Canterbury Astronomical Society

CASMag

Upcoming Notable events for your calendar:

Nov 17th – CAS Monthly Meeting – Last members meeting for 2026 @ Ernest Rutherford Rm 225 @7:30pm

****New Astronomers session 630 – 730 pm run by Orlon Petterson**

****Meeting Speaker: Talk on Maori Astronomy (TBC)**

Nov 21st - CAS Summer BBQ & Last members night for 2026 @ CAS Observatory - 600pm onwards

Events to look forward to in 2027

February 4 – 8th - STARDATE South Island!! 4 nights of astronomy in a dark sky site in Staveley, Canterbury
Look for "Stardate SI 2026" on Facebook – the page will be updated soon once registrations open

Inside this November 2026 Issue

Pg 2 CAS Cosmic Calendar 2027

Pg 3 CAS @Hororata Highland Games

Pg 4-6 Halloween inspired image submissions

Pg 7 Events/Programmes of Interest

Pg 7 CAS Monthly Meeting venue in November

Pg 7 CAS Membership information

Pg 8-13 The Night Sky in November by Alan Gilmore

Pg 14-15 The Night Sky in December by Alan Gilmore

Editor's Thoughts

And just like that we are here – the last CASMag for 2026. For CAS, November kicked off with the Hororata Highland Games (HHG) which this year was held on the same day as Election Day!! CAS has had a presence at the HHG since 2022. Rob was gently persuaded to share his thoughts of how it went this year. The next best thing to happen in November - the CAS' Cosmic Calendar 2027 is now available for purchase!! Showcasing some great images from our members. Mandy and Dale have spear-headed yet another gem for your calendar collection and Christmas gifting. Details of how to get your hands on a copy or copies is inside. The call for Halloween inspired images drew some nice submissions. I have included all the submissions along with a few of my own – the connection to Halloween is a bit tenuous for some but hopefully a bit of fun for you to figure out the connection to scary Halloween. The last CAS member's meeting for 2026 is on November 17th and the last CAS member's night for 2026 at the observatory is on November 21st – good news November 21st is also CAS' Summer BBQ!! Much has happened for CAS this year and hopefully you can join us at the observatory to close out 2026 for CAS. Because this is the last CASMag for 2026, included in this issue is Alan Gilmore's sky charts for November and December to guide you at what to look in our skies while CASMag is on hiatus. Astronomy to me is special - the universe is experienced through our eyes and minds as humans and to me as someone who looks upon the night sky, we are that bridge between "heaven" and earth. Clear skies everyone and keep looking up. Seasons greetings to all – *Preetha*

CAS' Cosmis Calendar 2027 is here!



Available NOW for $19.50 plus shipping or pick up from Edgeware (Bank transfer/eftpos available). To get your copies contact calendar@cas.org.nz. All the pictures featured are by CAS members near and far. Thanks to Dale and Mandy for their efforts in getting the calendar out in time for HHG and Christmas. With Christmas coming up I know from experience the calendars make great Christmas gifts – easy to post and/or transport. Once the year is done the calendar pages can be recycled as stand alone images to grace your walls or as really cool wrapping paper. There are also CAS membership gift vouchers available for purchase which makes for a very amazing gift - the universe!! For membership gift vouchers contact membership@cas.org.nz for more information.

CAS @Hororata Highland Games 2026 by *Rob Glassey*





Wow! Another fantastic Hororata Highland Games, with many people stopping by the CAS tent for a chat, for a view through the telescopes, and for all sorts of astro-goodies. A big welcome to the new members who signed up on the day. It was great meeting you all and chatting astronomy. I hope to see some of you at the CAS BBQ in a couple of weeks.



Despite the cloud, we got a few glimpses of the sun through our new solar telescope, and Orlon even managed to find some stars to view through his refractor, even if they were on a flag! We had even more stars in a jar, with many entries trying to guess the number of stars.

I'd like to thank our helpers on the day, Orlon, Christina, Sonja, Kathleen, and especially Dale and Mandy who were up very early in the morning to be there and set up before opening time. The tent looked amazing, as always! It was fantastic to see our new 2027 CAS calendar on sale, with so many amazing photos taken by you, our members!

