

THE SOUTHERN HEMISPHERE



With Glenn Dawes

Saturn is at opposition and we're looking high in the sky for targets in Pavo and overlooked Indus

When to use this chart

- 1 Sep 00:00 AEST (31 Aug, 14:00 UT)
- 15 Sep 23:00 AEST (13:00 UT)
- 30 Sep 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

Saturn reaches opposition on the 8th, presenting its largest angular size for the year. It's also approaching a ring plane crossing in 2025, so the rings are now nearly edge-on. Its bright moons' orbits are close to the ring plane, so at each interaction they currently pass close to the poles or go behind (or in front of) Saturn. The brightest moon, Titan, easily visible in a small scope, presently moves close to interactions. These moments are best seen on 1st, 10th, 18th and 26th.

STARS AND CONSTELLATIONS

For urban dwellers who can't see our Galaxy, there are still distinctive star patterns (asterisms) to help you navigate the evening sky. Close to the northern horizon is the Summer Triangle of Altair, Deneb and Vega. Low in the northeast, you'll find three bright stars from Pegasus and Andromeda that form the Great Square of Pegasus. Looking southwest, the Teapot in Sagittarius is pouring a drink as it prepares to set, as Scorpius dives headfirst towards the western horizon.

THE PLANETS

Venus is now a prominent beacon low in the early evening western sky. The planet has a close conjunction with the crescent Moon on the evening of the 5th, a sight not to miss! Uranus has entered the evening sky, rising around 23:00 mid-month.

Being at opposition this month, Saturn and Neptune are up all night, both transiting due north around midnight. Turning to the morning, Jupiter and Mars are conspicuous, rising about 01:00 and 02:00 respectively, and are best seen just before dawn.

DEEP-SKY OBJECTS

High in the southern evening sky, next to Grus, is the lesser-known constellation Indus. Move 5° north from the naked-eye (fourth-magnitude) double star Theta (θ) Indi to find galaxy NGC 7049 (RA 21h 19.0m, dec. -48° 34'). This mag. +10.7 spiral has a prominent, slightly oval core surrounded by a faint narrow halo. Only 0.4° west-northwest lies another spiral, NGC 7041, with an obvious oval core circled by a faint, spindle-shaped halo.

Immediately southwest is Pavo. From naked-eye (mag. +1.9) star Peacock (Alpha (α) Pavonis), travel 10° southwest to NGC 6752 (19h 10.8m, dec. -59° 59'), fifth-brightest of the globular star clusters (at mag. +5.3) and readily visible through binoculars. A 15cm telescope easily resolves the brighter members, looking like a diffuse open cluster overlaying the globular's haze, which has a condensed, bright 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	

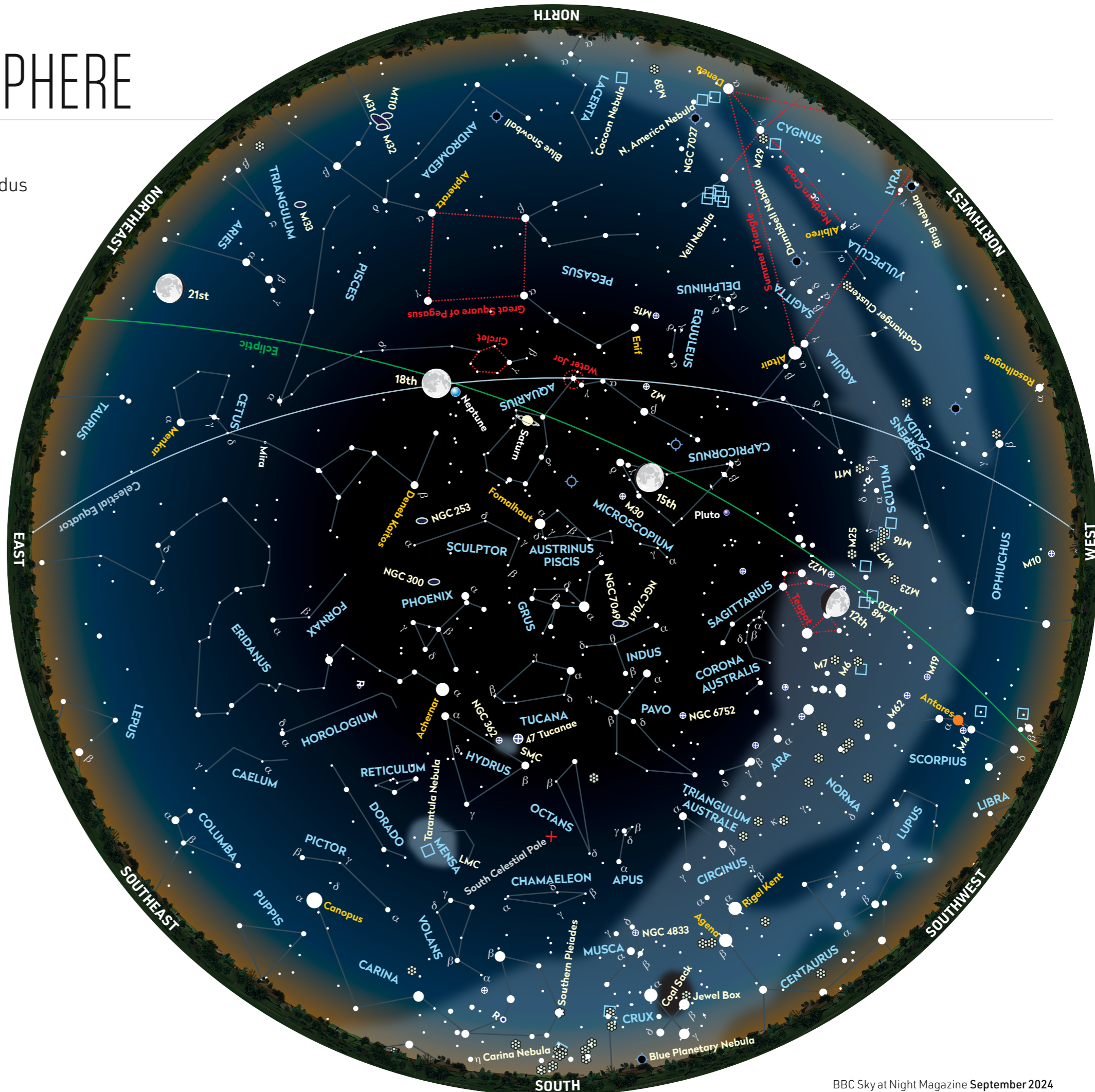


CHART: PETE LAWRENCE