing Crescent Moon lies close to Aldebaran & The Hyades Cluster (occultation of Gamma Tauri)
6 <sup>th</sup> March	Waxing Gibbous Moon lies close to Alhena (Gamma Geminorum)
7 <sup>th</sup> March	Waxing Gibbous Moon lies close to Lambda Geminorum
10 <sup>th</sup> March	Waxing Gibbous Moon lies close to Regulus
13 <sup>th</sup> 14 <sup>th</sup> March	Waning Gibbous Moon lies extremely close to Porrima (occultation in some areas)
14 <sup>th</sup> March	Waning Gibbous Moon lies close to Jupiter and Spica
15 <sup>th</sup> March	Waning Gibbous Moon lies close to 98 Vir
17 <sup>th</sup> March	Waning Gibbous Moon lies between Alpha & Beta Librae
18 <sup>th</sup> March	Waning Gibbous Moon lies close to Beta Scorpii
19 <sup>th</sup> March	Waning Gibbous Moon lies close to Antares
20 <sup>th</sup> March	Last Quarter Moon lies close to Saturn
22 <sup>nd</sup> /23 <sup>rd</sup> March	Waning Crescent Moon lies close to Comet C/2015 ER61 (PanSTARRS)
23 <sup>rd</sup> March	Waning Crescent Moon lies close to Alpha & Beta Capricorni
29 <sup>th</sup> March	Waxing Crescent Moon lies close to Mercury
30 <sup>th</sup> March	Waxing Crescent Moon lies close to Mars
31 <sup>st</sup> March	Thick Waxing Crescent Moon lies close to Aldebaran & The Hyades Cluster

## **Planetary Observations:**

**Mercury** – putting on its best evening appearance of the year, look for mag -0.5 Mercury from 17<sup>th</sup> March onwards. It becomes visible from around 8pm onwards as the twilight fades, located above the western horizon. It sets at around 9pm

**Venus** – begins the month as a spectacular evening object, but passes between the Earth and Sun on 25<sup>th</sup> March so by the end of March it will become a morning object. At mag -4.4 it is unmistakable

**Mars** – lying in Aries, Mars is visible in the western sky after sunset, setting at around 9:45pm. Its magnitude this month is only +1.4, but its red colour is very noticeable. At the beginning of the month it lies close to Uranus

**Jupiter** – located in Virgo, mag -2.2 Jupiter now rises at around 8:30pm and remains visible all night long. On 15<sup>th</sup> March it lies very close to the Waning Gibbous Moon. With Jupiter so well placed, there are multiple Jovian Moon events taking place throughout the month. Full details of these events can be found in Astronomy Now or Sky at Night magazines

**Saturn** – located in Sagittarius, Saturn rises at about 2am then remains visible until dawn. On 20<sup>th</sup> March, Saturn lies close to the Last Quarter Moon

**Neptune** – is not observable this month

**Uranus** – located in Pisces, mag +5.9 Uranus lies close to Mars at the beginning of the month. On 25<sup>th</sup> March it lies close to Mercury. By the end of the month it will be lost in the twilight

**Pluto** – located in Sagittarius, Pluto rises at around 3am and is visible for a short time until dawn, low in the south east. At mag +14.2 you will need a moderate telescope to spot it

**Ceres** – located in Cetus, Ceres becomes visible at around 7pm as the dusk twilight fades, then sets in the west at around 10pm. On 2<sup>nd</sup> March it lies very close to the Waxing Crescent Moon. At the end of March it lies close to Mars. At mag +8.5 you will need a telescope or binoculars to spot it

**Vesta** – located in Gemini, Vesta becomes visible at around 7pm when the dusk twilight fades when it will be about 56 degrees above the south eastern horizon. It sets in the north west at around 4:30am. During the last few days of March it lies very close to the mag +4.05 star 69 Gem. At mag +6.85 you will need binoculars or a small telescope to spot it

**Makemake** – the dwarf planet is at opposition this month. Located in Coma Berenices, it becomes visible above the eastern horizon after the sunset twilight has faded and remains visible all night long. It reaches its closest point to Earth on 24<sup>th</sup> March, but it is still 7.7 billion km away! It is close to the galaxy M64 in Coma Berenices all month. At mag +16 you will need a large telescope to spot it

