

ASTRONOMY SECTION REPORT 2013 – 2014 session

NEW SESSION STARTING SEPTEMBER 2013

Just prior to the new session start, Terry Pearce and I (Doug), made our annual visit to the Festival of Astronomy at the old R.O.G at Herstmonceux. This year the weather was fine and on the Saturday night (7th Sept.) we managed a look at Neptune through the old 10-inch refractor. Then we went into the camping field and found one of the visitors who had a 16-inch Dobsonian in operation. We managed a look at the 'Witches Broom' – part of the Veil Nebula in Cygnus, M27, M57, M11 and M13. Glorious views of these deep sky objects which we never get in Hampstead.

FIRST OPEN NIGHT Friday13th Sept 2013

Not an auspicious beginning to the new session – persistent rain and drizzle ensured that the Observatory remained closed on Friday but the weather improved a bit on Saturday and visitors were treated to some good views of the Moon – just a couple of days after first quarter. The weather remained unsettled for the following week-end, open on Friday and clouded out for the rest.

BBC FILMING AT THE OBSERVATORY Friday Sept. 27th

Once again the BBC requested the use of our Observatory as a venue for filming an item for the HORIZON programme. The programme featured the forthcoming approach of comet ISON and the BBC kindly paid £150 as a location fee. The programme aired on November 23rd and the interior of the Observatory was seen for approx 5 seconds – that works out at a location fee rate of £30/sec.

SKY at NIGHT AWARD to DGD & JVD

A full report of the Sky at Night Magazine award made to Doug & Julia Daniels was published in the October edition of the magazine. It was in recognition of their combined total of 104 years as volunteers at the Observatory.

Comet ISON

By mid November we had hoped to be observing the 'comet of the century' a magnificent bright comet visible in daylight. Will we never learn? – comets are not to be trusted! Early predictions indicated that ISON would reach magnitudes of minus11 to minus16 – ten times the brightness of the Moon. The latest BAA Circular issued in November indicated a maximum magnitude on +3.3, in other words a dismal failure. But worst still, ISON did not survive its perihelion passage and just fizzled out so we saw nothing of it.

Other Comets

Apart from ISON during November/December, there were 3 other comets gracing our skies – Encke, Linear and Lovejoy. Of the three, Lovejoy was the most easily observed as it was at higher declination. On November 25 it passed a few degrees west of Cor Caroli (Alpha Canes Ven,) at a magnitude of +5.8

New H alpha Solar Telescope

In November we placed our order for a Coronado Hydrogen Alpha telescope and a HEQ5 computer controlled mount. These were delivered on December 3^{rd}

2014. Coronado Telescope Training Day Jan. 5th

On Sunday January 5th, we held our first training session for Demonstrators and Assistants so that they could familiarize themselves with the setting up and operation of the new Coronado Hydrogen Alpha Solar Telescope. There is much to learn concerning the adjustments to tune the instrument into the different aspects of Solar observation and more to learn concerning setting up the new computer controlled mount. The meeting was reasonably well attended and we did manage to see a large sunspot group and one or two prominences before the low Sun was overwhelmed by thickening cloud. But at least the Coronado is installed and fully operational and will add another dimension to our Sunday morning solar observation sessions. In the event, we had to wait until March 9th for a nice sunny Sunday to show visitors what the Sun really looks like! The Sun, however, was a bit quiet with a few small sunspots and a couple of small prominences and dark filaments visible. Doug also managed to get a picture with a handheld Canon A2200 compact digital camera that just about shows one or two small prominences.

Stargazing Live

Once again the BBC produced another two Stargazing Live programmes in early January. Once again the weather was appalling but we managed one clear night on Saturday 11th Jan. Despite not advertizing our participation in the event because of last year's problems with crowd control, around 200 visitors still turned up and were treated to views of the Moon, Jupiter and M42 and the Pleiades. Well done all those who turned up to assist on the night.

Supernova in M82

Well done to Dr. Steve Fossey and his students at Mill Hill Observatory for their discovery of a Supernova in the galaxy M82 Ursae Majoris. The discovery was made on Jan. 21st during a training session with the Observatory's Celestron 14 and was the first time that the students had used the telescope. The image was identified in a 10 second CCD exposure taken through a gap in the clouds. "You lucky blighters".

Bad weather & Bad News

Towards the end of January and the early part of February, we experienced the worst weather for almost a century. Persistent rain and high winds blew in from the Atlantic carried by the jet stream that had positioned itself to the south of the country. High tides and monstrous waves battered the coasts and rivers burst their banks flooding vast areas. In north London, we were spared much of the devastation, but the high winds managed to dislodge the Observatory shutter.

The bad news came on February 18th when we heard of the sad passing of Gordon Harding (age 85). Gordon had been an Assistant demonstrator at the Observatory for many years. He was an enthusiastic amateur astronomer and was a Fellow of the RAS, a member of C.A.T.S and of the Harringay Astronomical Society. He will be greatly missed by his many friends.

Aurora – strong activity

Reports came in of strong auroral activity on the night of February 27th, the display was visible as far south as Jersey. I looked out shortly before midnight from Finchley, but saw nothing. Not surprising with the current level of light pollution. Needless to say, it was totally overcast on 28th.



Hampstead Scientific Society

Scouts visit on March 7th.

The Christchurch Scouts at last managed to visit the Observatory on the evening of March 7th. Their visit postponed from last month due to bad weather. This time we were lucky and were able to view a near first quarter Moon and Jupiter under clear skies.

Extended opening season

We decided to extend our opening season up until 18^{th} of May. This was because Jupiter was still on view and Mars was well placed for observation after opposition in April, and we could get a brief glimpse of Saturn before it is lost to view in the low declination Summer constellations. Because 'summer time' was by then in force and consequently not dark at 8:00 pm, from April 25^{th} we opened at 9:00 pm - 11:00pm. The last weekend opening sessions were blessed with clear skies and about 150 visitors turned up on 16^{th} for a final glimpse of Jupiter, Mars and Saturn.

Member's Mars Observation nights

Responding to some midweek clear nights, we decided to open for members to observe Mars. Two sessions were arranged on April 24th and again on May14th. Those attending were shown how to work out the Longitude of the Central Meridian (LCM), by Julia using the BAA Handbook and Doug brought his globe of Mars. Despite not being a close opposition, considerable surface detail could be seen together with a small northern polar cap.

End of session

The session ended on Sunday May 18th. I should like to take this opportunity to thank all Demonstrators and Assistants for their continued support. The Observatory is becoming ever more popular with visitors as can be seen from the numbers attending when we actually get a clear night.

I should also like to thank Kevin McNulty, Cara Christie and Simon who keep our Face Book entries up to date – we have over 800 regular readers, some from abroad and well out of our 'catchment' area.

Finally, I thank Julia for organizing the roster and looking after the section's finances which thanks to our anonymous benefactor has ensured that they remain in a very healthy state.

Doug Daniels (Joint Astro. Sec.)

