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SCORPIUS

THE JOURNAL OF THE
MORNINGTON PENINSULA ASTRONOMICAL SOCIETY INC.

Volume XVI, No. 3 (September/October 2007)

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.

Lunar Eclipse Delight

On Tuesday 28th of August, quite a few members of the society, some members of the public, and even the local press, gathered at The Briars observing site to witness the Lunar eclipse.

The evening wasn't looking too good to begin with cloud obscuring the view for the beginning of the eclipse, however just before the moon entered into the earth's shadow, the 'Lunar Paparazzi' were able to snap away at the moon.



Early setting up for the eclipse...

Media interest in this event saw a photographer from the Independent newspaper group with us. And through the media, a couple members of the Peninsula Camera Club ventured up to have a try at photographing this event. All of our guests enjoyed their night with the society members, learning a little bit more about our moon and our society.



...unfortunately didn't translate to great early pictures.

For the twenty or so members of the society, the evening enabled us to observe different things about the eclipse. For some it was a chance to try out our astrophotography skills (as seen on this page, and inside), for others it was taking Danjon estimations on the moons appearance, and for some just observing the event with family. In all, a wonderful astronomical event that was enjoyed by all present with a great bonus - it was viewed at respectable hours!



After the cloud finally broke, the eclipse's different phases as photographed by M.P.A.S. member Kevin Rossiter.

ABN:34569548751

Reg No: A268

Also in SCORPIUS for September & October...

- 2007 Science Week Wrap-Up
- Society Pictures
- Cranbourne Meteorite Move
- Skywatch for September & October

Society News



"...Happy Birthday, Mister President..."

With our winter finally behind us for another year, our first social event for this Spring is the President's Birthday viewing night at The Briars. This is a great night to dust off those winter cobwebs on our telescopes, and enjoy a B.B.Q. and drinks with other members of the society, in a relaxed social atmosphere. Even if you don't have a telescope, come up and enjoy the view through other member's scopes or use one of the society's scopes.

This is open to all members and their families, at anytime after 3pm on Saturday afternoon, the 20th of October. A sausage sizzle will be put on for members with soft drink available for a \$1 a can, however you can B.Y.O. other meats and drinks, if you like.

Hope to see you there.

Volunteers Required

Our public viewing night activities seem to be fairly well covered however other activities such as Briars working-bees, newsletter contributions and general meeting speakers are generally short on the ground. Although members pay a membership fee, this fee is kept low through the contributions from our volunteers. If you have time to help out please approach one of the committee members.

Upcoming Society Events for September & October

September

- Fri 7th - Public Viewing Night at The Briars (8pm)***
- Sat 15th - Members Viewing Night at The Briars**
- Wed 19th - General Meeting at The Peninsula School (8pm)**
 - Session 1 - Speakers Peter Skilton & Ian Sullivan*
 - Session 2 - Video NONE*
 - Session 3 - Open Forum & 'Sky for the Month'*
- Wed 26th - Committee Meeting**

October

- Fri 5th - Public Viewing Night at The Briars (8pm)***
- Sat 13th - Members Viewing Night at The Briars**
- Wed 17th - General Meeting at The Peninsula School (8pm)**
 - Session 1 - Speaker Dr. Michael Brown - 'The Growth of Galaxies over Cosmic Time'*
 - Session 2 - Video NONE*
 - Session 3 - Open Forum & 'Sky for the Month'*
- Sat 20th - President's Birthday Night**
(Details above)
- Wed 24th - Committee Meeting**

* Denotes assistance in the form of telescopes and general evening operating assistance (i.e. - parking, answering queries, organising supper, etc.) for the public/school nights would be appreciated.

E-Scorpius & M.P.A.S. website

Following on from the volunteers request from above, one of the major problems doing a newsletter like this has been keeping up-to-date with events that arise within the two month break between editions.

By signing up to the **e-scorpius** news group, you can know all the goings on in the society via email. Along with the society's new website at www.mpas.asn.au, you can now always be up-to-date.

Registration details for **e-scorpius** are on the back page.

YAHOO! GROUPS

Reminder from: **E-Scorpius Yahoo! Group**

Title: **Father and Son Viewing Night at the Briars Astronomy Centre and Education Camp**

Date: **Saturday September 1, 2007**
Time: **8:00 pm - 10:00 pm**

Location: **Briars Astronomy Centre, Melways reference 151/e1**

Notes: **Reminder that there is a Camp viewing night Saturday evening at The Briars Astronomy Centre. This is a group of Fathers and children who are staying at the Briars Camp overnight. (Approx. 45 heads) 8pm start. Help needed with telescopes and assistance.**

Get reminders on your mobile, Yahoo! Messenger, and email.
Edit reminder options.

An example of **e-scorpius'** email reminder alert for events.

Society News



Well, the lead up to Science Week certainly was active with schools and public events. After the well-appreciated Mt. Martha Primary evening at their school, we had the monthly General meeting on 15/8, with eclipse-related talks by Ian Sullivan, Bruce Tregaskis, Bob Heale and Peter Skilton. This was a very full evening with lots of interesting material that dovetailed well.

The next night saw MPAS visit Seaford Primary school at The Briars camp, where 59 kids were present (plus about another 6 teachers). Peter Lowe gave the talk, but unfortunately the cloud cover was 100%, so the telescopes from Greg Walton, Peter Skilton and Bruce Tregaskis weren't needed. The night after was a public Friday evening at The Briars Astronomy Centre, which saw 9 people in attendance. The weather turned out to be quite clear for most of the evening, though surrounding regions were under cloud which would have dissuaded many from attending. Local paper advertising of the evening was unfortunately minimal. Peter Lowe gave the talk, and in the field were Greg Walton, Kevin Rossiter, Bob Heale, Ian Sullivan, and Peter Skilton.

Saturday was busy all day long. MPAS had an amateur astronomy display all day outside Coles in the main Bayside Shopping Centre in Frankston CBD that was drawing about 40 interested inquirers per hour, with many hundreds (if not thousands) just casual passers-by. The display was manned by Peter Lowe (with a decent meteorite), Trevor Hand (with his decent sized Celestron on show) and Brett Bajada (together with some decent new posters made especially for the occasion), with an occasional relieving visit by other members during the day for moral support. This turned out to be very useful for raising the society profile amongst a high number of people who simply may never have made it to a public night at The Briars, and now realise not all amateur astronomers have 2 heads, and could pave the way for more such display events in future years.

