



SCORPIUS

THE JOURNAL OF THE
MORNINGTON PENINSULA ASTRONOMICAL SOCIETY INC.

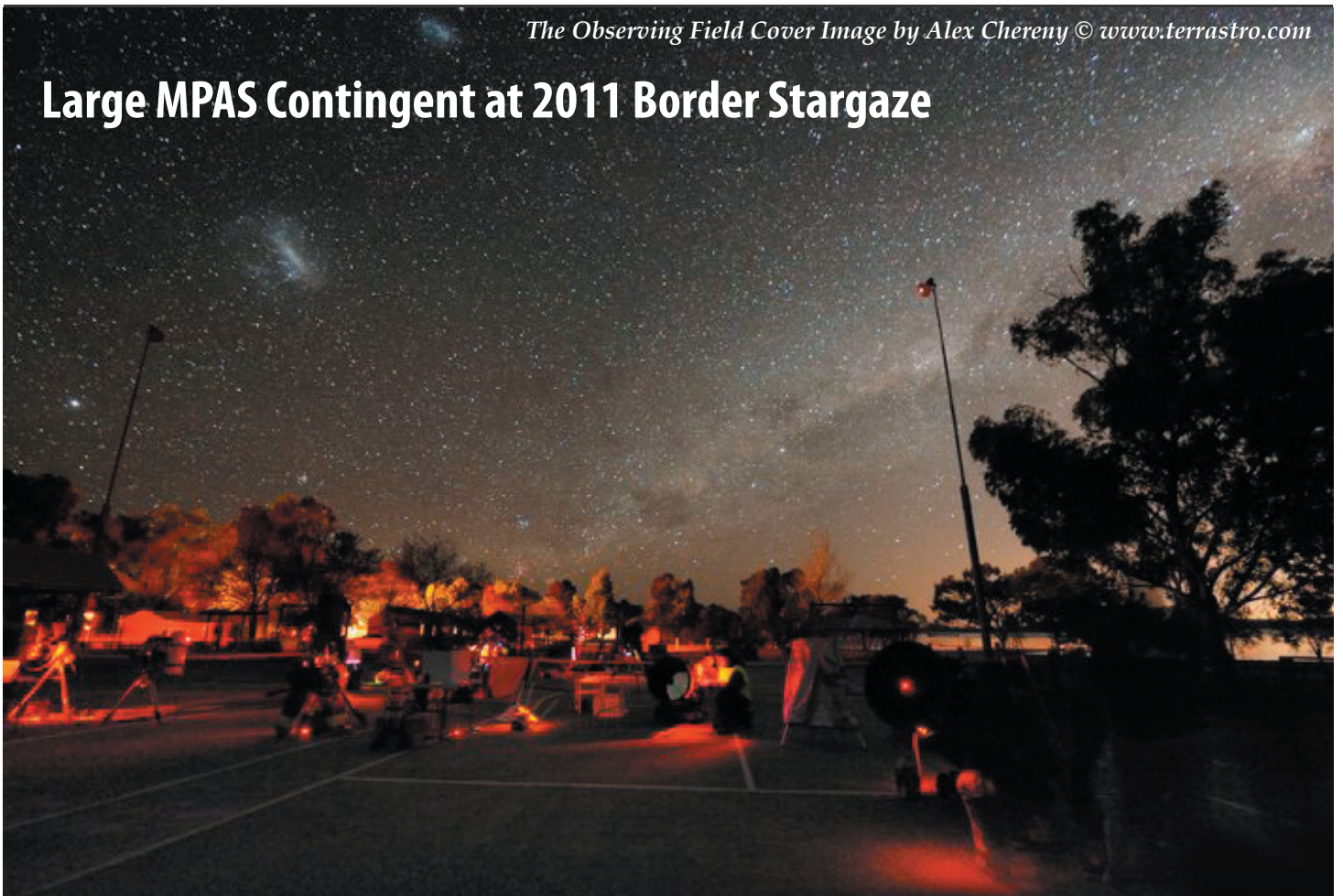
Volume XX, No. 5 (October 2011)

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 amateur 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 services of its members for educational presentations and observing nights for schools and community groups.

