

ASTRONOMY SECTION REPORT 2010 – 2011 SESSION

The 2010 session ended on May 16th. We had extended the session in order to continue observation of Saturn and give visitors the opportunity to view the exhibition celebrating our centenary.

On Monday May 17th, in collaboration with Chris Hatherill of ‘Super – Collider’, the section put on an observing evening in Shoreditch, east London. The event took place on the roof terrace of the ‘Queen of Hoxton’ bar in Curtain Road, high up amid the City office blocks. The Astro. Secretariat, Doug, Simon and Julia arrived before sunset to set up two of Simon’s portable telescopes – a 5-inch refractor and a 6-inch Maksutov Cassegrain. We were afforded a clear night and after a colourful sunset, the telescopes were trained on Venus, a slim crescent moon and later Saturn. Over 100 visitors took advantage of this event which continued until 11 pm. All things considered, it was a very successful ‘outreach’ event for the HSS and the donation to our funds was much appreciated.

New impact on Jupiter

Anthony Wesley (Australia) reported a bright flash lasting 2 seconds in Jupiter’s south equatorial belt (SEB) on June 3rd. The event was also independently videoed by Chris Go. The impact does not seem to have left any lasting ‘scar’. Unfortunately, the planet was too low for observations from Hampstead.

Observatory working party (1) July 4th 2010

A dozen or so members and friends gathered at the observatory on Sunday July 4th to begin the summer programme of site maintenance. Our first target was the preparation and de-rusting of the iron railings that surround the observatory enclosure. The railings have not seen paint for more than two decades and were in a poor state of repair. Simon managed to recruit a large task force of volunteers to chip off the rust and loose paint prior to re-painting. Once again we managed to select a fine day for the work. The grass and weeds along the path were also cleared. The work continued until late in the afternoon. Our thanks to all who took part in this mind numbing interminable but nevertheless essential work. At least three more working sessions will be required to complete this task.

During the day we had quite a few visitors as well, including 50 from the Hampstead Walks. We were able to show them a projected image of the Sun featuring one tiny sunspot. The Sun, it seems is still loath to quit its lengthy minimum.

Cezary Ludwik Kamieniecki – Caesar K (1950-2010) - Obituary

In July 2010 we received the sad news that Caesar Kamieniecki had died aged 60 following a long illness. Caesar was a long standing member of the Society, having joined in the late 1960’s shortly after leaving school. His main interest was astronomy and it was during the first National Astronomy Week (NAW), in 1974 that our ‘orbits intersected’ and his great enthusiasm was soon to earn him the position as a demonstrator at the Observatory. The 1974 NAW was organized to increase public awareness of astronomy and coincided with the apparition of the infamous Comet Kohoutek, promoted in the popular press as ‘the comet of the century’. Although it never materialized as more than a faint blob, over 1800 visitors came to view it over the following weeks and resulted in 30 new members joining the Society. Caesar (arrowed in 1974 photograph on right), lugged his own home made 8-inch telescope up to the Observatory and helped to man the exhibition and show visitors interesting objects as well as the dim comet. At that time he was still living with his parents in Crouch End. It was also in 1974 that I recruited him to the Astronomy sub-Committee as its Minutes Secretary, a position which he held until his illness forced him to give

it up just a few months ago – that is 36 years of continuous service to the Society. All the while that he was living in north London, in Crouch End and then later when he married Julie, in Edmonton, Caesar regularly demonstrated on public open nights at the Observatory. In more recent years, having fathered two children, Alexander and Katarina, the family moved to Betchworth in Surrey. Despite the considerable travelling distance involved, he continued as a demonstrator, confining his duties mainly to Sunday morning solar observations, commuting to and from Surrey on his motorbike. He was a great motorcycling enthusiast.

