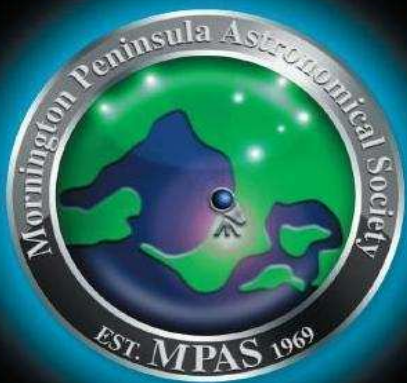


Cover Image, seeing red after the February public night photographed,
by Greg Walton



SCORPIUS

THE JOURNAL OF THE
MORNINGTON PENINSULA ASTRONOMICAL SOCIETY INC.

Volume XXII, No 3 (May /June)

The Mornington Peninsula Astronomical Society (formerly the Astronomical Society of Frankston) was founded in 1969 with the aim of fostering the study and understanding of Astronomy by amateurs and promoting the hobby of amateurs Astronomy to the general community at all levels.

The Society holds a focused general meeting each month for the exchange of ideas and information. Regular public and private observing nights are arranged to observe currently available celestial objects and phenomena. In addition, the society encourages the service of its members for education presentations and observing nights for schools and community groups. Reg No: A268 ABN: 34569548751 ISSN: 1445-7032



SCORPIUS The journal of the Mornington Peninsula Astronomical Society

Newsletter Disclaimer

The Scorpius Newsletter is published online, once every two months for its membership, by the Mornington Peninsula Astronomical Society, for Educational Purposes Only. As a newsletter, this publication presents news spanning a spectrum of activities, reports, and publications in order to keep society members abreast of a variety of events and views pertaining to astronomy. While prudent, reasonable effort has been utilized to verify factual statements made by authors, inclusion in this newsletter does not constitute or imply official MPAS endorsement. All materials (except previously published material, where credited) are subject to copyright protection © 2013, Mornington Peninsula Astronomical Society

May / 2013

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 Last Quarter	3 Public Night 8pm	4
5	6	7	8 ASV Meeting	9 SPSP South Pacific Star Party	10 SPSP New Moon Annular Solar Eclipse NT	11 SPSP
12 SPSP	13	14	15 Society Meeting 8pm	16	17	18 VASTROC Members Night BBQ 6pm First Quarter
19 VASTROC	20	21	22	23 Saturn close to the Moon	24	25 Astronomy class Full Moon
26 Jupiter, Mercury close to Venus	27 Jupiter, Mercury close to Venus	28 Jupiter, Mercury close to Venus	29 Jupiter, Mercury close to Venus	30	31	

Monthly Events & High Lights. Watch out for Auroras - Annular Solar Eclipse on the 10th May Best seen from Tenmant Creek NT
 Public nights 3rd, 8pm start - **AC Astronomy class** on 25th March @ the Briars 1:00 pm by Peter Lowe
 Society Meeting at 8pm on 15th @ the Peninsula School - Members Night BBQ 6pm at the Briars 18th
Evening - 22nd Spica close to the moon, 23rd Saturn close to the Moon, 26th to 29th Jupiter, Mercury close to Venus
 South Pacific Star Party on 9th to 12th of May @ Ilford NSW for information and bookings go to www.answ.com/spsp

