

Annual report 2004/05 session

On 24th of July (2004) we were alerted to the fact that another burst of solar activity had taken place accompanied by a Coronal Mass Ejection. We kept a look out for any auroral activity but thin diffuse cloud hampered observation and I heard no reports of any being seen. The sky cleared on the evening of the 27th and I looked at around midnight. Towards the north, the sky appeared quite bright. This might have been air glow but was more likely light pollution and there was no discernible auroral structure.

After the last exceptionally busy session, the Observatory was in need of a good tidy up! It is becoming a tradition to choose the hottest day of the year for the annual observatory working party, and this year was no exception! Accordingly, on Sunday August 1st, the volunteers: Simon Lang, Ron Smith, Jim Brightwell, Julie Atkinson and myself, braved temperatures which soared into the high 20's. The path and stairway was cleared of the weeds and numerous sycamore tree seedlings that had grown rapidly since it was last cleared for the transit of Venus in June. Repairs to the observatory included refitting part of the circular guttering, refitting the fraying shutter cords and patching numerous holes in the dome fabric. Examination of the fabric revealed it to be in a poor state and will soon need to be renewed. This was last done over 20 years ago and it will be a major job and a major expense!

The acquisition of the Wildey telescope caused us a little concern over its security. As it is essentially a 'portable' instrument we had to ensure that it was stored safely. To this end, we purchased a metal locker, which was fortunately large enough to accommodate both the optical tube assembly and the tripod mounting. This locker was screwed to the floor and bolted to the existing cabinet. This will hopefully keep the instrument safe.

In early August we received a request from Dr. Stuart Clark that we host a meeting of the Association of British Science Writers. They wanted to come to the Observatory on the evening of August 12th to hopefully observe some Perseid Meteors.

The observing conditions for the Perseids were predicted as favourable this year, there being little interference from a slim crescent waning moon rising in the early hours. In the event, the weather, as usual, determined the outcome and with heavy rain falling intermittently on the day of the intended visit, the ABSW decided to cancel their attempts to view the Perseids from the Observatory this year.

I looked out around midnight on the 11th, but it was raining in Finchley and the heavy showery conditions continued into the 12th. The sky cleared at sunset giving some hope but by midnight the cloud had returned; thus the Perseids went unobserved for yet another year.

During September and October 2004, Comet NEAT (C/2001 Q4), continued its slow traverse of the sky passing through the constellations of Draco and Ursa Minor. Despite its high declination, its rapidly decreasing magnitude at around 9-10, made it a difficult object to locate from the light polluted London skies.

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During this session we welcomed two 'new' assistants to our ranks: Tristan Oppenheimer and Daniel Pooley. Tristan was recruited at the Venus transit day and Daniel, who hails from New Zealand has a PhD in astronomy but will have to familiarise himself with our northern hemisphere constellations and get accustomed to our high levels of light pollution and poor weather. We wish them both a long and happy association with the Society.

The regular public open nights at the Observatory resumed on September 17th, but the sky was totally overcast. The clouds parted on the following night allowing some observations but there were no bright planets to observe at the beginning of the new session and the increasing sky glow, makes locating fainter interesting objects to show to visitors ever more difficult.

In the early morning hours of 28th of October, the Moon was again totally eclipsed. I did volunteer to open the Observatory if there was sufficient interest, however, nobody contacted me expressing an interest and despite the two previous nights being perfectly clear, the night of the 27th-28th was totally overcast with gusting wind and rain and no sight of the moon at all.

Despite the conditions being favourable by virtue of the absence of moonlight, once again the Leonid meteors remained unobserved due to poor weather. The display was expected between the 15th and 20th of November with maximum predicted on 17th. Most of these nights were overcast with occasional rain.



During the early part of December the skies remained overcast but the clouds parted on the evening of 17th. Simon Lang and Daniel Pooley, on observatory duty, were able to show

visitors Comet Machholz (2004 Q2). This comet was discovered by Don Machholz in California at the end of August when it was well to the south. By December it had moved up passing through Eridanus and was close to gamma Eridani on the night of the 17th December. I managed to record images of the comet at 23.35 hrs. on the 17th with a Minitron ultra sensitive CCD video camera



connected to my domestic television set. The comet appeared as a small diffuse patch of light with an unresolved nucleus at about 6th magnitude or less. I could detect no tail although there have been some reports of a tail 2 to 3 arc minutes in length. I observed it again in the early hours of the 21st. using 7x50 binoculars but conditions were unfavourable due to the presence of a near first quarter moon.