Caesar forged a career in IT troubleshooting, driving around the City on his motorbike, fixing computers for large companies. It was during these excursions that he got the idea to do the ‘knowledge’, and he passed the test to become a licensed black cab driver. During the last few years, he supplemented his income with some part time cab driving. Whenever he was in north London, whether fixing computers or driving his taxi, he would telephone me and drop in for a cup of tea and a chat. When his illness was diagnosed, he knew it was serious and he faced the treatment with great courage, enduring several sessions of chemotherapy. He openly discussed his condition and never once did I hear him complain about the ‘rotten hand’ that fate had dealt him.

Caesar was a devoted family man, very proud of his children and he was prepared to work hard to ensure that they had a secure and comfortable life. He was an enthusiastic amateur astronomer and a faithful servant of the Society. During his long membership, he would have introduced hundreds of people to the delights of the telescope and he will be sorely missed by his many friends in the Society all of whom convey their deepest sympathy to his wife Julie and his children Alexander and Katarina.

The funeral took place on Tuesday 27th July with a Requiem Mass at St. Joseph’s RC Church, Dorking Surrey, followed by a Cremation service at Randalls Park Crematorium, Leatherhead, Surrey and a reception at the Burford Bridge Hotel, Boxhill.

The family requested NO FLOWERS, but donations to the following charities would be gratefully received made through: Sherlock and Sons Funeral Directors of Trellis House, South Street, Dorking, Surrey.

- Cancer Research UK
- The Fountain Centre of St. Luke’s Cancer Unit, Royal Surrey County Hospital, Guildford, Surrey.
- The Hampstead Scientific Society.

Observatory maintenance (2) July 24th 2010

The programme of observatory maintenance continued with another session on Sunday July 24th. Five members turned up to continue de-rusting the railings and begin to apply primer. Work was again interrupted by the 50 or so members of the Hampstead Walks, who were given a short talk on the history of the Society by DGD.

Planet Picnic July 31st 2010

On the evening of July 31st, the planets, Venus, Mars and Saturn were aligned in triangular formation in the western sky after sunset. Simon arranged a viewing session in the guise of a picnic to be held in the field on Judges Walk, which has a low western horizon. There was also the faint possibility of glimpsing Mercury. The Ham & High advertised the event with a 1/3 page feature article. During the late afternoon, cloud started to build and Simon decided to postpone the event until the following Friday the 6th of August. However, at 6:pm the sky cleared and by the time that the sun set conditions were good. Simon and Jim Brightwell stayed at the location and many people

who hadn't heard of the postponement turned up. However, conditions proved good enough for around 30 visitors to see the conjunction. The proposed second try on Friday 6th didn't materialize as the sky was totally cloudy with the threat of rain.

Observatory maintenance (3) August 8th 2010

Six members turned up to continue the seemingly interminable task of de-rusting and priming the railings. Before work started, over 50 members of the Hampstead walks turned up and were shown two medium sized sunspots. A few days earlier, one of the spots had been large enough to be seen with the naked eye, but had now reduced in size by 2/3rds. Perhaps the Sun's extended minimum is at last ending. During the previous week, there were reports of a large coronal mass ejection followed by increased auroral activity in Earth's polar regions.

Perseid Meteor watch 11th-12th August 2010

The Assistant Astro. Sec. Simon Lang, organized a trip to view the Perseids from a dark location. Here is his report:

A group of 9 members watched the Perseid Meteor Shower from Paul Clements's place in Hertfordshire. We arrived at around 22:15, just in time for some to witness a bright fireball. The sky was clear with a little haze initially, but after about 2 hours became increasingly cloudy, with occasional gaps until about 03:30, when the sky became totally obscured. As well as looking for Perseid's, we looked for other things using a variety of instruments including:

A 150mm Maksukov on an Eq3-2 goto mount, A 120mm Short Focal Length Refractor OTA on a sturdy photographic tripod, Two 4" Refractors on German Equatorial Mounts (GEMs), a 70mm Maksukov on a photographic monopod and 110mm Binoculars.