That same Saturday saw the public astrophotography evening at The Briars. This was well covered in The Age newspaper (but not in the local newspapers for some reason) as part of the first day of National Science Week, so we were expecting a bumper crowd. As it turned out, the weather around the Melbourne region was gloriously good during the day, then took a nose-dive to being very overcast during the late afternoon/evening. In all, only 20 members of the public showed (some from Melbourne) and they saw it in The Age. Unfortunately The Age didn't publish our phone number or email address, only the street address and our old website, so this would have turned away a lot of prospective attendees even if the weather had been clear. Nevertheless, the great turnout of members was pleasing to see, and a good evening was had by all, especially as it became cloudless late in the evening. Peter Lowe gave the astrophotography talk, and in the field were Vivienne Lowe, Greg Walton, Steve & Simone Mohr, Bruce Tregaskis, Peter Skilton, Richard Pollard, Simon Birch, Alex Dickson, Roland Knabe, Kevin Rossiter, Brett Bajada, Andrew Thornton and possibly others I might have missed. Plus there was a strange glowing orb in the dead tree about 3 metres above the ground - a UFO perhaps?

Cheers, Peter Skilton.

(From Peter Skilton's e-scorpis report)

learn

National Science Week

If you've ever found a mysterious bug, bone, fossil or feather, bring it in to Melbourne Museum's Discovery Centre and have it identified (daily, 10am to 4pm; until next Sunday; free with museum entry; Nicholson Street, Carlton). You can also learn how to photograph the night sky at a telescope evening (tonight, 7pm to 10pm; \$6; Briars Astronomy Centre, Briars Historic Park, Nepean Highway, Mount Martha). BYO digital camera or camera phone and dress warmly. And the Australian Skeptics explain the science behind magic and the paranormal (today, tomorrow and next weekend, 11am to 4pm; \$6; children free; Scienceworks, 2 Booker Street, Spotswood).



As appeared in 'The Age', Saturday 18/8/2007.

Annual General Meeting - 8pm, Wednesday 21/11/2007

This is an early reminder about the Annual General Meeting that is to take place in November. As you are aware, the society relies on the voluntary efforts of individuals to keep the society going. These efforts are co-ordinated by the society's committee. If you feel you have the time and/or ability to contribute something back, then come along to the Annual General Meeting on Wednesday, 21st of November, 2007, at The Peninsula School, Wooralla Drive, Mt. Eliza.

Skywatcher Events for SEPT

Natures Firework

From September through to December we get (Hourly Rate) of between 2 to 10, there are 3 specific meteor showers. These meteor showers have their names from the constellation. The Orionid meteor shower is no more than the debris (dust, large meteoroids) left over from the comet. The images below will give you a better idea of our meteor showers.

Events for SEPTEMBER

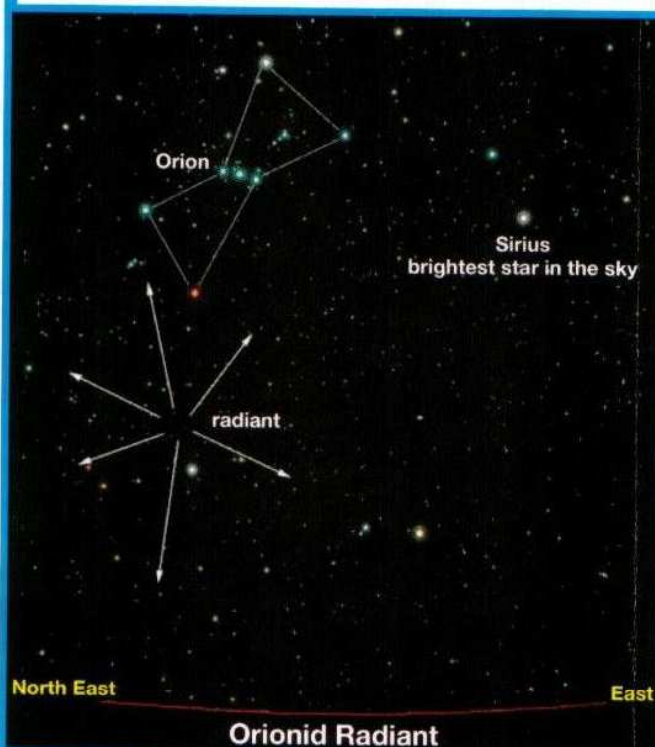
- 1st to 30th - Piscids meteor shower is a minor shower active with maximum activity on the 20th, after midnight (Z.H.R. of 3). Radiant in Northern Sky.
- 4th - Mars 6° South of the Last Quarter Moon (around Midnight).
- 9th - Venus 9° South of Moon (5pm).
- 10th - Uranus at Opposition (5pm).
- 11th - New Moon.
- 13th - Mercury 2° North of Moon (around Midnight).
- 17th - Mars 0.9° North of Crab Nebula (M1).
- 18th - Antares 0.7° North of Moon (6pm).
- 20th - First Quarter Moon.
- 22nd - Mercury 0.09° North of Spica (7pm).
- 23rd - Equinox (8pm)
- 27th - Full Moon.
- 30th - Mercury at greatest elongation East - 26° (2am).

Events for OCTOBER

- 15th to 29th - Orionids meteor shower is active with maximum activity on the 21st, from late evening, til dawn. (Z.H.R. of 14 to 31).
- 3rd - Mars 5° South of the Last Quarter Moon (8pm).
- 4th - Mars 1° South of M35 (5pm).
- 8th - Saturn 1.3° North of Moon (2am).
- 9th - Venus 3° South of Regulus (9pm).
- 11th - New Moon.
- 13th - Mercury 1.3° North of Moon
- 15th - Venus, Saturn & Regulus within 2.8° (12am).
- 18th - Antares 0.5° North of Moon (1am).
- 19th - First Quarter Moon.
- 21st - Neptune 1.3° North of Moon (1pm)
- 23rd - Uranus 1.8° South of Moon (Noon)
- 26th - Full Moon.
- 29th - Venus at greatest elongation West - 46° (1am).

The Orionids Meteor Shower.

The second of two showers that occur each year as a result of Earth passing through dust released by Halley's Comet. The Orionids generally begin on October 15 and end on October 29, with maximum generally occurring during the morning hours of October 20-22.



A representation of the view from about 2:00 a.m. local time around October 21.

