

Dundee Astronomical Society

Sky Notes for July 2017

Sky Map for 15th July 22:00

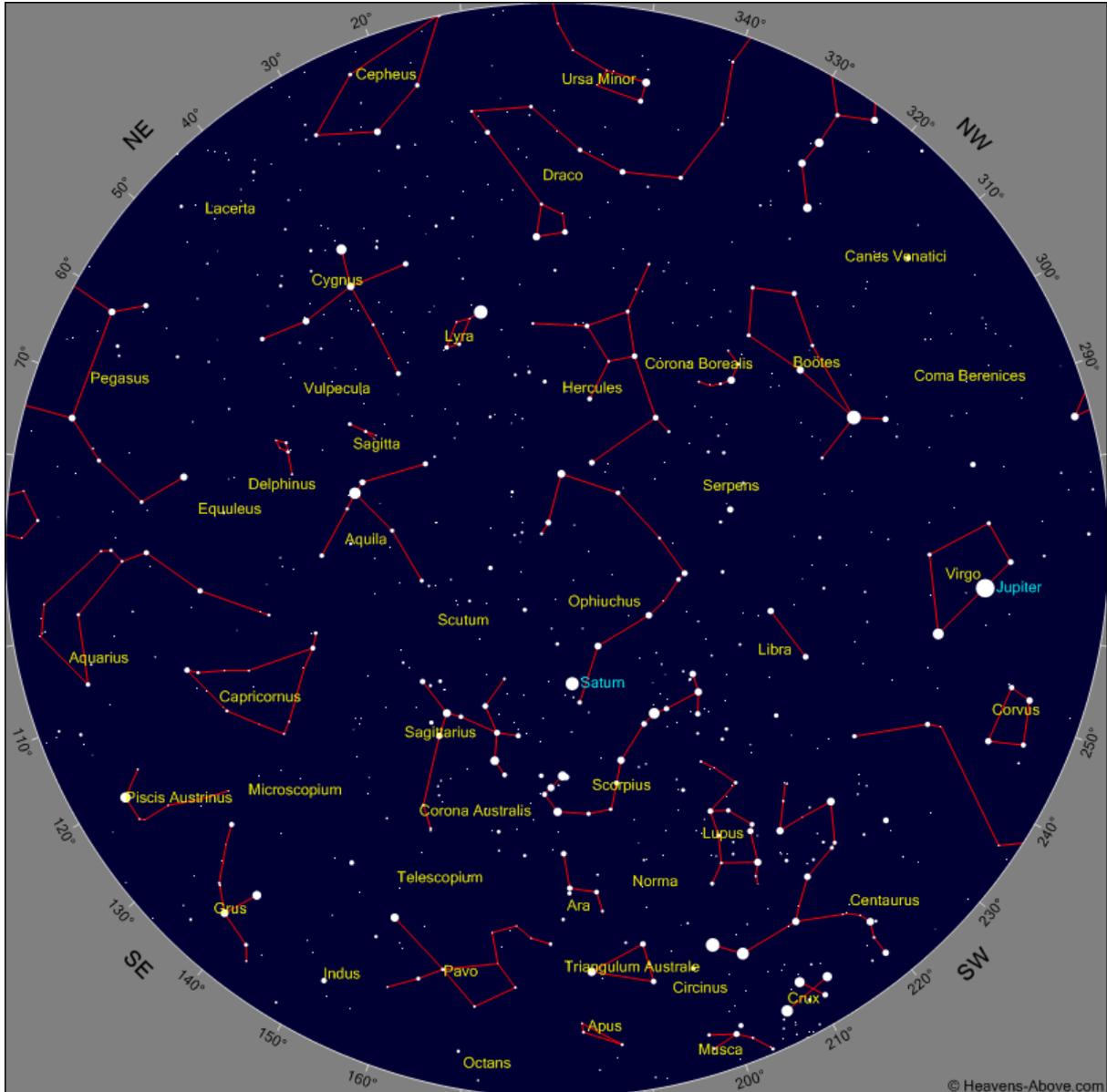


Illustration Courtesy of www.heavensabove.com

So far June has, at least for me, been a particularly disappointing month, what with the clear days and then at night the clouds coming over and obscuring most of the night sky. However, we need to look forward and hope that, for July, the weather picks up as far as clouds are concerned and as the nights start to close in we will be able to get some observing done. NLC season continues throughout

this month and has not proved to be one of the best. To paraphrase Ken Kennedy our resident NLC expert, *"We seem to have an explanation (at least in part) as to why there have been only few NLC displays so far this year. It seems that the temperature at the mesopause is unusually high, which you will see from the graph in the article on Spaceweather. The real question is why is it so high this year? Atmospheric teleconnection has caused this to happen in the southern hemisphere but it's not so common in the northern hemisphere, presumably because of land mass distribution. That may not be the reason for the 'warm' mesopause but perhaps more information will be released soon"*. However, don't let this deter you from going out late evening or early morning and looking North East for any signs of NLC's. There are 3 images included in the NLC section below.