Due to poor clarity we only saw about 8 Perseid's each, although that included a couple of bright fireballs. One Perseid went across the field of view of the 120mm Refractor –stunning. We also checked out the following;

Jupiter, with its Southern Equatorial Belt still absent, and all the Galilean Satellites to the west of the planet, and close together enough to view at 200x. Using the same power we looked at Uranus (and some people managed to see its moon Miranda, occasionally springing into view, on the very edge of visibility). We looked at M31, the Andromeda Galaxy and its companion M30, and then M81 and M82, the spiral and irregular galaxies in Ursa Major. In both cases we used an ex-surplus NATO wide field 40mm eyepiece to include M30/31, then M81/82 in the same field of view -gorgeous. The Double Cluster in Perseus was knockout in the 150mm and 120mm, on a low power. M57 the planetary Ring Nebula was brightened using a High Contrast Filter. M11 the Wild Duck Cluster low in Scutum, was picked out despite the sky glow of Harlow creeping up from the horizon, M13 the Great Globular Cluster in Hercules was a treat in the 150mm (especially after removing the contrast filter –huh,hmm).

We all had a great time and despite the haze and later cloud and dew, we managed to see a lot, and we all agreed we will be organising future outings. Back in December several members saw the Geminid meteor shower from a dark site in Laughton, East Sussex on a night of good clarity and although many meteors were seen that night, (a calculated peak Zenithal Hourly Rate of 120) the lack of Perseid's this time, was still made up for with the other sights, and good humoured company.

Observatory maintenance (4) Sunday 15th August 2010

Six members of the Astro, Section took part in another maintenance day on 15th of August and continued with the priming and painting the railings. Before work started at 11 am. The Astro Sec. delivered as short talk on the history of the Observatory to about 50 members of the Hampstead Walks (again!). By the end of the day, most of the de-rusting and priming was completed and the top coat had been applied to about 30% of the railings. A further maintenance day was planned for the following Sunday.

Observatory maintenance (5) Sunday 22nd August 2010

Six members and two guests attended on 22nd of August to continue with the restoration of the railings. Due to fears of imminent rain, applying the final top coat was halted and work to de-rust and prime was continued. At the same time consultations were made with the Hon. Meteorology Sec. concerning our intention to move the rail that divides off the Met. Station. Moving this back by a couple of feet, will make more space for portable telescopes to be used outside the dome. Work on this project was begun by cutting off the vertical supports and peeling off the turf, ready for the removal of the concrete footing. Once the rail is moved back, the area will be re-turfed

Observatory maintenance (6) Sunday 29th August 2010

Eight members and friends gathered at the observatory to continue applying the top coat of paint to the seemingly endless railings. Work began at 11:00 am and continued until after 5:00 pm. By this time most of the work was done, despite having to dodge one heavy but short lived shower. Another session was arranged for the next day –Bank Holiday Monday to finish off the painting as the weather forecast was more favourable. Once the railings are finished, we can turn our attention to patching some holes in the dome covering and re-positioning the Met .Station barrier.

Observatory maintenance (7) Monday 30th August 2010

Just two members of the Society and one member of ASH turned up; well it was a Bank Holiday. Fortunately, the weather was fine and after a couple of hours the painting of the railing was at long last complete. Another session was planned for the following Sunday to patch the dome and continue with the alterations to the Met.Station barrier

Observatory maintenance (8) Sunday September 5th 2010

Observatory maintenance continued on Sunday September 5th. Work to move the Met. Station railing and patching some holes in the dome was continued. Unfortunately, the Astro Sec. was not in attendance as he and Terry Pearce again journeyed to Herstmonceux Castle in Sussex for the annual Astronomy Festival. Unfortunately, the weather was not so fine this year, but some observations with the old Greenwich telescopes was possible. Jupiter was observed with the 10-inch refractor through holes in the cloud cover and the absence of the SEB was noted. The NEB was very prominent and had a distinct reddish hue. It was a shame that the 10-inch OG appeared to be out of square. The other instruments are in an equally poor state of optical repair, particularly the 30-inch Cassegrain. The owners/organizers of the event exhibit a fear bordering on paranoia, of anyone cleaning re-coating and adjusting the optics of these historic instruments. This is a great pity as they are bound to deteriorate more each year. Due to the poor weather, there were fewer telescopes working in the camp site. But we managed to view M27, M57, M15, Jupiter and Uranus with a 6-inch Dobsonian reflector owned by one of the visitors. By midnight, cloud cover was total and observations ceased.

