



# CASMAG

The official magazine of the Canterbury Astronomical Society

[www.cas.org.nz](http://www.cas.org.nz) [www.facebook.com/CanterburyAstronomicalSociety](https://www.facebook.com/CanterburyAstronomicalSociety)

## CAS Monthly Meetings:

Our 3rd Tuesday of the month Members meetings started in February and will continue each 3rd Tuesday until November

**Room ER 225 in the Ernest Rutherford Building, University of Canterbury**

**New Astronomers Meeting:** with Orlon Petterson 6.30pm-7.30pm

**Refreshments:** 7.30-8pm:

**Main Meeting:** 8pm Start:

## MARCH MEMBERS MEETING:

Tuesday 18th March 2025

### **AGM**

## ANNUAL GENERAL MEETING

Come along to hear what your society has been doing this last year and vote in your new committee:

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## 2025 ANNUAL SUBSCRIPTIONS/MEMBERSHIP

Payment for the **2025 Year is due on 1st April 2025**

This can be paid via internet banking, eftpos/cash in person, Please use your name & member number in your reference when making payment, So we can match your payment to your membership

***PLEASE advise any changes to your details:***

***Address, Phone Number, email,***

Please email any changes or if you have questions to Dale via [membership@cas.org.nz](mailto:membership@cas.org.nz)

If your details are not updated we will be unable to contact you, keeping you updated with happens/meetings etc

Membership Fees and Banking payment details are included on the back page of every CASMAG

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This is your Casmag, for YOU our members,  
So I welcome any ideas or articles you would like to share  
with the other members.  
Please email your Article or favourite photo with details so I  
can include it in future issues.  
Deadline for each issue is 1st of each month  
Remember you can have your advert added in the future  
casmag's,  
Any questions, Ideas or suggestions please email to  
[editor@cas.org.nz](mailto:editor@cas.org.nz)

## CAS Calendar MARCH 2025—MAY 2025



### MARCH 2025

Friday 7th                    First Quarter  
 Tuesday 11th              Committee Meeting  
 Friday 14th                Full Moon **LUNAR ECLIPSE**  
 Tuesday 18th              CAstronauts @ University 6.30-7.30pm  
                                   **CAS AGM Meeting**  
 Saturday 22nd             Members Night @ Observatory (Earth Hour)  
 Sunday 23rd                Last Quarter  
 Saturday 29th              New Moon

### APRIL 2025

Saturday 5th                First Quarter  
 Sunday 6th                3am Daylight saving clocks change  
 Tuesday 8th                Committee Meeting  
 Friday 11th                Public Open Night season starts  
 Sunday 13th                Full Moon  
 Tuesday 15th              CAstronauts @ University 6.30-7.30pm  
                                   Members Meeting @ University from 7.30pm  
 Friday 18th                Good Friday Holiday  
 Saturday 19th             Members Night @ Observatory  
 Sunday 20th                Easter Sunday  
 Monday 21st                Easter Monday  
                                   Last Quarter  
 Friday 25th                ANZAC Day  
 Monday 28th                New Moon

### MAY 2025

Monday 5th                First Quarter  
 Sunday 11th                Mothers Day  
 Tuesday 13th              Committee Meeting  
                                   Full Moon  
 Monday 19th              BHT Lecture Talk  
 Tuesday 20th              CAstronauts @ University 6.30-7.30pm  
                                   Members Meeting @ University from 7.30pm  
                                   Last Quarter  
 Saturday 24th             Members Night @ Observatory  
 Tuesday 27th              New Moon

## CAS Mailing Address Change

The committee has decided to close the PO BOX and have installed a Mail box at the Observatory,  
 The Mailing address is now  
 Canterbury Astronomical Society  
 218 Bells Road  
 West Melton  
 7671

## 2025 Open Night Season

Our 2025 Open night season starts at the beginning of Daylight Savings in April (Clocks Change 3am 6th April)

Its that's time again! Doesn't it come round quick!!!

This years open night programme kicks off on **Friday 11th April.**

These nights are run as part of our Public Outreach.

This is our main income towards running our society and of course the observatory. These events also bring in our new members.

Full training is available for those who come along to help.