The Observing Field Cover Image by Alex Chereny © www.terraastro.com

Large MPAS Contingent at 2011 Border Stargaze



MPAS members once again were well represented in large numbers again for the 5th annual Border stargaze event hosted by the Albury-Wodonga Astronomical society. This year's event turned on perfect weather breaking the trends of previous years bad weather. A few of the die hard members setup early on the Wednesday and enjoyed clear still nights through to Sunday pack-up. This years event like previous years was well coordinated with quality guest speakers (including Alex wrap up of his GTC trip), generous door prizes and top quality food.

(Continued on page 4)



what's on ?

Need to know more about what's going on? Then download the full edition of the Scorpius newsletter from www.mpas.asn.au/MembersArea/scorpius/scorpius.htm



Our Next Public Viewing Night...

Friday 4th November at The Briars (8pm).

November's regular Public Viewing Nights at The Briars, starting at 8pm, and held regardless of the weather. As usual, a large turnout is expected so we will need at least 6 scopes.



Our Annual General Meeting...

Wednesday 16th November at The Peninsula School (8pm).

Session 1 - Conducting of the society's Annual General Meeting
Session 2 - Open Forum and 'Sky for the Month'

Society Calendar...

Friday 4th November - Public Viewing Night. 8pm start.

Saturday 12th November - Mentone Grammar School Viewing Night at Sykes Camp in Shoreham (74 Marine Pde, Shoreham Melways Ref 256/J7). 8pm start.

Wednesday 16th November - Annual General Meeting (Speaker TBA)

Friday 18th November - St. Leonard's College Viewing Night at Cornish Campus at Patterson River (65 Riverend Road, Bangholme. Melways Ref 93/K12). 8pm start.

Wednesday 30th November - Cranbourne Secondary College @ Cranbourne Secondary (Stawell Street, Cranbourne. Melways Ref 133/K4). 8pm start.

Friday 2nd December - Public Viewing Night at the Briars. 8pm start.

Saturday 10th December - Christmas Party / Viewing Night at the Briars.

Be sure to subscribe to Yahoo's E-Scorpius emails for the latest society events updates

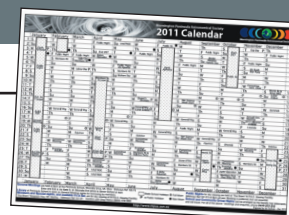
Our Next Committee Meeting - November 23rd @ The Briars (8pm)

2011 Society Calendar

Need to look further ahead to see what is happening in 2011?

Then the MPAS 2011 Calendar is what you need. For the full listing of this year's society events, go to the MPAS website, and download the calendar from *Upcoming Events* page, or visit E-Scorpius and download from the online files section, under *Calendars*.

...And lookout for the new 2012 calendar coming soon



Tony Coventry
Daniel Duffy



The Committee and Society are pleased to welcome the following new members.

Wishing you both clear skies.

Scorpius Thank You

A special thank you goes out to all the society members who contributed to our Scorpius publication this year. Your time and effort in writing up articles for other members enjoyment has been greatly appreciate by myself and the other members who read this publication. Have a wonderful Christmas and New Year to all.

General Meeting

October's General Meeting

October 21st, 2011

Our president Peter Lowe kicked started the October General Meeting by gave us a quick rundown of society news and happenings over the last month, and coming events in the next month. Peter also briefly spoke about some Astronomical news over the last month.

After Peter, our speaker for the night was our own Greg Walton, who was showing us his setup for wide angle - all sky photography with his new fixed 10mm fisheye lens. With the advancements in lens technology, and the higher ISO settings that are attainable with the new DSLR cameras, Greg was has been able to set his camera up to automatically take pictures throughout the night, and combine all the images into a short film sequence the following day.

The sequence he presented to us from the night before (Tuesday night 20th October), actually showed a brief aurora occurrence at about 1:20am that morning. It later turned out the Greg was the only person to pick up this event that evening.

After Greg's presentation we had the usual raffle draw and concluded the evening with our coffee get-together.

Society Reports

2011 President's Report

2011 has been a significant and busy year. Astronomically 2011 began with the 100th anniversary of Marie Curie receiving the Nobel Prize for Chemistry for her discoveries that revealed an insight into the enormous store of energy within the atom. This year ends with Australian astronomer Professor Schmidt receiving the Nobel Prize in Physics for discovering the rate of expansion of the universe is increasing with time. It is amazing how much our knowledge and understanding of the universe has developed over the past 100 years and will no doubt continue to develop over the next century.