RISE and SET

	Sun				Moon			Mercury		Venus		Mars		Jupit
	Twilight Begins	Rise	Set	Twilight Ends	Rise	Set	Phase	Rise	Set	Rise	Set	Rise	Set	Rise
Sept 1	05:16	06:43	17:58	19:26	22:37	08:26	Waning to Half Moon	07:24	19:08	05:15	16:28	01:47	11:28	11:03 0
8	05:05	06:32	18:04	19:31	04:48	14:39	Nearing New Moon	07:20	19:37	04:47	15:54	01:39	11:16	10:38 0
15	04:54	06:22	18:10	19:37	07:40	21:50	Waxing Crescent Moon	07:13	20:01	04:26	15:28	01:29	11:03	10:13 0
22	04:43	06:11	18:16	19:44	12:57	03:22	Nearing Full Moon	07:05	20:20	04:11	15:11	01:18	10:50	09:48 0
29	04:31	06:00	18:22	19:51	21:34	06:56	Waning to Half Moon	06:54	20:33	03:58	14:59	01:06	10:36	09:24 2
Oct 6	04:19	05:49	18:28	19:58	03:23	13:38	Waning to Crescent Moon	06:40	20:35	03:48	14:53	00:52	10:21	09:01 2
13	04:08	05:39	18:35	20:06	06:10	20:41	Waxing past New Moon	06:18	20:16	03:40	14:52	00:37	10:05	08:38 2
20	03:56	05:29	18:42	20:15	11:48	01:56	Waxing past Half Moon	05:44	19:24	03:32	14:54	00:20	09:47	08:15 2
27	03:44	05:20	18:49	20:25	20:25	05:26	Waning past Full Moon	05:05	18:11	03:25	14:58	23:59	09:27	07:52 2

SEPTEMBER and OCTOBER 2007

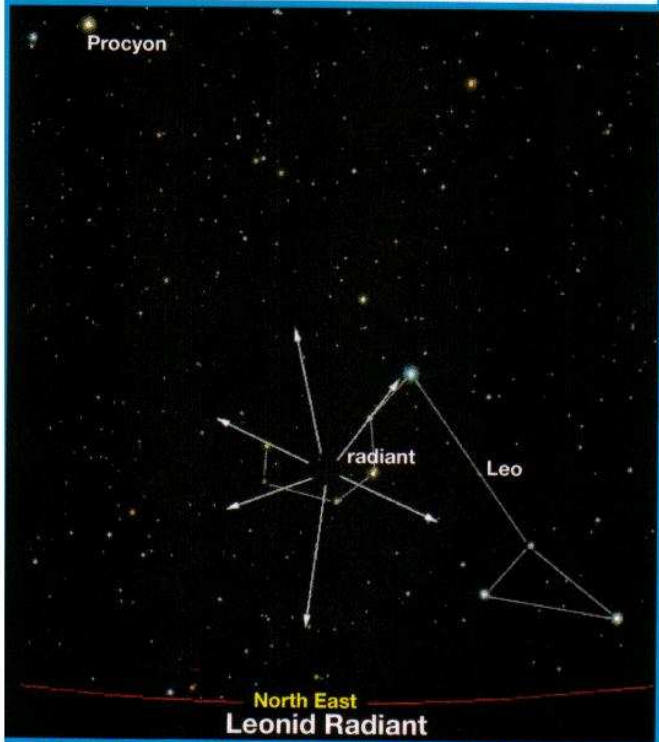
Shows Show (if you don't mind the hours!)

To see 17 of the year's 38 regular naked-eye meteor showers. While most are minor showers with Z.H.R. (Zenithal Hourly Rate) showers that can be relied upon to put on a show. These are the Orionids, Leonids and Geminid meteor showers. A constellation that is closest to radiant (the common point in the sky where the meteors appear). In essence, a meteor is a stream of particles, etc) left over from a passing comet. When we on the Earth pass through a comet's debris trail, we see a meteor. This is a guide to these upcoming showers, and hopefully encourage you to forego sleep to see them.

For more detailed information, check out www.meteorshowersonline.com

The Leonids Meteor Shower.

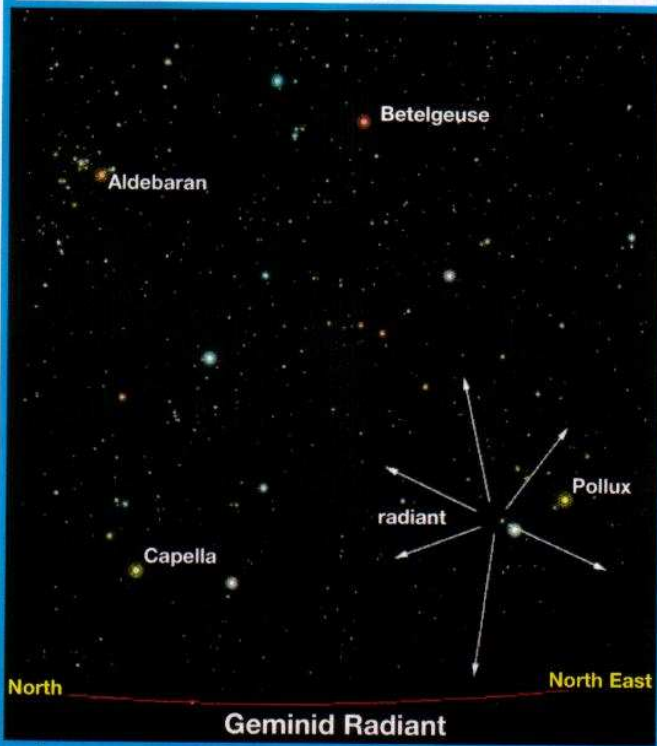
The Leonid meteor shower has produced some of the most spectacular meteor displays in history, but it is unfortunately periodic in nature. The Leonids generally begin on November 13 and end on November 21, with maximum generally occurring during the night of November 17/18.



A representation of the view from about 3:00 a.m. local time around November 18

The Geminids Meteor Shower.

Even though the radiant never climbs far above the horizon, it is possible to see 20 meteors per hour on the night of maximum. The Geminids generally begin on December 7 and end on December 18, with maximum generally occurring during the nights of December 13/14.



A representation of the view from about 11:00 pm local time around December 13

RISING TIMES

	Saturn		Uranus		Neptune		
	Rise	Set	Rise	Set	Rise	Set	
14	06:28	17:12	18:32	07:16	16:19	06:03	1 Sept
0	06:03	16:49	18:03	06:48	15:51	05:35	8
6	05:38	16:26	17:34	06:20	15:23	05:07	15
2	05:13	16:02	17:05	05:52	14:54	04:39	22
6	04:47	15:39	16:36	05:23	14:26	04:11	29
3	04:22	15:15	16:08	04:55	13:58	03:44	6 Oct
1	03:56	14:51	15:39	04:27	13:30	03:16	13
9	03:31	14:27	15:11	03:59	13:02	02:48	20
8	03:05	14:03	14:42	03:31	12:35	02:20	27

These times and much more celestial information can be found in the excellent annual Australian publication, ASTRONOMY 2007. Soon to be available for purchase from the club will be ASTRONOMY 2008. These publications are aimed at all levels of amateur astronomer, from newcomer to expert. So to see what's ahead for 2008, keep a look out for ASTRONOMY 2008.





Skywatcher Events for SEPTEMBER and OCTOBER 2007



A challenging astronomical event - right over Melbourne

This little bit of astronomical information was picked up by Dave Herald from Canberra, and relayed to our society.

