

Eridanus Optics CC

July 2006

Stunned by Sagittarius

Scorpio lies between around 15° and 45° above the eastern horizon in the early evenings during mid July and provides a stunning array of targets for naked eye observation as well as for binocular and telescopic viewing. The directions refer to the attached sky maps.

The Milky Way runs through Sagittarius, offering several deep sky objects such as nebulae, open clusters and globular clusters, some of them visible to the naked eye, even under moderate light polluted skies. The galactic centre also falls in Sagittarius.

Naked eye targets:

The constellation Sagittarius represents a centaur (half man/half horse). Sagittarius is an archer with his arrow pointed to the heart of Scorpio (Antares – see May 2006 newsletter). The arrow is, however, too late... Scorpio has already stung Orion who dies (sets) as Scorpio enters the scene (rises).

Not much of the Centaur is visible from light polluted sites, and in this newsletter I will focus on the more prominent features. The bright stars of Sagittarius form an asterism representing a teapot (see map 1). The stars that make up the lid/spout form the bow and arrow. Kaus Borealis, Kaus Meridianalis and Kaus Australis form the bow, while Alnasl represents the tip of the arrow aimed at the heart of Scorpio. The teapot should be visible from light polluted sites without optical aid.

Binocular Targets:

The following targets can easily be located with binoculars. Even with a full moon situated close to Sagittarius they presented no challenge to me (using 7x50 binoculars):

- M22: Sagittarius Cluster. This is a globular cluster of magnitude 6.5 and is about 10 000 light years away. It is one of the closest globular clusters to our solar system. M22 forms the forth corner of a parallelogram consisting of Nunki, Omega Sagittarii, Kaus Borealis and M22.
- M8: Lagoon Nebula. This is a 5th magnitude nebula. Extending the line from Omega Sagittarii to Kaus Borealis will lead you to M8.
- M20: Trifid Nebula. This 5th magnitude nebula will be in the same binocular field as M8. Close to M20 is the open cluster M21 which may be mistaken as being part of M20.

These objects should also be visible without optical aid from dark sky sites or even sites with moderate light pollution. You can follow these instructions on Map 2.

Telescope Targets:

All the objects listed for binocular viewing are also prime telescope targets. The following target was selected as a more challenging object:

- M28: This is a globular cluster of magnitude 8.5. It is also on the extension of the line from Omega Sagittarii to Kaus Borealis, but much closer to Kaus Borealis than M8 and M20. A small cross asterism consisting of Kaus Borealis, HIP89980, HIP89731 and HIP89954 should be visible in the finderscope (see map 3). M28 is just outside the line that connects Kaus Borealis with HIP89980 and slightly closer to HIP89980.

Observers interested to locate more deep sky objects within Sagittarius can look out for (See map 2 for locations):

Messier Number	Description	Magnitude
M16	Eagle Nebula	6.5
M17	Omega Nebula	7
M18	Open Cluster (Black Swan)	8
M21	Open Cluster	7
M23	Open Cluster	6
M25	Open Cluster	4.9
M69	Globular Cluster	9
M70	Globular Cluster	9

Happy hunting!

References

Astronomical Society Of Southern Africa: Sky Guide Africa South (Edited by Auke Slotegraaf)

