

THE SOUTHERN HEMISPHERE



With Glenn Dawes

Catch Saturn at opposition and scope out some beautiful star clusters in the constellation of Lyra

When to use this chart

- 1 Aug at 00:00 AEST (14:00 UT)
- 15 Aug at 23:00 AEST (13:00 UT)
- 31 Aug 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.

AUGUST HIGHLIGHTS

Saturn is at opposition in August and closest to Earth for this visit. Being distant (9.5 AU) from the Sun, you might think being 1 AU closer wouldn't make a difference, but Saturn is currently 25% larger than near conjunction. This helps when looking for fine details, such as in the rings. For example, the Cassini division becomes an actual gap, with Saturn shining through. Under excellent seeing the narrower Encke division, near the visible edge of the rings, might be seen.

STARS AND CONSTELLATIONS

The bright star Vega (mag. 0.0, Alpha (α) Lyrae), low in the northern evening sky, has not always been visible from the Southern Hemisphere. Thanks to precession, around 12,000 BCE it was the North Celestial Pole star, as it will be again in 14,500 CE. Except for being part of the Summer Triangle asterism, Vega is isolated but distinctive. Under dark skies (or through binoculars) a parallelogram of 3rd and 4th-magnitude stars lies next to Vega. This is the harp of Lyra.

THE PLANETS

Saturn is well placed in August, rising around sunset and visible all night. Speedy Mercury rises out of the twilight glow early on and is well clear of the dusk by month's end – its best evening return for 2022. Neptune and Jupiter are rising

mid-evening, with these outer planets transiting in the morning. Mars and Uranus remain morning objects, rising shortly after midnight. Finally, Venus continues to slowly approach conjunction, close to the eastern horizon at dawn.

DEEP-SKY OBJECTS

A sojourn into Lyra this month, commencing with one of the parallelogram stars, Delta (δ) Lyrae (RA 18h 54.5m, dec. +36° 54'). This impressive wide double consists of Delta², a mag. +4.3 red star, with its mag. +5.6 white companion Delta¹ 10 arcminutes away. Between these stars is a rather sparse, but obvious, open star cluster, Stephenson 1, dominated by around a dozen 9th to 10th-magnitude stars. Lyra also contains

the globular cluster NGC 6779 or M56 (RA 19h 16.6m, dec. +30° 11'), which without reasonable aperture and power looks like no more than a small fuzzy ball. Scopes of 200mm and powers around 150x just resolve individual stars, in this mag. -8.0, low-density globular (4' across) and reveal a broad core (2'). There is also a sprinkling of brighter stars across its haze with a 10th-magnitude star on the cluster's western edge – quite alluring!

Chart key

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

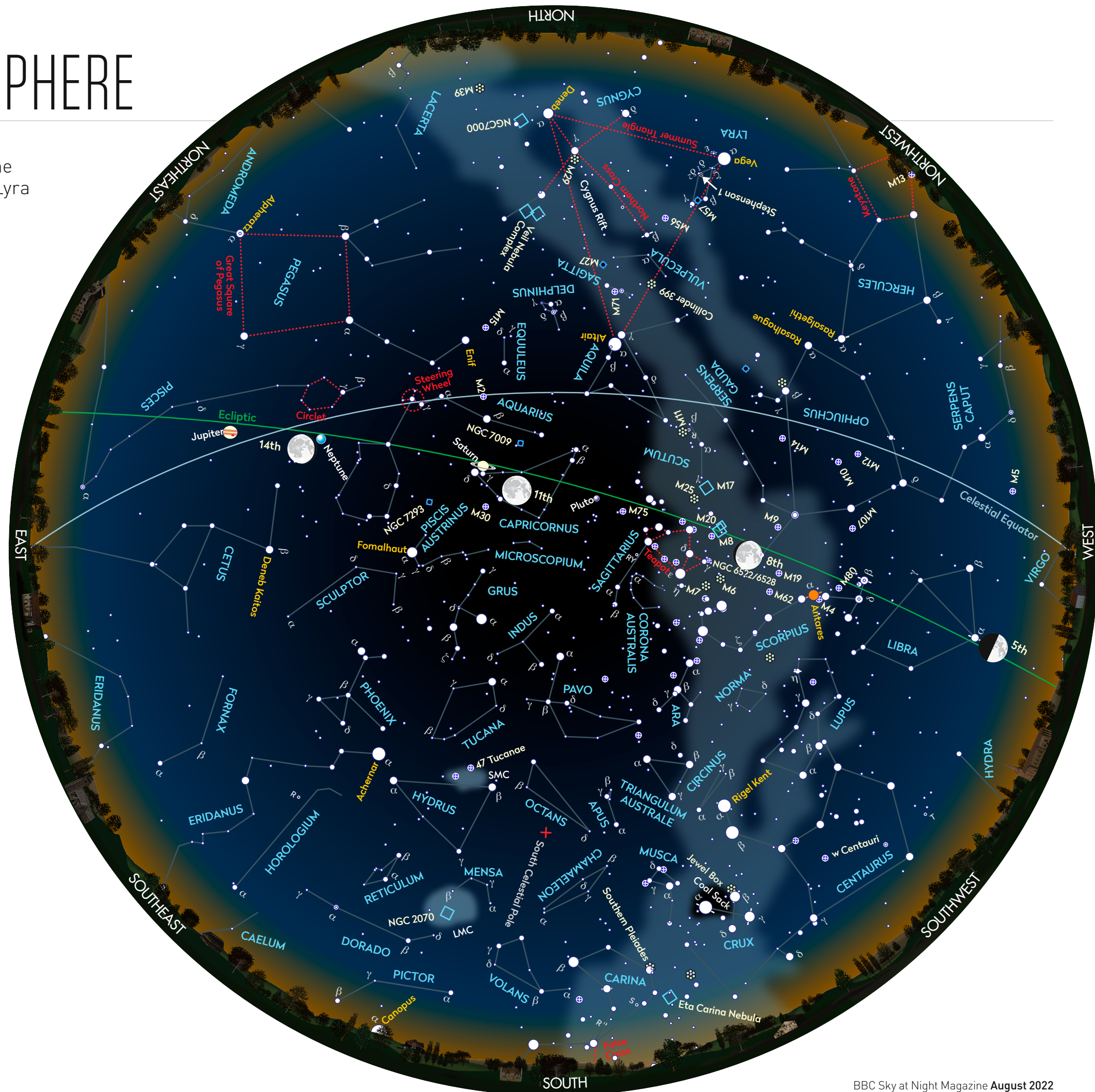


CHART: PETE LAWRENCE