Eridanus Optics CC

December 2007

Summer Triangle

Three bright stars form the corners of the 'Summer Triangle'. These are Sirius, Betelgeuse and Procyon (see map 1). In the Northern hemisphere, it is better known as the 'Winter Triangle' as it dominates the Northern night skies during the winter months. The Milky Way runs through this area and we can expect a few interesting objects to look at. This is, however, the 'outside' part of the Milky Way and is not as rich as the Scorpio/Sagittarius area that lies towards the core of the Milky Way.

The largest part of the area belongs to the constellation 'Monoceros' (Unicorn). Other constellations that fill the area are Orion, Canis Major and Canis Minor.

There is also a Southern 'Winter Triangle' consisting of Vega, Altair en Deneb – see August 2006 Newsletter.

Naked eye targets:

The Summer Triangle itself is an ideal naked eye object to view. Sirius, Betelgeuse and Procyon are the brightest, tenth brightest and eighth brightest stars in the sky and should be easy to locate. By adding Rigel (seventh brightest star) to the triangle, you can make a 'Summer Cross'. You can also look out for the following constellations – all of them fall only partly within the triangle:

- Orion (See January 2006 Newsletter)
- Canis Major (Look out for a future Newsletter)
- Canis Minor: Apart from Procyon, the only other bright star is Gomeisa. These form the 'Lesser dog', a rather long and flat constellation that I associate with a dachshund.
- Monoceros: (See Map 2). This is an inconspicuous constellation with the brightest stars around magnitude 4, overshadowed by neighbouring Orion with its numerous bright stars and famous nebulae. You may require binoculars to see the main stars of the constellation if the sky quality is compromised due to light pollution or moonlight.

Binocular Targets:

If you scan the area with binoculars, you will find various stars and groupings of stars of the Milky Way. Several groupings are indeed open clusters. The objects listed under the 'Telescope Targets' are easily visible through binoculars (7x50) from Pretoria's light polluted skies.

Telescope Targets:

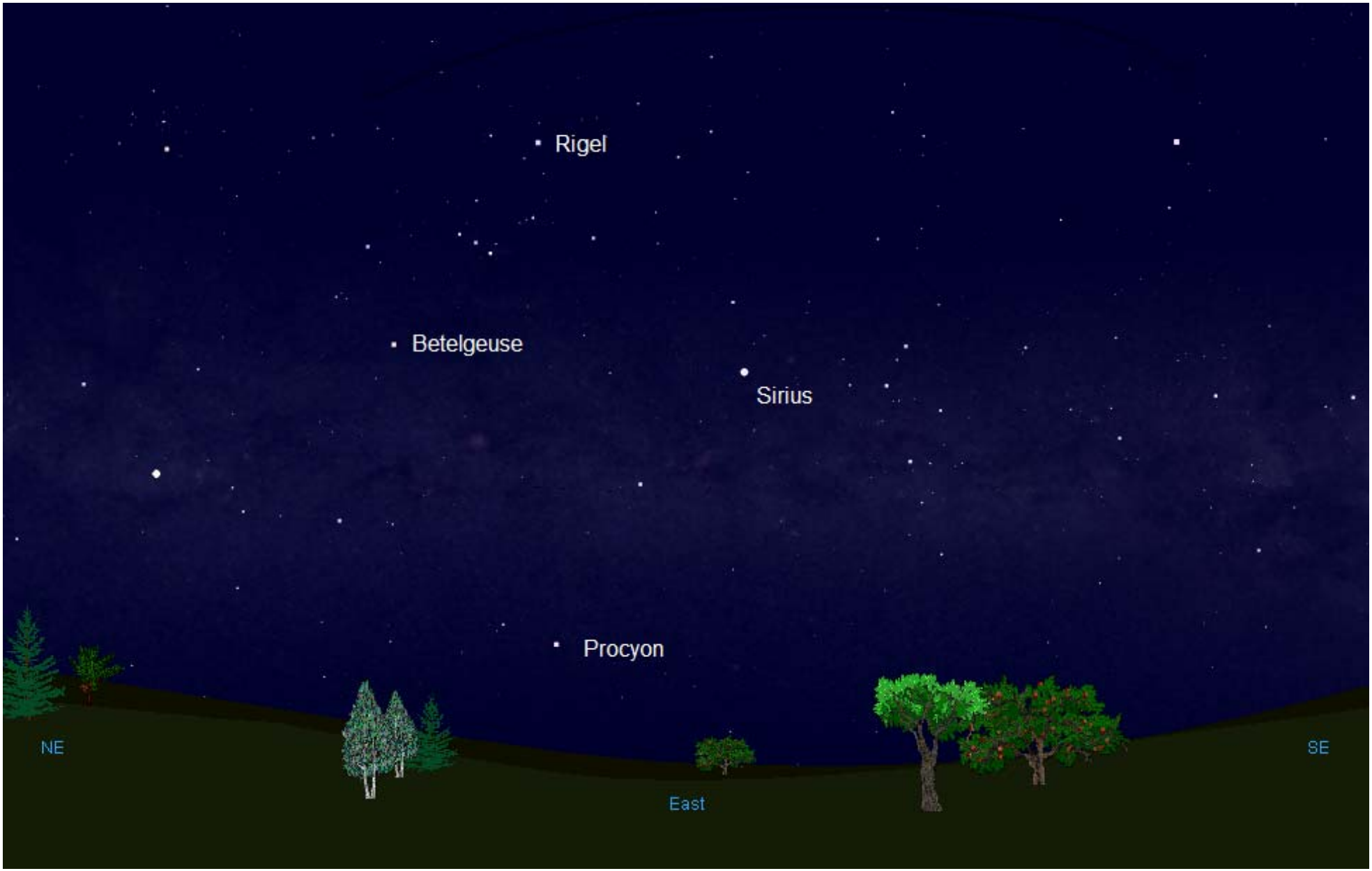
M50 is a 6th magnitude open cluster. Start off at Sirius to find it. About 5° towards Procyon is Theta Canis Majoris (Θ Cma). M50 is about 4° away along the same line.

