As befits the last evening of Winter, the March meeting was held in unseasonably warm weather and necessitated the removal of my sweater for the first time for months (at a meeting that is:-). The speaker this month was Richard Kilbey on the subject of Captain Cook and his measurement of the transit of Venus.

Richard described why measuring the duration of the transit was important to determine the distance to the sun (which is vital to work out the baseline for parallax measurement of nearby stars). To get an accurate determination, it's necessary to get measurements from different latitudes and Cook (then Lieutenant rather than Captain) was dispatched to Tahiti on a converted coal vessel called Endeavour to take a measurement from the southern hemisphere of the 1769 transit. After a long voyage, he successfully carried out his measurement which helped produce a determination within 3% of the modern value.

Richard contrasted Cook's success with some of the travails of earlier and contemporary observers. Probably the most notable was Guillaume Le Gentil who missed the 1761 transit by being at sea and then the 1769 transit because of cloud (something we can all relate to!). Furthermore, when he arrived back in France he found that he was considered to be dead and all his possessions had been sold!

After completing his task in Tahiti, Cook opened up sealed orders which sent him to discover the expected Terra Australis. Not surprisingly (as it doesn't exist) Cook failed to discover the vast southern continent but did accurately map New Zealand and the east coast of Australia. The voyage had been bankrolled by Joseph Banks who made a huge number of botanical discoveries and gave the name of Botany Bay to one especially prolific area.

Not all was successful on the voyage as the Endeavour ran aground on what we now call the Great Barrier Reef and they were lucky to make landfall and be able to carry out repairs. Despite the length of the voyage - and the typical death rate of 50%+ on such voyages – Cook had only lost 3 men out of 92 until their luck ran out in Batavia (Jakarta today) where about ½ the crew succumbed to malaria.

The Endeavour returned to England after a 3 year voyage and his reputation (and that of Banks) were much enhanced. Cook continued on 2 more voyages but – Richard surmised – became much more unreasonable in his behaviour until he was eventually killed in a skirmish in Hawaii.

Many thanks to Richard for preparing and presenting such a very entertaining look through the first voyage of one of the icons of British seamanship and certainly one of the greatest cartographers.

After the break, Terry ran through the upcoming events both in the sky and at CADAS and we went through the logistics of Professor Chris Lintott's visit next month. Pete Adshead showed how his images of Orion (and the Horsehead nebula) have improved over the years.

This was coupled with his recent (multi-night!) image of NGC2683 in the rather obscure constellation of Lynx.

Terry also had some images of the way some things change from night to night (and possibly hour to hour). These included what we see of Venus, the moon, the sun and Mars from night to night (or day to day for the sun:-). He also managed to get a few images of the Lunar Eclipse on Friday 14th though the main part of the eclipse was clouded out. It wouldn't be complete without a sequence of NGC6729 but it has been very boring over the last few weeks but the next outburst is expected sometime in very early April.

We all look forward to Professor Chris Lintott's visit next month but keep your eyes on the website just in case he has to change things at the last moment, or we go into Covid Lockdown like we did last time he was due to visit!

Upcoming Events

Planets

Venus is now very difficult in the west with binoculars just after sunset (be careful) for the next few days. You'll be rewarded by an obvious crescent. It's at conjunction with the sun on 23rd March. It'll then start appearing in the east before sunrise but will stay low until midsummer.

Mercury is near Venus but very low, faint (mag 3) and not really observable even with a telescope. Its upcoming morning apparition will be very low and disappointing. It'll be visible again in the June evening sky (though in twilight)

Mars is more or less south when it gets dark high up in Gemini. It is moving eastwards again past Castor and Pollux and will be in a straight line with them around April 13th. It's still quite bright but is starting to fade.

Jupiter is bright in Taurus and dominates the western sky after dark. It'll be setting by local midnight (1am BST) by the next meeting.

Saturn was in conjunction with the sun on 12th March and won't reappear until late June in the morning sky. The ring plane crossing happens on 23rd March but it'll be too near the sun for observation.

Uranus is near the Pleiades but will be getting lost in the twilight by the next meeting.

Neptune is now in conjunction with the sun. It won't reappear until late June when it will be very close to Saturn.

Partial Solar eclipse on Saturday March 29th. Starts at 10:00 with maximum at 10:59 (UT) with about 40% covered. Be Careful!!

Clocks spring forward on the morning of Sunday 30th March.

Upcoming Meetings

Apr 16 Professor Chris Lintott
May 21 Ask the Panel
June 18 Kate Earl *The 88 Costellations*
July 16 Tim Whetherell
Aug 20 Joe Williams *Formation of Planets and their atmospheres*
Sep 17 Gadgets and Gizmos followed by Observing Session
Oct 15 TBA
Nov 19 Heather Johnston *The rise and fall of the giant planet occurrence rate*
Dec 17 Arthur Davis lecture and Christmas Social