THE SOUTHERN HEMISPHERE

With Glenn Dawes

Discover targets around the bright constellation of Grus the Crane and watch for favourable Orionids

When to use this chart 1 Oct at 00:00 AEST (14:00 UT) 15 Oct at 23:00 AEDT (12:00 UT) 31 Oct at 22:00 AEDT (11:00 UT)

The chart accurately matches the sky on the dates and times shown for Sydney, Australia. The sky is different at other times as the stars crossing it set four minutes earlier each night.

OCTOBER HIGHLIGHTS

The Orionids meteor shower is visible around 2 October to 7 November, with its peak expected late evening on 22 October into the morning. At this time the Moon is at first quarter, leaving the morning hours basking under dark skies. The radiant is within a few degrees of the bright star Betelgeuse. This area will be conveniently high in the sky (crossing the meridian) around the start of dawn. The Orionids are typically swift and often bright, with some leaving trains.

STARS AND CONSTELLATIONS

Evening skies now see the Milky Way dropping towards the western horizon, making way for, well... nothing? That's how it appears from the suburbs. The far south has not only left the bright star patterns behind, but also Greek mythology has given way to more modern constellations. Many need dark skies to see any patterns, Grus the Crane being one bright exception. Other birds to spot are the Peacock (Pavo), the Toucan (Tucana) and, albeit mythical, the Phoenix.

THE PLANETS

Saturn continues to be an evening highlight, being due north around 22:00 mid-month. Although in a barren part of the sky, it sits about 20° south of the bright star Fomalhaut. It's followed two hours later by Neptune. Jupiter is

rising around sunset, with Uranus 30 minutes behind. Both are visible most of the night. Dawn commences with brilliant Venus low in the east. On the 11th, Venus and Regulus are 2° apart, with the crescent Moon 5° below – an impressive conjunction!

DEEP-SKY OBJECTS

This month, a trip to Grus the Crane. Within its prominent curve of stars is an impressive naked-eye double-double. Delta (δ) Gruis (RA 22h 29.2m, dec. -43° 30') comprises mag. +4.0 and +4.1 Delta¹(δ) and Delta²(δ), 16 arcminutes apart. Moving 3° northwest finds Mu (μ) Gruis, comprised of mag. +4.8 Mu¹ (μ) and +5.1 Mu²(μ ²), 19 arcminutes apart. In binoculars both Mu stars and Delta¹ are yellow, in contrast to the orange of Delta².

NGC 7582 (RA 23h 18.4m, dec. -42° 22') is the central member of the Grus Quartet, an 11th-magnitude triangle of galaxies with NGC 7590 and 7599 (to the northeast), fitting in a 15-arcminute field of view. The three are all partly edge-on spirals, showing prominent ellipse-shaped halos with brightening towards the centre. Lying 30 arcminutes southwest of 7582 is the fourth member, NGC 7552, which has a prominent stellar nucleus.