Want to try an interesting challenge? Perhaps the shortest astronomical phenomena you have ever tried to observe? The challenge is to watch the 4th mag star omega2 Scorpii on the evening of Tuesday Oct 9 between 7.06pm and 7.07pm. If you can record it on video (handicam etc) all the better...

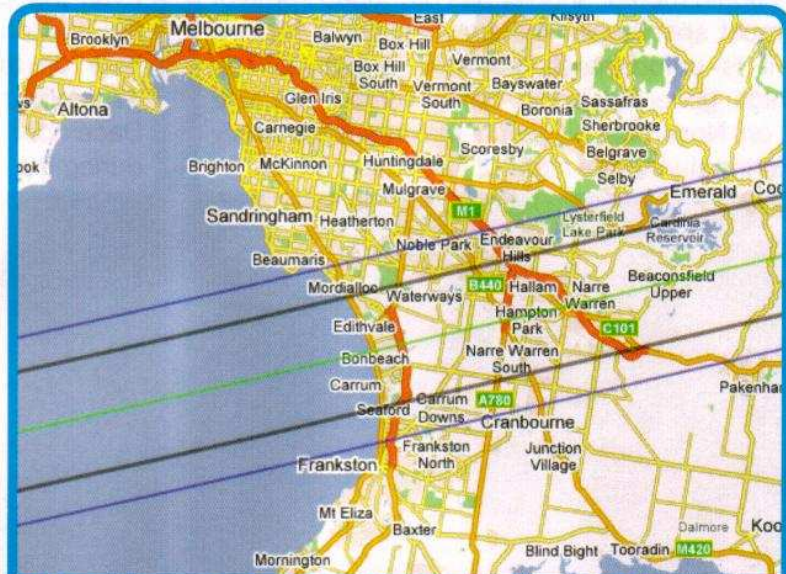
The reason? The 15km diameter mag 16 asteroid (901) Brunzia will pass in front of the star - occulting it for a maximum of about 0.4 secs (yep 0.4 secs - don't blink at the wrong time!) And the predicted path crosses right over Melbourne.

If the prediction was 100% accurate, the northern limit of the occultation path would be a line from Geelong to Emerald; the southern limit is a parallel line passing through Frankston. The 1-sigma uncertainties in the path location have the northern limit being as far north as a parallel line through about Essendon/Mont Park, while the southern limit is down around Crib Point.

If you can encourage others to participate, that would be great. It is almost certain that the occultation will be visible from somewhere in Melbourne. All people have to do is look at the star for that 1-minute period.

So hopefully people will put a note in their diaries for this event. I'm happy to answer any questions...

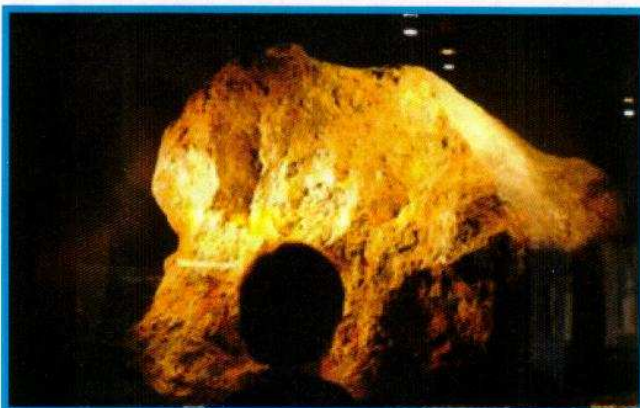
Dave Herald
Canberra, Australia



The area of viewing on Tuesday 9th Oct., between 7:06pm to 7:07pm

ASTRO NEWS

A new home for the Cranbourne Meteorite



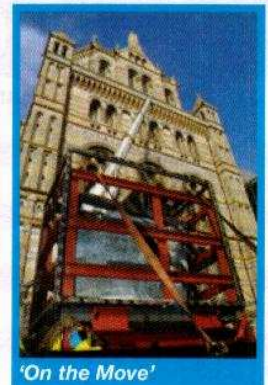
The Cranbourne meteorite displayed in the old Meteorite gallery

The famous No.1 Cranbourne meteorite at the Natural History Museum in London has been moved recently. All 3.5 tonnes of it were lifted out of its protective case of dry nitrogen and hauled out of the upper story window of the museum, taken around the other entrance and reinserted into its new home near the minerals in the Science museum instead (5 hours later). This is the first time it's ever been moved since the 1850's when it was shipped to London amidst a lot of controversy in Victoria. The move took 10 specialists and a very large crane.

At that time, Victoria was still very much seen as a colony and any such prizes discovered were considered booty to be returned to the mother land of England. This is the largest fragment of the meteorite (12 are known). Previous attempts to have it returned to Australia have fallen on deaf ears.

Most people would be unaware, but one of the fragments actually fell within the region of Frankston rather than Casey. This is the one on display in the Smithsonian in New York.

(From Peter Skilton's e-scorpis report. Images courtesy of The Natural History Museum)



'On the Move'

Journal of the Mornington Peninsula Astronomical Society
Volume XVI, No. 3 (September/October 2007)

Society Pics

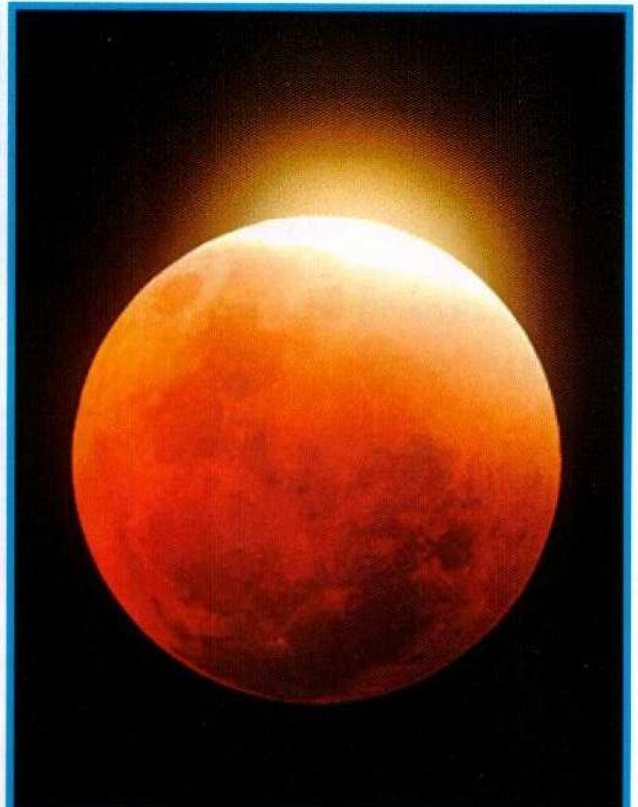
A growing activity in the society, is the experimentation with astrophotography. As a result, many of our members are getting great shots of the night (and daytime) sky. To show you what members are photographing, Scorpius will be setting aside a page each edition to show case these images. So don't be shy, if you have an image which you would like to share, send it in to scorpius@mpas.asn.au with a brief description of the image (as per opposite list). These images will also be available online to view at www.mpas.asn.au.

