

Canterbury Astronomical Society

CASMag

Notable events in May

May 7th, 14th, 21st & 28th – Group bookings

May 9th, 16th, 23rd, 30th – Public Open nights

**** Please consider volunteering @ <https://cas.ivolunteer.com/> ****

May 10th – Hororata Glow Festival – CAS will have a stall

May 19th – RASNZ BHT Lecture at the University of Canterbury

May 20th – CAS May Monthly meeting at University of Canterbury

May 24th – CAS Members Night at our West Melton observatory

Inside This Issue

Pg 2 - 6

Minutes of the CAS 2025 AGM & reports from CAS Committee

Pg 7 - 8

The Night Sky in May by Alan Gilmore

Pg 9 - 10

Articles by members Heather Skinner & Alan Teague

Editor's Thoughts for May

Welcome to the May 2025 CASMag. This is the first CASMag I have had the pleasure of curating as CAS Editor 2025. Please bear with me as the content and format of this is a work in progress. I very much wish for CASMag to be informative not just to keep members up to date on CAS and astronomical events but also to be a place for members of all ages to share their experiences and adventures in astronomy. Some ideas are photos, projects you have undertaken, astronomy camps you have attended, pictures you have drawn etc. I have been a CAS member since 2017 although I have had a lifelong fascination with all things astronomy, science and literature. When I joined CAS, I found a group of likeminded individuals from all walks of life who shared similar interests as me and who were so generous to share their knowledge and advice as I started my adventures in amateur astronomy. I am very happy to be able to contribute in some way as CAS Editor.

This issue has a few gems notably the CAS 2025 AGM Minutes containing the reports from each of the 2024 CAS officers. Re-reading the 2024 reports gave me great appreciation for all the hard work the committee does keeping the CAS observatory in good working order, orchestrating the different CAS events, keeping the public engaged with amateur astronomy as well as ensuring CAS members continue to benefit from their membership each year. Also included in May's issue is Alan Gilmore's star charts to help guide members in astronomical delights this month – I am especially looking out for the peak of the Eta Aquarids meteor shower in the early morning hours of May 6 – 7. Those up early will also be rewarded by a line-up of Venus, Saturn & Neptune. In this issue we also have contributions from long standing members, Heather Skinner and Alan Teague. Heather's article on the lunar eclipse we had in March is accompanied by photos I took of the event with my SeeStar S50. Alan shares his thoughts on being CAS editor fifty years ago and also a page out of the May 1975 CAS Magazine. Despite all the formatting hoops, I am very glad that I am able to write this CASMag on a laptop.

Minutes of the Canterbury Astronomical Society Annual General Meeting

Tuesday 18th March 2025 8pm Room: ER225 Level 2, Ernest Rutherford Building, University of Canterbury.

Welcome / Greetings:

Thank you all for attending tonight, and a warm welcome to our new members joining us for the first time this year.

Present:

Dale Kershaw, Ray Pointon, Simon Lewis, Carol McAlavey, Heather Skinner, Mandy Heslop, Preetha Sreedharan, Rob Glassey, Jason Kruger, Malcolm Carr, Orlon Petterson, Brent Schroeder, Adrian Sands, Terry Richardson, Tait Keller, Nick Fagg

Apologies / Acknowledgements:

Karen Wills, Ruth Snashall, John Pickering, Marc Bunyan, Gary Steel, Greg Hay, Anne Whitehead, Peter Whitehead

Minutes of 2024 AGM

Read and confirmed true and correct. Simon Lewis moved from the chair. Preetha Sreedharan 2nd. All in favour. Matters arising? Nothing

Annual Reports:

From the 2024 CAS President Simon Lewis

Annual General Meetings may not be the most exciting events, but they are extremely important. They provide an opportunity for our committee and volunteers to showcase their efforts and the substantial number of hours they dedicate each year. Many have been contributing consistently over the years, often balancing their involvement in astronomy with other family commitments and hobbies. So I'd like to say a huge thank you personally to our 2024 committee for their hard work and commitment to the society. I've been on this committee in various roles for many years, I know how much effort goes into organising events like Hororata games, managing the open night programme and private groups (thanks to Rob), and just keeping the grass cut, the weeds under control so that the observatory is ready for visitors and members. So, thank you all of you and it's also time to thank those who are taking a well-earned break from committee this year and to those members who are offering to stand this year. We should remind ourselves that we get some fantastic reviews from our visitors and that's solely due to the commitment and enthusiasm of those who volunteer either on committee or in some other capacity. So, on behalf of the society, thank you.