June / 2013

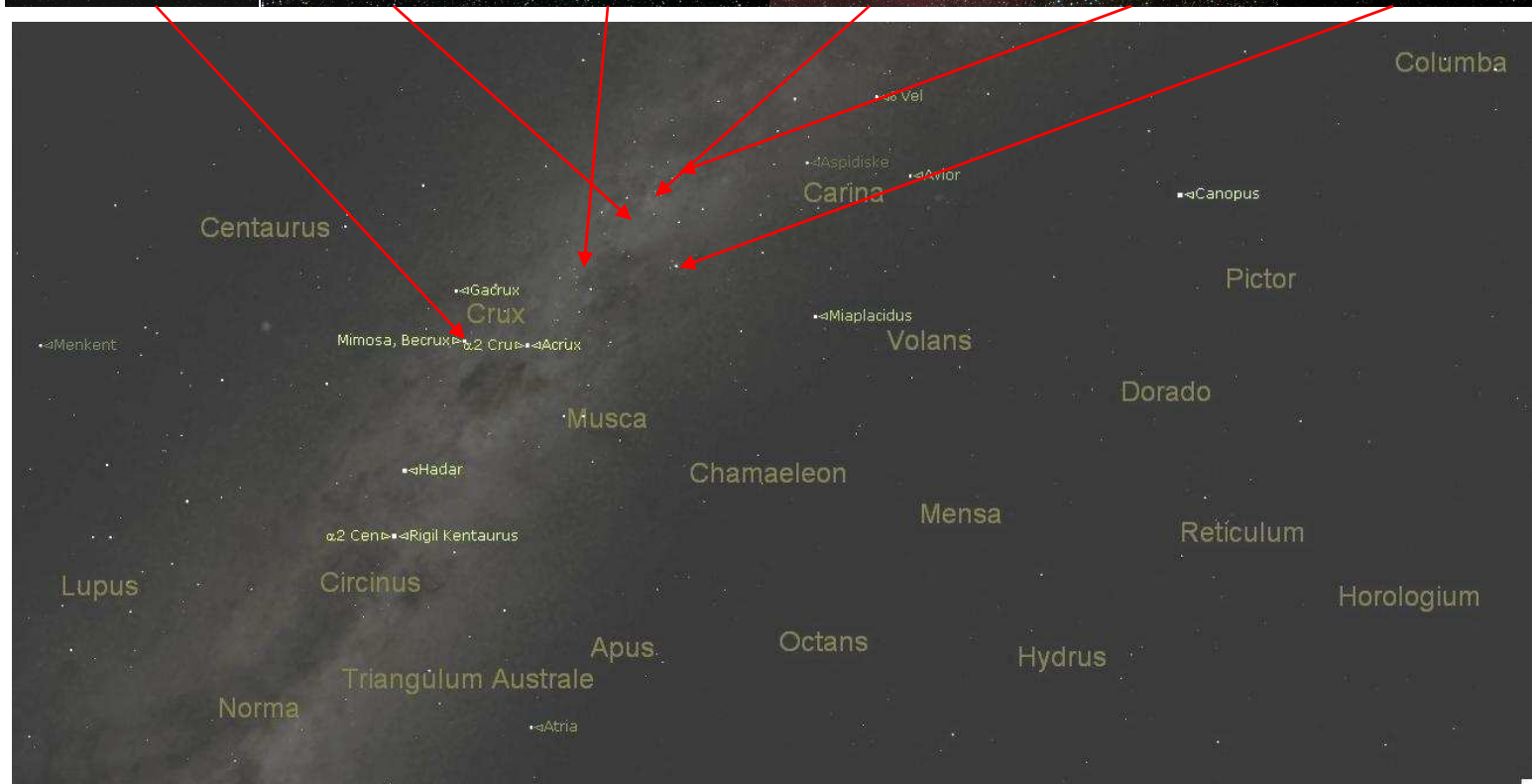
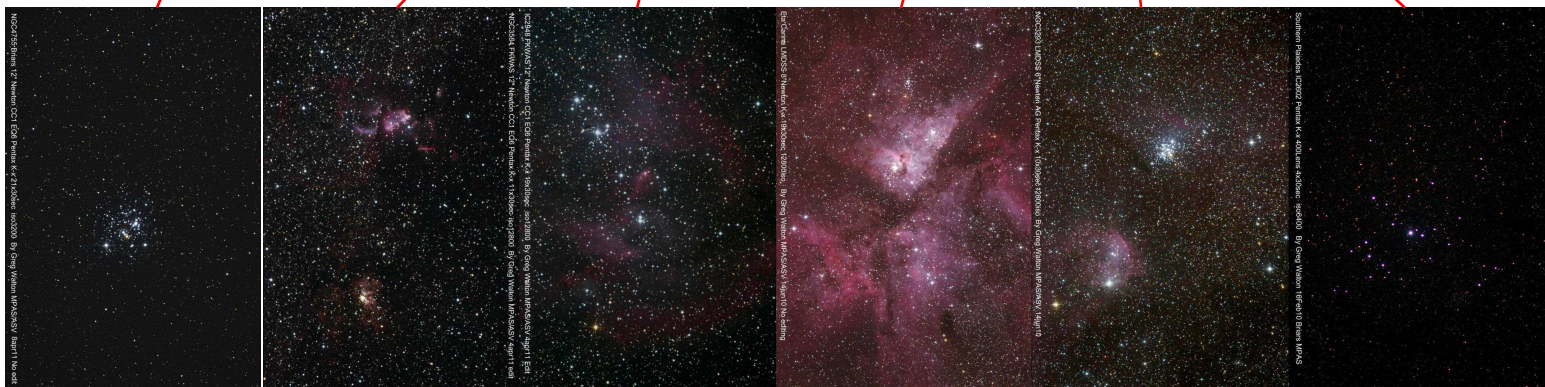
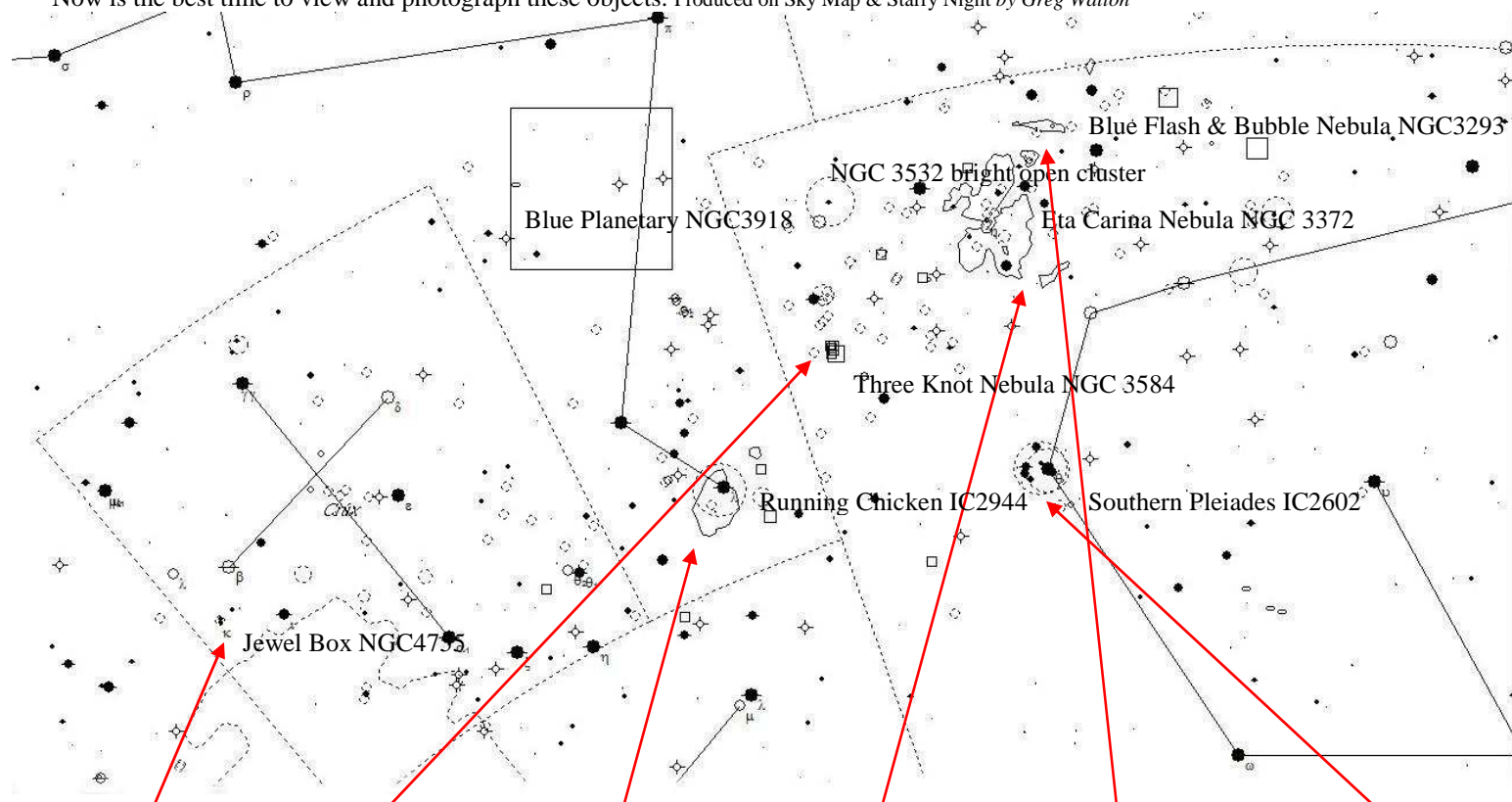
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30						1 Last Quarter
2	3	4	5	6	7 Public Night 8pm	8
9 New Moon	10 Queens Birthday	11	12 ASV Meeting	13	14	15
16	17 First Quarter	18	19 Society Meeting 8pm	20	21	22 Members Night BBQ 6pm Solstice Party
23 Full Moon Super Moon	24	25	26 Committee meeting 8pm	27	28	29 Astronomy class 1pm

Monthly Events & High Lights. Red Days indicates School Holidays- - **Watch out for Auroras.**
 Public night 7th, 8pm start - Society Meeting at 8pm on 19th @ the Peninsula School
 Solstice Party Members Night BBQ 6pm at the Briars 22nd
AC Astronomy class on 29th March @ the Briars 1:00 pm by Peter Lowe
Evening - **Super Moon** 23rd The Moon will be at its closest point to the Earth this year.

Note this years the Members night BBQ's will be the first Saturday after the Society Meeting.
 Also General Meetings will be called Society Meetings under the new regulations.

Sky for the months May/June we look South to Crux and Carina

In Crux & Carina you will find a treasure trove of interesting objects, the Jewel Box, Running Chicken IC2944, Southern Pleiades IC2602, Eta Carina Nebula NGC 3372, Blue Flash & Bubble Nebula NGC3293, Three Knot Nebula NGC 3584 & bright open cluster NGC 3532
Now is the best time to view and photograph these objects. Produced on Sky Map & Starry Night by Greg Walton



SOCIETY NEWS

By Greg Walton

February Annual meeting seen a large turn out of about 50 members. Peter Lowe (President) talked about coming changes to the society, under new Government regulations and presented the treasurers report on behalf of Marty Rudd (Treasurer), he also thanked all members who helped with the running of the society through out the year. Peter Skilton (Secretary) then chaired the voting in of the new Committee, President, Vice President, Treasurer and Secretary, See the new line up on the last page. Peter Lowe (President) then gave a brief talk on the latest astronomical news including video of the Russian meteorite impact. Dave Rolf (Vice President) talked on the Earths close encounter with an asteroid then showed his pictures and video. Greg Walton did sky for the month and showed time lapses video of comet Lemmon pasting in front of a starry back ground and the Moon pasting in front of Jupiter with some interference from clouds. Alex Cherney showed his wide angle pictures and video of comets Lemmon and Pannstar in the same frame with some aurora from Finders.

February Member Night BBQ seen a good turn out of about 30 members. Thank you Peter Lowe (President) for buying in all the food & help with the cooking. Special thank you to Marg Cleverdon for cleaning up after wards. We all had a great time using the societies telescopes, the moon was almost full but we were still able to find comet Lemmon 8 degrees west of SMC, easily seen in Binoculars.

March Public night seen a large turn out of members. Trevor gave the talk to about 50 members of the public before they got to see an Io shadow transit cross the face of Jupiter also many telescopes were tracking comet Lemmon and the usually deep sky objects, some stayed on till Saturn raised at about 11pm.

Lord Somers Camp 18th march about 300 uni student got to see the Moon, Jupiter and many deep sky objects. Peter Lowe did the talk 4 times as the hall was not big enough to accommodate 300 students. David Rolfe, Alex Cherney, Peter Skilton, Paul Albers and Greg Walton run the telescopes.

March Society meeting seen a good turn out of about 30 members, Professor Alex Heger gave a take on the formation of first generation stars in the early universe, some interesting points were the process of manufacturing each element and the amounts, there is 10 times more gold on earth than lead but it's out of reach at the centre of the earth.

