

Canterbury Astronomical Society

CASMag

Upcoming Notable events for your calendar:

April 10th – CAS Winter Open Nights kickoff

Apr 15th, 22nd & 29th – Private Group bookings (Wednesdays)

Apr 10th, 17th & 24th – Public Open nights (Fridays)

** Please consider volunteering **

April 21st – CAS Monthly Meeting in **Jack Erskine 111**, University of Canterbury followed by CAS Quiz Night by Mandy & Dale

April 25th – CAS Members Night at the Observatory

May 2nd – Simon's Memorial at CAS Observatory, West Melton starting at 6:30 pm. Please bring a plate & your best Simon story to share

Inside this April 2026 Issue

Pg 2 - 10	CAS AGM 2026 Minutes
Pg 10	Update from CAS Committee
Pg 11 – 12	Surprising image of the Homunculus Nebula discovered on an old hard drive – by Dr Larry Field
Pg 13	Condolences received by CAS on the loss of Simon Lewis
Pg 14	A tribute to Simon by Tyler Bryce
Pg 15	CAS Monthly Meeting venues for 2026 CAS Memberships due in April
Pg 16 - 21	The Night Sky in March by Alan Gilmore

Editor's Thoughts

March had some highs and one big low. We had our AGM for 2026, going over CAS progress in 2025 and upcoming projects in 2016. The AGM was attended by 19 members, two of whom joined online. A new committee was elected, with Brent stepping down as Treasurer and Observatory Director. Then just two days after the AGM was Stardate SI at Staveley which was attended by many CAS members, myself included. Stardate SI 2026 had really great talks during the day and a mixed bag of rainy and clear nights. Staveley remains a great Bortle 2 dark site for stargazing.

Here comes the low, on the Thursday whilst we settled into camp, we received shocking and upsetting news. As you are all aware, our President Simon Lewis passed away very suddenly on March 19th whilst he was in Auckland attending a 2 Degree Leadership training course. Most of everyone present at Staveley knew Simon and it was perhaps a good thing that we were all together to support each other. Collectively all our thoughts went out to Chrissie, Simon's wife, who some of you have met at CAS BBQs and events. Simon's passing leaves a sizable vacuum not only in his family and in CAS but in the astrophotography community. At the news of his passing, CAS received many heartfelt messages from across New Zealand and the world expressing how much Simon would be missed. We attended Simon's funeral on March 31st to bid our remarkable President and friend goodbye on his journey back to the stars from which we all come – *Preetha*

Canterbury Astronomical Society
Annual General Meeting
Tuesday 17 March 2026 8pm
Room 427 Rehua Building, University of Canterbury.

Agenda:

1. Welcome / Greetings:

Terry Richardson on behalf of Simon Lewis thanked those in attendance.
Also a warm welcome to our new members joining us for the first time.

2. Present:

Terry Richardson, Dale Kershaw, Mandy Heslop, Adrian Sands, Orlon Petterson, Malcolm Carr, Steven Graham, Ray Pointon, Brent Schroeder, Michael Hayes, Jason Kruger, Peter Davies, Alan Teague, Gary Steel, Marc Bunyan, Rob Glassey, Preetha Sreedharan.

Online:

Carol McAlavey, John Pickering

Apologies / Acknowledgements:

Greg Hay, Heather Skinner, Karen Wills, Nick Fagg, Anne Whitehead, Peter Whitehead, Tom Heslop, Brent Heslop, Simon Lewis, Ruth Snashall, Ken McMaster

3. Minutes of 2025 AGM - read and confirmed as true and correct.

Terry Richardson moved from the chair. Preetha Sreedharan 2nd. All in favour.

Minutes of the Special Meeting 2025 - read and confirmed as true and correct

Terry Richardson moved from the chair. Dale Kershaw 2nd. All in favour.

a. Matters arising?

The Constitution has been approved and we are able to still operate as an Incorporated society.

4. Annual Reports:

a. President's Report - read by Terry Richardson on behalf of Simon Lewis.

Hi All,

Firstly, apologies for not being with you tonight. I am unfortunately away with work and probably in the air while you're in the AGM, so do forgive me for not being available but I'll leave you in the capable hands of Terry to guide you through the session tonight.

It's been another busy year this year and I am pleased to report another successful one for CAS. We achieve so much during the year and it would be remiss of me to not personally thank the members of this year's committee who give so much of their time to ensuring things keep running but also submit a huge amount in other activities like attending external events like Hororata Night Glow, the Hororata Games, Yuri Night and many more through the year. It's also important to recognize the incredible effort that is given by our group of

volunteers who keep our private and public nights running throughout the season. We must remember that the bulk of our income comes from these nights and its only through their volunteering we are able to do this. So, thank you for all that you do.

Tonight is an opportunity for the committee officers to share their updates from their years activities. And their updates will assure you that CAS is in safe pairs of hands! From the Presidents desk I can report that I am continuing to work with a variety of outside organization and agencies to promote CAS and our aims as a society. These engagements such as council work, media relations, talks and other public relations activities are essential to ensuring CAS remains in the public view. What continues to surprise me, is that at many events we talk to local people in Selwyn who have no idea we exist, even on their own doorstep. That shows me we still have much to do in promoting our organization and lots more potential to grow. I am currently busy working with Selwyn District Council (SDC) on an activities program that CAS will run with SDC in their main community centres during the winter months and something we have tried to do several times before without success, but there is a strong interest this year to engage with us, which is great news.

Of course, with growth comes challenges. And I think I speak for all of us on committee when I say we do see fatigue across our teams. Both from longer term committee members to our many volunteers, and I do have a request. We really need volunteers for our open nights – even just one or two times a season from more of you would be of huge help particularly through the kid’s school holidays. Our current volunteers get burn out and every night that they get a break is helpful. You don’t need to be an expert; we’ll guide you along the way and you can piggyback our other volunteers the first time too. So do see Rob or I for info on how to volunteer. We have a volunteer site we use so we’ll publish that again soon. Open nights start 10 April through to early October.

One of the biggest tasks this year is one you will be very familiar with, and that’s the registration of CAS with Incorporated Societies and getting our constitution approved in line with the new Incorporated Societies Act 2022. I am pleased to report that we got approval on our very first pass through and that the work that Brent and I did on the new constitution was spot on. So, thanks to Brent for his support on this important task and to you as members for your review and approval.

If you have been out to the Observatory recently you will have seen, we have been busy over the season on our upgrade programme. We have installed a new water tank and cleaner so we can use our own water now. We installed a new on demand hot water heater to reduce the electricity bills from running a tank-based system and added in a new pump, so we have high pressure water for use around the observatory when we need it such as water jetting domes roofs.

We also installed a new alarm system after the last one was damaged in a lightning storm. And we also replaced the 16” roof rails with steel ones and installed a new storage shed outside and replaced the old ugly BBQ with a nice new Webber. While we have not yet managed to replace the 120mm dome and 11” shed, we do have a plan ready to use some of the funds we have accumulated in preparation for this big spend, which will likely be the biggest spend CAS has ever invested in, but will set us up for many years to come.