This can also work towards your accreditation

For the newcomers to the society, we run open nights every Friday night to the general public and some Tues/Weds nights for private groups.

Of course in June/July we have Kidsfest ... 28th June -13th July ..

but that's 15 nights of fun!

### Why are these so important to CAS?

They give CAS an opportunity to engage with our local communities and build strong relationships with them and key stake holders like Selwyn Council.

Provide a perfect opportunity to educate our visitors on the night sky and the hobby of astronomy

They are a great source of new members !

Your volunteering helps assist in supporting the society financially.

### So how can you help?

We need volunteers for our open nights to help run the evenings.

It takes about 6-7 people a night to run these, from helping people check in, our welcome brief, laser tour of the night sky and then running our scopes.

We normally assemble at CAS around 6.30pm and run till about 9-9.30 depending on bookings.

The more volunteers we get the less burden it places on others and helps spread the load but I can say its VERY rewarding and highly engaging activity, the kids love it and its amazing to see and hear them so excited about their time at CAS.

If you would like to help you can approach any of the committee

We have a volunteer booking system we use so you can choose a night to volunteer for and the system will also send you reminder emails too!

**Check it out at <https://cas.ivolunteer.com/>**

**There is 3 heading to chose from**

**1/ for FCAS open Nights 2025 (Fridays)**

**2/ for Private Group Nights 2025**

## MONTHLY MEETINGS:

### Meeting Venue:

**Room ER 225 in the Ernest Rutherford Building, University of Canterbury, Entrance to the building will be via the north side entrance, Then using the lift or stairs up to level 2**

***If you have any suggestions for speakers or would like to give a talk at our members meeting***

PLEASE CONTACT MANDY WITH YOUR SUGGESTIONS OR IF YOU CAN GIVE A TALK via [secretary@cas.org.nz](mailto:secretary@cas.org.nz)

### Upcoming Members Meeting Dates:

**18th March : CAS AGM**

**15th April: Quin Davies. (UC Student)**

**20th May: Heather Sinclair-Wentworth (UC Student)**

**17th June: Ethan Bull (UC Student)**

**(correct as at 1st March 2025, Subject to change as required)**

Many thanks go to Sharlene Wilson and Orlon Petterson from the School of Physical and Chemical Sciences, University of Canterbury for arranging the meeting room for CAS this year.

Also Thanks to Associate Professor Karen Pollard for organising the Lecture theatres for our public talks

## OBSERVATORY IMPORTANT INFORMATION

### DOOR CODE & ALARM AT THE OBSERVATORY

The Door code and Alarm code was changed last year with the new lock being installed available to members, Ask a committee member for the passwords.

### INTERNET WI-FI:

Ask a committee member for the password

### LASER POINTERS:

*There is a legal requirement when importing them, and information is on our website and at the observatory, CAS has a drafted a set of guidelines which we were presented at our AGM and were voted and added to our By-Laws,*

*If you need a letter confirming your membership for your application, please contact either membership secretary or secretary,*

*(This letter will state you are a current financial member of our society)*

### ACCREDITATION

A reminder that unless you have full accreditation on the equipment you are not to use the equipment unless there is an accredited person with you.

Full training is available, Please ask our Observatory Director how you can get your Accreditation. There is a full list of accredited person's on the wall above the kitchen sink inside the lodge. contact Brent (our Observatory directory via his email listed on our website or the inside back page of this casmag

## WELCOME TO OUR NEW MEMBERS:

A warm welcome to our new members, We look forward to meeting you at our meetings and/or events, Please make yourselves known to others. We like to welcome our new members here after the membership is accepted by the committee at the meeting following memberships are received.

Welcome to these New Members we accepted recently:

*Zelda, Haydon, Brooke & Caleb Yates (Family)*  
*Agnieszka Dabrowska (Adult)*  
*Sasha, Ethan & Chase Washbourne (Family)*  
*Michael Parry (Senior)*  
*Clayton Curnow (Adult)*  
*Harrison Cooler (Student)*



*Welcome to all our New Members, I hope you enjoy reading CSMAG and remember to keep an eye on the website for any updates*

It is always great to see our new members coming along to our Members Meetings, Members Nights and Events.

