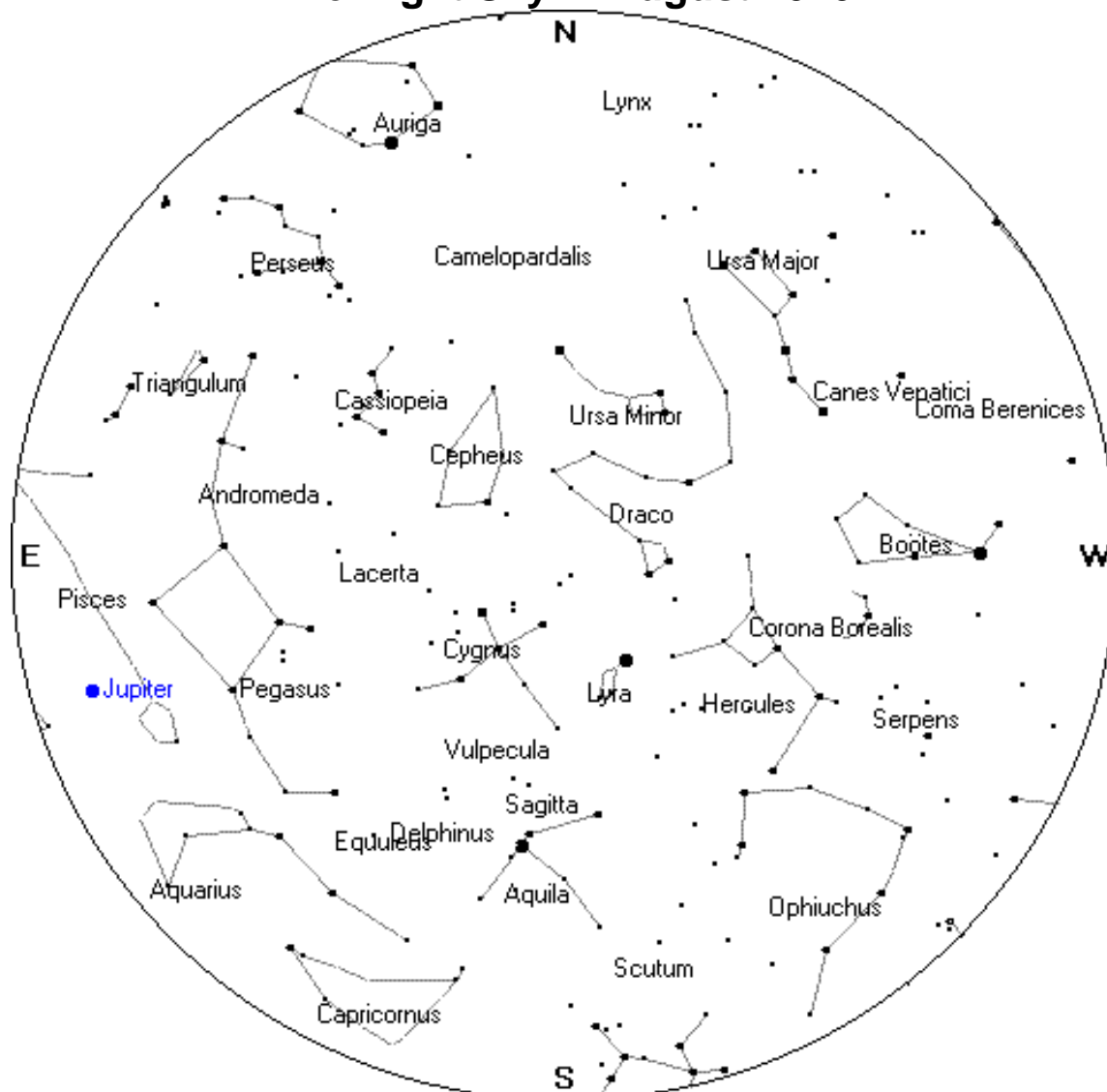


Dundee Astronomical Society The Night Sky in August 2010

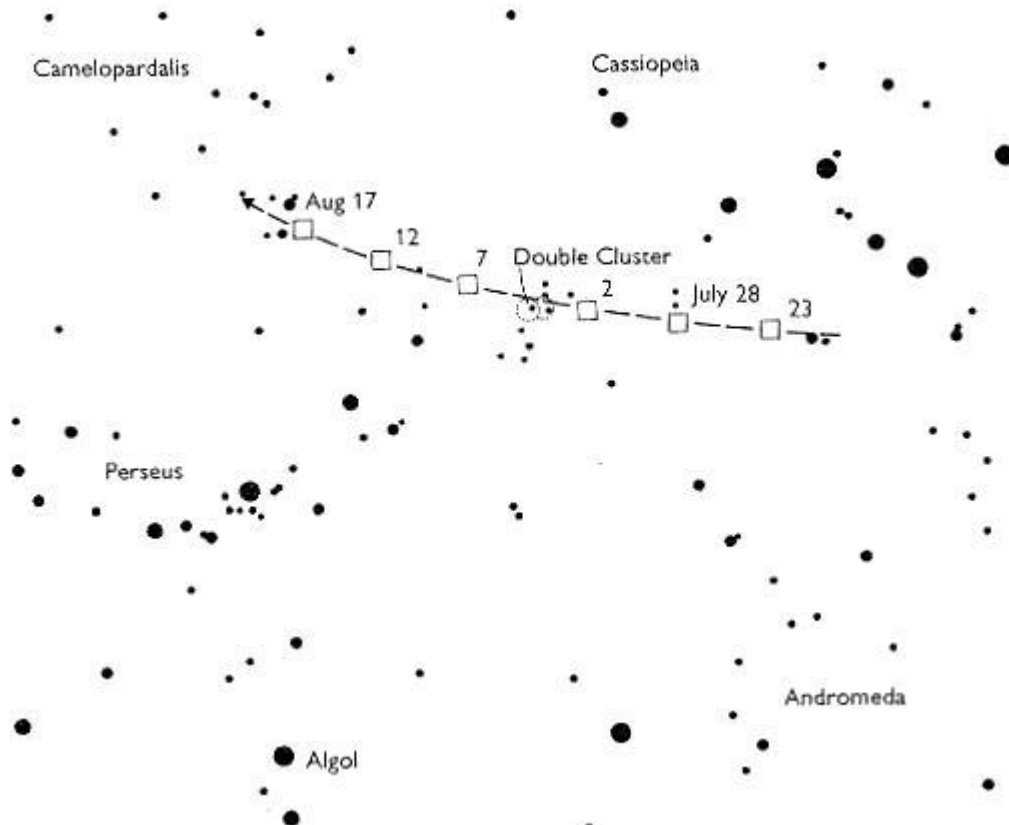


The Sky at 10pm on 15th August 2010

[chart courtesy of www.heavens-above.com]

The glorious 12th of August marks the annual highlight of the shooting season. In astronomical terms, however, the shooting objects are meteors and the Perseid meteor shower reaches its peak of activity at about 10pm on the night of August 12th. 2010 is a particularly favourable year to have a look for Perseid meteors as the peak of activity is during moderate darkness and at a civilised time of night. The Moon is two days old and will be set early in the evening and so its light will not interfere with fainter meteors. Hopefully it will still be relatively warm at this time of year and all we can hope for is a cloud free sky. At around 10pm it should be possible to see about 2 meteors every minute and some can be quite bright. These meteors can be seen all over the sky and it is best to look at the darkest part of your sky and wait. Telescopes and binoculars are not required and, with a bit of luck, you will be able to enjoy a celestial firework display for a few hours. The meteors are tiny particles shed by comet Swift-Tuttle which burn up on hitting the atmosphere about 55 miles above the Earth. If conditions are favourable (little cloud!), DAS intends to hold a meteor

watch on the night of 12/13 August at our observatory at SCRI. Because it will still be fairly bright in the evening it is probably not worth meeting until about 2100 BST and we should be seeing something by about 2130 and later. I would suggest bringing a folding chair and fairly warm clothing as it can get quite chilly standing (or sitting) about for an hour or two!



Perseid radiant