So turning to the year in review it's safe to say it's been another successful year for CAS and we continue to run a successful and healthy society. We maintain a healthy presence with the public across our open nights and private group nights, as well as attending events like Hororata Games, Night Glow, Yuri's night and other small events. It's fabulous to be invited back to these events time and again. They give an opportunity for CAS to be seen by thousands of people across the year however we shouldn't fool ourselves. We still have a job to do as each event brings us in touch with people who had never heard of CAS or know there is an observatory in West Melton and that's even for locals. It still amazes me that we come across this and we still have a big audience to pull on for open nights and potential new members which is an opportunity for us to exploit. We've maintained a good membership level and it's been great to meet so many new members this year. And we'd like to welcome those of you who joined us this year, make the most of the facilities and the amazing knowledge that our members have across such a broad range of astronomy activities. Many of our members come from public events and our open nights and while these do place a burden on our volunteers we should not underestimate the importance of them. They bring us into the public eye and in these days of social media and the internet it's easy for a hobby like ours to slip out of the public sight. I see that as one of my key roles as President and one that I take very seriously when I see an opportunity to wave our flag or spot an opportunity to share our society's amazing wealth of knowledge.

If you have been out to the observatory during the year, you may be aware that some of our buildings are feeling their age and becoming difficult to keep watertight. The observatory is our key asset and much more than

a paddock with some sheds. They are a facility we use for members' activities, for our public nights events and remain the most significant society asset. Maintenance is a huge task each year for the observatory director and the many volunteers on working bees but is a critical one to ensure they remain operational. There's a small dedicated team leading this work, that's Brent our obs director along with Terry our VP and Gary and a small army of helpers on those days that needs the grass cut or a paint brush applied. This year we've completed the woodwork on the 16" roof and we are now going to replace the 16" rails. These are rotten in place and in need of replacement. That's going to be done before open nights and will give us a chance later to motorise the roof mechanics too. The other big job that we have tried to progress this year was the replacement for the Nankerville dome housing the 120mm scope. The Society has spent a lot of money over the years trying to patch this up over the last five years and it still leaks like a sieve in winter. Last year we decided we needed to replace this building as we can't keep having good gear exposed to water and dampness every winter and we are just spending money on fix up's. So we started looking at this alongside the 11" building which is also showing its age, to see what we can do to create a replacement larger shed that will last us another 30 years and meet the society's needs now and in the future. Despite numerous attempts with various architects, designers and builds whose promises to deliver we have been let down again and again over this year. After multiple let downs we have decided to do this work ourselves and will build two smaller roll off roof sheds which we can build ourselves without relying on contractors or designers. So this is now our approach and we are now planning this out for next spring. You will have noticed we are taking the opportunity to spruce up the lodge facilities and some work has started on that already with a library refit completed this year which saw the eviction of many uninvited guests from the ceiling, new shelves, carpet and a lick of paint being applied. Speaking of the library, our new librarian will be tasked to review the library as we are not seeing this being used. This is not too surprising as more and more media move to digital media. In the short term we have stopped buying books this year as the ones we have are not being read and we will look at how we might reorg the library – perhaps looking at a digital subscription vs having physical books aging in the library.

We will be looking at further observatory development over the coming year but the priority is to complete jobs like the 16" rails, and new sheds first. Plus our steps from the lodge to the domes have seen better days and is another task for this year. We have continued to add new features to the observatory over the past year too with the addition of another new meteor camera system which you may have heard me talk about earlier this year, thanks to James Scott from the University of Otago. There are lots of other changes and activities over the past year and I do urge you to come out to one of our social nights and come check out the changes for yourselves. While it's great to focus on the positive outcomes for the year, it's worthwhile just touching on some of the challenges we have faced this year.

