

Sky Notes: 2011 February & March

by Callum Potter

Many excellent astro-images sent in as candidate pictures for the regular BAA Picture of the Week are displayed on the Association's website. More pictures are always welcome, and although most sent are digital images, scans of drawings and sketches are appreciated too. I am not at all artistic, but like to capture some of my observations as sketches, though I'm not sure I would care to share them with anyone – they are pretty functional, but in the end the accuracy of the observation rather than artistic merit is what is important. Of course many make written records of observations, and whilst these may not be suitable for use as a 'picture of the week' I am sure we would appreciate the most interesting being sent in too – for use in the *Journal's* 'Observers Forum' column, or on the BAA Blog.

The Spring Equinox occurs on March 20, with equal hours of light and dark that day.

And at the end of the month, on March 27, British Summer Time commences, so remember to put your clocks forward one hour at 1.00 a.m. – assuming there has been no government action to change this in the meantime. Personally, I'm not that keen on the

suggested move to CET: observing in the early evening in the winter months is a boon for those of us that can't stay up too late with work the next day. And hailing from Scotland too, I am sure the change would not go down well north of the border, though perhaps the impact there is being a little over-exaggerated – it's always pretty dark there morning and afternoon during the winter.

The Moon is New on February 3 and March 4, and Full on Feb 18 and March 19.



The massive storm on Saturn (see also page 5) imaged on 2010 Dec 30 by Anthony Wesley, Australia.

Inner planets

Mercury is not observable in February being at conjunction on Feb 26, but in March there will be an excellent opportunity in the early evening to view the closest planet to the Sun. It appears above the horizon starting around March 7, and reaches its highest elevation of about 10° on March 22, from whence it will drop again towards an early April solar conjunction.

Mercury and Jupiter do a little dance and will be closest together around March 15, which could make for an interesting photo challenge.

Venus is still bright and obvious in the pre-dawn sky, but it is heading towards the Sun and will be low in the south-east, making serious observation difficult.

Mars is in conjunction with the Sun on February 5 and is not well placed in March, so can be considered to be unobservable. It will be towards the end of the year before Mars will be good for observing again.

Outer planets

Jupiter is rapidly heading towards the south-western horizon and is becoming less favourable for observation. It will be in solar conjunction in April, so it will be the middle of the year before Jupiter comes into view again.

Saturn is really the best of the planets to be viewed during February and March. It will still culminate after midnight during these two months, but can no longer be considered to be just an early morning object. Careful observation and recording may still reveal traces of the storm which was seen in December and January, which was another amateur discovery, and shows the real value of continued monitoring of solar system objects by amateurs.

While discovering comets and asteroids is pretty much monopolised by automatic survey telescopes (though there are still opportunities for amateurs to make such discoveries, as shown by Ikeya, Murakami and McNaught in recent years), there are no real professional programmes interested in continually monitoring the planets and the Moon – so the field is open to amateurs to make a real contribution. No special equipment is needed – just patience and persistence!


Although you might just catch **Uranus** in early February, it is heading to conjunction with the Sun on February 17, and will still be unobservable in March. **Neptune** is also unfavourable.

Occultations

On March 13 there will be a lunar occultation of the double star Eta Geminorum, Propus, which could make an interesting observation.

BIG BANG

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EXHIBITION

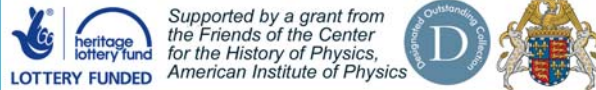
Papers and artefacts from the Hoyle Collection displayed in the seventeenth-century College Old Library. 10am-4pm

TALKS

Boots, boxes and books: the Life, Work and Papers of Sir Fred Hoyle. 11am
Searching for the Cosmic Dawn: the Quest for the First Galaxies. 1pm
Astrobiology: the Hunt for Alien Life. 3pm

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The magnitude 3.5 'star' is in fact a close double, but can be difficult to separate. The secondary is mag 8 and close, so can easily be swamped by the brightness of the primary.

Disappearance on the lunar dark limb will start at around 21:13UT and the reappearance on the bright limb will be at around 22:15, for those observing in London. If you consult your BAA *Handbook* you will be able to calculate the times for your local circumstances, or you could just use one of the popular 'planetarium' software packages.

Deep sky

March sees the start of the spring 'star camp season' with the Isle of Wight Star Party at the start of the month and the Kelling Heath Spring Star Camp and the Star Gazers' Lounge camp near Hereford on the same weekend at the end of the month. The weather is likely to be a bit bracing, especially for those camping in tents!

I often find it interesting to have a look at relatively empty areas of sky to see if there might be anything worth observing. Cancer is well placed for observing these two months,



M44 (top right) and Comet Lulin, imaged between 22:39 and 22:58 UT on 2009 March 4 from Elgin, Scotland. Canon EOS 300D, Sigma EX DG 150mm lens, Astro-nomik CLS filter. 6x3 minute sub-frames at f/4.5, ISO400. Alan Tough.

and is a pretty unremarkable constellation with the exception of the Beehive Cluster. There does not seem to be much to make of the shape of the constellation's major stars except perhaps a 'Y' or maybe a sort of Feynman diagram.

The main standout object of the constellation is of course M44, Praesepe, or the Beehive Cluster. This is a rich open cluster, which can just about be detected with the naked eye from a dark site. A wide field low power view is best – a 1½ to 2° field will be needed to capture the whole cluster in its entirety – so binoculars or a rich field telescope are ideal. Higher power telescopic views do not really add much. Unlike M45 there does not seem to be any sign of nebulosity in the cluster, indicating greater age, yet M44 is only reckoned to be around 650 million years old. It's also one of the closest open clusters at around 500 light years distant.

Cancer has another open cluster in M67, but in contrast to M44 it is of much greater age, being about 4,000 million years old, among the oldest open clusters

known in our galaxy. Not as spectacular as M44, but still an interesting object.

These two open clusters are the only 'easy' deep sky objects in Cancer, but those looking for a challenge can seek out a number of faint galaxies to the east of M44 – NGC 2672, NGC 2673, and further east NGC 2749 and NGC 2764. These are in the range of mag 11 to 13, so should be observable with a moderate size telescope and be within easy reach for CCD imagers. A few degrees to the west of M44 is the Cancer Cluster of galaxies with a large number of very faint galaxies – visual observers will need a dark site and a scope of 40cm or more.

Callum Potter

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