

# THE SOUTHERN HEMISPHERE



With Glenn Dawes

Catch sight of brightening comet 2P/Encke before sunrise and explore little-known Microscopium

## 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

Comet 2P/Encke is one of the shortest-period comets (3.3 years) and has been observed for over 300 years. It's best observed in the early dawn above the northeastern horizon. Starting the month in Auriga, it heads towards Castor, being closest on the 12th (1° north), around 10th magnitude. The 22nd sees Encke around ninth magnitude, just above the horizon, an hour before sunrise. It continues to drop into the dawn glow until it's lost, reaching perihelion next month.

## STARS AND CONSTELLATIONS

September skies present a wonderful contrast: the western half displays Milky Way vistas preparing to leave the evening, with icons like Scorpius dropping towards the horizon and Sagittarius's Teapot too, spout first. This gives way to the home of galaxies, a sparse sky with luminaries like Achernar and Fomalhaut or constellations Grus and Pegasus being exceptions. Other signposts like Piscis Austrinus and Capricornus are distinctive, but need dark skies to see.

## THE PLANETS

With Mars now departing as twilight closes, the evening highlight is Saturn high in the northern sky, transiting around 23:00 (mid-month). Around this time Jupiter is rising, followed 30 minutes later by Uranus. Both are best observed in the

morning. Neptune reaches opposition, transiting around midnight and visible all night. Venus can't be missed, rising in the eastern predawn sky. Although unnoticeable, this already-glowing beacon reaches maximum illumination on the 19th.

## DEEP-SKY OBJECTS

This month we take a trip to the obscure constellation of Microscopium, located south of Capricornus. Its brightest luminaries are a handful of fifth-magnitude stars, which include Alpha Microscopii (RA 20h 49.9m, dec. -33° 47'), an impressive double star. It has an obvious yellow primary (fifth magnitude) with a white secondary (10th magnitude) lying 20 arcseconds away.

Moving 3.7° northwest of Alpha finds the galaxy NGC 6925 (RA 20h 34.3m, dec. -31° 59'). This 11th-magnitude near-edge-on spiral has an obvious halo with a bright elongated core and star-like nucleus. Compare this to galaxy NGC 6958 (RA 20h 48.7m, dec. -38° 00'), 4.2° south of Alpha. It's also 11th-magnitude but elliptical, showing a near-circular halo (2 arcminutes wide) with a broad core that brightens towards the centre.

## 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	

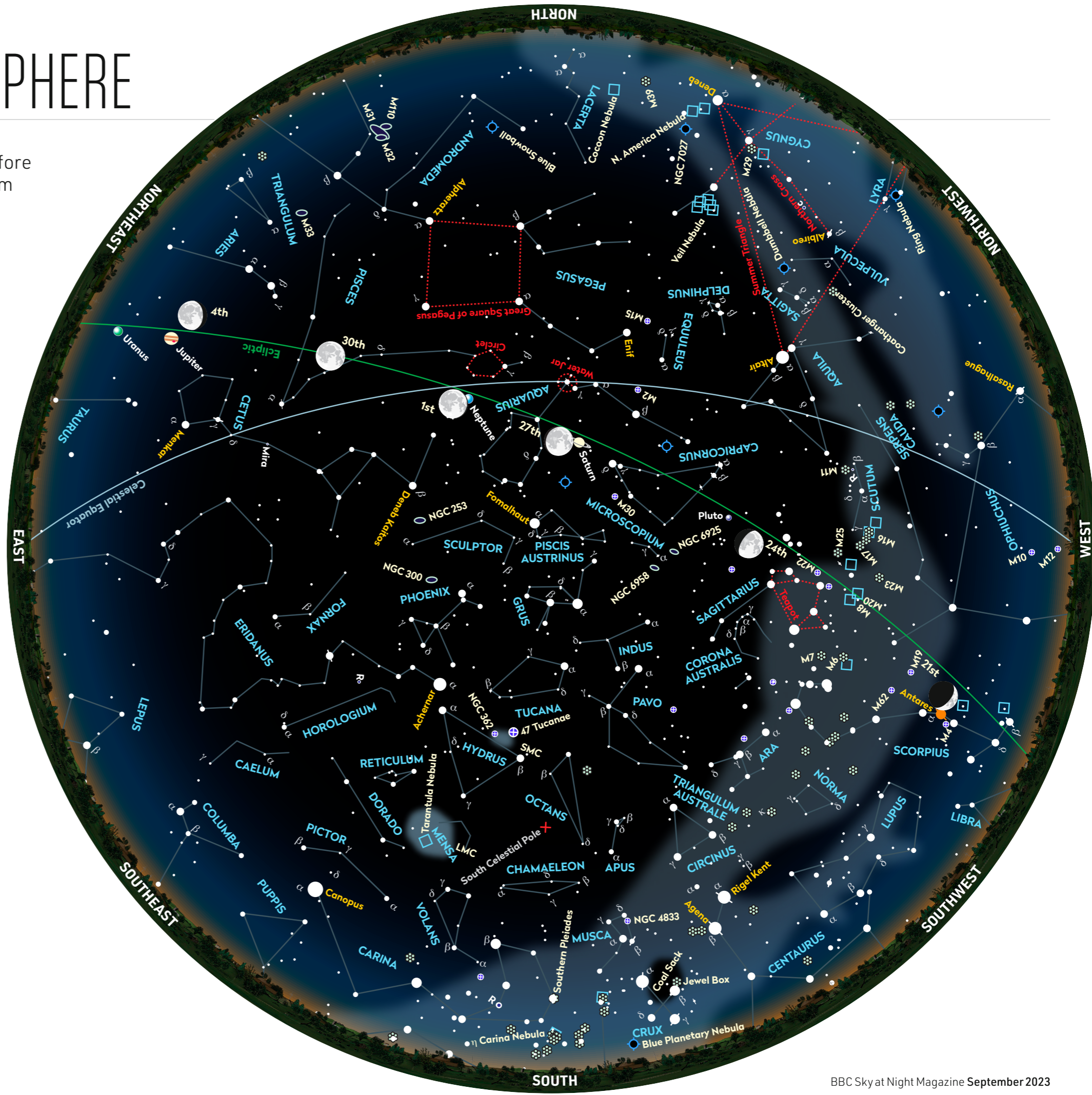


CHART: PETE LAWRENCE