

Planets November 2007

The information below is valid for 15 November as viewed from Pretoria. All planets, except Mercury, are more or less static over the one-month period. However, the rise and set times will be one hour later (about 4 minutes per day) towards the beginning of the month and earlier towards the end of the month.

Key information:

Planet	Magnitude	Rise time	Set time	Angle to Sun	Size of disc	Constellation
Mercury	-0.7	04:21	17:14	17°	6"	Virgo
Venus	-4.3	02:54	15:06	45°	20"	Virgo
Mars	-0.9	22:16	08:42	130°	14"	Gemini
Ceres	7.3	17:40	05:16	168°	Star like	Cetus
Jupiter	-1.9	07:06	20:44	29°	32"	Ophiuchus
Saturn	0.7	01:25	12:49	76°	18"	Leo
Uranus	5.8	13:16	01:49	111°	4"	Aquarius
Neptune	7.9	11:21	00:29	85°	2"	Capricorn
Pluto	14	07:40	20:51	34°	Star like	Sagittarius

Mercury: Mercury is in the morning sky during November. It reaches greatest western elongation on 8 November (19° West of the Sun) but remains difficult to see because it is always in the twilight zone. Mercury will reach superior conjunction on 17 December. Map on page 3.

Venus: Venus is a morning object during November and is the brightest object in the eastern sky (excluding the Sun and Moon). On 5 November Venus is 6° from the Moon, which creates an opportunity to view Venus in daylight. Map on page 3.

Mars: Mars will be the planet of choice to look out for during the next few months. Jupiter sets shortly after sunset while Saturn only rises after midnight. Mars on the other hand will be visible almost all night. Mars reaches opposition on 24 December and will then be at its best in 8½ years. Map on page 4.

Ceres: Minor planet Ceres is in opposition on 9 November (Mag 7.2) and will remain an early evening target for the next few months. Map on page 5.

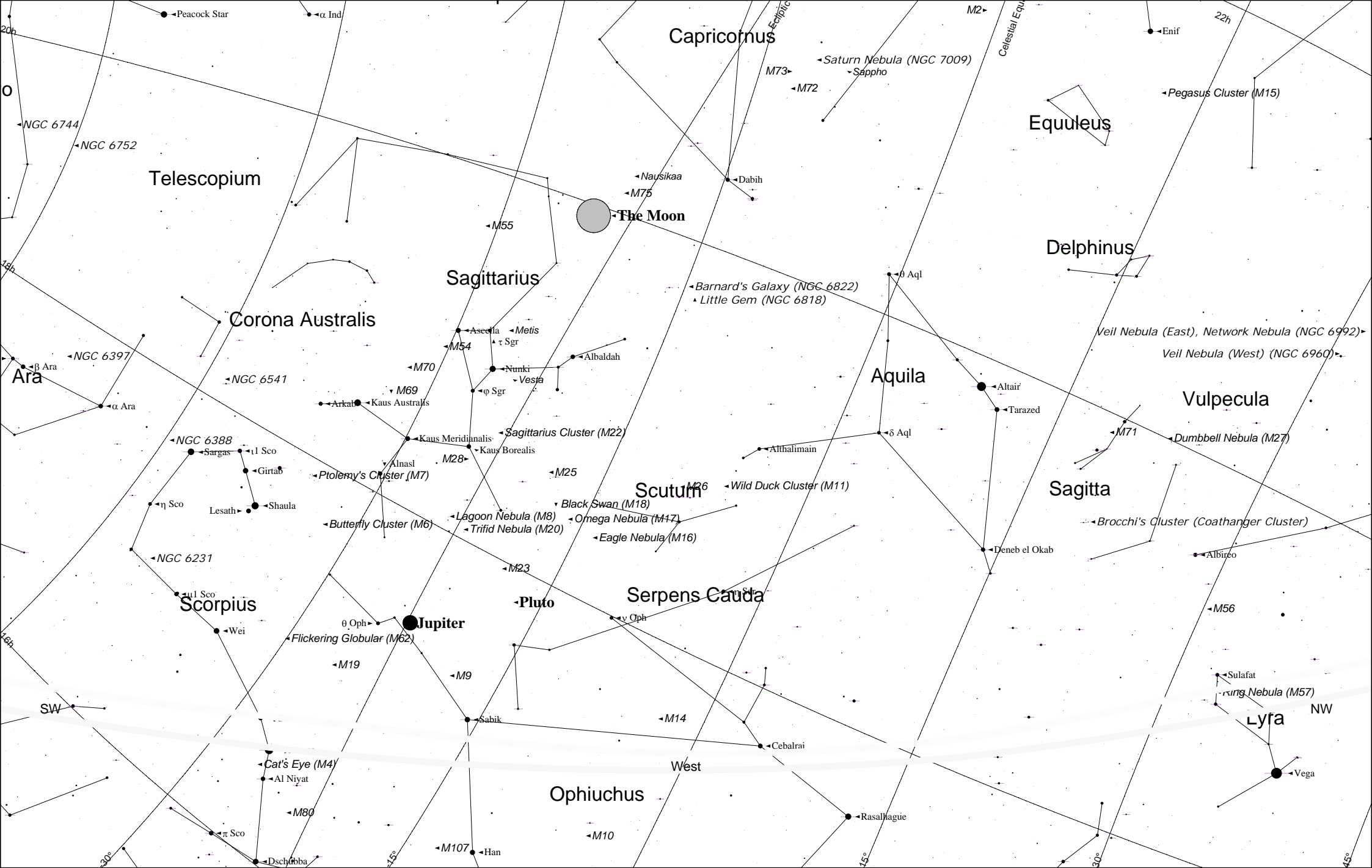
Jupiter: Jupiter reaches conjunction on 23 December and will be lost in the Sun's glow from late November. Jupiter is low on the western horizon shortly after sunset and will return as a morning object in the eastern sky late January. November is the last month in the current cycle to see the king of the planets during early evening. Map on page 6.