*Apologies from the editor for any spelling mistakes in the names*

## ASTRONZ

For all of our members "ASTRONZ" offers

### *Friends of Astronz Referral Scheme*

#### **How it Works**

- When someone purchases an item from ASTRONZ, they can use a unique referral code linked to your society or business.
- Your society or business receives 5% of the purchase amount (subject to terms and conditions) as a token of our support.
- Referral rewards are accumulated and distributed quarterly.

### **How to Participate**

The ways to engage with our referral scheme:

**Unique Referral Code:** Members can use your society's specific code during checkout.

**This means that CAS receives a donation from ASTRONZ** when you make your purchases. You need to use this code when ordering for CAS to benefit from the scheme

Code: 'AS-CAS'

We welcome *Andrew Buckingham* back to ASTRONZ, Andrew has a huge knowledge base and is very happy to answer your questions





## CAS MERCHANDISE

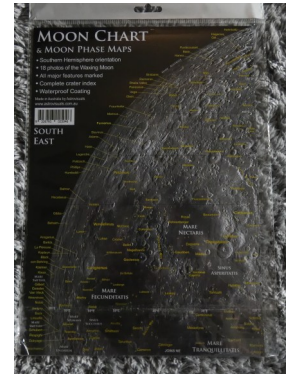
# *EFTPOS now available for payments*

### 2025 CAS COSMIC CALENDARS:

All the images are from our own members,  
~~\$18.00~~—\$12.00 plus postage or Pickup available  
 Contact [calendar@cas.org.nz](mailto:calendar@cas.org.nz) to order you copy

### NEW STYLE OF CAS PENS NOW AVAILABLE IN 2 STYLES \$3.00

*These are all black ink and with a variety of arrel colours*



STAINLESS DRINK BOTTLES: \$10/00 ~~\$15.00~~  
 with flip top 750ml

### MOON CHART

8 sheets showing Moon phase maps,  
 with waterproof coating. \$15.00

### DOUBLE -SIDED PLANISPHERE FOR SOUTHERN HEMISPHERE \$20.00



SUN-DISK KIT, \$25.00  
 Make a sundial at home

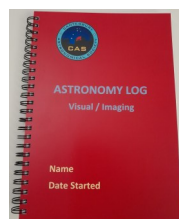


**EFTPOS  
 Available**

We have a wide selection of other merchandise items available, including:

Earrings, Necklaces, Bracelets, Keyrings, Red light torches,  
 Space Plasters, CAS Log Books, NASA Beanies, 3D Printed Lamps, Plant pots

To view /purchase  
 contact Dale  
[editor@cas.org.nz](mailto:editor@cas.org.nz) or  
 0272426376



## Members Interest Section

This section is dedicated to members on what **you** have as an interest under the umbrella of Astronomy.

Do you like: 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 ? **Or**

Do you have other interests that you would like to share and see who else would enjoy knowing some more? Form your own interest section. Here's a couple of ideas that if you would like to know more about You can also use the CAS forum to discuss other ideas to check out who else would be interested.



### 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.

Terry Richardson

[member1@cas.org.nz](mailto:member1@cas.org.nz)

Cell: 021 776 458

### Bounce Signals off the Moon

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

Simon Lewis

[Vice.president@cas.org.nz](mailto:Vice.president@cas.org.nz)

Cell: 022 640 6649

### 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.

Ray Pointon

[rpointon@cyberxpress.co.nz](mailto:rpointon@cyberxpress.co.nz)




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## QUOTES FOR THE MONTH

“Astronomy compels the soul to look upwards and leads us from this world to another”.

*Plato*

“The history of astronomy is a history of receding horizons.”

*Edwin Powell Hubble*

“My amateur interest in astronomy brought out the term magnitude', which is used for the brightness of a star.

*Charles Francis Richter*

The thing I like about astronomy is being outside at night and seeing the stars in a dark sky. It makes you feel small.

*Jimmy Walker*

*Quotes sourced from the world wide webb.*



## OBSERVATORY NEWS IMPORTANT INFORMATION

### New Security System in Lodge

The new security system in the Lodge is up and running well. This takes the form of an intrusion sensor outside, and a Wifi cam inside the lodge in the back corner at the car park end. The intention is to add another camera outside the lodge overlooking the car park area. The advantage of these is that they will trigger on intrusion alert and can be viewed remotely in real time or reviewed within 2 weeks. These are not for the purpose of watching people, but rather to check that entry to the lodge is by legitimate members. Given the assets we have on site, this is necessary for any insurance claims.

