**The July night sky**

Takurua/Sirius**,** the brightest true star, sets in the southwest as twilight ends, twinkling like a diamond. Atutahi/Canopus, the second brightest star, is also in the southwest at dusk. It swings down to the southern skyline before midnight where it also twinkles colourfully. It then moves up into the southeast sky in the morning hours. It is a circumpolar star, always visible from Aotearoa.

South of the zenith are Whetū Matarau/The Pointers, Ranginui/Beta and Uruao/Alpha Centauri. They point to Māhutonga/**Crux**/the Southern Cross, on their right. Alpha Centauri is the third brightest star in the sky and the closest of the naked eye stars, 4.3 light-years away. Beta Centauri, like most of the stars in Crux, is a hot blue-giant star hundreds of light-years away. Crux and the Pointers are also circumpolar, so useful for finding our way. In summer they are upside down and low in the south.

Midway down the north sky is orange Ruawāhia/Arcturus. It sets in the northwest around midnight, twinkling red and green as it goes. Arcturus is the fourth brightest star for us, the brightest in the northern hemisphere sky. It has an orange colour because it is cooler than the Sun; around 4000°C. Above Arcturus is a lone bright star, Whiti-kaupeka/Spica, the brightest star in Virgo. The Moon will be close to Spica on the 31st. Whānui/Vega rises in the northeast around 9 pm. It is on the opposite side of the sky to Canopus: low in the north when Canopus is low in the south. Vega is the fifth-brightest star in our sky and the second-brightest northern hemisphere star, 52 times brighter than the Sun.

Te Māngōroa/The Milky Way is brightest and broadest in the east toward Te Matau a Māui/Scorpius&Kaikōpere/Sagittarius. In a dark sky it can be traced up past the Pointers & Crux, fading toward Sirius. The Milky Way is our edgewise view of the galaxy, the pancake of billions of stars including our sun. A scan along the Milky Way with binoculars shows many clusters of stars and some glowing gas clouds.

The Delta Aquariid meteor shower peaks at the end of the month, when we might see 15-20 meteors an hour. From Auckland, the best viewing will be after midnight, but the meteors can be faint, so find a dark sky away from light pollution and look to the south east.

Six of the other seven planets are visible in July, rising in the east & setting in the west.

*Whiro/Mercury*: makes its best evening sky appearance of the year. At the beginning of the month it appears like a bright star toward the northwest, setting two hours after the Sun. It holds that position till mid-month, slowly fading as more of its sunlit side is turned away from us. It then sinks into the twilight in the third week as it begins to pass between us and the Sun.

*Kōpū/Venus*: rises in the northeast around 4:20 am at the beginning of the month and 5 am at the end, a brilliant object in the dark sky. Venus is now moving away from Earth and shrinking and growing slowly dimmer.

*Matawhero/Mars*: is another planet in the evening sky. It looks like a medium-bright red star, setting in the west around 9:40 pm. The red planet is small and little detail is visible even in a telescope and beginning to fade as it moves closer to the sun. The Moon will be below Mars on the 28th and above it on the 29th.

*Kōpūnui/Jupiter*: begins a morning sky appearance in July. The golden planet rises an hour before the Sun mid-month and at 6 am at the end.

*Rongo/Saturn*: rises around 11:50 pm at the beginning of the month and before 9:50 at the end. It looks like a medium-bright cream-coloured star, due east, all on its own. By dawn Saturn is mid-way up the sky a bit west (left) of due north. The Moon will be near Saturn on the night of the 16th. It is worth a look in any telescope & will get brighter & larger over the next few months. The ring is nearly edge-onto us, so its shadow appears as a thin line across the planet. On the night of the 2nd the shadow of its moon Titan shows as a small black spot present when Saturn rises around 11:40 pm & moving off the planet around 1 am. This repeats on the 18th, although an hour earlier.

*Tangaroa/Neptune*: has a bluish hue but is very small and hard to find. Neptune will be close to Saturn all month, rising together near midnight, and sitting between it and the moon on the 16th.

Star groups and single stars are coloured at 1st mention

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

<https://cosmicpursuits.com/night-sky-this-month/> <https://www.astronomy.com/observing/sky-this-month-july-2025/>