Earlier this year our long standing Treasurer Dave Brian resigned and after many months searching for a replacement, the committee made the decision to ask Brent to pick up the role. Brent has a good background in business and is familiar with the financial coming and goings our society deals with. Brent was confirmed in the role at the October meeting and got to work on reviewing our financials and budgets. What's become apparent to committee since Brent picked this role up is just how much the society has grown in terms of financial transaction volumes, a large portion of which comes from our growth in merch sales like calendars, sales at public events and open nights via EftPos and things like raffles for fundraising. It's clear we've outgrown our spreadsheet approach to tracking our transactions and after reviewing the feedback from our auditor we have made two immediate changes. Firstly we are in the process of moving banks to BNZ from Westpac and the migration of our accounting system into Xero. This will give Brent the tools to tighten up our accounting processes and bring our financial system to a level we need for our activities. This will take some months to do and given the current position we are at we do not intend to have the external auditor do an annual account review but intend to do these reviews more frequently during the year to reduce the time between transactions and audit making the job easier for them and for Brent. We are happy with this year's figures and we'll have a much more traceable system this year to make FY 2025 a much easier task for everyone. I can say that we are very lucky to have Brent on board and he will bring some improved rigour to our financial system this year, so thanks to Brent for taking on this mammoth task. On a final note, this will be our last year with our current constitution due to important changes that are

coming to the Incorporated Societies Act. These changes and the requirement to comply with other legislation such as the privacy act will require the society to modify our constitution to remain compliant to these important legislative acts. Committee will continue to share these changes during the coming year and in time for them to be incorporated at next year's AGM.

In summary, as we enter the 2025 season we have a healthy society, a good bank balance, stable membership and share a vibrant and successful society and as president I hope I can have your continued support to allow my committee and I to continue moving us forward in the coming year. Please stay tuned for news updates on the website our email news updates each month and at our monthly meetings and social nights. Simon Lewis moved from the chair. All in favour.

From the CAS 2024 Treasurer Brent Schroeder
Profit and Loss Trading

Income	Operating Expenses
Calendars..... 444.60	Advertising 560.28
Donations 5,064.50	Bank Fees 2.70
EFTPOS Revenue 7,312.50	EFTPOS expenses 569.34
Event Revenue15,929.30	Event Costs 720.24
Interest Income2,777.41	General Expenses 3,320.83
Membership fees6,964.81	Insurance 4,299.05
Merchandise Sales3,596.47	Light, Power, Heating 1,379.48
Total Trading Income ..42,089.59	Merchandise costs 4,426.33
Gross Profit42,089.59	Misc unassigned expense.. 925.52
	Motor Vehicle Expenses ... 1,506.50
	Observatory Maintenance .. 7,507.25
	Printing & Stationery 49.79
	Telephone & Internet 1,188.00
	Website Expenses 783.29
	Total Operating Expenses ... 27,238.60
Net Profit 14,850.99	

Brent Schroeder moved his reports. Dale Kershaw 2nd. All in favour

From CAS Observatory Director 2024, Brent Schroeder

Over the last year we have serviced the heat pump. Serviced the septic tank. Cleaned out and replaced the ball cock in the water tank. Built and set out the shed. 16” rails replaced. Brent thanked Terry and Gary for their efforts. Library refit. Toilets and part of lodge painted. Archives room set up. Flooring in the 14” dome and safety provisions in place. Brent thanked Mandy and Dale for their efforts. This year we will upgrade the switch board. Become self-sufficient with our water and not rely on the aging system and agreement with the neighbours Bob and Louise. Focus on replacing the stairs and new builds (‘domes’) for the current leaky 120 and 11” scopes. Brent Schroeder moved his report. Terry Richardson 2nd. All in favour.

From CAS Editor 2024, Dale Kershaw

Another busy year for Cas. There is always lots of things that happen behind the scenes to keep CAS running smoothly Casmags although reduced in the number published, following the change at last year's AGM. They still covered assorted astronomical information, Cas events, updates at the Observatory and other CAS news Our merchandise has been busy with sourcing items/pricing etc, Thanks to Mandy for her assistance with this. Having the eftpos terminal has made doing merchandise sales at all of our events etc so much easier. CAS had a busy time with events in 2024, The Yuri Event at the Air Force Museum in April, and the The Highland Games in November. These events have always proved to be a great outreach for CAS, with more awareness to the public that we have our amazing facilities etc along with merchandise sales / new memberships Assisting with the Public Friday nights, Wednesday Group nights & Kidsfest, included questions/refunds/attending lists for the eventbrite

bookings, Emailing to let our volunteers know if we were Open or Closed for each event. Along with attending on these nights his made for a busy time over the winter season A big thank you to those who submitted images for use in the 2025 CAS Cosmic Calendar 14 images were included this year. Dale Kershaw moved her report. Ray Pointon 2nd All in favour.

