

THE SOUTHERN HEMISPHERE



With Glenn Dawes

This month, enjoy two meteor showers as they peak and explore rich star fields in the constellation Ara

When to use this chart

- 1 Jul 00:00 AEST (30 Jun, 14:00 UT)
- 15 Jul 23:00 AEST (13:00 UT)
- 31 Jul 22:00 AEST (12:00 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.

JULY HIGHLIGHTS

Two meteor showers are expected to peak around 30 July, when the Moon is at first quarter: the Alpha Capricornids, from the direction of Capricornus, are known for bright, slow meteors with long paths and frequent fireballs; and the Southern Delta Aquariids, appearing from the direction of Aquarius, which tend to be faint, typically white with some blue members and occasionally leaving trains. Their radiant will be high in the northern sky in the early morning.

STARS AND CONSTELLATIONS

Evenings sees the richest parts of the Milky Way pass overhead. It's not visible from suburbia but can be traced by bright asterisms like Sagittarius's Teapot and Scorpius's scorpion. Closing the gap to the pointers and Southern Cross is the bat-shaped Ara (south of the scorpion's tail), preceded by the triangle of Triangulum Australe. Further west (south of Crux) is the trapezium of Musca. These constellations are comprised of mag. +2 to mag. +4 stars; binoculars will help.

THE PLANETS

Mercury concludes a favourable evening return, dropping into the twilight glare in the last week of July. Mars is soon lost from the evening sky being low in the northwest, departing around 21:00. Saturn and Neptune are now visible before

midnight, rising around 23:00 mid-month and transiting late morning. The beacon of Venus arrives in the predawn, taking a prominent place above the northeast horizon. Jupiter returns to the morning, spending July in the eastern dawn glow.

DEEP-SKY OBJECTS

This month, a trip to Ara, starting with the impressive globular cluster, NGC 6397 (RA 17h 40.7m, dec. -53° 40'). At mag. +5.9, it's considered the fifth-brightest globular in the sky! Reasonable power (100x) gives stunning views of this loosely packed globular, revealing a 10-arcminute halo brightening to a brilliant 2-arcminute core. Lines of stars radiate from the centre. NGC 6397 is found in the same binocular field as Beta (β)

Arae. Just 1' from Beta is Gamma (γ) Arae, its stars distinctly yellow and white.

Here's an easy galaxy to find: NGC 6221 (RA 16h 52.7m, dec. -59° 13') is just 0.4' east of naked-eye (mag. +4) star Eta (η) Arae. Although 10th magnitude, this peculiar face-on spiral has a low surface brightness, appearing as a 2-arcminute, slightly oval, featureless halo embedded in an impressive rich star field.

Chart key

GALAXY	DIFFUSE NEBULOSITY	ASTEROID TRACK	STAR BRIGHTNESS: ● MAG. 0 & BRIGHTER ● MAG. +1 ● MAG. +2 ● MAG. +3 ● MAG. +4 & FAINTER
OPEN CLUSTER	DOUBLE STAR	METEOR RADIANT	
GLOBULAR CLUSTER	VARIABLE STAR	QUASAR	
PLANETARY NEBULA	COMET TRACK	PLANET	