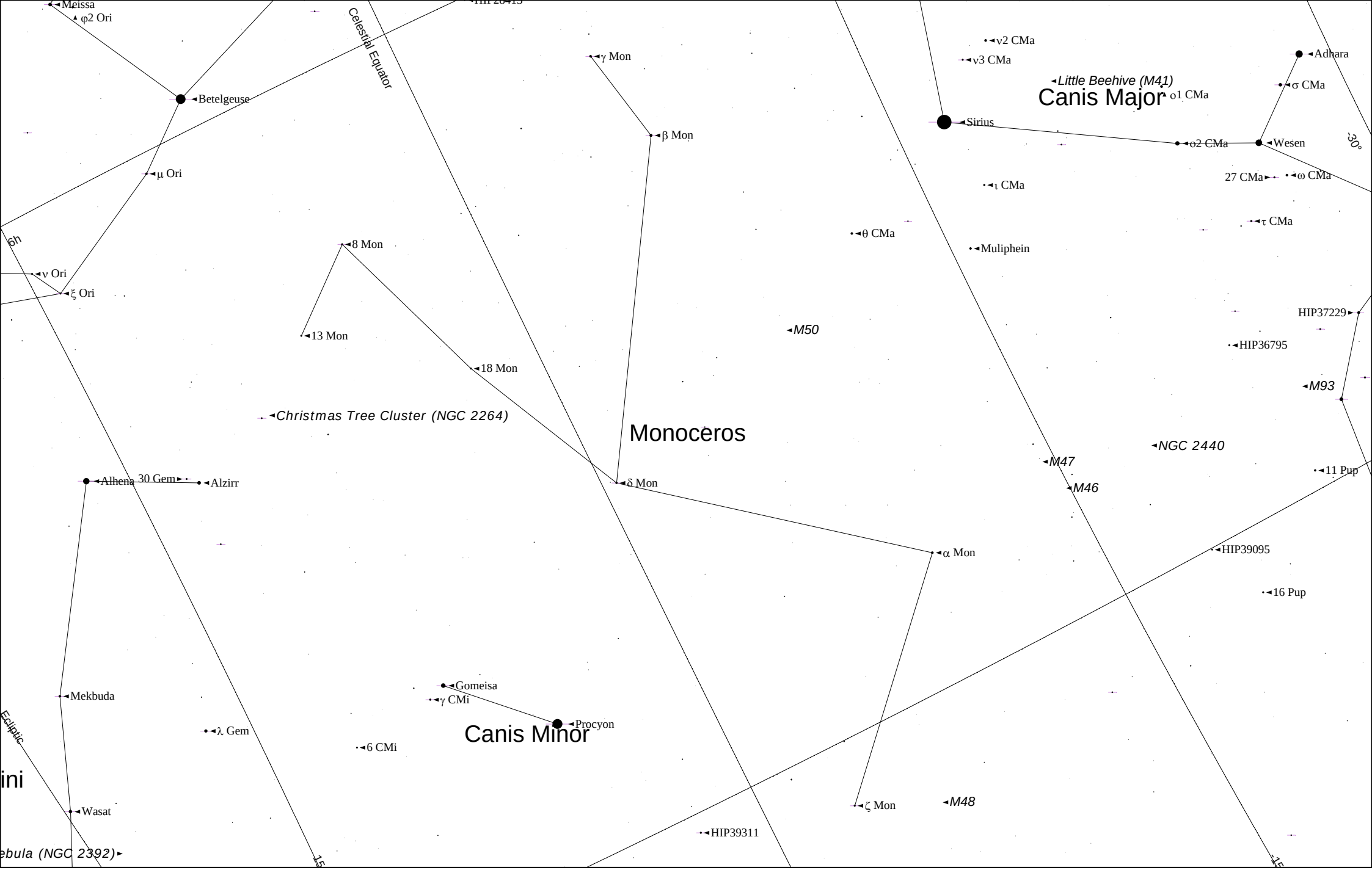
NGC 2264 – Christmas tree cluster. The Christmas tree cluster is surrounded by the nebulosity of the Cone Nebula. Start off at Betelgeuse. About 3° below Betelgeuse (North East) is Mu Orionis (μ Ori). About 7° to the right (South East) is 8 Monocerotis (8 Mon – mag 4.5). Three equally spaced bright(ish) stars form a line downwards (North East) with a forth star out of this line, but at almost the same spacing. The third star along this line is part of NGC 2264. NGC 2264 is about 2500 light years away.

NGC 2244 is an open cluster about 5000 light years away. It is surrounded by the nebulosity of the Rosette Nebula (my sources indicate that the nebulosity should be visible through binoculars from dark skies, but I could not see it from Pretoria). To find it, draw a triangle with corners at 8 Mon; 13 Mon and 12 Mon. NGC 2244 is the open Cluster around 12 Mon. Note that 12 Mon is not part of the open cluster but a foreground star.