Our open nights and public nights still bring 1000's to the observatory each year and the income we make from these will provide valuable investment upgrades to the observatory site for our future society.

Finally, we do have another resignation this year as Brent our current Treasurer wants to stand down as he is under a lot of pressure from his own business. I want to personally thank him for his hard work on getting the CAS financials back on track after the short notice resignation of our previous treasurer. Brent's done a fantastic job of getting us back on track and has agreed to ensure the new Treasurer has a good handover. What's particularly interesting is that Brent was originally our Observatory Director before the pressure of needing a Treasurer came about. So, a huge thanks to Brent for his hard work and guidance over the year.

That does mean we need to look for a new Treasurer with the right skills for the role and a new Observatory Director! So, if you know anyone with some excellent financial skills or an aptitude for figures then do shout out!

Finally, I am personally happy to stand for another year if elected and welcome the opportunity to work for you on making CAS ever more successful.

Thanks to all the outgoing committee for their efforts this year and we'll see what voting brings this evening. I may get the opportunity to welcome in the new committee next month.

Thanks
Simon
CAS President

Motion to adopt President's Report

Terry Richardson moved on behalf of Simon Lewis. Gary Steel 2nd. All in favour.

b. Treasurer's Report

A pleasing result given that we have spent approximately \$16,000 on the 16" rail refurbishment and new water tank

Total Income of \$38,109 and Expenses \$38, 480

1. Event revenue up – \$19,279 of which \$4,374 was private events, and \$1,4905 public and Kid's Fest events
2. Membership fees total of \$7,875, of which \$1,190 from paypal was not transferred until last week
3. Merchandise sales \$9,402 versus costs of \$6,370 so \$3,031 profit

Balance Sheet

Canterbury Astronomical Society As at 31 December 2025

	31 DEC 2025	31 DEC 2024
Assets		
Bank		
BNZ CAS Working Account	1,057.00	-
WP Bonus Saver	58,130.37	57,006.60
WP Main Account	25,290.13	27,841.88
Total Bank	84,477.50	84,848.48
Total Assets	84,477.50	84,848.48
Net Assets		
	84,477.50	84,848.48
Equity		
Current Year Earnings	(370.98)	13,065.50
Retained Earnings	13,065.50	-
Starting Bank Balance	71,782.98	71,782.98
Total Equity	84,477.50	84,848.48

Profit and Loss

Canterbury Astronomical Society For the year ended 31 December 2025

	2025	2024
Trading Income		
Calendars	486.00	444.60
Donations	1,588.10	5,064.50
EFTPOS Revenue	-	7,312.50
Event Revenue	19,279.00	15,929.30
Interest Income	929.34	2,777.41
Membership fees	6,375.00	6,964.81
Merchandise Sales	9,402.00	3,596.47
Other Revenue	50.22	-
Total Trading Income	38,109.66	42,089.59
Gross Profit	38,109.66	42,089.59
Operating Expenses		
Advertising	-	560.28
Bank Fees	2.00	2.70
EFTPOS expenses	586.37	569.34
Event Costs	1,422.11	1,301.28
General Expenses	1,924.91	3,320.83
Insurance	4,299.05	4,299.05
Light, Power, Heating	1,570.97	1,379.48
Merchandise costs	6,370.46	4,426.33
Motor Vehicle Expenses	1,906.50	1,506.50
Observatory Maintenance	18,626.46	9,342.74
Printing & Stationery	-	49.79
Subscriptions	375.00	-
Telephone & Internet	948.00	1,188.00
Website Expenses	448.81	1,077.77
Total Operating Expenses	38,480.64	29,024.09
Net Profit	(370.98)	13,065.50

Motion to adopt Treasurer's Report, including balance sheet and financial report
Brent Schroeder moved his report. Dale Kershaw 2nd. All in favour.

c. Observatory Director's Report

Various projects were carried out in 2025 including the following:-

1. Completion of the shed build from 2024
2. Design and rebuild of 16" telescope rails for the roll off roof
3. Water tank installation for rain water storage, including filters, and pump which allows water to be used on the upper level where the domes reside
4. Faulty alarm system replaced

Going forward:-

1. The old unused dome is to be dismantled and disposed of/sold
2. The 120 dome is leaking badly and will be replaced by a new roll off roof to be built later this year hopefully, along with a second new roll off roof for another telescope – probably in similar locations to these current two domes

Motion to accept Observatory Director report

Brent Schroeder moved his report. Mandy Heslop 2nd. All in favour.

d. Editor's Report

How time has passed. It's been a year since I took over as Editor for CASMag and CASNews. From the start, as Editor I revamped the look of CASMag and then foreseeing challenges in getting articles every month, I put forward to the committee that CASMag would publish every other month with a CASNews Update email sent out in between. As things turned out the exercise to update CAS Constitution last year meant two additional CASMags were published to ensure members were kept abreast of the proposed changes. We ended up publishing four CASMags in 2025 and two CASMags in 2026 so far. It was fortunate that for each CASMag I did have some articles from members to include. So as Editor, I'd like to thank those who have contributed articles to CASMag for their time and effort – My astronomer in residence Rob Glassey always keen to support astronomy and share his experience and knowledge, Mandy Heslop for her short contributions around volunteering and outreach, Terry Richardson and John Pickering, and Alan Teague for looking through his archives of past CASMags to bring us "Blast from the past" articles. We were also very fortunate to have an article written for the November CASMag by Father Francois-Xavier Cazali, a visiting Catholic Prior from France who shared his enjoyment of our Southern skies. I'd also like to thank Alan Gilmore for his monthly star charts that we publish in CASMag. We are always on the lookout for articles for CASMag and like to invite anyone interested in submitting an article and/or images of their adventures in astronomy. I hope you have enjoyed reading your CASMags and hope to be able to continue to publish more in the future for you members.

Motion to move Editors report

Preetha Sreedharan moved her report. Gary Steel 2nd. All in favour.

e. Membership Secretary's Report

In my third year as your membership secretary, it continues to keep me busy with database updates, tracking payments and new memberships. Taking payments via EFTPOS has continued to be a wonderful asset. Checking the payments via internet banking also speeds up the membership process. Ongoing updating the membership part of the website, and also answering any questions that come in regarding membership. I have continued to send out "Welcome to CAS" emails when folks join and then another to say your "Membership is confirmed" after formal acceptance at the committee meeting following them joining. Names of new members to be accepted are listed in the monthly meeting minutes. Emailing each member with personalised individual reminder emails to remind them that their membership is due, I include Name, member number, type and \$ amount. This was followed up with an overdue email in May and a final very overdue in July. The 2026 emails were sent out in the 1st week of March with a great response. Each year we do have some responding they will not be renewing due to whatever circumstance they do not wish to continue. I am following this up with a "Thanks for your Payment" or "Thanks for letting us know" email. I am happy to continue with this role of I am re-elected and look forward to another busy but fun year with CAS.