Access to these cameras is limited to Webmaster, Vice President and Observatory director only. We already have a surveillance network installed (several years ago) which records to a hard drive but cannot be remotely viewed in real time.

If anybody needs to know more please feel free to email me [observatory.director@cas.org.nz](mailto:observatory.director@cas.org.nz)

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### SECURITY FOR OBSERVATORY KEYS- Accredited Members

Committee have decided that we need improved security for access to the observatory equipment. From now all keys are stored in a lock box in the library.

Any accredited member will be given the combination (just ask me).

This includes the key to the equipment room and for the dobs.

Although the dobs do not require formal accreditation, they are precision instruments that can be damaged if not used correctly.

A member accredited on any of the scopes can open these for you.

Members still have free access to the lodge and its facilities, but any other access will require an accredited person to be present.

Any accredited member can get access to the keys,

but of course can only use (or supervise) the instrument they are accredited for.

This sounds a bit restrictive, but has become necessary due to recent misuse and possible damage to some instruments.

Any questions please email me [observatory.director@cas.org.nz](mailto:observatory.director@cas.org.nz)  
*Brent Schroeder*



We would like to thank the following  
sponsors for their generous donations  
to our 2024 Fund Raiser

<https://www.zwoastro.com/>



<https://explorescientificusa.com/>

The logo for Explore Scientific features the word 'EXPLORE' in a bold, black, sans-serif font. The letter 'O' is replaced by a yellow circular icon with a black spiral inside. Below 'EXPLORE' is the word 'SCIENTIFIC' in a smaller, black, sans-serif font.

