

SOLAR ECLIPSE AUGUST 1st 2008

The Observatory was opened on the morning of August 1st, 2008 for the partial solar eclipse. The eclipse was total in a narrow band stretching from Greenland, through Siberia, Mongolia and northern China, but was partial for observers at lower latitudes.

From our location in London about 20% of the Sun was obscured at maximum eclipse. The eclipse began at 08:32 UT in fairly clear skies but a stiff breeze soon brought cloud to interrupt the event. Mid eclipse was at 09:30 UT and shortly after that, the cloud turned to rain. The eclipse had received very little publicity but despite this about 12 visitors turned up to view the event.

Meanwhile, member *Jerry Workman* had travelled to western Siberia where he was able to view the total eclipse under ideal conditions. From his location near Novosibirsk, totality lasted a little over 2 minutes. Jerry sent in some excellent images that were posted on the website.

During early August, the *Astro. Sec.* was approached by a public relations organization that was promoting the 'Star Gate' science fiction films. They wanted us to entertain a reporter from the Evening Standard and to talk to him generally about astronomy and weather permitting, show him something of interest through the telescope. For this service they made a donation of £100. Although it was mostly cloudy on the appointed night, we did manage a brief look at Jupiter and the event resulted in a full column report in the Evening Standard on August 12. This was excellent publicity for the Society and helped to publicize the forthcoming lunar eclipse on August 16th, for which event, the observatory was to be opened.

PARTIAL LUNAR ECLIPSE AUG. 16th 2008.

There was a large (80%) partial eclipse of the moon on the evening of August 16th 2008. The penumbral phase began before moonrise. First contact of the umbra was at 19:36 hrs. UT and maximum eclipse was at 21:10 hrs. UT. Despite doubtful weather, the observatory was opened and about 10 visitors turned up, at least two had seen the article in the Evening Standard. Unfortunately, the cloud thickened and by mid-eclipse it had started to rain, so we saw nothing of this eclipse.

NEW SESSION

The new session of open nights began on Friday 12th September. We resumed open nights early this year in order to observe Jupiter before it finally sank into the murk. Both the Friday and Saturday nights were clear and on Saturday 62 visitors turned up, swelled by 45 people on the Hampstead Walks. Sunday morning was also clear and again the Hampstead walks turned up. The Sun, however, remains stubbornly inactive and there was not a single sunspot to be seen.

By the end of October, Jupiter had set by 20:00 hrs. and major bright planets were absent from the

night sky. With the constant increase in light pollution, it is ever more difficult to find suitable objects to entertain visitors. Despite the fact that we were assured that the next Solar cycle had begun, the Sun still seemed remarkably inactive on the few occasions that it was observed throughout a very overcast and dismal November.

The cloud persisted to ruin our chances to observe the occultation of Venus on December the 1st. Not that it would have been easy to see as it was scheduled to begin very low in a sky with the Sun still above the horizon. Observing from Hastings, with a sea horizon, **Theon Pearce** managed to secure an image shortly after the planet's reappearance with a Canon DSLR and a 90mm lens.

We had more luck on December 3rd for the planned visit to the Observatory by the 8th Hampstead cub Scouts. A bitterly cold clear evening with Jupiter, Venus and a crescent moon on view, but the planets had set by 18:30 hrs when over 30 cub scouts, parents and leaders descended on the Observatory. Although low in the sky, the telescopic view of the moon was greatly appreciated by all. **Simon Lang** introduced them to some of the brighter stars and constellations and the questions came thick and fast. The event was proclaimed a great success by all concerned.

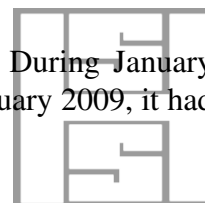
The full moon of December 12th was the closest and brightest for 15 years, however its increased radiance was totally obscured by unyielding cloud that persisted for the following week.

Weather conditions at the beginning of 2009 were unsettled but we were fortunate to have a few clear weekends. Venus, which had been climbing steadily above the SW horizon, attained greatest eastern elongation on January 14th and was just 1.5 degrees north of Uranus on January 24th. As this coincided with a clear Saturday evening, Simon opened the Observatory early at 18:00 hrs. to give visitors the opportunity to see our nearest and most distant major planetary neighbours close together in the twilight sky.

On Saturday 31st of January, the **Astro Sec. & Assistant Astro. Sec.** accompanied **Terry Pearce** to the Museum of the History of Science in Oxford, where in association with the Hanwell Astronomical Society, Terry gave a demonstration of telescope mirror making. This formed part of the celebrations for the 400th anniversary of the invention of the telescope. The demonstration, which lasted 2 hours was well attended and afterwards we were able to view the Museum's exhibition of historic telescopes and the books on optics by Newton and Herschel. Later, under a clear sky, there was a public observing session arranged by the Hanwell group. Members brought along some modern portable instruments and set them up in the Museum's grounds to observe a 5 day old Moon and Venus just past dichotomy.