Motion to move Membership Secretary report:

Dale Kershaw moved her report. Jason Kruger 2nd. All in favour.

f. Digital Services Officer's Report

The past year has seen some significant changes going on in the way we operate our presence on the Internet. The website continues to undergo incremental changes to keep up with current practice and to gradually update the bits and pieces that make the whole site operate. The website has for a few years had an ongoing problem with its email notifications system not always sending out emails. This came to a head when our provider for the service changed the terms and conditions and due to the size of the user base of the Society's site we have now upgraded to a paid tier which allows us to send much greater numbers of email than we could previously. There is no longer a daily send limit which was responsible for most of the issues we have had with our website and forum email notifications. So, I would like to encourage people to take a look at the forums in particular and check whether they are subscribed to get notifications when things get published.

Now that I've got a fuller understanding of our website and how it's put together I've been progressing the updating of the site which had fallen behind in a number of areas due to a lack of investment. Progress is being made in overhauling the website to first bring the existing site up to date with the behind the scenes infrastructure and move off the now unsupported versions of software the site relies on and get us on the most current versions. Once this is completed in the coming year the website will begin to see changes as it refreshes the website to better suit our needs.

The society now has channels for communication on Facebook, Instagram, YouTube and our first Video of the Brother Guy Consolmagno public talk has seen quite a number of views. Additional videos will soon be added as we now have a collection of various presentations that can be uploaded. Keep an eye out as we build up our content. Many thanks to Mandy and Dale for their regular handling of the social media for the Society.

We continue to see a steady stream of messages to the Society asking about events or information. The requests for information on CAS Open Nights is our main type of query and I would encourage members to get involved in assisting at these events which run on Winter Friday evenings and other special events. We are also starting to make use of tools to help automate the replies to messages to ease the workload from the numerous messages that come in and I see this as an area that is going to require more attention in the future.

Out at the Observatory we have upgraded the PC for use at our Open Nights. Amongst the software installed is the addition of the Calibre Ebook Management software which contains a list of many of the Books in the CAS library and in some cases links to download locations to get copies of books no longer under copyright. A list of those books is also available on the website.

As always, the society outreach can use input from the membership in the form of pictures taken of objects in the sky or events and people having a go at Astronomy. If you have something you would like to share with us or on our web presence, please get in touch.

Motion to move Digital Services Officer report:

Orlon Petterson moved his report. Brent Schroeder 2nd. All in favour.

g. Librarian's Report

Firstly, I'd like to thank Dale and Mandy for having a good sort out and refit of the library to make it usable again. The new computer programme is going well. Calibre allows us to enter almost all our library's books so we can search for them. Thank you Orlon for your support with this. I will need to sort out and retire a lot of books and update some as well.

Motion to move Librarians report:

Ray Pointon moved his report. Mandy Heslop 2nd. All in favour.

5. No change to annual subscription rate

6. Election of Committee Officers for 2026

President: Simon Lewis nominated by *Dale Kershaw. Jason Kruger 2nd*

Vice-President: Terry Richardson nominated by *Mandy Heslop. Rob Glassey 2nd*

Treasurer:

Secretary: Mandy Heslop nominated by *Dale Kershaw. Orlon Petterson 2nd*

Membership Secretary: Dale Kershaw nominated by *Brent Schroeder. Ray Pointon 2nd*

CASMAG Editor: Preetha Sreedharan nominated by *Rob Glassey. Terry Richardson 2nd*

Librarian: Ray Pointon nominated by *Orlon Petterson. Brent Schroeder 2nd*

Digital Services Officer: Orlon Petterson nominated by *Preetha Sreedharan. Gary Steel 2nd*

Observatory Director: Jason Kruger nominated by *Dale Kershaw*. *Gary Steel 2nd*

General Committee (maximum 12 members on the Committee):

1: Gary Steel nominated by *Terry Richardson*. *Jason Kruger 2nd*

2: Rob Glassey nominated by *Preetha Sreedharan*. *Ray Pointon 2nd*

3: Marc Bunyan nominated by *Mandy Heslop*. *Jason Kruger 2nd*

Solicitor:

Auditor: CCA Community Capacity Accounting

Patron: John Hearnshaw

Banking Signatories and Trustees:

Simon Lewis/Terry Richardson/Brent Schroeder (for now) Dale Kershaw - read only.

To Remove Names

To add Names: New treasurer when nominated

7. General Business:

Meeting Closed at 9.14pm

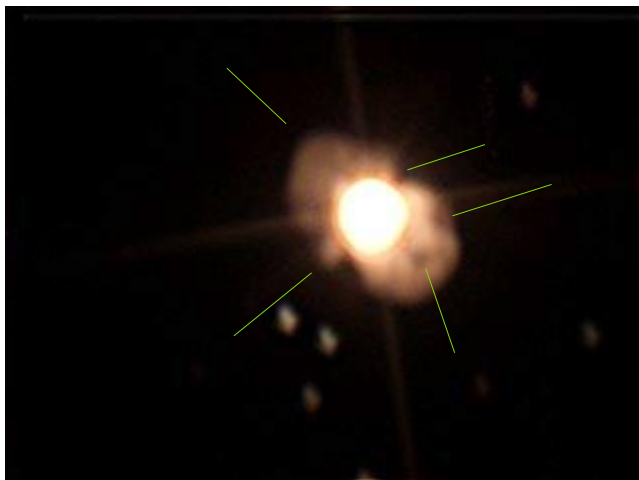
Update from the CAS Committee

On Simon's passing, CAS Vice-President Terry Richardson assumed the role of temporary President. A Special Committee meeting was held this week where the committee unanimously confirmed Terry Richardson as Acting CAS President for 2026 and then nominated Rob Glassey to the role of Acting Vice-President for 2026.

Both Terry and Rob have extensive experience being CAS Vice-President and President in previous years and the committee felt confident together they would be able to guide CAS through 2026 and implement some of Simon's vision for CAS in 2026.

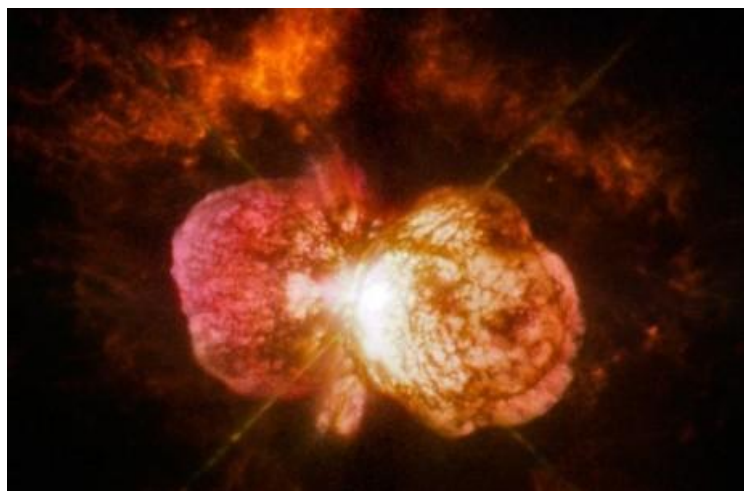
The role of Treasurer for 2026 remains to be filled and we would like to invite members of CAS who are interested in this role to discuss their interest with Terry.