March Member Night BBQ seen a good turn out of about 30 members. Thank you Peter Lowe (President) for buying in all the food & help with the cooking. Special thank you to Pia & Steve for wash the dishes. Also thanks to Irena and Marg for cleaning up after wards. The Moon was almost full but we all had a great time using the societies telescopes. Jerry Walter brought along his new Refractor on a go to mount, with Paul and Alex's helped it was soon zooming around the sky hitting object after object. Grant and I photographed the Moon with the societies 6 inch Mac and Grant's Canon 40D.

April Public night seen a large turn out of members. Trevor gave his talk to 164 members of the public, before they got to see Jupiter and the usually deep sky objects on this moon less night, a large number stayed on to see Saturn raised at about 10pm.

VASTROC 2013

For over twenty years now Victorian Astronomical Societies have been getting together every two years at an event called VASTROC The Victorian Astronomical Convention will be on the weekend of 18-19 may 2013 at Rydges Bell City Hotel, 215 Bell Street Preston, 3072 Cost with options for full and partial attendance see the ASV web sight @ www.asv.org.au The Mornington Peninsular Astronomical Society hosted this conference last time 2 years ago at the Briars.

New Members

Welcome

Peter Elias & Family
Kendra, Rebecca,
Michelle, Chloe

PUBLIC NIGHT THANK-YOU

Recent public viewing nights and school viewing nights have continue to be very well received by the attendees. It is no coincidence that this is due to the efforts put in by the members that help out at these events. To everyone that has helped out over the past months, a very big thank-you goes to you all. Your efforts are very much appreciated, and are being very well received.

A word from the Scorpius editing team.

Members please write a story about your astronomy experiences and add some pictures.

Send them to:
Brett Bajada
Peter Lowe
Greg Walton
gwmipas@gmail.com

2013 SUBSCRIPTIONS DUE

The ticking over of the New Year also means that society fees are now due to be paid. The society has worked hard to ensure that 2013 fees are still the same as last years prices.

So to assist the society in maintaining the facilities and service we provide, we appreciate your prompt payment for the 2013-year ahead.

As a reminder, the following structure of the fees are:

SOCIETY FEES

Subscriptions can be paid in a number of ways:

- Direct Cash payments to a committee member
- Send a cheque or mail order to the society mail box MPAS. P O Box 596, Frankston 3199
- Make a direct electronic payment into the society working bank account.

The account details are BSB 033-272 Account 162207. Remember to add your name and details to the transfer so we can identify the payment in the bank records.

If you have any concerns please talk to a committee member.

\$50 – Full Member
\$45 – Pensioner Member
\$65 – Family Membership
\$60 – Family Pensioner Membership

ASTRO NEWS

By Peter Lowe



There's Gold in Them There Meteors

Using the old "Strike While the Iron is Hot" philosophy, the best way to get research money is to be ready with a grant application when tragedy strikes. Following the meteor impact and subsequent recovery of meteorite fragments over the Russian city of Chelyabinsk in February there has been a veritable gold rush of funding applications to look for, find and handle dangerous asteroids. This research area became a bit of a backwater subject in recent years with various projects and space missions cancelled for cost cutting purposes however February's near disaster

has invigorated the whole "Save the World from Asteroids" scene. The Russian government has been looking at the Bruce Willis nuclear missile solution, which involves blowing the asteroid to smaller pieces using a nuclear explosion. This brute force approach does not really solve the problem because rather than one gigantic impact we get lots of less gigantic impacts. Alternatively we could explode a nuclear device close to the asteroid allowing the intense energy burst to vaporise part of the surface giving the asteroid a gentle sideways shove. Other approaches include fire lasers to ablate part of the surface and push it off course or land ion thrusts onto the surface and slowly push the asteroid or maybe hit the asteroid with a high speed impactor and let its kinetic energy push it away. However it might be done it will need significant research funding and lots of time and testing to achieve a reliable system. At present we have no way to prevent an impact and can only go out and watch the show.

New Dating Confirms Impact triggered the KT Extinction Event

It is generally believed the world's dinosaurs and many other land and oceanic species were wiped out by an asteroid impact some 65 million years ago. While the evidence for this is fairly solid, the smoking gun evidence has been hard to come by. Yes, the fossil record shows the extinction event occurred and yes, there is a suitable impact crater off the Yucatan coastline. Both these events have been dated to roughly 65 million years but given all the other global changes in atmospheric composition, volcanic activity or oceanic and climatic fluctuations it is hard to prove a connection between the extinction event and the impact event. The problem is that all of these factors were at play and the dating of the crater materials and the fossil records differed by a few million years. Even the dating of the impact itself had an 180,000-year error margin. Part of the problem was the world did not recover after the impact at the same rate. The Earth's atmospheric carbon cycle returned to normal within about 5,000 years of the impact while the world's ocean circulations took between 1 and 2 million years to return to normal. To resolve this a much more accurate timing measurement was needed. Studies of the volcanic ash before and after the dinosaur die out have narrowed the extinction to within 11,000 years while precise measure of the radioactive argon in the soot from the global fires has isolated the impact within the same error range. We now know both the impact and the extinction event occurred essential at the same time confirm the impact of a major contributor to the extinction event. It may not have been the only contributor however since the world as going through some major life-threatening changes at the time but the impact it seems was just one catastrophe too many. The revised dates for the extinction event is between 66,038,000 and 65,957,000 years ago.

Mars Operations Prepare to Close for Sun Conjunction.

Every 26 months the Sun, Mars and the Earth align such that the Sun is between us and Mars. Communications with the various probes and rovers on Mars are severed during this period. Between April 9 and April 26 the various Mars space mission will be put into automatic or safe modes until communications can be re-established.

WISE Gives a New View of Orion's Nebula

The tangle of clouds that lie in Orion's sword is showcased in a new, expansive view from NASA's Wide-field Infrared Survey Explorer (WISE). Orion's nebula is the closest star-forming region to us. WISE scanned the whole sky in infrared light, capturing this vast view of this dynamic region. The telescope picked up the infrared glow from dust heated by newborn stars. The colours green and red highlight this warmed dust, while the white regions are the hottest. Massive stars burned through the dust, carving out cavities, the largest of which is seen at the centre of the picture. Astronomers believe our sun was probably born in a similar cloud. Orion's newborn stars are less than 10 million years old.

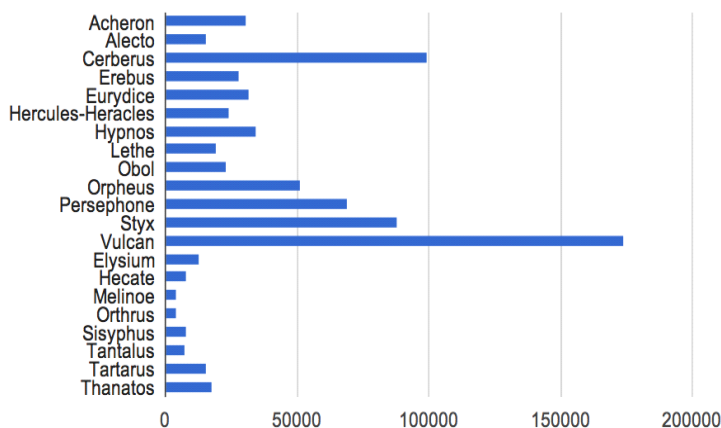


Naming Pluto's Moons



The U.S.-led team that discovered two new moons of the dwarf planet Pluto have run a voting campaign to pick names for these two new moons. The fourth and fifth moons of Pluto are currently known simply as P4 and P5. Tradition holds the names of Pluto's moons are taken from Greek and Roman mythology and relate to Hades and the underworld; the first three of Pluto's moons discovered are named Charon, discovered in 1978, and Nix and Hydra, both discovered in 2005. Among the considered potential names for P4 and P5 were Cerberus, Hercules and Orpheus. In a public voting campaign Star Trek fans have clearly won out selecting "Vulcan" proposed by Captain Kirk (aka. William Shatner). Second place was Cerberus. Vulcan is the god of fire in Roman mythology while Cerberus is a mythical three-headed dog that guards the gates to the underworld.

450324 responses as of 2013-02-25 17:00:07 GMT



China's Next Woman Astronaut set.