The following is a list of information you may wish to include with your image. It helps others see how you achieved your shot.

Photograph By	Date
Intruments Used	Location
F Stop	Camera Used
ISO Setting	Exposure
Additional Notes	Post Processing Used



The Briars Observing Site - Photographed by Helmuth Schultes
Camera: Canon EOS 20Da, ISO: 3200, F Stop: 8, Exposure: 15 sec



Total Lunar Eclipse - Photographed by Steve Mohr (28/8/2007)
Orion ED80mm Telescope mounted on Meade LX200GPS 8"
Canon EOS 350D (Modified)+ modified white balance
Taken via software: DSLRFocus, laptop controlled.
ISO: 800, Exposure: 1 sec



NGC 253 - Sculptor Galaxy
- Photographed by Helmuth Schultes
Canon EOS 20Da mounted on 6" Meade LX075 Schmidt-Newtonian, ISO: 3200, Exposure: 61 sec



Coming out of Eclipse
- Photographed by Kevin Rossiter
Camera: Konica Minolta 7D, ISO: 400, Lens: 500mm,
Exposure: 1/160 sec



The South Celestial Pole - Photographed by Helmuth Schultes
Camera: Canon EOS 20Da, ISO: 100, F Stop: 4.5, Exposure: 2039 sec

Office bearers of the Morrington Peninsula Astronomical Society

President: Peter Lowe - 0419 355 819
Vice President: Ian Sullivan
Editor: Peter Lowe
Committee: Peter Skilton, Kevin Rossiter,
 Terry Ryan, Bob Heale
Librarian: Andrew Thorton
Phone Contact: Peter Skilton

Secretary: Don Leggett - 5985 4977
Treasurer: Marty Rudd - 5977 8863
Public Officer: Rhonda Sawosz

Web Master: Steven Mohr

GENERAL MEETINGS

Meeting Venue: 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.

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 an 8-inch reflector, 80mm refractor and binoculars available for loan. Contact Kevin Rossiter or a committee member to arrange the loan of equipment. The Society also has books and videos for loan from its library, made available during General Meetings.

CONTRIBUTIONS TO SCORPIUS NEWSLETTER

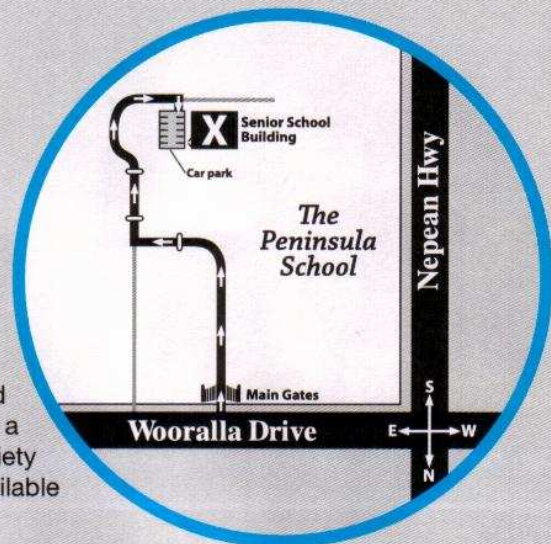
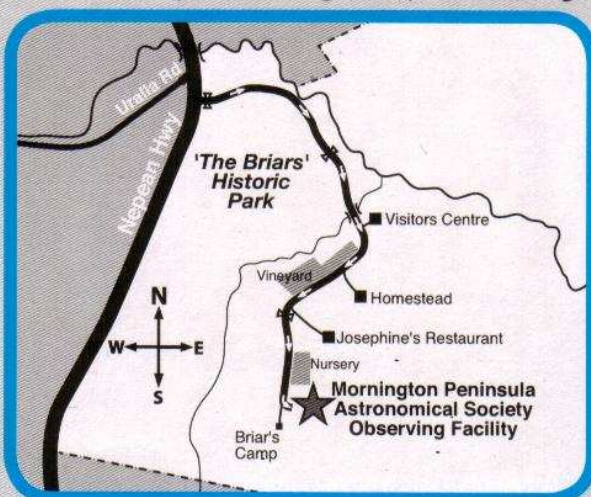
If you would like to submit an article or written contribution to Scorpius, then please send your submission to M.P.A.S., P.O. Box 596, Frankston 3199, or you can now email to scorpius@mpas.asn.au.

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. And the new **Society Pics** page requires images that you have taken for all members of the society to see - don't keep them to yourself! All contributions are welcome.

E— SCORPIUS NEWSGROUP

The 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> 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 skywatch@iprimus.com.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 Briers, Nepean Hwy, Mt. Martha, starting at dusk. If you would like to know if others are observing at the site, then call the society's site mobile on 0408 127 443.

Members visiting The Briers 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.

If it rains we can also watch a movie



Gallery

Jupiter taken with MPAS 18inch EQ stopped down to 4 inch ISO400 1/125 sec

16Apr2006 Pentax ist By Greg Walton Briars Mornington



Red spot on Jupiter 25May2006 12:13am

Taken with MPAS 18inch F4.5 EQ stopped down 4inch



By Greg Walton Briars Mornington

Pentax ist ISO400 1/125sec with 3 X convertor No Editing

Gallery

Lunar eclipses 28Aug2007 8.47pm Taken with MPAS 18inch EQ Pentax ist ISO200 6sec
By Greg Walton
Briars Mornington

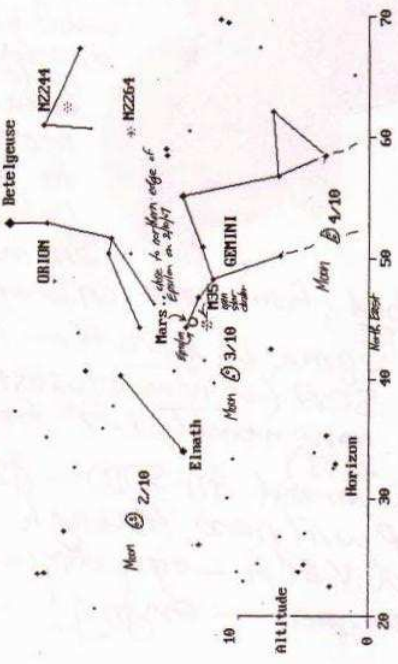


Lunar eclipses 28Aug07 7.47pm taken with MPAS 18inch EQ Pentax ist ISO200 3sec
By Greg Walton Briars Mornington