The Planets

- Mercury** Seen in the early evening at the start of this month. Reaches greatest elongation on the 29th.
- Venus** A morning planet just below the Pleiades on the 5th.
- Mars** Not visible this month. It will be in conjunction with the sun on the 27th.
- Jupiter** Now going past its best for this year.
- Saturn** Low in our evening sky, probably getting close to its best for this year.
- Uranus** Becoming visible to the naked eye later in the month, in the morning sky.
- Neptune** Again another morning planet.

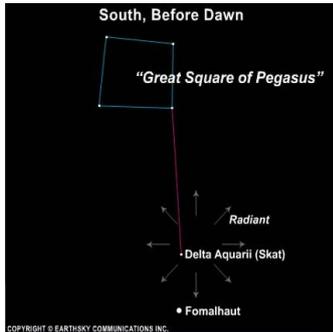
The Moon

- First Quarter 1 July 2017
- Full Moon 9th July 2017
- Third Quarter 16th July 2017
- New Moon 23rd July 2017
- First Quarter 30th July 2017

Meteor Showers

Delta Aquarids is an average shower that can produce up to 20 meteors per hour at its peak. It is produced by debris left behind by comets Marsden and Kracht. The shower runs annually from July

12 to August 23. It peaks this year on the night of July 29 and morning of July 30. The crescent moon will set by midnight, leaving dark skies for what should be a good early morning show. Best viewing will be from a dark location after midnight. Meteors will radiate from the constellation Aquarius, but can appear anywhere in the sky.



NLC's

NLC season continues this month with two reports for June from Ken Kennedy and Andy Heenan. Keep looking out though and again, if successful, send your reports to Ken Kennedy giving day, date, time, stating whether UT or Local, and of course direction.



Ken Kennedy



Ken Kennedy



Andy Heenan

Monthly Challenge

Let's stay inside the Summer Triangle for this month, Messier 29 (also known as M 29 or NGC 6913) is an open cluster in the Cygnus constellation. M29 Being situated in the Milky way should make this a slightly more difficult (but not too difficult) object to view. This cluster can be seen in binoculars. In telescopes, lowest powers are probably best. Look out for the quadrilateral of the 4 brightest stars, with a triangle just above them. Happy hunting!!

Jim's Focus of the Month

This month let's look at one of my favourites, The Summer Triangle. This Triangle consists of Vega (in the constellation Lyra), Deneb (in the constellation of Cygnus) to the east, and Altair (in the constellation of Aquila). There are many interesting objects to view, ranging from the Milky Way to Albireo, a double star with magnificent Orange and Blue components, at the head of Cygnus the Swan. There are several Messier objects such as M27 the Dumbbell Nebula in Vulpecula, M57 the Ring Nebula in Lyra, both fabulous objects to view through a medium telescope, and if you can

image them, even better. A difficult double-double star to view is Epsilon Lyra, but is well worth the effort if you have a medium – large scope with high magnification. To me well worth viewing.

One of my favourite objects to view through a pair of binoculars is the Coathanger Cluster or Brocchi's cluster.

Also within the Summer Triangle is the Northern Cross consisting of the stars, Deneb, Sadr, Gienah, Delta Cygni and Albireo. The 'head' of the cross, Deneb, is also part of the Summer Triangle asterism.



M27

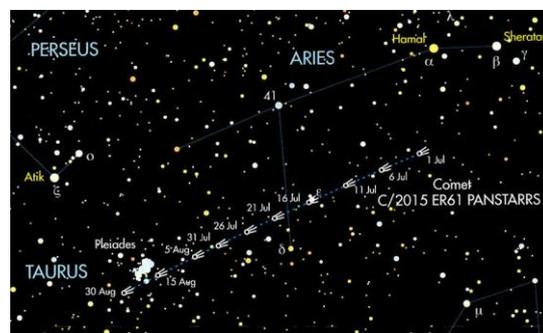


M57

There are many other objects within the Triangle, for instance M56 a lovely Globular Cluster, M29 etc, plenty to view with a variety to suit all tastes, have a go, providing the clouds clear long enough!

Comet Spotting

Comet C/2015 ER61 Panstarrs (lovely description) at mag +11 and moving quite fast as can be seen from the graphic below (Courtesy BBC Sky at night Magazine) should be visible in med to large scopes, so keep an eye out.



Did You Know?

4th July 2016 Juno arrived at Jupiter to understand the evolution of the planet.

10th July 1962. Telstar 1 a US communications satellite beams the first live transatlantic telecast.

15th July 1972. Pioneer 10 on its way Jupiter becomes the first spacecraft to travel through the Asteroid Belt.

15th July 1975. First Joint USSR-US mission The Soyuz – Apollo Test Project is launched.

20th July 1976. Viking 1 lands on Mars and returns the first pictures of the planet's surface.

21st July 2011. Space Shuttle Atlantis lands safely, bringing to an end the space shuttle program.

Jim Barber

Director of Observations

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