

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 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 shift each night as we orbit the sun.

Jupiter is the 'evening star', appearing in low in the north soon after sunset. Sirius, the brightest true star, appears northwest of the zenith in early twilight. Orion, containing 'The Pot', is below and left of 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. There is a total eclipse of the Moon on the 3rd.

The Evening Sky in March 2026

Total eclipse of the Moon on March 3-4. The full Moon starts to enter the fuzzy edge of the Earth's shadow, the penumbra, at 9:43 pm NZDT, but won't show obvious fading at first. At 10:50 it starts to move into the dark part of the shadow, the umbra. It is fully in the shadow just after midnight. At 12:34 the Moon is in the deepest part of the shadow. It begins to emerge from the umbra at 1:03 a.m. and is fully out by 2:18. It leaves the penumbra at 3:25. Just how dark the Moon gets depends on how much light is being bent around the Earth by the atmosphere. As no recent volcanoes have put dust into the air, the totally eclipsed Moon is likely to stay fairly bright and be a 'blood moon'.

Jupiter is the 'evening star', appearing low in the north at early twilight. It sets in the northwest after 2 a.m. at the beginning of the month, and before 12:30 a.m. at the end. The Moon will be near Jupiter on the 26th. From places with a sea horizon to the west brilliant **Venus** might be seen setting half an hour after the Sun.

Northwest of overhead is **Sirius**. It is the brightest true star in the sky, but fainter than Jupiter. 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'. Orion's belt points down and left to 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. Further down and left is the **Pleiades** or **Matariki** star cluster.

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.

Below and right of Jupiter 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 500 light-years from us.

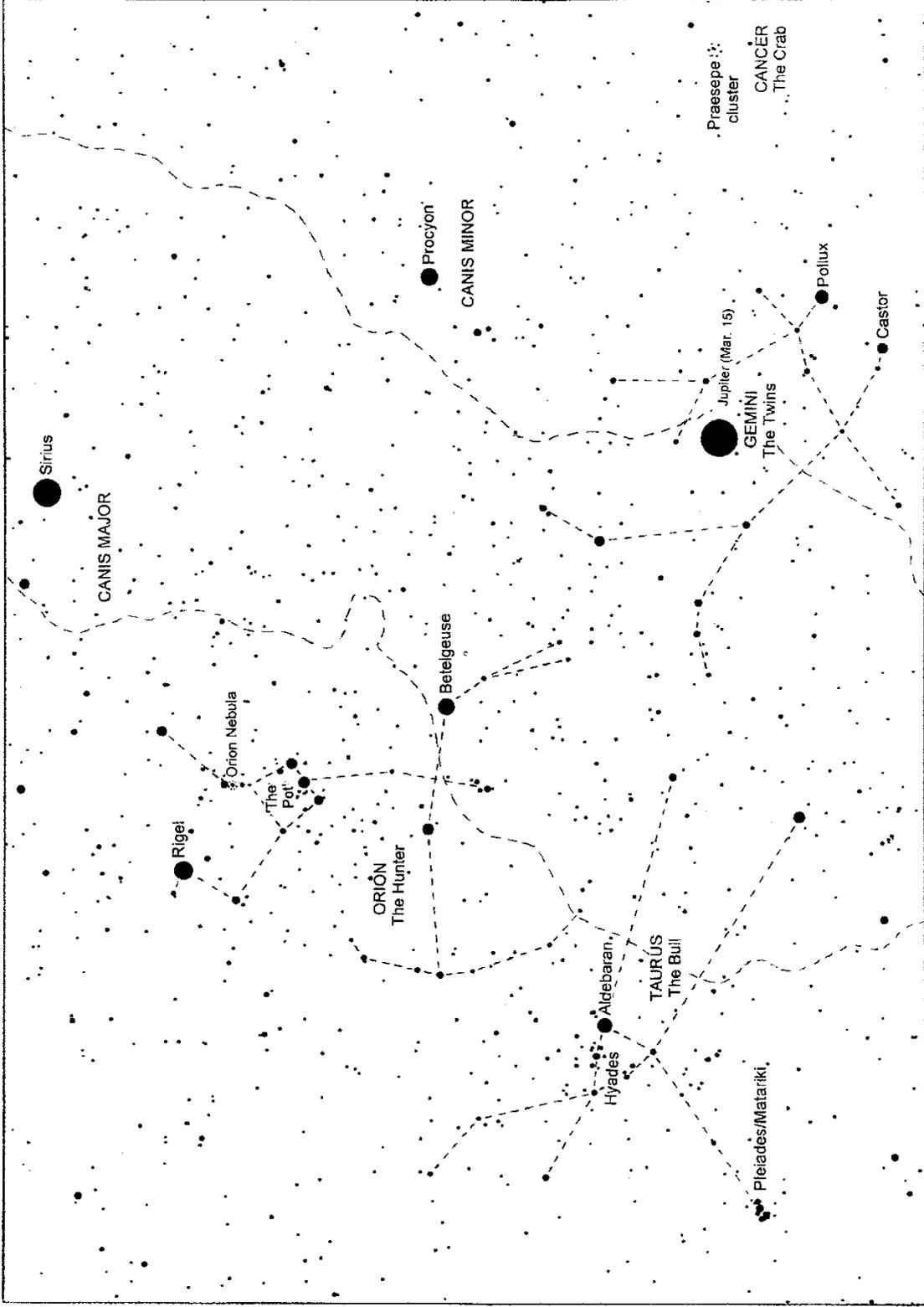
Crux, the Southern Cross, is in the southeast. Below it are Beta and **Alpha Centauri**, often called 'The Pointers'. Alpha Centauri is the closest naked-eye star, 4.3 light years away. Beta Centauri, like most of the stars in Crux, is a blue-giant star hundreds of light-years away. **Canopus** is also 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.