This year MPAS has gone through a similar transition albeit on a smaller scale. At the start of the year we hosted our third VASTROC, which went very well using our Briars facilities. In anticipation of this event we upgraded these facilities. The observatory was extended to increase storage space as well as additional powered observing platforms. The Bruce Tregaskis telescope has been refurbished and mounted on the lower observing platform. The end of the main building has been enclosed further extending the storage area. It is planned to install the library within this extension.

For us 2011 has also become the Year of Astrophotography. Our photographers have been making their mark advancing in both quality and scope at the various astronomy camps around the country. We have provided speakers on the subject to several other astronomical societies. The year culminated when Alex Cherney won the prestigious Starmus astrophotography prize for his astro-photographic time lapse sequenced.

In 2011, our society was involved in 75 events. The breakdown being:

- 20 Booked Events
- 11 Committee Meetings
- 4 Special Events (includes VASTROC)
- 11 General Meetings
- 9 Members Viewing Nights
- 13 Public Viewing Nights
- 7 Astronomy Classes

Overall we have maintained a prolific number of society events. By my count we have had 75 planned events either as viewing nights, school nights, general meetings, astronomy classes and special events. Over and above this there were numerous informal get-togethers. Ian Sullivan has been able to maintain a steady supply of excellent speakers for the General Meetings and Bob Heale continues his "Sky for the Month" presentations. Greg Walton in his role as Briars Coordinator has kept the Briars as a vital society asset for members.

None of this could happen without the commitment of the members and the committee. I would like to thank all the committee members and

volunteers who gave untiring efforts in personal time and contributions to progress the society this year. We have made excellent progress. It has been a most gratifying year and a lot of fun and I hope we can continue in 2012 to make things better and more enjoyable.

Peter Lowe
Peter Lowe

Society Reports

Large MPAS Contingent at Border Stargaze (Cont.)

The BSG also has a strong public focus on Astronomy with visiting schools (during the previous week) and a public viewing night on the Friday. Each year it usually coincides with national science week, however this year due to the event being shifted a month to try and break the weather jinx the general public numbers were down from previous years.

As far as the MPAS members experience goes every one there had excellent conditions to do their stuff;

- Greg had numerous scopes going at once with all his Pentax cameras clicking in sync,
- Alex has time lapses going over Lake Hume (which was full this year) as well as manning his SDM,
- Kevin was ruling the sky with his Meade and its hyper-accurate goto's,
- Fiona and Perl were busy with their trademark late entrances and informative chats,
- Steve was fighting the technical glitches with some new gear and frozen camera chips,
- I was focussing on low Northern objects (and quite often imaging the top of Kevs scope and fence!)

Next years event will be from Wednesday 15th to Sunday 19th August. Bookings will be taken from January next year via the ASAW website.

For a full summary of this years event, the ASAW has a write up at:

<http://www.asaw.org.au/index.php?page=38>



David Rolfe
David Rolfe

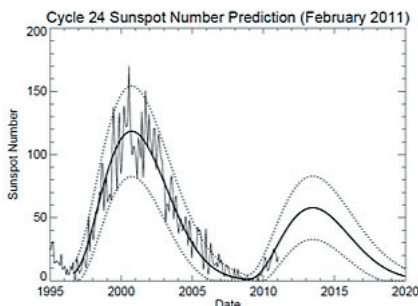


A reminder the Snake Valley Star Party (near Ballarat) is Next Month. For details they can contact myself via the Yahoo group if interested. Website is here <http://www.astronomycamps.bravehost.com/>

Society Reports

With a couple of astronomical events either occurring or coming up, Dave Rolfe has also submitted some notes for us to check out.

Sunspots



Solar cycle 24 is still active and is still believed to be still ramping up (see chart). When and where these spots appear is not predictable so you just need to check often.

Observing sun spots can be done with minimal cost using a white light solar filter (or film) and your existing favourite telescope.

The above right image was taken with my 8" scope using a unmodified Pentax digital SLR on the 31st of July using a thousand-oaks solar film. These sun spots were shown in the US Sky & telescope mag (Nov 2011) and have the unique designation numbers 1263, 1262 and 1261.

I also use a badder solar continuum filter that helps increase the contrast of the spots as shown in the green toned image.

