

THE SOUTHERN HEMISPHERE



With Glenn Dawes

Catch comet 62P/Tsuchinshan's closest approach and delve deep into Dorado's galactic group

When to use this chart

- 1 Jan at 00:00 AEDT (13:00 UT)
- 15 Jan at 23:00 AEDT (12:00 UT)
- 31 Jan 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.

JANUARY HIGHLIGHTS

Comet 62P/Tsuchinshan should be near maximum brightness (perhaps mag. +7) as January opens, rising in the late evening and visible all night. Having reached perihelion on Christmas Day, it spends January moving towards Earth, being just 0.5 AU away at month's end – a record since its discovery in 1965. It starts the year in Leo, moving into Virgo on the 11th. Over the next three months it makes several close conjunctions with members of the Virgo/Coma Cluster of galaxies.

STARS AND CONSTELLATIONS

Although Sirius is the brightest star, it reigns over a region of other brilliant luminaries, some making up the Winter Hexagon. Moving clockwise, drop down to Procyon, then to the Gemini twin stars Pollux and Castor. Next is the lowest (and most northern) first-magnitude star, Capella (in Auriga). Now climbing in altitude, you will come to red Aldebaran (the right eye of Taurus the Bull), then the final member of this asterism is Rigel, the beta star to Orion.

THE PLANETS

Saturn is low in the early western evening sky, dropping into the twilight by month's end. Neptune follows, setting an hour later. Jupiter is now an evening only object, setting around midnight mid-month, followed by ice giant Uranus

an hour later. Turning to the morning, brilliant Venus dominates the predawn eastern sky, arriving around 03:00 hours, quickly followed by Mercury and Mars, rising around dawn. These two have a close conjunction on the 28th, only 0.2° apart.

DEEP-SKY OBJECTS

This month, a swim with Dorado the Goldfish. Move 2.5° west-southwest from Alpha (α) Doradus to discover a compact region of the Dorado Galaxy Group, comprised of four galaxies fitting in a 0.5° field. It's dominated by two ninth-magnitude galaxies. The first is an elliptical, NGC 1549 (RA 4h 15.7m, dec. -55° 36'), with an obvious 1.5-arcminute circular halo with a small core and stellar nucleus. The other, lying 12 arcminutes

south-southeast, is the spiral NGC 1553 which in contrast is distinctly oval-shaped (3 x 1 arcminutes), with a small elongated bright core. Shift your gaze 20 arcminutes southwest to discover another spiral, NGC 1546. It has a similar appearance to NGC 1553, but is fainter at 11th magnitude. Lying 17 arcminutes southeast from NGC 1553 is the challenging edge-on spiral IC 2058, best described as a faint (13th-magnitude) uniform streak (3 x 0.3 arcminutes).

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	

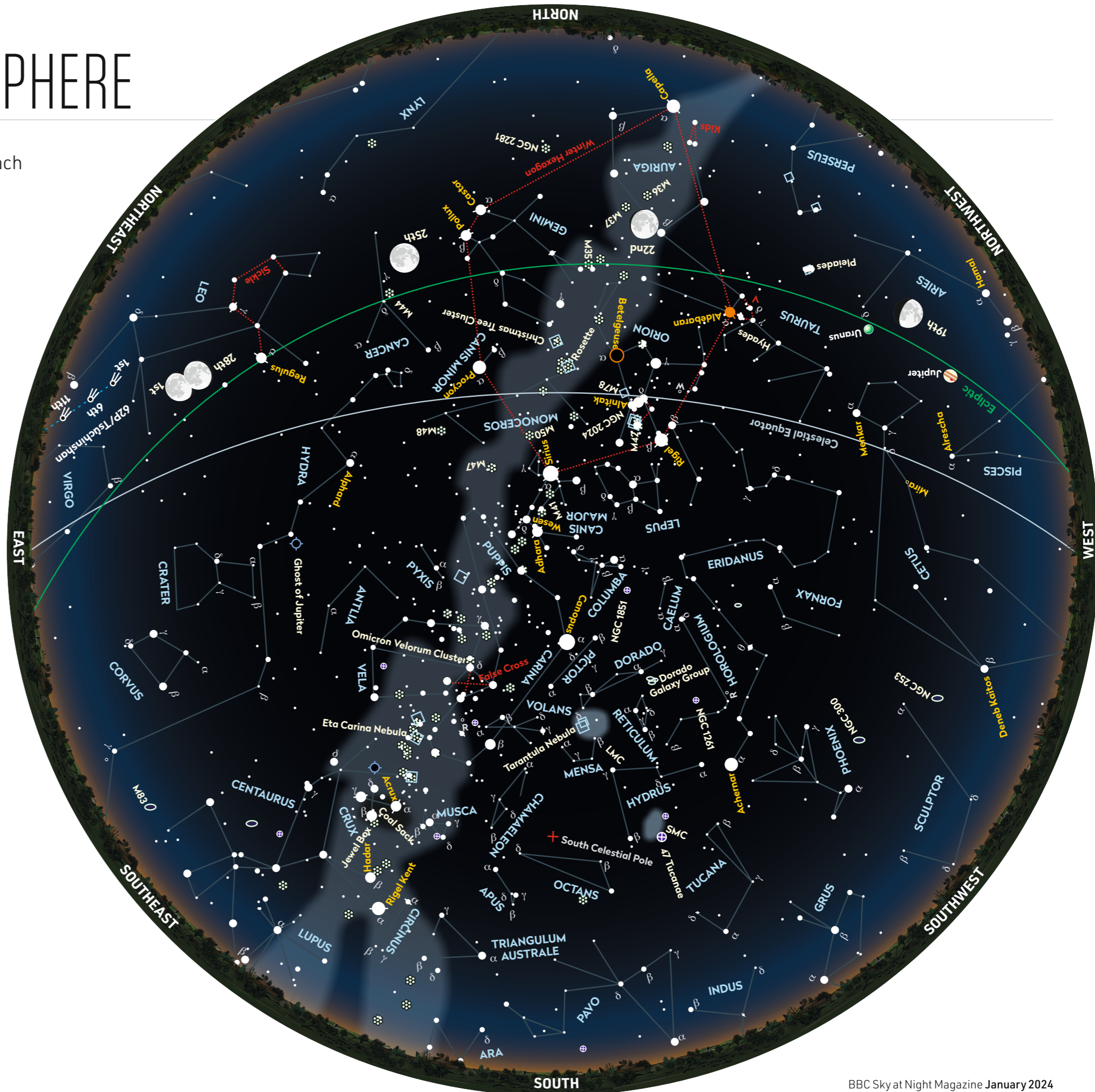


CHART: PETE LAWRENCE