<https://www.photowarehouse.co.nz/>



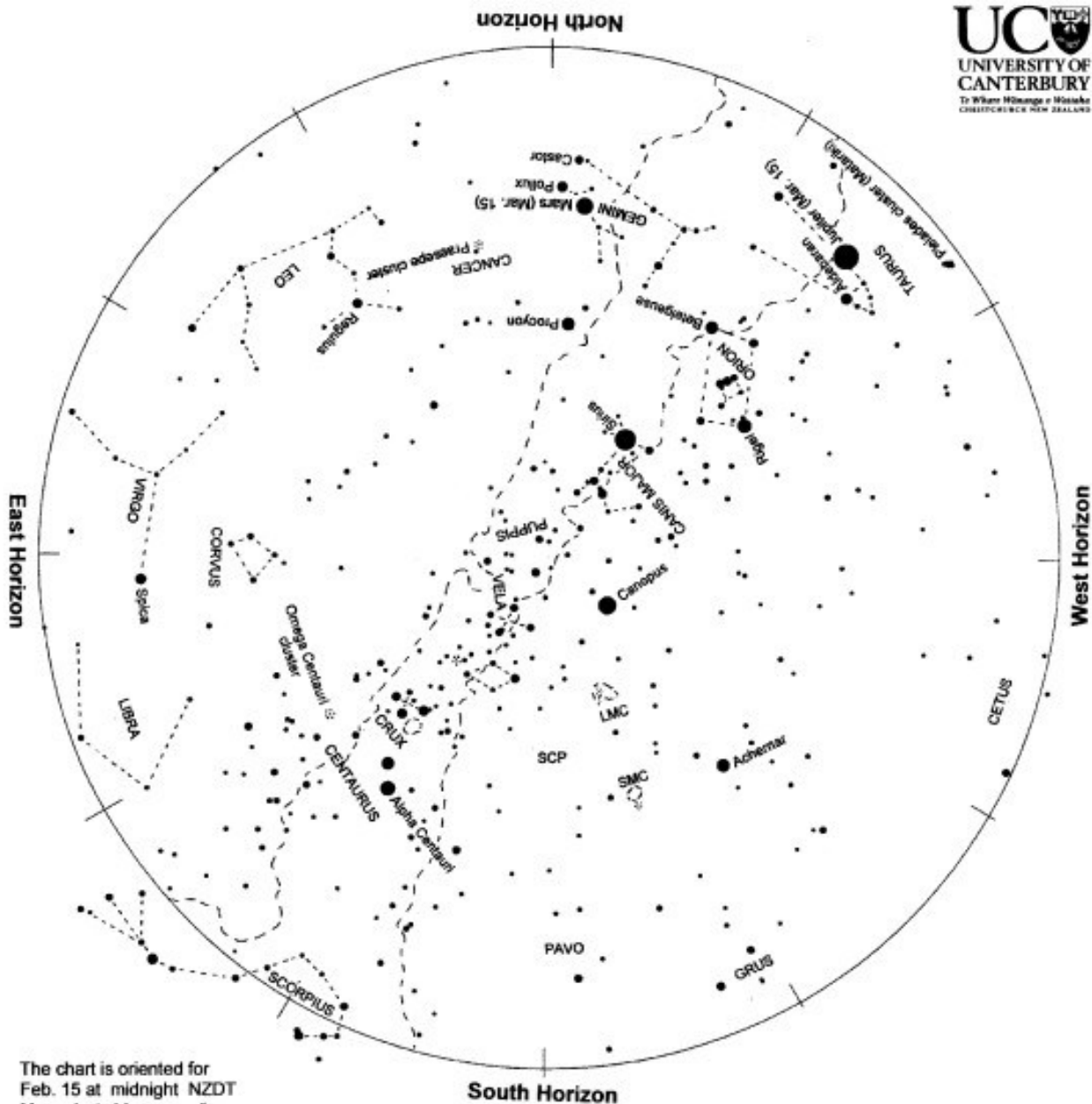
<https://astronz.nz/>



Astronz  
Order code  
'AS-CAS'

*Remember to mention you are a CAS Member when ordering*

# The Evening Sky Map for March 2025



The chart is oriented for  
 Feb. 15 at midnight NZDT  
 Mar. 1 at 11 p.m. "  
 Mar. 15 at 10 p.m. "  
 April 1 at 9 p.m. "

## Evening sky in March 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.

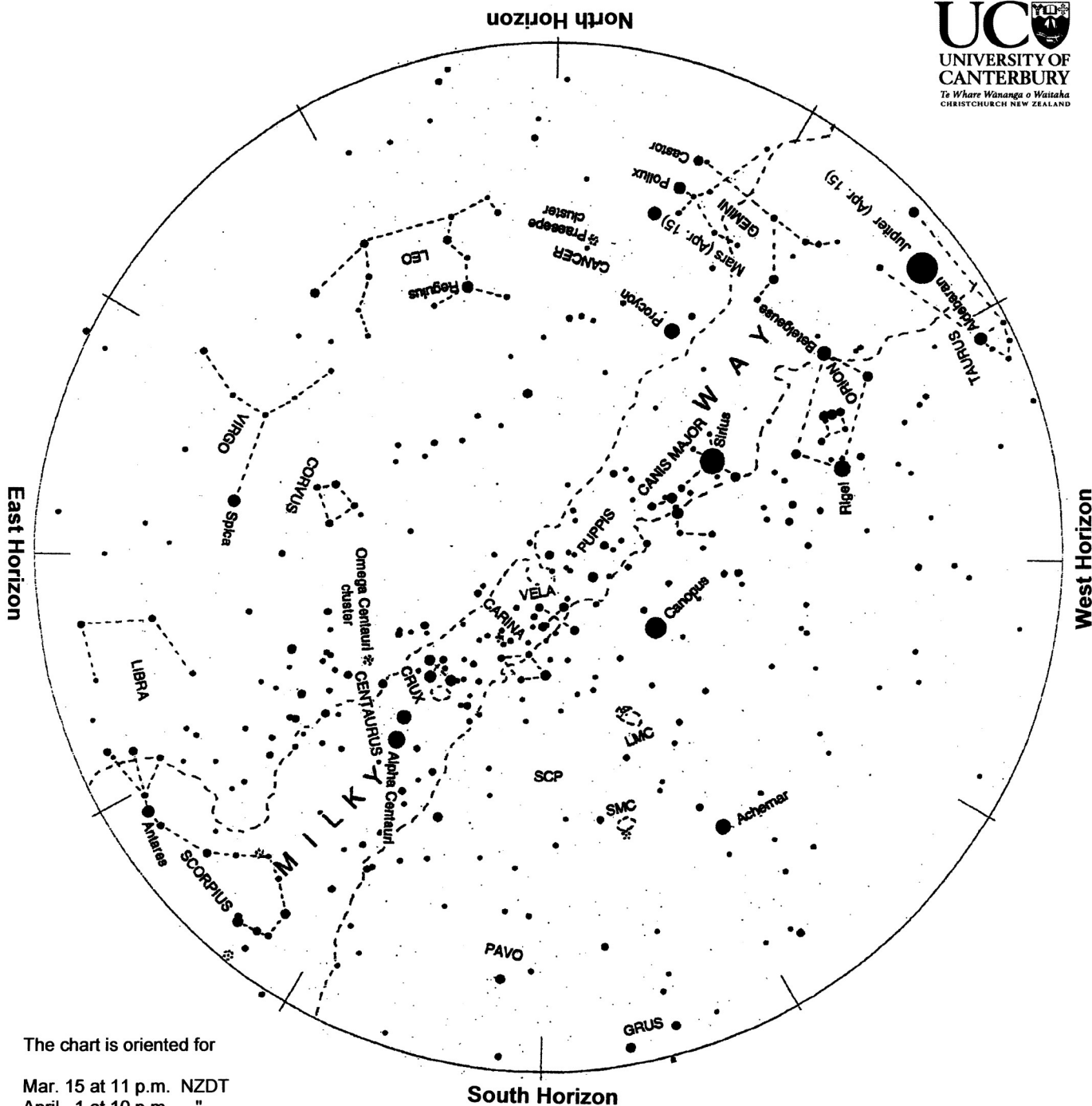
Jupiter is the 'evening star', appearing in northwest soon after sunset. Sirius, the brightest true star, appears northwest of the zenith in early twilight. Orion, containing 'The Pot', is below Sirius in the northwest sky. Canopus, the second brightest star, is southwest of overhead. The Southern Cross, Crux, and the Pointers are midway up the southeast sky. Nearby galaxies the Clouds of Magellan, LMC and SMC, are high in the south looking like misty patches in a dark sky. The full Moon rises totally eclipsed on the 14<sup>th</sup>.