### Other Observations:

**Sunrise Over Plato** – one of the most distinctive craters on the Lunar surface, sunrise over the crater Plato can produce some stunning shadows. This month, sunrise occurs over this crater on 6<sup>th</sup> March. It begins during daylight hours at around 13:00UT, but you should still be able to track the shadows shrinking across the crater floor. Once it has gone dark at about 17:45 you will clearly see the distinctive shadows under the eastern wall

**Gamma Tauri Occultation by Moon** - on 4<sup>th</sup> March, the Moon occults several stars within the Hyades cluster from some locations, but the occultation of Gamma Tauri is the only one which is readily visible from across the UK. The mag +3.7 star disappears behind the dark limb of the First Quarter Moon just before 20:48 GMT, and reappears on the bright side about an hour later. The exact timings of this event will vary depending on your location.

**Binocular Tour** – This month's Sky at Night Binocular Tour by Stephen Tonkin is focused on the sky around Canes Venatici and Coma Berenices. There are 4 targets for 10 x 50 binoculars. First look for the gorgeous globular cluster M3 which contains half a million stars. Next look for the line of sight double star comprised of mag +5.9 star 17 Canum Venaticorum and mag +6.3 star 15 Canum Venaticorum. These stars are not a binary pair, they simply appear close together when viewed from Earth. The 3<sup>rd</sup> target is variable star 4 La Superba. Also known as Y Canum Venaticorum, it is a cool carbon star which varies in magnitude from +6.3 to +4.7 over a period of 160 days. It has a really distinctive red colour. If you are into spectroscopy, this star has some unusual spectral absorption lines. The final target for 10 x 50 binoculars is M94, a mag +8.9 spiral galaxy. You will need dark, transparent skies to spot this with low power binoculars. If you have 15 x 70 binoculars there are 2 targets for you. First is V Canum Venaticorum, a variable star which has a magnitude anywhere between +8.5 and +6.5. Its period is 191.5 days, but there have been many reported fluctuations in both the magnitude range and period. Finally, look for Upsilon 1, which may be a very old open cluster or 2 clusters in the same line of sight. It is comprised of 8<sup>th</sup> and 9<sup>th</sup> magnitude stars which span about 14 arc minutes and they make a very pretty sight in binoculars. For full details on how to find these objects, look at the March edition of Sky at Night Magazine

**Deep Sky Tour** – This month's Sky at Night Deep Sky Tour is centred on the area around Virgo. All 6 targets this month are located within Markarian's Chain, a line of galaxies located in the bowl of Virgo. The first target is M84, a face-on lenticular galaxy. A 6" telescope will show a hazy patch with a brighter core. Larger telescopes will reveal a bit more detail in the core. Next is the galaxy M86, which has been classified as elliptical or lenticular, although more recent classifications place it in the lenticular group. A 6" telescope reveals a hazy halo with a brighter core. Larger telescopes will reveal a larger sized halo. Next look for NGC 4388, a mag +11.0 edge-on spiral galaxy. It is dim and hard to see, looking like a needle of light through a 6" telescope. 8" or larger telescopes will reveal the spiral arms. Next look for a pair of galaxies, mag +11.0 NGC 4438 & mag +11.7 NGC 4435, also known as "Markarian's Eyes". NGC 4438 is a spiral galaxy which is gravitationally interacting with NGC 4435. Viewed with a 6" telescope they will appear as hazy patches; averted vision will assist. The 5<sup>th</sup> target is NGC 4473, which is an elliptical galaxy which appears to have been flattened into a disc-like structure. An 8" telescope will reveal an elongated haze, and the elongated core will show up well with higher magnification. The final targets are NGC 4477, a mag +11.4 barred lenticular galaxy & NGC 4459, a mag +11.3 lenticular galaxy which lies just 25 arc minutes north of 4477. This pair of galaxies are best viewed with an 8" or larger telescope. For full details of where to find these objects and how best to see them, pick up the March issue of Sky at Night magazine

**M66** – Astronomy Now's object of the month is a bright spiral galaxy located in Leo, best known as one of the members of the Leo Triplet. A medium sized telescope will give a good view of M66, and under good seeing conditions and higher magnification, you may be able to trace out the dust lanes and spiral arms. To image it, you can use LRGB filters or a DSLR. There are some HII

regions along the spiral arms which will respond well to H-alpha imaging. For more information on how to observe, image or sketch this object, take a look at the March edition of Astronomy Now magazine