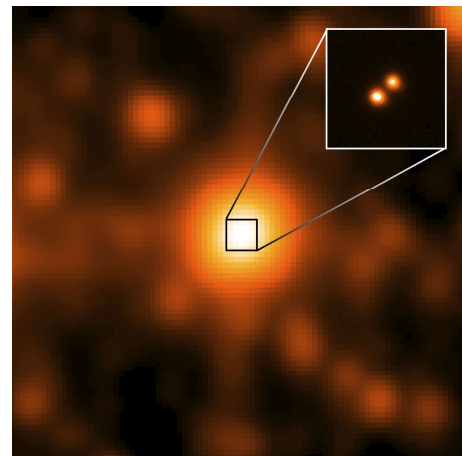
Wang Yaping, a former air force pilot is expected to be the next woman astronaut aboard the crew of the Shenzhou 10 spacecraft due to lift off mid-2013. The craft will rendezvous with China's Tiangong 1 space laboratory for a 15-day mission. The Shenzhou 10 mission will be the second and final crewed expedition to the Tiangong 1 space laboratory. After this the large Tiangong 2 space laboratory currently expected to be launched in 2015. The Tiangong program provides a basis for hardware development and crew training for a modular space station planned around 2020.



The Third Closest Star System to Us Found.

A pair of newly discovered stars are believed to be the third-closest star system to the Sun. Both stars in this new binary system are "brown dwarfs," which are stars that are too small in mass to ever become hot enough to ignite hydrogen fusion. As a result, they are very cool and dim, resembling a giant planet like Jupiter more than a bright star like the Sun.

The distance to this brown dwarf pair is 6.5 light years -- so close that Earth's television transmissions from 2006 are now arriving there. Since it is the third-closest star system, in the distant future it might be one of the first destinations for manned expeditions outside our solar system. The star system is named "WISE J104915.57-531906" because it was discovered in a map of the entire sky obtained by the NASA-funded Wide-field Infrared Survey Explorer (WISE) satellite. It is only slightly farther away than the second-closest star, Barnard's star, which was discovered 6.0 light years from the Sun in 1916. The closest star system consists of Alpha Centauri, found to be a neighbour of the Sun in 1839 at 4.4 light years, and the fainter Proxima Centauri, discovered in 1917 at 4.2 light years.



MPAS at the ASV's Messier Star Party, *By Greg Walton*

The annual Messier Star Party hosted by the ASV is held in March, when most of the Messier object can be seen in the sky. Kevin, Dominic, Alex, Rod, Pia and I travelled to ASV's LMDSS under a cloudy sky. But as night fall the clouds retreated over the horizon and did not return till 2am. As usual the loins club were on deck cooking hamburgers and selling ice creams. Perry Vlahos did the Astro trivia, then took 100 members of the public out on the field to show them the night sky (see below) and then they roamed the field checking out all the telescope with there wonderful views of the heavens. We all had a great time on this warm and barmy night. See video - Messier Star Party 2013 <https://vimeo.com/112119433>

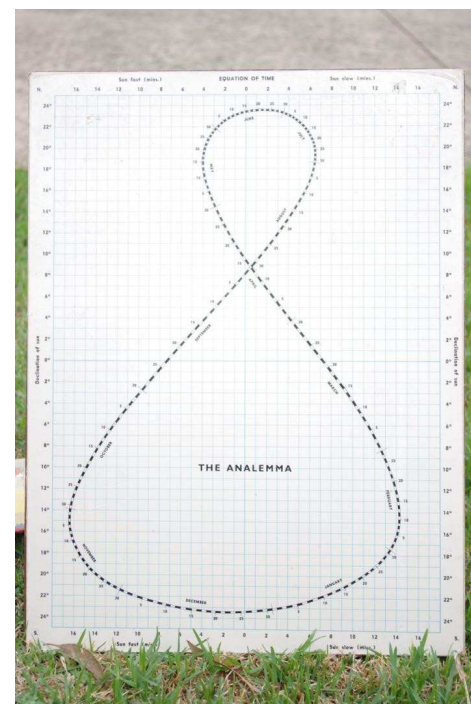


Solar Day at the Briars on the 23rd March, *By Greg Walton*

MPAS runs a solar day around the time of the first equinox, the time of year where the day and night are equal lengths, when the sun crosses the equator. Ian Sullivan takes us through a complicated set of mathematical equations, involving measuring the angle of the sun above the horizon at solar noon, which is about 22 minutes past 12 o'clock plus one hour for daylight savings, meaning that the measurement is done at 1:22 pm. Our measurement was 4 minutes late due to clouds or one degree late. But we did get a good measurement and were able to calculate that the sun was where it should be. We also did a sun spot count only 5. James brought along this 60mm Lunt solar scope which gave an impressive view of the sun's surface. We also set up the MPAS sun dial donated by Ian Sullivan.



Below Ian and Jim preparing to measure the angle of the sun. Below right the Analemma used to get the correction of time.

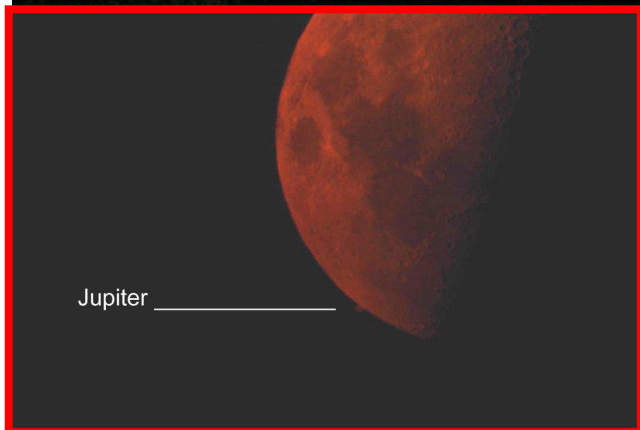


MPAS at Oliver's Hill waiting for the Moon to cover Jupiter, *by Greg Walton*



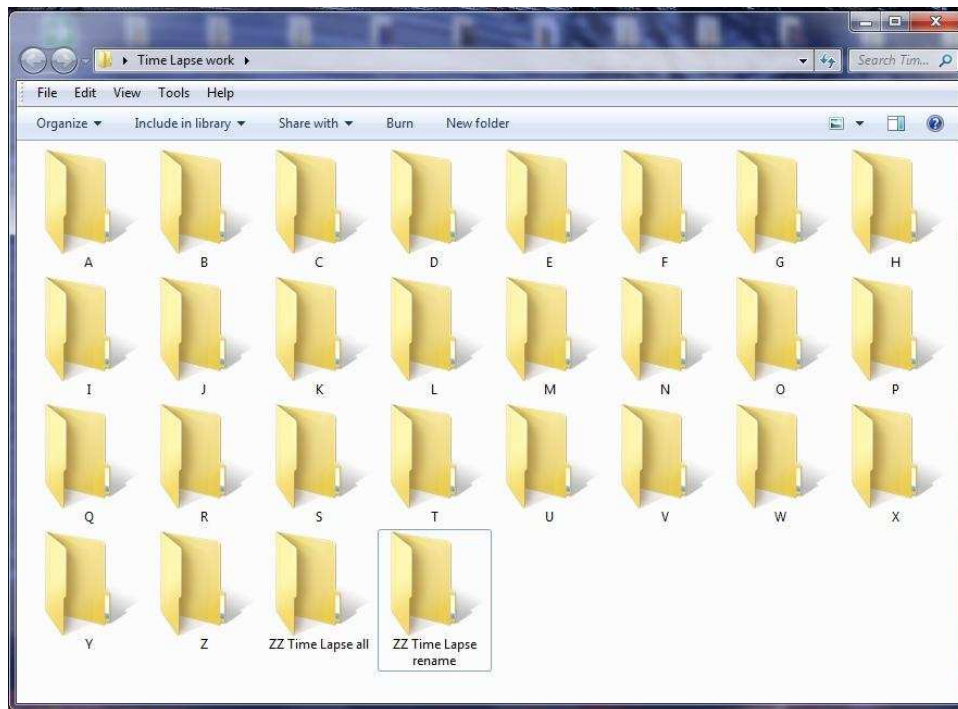
Monday the 18th February the Moon was to cover Jupiter around 11.30pm. So Peter Lowe, Alex Cherney, Dominic, Paula, Mal, Pia and myself, chose Oliver's Hill to see this rare event, because the Moon would be only 8 degrees above the horizon at first contact in the west and 4 degrees at reappearance. But smoke and clouds blocked our view 10 minutes before first contact (Left) and at reappearance we got just a glimpse of Jupiter coming out from behind a burnt orange moon. (Below Left)