Surprising image of Homunculus Nebula discovered on an old hard drive – by Dr Larry Field



IK51 0.5m Cassegrain, QHY5III290
camera (video)
(green lines: features coinciding with the
Hubble image below)

Hubble 2.4m Ritchey-
Cretien



The first photograph above is the star eta Carinae imaged from Kaikoura Observatory on March 6, 2019, by myself and Ashley Marles. The image was from a lucky imaging video taken with a QHY 5III290 camera and processed with the old Registax 4, using my f/9 0.5m Cassegrain telescope which has always given me troubles with secondary astigmatism. Nevertheless on that night we were pleased that we could see a somewhat blurred ochre expansion around the star and I thought that we might take a record of the blur with the QHY camera. Thus we were satisfied that we had recorded the Homunculus Nebula, the explosive cocoon surrounding eta Carinae, and went on with our lives.

Only this week (March 13, 2026), when I was going through old hard drives of astro images, did I happen to look more carefully at the Homunculus in the eta Car image, and the shape of the nebula seemed to ring a bell from some of the earlier Hubble images. When I looked up the image on the right and compared shape and detail with our old video one, I realized that we had actually captured the detailed shape of the nebula, despite being unable to see any of that detail owing to seeing disturbance on that night. The nebula is reported to be 15-18 arc" long, so it should certainly be resolved by the half-meter Cass telescope but we never expected to reveal the amazing shape of this violent unstable binary star system. I have since viewed the Homunculus a number of times through various scopes but can never see this detail due to seeing. Have CAS members taken images like this?? - *Dr Larry Field, Kaikoura Observatory, Kaikoura NZ*

Below are two beautiful images that Larry sent in taken from his observatory in Kaikoura



Thackeray's Globules IC2944



NGC2170
&
NGC2182

Condolences received by CAS on the loss of Simon Lewis

From Auckland Astronomical Society President Mitchell Clark - on behalf of the Auckland Astronomical Society, express our deepest condolences to the Canterbury Astronomical Society upon the sudden loss of your President, Simon Lewis. Though I am new to the Auckland presidency and thus did not know Simon myself, I know many of our Council and general membership did, and the shock of his sudden passing will surely be felt far and wide. We wish you comfort during the mourning period, as you remember Simon's life and walk in his legacy. Please also pass on our condolences to his family

From RASNZ President Duncan Hall - On behalf of the Royal Astronomical Society of New Zealand (RASNZ) and its Council I offer our condolences to the Canterbury Astronomical Society and Simon's family. Our thoughts are with you

From CAS members past and present

I'm saddened by the news of Simons Passing. Condolences to his family and friends. Safe journey Simon you will be missed – *from Steve Johnson*

We are so deeply saddened to hear the news of Simon's sudden passing. Please pass our deepest sympathies to Chrissy and family. May he rest in peace amongst the stars that he loved so much – *from Goran and family*

Simon was one of those individuals that we sorely missed within the astronomical community. His love for the stars in deep space and his willingness to help individuals understand how the world works outside in the space is what was truly amazing about him the most. Space unfortunately, will never be the same without Simon and his vast well of knowledge and his willingness to help others... I had the incredible honor of working alongside Simon Lewis at Astroworkz. Before that, I was with Explore Scientific, but nothing compares to the passion and impact Simon brought to everything he did – *from Tyler Bryce*

Please accept my commiserations for the very sad news of Simon's passing. With warm regards and sympathy – *from John Simpson*

We are deeply saddened by this news and would like to extend our sincere condolences to his family and friends – *from Amir Bastani*

A tribute to Simon – by Tyler Bryce

From his humble observatory nestled beneath the breathtaking southern skies of Christchurch, Simon Lewis has poured his soul into capturing the universe's most awe-inspiring wonders. Night after night, his heart beats in tandem with the cosmos, driven by an indescribable passion that transcends mere science. It's a fiery devotion to uncovering the mysteries of the universe, sharing its breathtaking beauty, and to igniting the same awe that first ignited his own spirit.

When he's not immersed in the delicate art of astrophotography, Simon's mission extends far beyond his telescope. As President of the Canterbury Astronomical Society, he passionately dedicates himself to inspiring others, turning curious gazers into passionate explorers. His outreach events, stargazing nights, and heartfelt workshops are driven by a deep desire to open hearts and minds and to reveal the wonder and magic woven into the night sky. Through his enthusiasm, countless souls have been touched, lured into the eternal dance of curiosity and discovery, transforming wonder into a lifelong love.

Simon's influence reaches across borders, resonating with a global community. As a vital member of the ZWO Astronomy support team and a proud ambassador for both ZWO and Explore Scientific, he bridges the gap between cutting-edge technology and passionate minds. His insights and collaborations have helped craft tools that empower imagers worldwide, turning dreams into breathtaking reality. Testing gear, providing heartfelt feedback, Simon's contributions are a testament to his unwavering dedication to advancing astrophotography and fostering connection through shared wonder.

Through his words and writings, Simon's passion shines even brighter. His beginner guides, insightful articles, and contributions to esteemed publications are infused with genuine enthusiasm. His ability to meld technical mastery with poetic inspiration invites others to see, to feel, and to fall in love with the universe all over again. His voice encourages us to look beyond ourselves, to embrace the endless possibilities hidden among the stars.

In every online community he nurtures, moderating groups, mentoring newcomers, offering guidance Simon embodies a soul committed to unity and discovery. His presence is a beacon of kindness and encouragement, reminding us that the pursuit of knowledge is a shared journey woven with wonder, patience, and passion.

At the core of all Simon does is a simple, unwavering truth: his burning desire to help others experience the profound awe that initially drew him into the night sky. His journey is a luminous testament to the idea that astronomy isn't just about gazing upward, it's about opening our hearts to the universe's infinite beauty and inspiring others to find their own place among the stars.

CAS Monthly Meeting venues for 2026 at the University of Canterbury

– It’s a bit of a mix so do make sure you make a note of it and head to the right room!

Date	Location	Speaker
17/2/2026	Ernest Rutherford 225	Prof David Buckley, South African Astronomical Observatory (SAAO) and ex-CAS member
17/3/2026	Rehua 427 Technology Workshop	CAS AGM 2026
21/4/2026	Jack Erskine 111	CAS Quiz Night by Mandy Heslop & Dale Kershaw
19/5/2026	Jack Erskine 111	Tracking, imaging and restoration of LEO satellites by Steve Weddell
16/6/2026	Jack Erskine 111	To be advised
21/7/2026	Ernest Rutherford 225	To be advised
18/8/2026	Jack Erskine 111	To be advised
15/9/2026	Jack Erskine 111	To be advised
20/10/2026	Ernest Rutherford 225	To be advised
17/11/2026	Ernest Rutherford 225	To be advised

