



COFFS HARBOUR ASTRONOMICAL SOCIETY INCORPORATED

MINUTES AND NOTICE OF MEETING

MINUTES OF MAY MONTHLY MEETING HELD AT BOAMBEE HALL, MONDAY 6 MAY 2013 AT 7:00pm.

PRESENT: 9 members and 1 visitor.

MEETING OPENED: 7:04pm with President, Win Howard in the chair.

APOLOGIES: Peter Black, Ian Veness, Roy Derrett

MINUTES OF LAST MEETING: adopted as circulated by e-mail.

BUSINESS ARISING FROM MINUTES: Nil

CORRESPONDENCE:

IN:

1. From Max Laroux via email: re introduction of a discussion section in future meetings. See General Business below for action.
2. From John O'Byrne, secretary of the Astronomical Society of Australia: including a fact sheet with details of the Partial and Annular eclipse of the sun on 10 May.
3. From Cheryl Fatouros of Urunga advising that she has a telescope for sale.

OUT: Nil. One of the members present expressed some interest in the telescope for sale and took the written information regarding it.

GENERAL BUSINESS:

- 1) Moved Max Laroux, seconded Terry Gill that: "A discussion section be added to our meeting agenda each month, along the lines suggested by Max in his email. Topic to be decided at the previous meeting. This section of the agenda to be called "The Topic" -Carried
- 2) The Topic for next meeting will be "The basics of the Sun."

By way of clarification of the above motion the following is a direct quote from Max's email. It clearly sets out what he has in mind for "The Topic".

"Hi Terry,

I have been thinking about how our monthly meetings are presented and have a suggestion to make, it is-----

I feel that we need a section that will involve all present to participate in a general discussion on a subject of the month, one that involves the newcomers, people who are new to astronomy and are unfamiliar with many of the subjects that Win reads off his many sheets of information"

REPORTS FROM MEMBERS:

1) From Terry Gill:

- a) A few days ago Terry saw an unusual shooting star. It flashed, like an arc being struck then disappeared before reappearing about three degrees further north and then continuing like a normal shooting star. It continued in a northerly direction, travelling slowly for a few seconds before disappearing. Terry likened the observation to striking a match.
- b) On holiday recently Terry stayed at Balranald in western NSW. Their tourist information brochure mentions that Balranald is an excellent area for stargazing and suggests a few dark sites where people can go to stargaze. What a great idea to include this in a tourist brochure. Terry tried the first site suggested, the airport carpark. If the night had not had a bright moon the sky would have been outstanding.
- c) On the same holiday Terry passed through Coonabarrabran and went to Siding Springs to check on the fire damage since he was there last year. Severe fire had burnt up to within 10m of the dome and most of the bushland was destroyed for many kilometres. Good luck and good management prevented damage to most of the observatory. The road to the observatory was closed to the public for many weeks.
- d) Further on the Coonabarrabran fire: Last year Terry reported on a "Virtual Solar System" based on the dome of the Siding springs telescope representing the sun. Large billboards were placed along roads leading to Siding Springs with scale models of the planets. Unfortunately, in the recent fires, "The Earth" was severely damaged, as was "Mars". Even worse was "Venus" which was unrecognizable and all writing was burnt from its billboard.
- e) While Terry was on holidays someone from the Society called his home phone asking for assistance with some astronomy matter. Unfortunately the message left was destroyed by a well-wisher who informed Terry that some unknown person rang. Terry apologises to whoever this was.

2) From Max Laroux:

- a) On 25 April Max observed the moon and noted that it had a different appearance to usual.

- b) Saturn is in an excellent position for observation now.
- 3) From Win Howard:
 - a) Win successfully observed one of the recent occultations of one of the stars in Libra by the moon.
 - b) On the last week of this month there will be a nice conjunction of Jupiter, Venus and Mercury. All three will be close together in the western sky just after sunset. 26 May to 29 May will be the best time to observe this.

REPORTS FROM THE PRESIDENT: (this material is collected from the internet each month and presented in an edited form).

1. Comet ISON is expected to be at its best for viewing later in the year. It has the potential to be very spectacular. More in coming months.
2. Objects are being found that are thought to be planets that are not part of any solar system. They have probably been ejected by collisions or similar. There is some question about what to call these as the term planet refers to a body orbiting a star.
3. A galaxy has been found that, 12.8 billion years ago, was producing 3000 new sun-like stars each year. This is interesting because it was not known if galaxies were able to produce stars like this so soon after the Big Bang.
4. Kepler space telescope has found three planets that are both similar in size to earth and in the goldilocks zone for water.
5. A massive star explosion has been witnessed that would have destroyed us had it been close. It was found in a galaxy about 11 billion light years away. The gamma ray burst associated with the explosion lasted seven hours. Most last only a few seconds. This has caused some problems for astronomers because it challenges theory on how stars die. More detail at <http://www.watoday.com.au/technology/sci-tech/massive-death-star-discovered-by-wa-scientists-20130417-2i04i.html> .
6. An experiment conducted on the International Space Station has counted over 400 000 positrons. These are particles that are the antimatter equivalent of electrons. These were detected using the Alpha Magnetic Spectrometer on board the ISS. It is thought that this may have something to do with dark matter. More at http://science.nasa.gov/science-news/science-at-nasa/2013/14apr_ams/ .
7. A very recent NASA budget release for 2014 includes talk of exploiting the resources in a near earth asteroid. NASA now has an, “Asteroid Retrieval Mission”. Read about it at <http://www.skyandtelescope.com/community/skyblog/newsblog/202525981.html> if you are interested.
8. It is a reasonably well accepted theory that the heavy cratering of the moon and other solar system bodies around 3.9 billion years ago was caused by changes in the orbits of the larger planets, particularly Jupiter. Another scientific paper has just been released on this topic and it supports this proposal. Details at <http://www.abc.net.au/science/articles/2013/03/25/3721043.htm> .
9. Supernovae, where a star explodes have been carefully studied and categorized for many years. Supernovae have been put into two groups: Type 1a and “core collapse”. 25 examples of a third type have now been observed. The new type is called Type 1ax. Details at

<http://news.sciencemag.org/sciencenow/2013/03/scienceshot-a-new-class-of-super.html> .

10. Scientists have observed what appears to be a dormant black hole becoming active after 30 years and absorbed an object with a mass about 15 times that of Jupiter. Seeing that the black hole is about 47 million light years away this is quite an observation. Detail at <http://www.abc.net.au/science/articles/2013/04/03/3728673.htm> .
11. Cassini spacecraft, in orbit around Saturn has found a massive hurricane near the planet's North Pole. It is in a position that cannot be viewed from earth. More information at <http://news.nationalgeographic.com.au/news/2013/13/130501-saturn-hurricane-north-pole-space-science/> .
12. The Herschel observatory (in space) has stopped working after a four-year mission. It was launched in 2009 and was the largest telescope ever put in space. It required extreme cold to operate. Its supply of liquid helium ran out so it heated up. Like many of us when we get past our prime it lost focus.

CLOSURE AND FUTURE MEETING TIMES:

The next monthly meeting will be Monday 3 June, again at Boambee Hall at 7:00pm, all members and interested persons are encouraged to attend.

Meeting closed at 8:54pm.

VIEWING

The sky was again full of nice things to see that were hidden behind thick cloud. Also as usual it was raining. The rain was quite hard and, at times, the speaker at the meeting had to raise their voice to be heard above the rain. This was the first rain we had in Coffs Harbour for weeks. How lucky were we that it came on the very night we were hoping to view the sky.

Terry GILL
Secretary