## The Evening Sky in March 2025

The Evening Sky in March 2025 Jupiter is the 'evening star', appearing in the northwest at early twilight. It sets after midnight at the beginning of the month and before 11 pm at the end. The Moon will be near Jupiter on the 6th. Orange Mars is due north at dusk, low in the sky. It is fading as we leave it behind. The Moon will be near Mars on the 8th and 9th. At the beginning of the month brilliant Venus (not on the chart) sets due west half an hour after the Sun. The very thin crescent Moon will be above Venus on the 2nd. Venus sinks into the twilight before passing between us and the Sun on the 23rd. Northwest of overhead is Sirius. It is the brightest true star in the sky. Southwest of the zenith is Canopus, the second brightest star. Below and left of 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 stars makes the bottom of 'The Pot'. Above and left of Jupiter is orange Aldebaran. It is at one tip of an upside-down V. The V is the face of Taurus the bull with Aldebaran being one of his eyes. Well left of Jupiter, and lower, is the Pleiades or Matariki star cluster. It sets after 10 pm, mid-month. The cluster is about 440 light-years\* away. Sirius is the brightest star both because it is relatively close, nine light-years away, and 23 times brighter than the sun. Rigel is a bluish supergiant star, 40 000 times brighter than the sun and much hotter. It is 800 light-years away. Orange Betelgeuse is a red-giant star, cooler than the sun but much bigger and 9000 times brighter. Betelgeuse is 400 light-years from us. The handle of "The Pot", or Orion's sword, has the Orion Nebula at its centre; a glowing gas cloud many light-years across and 1300 light years away. It is a place where dust and gas in space are gathering together to make new stars. Some of the stars are much bigger and hotter than the Sun. Ultra-violet light from them causes the left-over gas to glow, lighting up the nebula. It is easily seen in binoculars. Below and right of Mars are Pollux and Castor marking the heads of Gemini the twins. Though paired in mythology, the two stars 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 right of them is the Praesepe star cluster, marking the shell of Cancer the crab. Praesepe is also called the Beehive cluster, the reason obvious when it is viewed in binoculars. It is some 500 light-years from us. Crux, the Southern Cross, is in the southeast. Below it 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 light-years away. Canopus is also a very luminous distant star; 13 000 times brighter than the sun and 300 light-years away. The Milky Way is brightest in the southeast toward Crux. It becomes broader lower in the southeast toward Scorpius. Above Crux the Milky Way can be traced to nearly overhead where it fades. It becomes very faint in the north, right of Orion where we are looking toward the Galaxy's nearby edge. The centre of the Galaxy is in the broad part of the Milky Way below Scorpius in the southeast. The Clouds of Magellan, LMC and SMC are high in the south sky. They are easily seen by eye on a dark moonless night, looking like misty patches. They are two small galaxies about 160 000 and 200 000 light years away. The Large Cloud is around a quarter the mass of the Milky Way. The full Moon will rise totally eclipsed on the 14th. Being exactly opposite the Sun, the Moon rises at sunset. It starts to exit the dark inner part of Earth's shadow, the umbra, at 8:31 and is fully out by 9:48. It will still look a little odd till it leaves the fuzzy edge of the shadow, the penumbra, at 11:00. It has become fashionable to call the totally eclipsed Moon a 'blood Moon', but its colour can be anything from orange brown like a dried apricot to deep bronze. It all depends on how much cloud there is around the rim of the Earth as seen from the Moon. A light-year (l.y.) is the distance that light travels in one year: nearly 10 million million km or  $10^{13}$  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. Notes by Alan Gilmore, University of Canterbury's Mt John Observatory, P.O. Box 56, Lake Tekapo 7945, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz)