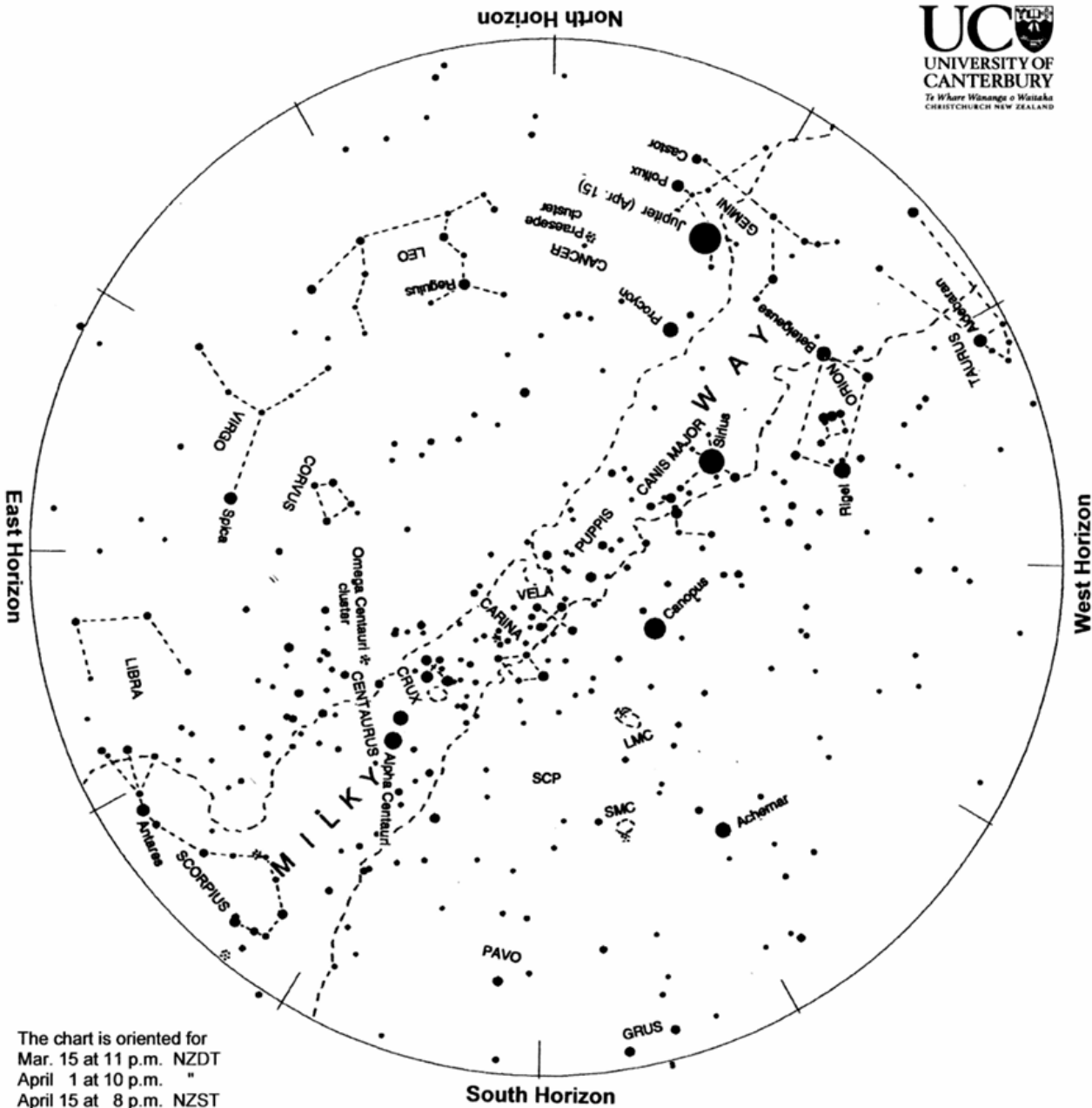
From CAS Membership - CAS Membership subscriptions are due 1st April 2026

Payment by either, bank deposit or eftpos at a meeting. If by bank deposit, please use your name and membership as a reference so it can be matched to your membership. (if you know your member number please use this). Also advise any of your contact detail changes for your membership (e.g.: address, phone number) to

membership@cas.org.nz

Online Banking Details (Please identify your payment): 03 0802 0098273 00

<input type="checkbox"/>	Adult (any person 18 years of age or over who is not eligible for any other category)	Full \$70
<input type="checkbox"/>	Family (two or more persons living at the same address)	\$105
<input type="checkbox"/>	Junior (under 18 years of age on 1st April in the current year)	\$35
<input type="checkbox"/>	Senior (over 65 Years)	\$35
<input type="checkbox"/>	Community Services Card Holder	\$35
<input type="checkbox"/>	Student (any person studying full-time at a tertiary institution, must reapply annually)	\$35
<input type="checkbox"/>	Corporate (members have voting rights of one member, but cannot take office)	\$210



The chart is oriented for
 Mar. 15 at 11 p.m. NZDT
 April 1 at 10 p.m. "
 April 15 at 8 p.m. NZST
 May 1 at 7 p.m. "

Evening sky in April 2026

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 or clockwise shift each night as we orbit the sun.

Jupiter is the 'evening star', setting around 11 p.m. mid-month. (Brilliant Venus sets in the northwest twilight so is not on the chart. Also, a comet might be seen above the sunset point in the first week of April.) Sirius, the brightest true star, is midway down the western sky. Below it is Orion with bright stars Rigel, blue tinted, and orange Betelgeuse. Canopus, the second brightest star, is southwest of overhead. Below Sirius, 'the dog star', is Procyon marking the smaller dog. Below and right of Jupiter are Pollux and Castor, the Gemini twins. Regulus in Leo is due north and Spica in Virgo is due east. Crux, the Southern Cross, and The Pointers, Alpha and Beta Centauri, are high in the southeast sky. The other bright planets are bunched in the dawn 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

The Evening Sky in April 2026

There might be a **bright comet** in the western twilight sky in the first week of April. Comets are unpredictable beasts, so we won't know for sure till it gets near the Sun. If it holds together then it will pass just 120,000 km from the Sun's surface on April 4. That's just one-third of the Moon's distance from Earth. The comet will be low in the western sky both approaching the Sun and receding from it. The head of the comet should be visible on April 1 and 2, setting 55 minutes and 40 minutes after the Sun respectively. It will then be above the place where the Sun set. From April 3 to 6 the comet's head will be too low in the twilight to be seen but the tail might be visible, if it survives. It will be above and right of the sunset point as it moves away from the Sun.

The comet is called C/2026 A1 (MAPS). The MAPS name comes from the first letters of the surnames of the four guys who found the comet in their search program. Comet MAPS is one of a family of comets called the Kreutz group. They are all in the same sun-grazing orbit, fragments of a big comet that broke up many centuries ago.

Brilliant silver **Venus** is low in the northwest. It sets 50 minutes after the Sun at the beginning of the month and 80 minutes after at the end, so isn't on the chart. The Moon will be near Venus on the 19th.

Golden **Jupiter** is the other 'evening star'. It appears low in the north soon after sunset and sets around 11 pm mid-month. The Moon will be near Jupiter on the 23rd.

Sirius, the brightest true star, appears midway down the northwest sky at dusk. It is soon followed by **Canopus**, southwest of the zenith. Below Sirius are bluish **Rigel** and orange **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.

