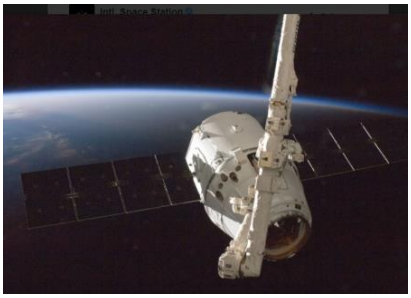
Dark Sky at LGFC – what to look out for in 2018

This is a list of what to look out for in the night sky from LGFC at different times of year during 2018. To get your directions – when you come out of the front door of the main building, you will be facing due South. To your right, looking towards the Lake is West. To your left, looking up to the head of the valley is East and directly behind you is North.

To obtain the best view, the skies will need to be clear of clouds, make sure that you turn lights off outside and give your eyes a few minutes to adjust to the dark. The best way to watch for meteors is to sit or even lie down if you have something warm to lie on.

It is also possible to get a good view of the International Space Station as it passes over Ennerdale. Visit https://spotthestation.nasa.gov/ to see exact times when it will fly over. It's easy to spot the ISS shortly after sunset as it looks like a very bright star moving rapidly across the sky – it flies at 17,500 mph at a height of 250 miles.



January 3-4 – Quadrantids meteor shower

The Quarantids meteor shower will peak on 3rd and 4th January, though you should be able to see meteors from 1st to 5th January if skies are clear. At peak times up to 40 meteors per hour will be seen. The meteors can appear anywhere in the sky but will appear to radiate from the constellation Bootes which is close to the Pole Star. The best viewing time will be after midnight.

January 1 and January 31 – Supermoon

A Supermoon happens when a full Moon coincides with the Moon's closest approach to Earth, the Moon appears much larger than normal. This happened on December 3rd in 2017 and occurs again on January 1st and January 31st in 2018. The second full moon in a month is known as a 'blue moon'.

April 22-23 – Lyrids meteor shower

The Lyrids meteor shower produces about 20 meteors per hour at peak on April 21-22, though some meteors should be visible from 16th to 25th April. The meteors can appear anywhere in the sky.

May 6-7 – Eta Aquarids meteor shower

The Eta Aquarids meteor shower is fairly low intensity and at its peak should produce about 30 meteors per hour. Some meteors may be visible from April 19th through to May 28th. The meteors can appear anywhere in the sky but will appear to radiate from the constellation Aquarius in the East at 3am on May 7th. The meteors are caused by dust and debris from Halley's Comet.

May 9 – Jupiter opposition

On May 9th Jupiter will reach opposition, this is the point in its orbit where it is closest to Earth. Jupiter will appear brightest on May 9th but will still be bright in the weeks leading up to and after May 9th.

June 27 – Saturn at opposition

Saturn will be at its closest to the earth and it will be fully illuminated by the sun. So this is the best time to view Saturn. A telescope will allow you to see Saturn's rings and some of its moons.

July 27 – Total Lunar Eclipse

The moon will be in the Earth's shadow and will appear blood. The eclipse will be at its maximum at 9.45pm.

July 27 – Mars at Opposition

On July 27th Mars will reach opposition - the point in its orbit where it is closest to Earth. It will be brighter than any other time of the year.

August 12-13 – Perseids meteor shower

The Perseids are one of the stronger meteor showers and may produce 60 meteors per hour at peak on the night of August 12th, though you may be able to see meteors between July 17th and August 24th. The meteors can appear anywhere in the sky but will appear to radiate from the constellation Perseus in the North-East. The meteors originate from the tail of the Swift-Tuttle comet.

October 21-22 – Orionids meteor shower

The Orionids meteor shower produces about 20 meteors per hour and is created by dust from Halley's comet. The meteors can appear anywhere in the sky but appear to radiate from the constellation Orion which will be in the east at midnight on the night of October 21-22.

November 17-18 – Leonids meteor shower

The Leonids meteor shower produces about 20 meteors per hour at its peak and is created by dust from the comet Tempel-Tuttle. The meteors can appear anywhere in the sky but will appear to radiate from the constellation Leo which will be in the east in late evening/early morning of November 17-18.

December 13-14 – Geminids meteor shower

The Geminids meteor shower will peak on the nights of 13th and 14th December late in the evening and before dawn the following day, though meteors could be visible between 6th and 19th December. At peak times between 60-100 meteors should be seen if the skies are clear and the Geminids are usually one of the most spectacular meteor showers of the year. The meteors can appear anywhere in the sky but will appear to radiate from the constellation Gemini in the east at 9pm on December 13th. Unlike most meteor showers, the Geminids are associated with dust from an asteroid rather than a comet.

Photos courtesy of NASA – below the Milky Way