From CAS Membership Secretary 2024, Dale Kershaw

This was my second year as your membership secretary. It continues to keep me busy with database updates, tracking payments, new memberships etc, Along with answering any questions that come in re memberships. Updating the membership part of the website means paid members are able to read full forums etc. The ability to be able to “view only” the bank account means I can update & add new members straight away This has made the process a lot quicker than what was possible in the past. Along with having the “EFTPOS terminal” to take instant payments I have continued to send out “Welcome to CAS” emails when folks join followed by another to say your “Membership is confirmed” after formal acceptance at the committee meeting following them joining. Names are listed for this in the minutes I started last year to send personalized individual reminder emails to our members to remind them that their membership is due, These include their name, member number and type plus the \$\$ amount along with the bank details. The 2025 emails were sent out, last weekend, Response to this has been positive with payments coming in, Several have responded that due to whatever circumstance they do not wish to continue. Then sending a follow up “Thanks for your Payment” or “Thanks for letting us Know” email. Dale Kershaw moved her report. Heather Skinner 2nd. All in favour.

From CAS Webmaster 2024, Orlon Peterson

It's been a good year. The transition into the role took longer than expected. But once I was underway it was easy. Keeping updates for plugins current. Keeping the online calendar up to date. Initiating an auto reply to the ongoing emails. Changed the navigation of the website which makes it easier. Uploading of images will be activated again after initial security concerns. Back up for Website sorted so nothing can be lost. Facebook - thanks to Mandy and Dale for monitoring this! Orlon Petterson moved his report. Terry Richardson 2nd All in favour. *Terry thanked Orlon for his efforts. Best improvements in several years!

CAS Librarian 2024 Sean Mullis is standing down. Thank you for your work! Ray Pointon offered to stand for this role. We are looking to the future and how to engage more use of the library.

Other Business

*No change to annual subscription rate

Election of Committee Officers for 2025

President: Simon Lewis nominated by Mandy Heslop. Jason Kruger 2nd. All in favour

Vice-President: Terry Richardson nominated by Dale Kershaw. Orlon Petterson 2nd. All in favour

Treasurer: Brent Schroeder nominated by Preetha Sreedharan. Ray Pointon 2nd. All in favour

Secretary: Mandy Heslop nominated by Dale Kershaw. Simon Lewis 2nd. All in favour

Membership Secretary: Dale Kershaw nominated by Orlon Petterson. Brent Schroeder 2nd. All in favour

Editor: Preetha Sreedharan nominated by Simon Lewis. Rob Glassey 2nd. All in favour.

Librarian: Ray Pointon nominated by Dale Kershaw. Brent Schroeder 2nd. All in favour

Webmaster: Orlon Petterson nominated by Brent Schroeder. Terry Richardson 2nd. All in favour

Observatory Director: Brent Schroeder nominated by Simon Lewis. Mandy Heslop 2nd. All in favour

General Committee:

Gary Steel and Jason Kruger - Dale Kershaw 2nd. Simon Lewis moved to accept.

Solicitor: TS Dacre and son. Simon Lewis moved to accept. Terry Richardson 2nd.

Auditor: Community Capacity Accounting. Simon Lewis moved to accept. Orlon Petterson 2nd.

Patron: John Hearnshaw will remain our Patron.

Banking Signatories and Trustees:

- To Remove Names N/A

- To add Names: Simon Lewis, Terry Richardson, Brent Schroeder, Mandy Heslop. Dale Kershaw - read only. Simon Lewis moved to accept. Rob Glassey 2nd. All in favour.

General Business:

Simon thanked Malcolm for his efforts bringing the tea, coffee, Milo, biccies and all the mugs every week! Carol assists at times with a ride to the Uni but otherwise he busses. The large backpack is hard work so if he finds something better with wheels CAS will fund this for him.

Meeting Closed at 9.41pm

The Night Sky in May 2025 by Alan Gilmore

Jupiter is the early 'evening star'. It appears in the northwest soon after sunset. It sets before 8 pm at the beginning of the month and soon after 6pm at the end. (So isn't on the chart.) The Moon will be to the right of Jupiter on the 1st. **Mars** is the only other planet in the evening sky. It looks like an orange-red star low in the northwest, similar in brightness to nearby bright stars. The Moon will be near Mars on the 4th.

As the sky darkens **Sirius** appears midway down the western sky. It is the brightest true star and twinkles with all colours when setting in the southwest in the late evening. It is the 'Dog Star', marking the head of **Canis Major** the big dog, now head down, tail up. **Canopus**, the second brightest star, is southwest of overhead. Below Sirius are bluish **Rigel** and reddish **Betelgeuse**, the brightest stars in **Orion**. Between them is a line of three stars, Orion's belt. To southern hemisphere star watchers, the line of three makes the bottom of 'The Pot', now tipped on its side.

