

TAURANGA ASTRONOMICAL SOCIETY NEWSLETTER

Issue No. 4 – August/September 2004

Edited by Ursula Macfarlane email ursa.minor@clear.net.nz

More recent observing.....

TROG was out in force on Sunday night down at a local park.....the lights from the Port didn't seem as bright as usual, possibly due to it being Sunday? Jim and Les turned up which stopped me talking to myself thank goodness, and they were keen to learn more about how to star hop. This all went very well, and both Les & Jim found omega Centaurii in their binoculars which they were very pleased about. Well done ! We looked at several zenith constellations, and then went low north to Hercules and Lyra. I got the Ring nebula in the 6" scope - first time I've tried this in Tauranga.....well the description would be closest to it being a small blob of boiled porridge on the eyepiece. Hmm. Maybe those port lights were disturbing the horizon more than we thought. Vega, the alpha star of the Lyra constellation, was especially bright and clear though. Had a look at M13 in Hercules too, which was lovely, and apparently wins the prize as the gem of the northern skies. These sessions do depend upon the weather of course, and are often on short notice, but do join us next time.



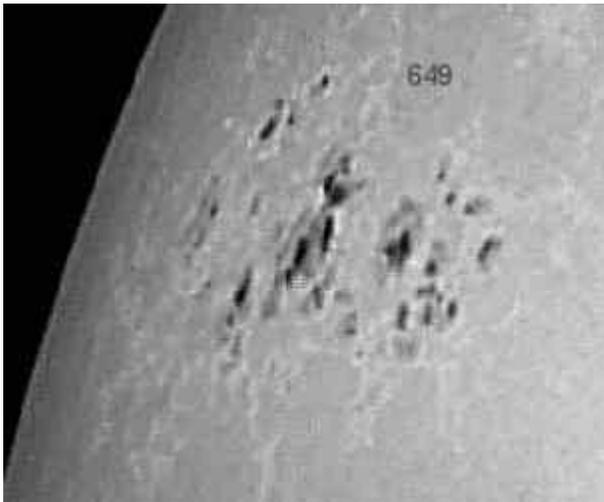
Spots before the Eyes.....

Murray Helm is a keen solar photographer. He has taken a lot of images of the recent sunspot activity. Indeed, we've been following it all at work using binoculars backing onto a sheet of white cardboard. The spot that made such a huge impression last month, number 649, has returned once again albeit a little trimmer. Compared with last month's appearance that had it larger than Jupiter, the spot is now a modest Earth-sized figure and probably won't be anywhere near as active. Compare these two shots of

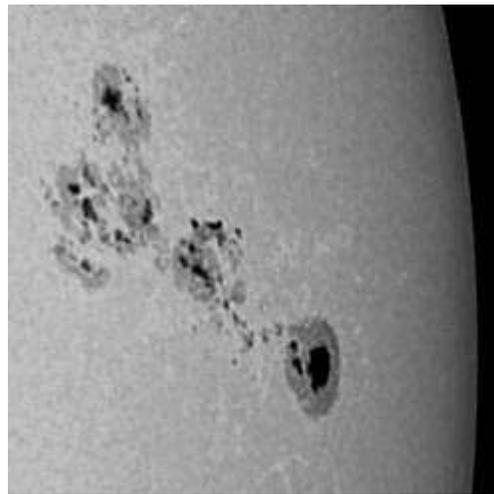
649 departing in August and it's recent return.

Also below is Murray's picture from July.

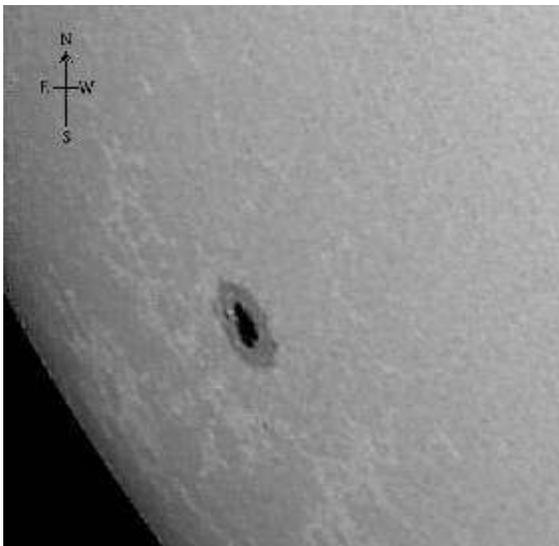
(Photos; Murray Helm.....also some text from Murray's emails_



July 14th 2004



August 16th 2004



September 4th 2004

The website www.spaceweather.com shows a video which allows us to see the rapid change of this sunspot. Murray has been following this one for a while, and the changes are rather dramatic.

