**Dundee Astronomical Society** 

# Sky Notes for June 2017

Sky Map for 15<sup>th</sup> June 2017 22:00



Illustration Courtesy of www.heavensabove.com

Well here we are now into 'summer time' with all the opportunities that brings with it. The short nights bring us challenges for observing; however, we shouldn't be too dismayed as there is always our nearest neighbour the Moon and our nearest star the Sun to look out for. You may, by now, be tired of me saying the obvious about looking at the sun, but you should always take appropriate action to protect your eyes by using the correct sun filters on telescopes, binoculars, cameras or anything else you may use to view our nearest star - you have only one pair of eyes, so be careful.

Remember the sun reaches summer solstice on the 21<sup>st</sup>, this is the point when the sun's change of declination is zero, thereafter if you forgive the pun, its downhill from there to the darker nights and more opportunity to get out there, freeze to death observing the universe and enjoying ourselves, who says we are not right in the head, not me that's for sure.

Summer time is also an appropriate time to find a dark site, consider the night sky and view the Milky Way in all its glory, remember to allow approximately 20 minutes for your eyes to become dark adapted.

#### The Planets

Mercury	Is low in the sky this month at an altitude 2 deg. Situated in Gemini the best time to view is at the end of the month on the $30^{th}$ at around 2110 UT
Venus	Although not as low in the sky as Mercury, at an altitude of 10 deg it will still be difficult to observe. Venus reaches its greatest western elongation on the $3^{rd}$ , but will be best observed on the $20^{th} - 21^{st}$ of the month around 0300 UT and is situated in Aries.
Mars	Unfortunately Mars is not visible this month.
Jupiter	Located in Virgo, the best time to view is on the 1 <sup>st</sup> of the month and at an altitude of 30 deg is very easy to see. Located in Virgo the best time to view is around 2145 UT. Now is the time, provided the clouds have gone, to have a look and capture some images.
Saturn	This planet along with Jupiter is a marvellous sight to capture. Although low in the sky at 15 deg, is resident in Ophiuchus. Using a medium scope, you should see the rings and some of Saturn's moons. Probably the best time to view 0000UT on the 15 <sup>th</sup> .
Uranus	Not visible in our night sky.
Neptune	Again low in the sky at 9 Deg located in Aquarius aim the view around 0020 UT.
The Moon	
First Quarter	1 <sup>ST</sup> June
Full Moon	9 <sup>th</sup> June This full moon was known by early Native American tribes as the Full Strawberry Moon because it signalled the time of year to gather ripening fruit. It also coincides with the peak of the strawberry harvesting season. This moon has also been known as the Full Rose Moon and the Full Honey Moon.
Third Quarter	17 <sup>th</sup> June

## New Moon 24<sup>th</sup> June

**NLC's** We are now into the full swing of NLC season. These are the highest clouds on our planet being 76 – 85km high. They can typically can be seen 90 – 120 minutes after sunset in the northwest or a similar time in the northeast after sunrise. If you observe some NLC's, please send details and any images you might capture to Ken Kennedy giving date, location, direction and time stating whether local or UT.

### **Monthly Challenge**

Look for the Lunar X on the 1<sup>st</sup> and 2<sup>nd</sup> of the month, the best time to view and image is around midnight on the 1<sup>st</sup>. The best way to spot the X is by going roughly a quarter the way up the southern terminator limb. The X is formed when sunlight catches part of the rims of craters La Caille, Purbach and Blanchinus. This will be fun to try and capture an image. *Image courtesy of Sky at Night Magazine.* 



This month's second challenge is to look for M3 a Globular Cluster east of Bootes and west of Canis Venatici, with a magnitude of +6.2 it should be easily observed in a pair of binoculars, and on a very dark night with the naked eye. Have some fun and go looking.

## **Comet Spotting**

This month gives us another opportunity to observe Comet C/2015 V2 before it disappears in July. Johnson has a predicted mag of +6.7 by the end of the month, but we all know what predictions are like!! You should be able to observe Johnson with binoculars or a small scope.



Comet 71/P presents another opportunity to view, but being only magnitude of +11.8 will be difficult to spot, but using a medium to large scope you should see it.



### Jim's Focus of the Month

#### **Canis Venatici**

The name Canis Venatici is Latin for "hunting dogs", and the constellation is often depicted in illustrations as representing the dogs of Boötes the Herdsman, a neighboring constellation. Cor Caroli is the constellation's brightest star, with an apparent magnitude of 2.9, La Superba, another star in the constellation is a pulsating variable star and is one of the reddest stars in the sky as well as one of the brightest carbon stars.

This constellation contains five Messier objects, including four galaxies. One of the more significant galaxies is the Whirlpool Galaxy (M51, NGC 5194) which contains many star-forming regions and nebulae in its arms, coloring them pink and blue in contrast to the older yellow core.

Other notable spiral galaxies in Canes Venatici are the Sunflower Galaxy (M63, NGC 5055), M94 (NGC 4736), and M106 (NGC 4258). M63, the Sunflower Galaxy, was named for its appearance in large amateur telescopes. It is a spiral galaxy with an integrated magnitude of 9.0. M94 is a small

face-on spiral galaxy with an approximate magnitude of 8.0, about 15 million light-years from Earth. NGC 4631 is a barred spiral galaxy, which is one of the largest and brightest edge-on galaxies in the sky. M3 (NGC 5272) is a globular cluster 32,000 light-years from Earth. It is 18 deg in diameter, and at magnitude 6.3 is bright enough to be seen with binoculars. It can even be seen with the naked eye under particularly dark skies.



1



## Did You Know?

6 <sup>th</sup> Jun 1971	Soyuz 11 carries Soviet Cosmonauts to Salyut 1 the first manned orbital station.
13 <sup>th</sup> June 1983	Pioneer 10 becomes the first spacecraft to exit the solar system.
16 <sup>th</sup> June 1963	Valentina Tereshkova, Soviet Cosmonaut becomes the first woman launched into space.
20 <sup>th</sup> June 2016	Summer Solstice (longest day).
21 <sup>st</sup> June 2004	First private manned mission to space taken on SpaceShipOne.

Jim Barber

**Director of Observations** 

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