On the 10th the Moon crosses in front of Antares, the bright orange star in Scorpius. Antares will disappear around 11:30 pm NZDT and reappear an hour later. The exact times depend on your location.

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.

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.



Northern Evening Sky in March 2026

The chart shows the northwest to north sky in the evening. Jupiter, the brightest 'star' in the evening sky, is a beacon for the region. The chart may need to be tilted to the left to match the sky, depending on the time of night.

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 North and Northwest sky in March 2026

Jupiter, the brightest 'star', low in the north at dusk, highlights this region. Jupiter is worth a look in any telescope with its four '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. At least two can be seen in binoculars, if you can hold the binoculars steady enough. Larger telescopes show parallel stripes in Jupiter's clouds. It is 720 million km away mid-month.

Sirius, the brightest true star, appear northwest of overhead as the sky darkens. It marks the head of **Canis major**, the big dog. The stars making the dog's hind legs are above Sirius, off the top of the chart. **Procyon**, below and right of Sirius, is the head of **Canis Minor**, the small dog. The two dogs follow Orion the hunter across the sky.

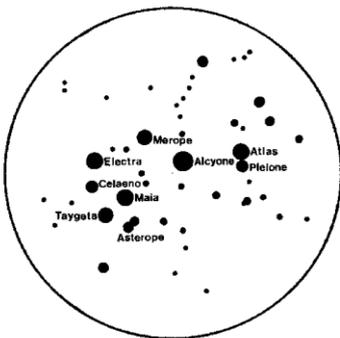
Orion is below and left of Sirius. Bluish **Rigel** and orange **Betelgeuse** are the first of its stars to appear. Between them, as the sky darkens, is a line of three stars, Orion's belt. Above the three, and fainter, is a short line of stars making Orion's sword. To southern hemisphere sky watchers the belt and sword form **The Pot** or The Saucepan. In the northern hemisphere view, upside down to us, Orion has a shield raised toward Taurus the bull and a club ready for action.



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 is too faint to be seen in small telescopes.

Below and left of Orion is orange **Aldebaran**. It is at one tip of a V-shaped cluster of stars called the Hyades. The V is the face of Taurus, upside down to us, with Aldebaran making one eye. Aldebaran is not in the cluster, just on the line of sight at half the cluster's distance.

Further down and left, toward the northwest, is the **Pleiades/Matariki** star cluster.