Orange **Arcturus** is the brightest star in the northern sky, rising in the northeast at dusk. It often twinkles red and green when low in the sky. It is 37 light-years* away and about 120 times brighter than the sun.

Crux, the Southern Cross, is southeast of the zenith, to the right of 'The Pointers'. **Alpha Centauri**, the brighter Pointer, is the closest naked-eye star, 4.3 light years away. Beta Centauri, like most of the stars in Crux, is a blue-giant star hundreds of light years away. Canopus is also very luminous and distant: 13 000 times brighter than the sun and 300 light-years away.

Following the Milky Way down into the southeast finds **Scorpius**. Orange **Antares** marks the Scorpion's body. The scorpion's upside-down tail curves to the right of Antares. There is a Greek legend that the Scorpion and Orion were always fighting so a goddess put them on opposite sides of the sky, so they never appeared in the sky together. It doesn't work for the southern hemisphere.

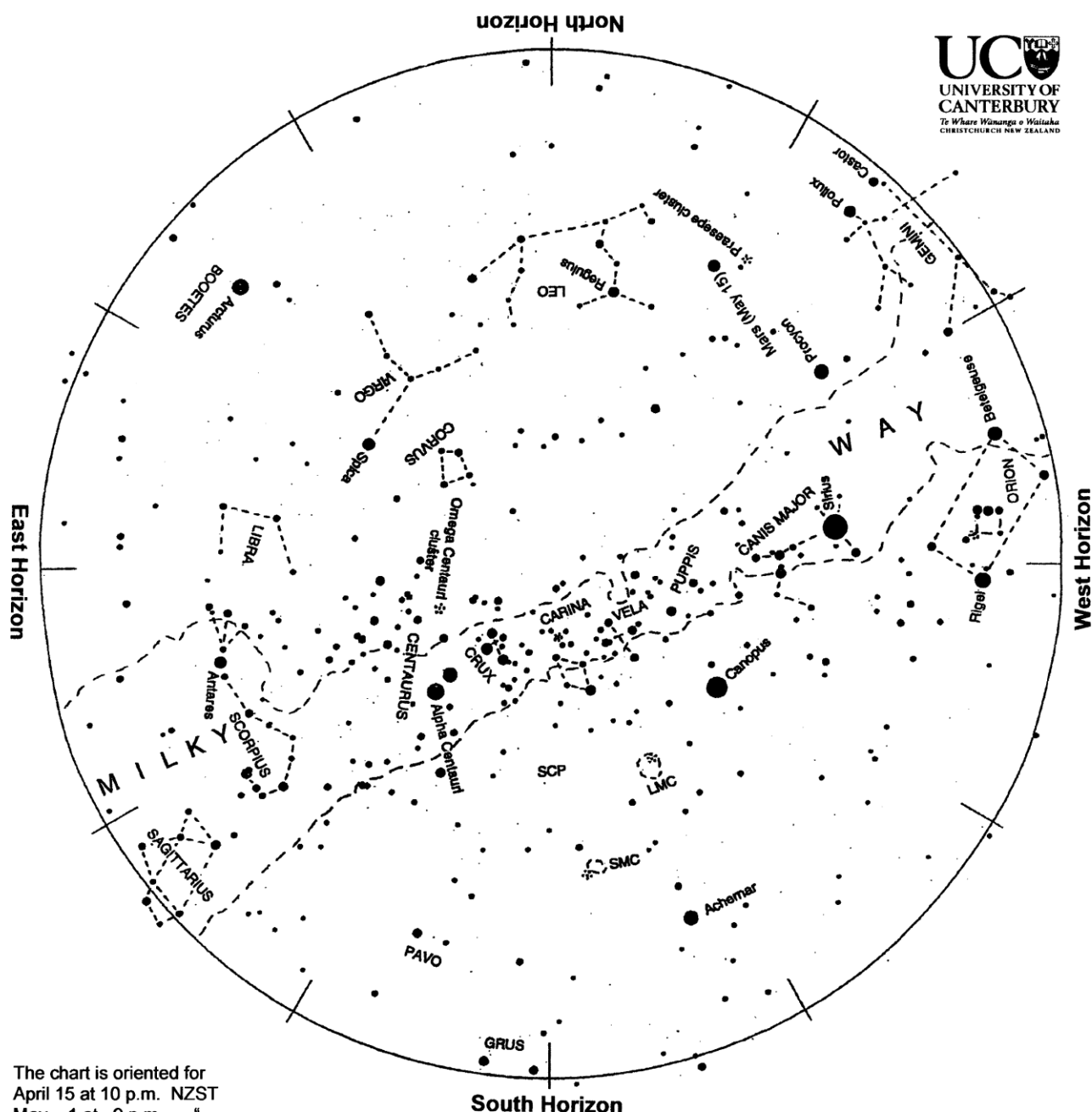
The **Milky Way** is brightest in the southeast toward Scorpius and **Sagittarius**. In a dark sky it can be traced up past the Pointers and Crux, fading toward Sirius. The Milky Way is our edgewise view of the galaxy, the pancake of billions of stars of which the sun is just one. The thick hub of the galaxy, 27 000 light-years away, is in Sagittarius. The nearby outer edge is by Orion where the Milky Way is faintest. A scan along the Milky Way with binoculars shows many clusters of stars and some glowing gas clouds, particularly in **Carina** and Scorpius.