By Rob Glassey

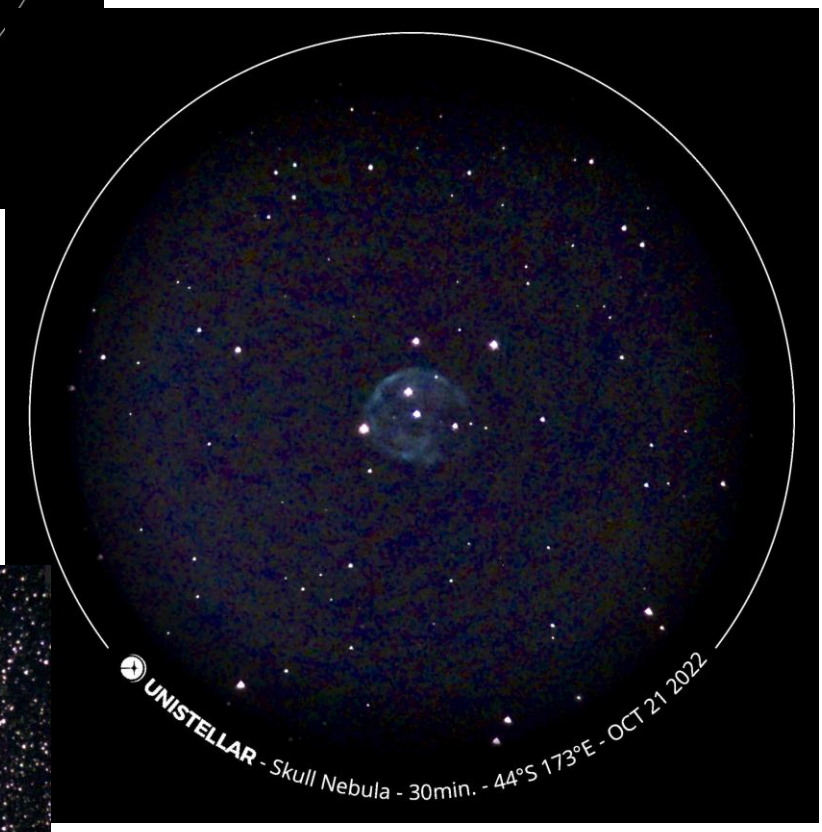


Halloween inspired image submissions



The Ghost Nebula from John Pickering

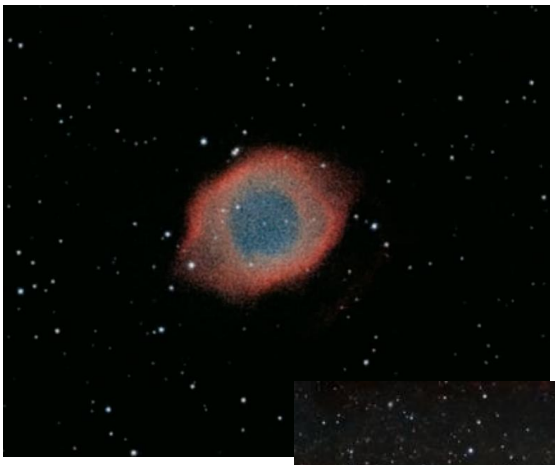
The Skull Nebula from John Pickering





The Dark Snake Nebula from John Pickering

The Eye of Sauron aka the Helix aka The Eye of God nebula from Mandy Heslop



The Tarantula nebula from Mandy Heslop



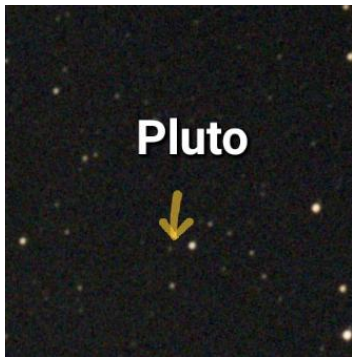


The Blood Moon from Rob Glassey



The Owl nebula from Preetha Sreedharan

Also from Preetha – Pluto, faint and so very far away – hopefully the arrow helps





The Devil's Comet aka 12P/Pons-Brooks from Preetha Sreedharan taken from somewhere in Texas April 2024



This same comet then appeared to have this Anti-Tail in June 2024 – it's actually a optical illusion

Events/Programmes of interest

November 21st - CAS Summer BBQ at the CAS Observatory - CAS provides the kebabs and burgers/saussies , breads and some soft drinks. Please bring a plate, salad or any meat you want for yourself. BYOD is ok don't forget kids are present and its a long way home! Fun starts 5.30pm with food from 6pm.

February 4 – 8, 2027 – Stardate SI at Staveley Camp – watch out for announcements on Facebook "Stardate SI" and/or CAS forums and emails for when registrations open. It's around Waitangi weekend this year with Monday being a public holiday - so 4 whole nights at this dark sky site!! Camp under the stars or grab a bunk. There are also powered caravan/camper sites available. The days are not empty – Rob is organizing a host of speakers. If you have are interested in giving a talk or doing a soap box presentation, get in touch with Rob via email rob@cas.org.nz