Below and right of Jupiter are **Pollux** and **Castor** marking the heads of **Gemini** the twins. Further right is a luminous spot, the **Praesepe** star cluster. It marks the shell of **Cancer** the Crab. Praesepe is also called the Beehive cluster, the reason obvious when it is viewed in binoculars.

Right of Praesepe is the medium-bright star **Regulus**. It is the brightest star in **Leo** the Lion. The curve of stars below Regulus outlines Leo's mane, upside down in our southern hemisphere view. A crooked vertical line of stars right of Regulus makes Leo's hind quarters with the brighter star further right being his tail.

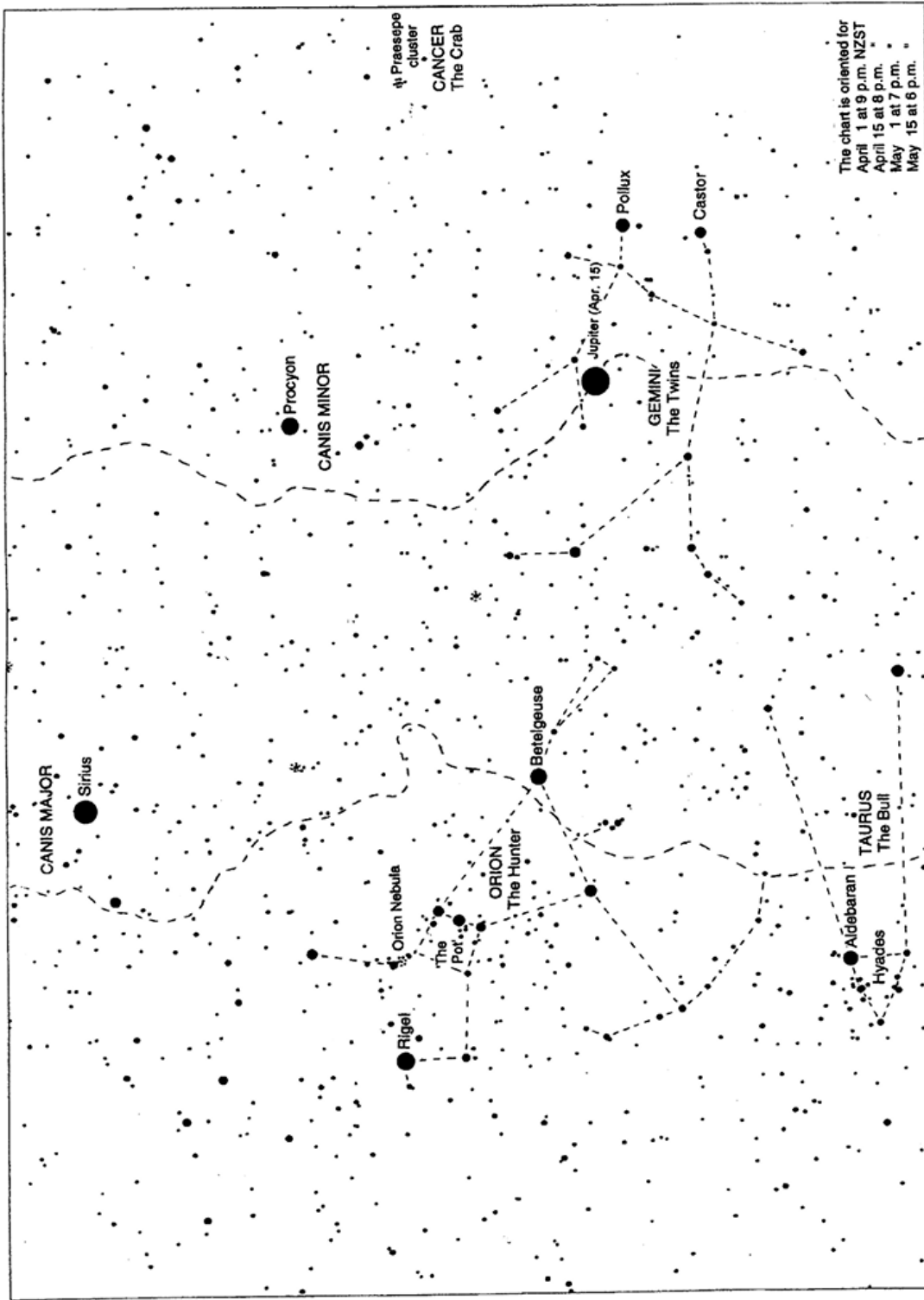
Crux, the Southern Cross, is high in the southeast. Below it, and brighter, are Beta and **Alpha Centauri**, often called 'The Pointers'. Alpha Centauri is the closest naked-eye star, 4.3 light-years away. Beta Centauri, like most of the stars in Crux, is a blue-giant star hundreds of l.y. away. **Canopus** is also a very luminous distant star; 13 000 times brighter than the sun and 300 l.y. away.

The **Milky Way** is brightest in the southeast above Crux. It can be traced to nearly overhead where it fades and becomes very faint in the northwest, right of Orion. The Milky Way is our edgewise view of the galaxy, the pancake of billions of stars of which the sun is just one.

The Clouds of Magellan, **LMC** and **SMC** are midway down the southwest sky, easily seen by eye on a dark moonless night. They are two small galaxies about 160 000 and 200 000 light years away.

Mercury, Mars and Saturn bunch together in the dawn sky. At the beginning of April Mercury is a bright 'star' rising due east two hours before the Sun. Mars is a fainter red 'star' below Mercury. Saturn is a cream-coloured 'star' below Mars. Mercury slips lower in the dawn while Mars and Saturn rise earlier. Around the 20th the three will form a tight group, rising around 5 a.m. The Moon will be near the three planets on the morning of the 16th. The grouping is strictly line-of-sight, of course. Mercury is 160 million km away, Mars 340 million km and Saturn 1560 million km away, mid-month.

*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 four years to reach the nearest star, Alpha Centauri.



North to Northwest Evening Sky in April 2026

The chart shows the northwest to north sky in the evening. Jupiter, the brightest 'star' in the evening sky (after Venus sets), is a beacon for the region before it sets around 11 p.m. The chart may need to be tilted to the left to match the sky, depending on the time.

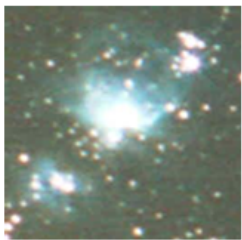
Chart produced by Guide 8 software; www.projectpluto.com. Labels and text added by Alan Gilmore, University of Canterbury's Mt John Observatory, P.O. Box 56, Lake Tekapo 7945, New Zealand. www.canterbury.ac.nz

Interesting Objects in the Northwest Evening Sky in April 2026

Jupiter, the early 'evening star', is a beacon for this region. It appears low in the north soon after sunset. At the beginning of the month it sets in the northwest around 12:30 NZDT. At the end of April it sets around 10 p.m. NZST. We are looking at Jupiter through a lot of air, so it is blurry in a telescope. Still, any telescope should show its four bright 'Galilean' moons lined up on each side. Not all four are seen every night as they pass in front of Jupiter and behind it and are eclipsed in the planet's shadow. Jupiter is 790 million km away mid-month.