Looking up, almost overhead, is the obvious cross of Cygnus, the swan. Highest in the sky, at the tail of the swan, is the bright star Deneb. Although Deneb is only the 19th brightest star in the sky it is one of the most luminous, being about 60,000 times brighter than our Sun. It is a blue-white supergiant 200 times the diameter of the Sun at a distance of 1,550 light years. The line of stars forming the body and neck of the swan lies along the Milky Way which should be seen clearly on a moonless night from a dark spot.

There will be a grazing occultation of 47 Arietis (magnitude 5.85) on 31st August. This will be seen near, and probably to the west of Dundee and observers should start looking at about 0100 UT. The Moon's phase will be at about last quarter. With such an event its ideal to string observers along a few miles in Carse of Gowrie and hope someone sees the graze. Anyone interested should get in touch and perhaps arrangements can be made. Unfortunately I won't be in Dundee at the time.

Mercury will not be seen from the northern hemisphere during August.

Venus, Mars and Saturn all set by about 9pm during August and are not visible throughout the month.

Jupiter rises at about 10pm early in the month and will be well placed by 2am during August. Gradually becoming higher in the sky, Jupiter will make a good telescopic object and, with binoculars held steady, the four major satellites can be easily seen.

Uranus is in Pisces near Jupiter throughout the month.

Neptune is lower in the sky and moves into Capricornus from Aquarius. It is in opposition on 20th August.

The Moon is at last quarter on the 3rd, new on the 10th, at first quarter on the 16th and full on the 24th.

Bill Dow, vice chairman of Dundee Astronomical Society will give a talk entitled 'Astronomy and Our Own Planet' at 1.30pm on Sunday 15th August.

Ken Kennedy
Director of Observations