**Constellation Canes Venatici** – Astronomy Now's constellation of the month is Canes Venatici. This may be a relatively faint constellation, but it is packed with interesting objects, including 5 Messier objects plus a host of other deep sky objects. One of the most striking is M51 The Whirlpool Galaxy. M63 the Sunflower Galaxy is a fantastic spiral galaxy which responds well to larger apertures. M94 is a face-on spiral galaxy which has tightly woven arms. There are also a number of prominent NGC galaxies in this constellation, including NGC 4490, 4485, 4244, and if you want a challenge, NGC 4656 & 4631. If you have an 8" or larger telescope, look for Hickson 68 which is a galaxy group. Moving away from galaxies, another Messier object is M3 a great globular cluster. There are also many interesting stars and double stars in this region of sky, including La Superba as discussed above. For more information about this constellation and all of its treasures, take a look at the March edition of Astronomy Now magazine

**International Space Station** – The ISS returns with some passes during the early hours of the morning from 4<sup>th</sup> March onwards. By the 2<sup>nd</sup> week of the month there will be 2 passes each morning, then by the end of the month there are some low evening passes visible. For the exact timings of the passes from your location, visit [www.heavens-above.com](http://www.heavens-above.com) You can also check the Iridium flare times for your location at Heavens Above

### Comets Visible This Month:

**Comet 2P/Encke** – located in Pisces, you may catch a glimpse of this comet low in the west after sunset during the first few days of March. After that it will be lost in the solar glare. It is currently at mag +6.0 and brightening

Click here to view the finder chart: <http://bit.ly/2m2Gt4G>

**Comet C/2015 ER61 (PanSTARRS)** – moving from Sagittarius towards Capricornus this month, it rises at around 4am in the south east and remains visible very low in the south east for a short time until dawn. It is currently mag +7.6 and brightening. Around 16<sup>th</sup> March it lies close to Pluto. On 22<sup>nd</sup> & 23<sup>rd</sup> March it is located very close to the Waning Crescent Moon

Click here to view the finder chart: <http://bit.ly/2ljQB4Y>

**Comet C/2015 V2 Johnson** – currently located in Hercules, this comet becomes visible around 7pm in the northern sky, then remains visible until dawn, when it will be around 80 degrees above the eastern horizon. It is currently at mag +8.9 and brightening. At the beginning of March, the comet lies very close to the mag +3.9 star Tau Hercules

Click here to view the finder chart: <http://bit.ly/2mp2hbx>

**Comet 41P/Tuttle-Giacobini-Kresak** – this comet begins the month in Leo, then moves through Leo Minor towards Ursa Major as the month progresses. It becomes visible after dusk, about 37 degrees above the eastern horizon. It remains visible all night long, reaching its highest point at around 11:15pm when it will be 63 degrees above the southern horizon. It will become lost in the dawn twilight at around 5am. It is currently at mag +10 and brightening. On 22<sup>nd</sup> March the comet lies just half a degree NE of the galaxy M108.

Click here to view the finder chart: <http://bit.ly/2lPvDhP>

**Comet 45P/Honda-Mrkos-Padusakova** – located in Leo this month, this comet becomes visible after the dusk twilight has faded around 24 degrees above the eastern horizon. It reaches its highest point at around 1am when it will be 64 degrees above the southern horizon. It remains visible until the dawn twilight. It is currently at mag +10 and fading

Click here to view the finder chart: <http://bit.ly/2mGwUFR>

There are several other comets in the mag +11 to +15 range. Details of these can be found in the links below.

For up to date information about the fainter comets which are visible, please visit:

<https://in-the-sky.org/data/comets.php>, the BAA Comets Section: <https://www.ast.cam.ac.uk/~jds/> or Seiichi Yoshida's home page: <http://www.aerith.net/index.html>

**NB: All of the information in this sky guide is taken from Night Scenes 2017 by Paul L Money, Philips Stargazing 2017 by Heather Couper and Nigel Henbest, Astronomy Now Magazine, Sky at Night Magazine, Stellarium, the BAA Comets Section website <https://www.ast.cam.ac.uk/~jds/>, [www.inthesky.org](http://www.inthesky.org) and [www.heavens-above.com](http://www.heavens-above.com) Information collated by Mary McIntyre. For regular updates about the events happening in the sky this month, follow the Nightscenes Monthly Night Sky Facebook page at [www.facebook.com/AstrospacePublications](http://www.facebook.com/AstrospacePublications)**