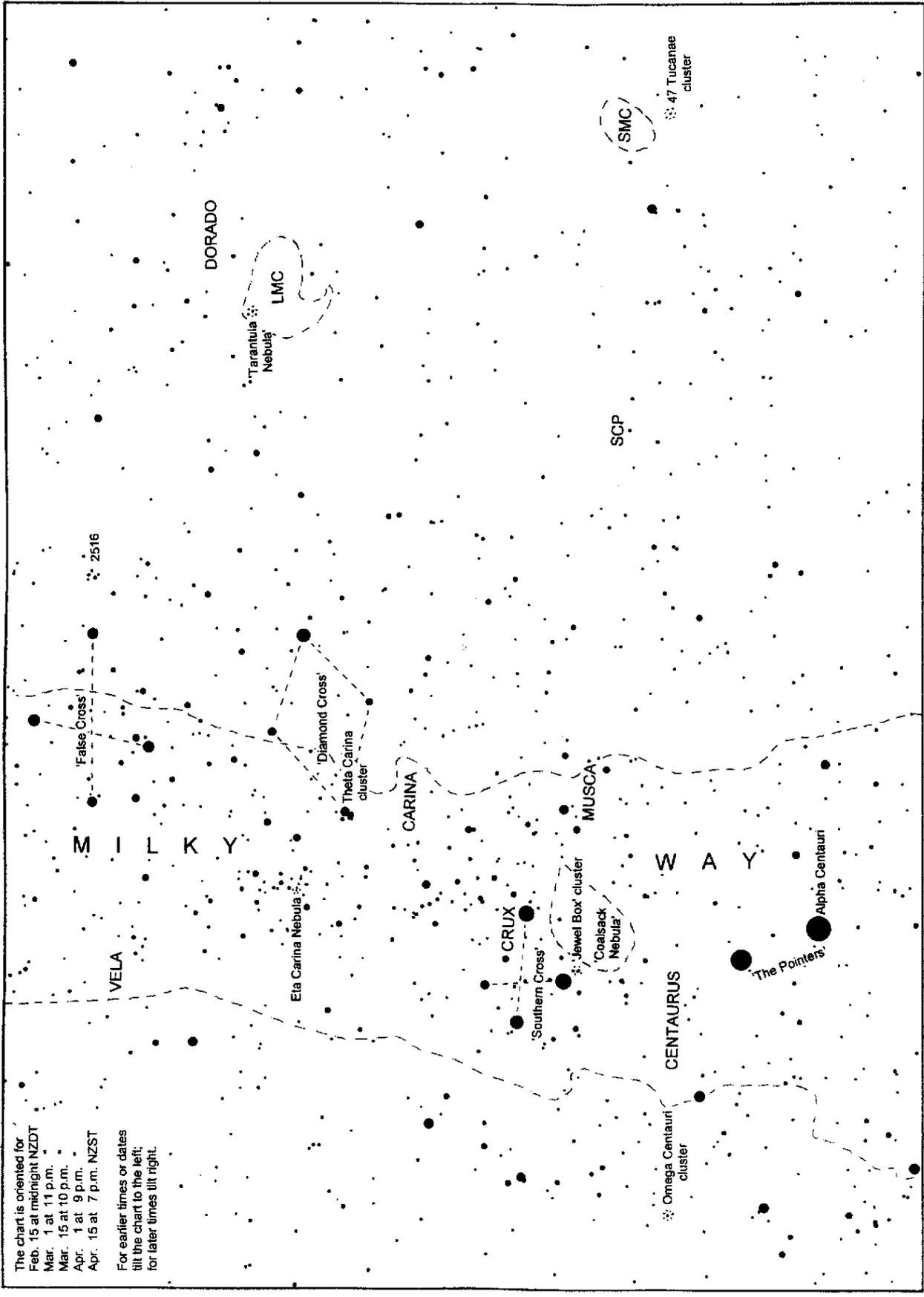


The **Pleiades / Seven Sisters / Matariki / Subaru**, and many other names, is a cluster of stars well known in both hemispheres. Though often called the Seven Sisters, most modern eyes see only six stars. Many more are seen in binoculars. The cluster is about 440 light years away. Its brightest stars are around 200 times brighter than the sun. It is between 75 and 150 million years old. The cluster is visible from all places except Antarctica. So all cultures have names and stories about it.

Below and right of Jupiter are **Pollux** and **Castor**, marking the heads of Gemini the twins. Though paired in myth, the two stars are unrelated. Pollux is 34 l.y. away and 43 times brighter than the Sun. It is cooler than the Sun (4,600 C), so has a golden tint. Castor is a multiple star: a bright white star with five fainter companions orbiting in a complex dance. It is 50 l.y. away.

Further to the right is the **Praesepe** star cluster. It looks like a faint spot of light to the eye. Binoculars show it as a compact group of stars. It is 577 light-years away. Praesepe is 625 million years old, so its bright stars burnt out long ago. That's why its stars are more similar in brightness than those of the much younger Matariki cluster.

A light-year (l.y.) is the distance that light travels in a year, about 10 million million (10^{13}) km.

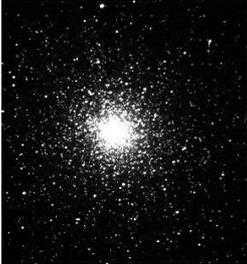


Southern Evening Sky in March-April
 The chart shows the southeast sky. Interesting star clusters and nebulae are indicated with asterisks. They are described on the other side of this page.

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 56, 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, 10^{13} 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 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**, 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 or Orion's sword) then it would be as bright as the full moon. The nebula is glowing in ultra-violet light from very hot, massive newly-formed stars in the region.

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 less than 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 more than 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.