# THE SOUTHERN HEMISPHERE



### With Glenn Dawes

Marvel at big, bright Jupiter and take a swim around the stars of Delphinus, the Dolphin

# When to use this chart

1 Sept at 00:00 AEST (14:00 UT) 15 Sept at 23:00 AEST (13:00 UT) 30 Sept at 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.

#### SEPTEMBER HIGHLIGHTS

Jupiter is at opposition this month, rising around sunset and visible the whole night. With Venus too close to the Sun, Jupiter is by far the brightest and largest of the planets visible. At close to 50 arcseconds across (around the biggest it gets), this is a great opportunity to observe the intricate cloud patterns in its north and south equatorial belts. The Great Red Spot is a target for any sized telescope and best seen around an hour before and after crossing the central meridian.

# STARS AND CONSTELLATIONS

Watery constellations to see this month are the fishy ones (Pisces and Pisces Austrinus) and Aquarius, the Water Bearer. Lesser known is Delphinus, the Dolphin. This small constellation is faint, but distinctive, lying around 15° eastnortheast (lower right) of bright Altair. Its main four 4th-magnitude stars are in a diamond shape known as Job's Coffin. A fifth star of similar brightness lies 3° south of (above) the diamond. Suburban dwellers may need binoculars to view.

## THE PLANETS

For the first half of September, Mercury is close to the western horizon in the late twilight. Then turn around and find luminous Jupiter in the eastern evening sky. Saturn is already well placed, crossing the meridian (due north)

around 22:00. Neptune takes the same passage about two hours later, followed by Jupiter at 01:00. Although visible late evening, Uranus is best left until midmorning. Mars too arrives around midnight, but is at its best in the late morning.

#### **DEEP-SKY OBJECTS**

This month a quick swim to visit the Dolphin. As it's not far from the Milky Way, Delphinus offers some rich star fields. Embedded in one such field is the globular star cluster NGC 6934 (RA 20h 34.2m, Dec +07° 24'). Although an attractive view, this 9th-magnitude 'fuzzy' is only four arcminutes across and needs some power (150x) to see its twoarcminute-wide bright, condensed core: and some aperture (250mm) to begin

resolving halo stars. There is a 9th magnitude star on the western edge.

Now for a challenge! NGC 6891 (RA 20h 15.1m, Dec +12° 42') is a fairly bright (10th-magnitude) planetary nebula. However, you need to find it. Being in an isolated region (2.5° south of Rho Aquilae), at low power the nebula looks just like a star. Under high power (200x) this 12-arcsecond blue disc is impressive.



