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

Bright stars shine around the skyline. Orange Ruawāhia/Arcturus is in the northwest, often twinkling red and green as it sets. Atutahi/Canopus, the brightest star in the evening sky, skims along the southern skyline, twinkling all colours. Whānui/Vega is low in the north. It is the second-brightest northern star after Arcturus. From northern Aotearoa the star Kaipō/Deneb can be seen near the north skyline. It is the brightest star in Cygnus the Swan.

Orange Rehua/Antares, northwest of the zenith, marks the body of the Scorpion. The Scorpion's tail hooks toward the zenith like a back-to-front question mark. It is the 'fishhook of Maui' in Māori star lore. Below or right of the Scorpion's tail is 'the teapot' made by the brightest stars of Kaikōpere/Sagittarius. It is upside down in our southern hemisphere view.

Midway down the southwest sky are Whetū Matarau/The Pointers ', Beta and Alpha Centauri. They point down to Māhutonga/Crux/The Southern Cross. Alpha Centauri is the third brightest star. It is also the closest of the naked-eye stars, 4.3 light-years away. Beta Centauri, along with most of the stars in Crux, is a blue-giant star hundreds of light-years away.

The Te Ikaroa/Milky Way spans the sky from north to south. It is brightest and broadest overhead in Te Matau a Māui /Scorpius and Sagittarius. In a dark sky it can be traced down past the Pointers and Crux into the southwest. To the northeast it passes Poutū-te-rangi/Altair, meeting the skyline right of Vega. 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, 27 000 light years away, is in Sagittarius. Dust clouds near us appear as gaps and slots in the Milky Way. Binoculars show many clusters of stars and some glowing gas clouds in the Milky Way.

The Large and Small Ngā Pātari/Magellanic clouds, look like two misty patches of light in the south sky. They are easily seen by eye on a dark moonless night. They are galaxies like our Milky Way but much smaller and about 180,000 light years away.

On moonless evenings in a dark sky the Zodiacal Light is visible in the west. This is caused by sunlight reflecting off meteoric dust in the plane of the solar system and appears as a faint broad column of light extending up past Mars and Whiti-kaupeka/Spica, toward Antares.

There is a total lunar eclipse around dawn on the 8th, starting at 4:27 am and finishing around 6:53 for us as we see the moon setting. The moon will go fully into shadow and appear red as the earth casts its shadow over the moon.

A partial solar eclipse begins at sunrise on the 22nd, as the moon passes in front of the sun. The sun will appear to have a big bite taken out of it, and this will get bigger then slowly shrink, ending around 8:15 am. As the sun can burn a hole in your retina ensure you wear special glasses or project an image of the sun through a pinhole onto a wall.

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

*Whiro/Mercury*: Late in the month Mercury appears below Mars in the west, setting an hour after the Sun.

*Kōpū/Venus*: Looking like a ‘morning start’, silver Venus, the brightest planet, rises around 5:30 at the beginning of September and soon after 5 am at the end. The Moon will be close to Venus on the 20th.

*Matawhero/Mars*: Mars is low in the west. It looks like a medium-bright red star. In mid-September it will be near Spica, the brightest star in Virgo.

*Kōpūnui/Jupiter*: This golden planet also looks like a ‘morning star’, appearing in the northeast around 4:20 am at the beginning of the month and 3 am at the end. The Moon will be near Jupiter on the 14th.

*Rongo/Saturn*: Sitting in the eastern sky, this medium-bright ‘star’ is all on its own.

References: [RSNZ](https://www.rasnz.org.nz/in-the-sky/the-evening-sky/august-evening-sky-1), [Pixieplots](http://www.pixieplots.co.nz/Maori-Star-Names). Stardome [video clip](https://www.youtube.com/watch?v=qFHocpYXyMo) on FB (goes live 9am on Mon 1 Sep)