High in the northwest is **Sirius**, the brightest true star, but fainter than Jupiter. Sirius appears bright because it is 23 times brighter than the sun in true brightness and because it is relatively close at 8.6 light-years (l.y)* away. Sirius often twinkles like a diamond when it is low in the sky, as the air breaks its white light into separate colours.

Below Sirius are bluish **Rigel** and orange **Betelgeuse**, the brightest stars in **Orion** the hunter or warrior. Orion is upside down in our southern hemisphere view. The line of three stars between Rigel and Betelgeuse makes Orion's Belt. The line of faint stars above and left of the belt form Orion's Sword hanging from his belt in the northern hemisphere view. To most southern hemisphere sky watchers the belt and sword form **The Pot** or The Saucepan, now tilted on its side.



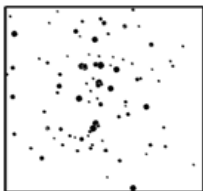
The **Orion Nebula** is visible in binoculars as a misty glow around the middle stars of Orion's Sword or the handle of The Pot. It is a vast cloud of dust and gas about 1300 l.y. away and more than 20 l.y. across. Ultra-violet light from a massive, extremely hot star in the cloud causes it to glow. Some stars in this region are less than a million years old and a few of the brightest may be much younger still. The sun, by contrast, is 4.6 billion years old. There are many bright and dark nebulae in this part of the sky. The Horsehead nebula, a favourite of astronomy books, is beside the top star of Orion's Belt, but too faint to be seen in small telescopes.

Sirius marks the head of Canis Major, the bigger of the two dogs following Orion the hunter down the sky. The dog's hindquarters are outlined by the stars above Sirius, off the top of the chart. Well to the right of Sirius, and lower, is **Procyon**, marking the head of the small dog, Canis Minor.

Below Orion, near the northwest skyline, is orange **Aldebaran** making one eye of Taurus the bull.

Below and right of Jupiter are **Pollux** and **Castor**, the heads of **Gemini** the twins. Though paired in myths, Castor and Pollux are not related at all. Castor is a hot white star like Sirius but 52 light-years away. Golden Pollux is bigger and brighter but cooler than Sirius and 34 light-years away.

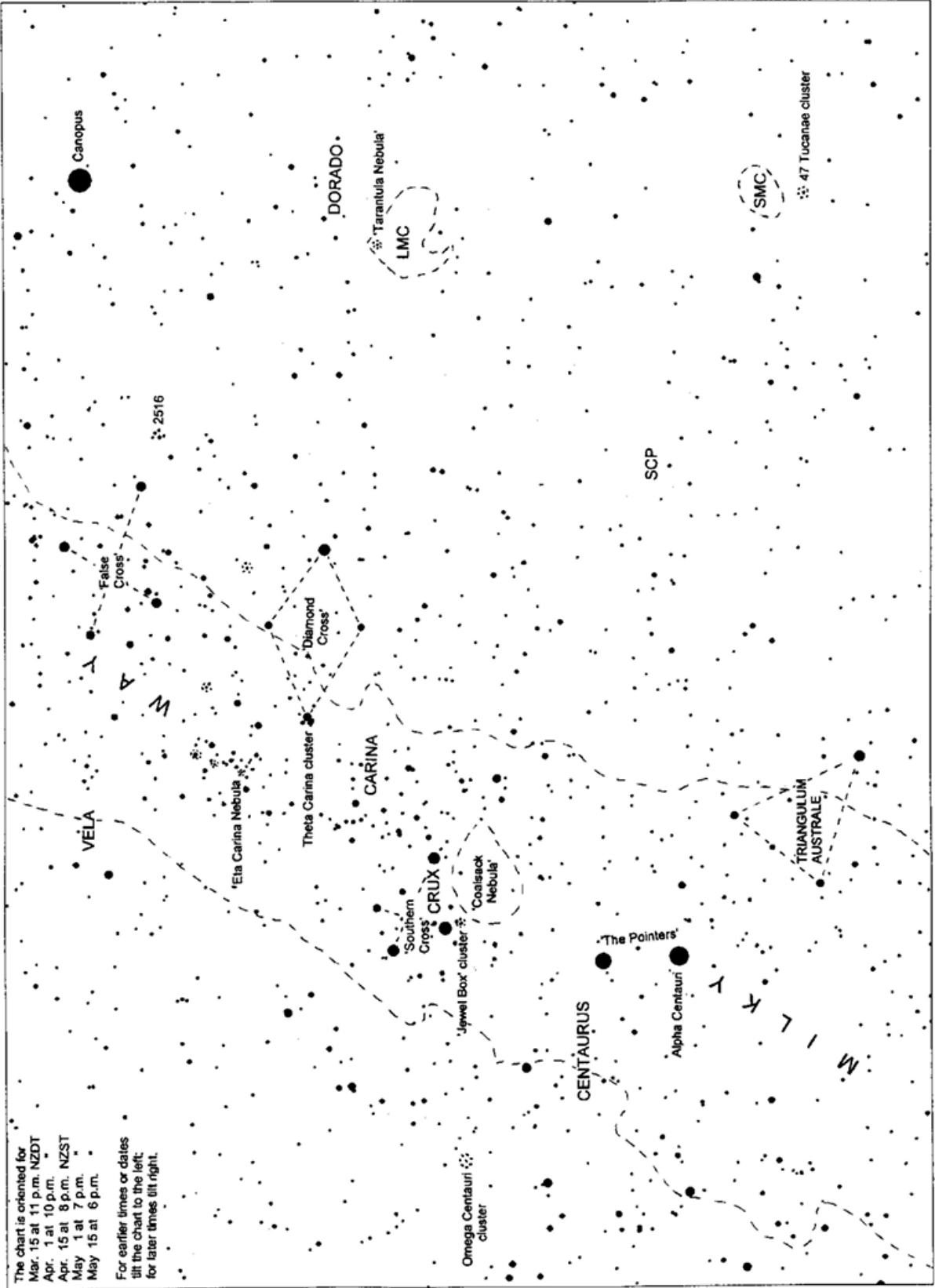
Above and to the right of Jupiter and the Twins is a luminous spot, the **Praesepe** star cluster, marking the shell of **Cancer** the Crab.



The Praesepe cluster is also called the Beehive. Binoculars show why. It is 620 million years old. Because it is old, its brightest stars long ago burned out. So its stars appear more similar in brightness than do the stars in the Pleiades/Matariki cluster (~100 million years old) or the Jewel Box (~16 million years old.) It is 580 light-years away.

The Milky Way is faint in this region as we are looking toward the nearby edge of the Galaxy's disk. Several star clusters visible in binoculars or small telescopes are marked with asterisks.

*A **light-year (l.y.)** is the distance light travels in one year: about 10 million million km (10^{13} km) or 6 million million miles. Light from the sun reaches us in 8 minutes. Light from the moon gets here in 1 second. Sunlight takes 4 hours to reach Neptune, the outermost significant planet, and 4 years to reach Alpha Centauri, the nearest star.



