THE SOUTHERN HEMISPHERE

With Glenn Dawes

Don't miss big, bright Jupiter at opposition and enjoy a stroll around galaxy-packed Fornax

When to use this chart

1 Nov at 00:00 AEDT (13:00 UT)
15 Nov at 23:00 AEDT (12:00 UT)
30 Nov 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.

NOVEMBER HIGHLIGHTS

Jupiter is at opposition this month and at its brightest and largest for the year. Located in a rather barren region in Aries, this mag. –2.9 beacon can't be missed, with only Venus being more luminous. Although always visible through small scopes, don't miss appreciating it now when its size (about 50 arcseconds) is around 50 per cent larger than when close to conjunction, making it easier to see detail in its northern and southern equatorial belts and the Great Red Spot.

STARS AND CONSTELLATIONS

As we look below the plane of the Milky Way, with our Galaxy hugging the horizon, the constellation of Sculptor is nearly overhead, for it is home to the South Galactic Pole. The view looking *back* from this direction would show our Galaxy face-on. For example, we see the brilliant spiral NGC 253 nearly edge-on. From this galaxy, 11 million lightyears away, the Milky Way's nucleus, central bar and spiral arms would be magnificently displayed – sadly a view we can never share!

THE PLANETS

Towards the end of November, Mercury makes a poor return to the evening sky, remaining low in the western twilight. Saturn is still an early treat, being due north (culminating) around sunset, with Neptune following two hours later.

Being at opposition this month, both Jupiter and Uranus are rising in the twilight and visible all night. Jupiter leads its outer Solar System sibling by about an hour. Turning to the morning, Venus remains a fixed beacon rising around 03:00.

DEEP-SKY OBJECTS

This month, a trip to two extra-galactic denizens in Fornax, a constellation that's home to many galaxies, its brightest member being NGC 1316 (RA 3h 22.7m, dec. –37° 13'). In a 15cm telescope, this fine mag. +8.5 lenticular galaxy clearly shows a 2 x 3-arcminute hazy halo, rising to a brighter core region. Only 5 arcminutes north lies the galaxy NGC 1317, appearing as a bright, well-defined, 0.5-arcminute circular cloud.

Fornax also contains the brightest (mag. +9.5) barred spiral galaxy known: NGC 1365 (RA 3h 33.6m, dec. –36° 09'). Its bright, circular central core stands out, being embedded in a broad, 3-arcminute-long bar. This is surrounded by a faint halo that looks somewhat mottled, and on a good night with averted vision its spiral arms can be glimpsed, giving the galaxy the overall shape of a distorted letter 'S'.

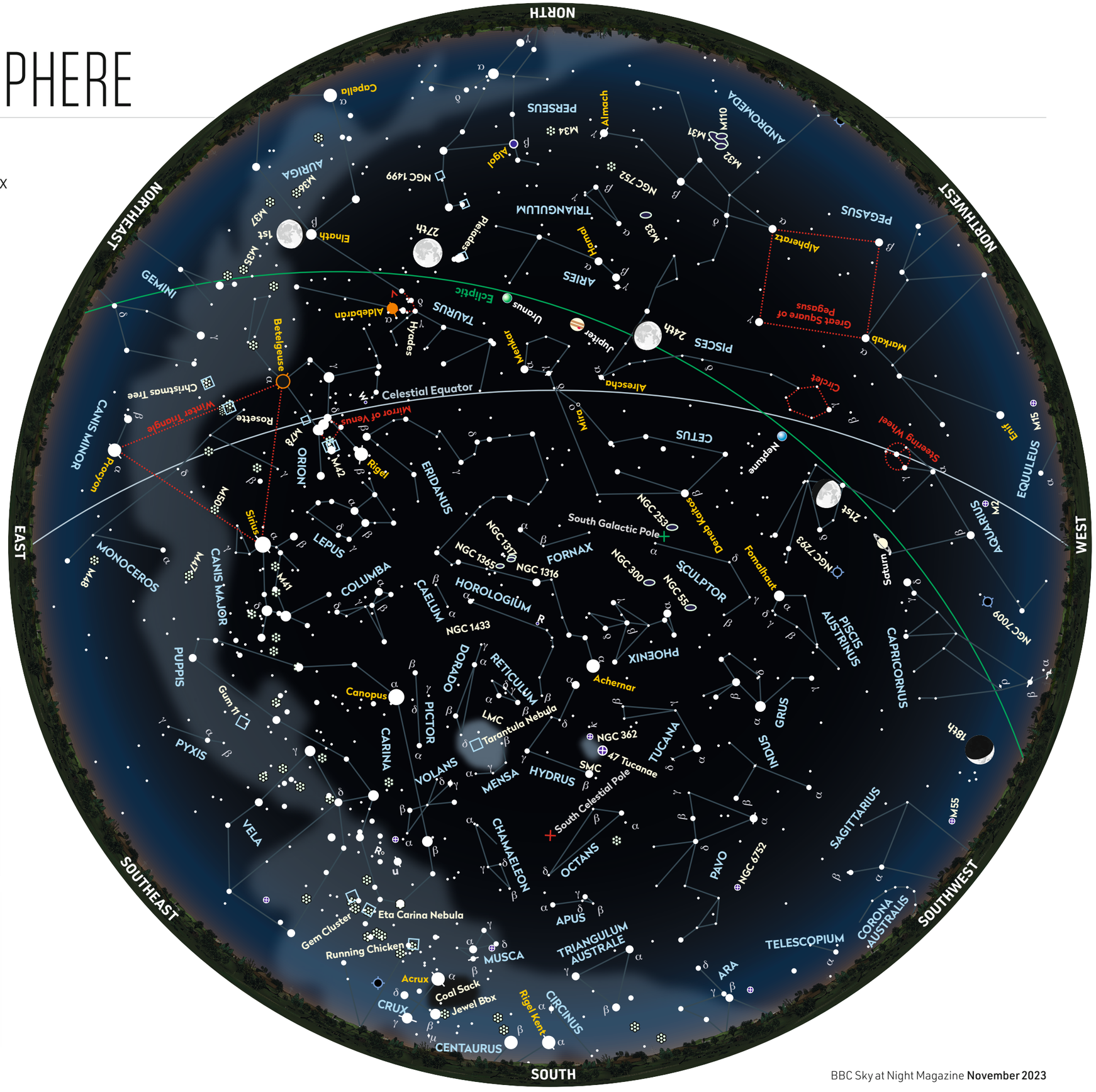

Chart key

- GALAXY
- OPEN CLUSTER
- GLOBULAR CLUSTER
- PLANETARY NEBULA
- DIFFUSE NEBULOSITY
- DOUBLE STAR
- VARIABLE STAR
- COMET TRACK
- ASTEROID TRACK
- METEOR RADIANT
- QUASAR
- PLANET

STAR BRIGHTNESS:
- MAG. 0 & BRIGHTER
- MAG. +1
- MAG. +2
- MAG. +3
- MAG. +4 & FAINTER

CHART: PETE LAWRENCE

BBC Sky at Night Magazine **November 2023**