The last CAS Monthly Meeting for 2026 at the University of Canterbury

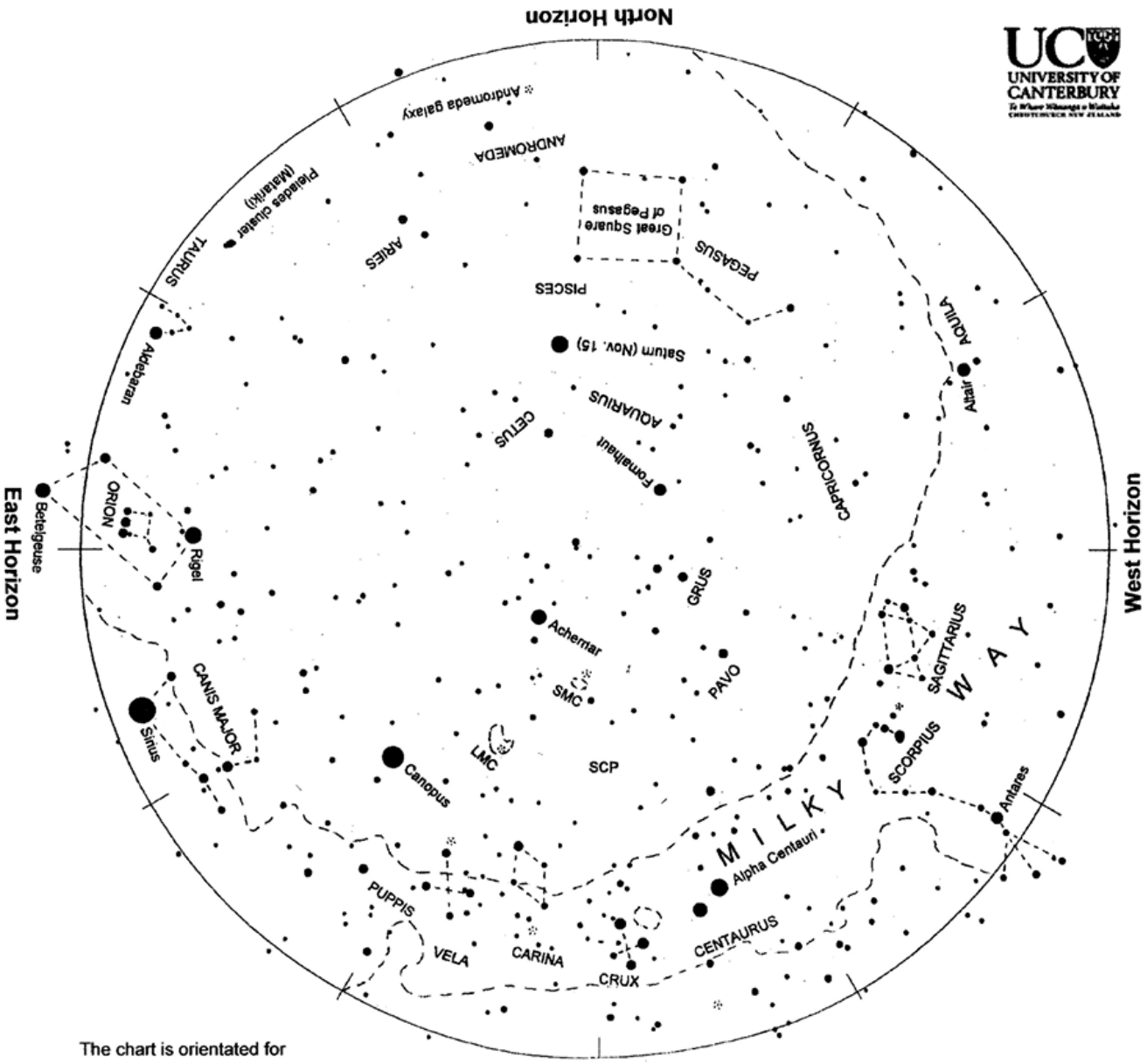
Date	Location	Speaker
17/11/2026	Ernest Rutherford 225	TBC – Talk on Maori Astronomy

Information about CAS Membership - CAS Membership subscriptions are usually due 1st April

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

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



The chart is orientated for
Oct. 15 at midnight NZDT
Nov. 1 at 11 p.m. "
Nov. 15 at 10 p.m. "

Evening sky in November 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 clockwise rotation each night as we orbit the sun.

Sirius, the brightest true star, appears in the east twinkling colourfully. It rises after 10 pm at the beginning of the month and is up at dusk at the end. Left of Sirius is Orion containing 'The Pot'. Further left are Taurus and the Pleiades/Matariki star cluster. Canopus, the second brightest star, is midway up the southeast sky. The Pointers and Crux, the Southern Cross, are low in the south. The Clouds of Magellan, small nearby galaxies, are two misty patches high in the south above Canopus. The Milky Way is wrapped around the horizon. Low in the north is the Great Square of Pegasus with the Andromeda galaxy below and right of it. Saturn is a medium brightness 'star' in the north above the Great Square.

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

The Night Sky in November 2026

Bright stars are scattered along the east and south skyline at dusk. At the start of the month **Sirius**, the brightest star, rises around 10:40 NZDT. By the end of the month it is up at sunset. **Canopus**, the second-brightest star, is in the southeast. Both stars twinkle like diamonds as the air disperses their white light.

Left of Sirius is the constellation of **Orion**, with 'The Pot' at its centre. **Rigel**, a bluish supergiant star, is directly above the line of three stars; orange **Betelgeuse**, a red-giant star, is straight below. Left again is orange **Aldebaran**. It is at one tip of a triangular group called the Hyades cluster. The Hyades and Aldebaran make the upside-down face of **Taurus** the bull.

Still further left is the **Pleiades** or **Matariki** star cluster, also called the Seven Sisters, Subaru and many other names. Six stars are visible to most eyes. Dozens are seen in binoculars. The cluster is 440 light-years* away and around 100 million years old.