Southern Evening Sky in April-May

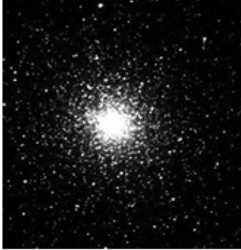
The chart shows the area midway up the southern sky. Interesting star clusters and nebulae are indicated with asterisks. They are described on the other side of this page.

Chart produced by Guide 8 software; www.projectpluto.com. Labels added by Alan Gilmore, Mt John Observatory of the University of Canterbury, P.O. Box 96, Lake Tekapo 7945, New Zealand. www.canterbury.ac.nz



Interesting Objects in the Autumn Southern Sky

Large & Small Clouds of Magellan (LMC & SMC) appear as two luminous patches below Canopus on autumn evenings, easily seen by eye in a dark sky. They are two galaxies like the Milky Way but much smaller. Each is made of billions of stars. The Large Cloud contains many clusters of young luminous stars seen as patches of light in binoculars and telescopes. The LMC is about 160 000 light years away and the SMC 200 000 l.y away, both very close by for galaxies. (1 light year is about 10 000 billion km.)



47 Tucanae, looks like a faint fuzzy star just below the SMC. It is a globular cluster, a ball of millions of stars. A telescope is needed to see a peppering of stars around the edge of the cluster. Though it appears near the SMC it is much closer, 15 000 light years away, and is has no connection to the Small Cloud. Globular clusters are mostly very old, 10 billion years or more; at least twice the age of the sun. **Omega Centauri**, above and left of the Pointers, is similar but larger than 47 Tucanae, around 17 000 light years away.



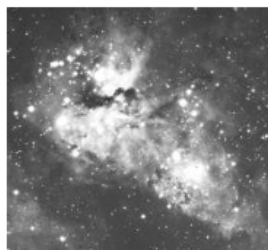
Tarantula nebula is a glowing gas cloud in the LMC. The gas glows in the ultra-violet light from a cluster of very hot stars at centre of the nebula. The cloud is about 800 light years across. It is easily seen in binoculars and can be seen by eye on moonless nights. This nebula is one of the brightest known. If it was as close as the Orion nebula (in The Pot's handle) then it would be as bright as the full moon. Both nebulae are places where vast clouds of dust and gas have recently condensed into clusters of stars.

Canopus is the second brightest star after Sirius. It is 14 000 times brighter than the sun and 313 light years away. The planets Venus and Jupiter, and sometimes Mars, are brighter.

Alpha Centauri, the brighter and lower Pointer, is the closest naked-eye star: 4.3 light-years away. Alpha Cen is a binary star: two stars about the same size as the sun orbiting around each other in 80 years. A telescope magnifying 50x will split the pair. (A very faint and slightly closer star, Proxima Centauri, orbits a quarter of a light-year, or 15 000 Sun-earth distances, from Alpha.)

Coalsack nebula is a cloud of dust and gas about 600 light years away, dimming the more distant stars in the Milky Way. Many similar 'dark nebulae' can be seen, appearing as slots and holes in the Milky Way. These clouds of dust and gas eventually coalesce into clusters of stars.

The Jewel Box is a compact cluster of young luminous stars 6400 light years away. The cluster formed about 14 million years ago. To the eye it looks like a faint star.



Eta Carinae nebula is a glowing gas cloud about 8000 light years away. The golden star in the cloud, visible in binoculars, is Eta Carinae. (Eta is the Greek 'e'.) It is estimated to be to be 60 times heavier than the sun and a million times brighter but is dimmed by dust clouds around it. It is expected to explode as a supernova any time in the next few thousand years. Many star clusters are found in this part of the sky.

The **Theta Carinae cluster** of stars is at one point of the 'Diamond Cross'. It is also called the 'Five of Diamonds' cluster, the reason obvious when viewed in a telescope. The cluster is 550 light years away and is around 14 million years old.

NGC 2516 is right of the False Cross. To the eye it looks like a faint comet. It is a nice sight in binoculars. The cluster is about 1300 light years away.

Members Interest Section

This section is for members who have as an interest under the umbrella of Astronomy. Your interests could be around Meteors / Comets / Photometry / Solar observing / Photography / Telescope building / Spectroscopy / Aurora's / Occultation's / Variable Stars / Satellite tracking / Lunar observations/ Jupiter impact monitoring / Radio Astronomy / Eclipses. You are welcome to share your thoughts and see who other like minded people would like to join you. You can form your own interest section. Below are a few members who have started their own interests sections. You can also use the CAS forum to discuss other ideas to check out who else would be interested in starting a new members interest section.

- **Tune into Jupiter or the Sun with Radio Astronomy**

Radio astronomy can be done during the day and even cloudy nights. Terry has built a receiver and with his computer can log activity of the Sun and Jupiter.

For more information contact Terry Richardson, email: president@cas.org.nz Cell: 021 776 458

- **Bounce Signals off the Moon**

Beam a signal at the Moon or at a lunar orbiting satellite

For more information email: president@cas.org.nz

- **Spectroscopy**

CAS has recently purchased a diffraction grating which can be attached to a telescope eyepiece or camera on the telescope. The grating, like a prism, spreads the light from starlight into component colours (distribution of wavelengths). Thus begins the engaging look into the not so private lives of stars, nebulas and galaxies.

For more information contact Ray Pointon, email: rpointon@cyberxpress.co.nz

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 at the very least but if there are sufficient articles of interest submitted, CASMag can be published monthly. CASMag will contain information on CAS activities, articles contributed by CAS members or others with interest in astronomy which members may find interesting, monthly star charts. Members new and experienced, young and mature are invited to send in your contributions and these 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, astronomy or astronomy related images etc. Send your contributions to Editor@cas.org.nz by the 3rd week of the month at the latest.

Application for Membership

If you wish to apply for CAS membership, then please head on over to our website <https://cas.org.nz/register> to register and apply for membership.

Contacts information:

For Public Group Bookings - bookings@cas.org.nz

CAS COMMITTEE AND OFFICERS 2026/2027

President:	Terry Richardson	president@cas.org.nz
Vice President:	Rob Glassey	vice.president@cas.org.nz
Treasurer:	<i>Currently vacant</i>	treasurer@cas.org.nz
Secretary:	Mandy Heslop	secretary@cas.org.nz
Observatory Director:	Jason Kruger	observatory.director@cas.org.nz
Editor:	Preetha Sreedharan	editor@cas.org.nz
Membership Secretary:	Dale Kershaw	membership@cas.org.nz
Librarian:	Ray Pointon	librarian@cas.org.nz
Digital Services Officer :	Orlon Petterson	casweb@cas.org.nz
Committee Members:	Gary Steel	TBC
	Marc Bunyan	TBC

You can also see the contact information page on www.cas.org.nz

CAS Mailing address:

*Canterbury Astronomical Society Inc.
218 Bells Rd, West Melton 7671*

Web: www.cas.org.nz

Canterbury Astronomical Society Facebook Group: www.facebook.com/groups/CanterburyAstronomicalSociety