

Extract from BBC The Sky at Night News Letter

Highlights for the week ahead, 23-29 March

Tuesday 26 March This morning sees mag. +0.9 Saturn, mag. +0.8 Mars and mag. -2.0 Jupiter all sitting in a triangular formation, low in the southeast as the dawn twilight begins to take hold. For tips about spotting the planets in March click [here](#).

Friday 27 March Venus reaches dichotomy, when its phase should appear 50%-lit. In reality this occurs visually a few days earlier due to the Schröter effect. This is an anomaly believed to occur because of the way Venus's thick atmosphere scatters light.

Saturday 28 March This evening's sky plays host to mag. -4.3 Venus, a 17%-lit waxing crescent Moon and the Pleiades open cluster, M45, all appearing close to one another – a fantastic opportunity for a photograph.

If you find yourself stuck at home during the corona virus outbreak, click [here](#) for our list of stargazing activities to help you pass the time.



Look at Venus on 27 March when it will appear half-lit. On the following evening, the planet is in conjunction with a waxing crescent Moon and both will appear close to the Pleiades. *(Picture credit: NASA)*

THE MOON THIS WEEK

THE SUN THIS WEEK

DATE	MOONRISE	DATE	SUNRISE	SUNSET
23 March 2020	06:24 UT	23 March 2020	06:04 UT	18:30 UT
24 March 2020	06:39 UT	24 March 2020	06:02 UT	18:32 UT
25 March 2020	06:53 UT	25 March 2020	06:00 UT	18:33 UT
26 March 2020	07:07 UT	26 March 2020	05:57 UT	18:35 UT
27 March 2020	07:23 UT	27 March 2020	05:54 UT	18:37 UT
28 March 2020	07:41 UT	28 March 2020	05:52 UT	18:39 UT
29 March 2020	09:03 BST	29 March 2020	06:50 BST	19:41 BST



23 March

2001 The Russian Mir space station is disposed of, breaking up in the atmosphere before falling into the southern Pacific Ocean near Fiji

After 15 years of service, the Russian space station was taken out of orbit in the early hours of 23 March 2001. Onlookers watched as its 130-tonne frame burnt up in the sky above Fiji.

At the time Mir was the largest spacecraft to ever re-enter Earth's atmosphere and there were concerns about large debris. New Zealand issued shipping warnings and in Japan residents were advised to stay indoors, but chances of danger from debris was actually very low.

The de-orbit took place over three stages, at 90-minute intervals. The first two brought Mir down to 160km above Earth's surface. As Mir reached a height of 90km, the heat from its hull created a glowing halo of hot plasma. At this point several elements of the burning space station were visible from Fiji in the evening sky (pictured above). An official statement announced that Mir 'ceased to exist' at 05:59 UT.

Mir had been a technical triumph. It flew 3.5 billion km while housing 104 cosmonauts and astronauts representing more than 12 countries, but Russia wanted to concentrate its future efforts on supporting the International Space Station.

Also this week

23 March 1965 NASA launches Gemini 3, the first crewed mission in the Gemini Program, with astronauts Gus Grissom and John Young onboard.

24 March 1979 The first fully functional Space Shuttle, Columbia, is delivered to the John F Kennedy Space Center to be prepared for its first launch.

Get started in stargazing

1. No equipment needed

There are lots of things you can see with the naked eye alone, from Milky Way star fields to meteors and bright constellations, even star clusters and some bright galaxies. If you want to take things further, consider a pair of 10x50 binoculars.

2. Wrap up warm

We know this sounds obvious, but a lot of astronomy is spent standing still, staring up at the sky, so it is important to guard against the cold. Multiple layers are a good idea, as are waterproof shoes, a hat and gloves.

3. Let your eyes adjust

This is crucial. If you go outside from a brightly lit room, you will probably only see a handful of stars. Wait and let your eyes adjust to the darkness, ideally for 30 minutes, and you will notice an incredible difference. Doing so should allow you to see much fainter stars.



Understanding the night sky

Size and distance

The apparent size of objects in the sky and the distances between them are measured in degrees. The width of your little finger with your arm outstretched spans about one degree.

Magnitude

The brightness of an astronomical object is given by its magnitude (mag.). The lower the number, the brighter it is. Magnitudes brighter than zero are represented by a negative number.

Astronomical time

Universal Time (UT) is the standard time used by astronomers around the world. We also use British Summer Time (BST) when this is in effect, which is one hour ahead of UT.

Zenithal hourly rate

A measure of meteor shower activity, ZHR refers to the number of meteors you would expect to see per hour under perfect conditions with the radiant of the shower overhead.