See video - Jupiter & the Moon on 18th Feb 2013 <https://vimeo.com/125863678>

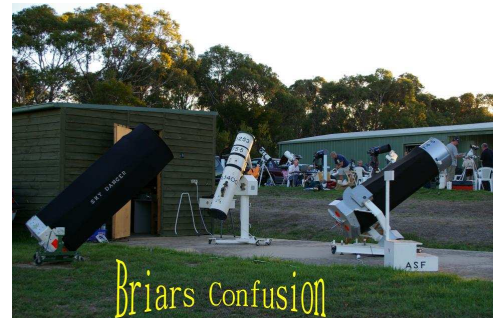


Making a time lapse movie with many different scenes, *by Greg Walton*

As you get more experience you will want to add many different scene to your time lapse movies. It is best to build your movie from the ground up like building a house. First start with the foundations. I have made a standard set of folders which I use for all my time lapse movies called time lapse work. Which contains 26 folders named A to Z.



You can add more folders in between these, for example AA, AB, AC. This means you can add, copy and move scene around till you get the desired effect. You can also up date the movie from time to time as you get more and better images.



In the first folder A I put the first or opening scene, usually 60 imagers all the same with writing overlayed. Then I rename all the images in the folder A, click Edit Select all or Control A then right click rename A Enter. See below

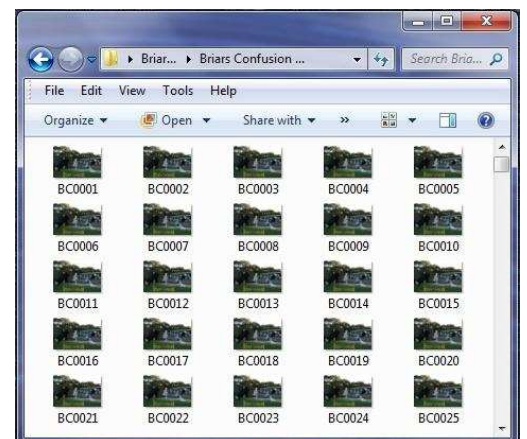
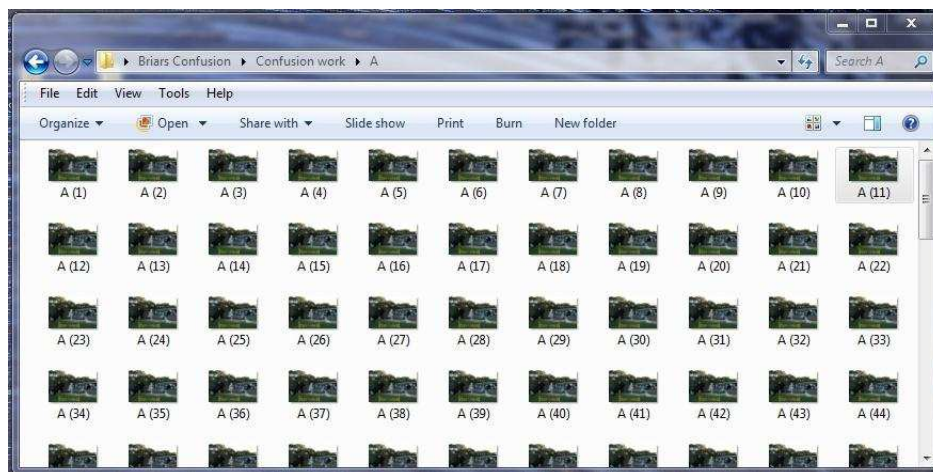


Diagram 4

In the second folder B I put the time lapse images, usually many 100s of images. Then I rename all the images in folder B, click Edit Select all or Control A then right click rename B Enter. In the third folder C I put the next set of time lapse images and so on till I have all scenes put in there folders and renamed. Next I copy all the imagers from all the folders in to one folder named Time Lapse all, please note Copy not move. All your images now should be in one folder. Because they are in alphabetical order you can scroll through them to see how your movie will look. Next I copy that folder and rename it Time Lapse rename, then open at folder and rename all images. Click View List, View Refresh, highlight the first image, Click Edit Select all or Control A then right click rename BC Enter. If this does not work and your images get scrambled, throw Time Lapse rename folder in the bin and start again. Because we have been copying as we go, you can just go back one step to recover your work. Window can be very unreliable at renaming, so its best to use Fast Stone renaming which you can down load from the web. Also all your images must be the same size for Virtual Dub to work. I now use 1072x712 which is 25% of the Pentax sensor. Also all your images must be in numerical order, if one image is deleted Virtual Dub will stop at that point. Note that Sony Vegas requires numerical order without brackets as to diagram 4.

Roland & Anna Knabe eclipse Photos.

Roland & Anna traveled to Palm Cove Queensland for the solar eclipse, the day before they were bailed up on the beach in the rain by an ABC TV film presenter, Roland said we travelled 3500 Kilometers to see clouds, which ended up on the news that night.

The morning of the eclipse was very cloud at Palm Cove with a large crowd on the beach (see below) all hope to see this rare event, likely the clouds parted just before totality.

Roland & Anna snapped these images of the eclipse at right.

Bottom photo Anna at right with eclipse glasses.



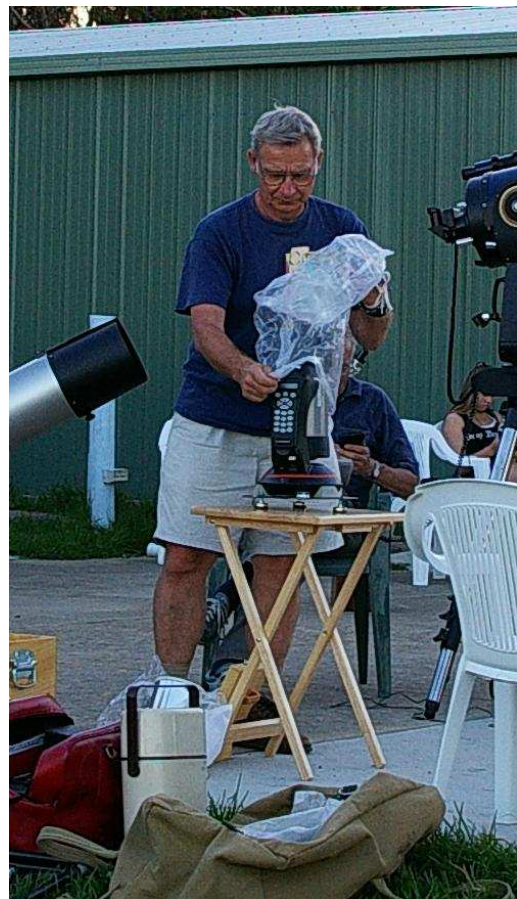
2012DA14 Asteroid fly-by as seen in Red Hill, by *Roland Knabe*

We don't get a fly-by that close all that often, so some effort was put into the "affair". Alex Dickson had kindly provided me with the RA-DEC coordinates of the mini asteroid for: times (EADST) 04:00, 04:30, 05:00, 05:30, 06:00. These came from the Sydney Observatory website. As the target was small (forecast magnitude 7) I decided to use the 100 mm f 13 1350mm Go-To ALT-AZ Maksutov (4 inch Celestron) with the longest eyepiece in my possession a 40 mm Plossl. The field of view was calculated at 1.2 degrees. A much larger FOV would have been preferable. This eyepiece always gave some "black spot" effect probably due to exit pupil matters, and eye position was critical. The idea was to have the scope tracking in its ALT-AZ mode, go to the RA-DEC coordinates ahead of the appropriate time and wait for the asteroid to "arrive".