# The Evening Sky Map for April 2025



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 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 or clockwise shift each night as we orbit the sun.

Jupiter is the 'evening star', setting before 9 p.m. mid-month. Mars is the only other planet in the evening sky, looking like an orange-red star of medium brightness, low in the north. 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 it is Mars with Pollux and Castor, the Gemini twins, below Mars. 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. Bright planets are in the dawn sky.



## The Evening Sky in April 2025

Jupiter is the 'evening star', appearing low in the northwest soon after sunset and setting around 9 pm NZST mid-month. The Moon will be to the right of Jupiter on the 3<sup>rd</sup>. Mars is low in the north at dusk, looking like a medium bright orange star. The Moon will be near Mars on the 5<sup>th</sup> and 6<sup>th</sup>. 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 Sirius is Procyon marking the head of Canis Minor one of the two dogs following Orion the hunter across the sky. Sirius marks the head of Canis Major, the big dog. The big dog hindquarters are made by the bright stars above Sirius.

At the beginning of the month Mars is just above Pollux, the brighter of the two stars making the heads of Gemini the twins. Below Pollux is Castor, the other twin. Though related in myth, the Twins are quite different from each other. Pollux is an orange star 31 times brighter than the sun and 34 light-years (l.y)\* from us. Castor is a hot white star about 47 times the sun's brightness and 51 l.y. away.

Through the month Mars moves left and upward. Around the 10<sup>th</sup> it is in line with the twins. By the end of the month it is close to the Praesepe star cluster. Praesepe looks like a hazy spot to the eye. It marks the shell of Cancer the Crab. Praesepe is also called the Beehive cluster, the reason obvious when it is viewed in binoculars. It is 600 light-years away. It is around 600 million years old so its biggest and brightest stars have long ago burnt out. 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.

The lone bright star due east is Spica, the brightest star in Virgo. Spica marks the ear of wheat that the Roman goddess Ceres is holding. From her we get the word cereals for grain crops. Above Spica is the roughly kite-shaped constellation of Corvus the Crow. Some navigators called it Spica spanker (spinnaker) the sail that towed Spica across the sky. Corvus was a handy cross-check that they were sighting on the right star.

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. Bright planets are in the eastern pre-dawn sky.

At the beginning of the month Venus rises due east an hour before the Sun. It moves quickly up the sky morning to morning. By mid-month it will be rising 2½ hours before the Sun, a brilliant object in the dark sky. Then Saturn will be to the right of Venus and Mercury will be below Saturn.