COMET LULIN (C/2007 N3)

Comet Lulin was discovered in July 2007 at the Lulin Observatory in Taiwan. During January 2009, Lulin moved into the morning sky passing through Libra and Virgo. By February 2009, it had



moved to the late night sky passing beneath Leo. On 24th Feb, Lulin passed about 2 degrees south of Saturn and was at its closest approach to Earth at some 38 million miles. On Feb. 28th it was a short distance west of Regulus.

Early reports described Lulin as a green coloured comet and predicted magnitude at perigee was 4 or 5, requiring binoculars to reveal it. In the event, persistent cloud prevented observation until a small break occurred around midnight on Feb. 25th. The *Astro.Sec.* searched the area with binoculars but could not find the comet. We tried again on Feb. 28th without success but later at 23:00 hrs, *Terry Pearce* 'phoned to say that he had observed the comet from clear skies in Cambs. Terry described Lulin as a faint greenish smudge with no obvious nucleus and a hint of a short tail following.

Venus

Towards the end of March, Venus, which had been for several months a bright object in the western sky, was finally lost to view when it passed between us and the Sun. Shortly before this, the *Astro.Sec.* managed to image the slim crescent with a 75 mm. apo refractor – through his bathroom window!

Saturn

During the latter part of the session, Saturn was well placed for observation, situated midway between Regulus and Denebola below Leo, coming to opposition on March 8th. The ring system was displayed almost edge-on and although looking less impressive than usual, it focused attention on Saturn's satellites, five of which could be seen on several occasions. In order to give visitors the opportunity to view Saturn, the observatory remained open until mid May.

The Sun

Despite the fact that the new cycle was expected to begin last year (Cycle 24), and one or two very small sunspots were seen, the Sun has remained quite inactive during this session. Reports from professional sources indicate low solar activity is still continuing with reduced solar wind pressure, radio emissions, flares and sunspots. Could we be heading for a 'Maunder minimum'?

Publicity

During mid April, we received a request from the Observer Fashion supplement magazine 'Tank O' to use the observatory as a location for a fashion photography session. Accordingly on the evening of 22nd April, a team of glamorous young ladies including fashion photographer Julia Kennedy, stylist Pandora Lennard and a top fashion model turned up. Many photographs were taken of their scantily clad model caressing the 6-inch Cooke refractor. It was an unusual way of celebrating the 400th anniversary of the invention of the telescope but reinforces my view that science can be fun



and free mass media publicity should be welcomed. We look forward to seeing the magazine, which is due for publication in August.

The present session of public open nights ended on May 3rd and during the session, slightly extended this year to observe Saturn, well over 500 visitors attended, this is reflected by the donations received in the fund box. The Observatory was re-opened on the nights of May 7th, 8th and 9th for the annual Hampstead and Highgate Festival. All three sessions were fully booked. Cloud prevented any observations on the 7th, but we had partially clear skies on the 8th and 9th so at least the visitors were treated to a good view of Saturn – this year with the ring system almost edge on.

During this session we welcomed several new assistants to our ranks. **Ennio Tabone**, **Slim Loghmari**, **Agnieszka Fraszczka**, **Charlie Groome** and **Roger O'Brien**. We are hoping to upgrade two or three of our new assistants as demonstrators early in the next session. This should ease the strain on our dwindling number of demonstrators.

This year we decided to acquire some new equipment for the Observatory. We have purchased a 150mm. Schmidt/Newtonian reflector on a semi-portable equatorial mount. This instrument can be used outside the observatory. It will provide a wide field view of extended objects and give members and visitors the opportunity to use a modern compact telescope. To introduce demonstrators and assistants to the new equipment and thank them for their continued support, Simon organized an informal pick-nick lunch at the Observatory on May 31st. Once again we selected the hottest day of the year but a good time was had by all. During the event **Doug Daniels** presented a certificate for long service to **John Hayden**. John, who had been a demonstrator for over 30 years, was forced to retire 4 years ago when it was discovered that he was suffering from vascular dementia and he now lives in a care home in Burnt Oak. He was brought to the observatory by his carer and long-term friend Isobel.

The Observatory remains the Society's most important interface with the public and next year we will be celebrating the centenary of its establishment. In order to keep it up and running, it requires a lot of people giving up a lot of their time and effort for no reward other than the acquisition of knowledge and the satisfaction gained by passing it on freely to others. That is after all what this Society is all about.

I take this opportunity to thank the Assistant Secretary, **Simon Lang** for all his help during the year, the section Treasurer, **Julia Daniels** for keeping us solvent, **Dan Pooley** for keeping me up to the mark editing the section's web-site and all demonstrators and assistants for their continued enthusiasm for the section's activities.

Doug Daniels

(Astronomy Secretary) June 2009