Observatory maintenance (9) Sunday September 12th 2010

The last working party attracted just 4 members who spent the day finishing off the painting and generally tidying up the observatory ready for the new session of open nights due to begin on Friday 17th of September. All the jobs scheduled for this Summer had been completed, the railings were painted, the building was painted, the Met Station barrier was moved to provide extra room for additional tripod mounted telescopes and a proper side gate was built to give easy access outside the enclosure for maintenance. The path and steps were given their final de-weeding and the whole observatory compound looked very smart for our centenary year. Thanks to Simon and to all members who gave up their Sundays to complete this work.

New session and Hampstead & Highgate Festival

The new session at the observatory began on Friday September 17th and shortly afterwards we opened the Observatory for three extra nights as part of the Hampstead & Highgate Festival. In previous years the Festival was held in May, but this year the organizers moved it to September and the nights chosen were Sept. 26th, Sept. 28th and Sept. 30th. Moving the Festival to September seemed a good idea, as the sky would be darker but unfortunately this year the weather was very poor. Sunday 26th was totally cloudy with rain at times. We had a little more success on Tuesday 28th when the cloud cover broke briefly and visitors managed to glimpse Jupiter and Uranus, and on the 30th the sky was clear for over an hour allowing a longer look at the two planets in the same low power field. As always, the visits were fully booked and it is a pity that the weather was unkind to us – but this is something over which we have no control yet despite this, visitors said that they had enjoyed the experience.

Filming at the Observatory

In early December, we were asked by Pioneer Productions if they could use the Observatory as a location for a filmed interview for a programme they were making for the National Geographic Channel. Accordingly on Thursday 9th December a film crew descended at 4:00 pm to interview Ian Ridpath on the subject of UFO's. Yours truly and Simon spent the next three hours on a freezing cold day while Ian made the case against UFO's being of extra terrestrial origin. Pioneer made a donation of £60 to the Observatory fund.

Total Lunar Eclipse

There was a total Lunar Eclipse on December 21st. Unfortunately from London totality occurred at moonset between 07:40 – 08:53 am. In any event at Hampstead the sky was totally clouded over and no part of the eclipse was observed

2011

Stargazing Live

2011 began with a major astronomical event. Between the 3rd and 5th of January 2011 when the BBC put on a special series of programmes aimed at increasing the public's awareness of astronomy. The dates chosen were to include the annual Quadrantid meteor shower, the partial Solar Eclipse at sunrise on Jan. 4th and also the close conjunction of Jupiter and Uranus. We were asked to participate in this event and to help with the publicity the President was interviewed for an article that appeared on the BBC London website. The BBC also gave us a banner to put up at the Observatory, some posters and a huge quantity of Star Guides to be handed out to visitors. We also had several entries detailing our events on the BBC website which was linked to our own site.

Simon Lang managed to recruit a good number of volunteers and decided to open the Observatory on Monday 3rd until 04:00 hrs – the peak time for the Quadrantid meteors. In the event the night remained relentlessly cloudy.

As the Solar eclipse occurred at sunrise on the 4th of January, it was decided to observe from Parliament Hill as the horizon at the Observatory is obstructed by trees. Simon and his band of helpers including Jim Brightwell, Brian Bond and Ennio Tabone, were up and about by 06:00 hrs hauling equipment up to the Hill, under a cloud filled sky. They were joined by about 40 members of the public The BBC sent an outside broadcast crew and both Simon and Jim were interviewed and made it to the midday News with a repeat on the six o'clock news. Although the sky was cloud ridden, a tiny part of the eclipse was glimpsed for about 5 seconds through a hole in the cloud cover. We even had the Society's name attached to the header board on the BBC1 weather forecast and the Observatory open night was advertised by Peter Cockroft in the weather report. This resulted in about 30 people turning up at the observatory on a cloudy night, but we managed to entertain them for an hour or so.