By 31st of December, comet Machholz had moved further up into Taurus and continued to brighten to about mag. 4.5. A brief gap in the clouds on New Year's eve allowed me to secure images using the Minitron CCD video camera. Examination of the images revealed a thin tail extending to the east at an angle of about 45 degrees. In the early evening of Jan. 1st 2005, comet Machholz was in close proximity to comet P/2004 V4. In fact P/2004 V4 was supposed to be within the coma of Machholz but at Mag. 17.1, P/2004 V4 was invisible on my images secured via the Minitron attached to an 8-inch Meade SCT. Machholz passed close to the Pleiades on the evening of Jan. 8th. But the sky was covered by thin diffuse cloud driven by high winds. Nevertheless, I managed to obtain one or two images using the Minitron camera and Terry Pearce observing from the less light polluted and cloud ridden skies at Weston Coleville CAMBS. obtained several fine views of the comet using conventional film. All theses images were posted on the society's website.

It is with great sadness, that in January we had to report the death of Angus McKenzie at the age of 71. Angus was a long-standing member of the Society and the astronomy section which he joined at the age of 14 in 1947. In his youth he was greatly encouraged in the study of astronomy by our late Astronomy Secretary, Henry Wildey. Angus always suffered from poor vision and despite the total loss of his eyesight in 1959, he remained passionately interested in astronomy throughout his life. He frequently attended meetings of the BAA and a full obituary appeared in the BAA Journal Vol.115 No.2, published in April 2005.

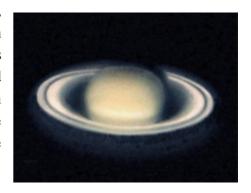
During January and February 2005, there were few clear Fridays and Saturdays nights so the Observatory attracted few visitors. The poor weather continued into early March and curtailed our intended opening



during Science Week. However, on the very last day of Science Week, Friday March 18th, the weather changed completely.

It suddenly became warm and sunny and provided us with a clear night on which to end the Science Week session. It was also during this week that the Observatory played host to two television companies, who wanted to use it as a location for interviews in connection with some pseudo scientific programmes that they were intending to make, one of them featuring Prof. Colin Pillinger and the 'comedian' Vic Reeves. This brought in donations to the section in excess of £100. Our thanks to Radar Television and to Endemol Entertainment for their kind support.

Throughout the session, Saturn was the main object of interest, being well placed for observation just below Castor and Pollux in Gemini. The ring system is still well open and the public's interest in the Saturnian System, always high, was further raised by the successful landing of the Huygens space probe on Titan on 14th of January. For the first time we were allowed a glimpse beneath the opaque atmosphere of this enigmatic satellite. The



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wonderful images obtained revealed a landscape dominated by Methane ice with features resembling a vast lake, mountains and dark meandering 'river' like features.

We had to wait until late March before Jupiter, now lower down in Virgo, became accessible, but the weather remained poor and consequently there were few opportunities to observe it. Jupiter is now moving further eastwards into the low declination zodiacal constellations of the Summer sky. Sadly, Jupiter will be missing from the Winter sky for the next few years and consequently will be more difficult to observe from the northern hemisphere.

The session concluded on Sunday April 17th, a beautiful warm sunny day with one fair sized sunspot visible.

We are sad to record the death of Michael O'Gara. Michael was a long standing member of the Society and a frequent visitor to our Observatory. Despite being elderly, frail and suffering from Parkinson's disease; he would travel to Hampstead on public transport all the way from South Norwood. I shall miss him telephoning me on Friday or Saturday evenings enquiring, "Is there any star gazing tonight?"

Once again the Observatory took part in the Hampstead and Highgate Festival, opening on the evenings of the 14th, 15th, and 20th of May. This is now becoming an established event within the festival and due to popular demand, this year we were asked to extend the openings to 3 nights. This year, the weather was kind to us with clear nights on all three occasions and we were able to show visitors Jupiter, Saturn and a near 1st quarter moon. This event is a useful fundraiser for us, as the organisers charge visitors £6.00 entrance fee, 50% of which is donated to observatory funds.

As ever, we take this opportunity to thank all demonstrators and assistants for their support of the section, for their time and labour freely given and their continued enthusiasm for the Society and all that it stands for.

Doug & Julia Daniels (Astronomy Secretariat).

June 2005

