

Telescope400 at Syon Park

Thomas Harriot's quatercentennial celebration took place successfully on Sunday 26 July 2009. The weather on the day was good and there were more than 700 visitors to Syon Park, Isleworth, Middlesex, including many families. Syon Park is quite difficult to get to and public transport is poor on Sunday in London, so this was a good turnout. The event had many highlights, some of which are pictured here, with more to see on the Telescope400 website and on the International Year of Astronomy Flickr page (details below).

The magnificent Great Conservatory at Syon was the setting for the exhibitions. These included a fascinating display of copies of Thomas Harriot's drawings, courtesy of Petworth House Archives, by kind permission of Lord Egremont of Petworth. Harriot also featured in South Downs Planetarium's excellent coverage of the history of astronomy over 2000 years. The Campaign for Dark Skies was also represented, as were various local astronomical societies. In particular, West of London (WOLAS) and Hampshire Astronomy Group (HAG) provided material covering the history of the telescope from Harriot to Hubble.

Society members brought along solar telescopes and treated visitors to some excellent demonstrations. They were able, much of the time, to show a rather misty view of the Sun, albeit free of sunspots at this time of deep solar minimum. In addition, two excellent replicas of the type of instruments Harriot himself would have used were made for the occasion by Michael Tabb. One was a square oak tube – apparently Harriot likened one of his “Dutch Trunkes” to his flute case – and the other a tube made of paste board.

Both telescopes were equipped with lenses adjusted to simulate the view Harriot would have had when he made his historic observation of the Moon on 26 July 1609. The square oak tube instrument was fitted with an objective $F=800\text{ mm}$, 38 mm diameter, stopped down to about 18 mm, and an eye lens $f=-125\text{ mm}$, 25 mm diameter, stopped down to about 11 mm (giving a power of 6.4). The round pasteboard instrument had objective $F=700\text{ mm}$, 38 mm diameter, stopped down to about 18 mm, with an eye lens $f=-125\text{ mm}$, 25 mm diameter, stopped down to about 11 mm (power 5.6).

Viewing the Moon

Visitors were able to look through these at photographs of the Moon set at an appropriate

distance to get an idea of the restricted views Harriot himself would have had. This gave a real appreciation of the details in his drawings. They could then join a workshop run by Sally Russell in the Great Conservatory's Cactus House and learn for themselves the rudiments of observing and drawing lunar features.

The Great Conservatory was the location for Science Projects' “Puzzles and Illusions”, an excellent and attractive array of hands-on activities, while Explorer Dome, the Bristol-based mobile planetarium, sat under the spectacular dome. This was a huge success and an extra show was run at the end of the day to cope with the demand.

On the front lawn of Syon House, Sandra Voss and a team from Herstonceux helped a stream of excited children to build and launch water rockets powered by compressed air. Children and adults assembled card sundials and planispheres to take home. “Create a Comet” created quite a stir, with RAS Press Officer Robert Massey at times almost obscured by clouds of gas from the dry ice, as he produced, Harry Potter style, a series of evil-looking and smelly “dirty snowballs” to the delight of his audiences.

Thomas Harriot in person

Throughout the day, a well-dressed ghost was to be found wandering the grounds, talking about his achievements to visitors. He was also seen looking covetously at the main raffle prize – a far better telescope than was available in his time. The actor Alan Cheeseman made a very convincing Thomas Harriot.

In a basement room in Syon House, Ian Ridpath organized and took part in a programme of talks on the Apollo 11 Mission, living in space, and NASA's plans to return to the Moon. These were so popular that extra chairs had to be found for the audience. All the speakers – Ian, Mat Irvine and Greg Smye-Rumsby (who spent the day in a spacesuit) – did a terrific job.

The concert by early-music ensemble Cantamus was also memorable. The Great Hall of Syon House was an excellent venue in which to hear music from Harriot's time. The audience was delighted by a well-chosen programme of madrigals accompanied by a spinet.

Cantamus also sang just before the unveiling of the memorial to Harriot, the climax of the day. Lord Egremont is a descendant of the Ninth Earl of Northumberland, Harriot's patron, and owns most of Harriot's astronomical papers. He revealed the plaque with a great flourish. When the day itself is just a memory, this memorial



1: The RAS's Robert Massey makes a comet.

2: Thomas Harriot discusses the past 400 years with a passing spaceman.

3: Allan Chapman with the plaque and a new astronomer. (Max Alexander)

– the design is shown on the Telescope400 website – will remain to inform passers-by of the life and achievements of a most remarkable man who lived and worked near that very spot.

The day finished with an early evening lecture and reception in the Garden Room Marquee at Syon. The Quatercentenary Lecture by Allan Chapman in the evening was a tour de force which, as one listener said, was simply enthralling. Allan spoke for an hour without notes, never hesitating as he gave a marvellously evocative account of Thomas Harriot's life and times. A perhaps uniquely exciting period in English

Teresa Grafton, on behalf of the Telescope400 Committee, reports on the successful celebration of 400 years since Thomas Harriot's lunar observations, an IYA2009 event that appealed to young and old.



history was brought vividly to life, ranging from discoveries in science and Harriot's participation in the exploration of Virginia, to accounts of what it was like to be imprisoned in the Tower as an aristocrat.

Volunteers

Many people contributed to the success of Telescope400, almost all, including Allan, as volunteers. Syon staff made every effort to ensure that things ran smoothly on the day – for which many thanks. Finally, the RAS must be thanked for the generous award which made the project

possible. And, now that IYA2009 has started the process of establishing Thomas Harriot's rightful place in the scientific pantheon, could-Harriot Day become an annual event? ●

Teresa Grafton is a former Chairwoman of Telescope400 and Secretary of the Association of Astronomy Education. teresa@erwwen.co.uk

Further information

Telescope400 home page

<http://www.telescope400.org.uk>

Syon House event on Flickr <http://www.flickr.com/photos/astronomy2009uk/sets/72157621746665603>

IYA2009 update

● An evening's celebration

Scenes from a play about the astronomer Beatrice Tinsley will be part of a day of activities at the Bloomsbury Theatre, London, on 2 November. There will be children's workshops on astronomy in the morning, a forum on Women in Astronomy in the afternoon and the evening event, including *Bright Star*, as part of an IYA2009 celebration of astronomy. The project is being produced by Dr Maggie Aderin. Michelle Witton has written the play *Bright Star*, with support from the RAS.

<http://www.astronomy2009.co.uk>

● She is an Astronomer

This cornerstone project of IYA2009 had a big presence at the British Science Festival in Surrey in September, including an account of a typical day at work (now available on the BBC news website), and a conference session and networking event for women returners to research. The "She is an Astronomer" website now has a body of resources in this field. Personal stories and experiences from a range of women in astronomy and space sciences can now be found on the UK Resource Centre for Women's blog page – including Captain Jennifer from Belfast!

<http://www.sheisanastronomer.org>

<http://news.bbc.co.uk/1/hi/sci/tech/8239398.stm>

<http://www.ukrc4setwomen.org/html/projects-and-campaigns/astronomy-blog>

● Twitter takes off

IYA2009 started using Twitter, the internet site posting short messages known as tweets, during 2009 as a way to link people at IYA events such as meteor showers, giving access to instant news, and making it easy to upload photos and ask questions – a valuable new way to engage public interest. There have now been more than 3000 tweets about IYA2009 events, with even venerable institutions such as the Royal Observatory at Greenwich and the Science Museum joining in. To join in, look for @astronomy2009uk on the Twitter website.

<http://twitter.com/astronomy2009uk>