Saturn is midway up the north sky at dusk. It looks like a medium-bright star with a cream tint, all by itself. A small telescope will show the ring and its biggest moon, Titan, looking like a close-by star. Saturn sets due west in the morning hours. The Moon is below Saturn on the 20th and 21st.

The **Milky Way** is low in the sky, visible around the horizon from the northwest, through south into the eastern sky. The broadest, brightest part is in **Sagittarius**, to the right of the Scorpion's sting. The Milky Way is our edgewise view of the galaxy, the pancake of billions of stars of which the Sun is just one.

Low in the south are the Pointers, Beta and **Alpha Centauri**, and **Crux** the Southern Cross, now upside down. In some Māori star lore the bright southern Milky Way makes the canoe of Maui with Crux being the canoe's anchor hanging off the side. In this picture the Scorpion's tail can be the canoe's prow and the Clouds of Magellan are the sails. Alpha Centauri is the closest naked-eye star; 4.3 light-years away.

The Clouds of Magellan, **LMC** and **SMC**, appear as two misty patches high in the southern sky, easily seen by eye on a dark moonless night. They are small galaxies about 160 000 and 200 000 light years-away. The globular star cluster 47 Tucanae looks like a slightly fuzzy star near the top-right edge of the small cloud, the SMC. 47 Tuc is about 13 000 light-years away and on the line of sight to the SMC. Globular clusters are spherical clouds of ancient stars.

Very low in the north is the **Andromeda Galaxy**, easily seen in binoculars in a dark sky, and faintly visible to the eye. It is like our Milky Way Galaxy and nearly three million light years away.

Jupiter rises in the northeast before 3:30 a.m. at the beginning of the month and around 1:30 at the end. It is the brightest 'star' in the morning sky till Venus appears, and shines with a steady golden light.

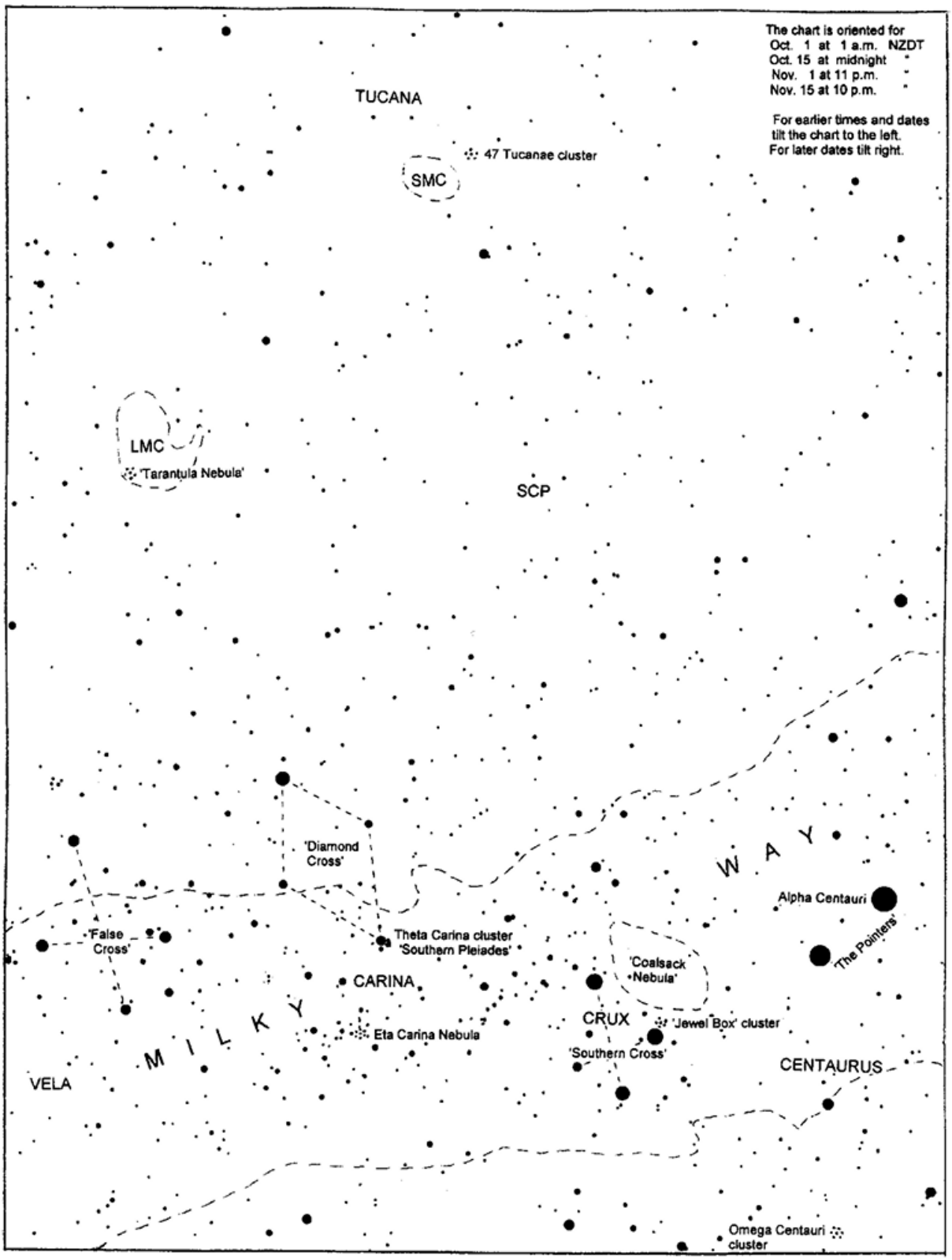
Mars is left of Jupiter at the beginning of the month. It is orange-red and much fainter than Jupiter. On the morning of the 3rd, the Moon will be between Jupiter and Mars. Mars moves toward Jupiter so that the two planets make a close vertical pair on the 18th. To their right is Regulus, the brightest star in Leo. It is a white star, a bit fainter than Mars. The planetary movements are all *apparent,* of course, caused by their movements and the movement of the Earth.

