

# THE SOUTHERN HEMISPHERE



With Glenn Dawes

This month, enjoy the crescent Moon meeting a string of planets and explore sights around Vela

## When to use this chart

- 1 Feb at 00:00 AEDT (13:00 UT)
- 15 Feb at 23:00 AEDT (12:00 UT)
- 29 Feb at 22:00 AEDT (11:00 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.

## FEBRUARY HIGHLIGHTS

The crescent Moon next to a planet is always a pleasing sight. In February all five naked-eye planets have such encounters. On the 8th, low in the dawn sky the 27-day-old Moon has brilliant Venus 5° to the lower left, with Mars 8° below. The following morning, the Moon is 3° to the upper-right of Mercury. The thin crescent Moon appears low in the evening twilight on 11th, 4° to the upper right of Saturn, then on the 15th, the six-day-old Moon is 4° to the lower right of Jupiter.

## STARS AND CONSTELLATIONS

Look at the northern Milky Way. Many of the bright stars and nebulae are nearby, but some far further away. This includes the stars of Orion and Taurus, and the Hyades and Pleiades. So why do we see a jump for some objects in the same area to over 4,000 lightyears, such as M36, M37 and M38 in Auriga? It relates to the spiral structure of our Galaxy. The Sun and the closer objects belong to the Orion Arm, which share the night sky with these distant members of the Perseus Arm.

## THE PLANETS

Saturn and Neptune are immersed in the twilight glow and lost by month's end. The highlight of the evening is Jupiter, but is soon gone, departing around 23:00 (mid-month). Uranus now sets around 30 minutes after Jupiter. There is then an

absence of planets until Venus, Mars and Mercury arrive in the predawn. February begins with Mars and Mercury close. As Mercury drops towards its solar conjunction at month's end, Mars draws close to Venus, being separated by only 0.6° on the 23rd.

## DEEP-SKY OBJECTS

This month, we visit the constellation of Vela, the Sail. High in the southern evening sky is the False Cross asterism. One of its stars, Delta (δ) Velorum, forms a brilliant binocular field with the open cluster IC 2391 (RA 8h 40.5m, dec. -53° 02'), 2' northward. The cluster, named after its dominant (third-magnitude) luminary, Omicron (ο) Velorum, consists of around a dozen bright, hot, blue stars scattered across a 1' circle, sitting on an impressive

Milky Way field. Just 6 arcminutes south of Omicron lies the wide binocular double of HR3448 and NZ Velorum, mag. +5.5 and -5.2 respectively, 4 arcminutes apart. Only 19 arcminutes east is another impressive double star, HY and KT Velorum being mag. +4.8 and +5.5, separated by 1.3 arcminutes. Small telescopes reveal both HY and KT are wide doubles and that NZ has a ninth-magnitude companion 17 arcseconds to the northeast.

## 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	