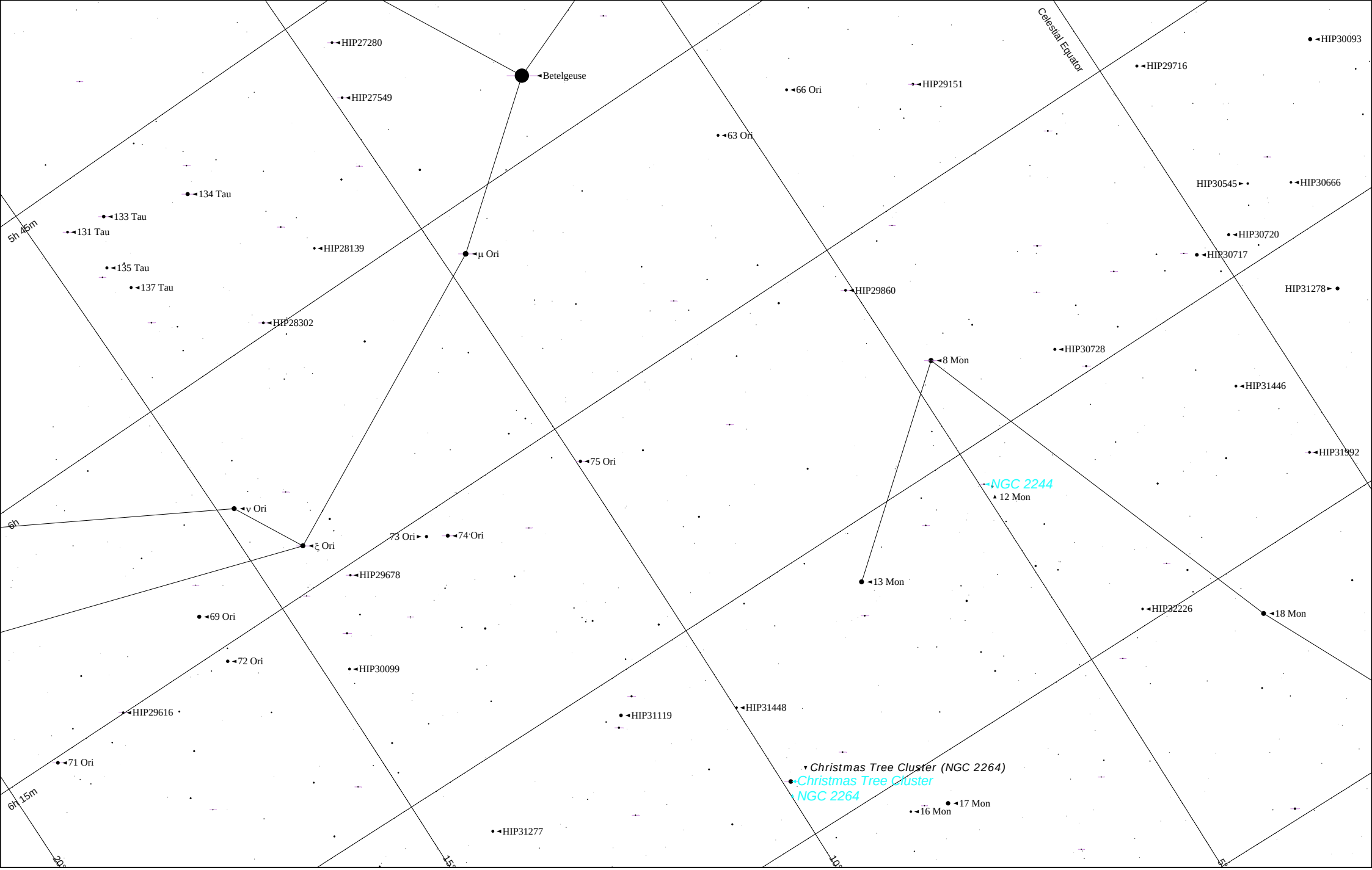
Happy hunting!

Andrie


Rigel
Betelgeuse
Sirius
Procyon
NE
East
SE



Viewing from Pretoria, South Africa Long: 28° 13' 24" Lat: -25° 43' 29"
2007/12/30 8:00:00 PM (Local)
Chart centre (J2000): RA: 7h 9.892m Dec: -3° 31.223'
Looking: east (19° above horizon)
FOV: 49°
Limiting Magnitude: 6.4



Viewing from Pretoria, South Africa Long: 28° 13' 24" Lat: -25° 43' 29"
2007/12/30 8:00:00 PM (Local)
Chart centre (J2000): RA: 6h 19.274m Dec: 8° 21.379'
Looking: north east (24° above horizon)
FOV: 21°
Limiting Magnitude: 8.2