Warning: Never look at the Sun without having complete confidence in the quality of your solar film, a small mark or scratch can cause excess heat energy to pass which may leave the observer with permanent blindness.



Lunar Eclipse Reminder - December 10, 2011

A reminder, a lunar eclipse will be on Sunday December the 10th. This will be the second lunar eclipse this year. It will last just over 50 minutes of totality. (A full detailed sheet is on the next page).

The eclipse will start at approx. 11.30pm, reach totality at about 1.30am and complete after 3am. The moon will be at a good viewing angle of about 30 degrees.

I am sure there will be a crowd at the Briars for the event (the following night after the MPAS members night).

Picture's I took from June's eclipse earlier this year (Taken from olives Hill) with the time recorded below in Red.



... and just for giggles

For the society members with their smartphones or iPads...



...and for the society members who forget not to stand next to Dave when taking the group photo at Border Stargaze.



Astro News

Total Lunar Eclipse of 2011 Dec 10

Ecliptic Conjunction = 14:37:28.9 TD (= 14:36:21.4 UT)

Greatest Eclipse = 14:32:56.0 TD (= 14:31:48.5 UT)

Penumbral Magnitude = 2.1860

P. Radius = 1.2023°

Gamma = -0.3882

Umbral Magnitude = 1.1061

U. Radius = 0.6609°

Axis = 0.3571°

Saros Series = 135

Member = 23 of 71

Sun at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 17h08m35.0s

Dec. = -22°54'38.7"

S.D. = 00°16'14.5"

H.P. = 00°00'08.9"

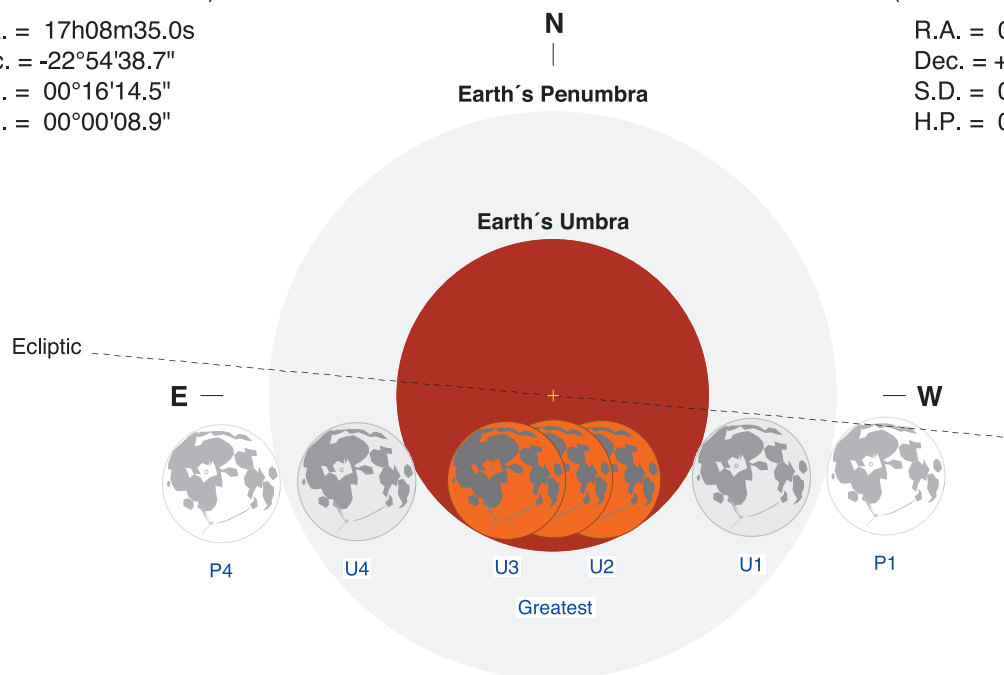
Moon at Greatest Eclipse
(Geocentric Coordinates)

R.A. = 05h08m33.9s

Dec. = +22°33'13.3"

S.D. = 00°15'02.4"

H.P. = 00°55'11.7"



Eclipse Durations

Penumbral = 05h56m28s

Umbral = 03h32m17s

Total = 00h51m08s

! T = 68 s

Rule = CdT (Danjon)