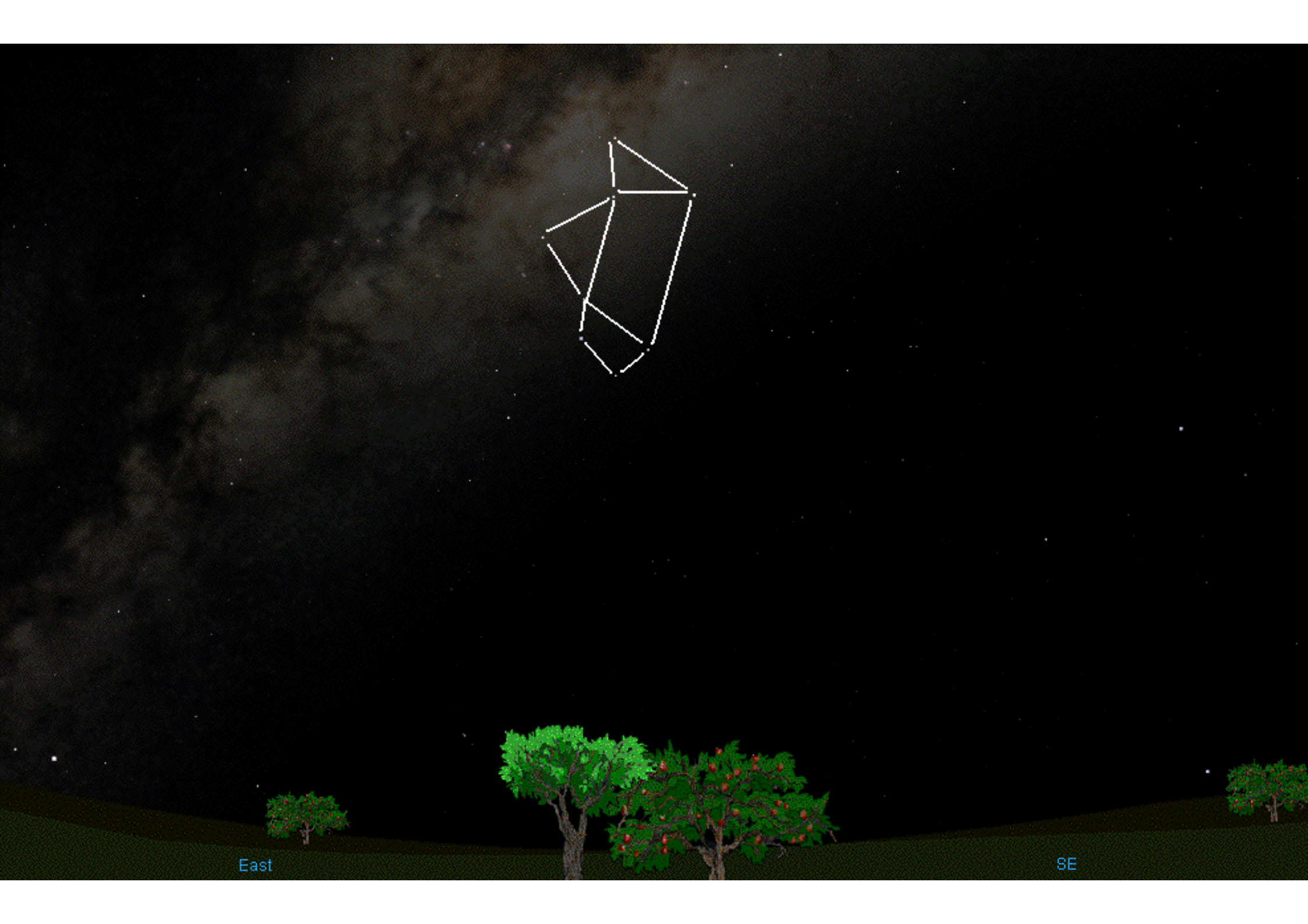
David Ellyard & Wil Tirion: The Southern Sky Guide

Ian Ridpath & Wil Tirion: Collins Gem – Stars

Milton D Heifetz & Wil Tirion: A Walk through the Southern Sky (A Guide to Stars and Constellations and their Legends)