The Moon will be above Venus on the morning of the 25<sup>th</sup> and beside Mercury on the 26<sup>th</sup>.

\*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.

Notes by Alan Gilmore, University of Canterbury's

Mt John Observatory, P.O. Box 56, Lake Tekapo 7945, New Zealand. [www.canterbury.ac.nz](http://www.canterbury.ac.nz) 250301

## CAS COMMITTEE AND OFFICERS 2022/2023

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For more specialized information please see the contact information page on [www.cas.org.nz](http://www.cas.org.nz)

### CAS Contact Information

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Web: [www.cas.org.nz](http://www.cas.org.nz)

Canterbury Astronomical Society Facebook Group:

[www.facebook.com/groups/CanterburyAstronomicalSociety](https://www.facebook.com/groups/CanterburyAstronomicalSociety)

**West Melton Observatory:** 43° 29' 55.5" S, 172° 20' 59.0" E 218 Bells Road, West Melton

### CAS Members Meetings:

The *CAS monthly members* meetings are currently held from 7.30pm onwards every third Tuesday of the month (except December and January) at the University of Canterbury,

Room ER225 Ernest Rutherford Building (2nd floor)

*CAstronauts Meeting's* are 6.30-7.30, in the same venue on the same night (3rd Tuesday of the month)

Any member of the public who is considering in joining the society are most welcome to attend the meetings.

Members Nights at the Observatory are detailed on our website

### Observatory Members Nights:

Cas holds these nights as follows

**Members Nights (General)** on the 3rd Saturday of the month after the Tuesday Members meeting at UC, (be aware some months it is the 4th Saturday, depending on the start of the month) check the website for details

### CAS on Facebook:

Cas has a Facebook presence, Useful to keep up to date with events, interesting articles, asking for advice, For members please use the website forums for more detailed information etc

### CAS Membership:

Subscriptions are due 1<sup>st</sup> April each year

Fees for current members shown on the membership form included on the back page of your Casmag,

Full details are included on our website.

### Contributions to CASMAG:

Member contributions to CASMAG are always most welcome (letters, observing notes, articles, news)

Please submit articles by email to [editor@cas.org.nz](mailto:editor@cas.org.nz)

The deadline for each issue is the 1<sup>st</sup> of each month

Small personal advertisements are free to financial members, (less than 8 lines in a column)

Charges for larger items range from \$5 to \$40, email the editor for more details.

### The Constitution of The Canterbury Astronomical Society Inc:

This is available on request, Please ask for a copy if required

### DISCLAIMER:

This newsletter is for general information purposes only. The views expressed herein are not necessarily those of the Canterbury Astronomical Society Inc (CAS)

CAS has taken all reasonable measures to ensure that the material contained herein is correct, but gives no warranty for, and accepts no responsibility for its accuracy or completeness.

Readers are advised not to rely solely on this information, and should seek independent advice before making any decision, CAS reserves the right to make changes at any time, as deemed necessary.

Canterbury Astronomical Society Inc

**APPLICATION FOR MEMBERSHIP**

To: Membership Secretary  
 Canterbury Astronomical Society Inc.  
 218 Bells Road  
 West Melton 7671  
 membership@cas.org.nz



Applicants Name in Full \_\_\_\_\_

Address: (Note a P.O.Box is NOT a legal address) \_\_\_\_\_

Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Email: \_\_\_\_\_ Date of Birth: (if under 18) \_\_\_\_\_

**Membership Category (tick, subscripton must accompany application)****Online Banking Details (Please identify your payment):** 03 0802 0098273 00

	Full
<input type="checkbox"/> Adult (any person 18years of age or over who is not eligile for anyother category)	\$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 instintion, must reapply annually)	\$35
<input type="checkbox"/> Corporate (members have voting rights of one member, but cannot take office)	\$210

Name:	Date of Birth(if Under 18yrs)	Signature

All CAS members receive CASMAG a monthly newsletter,

Do you have access to a telescope? What type and size? \_\_\_\_\_

I the undersigned declare that the information given herein is true.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

By signing this application the applicant agrees to comply with the Constitution and By-Laws of the Canterbury Astronomical Society Inc.

Date Approved: \_\_\_\_\_

*Please send a copy of this form to  
 membership@cas.org.nz*