Eph. = VSOP87/ELP2000-85

Eclipse Contacts

P1 = 11:33:32 UT

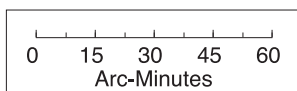
U1 = 12:45:42 UT

U2 = 14:06:16 UT

U3 = 14:57:24 UT

U4 = 16:17:58 UT

P4 = 17:30:00 UT



F. Espenak, NASA's GSFC

eclipse.gsfc.nasa.gov/eclipse.html

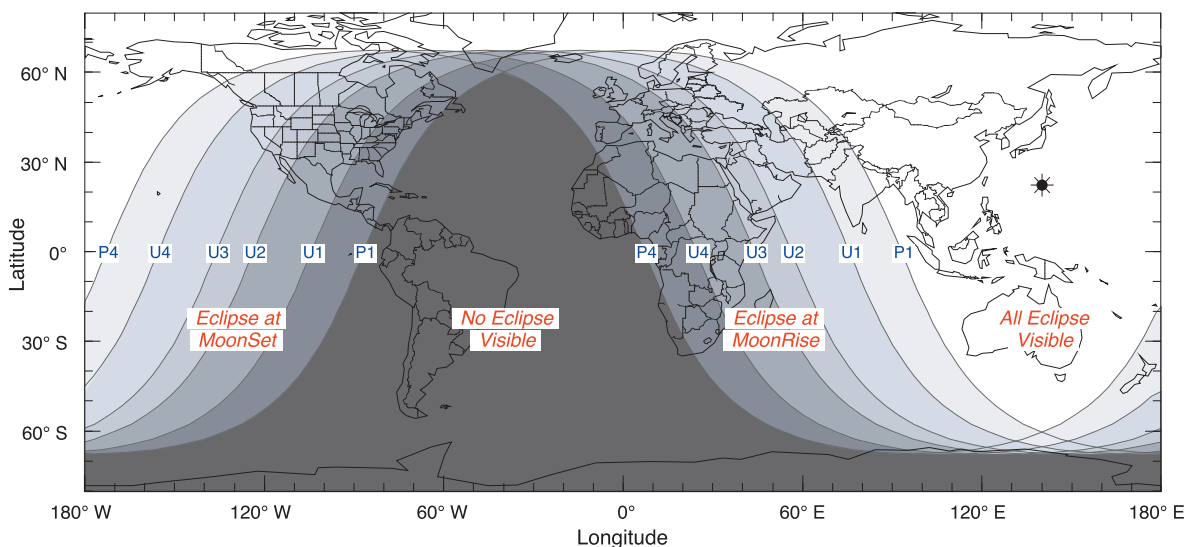


Image Credit: © NASA.

More eclipse information can be found at <http://eclipse.gsfc.nasa.gov/OH/OH2011.html>

Society News

Annual General Meeting - Committee Elections Wednesday, 16th of November, 2011.

Have you considered joining the society committee?

The Mornington Peninsula Astronomical Society operates because we have a committee of management responsible for the general operation of the society. We're always on the look out for interested persons who can contribute to the society's success.

The Society's committee is structured under the constitution and has a number of specific officer positions together with a number of general committee members. Each committee member takes responsibility for handling some aspect of the society's business. The President and Vice President are responsible for the general planning and operation of the Society's business and represent the society to the members, other societies and the general public. The Secretary is the formal contact point of all formal society business and maintains the records of the society. The Treasurer monitors the society financial status and handles the various money transactions required.

Other committee members provide logistical support for the various society activities & development programs. These include :

- Developing the forward society calendar of activities including speakers for the general meetings and special events both social and astronomical.
- Handling and planning school viewing nights
- Preparing the "What's On" handouts for members.
- Publishing the Scorpius and managing the E-Scorpius internet chat room.
- Maintaining the publicity and public notices we require to keep the general public apprised of our activities.
- Developing and creating the library.

Without this group of dedicated supporters the society would definitely slow down.

If you feel you would like to get involved in the society business or have a particular skill you think would be useful to the society as a whole please give some thought to becoming a committee member.

The Annual General Meeting will be held on Wednesday, 16th of November, 2011. In this edition of Scorpius (below), there is a 'Committee Election Form' that can be used for the submission of nominations for the next committee. This can be posted to M.P.A.S., PO Box 564, Frankston, VIC. 3199. Alternatively, nominations can also be submitted electronically to welcome@mpas.asn.au by stating which position on the committee you would like to nominate for.