The Sun and sunspots should never be looked at directly, or through any optical equipment without the correct filters.

Sunspots appear dark in photographs like the one above, but in fact sunspots are quite bright - they are just dark compared to the rest of the Sun. Sunspots are about the size of the Earth and frequently occur in groups, as shown above. Sunspots occur when a concentrated portion of the solar magnetic field pokes through the surface. This field slows energy from entering the sunspot region, causing sunspots to appear cooler, darker, and lower than the surrounding surface. Sunspots typically last a few days before dissipating. The number of sunspots is always changing, generally going from a maximum to a minimum about every 5 ½ years.

Sunspots which cause a great deal of CME – coronal mass ejection – produce the auroral activity which we can see from Earth.

COMET COMMENTARY

In May 2004 two bright comets were visible - NEAT (Q4), and LINEAR (T7) - at the same time, and astronomers worldwide were tracking these.

Now there are more coming across the New Zealand skies - K4 - and as you all learnt so much about Linear and Neat, you'll be keen to track this one too. Also, Q2, which was discovered by astronomer Don Macholtz from the U.S.A. He has discovered several comets, and is a keen

observer. His latest book is all about Messier object hunting, marathon fashion !

The two comets will be at their brightest later in the year, but can be seen now.

Watch out for a chart in the next newsletter.

For recent comet observations try...

<http://groups.yahoo.com/group/CometObs/>

<http://encke.jpl.nasa.gov/RecentObs.html>

<http://cfa-www.harvard.edu/iau/icq/CometMags.html>

Thinking of buying a telescope?

A brand called Astronz is a very reasonably priced scope and many amateur observers have been happy with theirs. A good starting size would be an 8" dobsonian.

The company is fully owned and operated by the Auckland Astronomical Society on a purely voluntary basis. The Directors are members of the AAS and are appointed by the Society Council.

They believed the mark-ups used by retailers of astronomical optics in New Zealand were unacceptably high and so decided to do something about it. There is an increase in the range of items held in stock and that will increase further. Orders are often turned around within 24 hours.

A new price list was made available on July 1st.

Details are on the web site www.astronomy.co.nz/pub/home.asp

Astronz now has two different ranges of relatively

wide-angle (65 deg) 2-inch eyepieces, with a Barlow

and a star-diagonal.



This image is **the GS-880F 10" (250mm) Dobsonian Telescope - which includes a cooling fan for \$1,309 (Incl. GST)**. The telescope is easily portable and has fantastic viewing of celestial objects. A new shipment arrived in June. Don't miss out on this fantastic deal since there are very limited numbers available

Further Information

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

22nd September 2004

28th October 2004

Committee meetings;

6th October 2004

3rd November 2004

Also.....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.

Tauranga Astronomical Society.....

Ours is a comparatively new Society which was formed a mere two years ago, but our numbers are increasing rapidly. We have sought Council permission to erect a smallish observatory in Fergusson Park in Tauranga and are seeking finance for this. At present we operate an 8 inch Schmidt Cassegrain telescope and now have a 10 inch Reflector which would be mounted in the observatory.

We have monthly meetings at Fergusson Park which always include a talk on a specific subject and a video to back up the lecture followed by a welcome cuppa and then telescope viewing if sky conditions permit. As sky conditions are not very often clear we do have a few extra nights to give members the opportunity to view the sky above. Jim B.

Patron retiring from astronomy – Dr. Frank Bateson will be retiring in December this year, although he is willing to stay on as the Patron of our society. More news on Frank in the next newsletter.

Committee news ; the elected Vice-President from this year's AGM has resigned from his position. This seat is currently vacant.

Jim Barrowclough is working hard to get the Society's telescopes shipshape. We'll have a report on this in the next issue.

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.

Contributions to the newsletter most welcome !

email Ursula on ursa.minor@clear.net.nz