On the morning of December 1, Jupiter, Mars, the Moon and Regulus will be close together. Around 2:30 the Moon covers (occults) Regulus, hiding it until around 3:30. The exact times depend on your location.

Brilliant silver Venus rises in the southeast around 5:20 a.m., an hour before the Sun, at the beginning of the month and around 4 a.m., nearly two hours before the Sun, at the end. On the morning of the 8th, the thin crescent Moon will be near Venus.

*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 260927



Southern Evening Sky in November

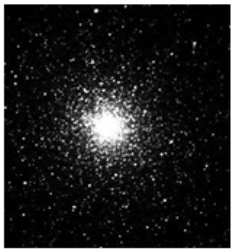
The chart shows the sky south of overhead. Interesting star clusters and nebulae are indicated with asterisks. They are described on the other side of this page.

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

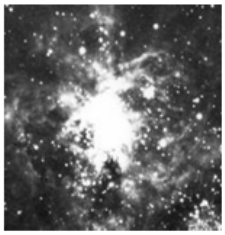
UC UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Interesting Objects in the Southern Sky

Large & Small Clouds of Magellan (LMC & SMC) appear as two luminous patches, easily seen by eye in a dark sky. They are two galaxies like the Milky Way but 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 Large Cloud is about 160 000 light years away, the Small Cloud 200 000 l.y; away very close by for galaxies. (1 light year is about 10 000 billion km, or 10^{13} km.)



47 Tucanae, looks like a faint fuzzy star on the edge of 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 on the edge of the SMC it is one-tenth the distance, 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**, very low in the south, is a similar cluster.



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.

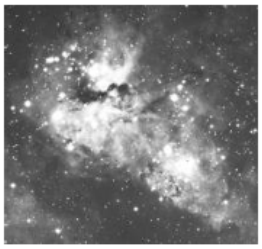
This nebula is one of the brightest known. If it was as close as the Orion nebula (in The Pot's handle) then it would be as bright as the full moon.

Canopus is the second brightest star. It is 14 000 times brighter than the sun and 300 light years away. Sirius, low in the east on spring evenings, is the brightest star in the sky.

Alpha Centauri, the brighter Pointer, is the closest naked-eye star, 4.3 light-years away. Alpha Centauri is a binary star: two stars about the same size as the sun orbiting around each other in 80 years. A telescope that magnifies 50x splits 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 the Alpha pair.)

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.