The telescope was set up the night before, connected to mains power, and tracking. It was covered with a plastic bag and left. My alarm was set for 03:30. The scope was wet with dew, even though it was covered. After 2 cups of coffee, the scope and optics were dried and the tracking checked and corrected by a very small amount. There was insufficient time left to set in the all important RA-DEC and the 04:00 "appointment" was missed. The 04:30 setting was done in time, but nothing was seen in the eyepiece. The 05:00 RA-DEC was put in, and at 04:55 the eye was glued to the eyepiece. Bingo... at close enough to 05:00 a tiny spec of light moved through the upper third of FOV. It took, my guess, about $\frac{1}{2}$ to 1 second, too slow for both meteorites or satellites. Circumstantial evidence indicates it was the asteroid. This ALT-AZ mount is too clumsy to try and manually track such an object. Quickly grabbing the binoculars, all to no avail (I am notoriously hopeless with binoculars).

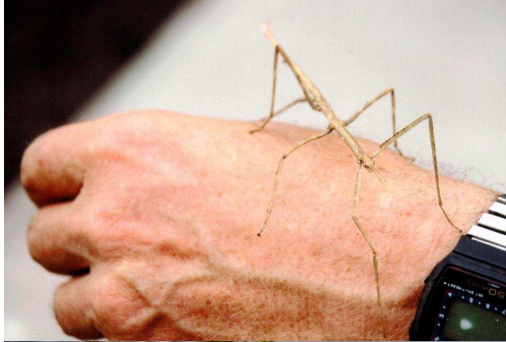
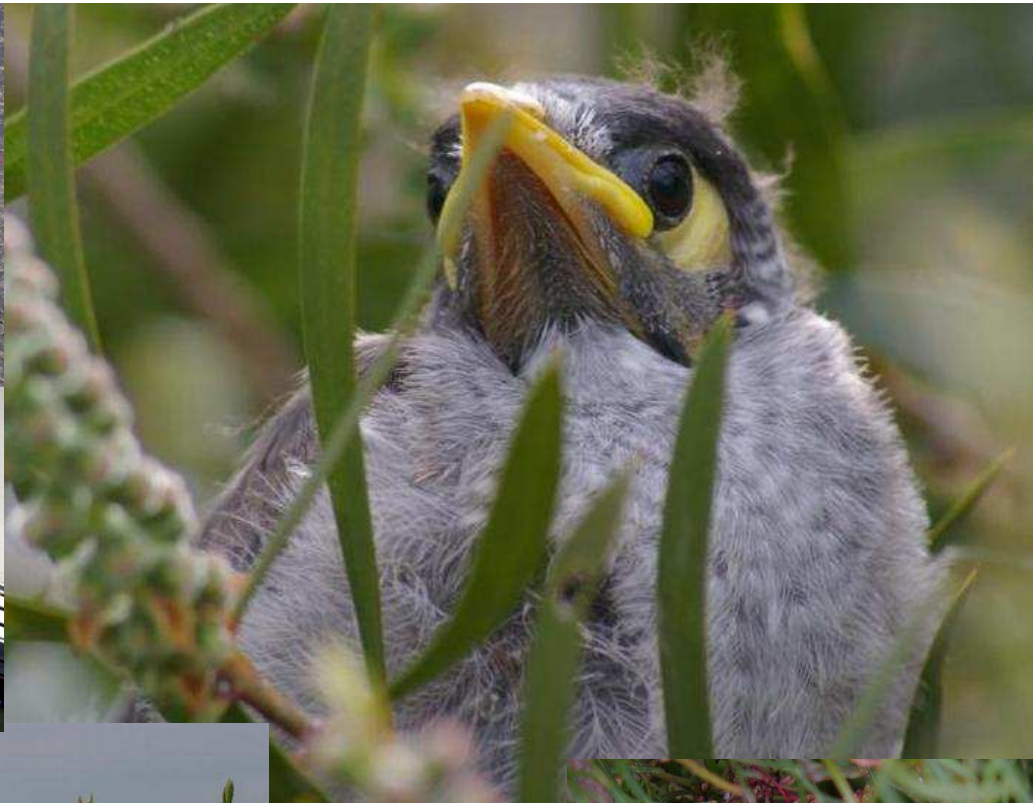
To me the mini asteroid looked smaller than magnitude 7.

The 05:30 observation proved fruitless, and the 06:00 had the sky too light.



Roland's observatory is equipped with a 16 inch Light bridge. (see right) The observatory rotates independently of the telescope and is power by a electric drill. (see Below)



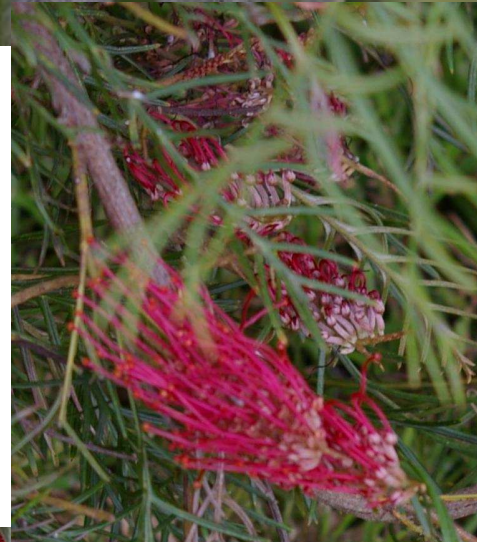


MPAS site make a good home for wild life.

Images Baby Australia miner, stick insect, & family of Ducks.

Also some of the flowering trees planted by MPAS members
Tea tree, Bottle bush, Melaleuca & Grevillea.

