

### Offered Title: Kia Ora Y'all

I've been out of pocket for a few weeks, exploring the beauty of New Zealand with Nancy. If you haven't already, just go there, really, I mean it.

We had a brief stretch of clear and dark sky. OK, unfortunately only one night, but it was a beautiful one in Lake Tekapo on the South Island. I took advantage, checking out a few of the southern hemisphere's celestial highlights. After that our glorious Moon appeared, and with or without clouds made observing a less than stellar experience.

First on my list was a pair of dwarf galaxies called the Large and Small Magellanic Clouds. They were easy to spot, nestled close to our Milky Way and seeing them was such a treat. These aren't just fuzzy patches, they are huge, naked eye, in your face fuzzy patches. Amazing! The Magellanic Clouds are satellites of our Milky Way galaxy and will one day be absorbed into our community.

From our vantage point in south central Texas another southern hemisphere highlight is visible but near the horizon, so not an ideal object of observation. When viewed from Lake Tekapo that object, Omega ( $\omega$ ) Centauri was spectacular! Omega Centauri is a really big globular cluster situated in the constellation Centaurus, the Centaur. Did I say it's big? At around 2 million stars it's huge compared with the typical globular containing a few hundred thousand stars. It's also close, around 17 thousand light years from Earth. M13, the brightest globular in northern skies is 24 thousand light years from us. These factors make for a bright and impressive sight in binoculars or telescope.

Centaurus A (NGC 5128) is a galaxy near Omega Centauri in the sky. It's a peculiar galaxy, apparently the result of two different galaxies colliding. It has the fuzzy roundish shape of an elliptical galaxy, but with a dust lane bisecting it, common to spiral or lenticular galaxies. An unusual and beautiful object.

Also, not far from Omega Centauri lies Crux, the southern cross. That glorious night in Lake Tekapo was so clear and dark I had a little trouble teasing Crux out from background stars. But there it was lying across the Milky Way. Its second brightest star, beta ( $\beta$ ) Crucis lies about 1 degree from the sparkly Jewel Box cluster NGC 4755. Follow an imaginary line from Crux's top through its bottom stars for about 25 degrees and you come close to the south celestial pole. Unfortunately, there is no South Star currently. The closest, sigma ( $\sigma$ ) Octans is not close enough to be used as the South Star in the way Polaris is used as the North Star.

Near the Small Magellanic Cloud, 47 Tucanae (NGC 104) is a little smaller, denser globular cluster than Omega Centauri, but another WOW!

Oh, and the northern constellations look upside down, weird.

### What's in the Sky?

April 8; evening; west: The Pleiades, Moon, Mars, and Aldebaran are together.