



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 2010

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.

Sirius is the brightest star in the evening sky, northwest of overhead. Canopus, the second brightest star, is southwest of overhead. Orange Mars is low in the north. Saturn, medium-bright, is level with similar-looking Spica, low in the eastern sky. The Pointers and Crux, the Southern Cross, are midway up the southeast sky. The Scorpion rises in the southeast later.

The Evening Sky in March 2010

Sirius is the first star to appear at dusk, northwest of overhead. It is quickly followed by **Canopus**, southwest of the zenith, then orange **Mars** low in the north. Below Sirius are **Rigel** and **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'. Orion's belt points down and left to a V-shaped pattern of stars making the face of **Taurus** the Bull. Further down and left, low in the northwest, is the **Pleiades** or **Matariki** star cluster, setting early.

Sirius, 'the Dog Star', marks the head of **Canis Major** the big dog. A group of stars above it make the dog's hindquarters and tail. Sirius is the brightest star in the sky both because it is relatively close, nine light years* away, and 23 times brighter than the sun. **Procyon**, between Sirius and Mars, marks the smaller of the two dogs following Orion the hunter across the sky. Procyon is seven times brighter than the sun and 11 light years away.

Mars is bright and orange above the north skyline. We passed by Mars in late January. It is slowly fading as we leave it behind. At mid month it is 130 million km away and small in a telescope. Left of Mars are **Pollux** and **Castor**, marking the heads of **Gemini** the twins. Above and right of Mars is the **Praesepe 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 away.

Rigel, above and left of Orion's belt, is a bluish supergiant star, 40 000 times brighter than the sun and much hotter. It is 800 light years away. Orange **Betelgeuse**, below and right of the line of three, is a red-giant star, cooler than the sun but much bigger and 9000 times brighter. It 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 around 1300 light years away.

The V-shaped group making the face of **Taurus** the bull is called the Hyades cluster. It is 130 light years away. Orange **Aldebaran**, Arabic for 'the eye of the bull', is not a member of the cluster but merely on the line of sight, half the cluster's distance. The **Pleiades** cluster, impressive in binoculars, is 400 light years from us. Its stars formed around 100 million years ago.

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. 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 high in the south sky, easily seen by eye on a dark moonless night. They are two small galaxies about 160 000 and 200 000 light years away.

Saturn is in the east at dusk. It is a little brighter than **Spica** the brightest star in **Virgo**, on Saturn's right. Saturn's rings are nearly edge-on to us this year. In a telescope they look like a thick line through the planet. Saturn is 1280 million km away in mid March.

Brilliant Venus is beginning a slow rise into the western evening sky as it catches up on us from the far side of the sun. It might be seen near the west horizon soon after sunset, setting half an hour after the sun. At the end of the month Mercury will be just below Venus but a lot fainter.

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