In order to observe the conjunction of Jupiter and Uranus, we opened the Observatory from 6:00 pm – 8:00 pm from Monday to Thursday i.e. Jan 3rd – 6th. Unfortunately the weather did not co-operate but visitors still turned up. We had to wait until Saturday 8th for a clear night and then about 100 visitors arrived to see the Jupiter/Uranus conjunction, and by then we also had a crescent moon on view. The following Sunday morning was also clear and about 50 visitors came to view the Sun through Brian Bond's hydrogen alpha telescope. Frustrated by the lack of clear skies during the 'Stargazing' event we decided to open the observatory from 6 pm – 8 pm on Monday – Thursday during the following week as well, but again we were frustrated by poor weather and had to cancel the sessions.

The whole 'Stargazing Live' event can be judged as a limited success and the publicity certainly raised the Society's profile. It is a pity that the weather was so poor but nevertheless many visitors managed to see something. Our participation in this event meant that many members of the section worked long and hard to man the observatory and entertain visitors – mostly on bleak cold, cloudy nights. Our thanks to Simon and all demonstrators and assistants who gave up their time to make the most of this rare opportunity to publicize the Society to a wider audience.

Visit to the R.A.S. Library

By kind arrangement with Peter Hingley, 8 members of the Society visited the library of the Royal Astronomical Society at Burlington House at 3:00 pm on Saturday January 8th. Peter treated us to a two hour tour of the library and showed us many of its treasures including rare first editions by such luminaries as Copernicus, William Herschel and Isaac Newton. We were amazed and delighted to be able to actually handle some of these treasures. We also got to see Captain Cooke's sextant and many of the library's rare paintings, maps and charts. Throughout the tour, Peter entertained us all with humorous anecdotes concerning some of the famous astronomical personalities who contributed so much to the history of the science. Our thanks to Peter Hingley and the R.A.S. for arranging this fascinating tour.

The bad weather continued throughout January and people were still clamouring to get a last look at Jupiter and Uranus before they descended into the horizon murk. Simon opened the observatory on Friday Jan. 21st in the early evening – the first really clear night since the 8th and around 100 visitors turned up for a last look at the conjunction. The publicity gained from the BBC exposure was still having a pronounced effect and we estimate that about 400 visitors came to the observatory during January. Due to this demand, many extra open sessions were planned during the early evening up to the end of the month, but due to persistent cloud cover, most had to be cancelled.

Visit by Christchurch (Cricklewood) Cub-Scouts Friday Feb. 11th 2011

Twenty five children and their group leaders turned up at the Observatory as part of their studies for the 'Astronomer' badge. The night was specially chosen as the Moon would have been available. Unfortunately, the bad weather continued unabated and the sky remained totally cloud covered. Nevertheless, they stayed for an hour and a half, asking many questions and listening eagerly to Doug and Simon who did their best to keep them entertained. On leaving they were given copies of the BBC 'Stargazing Live' star guide to help them to identify a few constellations when and if the weather ever improved. This just emphasises the fact that it is almost impossible to pre-book a visit to the Observatory and expect it to coincide with a clear night! To add insult to injury, the following night was, of course clear!

March 19th Mercury, Jupiter and the 'Supermoon'.

