

THE SOUTHERN HEMISPHERE



With Glenn Dawes

Watch as Venus and Mars dance over to Regulus, then visit two half-horses and run with the Wolf

When to use this chart

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

JULY HIGHLIGHTS

☿ Early in the month, Venus and Mars travel together towards Regulus (Alpha (α) Leonis) in the northwestern twilight. Mars has its closest approach on 10th, 0.7° from Regulus, with both a similar brightness. The planets separate as Venus heads towards conjunction, to be passed by Mercury as it returns to the evening sky. This 'speedy messenger' follows Mars's path, passing within 0.5° of Regulus on the 29th. Mercury will be brighter than the star, with Venus easily outshining them both.

STARS AND CONSTELLATIONS

♊ Of the many mythical creature constellations, two are centaurs: Centaurus and Sagittarius, displayed high in winter evening skies. Located in the southern Milky Way, these half-horse, half-humans are not really recognisable. Only hints remain, like Alpha Centauri – Rigel Kentaurus, the 'foot of the Centaur', indicating the creature is standing over the Southern Cross. Even the famous Teapot asterism mainly marks Sagittarius's bow and arrow, not the beast itself.

THE PLANETS

♀ Venus continues to dominate the western twilight sky, with Mars nearby. Mercury reappears in the evening, reaching a fair altitude by mid-July. Saturn is now rising around 21:00 mid-month, followed by Neptune two hours later. Both

will transit in the morning hours. Turning to the morning, Jupiter arrives in the early hours (rising at 02:00 mid-month), followed by Uranus an hour later. These are best observed in the predawn, allowing them time to reach a reasonable altitude.

DEEP-SKY OBJECTS

👁 This month, a trip to the constellation of Lupus, the Wolf. Phi¹ (φ¹) Lupi (RA 15h 21.8m, dec. -36° 16') with Phi² (φ²) makes a naked-eye double star with components of mag. +3.5 and +4.5, separated by 43 arcminutes. Binoculars reveal an attractive colour difference, Phi¹ being yellow and Phi² being blue-white.

feature of NGC 5986 (RA 15h 46m, dec. -37° 47') is its bright, wide, 5-arcminute core surrounded by a narrow, fainter halo about 1 arcminute across. Stars are visible scattered across this mag. +7.5 globular. In contrast, NGC 5824 (RA 15h 4m, dec. -33° 4') has a faint halo of around 3 arcminutes, with an almost stellar-like core of around 1 arcminute. Only a few stars are resolved around the edge and they call for a larger telescope (around 250mm) to be seen.

🔭 Next, two quite different globular star clusters. The most striking

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	

