

TAURANGA ASTRONOMICAL SOCIETY NEWSLETTER

Issue No. 8 – June/July 2005

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A number of outstanding events have been happening in our skies recently...

And this newsletter is where you'll read all about it...!



During the evenings of June 25th, 26th and 27th, we were treated to a trio of planets in the westering twilight. On the 27th we saw Venus, Mercury, and Saturn at their closest points to each other. It was one of those events which get more members of the public looking up, and so is always good to promote 'on-the-spot'. It's great fun phoning around to friends and getting them to just go outside and look.

We were fortunate enough to have clear skies on all three nights, and there were lots of fantastic images taken around the country. This one came from Paul Moss of Wellington. Thanks Paul !

Occultation of Jupiter

occultā'tion – adjs – a concealing, esp of one of the heavenly bodies by another: the state of being hidden.

Occultations occur when a moving object, such as a planet or the moon, blocks the light coming from a more distant object, such as a star, and is then hidden from the sight of the observer. Compared to astronomical [transits](#) and [eclipses](#), an occultation is said to occur when the nearer object appears larger and completely hides the more distant object.

For example, a satellite of Jupiter may be eclipsed, i.e. made dimmer because it moves into Jupiter's shadow; occulted, hidden from view because Jupiter lies on our line of sight; or may transit, i.e. pass in front of, Jupiter's disk.



On the night in question, the moon was 62 % lit, and the event started at 6.15pm. The further south the observer, the less of the planet actually 'disappeared', although for us here in the Bay of Plenty, the view was almost totally obscured by cloud ! The disappearance was fairly easy to see with the naked eye, but of course much more detail available with binoculars or telescope.

This image was taken by Andrew Dodson, of

New Plymouth.

These sites are worth having a look at for more information on observing occultations. If anyone is interested in having a go, please contact the director through the RASNZ site. Calls for observers go out regularly, and more often than not it is for occultations involving minor planets.

occsec.wellington.net.nz – Occultation section of RASNZ

www.lunar-occultations.com - the International Occultation Timing Association

www.occultations.org - the International Occultation Timing Association member site

Matariki Display



During June, there was a display in the Tauranga Library about the celebration Matariki, the Maori New Year. This coincides with the rising of the constellation Matariki, or Pleiades, in the East, during June.

Tauranga Astronomical Society were asked to contribute some information, along with a telescope. You can see the photograph here of the display.

Thanks to Jim Barrowclough for helping with the organising, and for the photograph.

NASA Deep Impact Mission



As you all know, this deep impact mission involved projecting an impactor into Comet Tempel 1 in order to discover some of its secrets. The comet is approximately 5km by 11 km long.

The flyby spacecraft performed right on schedule, by releasing the impactor spacecraft – incidentally about the same dimensions as a typical living room coffee table – aiming it into the comet. The impact velocity was 23,000 mph, and caused an immense cloud of powdery material to be released.

The Deep Impact science team continues to wade through gigabytes of data collected during the July 4 encounter, and updates are available on the NASA website –

<http://www.nasa.gov/home/index.html>

President's Report 2004/2005

The year has seen many activities going on within the Society and the trust board. The board has worked diligently throughout the year and our public exposure has helped enormously.

The main focal points this year have been;

To raise funds for the society; Toby Tobias has been our chief moderator for contacting the various grant committees and has had great success this year. Our best achievement was for a grant of \$5000 from the Perry Foundation, plus \$2,000 from Pub Charities. Most of this money was used towards purchasing the projector, a screen, and a stereo system with a DVD unit.

A 10" reflector telescope was also purchased for the use of the society and its members. This is undergoing some alterations to make it easier to use. The 8" cassegrain telescope is also being altered so that the finder is easier to use.

To start an education program for schools;

This has been a major part of the scheme to buy the projector equipment. The idea was to use this to help promote astronomy in schools and to work in with current science programmes that children are undertaking.

This year we have run star parties with local schools, these being Mt. Maunganui Primary School, the Rudolph Steiner School, Selwyn Ridge Primary school. We have also had a couple of impromptu star parties involving children.

The projector equipment has also allowed a 'new technology' focus into the Public meetings, whereby we have shown educational programmes via DVD and a large screen format, making it much easier to view.

The trust board have an ongoing interest in working towards an observatory for the Society. It is hoped that we will be involved in the council's planned upgrade of the current site in Fergusson Park.

Taking the stars to the public has been a fun activity, with observing on the Strand in Tauranga. This idea came from what the Sidewalk astronomers promote in San Francisco. The public were much appreciative, and the local papers are always keen on what we're planning.

Some of our visitors during the year included John Dobson, of the Sidewalk Astronomers in Los Angeles. He gave a public talk in April of 2005 about his views on cosmology. Graham Loftus also attended as a visiting speaker at one of the club nights.

The Royal Astronomical Society of New Zealand hosted a celebration of 80 years in the life of Dr. Frank Bateson. This was based in his hometown of Tauranga, and lasted for a weekend in December 2004. Members of RASNZ attended, as well as overseas visitors, and also some of the Tauranga Astronomical Society members. The Society also presented Frank with a plaque which will be on view at the Mt. John observatory.

With regard to the trust board, Bill Simm was president until October 2004 when he resigned and Ursula Macfarlane took up the reins as vice-president for the rest of the term.

Ursula Macfarlane

Retiring Vice-President Tauranga Astronomical Society

May 2005.

Further Society Information

2005 AGM

The AGM was conducted on May 25th at Fergusson Park, Matua. The evening proceeded smoothly, with the President's Report and the Financial report read.

Two previous committee members, Gunter van Dijk and Ursula Macfarlane, were unable to resume duties for the following year. Three new members were voted on; George Stewart, Stuart Murray and Kay Knight. Welcome aboard, and we trust you have a great year.

SUBS due for 2005 ! ! !

A small friendly reminder to members that the subscription fees are once again due. We have kept a low, low price for you.....!!

\$20 for single membership, \$30 for family.

Upcoming Public Meetings of Tauranga Astronomical Society.....

27th July 2005

24th August 2005

28th September 2005

TROG.....Tauranga Roaming Observers Group

This is a phone/email list which you can put your name down for if you are interested in 'spur of the moment' observing. This has normally been down at Fergusson Park in Matua, Tauranga, but other sites are being checked out constantly. Contact Ursula or Jim if you are interested in joining the observing group.

NOTE: Public Meeting Visitors;

Casual visitors to public meeting nights will be able to come along free of charge for two public meetings or viewing nights, thereafter a charge of \$5 per meeting or viewing night if the person does not pay the annual subscription.

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Contributions to newsletter most welcome !
email Ursula on ursa.minor@clear.net.nz