At last a clear night and so Simon organized a special session at the old gravel pit off Judge's Walk to view Mercury and Jupiter. Accordingly just before sunset about 20 people gathered and were rewarded with a good view of the elusive Mercury. Simon brought his 100 mm refractor along and with powers of up to x300 was able to see the phase as a thick crescent. Later on at the Observatory, it was pandemonium, when over 100 plus visitors turned up to view the Full Moon at perigee. Once again the media managed to stir up misguided enthusiasm for an unspectacular astronomical event. To the untrained eye, the Full Moon at perigee looks much the same as any full moon but it was described by the media as a 'Supermoon' and this apparently made all the difference. In any event, Ennio Tabone, Jim Brightwell and two Assistants Cara Christie and John Durham coped manfully with the crowd that queued cheerfully all the way down to the gate and beyond to witness this 'rare' event. Those arriving later also got a look at Saturn. The ring system is just beginning to open up again and presents a very attractive aspect.

Saturn is now gradually descending into the low declination summer constellations and will be inaccessible to the public for a few years as it will only be visible during the summer months when the observatory is closed. Accordingly, we decided to open the observatory for extra viewing nights over the Easter weekend and also the following Bank Holiday weekend. Fortunately, the extra openings over Easter coincided with a spell of fine weather and were very well attended. Unfortunately, it was at this point that the drive system began to give trouble. The stepper motor and gearbox had suffered damage over the years and needed replacement. Paul Clements supplied new parts and Simon and Doug stripped down the main worm, cleaned everything up and replaced a couple of missing/damaged bolts and adjusted the main counterweights to achieve better balance. On Sunday May 1st, the drive was working well, the Sun exhibited a couple of small spot groups and there were many prominences visible through Brian Bond's hydrogen alpha telescope. Paul Clements made a further visit on Sunday May 8th to make some adjustments to the drive's electronic unit, replacing a failing capacitor, and Simon constructed a protective cage for the drive motor to prevent it being struck by the telescope when on the east side of the pier. Hopefully this should cure the problems with the drive which until recently has served us well for the last 18 years!

Astro Sub-Committee meeting Sunday May 15th.

Eight members attended the section sub-committee meeting at the Observatory at 1:00 pm on Sunday May 15th to discuss further maintenance work. The repair to the drive was not entirely successful and Paul Clements will have to attend again to hopefully fix it. Other subjects discussed were the necessary repair to the dome rotation pulley and the re-covering of the dome, possibly using thin aluminium sheeting. But this will not be attempted this year. It was agreed that when the

pulley is removed, the dome will be supported by wooden blocks to see if we can correct the warping of the bottom dome rail. Otherwise the only maintenance will be the removal of the weeds along the path just before our re-opening in September.

Donation

The Secretariat was contacted by Sourav Sen who had been a visitor to the Observatory and wished to donate his telescope to the Observatory. The instrument is a Celestron 114 mm reflector on a portable equatorial mount. We thank Sourav for his generous donation. The instrument will join the other portables for use by visitors.

The session continued with normal weekend openings until May 22nd when we closed for the Summer break. This has been one of the most active sessions on record at the Observatory thanks to the publicity gained from the BBC 'Stargazing Live' programmes and all the extra open nights. This extra activity was reflected in the contributions made to the observatory fund box which totalled in excess of £870 for the session – this is by far a record. Our thanks to Simon and all Demonstrators and Assistants for their willing involvement and hard work to keep the Observatory and the Society in high profile with the public. So after the final open day of the session we organized the following:

End of session & Demonstrators' and Assistants' Picnic.

On Friday May 21st 60+ visitors took a last chance to observe Saturn before the observatory closed for the summer break. The night was fine and clear and many stayed until past 11:00pm.

The last public opening of the session took place on Sunday morning May 22nd. 35 visitors came with the 'Hampstead Walks' group and later about ordinary 10 visitors. The day was partially cloudy but all visitors managed to see one sunspot and later some large prominences with Brian Bond's H alpha kit.

After 1:00 pm a dozen or so Demonstrators and assistants arrived for an end of session picnic at the Observatory. Although quite windy it turned into a pleasant and relaxing afternoon, a fitting end to one of the most prolonged and active sessions on record – again thanks to all who took part.