The February Night Sky

Takurua Sirius and Atutahi Canopus, the brightest true stars, are white and overhead: Sirius to the north and Canopus, a bit south.

Two constellations in a dog shape follow Orion across the sky**. T**he head of Canis Major the big dog is marked by Sirius, the Dog Star, with the rest of the dog upside down behind it. Procyon, in the northeast below Sirius, marks Canis Minor.

Below and left of Sirius is Orion, the hunter. Its brightest stars are bluish Puanga Rigel and orange Pūtara Betelgeuse. Between them is a line of three stars: Tautoru Orion's belt, what we call ‘the pot’. The handle of the pot is Orion's sword, a fainter line of stars above the belt. At its centre is the Orion Nebula, a glowing gas cloud seen in binoculars.

Below Orion, in the north, orange Taumatakuku Aldebaran(a red giant star)makes one eye of Taurus the bull. It is on one tip of an upside-down V of stars making the face of Taurus. These constellation pictures were thought up by northern hemisphere folk so are upside down to us. Well left, near the northwest skyline, is the Matariki Pleiades star cluster.

The Matariki Pleiades star cluster is also known as the Seven Sisters and Subaru. From northern Aotearoa the bright star Capella is on the north skyline, much brighter than the sun.

Māhutonga Crux, the Southern Cross, is on its side in the southeast. Below it are Ranginui Beta and Uruao Alpha Centauri**,** often called 'The Pointers'. Alpha Centauri is the closest naked-eye star, about 4 light-years away. Beta Centauri is a blue-giant star hundreds of light years away, as are most of the stars in Crux. Above Crux, Atutahi Canopus is also a very luminous distant star, brighter than the sun.

Te Māngōroa The Milky Way is brightest in the southeast toward Crux. It can be traced up the sky, fading where it is nearly overhead. It becomes very faint east, or 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. Star clusters and a glowing gas cloud can be seen in binoculars in the Carina region above Crux.

Ngā Pātari The Clouds of Magellan, LMC and SMC are two small galaxies, high in the south sky, easily seen by eye on a dark moonless night. Beside the Small Cloud (SMC) is the globular star cluster 47 Tucanae. It looks like a round smudge of light in binoculars. Telescopes show it as a cluster of thousands of faint stars. Omega Centauri, left of The Pointers is also a globular cluster.

The planets visible this month, all rising in the east and setting in the west.

KŌPŪ VENUS: An ‘evening star’ this month, silver Venus is low in the west. It sets around 10:40 pm at the beginning of the month and around 9 pm at the end. Venus is catching up on Earth on the inside track, passing between us and the Sun in March. Venus is especially bright this month, with enough light to cast a shadow in dark locations. Much of its sunlit side is turned away from us so in a telescope it appears as a tall thin crescent. The Moon will be near Venus on the 2nd.

MARS: Orange Mars appears in the evening low in the northeast, much fainter than Jupiter but the brightest object in that part of the sky. Mars is a tiny disk in a telescope. The Moon will be near Mars on the 9th and 10th.

JUPITER: This planet appears gold & in the north soon after sunset. It sets after 2 a.m. at the beginning of the month and around 12:30 at the end. The disk of Jupiter can be seen in a small telescope with its ‘Galilean moons’ lined up on each side. They can be seen in binoculars if held steady enough. The Moon will be near Jupiter on the 7th.

NEPTUNE: At the start of the month, visible in binoculars or telescope just south of the Moon as a tiny spot shining blue-green.

Star groups and single stars are coloured at 1st mention

<https://www.rasnz.org.nz/in-the-sky/the-evening-sky/february-evening-sky-1> <http://www.pixieplots.co.nz/Maori-Star-Names> <https://cosmicpursuits.com/night-sky-this-month/>