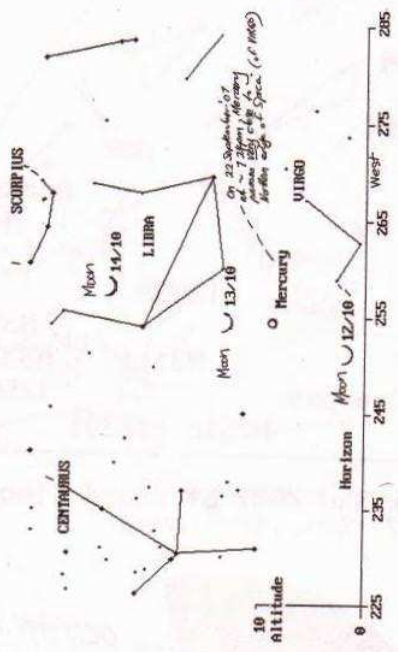


SKY FOR THE MONTH 19TH SEPTEMBER TO 16TH OCTOBER 2007 MORNINGTON PENINSULA

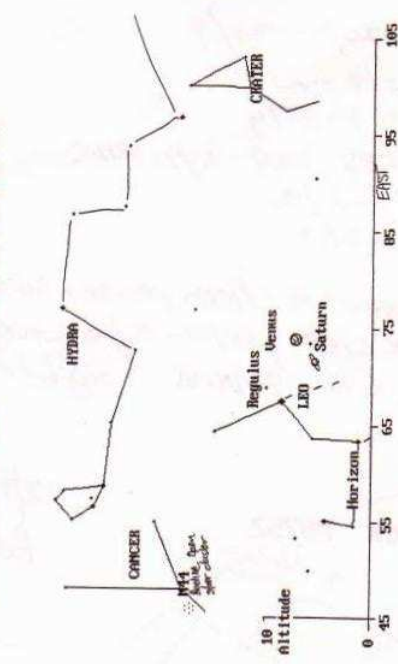
2:27am MRS Dark Sky 3rd October 2007 Standard Time
 Faintest object is mag 5.5 U1.00 (c) Bob Heale 13/1/03



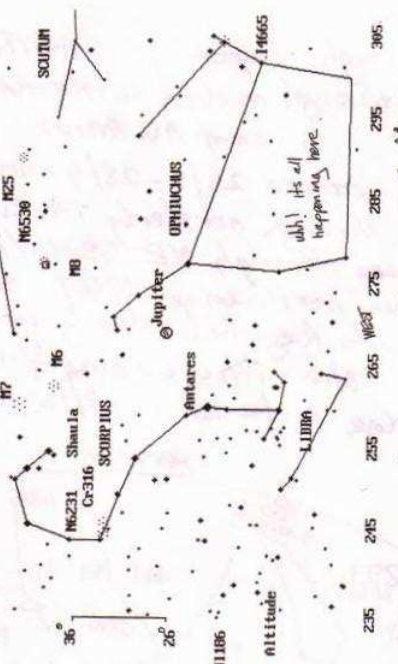
MERCURY 7:24pm 5-6 Dark Sky 13th October 2007 Standard Time
 Faintest object is mag 4.5 U1.00 (c) Bob Heale 13/1/03



VENUS/SATURN 4:14am 5-6 Dark Sky 16th October 2007 Standard Time
 Faintest object is mag 4.5 U1.00 (c) Bob Heale 13/1/03

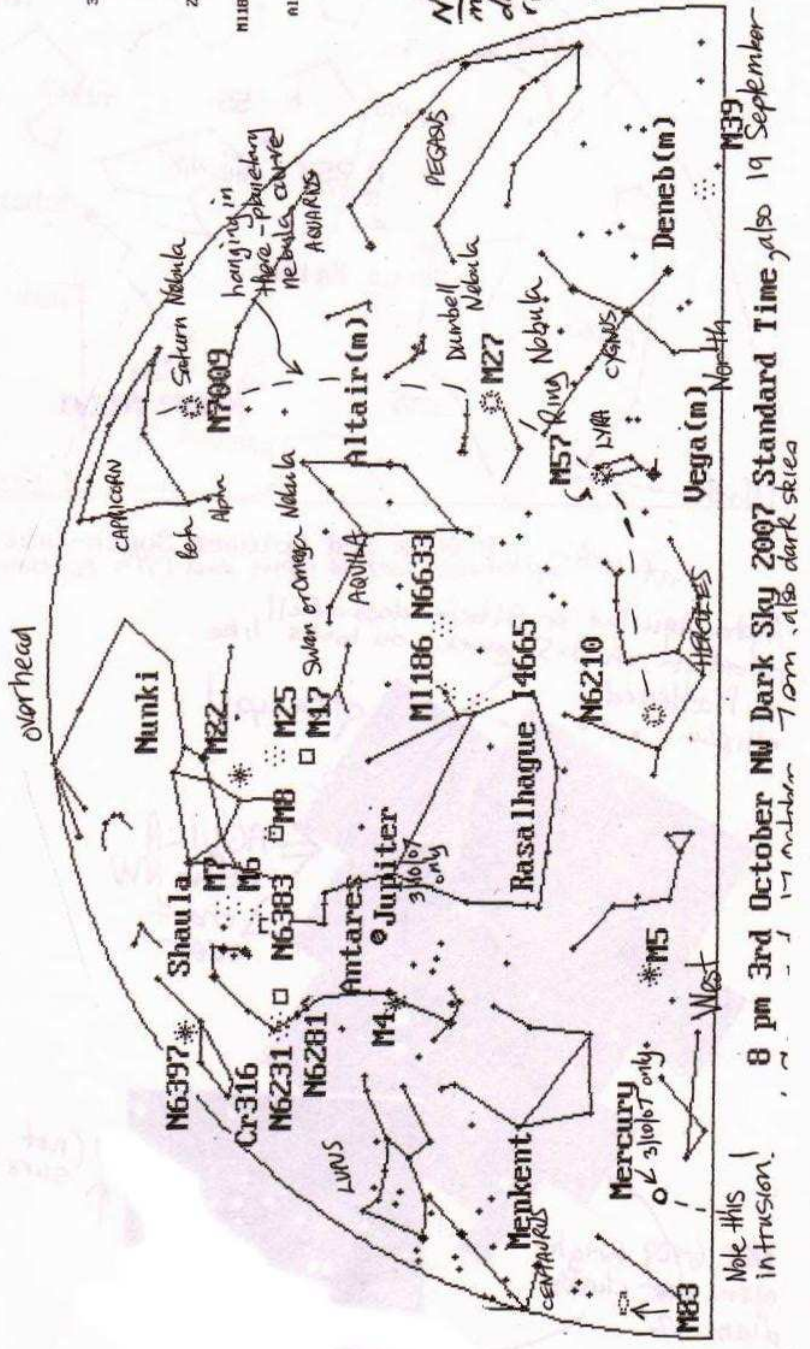


JUPITER 8:09pm Dark Sky 16th October 2007 Standard Time
 Faintest object is mag 5.5 U1.00 (c) Bob Heale 13/1/03