The Clouds of Magellan, **LMC** and **SMC**, are midway down the southern sky, easily seen by eye on a dark moonless night. They are small galaxies. The Large Magellanic Cloud is 160 000 light-years away and the Small Cloud is around 200 000 light-years away. They are much smaller than our Milky Way Galaxy but there are many billions of stars in each.

Venus rises around 4 a.m. throughout the month, a brilliant object in the dark night sky. At the beginning of the month Saturn is a medium-bright 'star' above Venus. Mercury is a bright 'star' below Venus. Saturn moves higher in the sky morning to morning while Mercury slips lower. Venus stays put. By the end of the month Saturn is well above and left of Venus but is the brightest 'star' in that empty region. The Moon will be close to Saturn on the morning of the 23rd and close to Venus on the 24th. Around 9 a.m. on the 24th the crescent Moon will be due north and midway up the sky. Venus will then be about eight moon-diameters (4 degrees) above the Moon, giving a chance to find Venus by eye in the daylight.

Many meteors will be in the pre-dawn sky around May 5-7 as the Eta Aquarid meteor shower peaks. Up to 30 meteors per hour might be seen before twilight. The shower runs from late April to late May. The meteors are dust from Halley's comet, hitting the air at high speed and burning up.

*A **light-year (l.y.)** is the distance that light travels in one year: nearly 10 million million km. Sunlight takes eight minutes to get here; moonlight about one second. Sunlight reaches Neptune, the outermost major planet, in four hours. It takes sunlight four years to reach the nearest star, Alpha Centauri.



The chart is oriented for
April 15 at 10 p.m. NZST
May 1 at 9 p.m. "
May 15 at 8 p.m. "
June 1 at 7 p.m. "

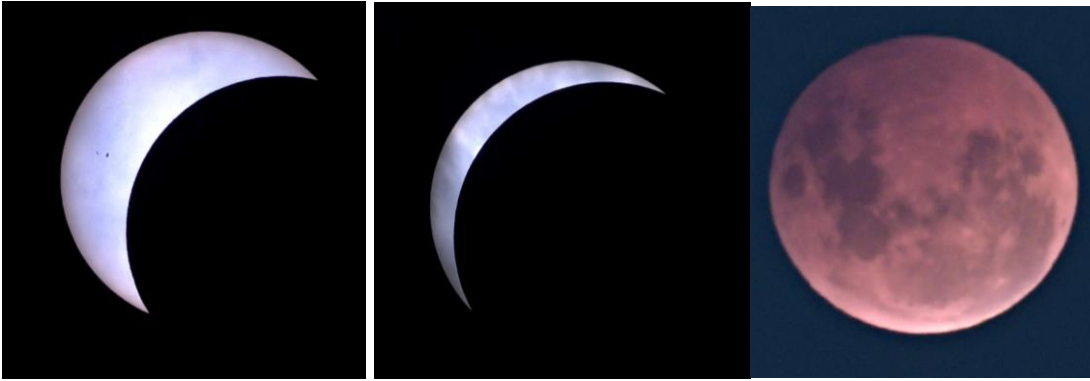
Evening sky in May 2025

To use the chart, hold it up to the sky. Turn the chart so the direction you are looking is at the bottom of the chart. If you are looking to the south then have 'South horizon' at the lower edge. As the earth turns the sky appears to rotate clockwise around the south celestial pole (SCP on the chart). Stars rise in the east and set in the west, just like the sun. The sky makes a small extra westward shift each night as we orbit the sun.