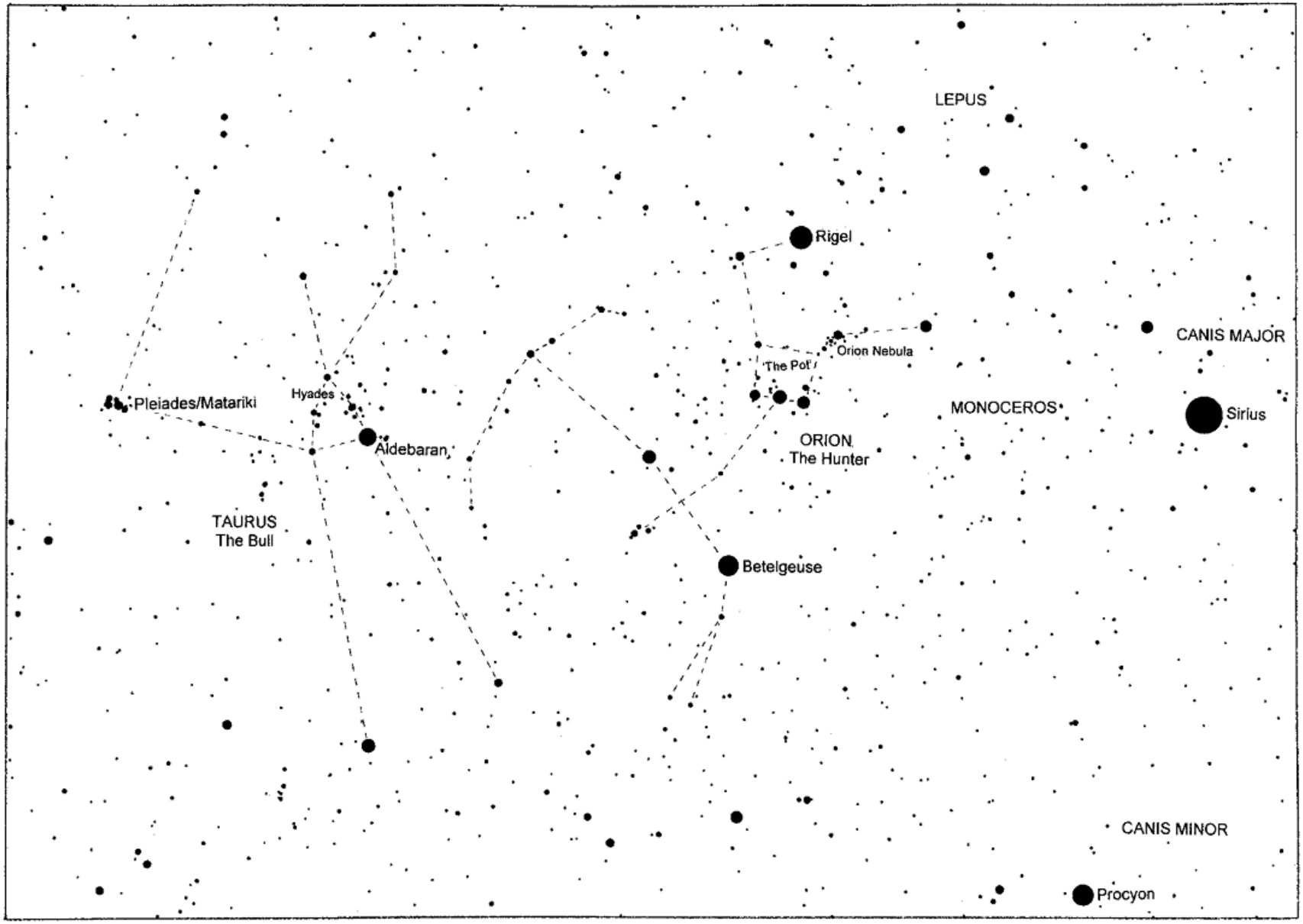
The Jewel Box is a compact cluster of young luminous stars about 7000 light years away. The cluster formed around 25 million years ago. To the eye it looks like a faint star.



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 Southern Pleiades is a newish name for a cluster of stars at one point of the 'Diamond Cross'. It is formally the **Theta Carinae cluster**, after its brightest star but is also known as the 'Five of Diamonds' cluster, the reason obvious when it is seen in a telescope. It is much fainter and smaller than the real Pleiades in Taurus but a nice sight in binoculars. The cluster is about 500 light years away and is around 10 million years old.

Text and photos by Alan Gilmore, Mt John Observatory of the University of Canterbury,
P.O. Box 56, Lake Tekapo 7945, New Zealand. www.canterbury.ac.nz 211007



Eastern Evening Sky in Spring

This chart shows the area of sky in the east on spring evenings. During the night these constellations move into the north, tilting leftward as they go. Interesting objects are described on the other side of the page.

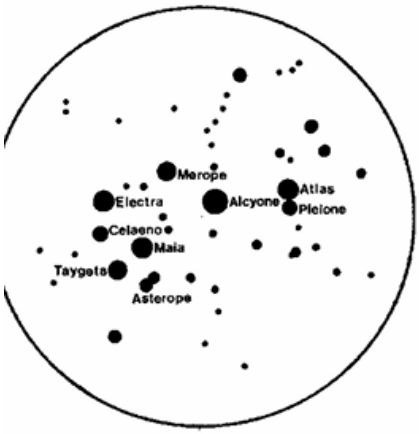
Chart produced by Guide 8 software; www.projectpluto.com. Labels and text added by Alan Gilmore, Mt John Observatory of the University of Canterbury, P.O. Box 56, Lake Tekapo 7945, New Zealand. www.canterbury.ac.nz

UC UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

Interesting Objects in Orion and Taurus

Taurus the Bull and **Orion** the Hunter are constellations recognised by most northern hemisphere cultures. To see the northern hemisphere pictures turn the chart upside down. The face of Taurus is outlined by the V-shaped **Hyades** cluster. The brightest star in this group is orange **Aldebaran**. Taurus's long horns extend down our sky. In the northern hemisphere picture the **Pleiades** cluster rides on the Bull's back.

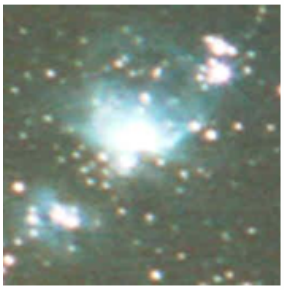
Orion, in the northern hemisphere view, has a shield raised toward Taurus and a club ready for action. The line of three stars makes **Orion's Belt**. The line of faint stars above and left of the belt form **Orion's Sword** in the northern view, dangling from his belt. To most southern hemisphere sky watchers the belt and sword form **The Pot**, **The Iron Pot**, or **The Saucepan**.