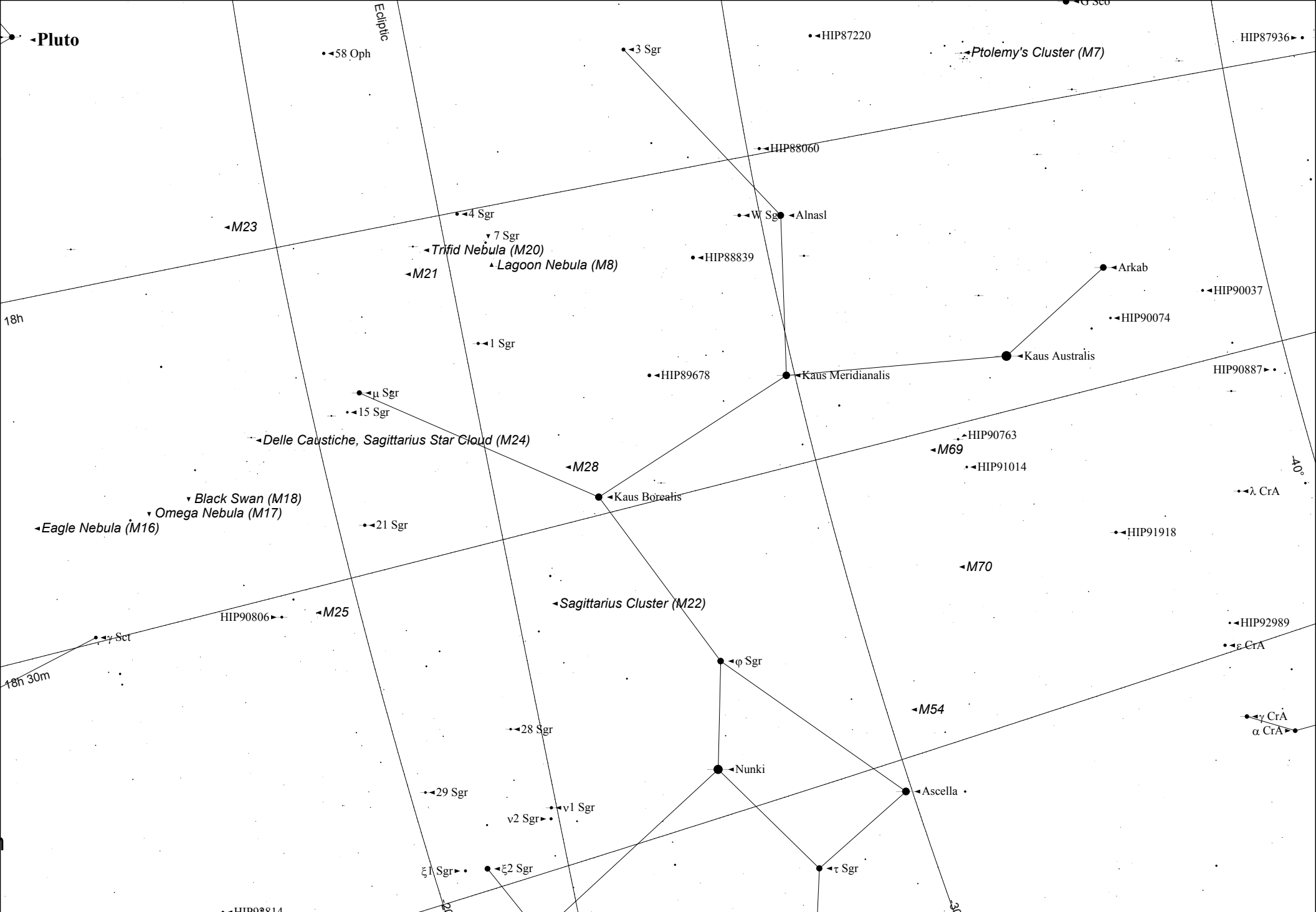
Maps Created with:

Starry Night (Orion Special Edition)



East

SE



Viewing from Pretoria, South Africa Long: 28° 13' 24" Lat: -25° 43' 29"