Jupiter is the 'evening star', setting in the northwest two hours after the Sun, so is not on the chart. Sirius, the brightest true star, is midway down the western sky. Directly below it are bright stars Rigel and Betelgeuse with 'The Pot' between them. Canopus, the second brightest star, is southwest of overhead. Crux, the Southern Cross, and the Pointers, Alpha and Beta Centauri, are southeast of the zenith. Orange Arcturus, low in the northeast, often twinkles red and green. Scorpius, with orange Antares at its heart, is low in the southeast sky where the Milky Way is broadest and brightest. Bright planets are in the morning sky.

Chart produced by Guide 8 software; www.projectpluto.com. Labels and text added by Alan Gilmore,
Mt John Observatory of the University of Canterbury. www.canterbury.ac.nz

On the Lunar Eclipse in March:

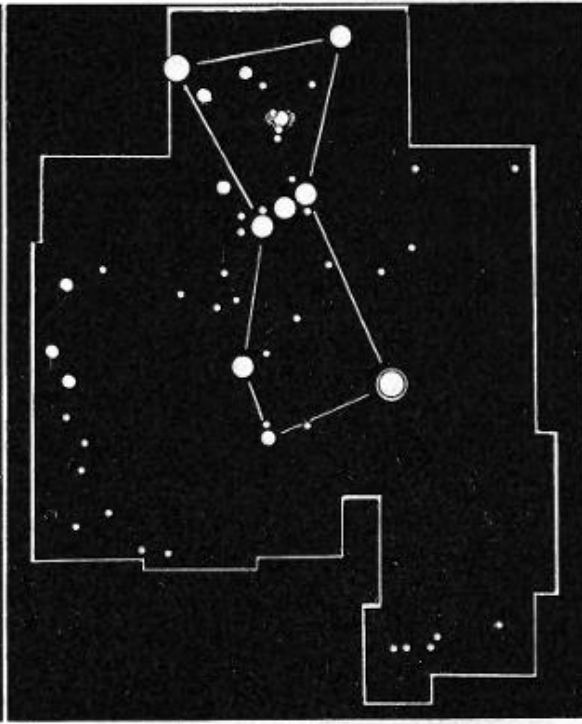
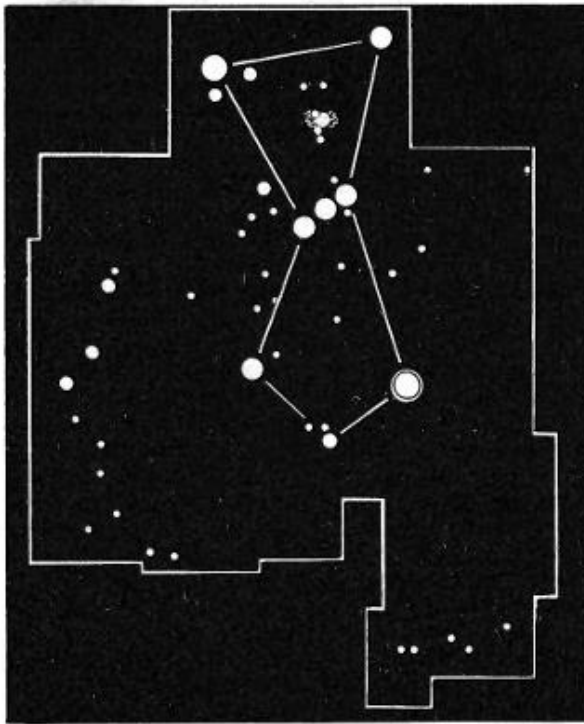


I had doubts if I would get to see the eclipse --it may be all over by the time it is high enough for me to see, or, cloud cover, and it was very cloudy during the day...I didn't feel like taking a chance on a clear sky to travel somewhere to see it. So, just stayed at home, but I did take a look out the window from time to time, Hmmmm ...the cloud seems to have gone? I go outside,--still too early for moonrise just yet, then a bit later,- WHAT ??? There it is!!! A beautiful copper-colour, full moon in full eclipse in an absolutely clear sky from where I am in Rolleston.... I didn't care that it had risen in eclipse, it was just stunning. My astronomy is viewing not pictures, though I saw on Facebook, some stunning pics sent in;- I was looking at it naked eye, and through my 20x80 bino on a tripod stand,-- seeing it through the bino, I saw so much turbulence, that it looked just like water rippling over the face of the moon.. I watched it to the end of the eclipse, and as the moon got to its full brightness again, the clouds started to roll in and scud across the face of the moon, some of the clouds were backlit by moonlight and took on an orange hue that just added to the beauty of it all, but, to add to the drama,-as clouds were going "across the moon", a neighbour's dog started howling,- talk about a Dracula affect! --pleased to say the dog stopped howling!!! - from what I read on FB, I saw for some people, it was a picture perfect night and for others, there was some cloud. A perfect night for me.... from Heather

What was life like for the CAS editor 50 years ago?

