

The June Night Sky

Takurua/Sirius, the brightest true star, appears in the west as the sky darkens. It sets in the southwest around 9 pm, mid-month, twinkling like a diamond. **Atutahi/Canopus**, the second brightest star, is in the southwest. Canopus is a circumpolar star – it circles the South Celestial Pole clockwise but never sets from Aotearoa NZ except for the most northern places. Around 1 a.m. it will be near the southern horizon, twinkling colourfully.

Ruawāhia/Arcturus is the brightest star in the north sky. Its orange light is often split into red and green when it is low in the sky. It sets in the northwest in the morning hours. Although Arcturus is relatively close, it appears bright because it is 170 times brighter than the Sun.

Māhutonga/Crux, the Southern Cross, is south of the zenith. Beside it, and brighter, are **Ranginui/Beta** and **Uruao/Alpha Centauri**, often called **Te Taura o te Waka o Tamarēreti** (the anchor) or **The Pointers** (because they point at Crux). Alpha Centauri is the closest naked-eye star. Beta Centauri and three of the four brightest stars in Crux are hot, extremely bright blue-giant stars hundreds of times further away.

Orange **Antares**, high in the eastern sky, marks the body of **Manaia ki te Rangī/Scorpius** the scorpion. It is a red giant star even further away and 19 000 times brighter than the sun. The scorpion's tail, upside down, curves off to the right. Below Scorpius is **Kaikōpēre/Sagittarius**, its brighter stars making 'the teapot'.

Te Māngōroa/The Milky Way is brightest & broadest in the southeast toward Scorpius and Sagittarius. It remains bright but narrower through Crux then fades in the western sky. The Milky Way is our edgewise view of the galaxy, the pancake of billions of stars of which the sun is just one. The thick hub of the galaxy, 30 000 light years away, is in Sagittarius. A scan along the Milky Way with binoculars will find many clusters of stars & some glowing gas clouds. Relatively nearby, dark clouds of dust and gas look like holes and slots in the Milky Way. The dust, more like smoke, mostly comes from red-giant stars like Antares. These clouds eventually coalesce into new stars.

Ngā Pātari/The Clouds of Magellan, lower in the south, are luminous patches easily seen by eye in a dark sky. One is large, LMC, the other small, SMC. Both are much smaller than our galaxy, but still with billions of stars.

The **Matariki/Pleiades/Subaru** star cluster rises in the northeast, directly below Venus, around 5:40 a.m. on Matariki Day, June 20th. It is faint so needs to be well above the horizon before it is visible and may be hard to see in the moonlight. Well to the right of Matariki is the 'pot', made of **Tautoru/Orion's belt** and sword. The Pot is also visible in the west at dusk in June along with nearby bright stars.

Five of the other seven planets are visible in June, rising in the east & setting in the west.

Whiro/Mercury: Appears in the northwest sky in the second half of the month, looking like a medium-bright star. It sets two hours after the Sun at the end of the month. **Marama/The Moon** will be near Mercury on the 27th.

Kōpū/Venus: This bright planet rises around 4 a.m. mid-month, a bit earlier at the beginning of the month, a bit later at the end. The crescent Moon is left of Venus on the morning of the 22nd.

Matawhero/Mars: Is the only planet visible in the later evening sky. It looks like a medium-bright red star, low in the north at dusk, setting around 10 pm. It will be close to Regulus, the brightest star in Leo, around the 17th, making an eye-catching red and white pair. The Moon will be near Mars on the 1st and again on the 30th.

Kōpūnui/Jupiter: Might be seen low in the northwest at the beginning of the month, setting an hour after the Sun. It soon slips down into the twilight.

Rongo/Saturn: Saturn rises due east around 1:30 a.m. at the beginning of the month and around midnight at the end. It looks like a medium-bright 'star' in an empty region of sky. By dawn it is midway up the north sky. The Moon will be near Saturn on the morning of the 19th.

Star groups and **single stars** are coloured at 1st mention

<https://www.rasnz.org.nz/in-the-sky/the-evening-sky/june-evening-sky-1>
<http://www.pixieplots.co.nz/Maori-Star-Names>

