The September Night Sky Star groups and single stars are coloured at 1st mention

The brightest true stars are low in the north and south. Twinkling colourfully, Atutahi/Canopusis low in the southeast at dusk, swinging up into the eastern sky during the night. On the north skyline, Whānui/Vega sets in the early evening. Deneb is the brightest star in the cross-shaped constellation of Cygnus the swan and northern parts of Aotearoa NZ will see Deneb near the north skyline in the middle of the Milky Way. It is one of the most distant stars visible to the naked eye, around 2600 light-years (Ly) away.

Marking the body of the Scorpion, orange Rehua/Antares is midway down the western sky. The Scorpion's tail loops up the sky, making a back-to-front question mark with Antares as the dot. The curved tail is the 'fish-hook of Maui' in some Māori star lore. Above and right of the Scorpion's tail is the two-handled ‘teapot' made by the brightest stars of Kaikōpere/Sagittarius. It is upside down in our southern hemisphere view.

In the southwest, The Pointers, Ranginui/Beta & Uruao/Alpha Centauri, make a vertical pair, pointing down to Māhutonga/Cruxthe Southern Cross. Alpha Centauri, the top Pointer, is the closest naked eye star at 4.3 light-years away. Beta Centauri is a blue-giant star, very hot & very bright, hundreds of Ly away.

Te Māngōroa/The Milky Way meets the skyline just right of Whānui/Vega in the north & can be traced down to the south, in a dark sky. The Milky Way is our edgewise view of the galaxy, the pancake of billions of stars of which the Sun is just one. In the centre of the galaxy is a black hole, hidden by dust clouds in space, but a little outside the teapot's spout. The dust clouds appear as gaps and slots in the Milky Way. A scan along the Milky Way with binoculars shows many clusters of stars and some glowing clouds of left-over gas.

The Large and Small Ngā Pātari/Magellanic clouds,LMC and SMC, look like two misty patches of light in the southeast sky above Canopus. They are easily seen by eye on a dark moonless night. They are galaxies like our Milky Way but much smaller. The LMC is around 160 000 l.y. away; the SMC around 200 000 l.y. away.

On moonless evenings (near new Moon, 21st) in a dark rural sky the Zodiacal Light is visible in the west. It looks like late twilight: a faint broad column of light enclosing Mercury and Mars and reaching up toward Antares, fading out at the Milky Way. It is sunlight reflecting off meteoric dust in the plane of the solar system.

In the evening sky we will also see a new comet this month, C/2025R2 (Swan) best viewed through a telescope in the west just after sunset early in the month.

In the early morning the Andromeda galaxy and the Matariki cluster are good viewing in the north. In the early morning of the 22nd the Orionids meteor shower peaks in the Southern Hemisphere. Expect to see 10-20 meteors per hour in the north if you are away from streetlights.

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

*Whiro/Mercury*: Moving up the western sky through the month, Mercury will be alongside Mars around the 20th. By the end of October, Mercury is setting around 10 pm. Tiny in a telescope. Mercury is swinging around from the far side of the Sun and catching us up. The 30th will be the best time to see our smallest planet. The Moon appears near on the 23rd

*Kōpū/Venus*: From places with a low eastern skyline, brilliant Venus might be seen rising in the dawn twilight around 6 am. at the beginning of the month and 5:30 at the end. Venus is on the far side of the Sun from us; 235 million km away. A very thin crescent Moon will be near Venus on the 20th

*Matawhero/Mars*: Mars will be beside Mercury in the west on the 20th, but redder and much fainter. This planet is tiny in a telescope, as it is on the far side of the Sun from us, 360 million km away. The Moon appears near them on the 23rd.

*Kōpūnui/Jupiter*: Jupiter is the brightest ‘star’ in the morning hours. It rises in the northeast around 3:30 am. at the beginning of the month and 1:40 at the end. It shines with a steady golden light. The Moon will be near Jupiter on the 14th.

*Rongo/Saturn*: **Saturn** can be seen midway up the northeast sky in the evening and due north by midnight. To the naked eye it looks like a lone, medium-bright star with a cream tint. In low-powered telescopes Saturn appears as a ball with a spike through it as the ring is nearly edge-on. Larger telescopes show the ring and Saturn's biggest moon, Titan, looks like a star nearby, in line with the edge-on ring and the smaller moons. The moon will be near Saturn on the 5th & 6th, and Titan will pass in front of Saturn with its shadow also visible about the same time.

References: [RSNZ](https://www.rasnz.org.nz/in-the-sky/the-evening-sky/october-evening-sky), [Pixieplots](http://www.pixieplots.co.nz/Maori-Star-Names). [Astronomy mag](https://www.astronomy.com/observing/sky-this-month-october-2025/), Stardome [video clip](https://www.facebook.com/watch/?v=1698408414331634) on FB (goes live 9am on Mon 1 Sep)