The **Pleiades / Seven Sisters / Matariki / Subaru**, and many other names, is a cluster of stars well known in both hemispheres. Though often called the Seven Sisters, most modern eyes see only six stars. Dozens are visible in binoculars. The cluster is about 440 light years away. Its brightest stars are around 200 times brighter than the sun.

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

The **Hyades** cluster is 160 light years away. Its brightest stars (not Aldebaran!) are about 70 times brighter than the sun. The cluster is 630 million years old. **Aldebaran** is not a member of the cluster but simply on the line of sight. It is 65 l.y. away and 150 times brighter than the sun. Aldebaran is a giant star about 25 times bigger than the sun though only five times heavier. Its orange colour is due to its temperature, around 3500° C. The sun is 5500° C.



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 only two million years old. The sun, by contrast, is 4.6 billion years old. Stars continue to form in a giant cloud behind the glowing nebula. There are many bright and dark nebulae in this region. The Horsehead nebula, a favourite of astronomy books, is beside the right-hand star of Orion's Belt, but too faint to be seen in small telescopes.

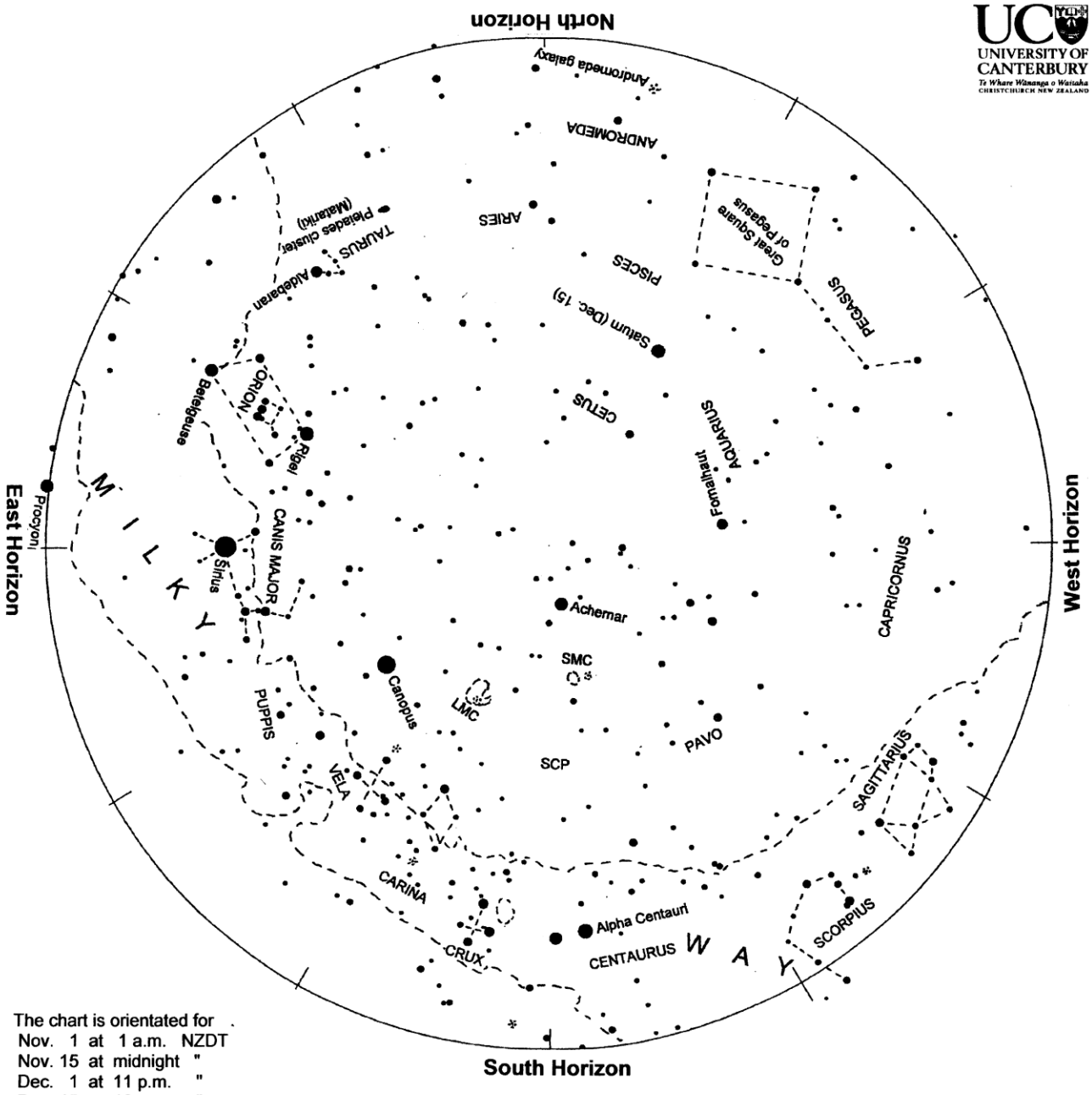
Rigel is a blue 'supergiant' star around 40 000 times brighter than the sun and 800 l.y. away. Its surface temperature is around 20 000°C, giving it a bluish colour.

