

The talk for the June meeting was given by our own Terry Evans who had been to Mexico recently for the total solar eclipse on April 8th. An excuse to show his holiday snaps, it was a two-parter with the first being the eclipse itself followed by Mayan astronomy based on the trip extension through the Mayan homeland of the Yucatan peninsula.

The eclipse itself was very much a “game of two halves”. The day had started cloudy and got worse! The partial phase was a lucky dip of images shot when the cloud momentarily left a gap. However, as the moon’s shadow cooled the atmosphere, a patch of blue sky came along with the shadow just before totality. Though there was high cloud obscuring the corona, the prominences were very clear and the final “diamond ring” was spectacular as usual. Cloud quickly rolled back in, of course, but it was possible to follow the moon’s disk as it moved off the sun with a decent view of the sunspots. Not the greatest eclipse but a remarkable sight nonetheless.

Following the eclipse itself, the group flew to Cancun and then started an 1,800 mile journey around the various Mayan ruins including Coba, Tulum and Chichen Itza. All of these had been on the Terry bucket list since reading a booklet on the Mayans back in the 1960s. The rest of the talk was on how the Mayans used astronomy to keep their calendars in line and how they had very advanced methods for the time, especially calculation where they had a positional number system, with the concept of zero, some 500 years before the Indians and 1000 years before the Arabic numbers we use now.

Observations done by the Mayans were, of course, naked eye. They used building alignments and narrow windows in buildings to observe sunrise and sunset at special dates like the equinoxes and solstices. They also measured the northernmost ranges of the Moon and Venus to provide accurate predictions of eclipses and apparitions of Venus. Though they didn’t have the concept of a Leap Year, they nevertheless knew that their calendar lost a year every 1508 solar years. This meant that they had a more accurate calendar with respect to the sun than our Gregorian calendar.

Most of the Mayan’s writings were destroyed by Spanish missionaries and only about 200 pages still exist. It would be amazing to see what was on those thousands that did get destroyed.

After the break Ken Honour described the trials and tribulations of setting up a new observatory. Paraphrasing Jane Austen, “It is a truth universally acknowledged that a man in possession of a good telescope must be in want of an observatory” and Ken has finally succumbed! He described the levelling process (3 times as much ballast as he’d thought) and getting utilities like power and data cabling to the observatory. All hard work but I’m sure that it will transform Ken’s observing as it will be so much easier to set up and, especially, to end an observing session.

Terry had a few images of Comet P/19 Pons-Brookes which is now in range of Australian telescopes. The comet has passed through the plane of the Earth’s orbit and the changes in the orientation of the “anti-tail” were obvious from day to day.

Next month’s talk will be by Ian Coster on the subject of Double Stars on July 17th.

Upcoming Events

Planets

All the planets are still difficult.

Saturn is 15 degrees high in the South East at around 3am BST at start of twilight.

Mars is just rising at 3am

By next meeting Saturn will be 30 degrees high at 3:30 am at start of twilight

Mars and Jupiter will have risen as well by that time.

Uranus and Mars will be about $\frac{1}{2}$ degree apart on the morning of 15th July

Comets

Comet 2023 A3 (Tsuchinshan-ATLAS) is brightening and may be naked eye in the autumn.

Noctilucent Clouds

Noctilucent Clouds (NLCs) have started being visible again. The season for NLCs usually runs through start of June to end of July. These are clouds that form about 70 Km up in the atmosphere and are visible about an hour after dark – hence the name which means Night Shining Clouds. They appear in the north and are usually very low for us down south.

Outreach

St Margaret's school in Tintinhull would like to do another stargazing evening this autumn. We should be able to support and have given them a few dates at the end of November / start December when Venus, Saturn and Jupiter should be visible.

Not had any reply from my e-mail.

Upcoming Meetings

Jul 17 Ian Coster Double Stars

Aug 21 John Chuter The BAA archive

Sep 18 Gadgets and Gizmos Evening followed by Observing Session

Oct 16 Adrian Dening

Nov 20 Brian Fraser Unmanned Lunar Landings

Dec 18 Christmas Social and members' short talks