The main difficulty then, as now, was obtaining articles and snippets to put in the magazine and talking members into writing them. CAS had an old typewriter which could do half-spacing. I typed an article and used the slash (/) near the end of a line. A second typing enabled me to space each line to produce justified columns, but was it justified? Later editors didn't think so. These days columns can be justified using Word. Diagrams were drawn and photos reduced to a format in tiny dots. The typed pages were then glued into sheets which were sent to a printer who occasionally said, "I'm busy, you'll have to wait until next week".

Following is a page Alan shared from CAS Magazine May 1975. Skyview #3 is quite a fun exercise, and I can confirm that a 3-D image can be seen - have a go yourself.



THE LAST JOURNEY.

This creature man, who in his genesis
First stood, then gazed upon the molten
stars

With dim perception, knew their mystery.
Now through the spanning years his
tread has gone

Over wide oceans, continents and plains,
Vaulted the encompassing atmosphere
that clings

about the rounded cradle of his world,
And hurled himself headlong in valiant
flight

Upon the arid, harsh and cratered Moon,
And claimed its bitter majesty as his.
Beyond the Moon his voyaging will go
Until his footprints mark the Jovian
moons;

The outward yet, to Saturn's lonely
path,

And far beyond, into the stellar night.
Man seeks in outer space what lies
within;

For this is true, that if he will but
sit

And gaze into the still, abysmal deep
That is himself, the woven threads
that shape

The barriers of distance, time and
form

Will fade, as dreams upon awakening,
And be no more than their dimmed
memory.

In this last journey, floating free at
last

Upon the faceless glory of that sea
Whose foam is stars, and spindrift
galaxies

Man knows the whole wide universe as
home.

- Sam Rix ¹²

SKYVIEW #3.

The above twin pictures make up a three dimensional picture if the magazine is held about a foot from the eyes and at right angles to the viewing point. If you cross your eyes slightly until you see three pictures, the centre image will have depth. An amount of refocussing may be necessary. The star images are at the distances that would be seen if your eyes were far enough apart to see the depth of field. -D V Smith.

CAS MAGAZINE is produced for the Canterbury Astronomical Society, Inc, P. O. Box 25-137, Victoria Street, Christchurch, New Zealand, by Multicraft Business Services, 23 Forfar Street, Christchurch 1.

- Papers, articles, news items, notices of meetings and advertisements should be submitted as double-spaced typed sheets and should reach the Editor no later than the tenth of the month preceding the month of issue.

- SUBSCRIPTIONS to Cas Magazine are available to persons residing outside the mid or north Canterbury area at the rate of \$2.50 per year, eleven issues (not published January). These subscriptions should be paid in advance to Cas Magazine, P. O. Box 25-137, Victoria Street

- ADVERTISING SPACE is available at the rate of 25¢ per column centimetre with a minimum of 50¢ per advertisement. Copy should be sent to Cas Magazine at our box number. Illustrations and artwork extra.

- The publishers, Editor and The C.A.S. will not be responsible for unsolicited manuscripts. Submissions should be accompanied by a stamped self-addressed envelope.

Other Information

***** IMPORTANT NOTE - UC PARKING *****

There are bollards now installed by the Rehua Building and these will be raised at 6pm daily till 7am. Do not park in the areas by these as you risk getting locked in! Please note its just this one area where the EV chargers are located that has been protected by bollards. All the rest of the campus remains the same. Be wary where you are parking!! The map at this link shows where accessibility parks are >>> <https://www.canterbury.ac.nz/about-uc/our-campus-and-environment/maps>

CASMag will be published every alternate month and will contain much more about the activities of CAS, CAS members, monthly star charts I'd like to invite members new and experienced, young and mature to send in your contributions, can be short articles (50 – 100 words) on what your experience has been being a CAS member, what you have learnt, what astronomy projects you're working on etc. Send your contributions to Editor@cas.org.nz by the 3rd week of the month at the latest.