Betelgeuse is a red giant star 250 times bigger than the sun -- wider than earth's orbit! -- but only around 20 times heavier, so it is mostly very thin gas. It is around 10 000 times brighter than the sun, about 400 l.y. away, and has a surface temperature around 3000°C.

Sirius is the brightest star, though the planets Venus and Jupiter, and sometimes Mars, are brighter. Sirius appears bright because it is both brighter than the sun and relatively a close 8.6 l.y. away. Sirius was often called 'the dog star' being the brightest star in Canis Major, one of the two dogs that follow Orion across the sky.

Pictures and words by Alan Gilmore, University of Canterbury's Mt John Observatory, Lake Tekapo, New Zealand; www.canterbury.ac.nz

191020



The chart is orientated for
Nov. 1 at 1 a.m. NZDT
Nov. 15 at midnight "
Dec. 1 at 11 p.m. "
Dec. 15 at 10 p.m. "

Evening sky in December 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 also does a small extra clockwise rotation each night as we orbit the sun.

Saturn is midway down the northwestern sky, a cream-coloured 'star' all on its own. Due east is Sirius, the brightest true star, twinkling like a diamond. Left of it is Orion, with 'The Pot' at its centre. Bright bluish Rigel is above the Pot and reddish Betelgeuse below. Left of Orion is orange Aldebaran with a V-shaped cluster making the face of Taurus the Bull. Further left is the Pleiades/Matariki/Seven Sisters star cluster. Above and right of Sirius is Canopus, the second brightest star. Above it are two misty patches, the Clouds of Magellan, LMC and SMC on the chart, small nearby galaxies. The Pointers and Crux, the Southern Cross, are low in the south. The Great Square of Pegasus spans the lower northwest sky with the Andromeda Galaxy below and right of it. Bright planets are in the late-night and morning skies so not on the chart.

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

The Night Sky in December 2026

Sirius is the brightest star in the evening sky, low in the east, twinkling colourfully. **Canopus**, the second brightest, is a bit higher in the southeast. Almost overhead is **Achernar**. Left of Sirius is the constellation of **Orion**. Bluish **Rigel** and orange **Betelgeuse** are Orion's brightest stars. Between them is the line of three stars making the bottom of 'The Pot' in our southern hemisphere view. A faint line of stars above the bright three is the Pot's handle. At its centre is the Orion Nebula, a glowing gas cloud nicely seen in binoculars.

Left of Orion is a triangular group making the upside-down face of **Taurus** the bull. Orange **Aldebaran**, at one tip of the V shape, is one eye of Taurus. The stars on and around the V, except for Aldebaran, are the **Hyades** cluster. Aldebaran is not a member of the cluster but closer and on the line-of-sight. Further left is the **Pleiades/Matariki/Subaru** cluster, a tight grouping of six naked-eye stars. Many more stars are seen in binoculars.

Low in the south are the Pointers, Beta and **Alpha Centauri**, and **Crux** the Southern Cross, upside down at this time of the year.

The **Milky Way** is wrapped around the horizon. The broadest part is in **Sagittarius**, setting in the southwest. It narrows toward Crux in the south and becomes faint in the east below Orion.

The Clouds of Magellan, **LMC** and **SMC**, high in the southern sky, are two small galaxies about 160 000 and 200 000 light-years* away, respectively. They are easily seen by eye on a dark moonless night as misty patches of light.

Saturn is in the northwest. It looks like a medium-bright cream-coloured star, all on its own. It sets due west around 2:30 a.m. NZDT. The Moon will be below Saturn on the 18th. Saturn is a good target in any telescope. A small telescope will show the disk of Saturn with the near edge-on ring. Titan, Saturn's biggest moon, appears as a star close to the planet. Larger telescopes will show fainter moons closer in than Titan.

Very low in the north is the **Andromeda Galaxy**. In binoculars in a dark sky it looks like a spindle of light. It is a bit bigger than our Milky Way Galaxy and nearly three million light-years away.

Jupiter (not on the chart) rises around 1:30 a.m. at the beginning of the month and around 11:30 p.m. at the end. It is the brightest 'star' in the late-night sky till Venus appears, and shines with a steady golden light. The Moon will be close to Jupiter on the mornings of the 1st and the 28th.

Mars appears as an orange-red star below and right of Jupiter. It brightens through the month as we catch up on it. The Moon will be near Mars on mornings of the 1st and the 29th.

On the morning of the 1st, Jupiter, Mars, the Moon and Regulus, the brightest star in Leo, will be close together. Around 2:30 the Moon covers (occults) Regulus, hiding it until around 3:30. The exact times depend on your location.

Brilliant Venus rises before 4 a.m., two hours before the Sun. It is by far the brightest 'star' in the morning sky and visible in daylight. Around 10:30 a.m. it is due north and high up the sky – elevation around 55-65°.

*A **light-year** (**l.y.**) is the distance that light travels in one year: nearly 10 million million km, 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
261028

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

- **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:	Brent Schroeder	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