No! comments about Mars and Mercury movements in above left charts, Mercury doing a neat reversal around 14/09/07 reasonably dark evening sky
 2 Saturn and Venus return to mid morning sky, Saturn for a long haul
 3. Jupiter now in descent

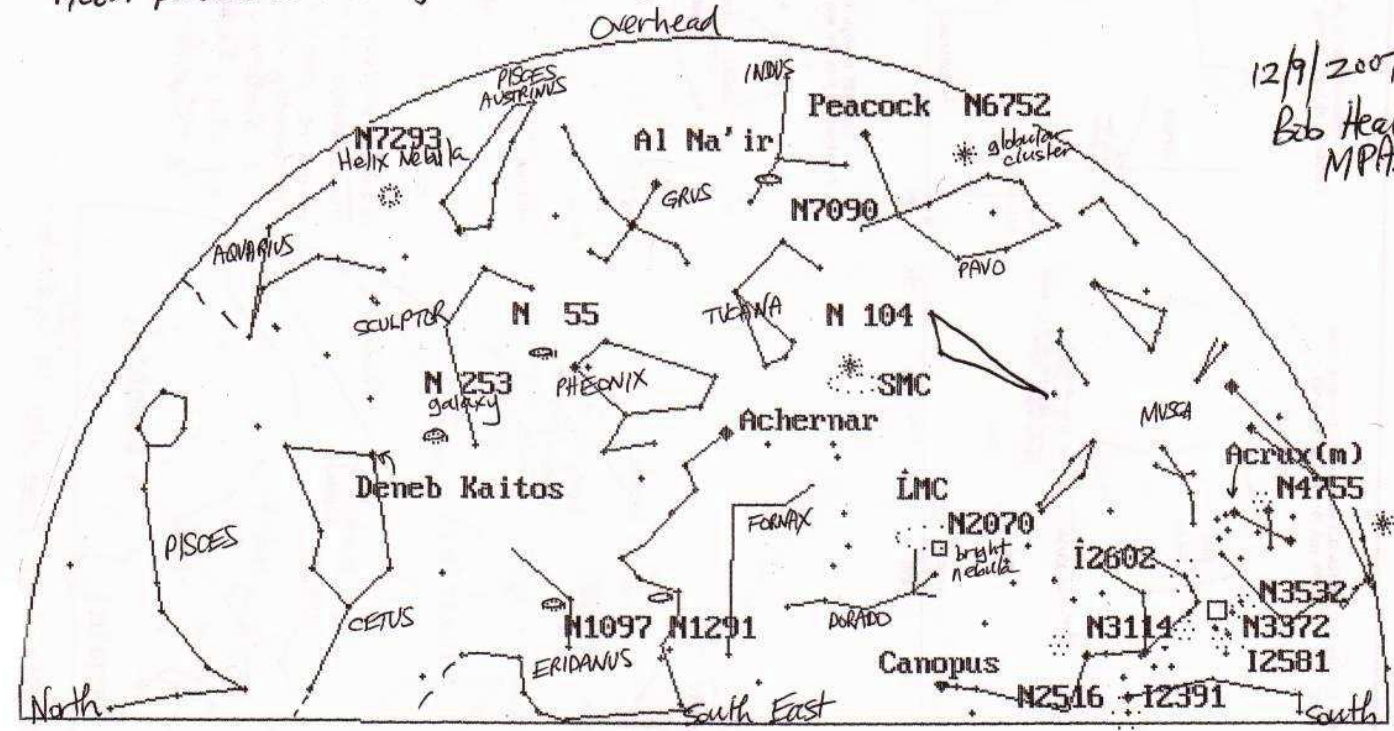
12/9/2007
 Bob Heale
 MPAS



8 pm 3rd October NW Dark Sky 2007 Standard Time, also 19 September
 Note this intrusion! 1st antares 7am, also dark skies

Moon movements over 19/9/07 - 16/10/07

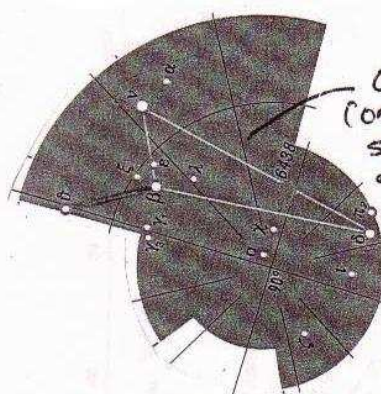
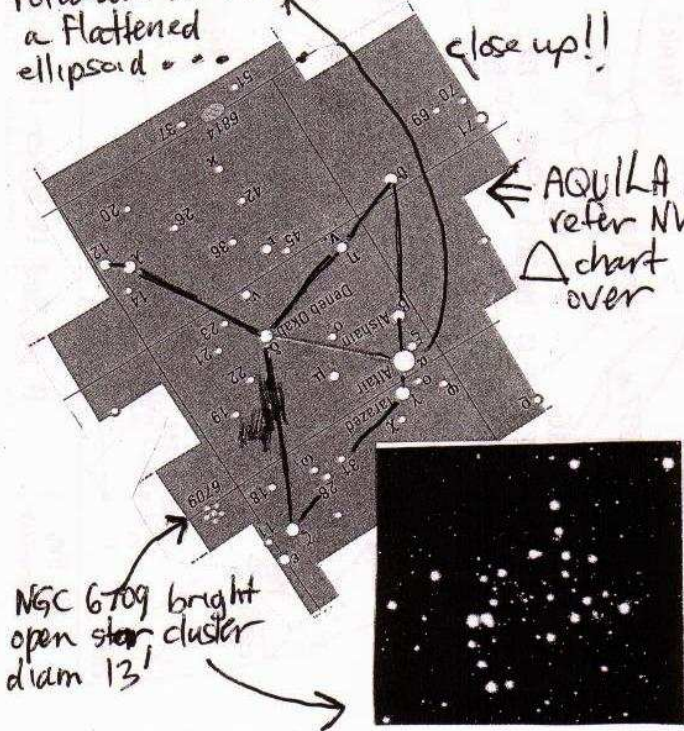
waxing $\frac{1}{2}$ Moon passes through 'teapot' of SAGITTARIUS 20/9 - 21/9
 waxing $\frac{3}{4}$ Moon passes through middle CAPRICORNUS 22/9 - 23/9
 similarly east AQUARIUS 24/9 - 25/9
 waxing near Full Moon passes 26/9 - 28/9 middle PISCES, 29/9 - 30/9 ARIES
 waning $\frac{2}{3}$ Moon passes through northerly Taurus 30/9 - 2/10
 waning $\frac{1}{3}$ Moon passes through NE SEMINI 3/10 - 4/10
 waning $\frac{1}{3}$ Moon passes north edge M4 5/10
 waning $\frac{1}{3}$ Moon passes north edge M4 5/10
 Spica 10/10 - 11/10; 13/10 - 14/10 waxing $\frac{1}{7}$ in south LIBRA - 15/10 - 16/10 waxing $\frac{1}{4}$
 Moon passes south edge Antares; 17/10 return to SAGITTARIUS (Sigh!)