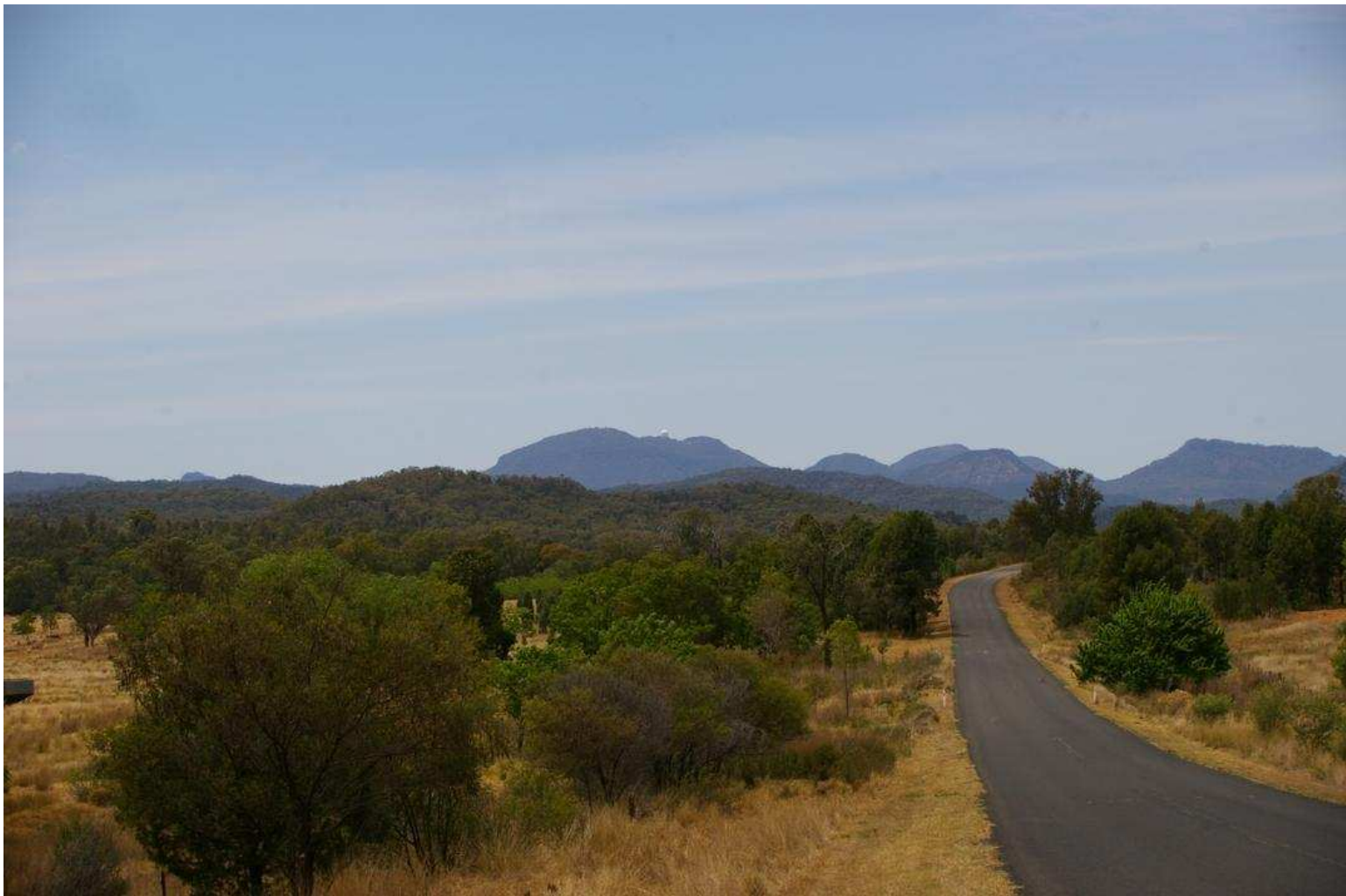
Photographed at the briars by G Walton



The 3.9 meter Anglo Australian Telescope, *By Greg Walton*

On my travels North to see the solar eclipse last November, on the side of the road near Coonabarabran I spotted a large model of Uranus. I decided to investigate the road lead me through the Warrumbungle mountain range, I could see a tiny white dome on a mountain top in the distance. Could this be the Anglo Australian Telescope? Then the road narrowed and disappeared in to a steep valleys, from time to time I would come across more large models of the planets which I stopped and photographed. The road was very steep now I felt that I must be getting close. Not until I almost reached the top, did I see the Anglo Australian Telescope, it was an impressive sight. As I parked the car I met 2 ASV members Stephen and Mat, who were also heading north to see the eclipse. I could not wait to investigate the AAO, I had always wanted to see this telescope close up, I took my trusty Pentax-ist with the 10mm fish eye lens and was pleased to find a viewing point with a big window, there was 16 flights of stair to get there or a lift. I was very happy to see this impressive telescope. I found I could get the whole telescope in 1 shot (see below) They was also plenty to see in the education centre and a café with gift shop.



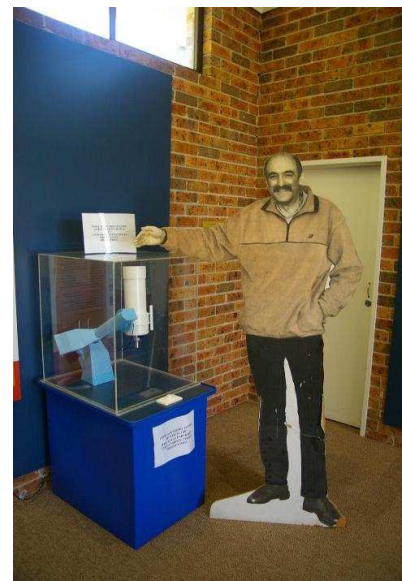


Above is the road in to the AAT.
I could see the telescope between
the 2 hills.
Look at the centre of the photo.

Left is the piece of glass they cut
from the centre of the main
mirror.

Right young Fred Watson
demonstrating the pros and cons
of telescopes.

Below is metal art work in the
gardens around the telescope.



The World's Largest Virtual Solar System Drive

A scaled model 38 million times smaller than outer space!

The Sun is the closest star to Earth. The ancient Romans named the Sun 'Sol' after their god of the sun. It is by far the largest object in our Solar System. The International Astronomical Union has designated that 8 planets orbit the Sun (as do many other objects).

For 76 years, Pluto was considered to be the 9th planet of our Solar System. However, after years of intense debate and controversy, in August 2006, the IAU reclassified Pluto as a dwarf planet.

At the scale of our Solar System model (1:38,000,000) the Sun would be the same size as the nearby dome of the Anglo Australian Observatory which houses the giant 3.9 metre mirror Anglo Australian Telescope.

Coonabarabran, the 'Astronomy Capital of Australia' is home to Australia's largest astronomy research facility. Maps and guides are available to assist your journey through the Solar System from Visitor Information Centres along the 5 tourist drives and from the Exploratory Centre right here at Siding Spring Observatory.

THE SUN

You are HERE

Earth

Mars

Jupiter

Saturn

Uranus

Neptune

Pluto

Coonabarabran

Binnaway

Cooolah

Dunedoo

Gulgong

Merrriwa

To Mudgee

To Dubbo

To Gundah

To Narrabri

To Bellata

To Moree

AusIndustry

www.solarsystemdrive.com

Ph

1800 242 881

Warrumbungle

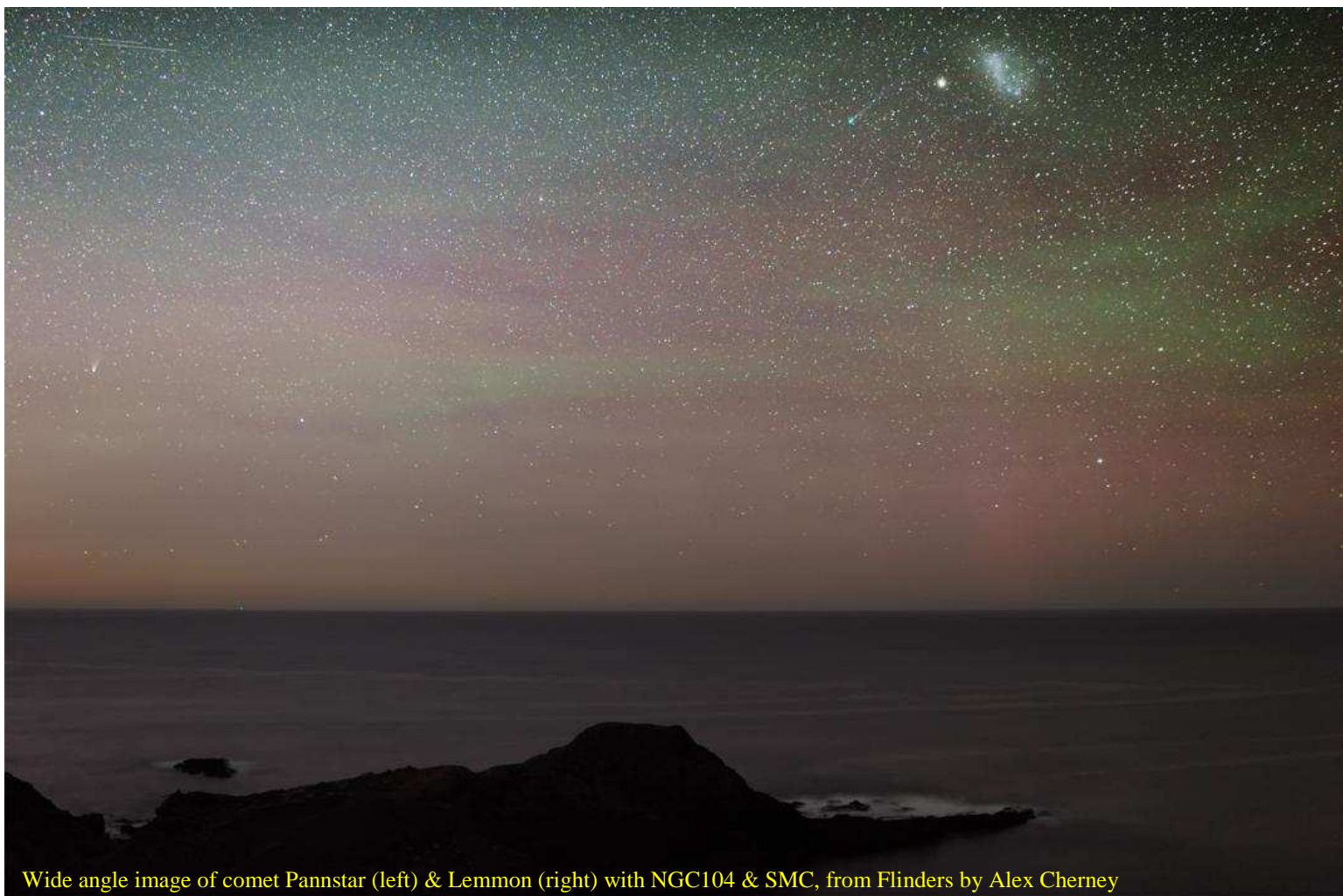
On Virtual Solar System Drive, I found all the planets except for Pluto. Maybe its because Pluto is not a planet any more that I missed it?