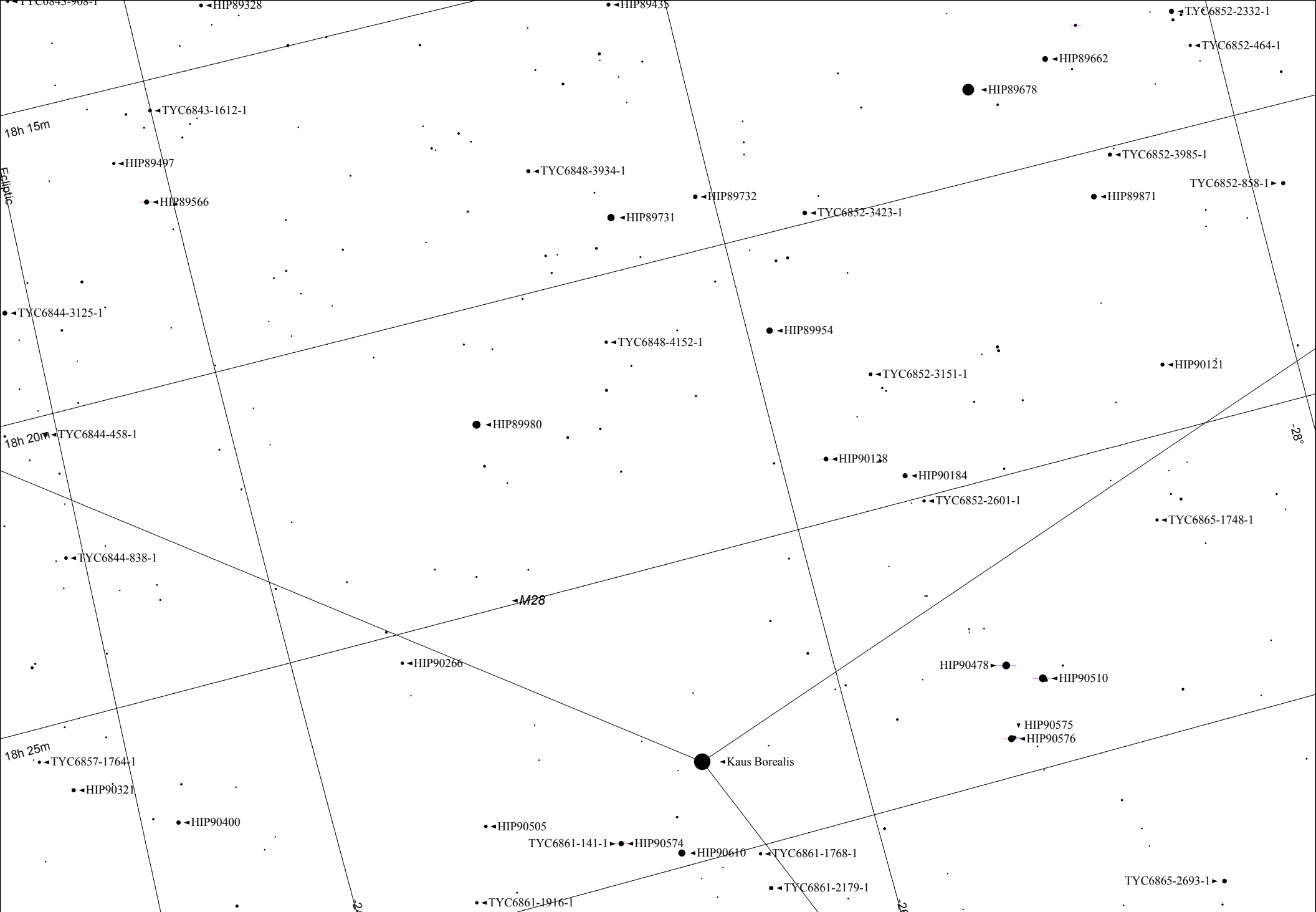
2006/07/13 07:00:00 PM (Local)

Chart centre (J2000): RA: 18h 25.656m Dec: -26° 49.340'

Looking: east (35° above horizon)

FOV: 27°

Limiting Magnitude: 7.7



Viewing from Pretoria, South Africa Long: 28° 13' 24" Lat: -25° 43' 29"

2006/07/13 07:00:00 PM (Local)

Chart centre (J2000): RA: 18h 22.805m Dec: -25° 33.232'

Looking: east (35° above horizon)

FOV: 5.0°

Limiting Magnitude: 11.3