at 19th September 8 00pm 3rd October South-East Dark Sky 2007 Standard Time, also at 9pm and 17th October 2007 7pm, dark skies

Alpha Aquilae or Altair - does a full rotation in 6.5 hours, so looks like a flattened ellipsoid

close up!!
 ← AQUILA refer NW chart over



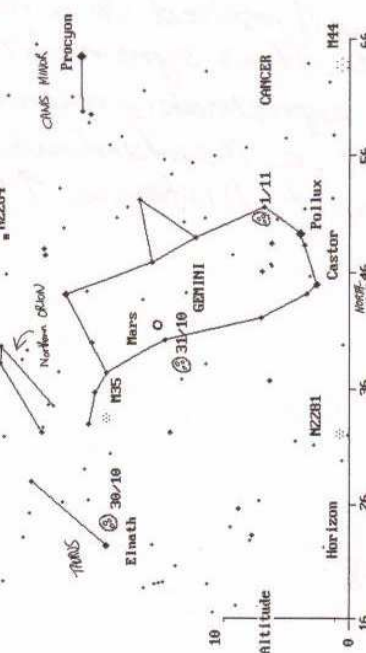
OCTANS, notab. (only just!) for some binaries, doubles and galaxies containing the nearest star to South Celestial Pole Sigma Octans

but, from 2000 onwards, sigma is more than 1° from SCP (it was closest in 1870 now about 1.7° from pole 2007)
 In period AD 5000 - AD 11 000 SCP will pass through CAPRINT and VELA - equatorial align. telescopes - enjoy!

N (not sure!)

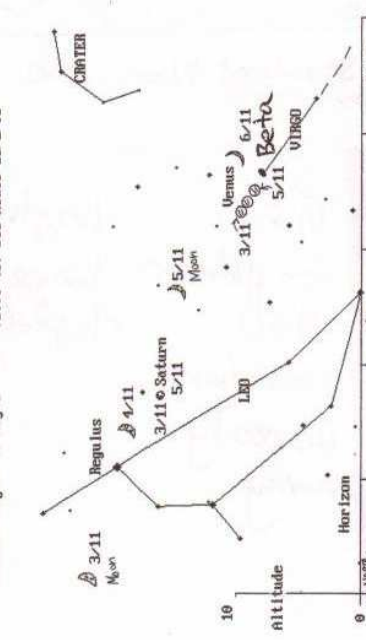
SKY FOR THE MONTH 17TH OCTOBER TO 20TH NOVEMBER 2007 MORNINGTON PENINSULA

MARS 1 33am Dark Sky 31st October 2007 Standard Time
 Faintest object is mag 5.5 U1.00 (c) Bob Heale 13/1/03
 M2254



No nearby or close encounters for Mars in viewing period

4 03am 307-40N 8-9 ENE Dark Sky 4th November 2007 Standard Time
 Faintest object is mag 5 U1.00 (c) Bob Heale 13/1/03

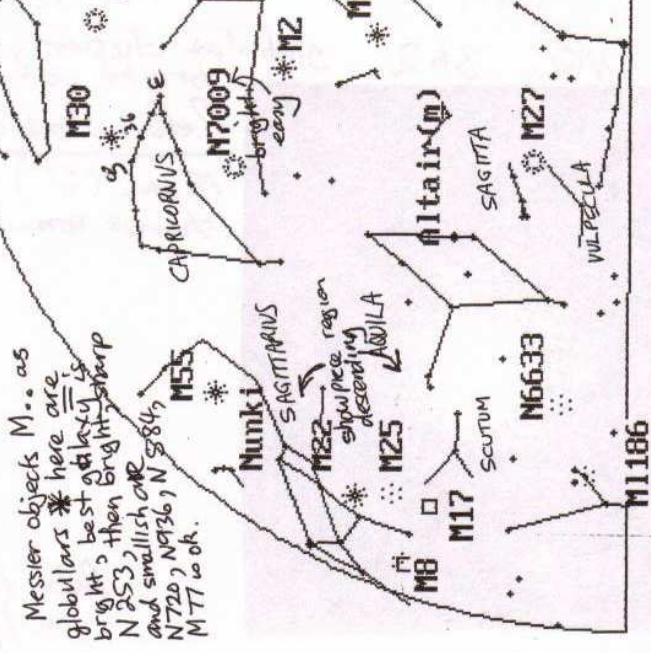


Warning crescent Moon passes over Regulus about 8pm 3/11 (similar image ASTRONOMY 2007 ANNAL but they say in listings not visible Australia - Oh! clear)

Venus passes south over north edge Beta Virginis 24/10 - 25/10

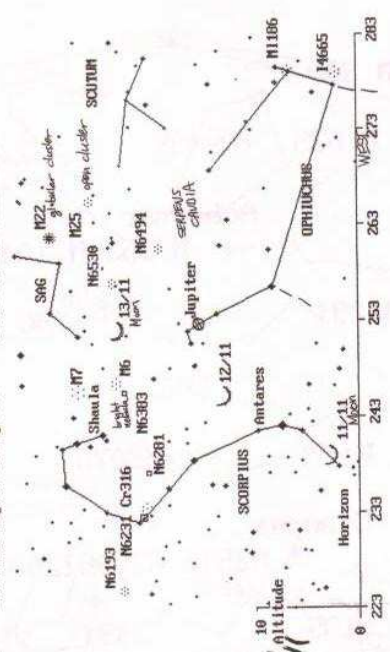
Venus passes over north edge Beta Virginis 6/11 - 7/11

Messier objects M... as globulars * here are bright, best galaxy is N 253, then bright sharp and smallest are N 720, N 936, N 584, M 77 is ok.



10:42 pm 17th October 2007 and 7:45pm 6th November NMW Dark Sky 2007 Standard Times, also 15/10/2007

JUPITER 8 11pm Dark Sky 12th November 2007 Standard Time
 Faintest object is mag 5.5 U1.00 (c) Bob Heale 13/1/03



No nearby or close encounters for above Jupiter in viewing period

Bob Heale MPAS
 15/10/2007

