Night Sky April

As autumn nights get longer and cooler some new constellations come into view.

High in the north there are three bright stars in a line. These stars make up the ‘Belt of Orion’ - also known to us in Aotearoa as Tautoru. They are one of the most distinctive landmarks of the night sky. To southern hemisphere star watchers, the line of three makes the bottom of 'The Pot', now tipped on its side. On either side of Orion’s belt we find blue-white Rigel and orange Betelgeuse, Orion’s brightest stars. In the Pot's handle (Orion's Sword) is the Orion Nebula, a glowing cloud easily seen in binoculars.

Extending the line of the belt stars upward and to the right you will find Sirius, the brightest star in the night sky and the first to appear at dusk. Extend the line down and left from the belt and you will find a bright orange star, Aldebaran. Continue that line further and you will find the beautiful star cluster, Pleiades (known to us in Aotearoa as *Matariki*) easily visible in April but soon to be hidden by the Sun.

The constellations of the dog follow Orion across the sky. Sirius marks the head of Canis Major, the big dog and its hindquarters are made by the bright stars above Sirius. Below and right of Sirius is Procyon marking the head of Canis Minor.

During April, the star Canopus is midway down towards the southwest. Bright Canopus, or Atutahi, was a key guide star used by the Polynesian voyagers and today it is used to guide interplanetary spacecraft.

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. This is a very rich stellar region to explore with binoculars.

The Milky Way is brightest in the southeast above Crux, although the densest region of the Milky Way will rise later in autumn. Our galaxy can be traced to nearly overhead where it fades and becomes very faint in the northwest, right of Orion. The Milky Way galaxy is seen edgewise, the pancake of billions of stars of which our sun is just one.

Two small galaxies, the Clouds of Magellan, are midway down the southwest sky, easily seen by eye on a dark moonless night.

**VISIBILITY OF THE NAKED EYE PLANETS**

This autumn our evening skies are devoid of naked eye planets. Instead, they grace the morning sky in the hours immediately before sunrise. The Moon sweeps by in the closing days of the month and there are some spectacular conjunctions and lovely planetary alignments in April. By mid-month Jupiter, Venus, Mars and Saturn will make a line up the eastern pre-dawn sky. The moon will be near Saturn on April 25, Mars on the 26th, Venus on the 27th and Jupiter on the 28th.

**MERCURY:** Early in AprilMercury will be in the Sun’s glare at sunrise, returning to the pre-dawn sky from mid-April.

**VENUS:** Venus is brilliant in the pre-dawn eastern sky, rising about 3am early in the month. Venus seems to fall lower in the sky over the month.

**MARS:** During April red Mars is visible in the pre-dawn sky just above Venus in company with Saturn on April 5 and 6.

**JUPITER:** Golden Jupiter rises about 5am, 2 hours ahead of the Sun from early April. Over the month it rises higher in the morning sky.

**SATURN:** In early April cream-coloured Saturn is faintly visible low in the east from 3am or so. Saturn meets Mars on April 5, and rises higher in the morning sky over the month.

<https://www.stardome.org.nz/astronomy/star-charts/> <https://www.rasnz.org.nz/in-the-sky/the-evening-sky>