The Members Gallery

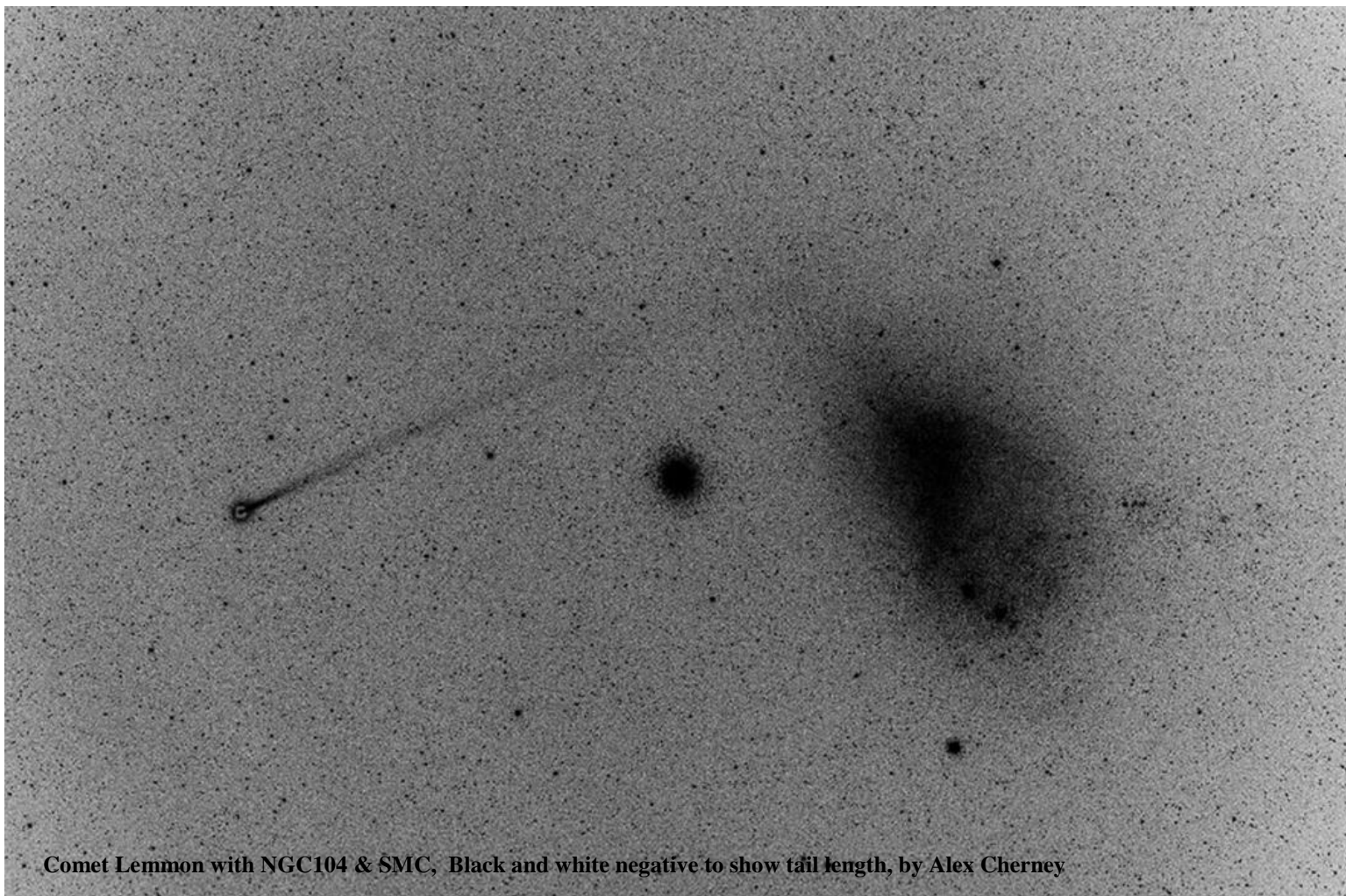


Wide angle image of comet Lemmon, NGC104 and SMC with aurora, from Flinders by Alex Cherney



Wide angle image of comet Pannstar (left) & Lemmon (right) with NGC104 & SMC, from Flinders by Alex Cherney

The Members Gallery



The Members Gallery

Flinders ED80 FF EQ6 Pentax Kr 30sec iso6400 By Greg Walton MPAS/ASV 12mar2013

NGC55

Lemmon

NGC2442 LMDSS 12" Newton CC1 EQ6 Pentax Kr 29x30sec iso12800 By Greg Walton MPAS/ASV 10apr13

SOCIETY INFORMATION



Peter Lowe



Dave Rolfe



Peter Skilton



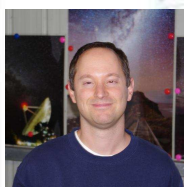
Marty Rudd



Trevor Hand



Ian Sullivan



Simon Hamm



Greg Walton - Please send your articles to gwmpas@gmail.com

OFFICE BEARERS OF THE MORNINGTON PENINSULA ASTRONOMICAL SOCIETY

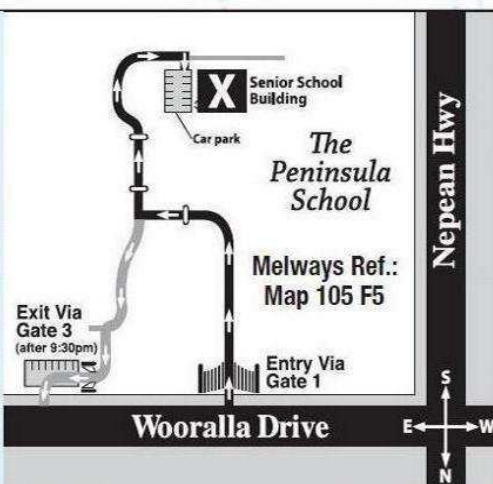
President: Peter Lowe
Vice President: David Rolfe,
Committee: Ian Sullivan, Trevor Hand, Simon Hamm
 Fiona Murray, Greg Walton.
Phone Contact: Peter Skilton - 0419 253 252

Secretary: Peter Skilton
Treasurer: Marty Rudd
Web Master: Steven Mohr
Scorpius Editor: Greg Walton
Library: Fiona Murray

SOCIETY MEETINGS

Meeting Venue: The Peninsula School,
 Wooralla Drive, Mt. Eliza, (Melways ref. 105/F5)
 in the Senior School at 8pm,
 on the 3rd Wednesday of each month
 (except December).
 Entry is via the main gates or Gate 3, off Wooralla Drive.
 Exit is via Gate 3 Only after 9:30pm (see map).

For additional details:
Internet: <http://www.mpas.asn.au>
email: welcome@mpas.asn.au
Phone: 0419 253 252
Mail: P.O. Box 596, Frankston 3199, Victoria, Australia.



LIBRARY

The Society also has books and videos for loan from it's library, made available on most members nights at The Briars site, contact Fiona Murray.

E-SCORPIUS NEWSGROUP

M.P.A.S. main line of communication is the online newsgroup called E-Scorpius. Here you will be kept up to date with the latest M.P.A.S. news and event information as well as being able to join in discussions and ask questions with other members.

To join, go to: <http://groups.yahoo.com/group/e-scorpius> and sign up to Yahoo groups - You require to sign up to Yahoo groups to join E-Scorpius. Once you have signed up at Yahoo groups, email welcome@mpas.asn.au saying that you want to join E-Scorpius and you will be added to the E-Scorpius list.

VIEWING NIGHTS - MEMBERS ONLY

Any night, at The Briars, Nepean Hwy, Mt. Martha, starting at dusk.
 Members visiting The Briars for the first time must contact Greg Walton on either 9773 0098 or 0415 172 503 if they need help in getting to the site. Upon arrival at the site, remember to sign the attendance book in the observatory building.

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