Mornington Peninsula Astronomical Society Inc. ANNUAL GENERAL MEETING ELECTIONS

Nominee: _____

Proposer: _____

Seconder: _____

} Must be current
financial members

Position: **Office Bearers:** ☐ President ☐ Vice President ☐ Treasurer ☐ Secretary
(tick 1 or more*)

Ordinaries: ☐ Public Officer ☐ Ordinary Committee Member (5 of these)

Acceptance Signature of Nominee: _____

Submit 1 day prior to the Annual General Meeting.

Post to M.P.A.S., PO Box 596, Frankston, VIC. 3199.

* Note : (1) That one person cannot nominate for multiple Office Bearer positions. (2) The committee is responsible for the development and operation of the society according to the MPAS Constitution. To support this, all committee members are expected to take responsibility for some aspect of society business

General Society Information

Office bearers of the Mornington Peninsula Astronomical Society

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

Secretary: Peter Skilton
Treasurer: Marty Rudd
Public Officer: Rhonda Sawosz
Web Master: Steven Mohr
Scorpius Editor: Brett Bajada

General Meetings

Meeting Venue: *The Peninsula School*, Wooralla Drive, Mt. Eliza, (Melways map 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).

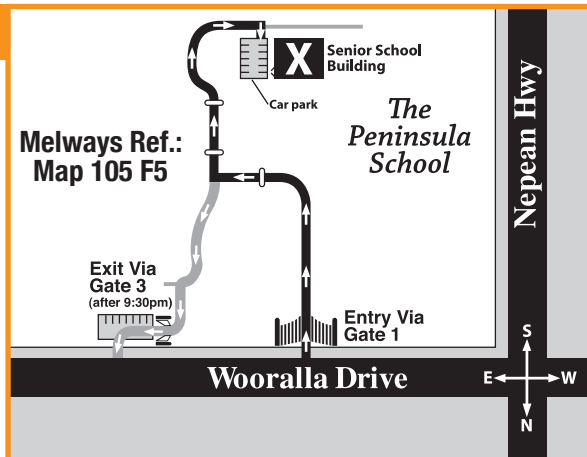
For additional details:

Phone: 0419 253 252

Mail: P.O. Box 596, Frankston 3199, Victoria, Australia.

Internet: <http://www.mpas.asn.au>

email: welcome@mpas.asn.au



Loan Equipment

The Society has a variety of telescopes including an 8-inch reflector, 80mm refractor and binoculars, all available for loan.

Contact a committee member to arrange the loan of equipment. The Society also has books and videos for loan from it's library, made available during General Meetings.

Contributions to Scorpius

If you would like to submit an article or written contribution to Scorpius, then please send your

submission to M.P.A.S., P.O. Box 596, Frankston 3199, or you can now email to scorpius@mpas.asn.au.

Any astronomical events that you have witnessed or tales you would like to tell, things you have for sale (eg: telescopes, eyepieces, etc.) then please send them in. All contributions and any feedback you wish to make about the newsletter are welcome.

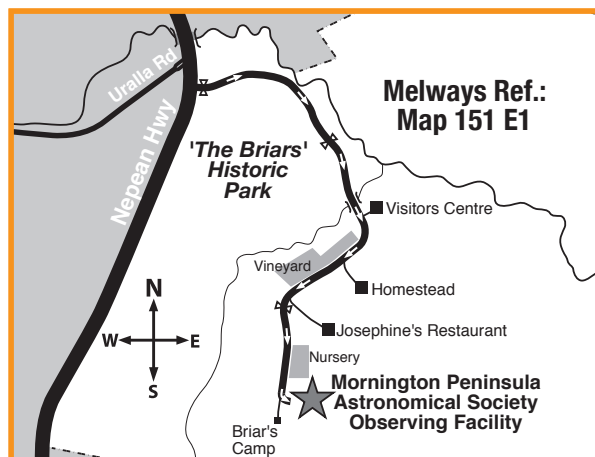
E-Scorpius Newsgroup

M.P.A.S. has an 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. Come on, join up. The more people in the group the better.



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 to verify that the mobile is turned on.

For additional details: <http://www.mpas.asn.au>