Saturn: Saturn rises after midnight and will reward the determined astronomer. The rings are now tilted only 7° with respect to the earth and are still decreasing. This causes Saturn to appear fainter than usual. Map on page 3 and page 4.

Uranus: Uranus is close to the meridian during the early evening and should be easy to see with binoculars or small telescopes. Under dark sky conditions, you may even see Uranus without optical aid. Map on page 7.

Neptune: Neptune are more challenging than Uranus (2 magnitudes dimmer) but should be well within the reach of even small binoculars and telescopes. Map on page 7.

Pluto: Pluto is positioned close to Jupiter and will be challenging to see even in the larger telescopes (you'll need about an 11" telescopes under dark sky conditions). Pluto will dip below the horizon soon after sunset and are at conjunction on 21 December. Map on page 6.



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

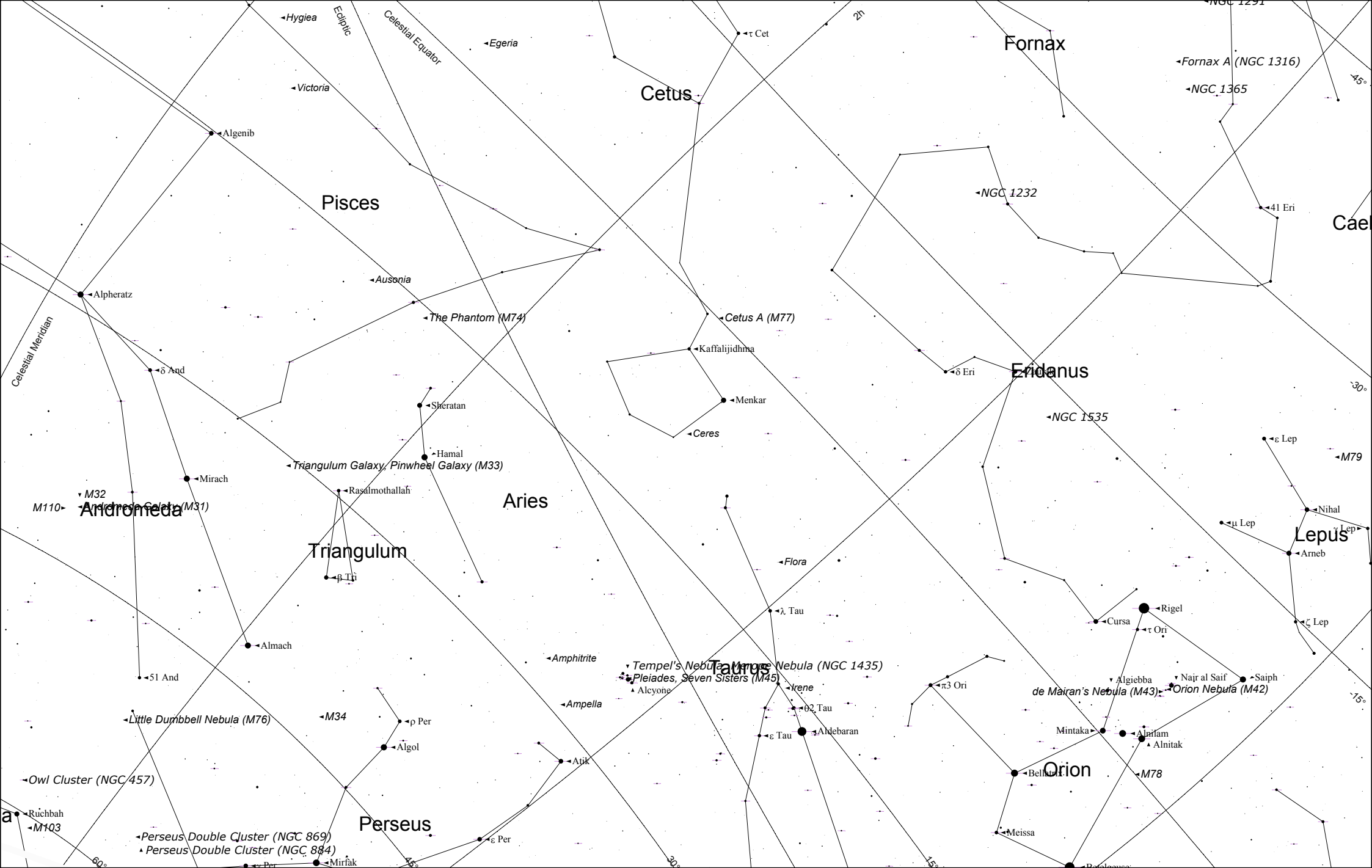
2007/11/15 8:00:00 PM (Local)

Chart centre (J2000): RA: 19h 1.366m Dec: -10° 34.788'

Looking: west (25° above horizon)

FOV: 100°

Limiting Magnitude: 6.4



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

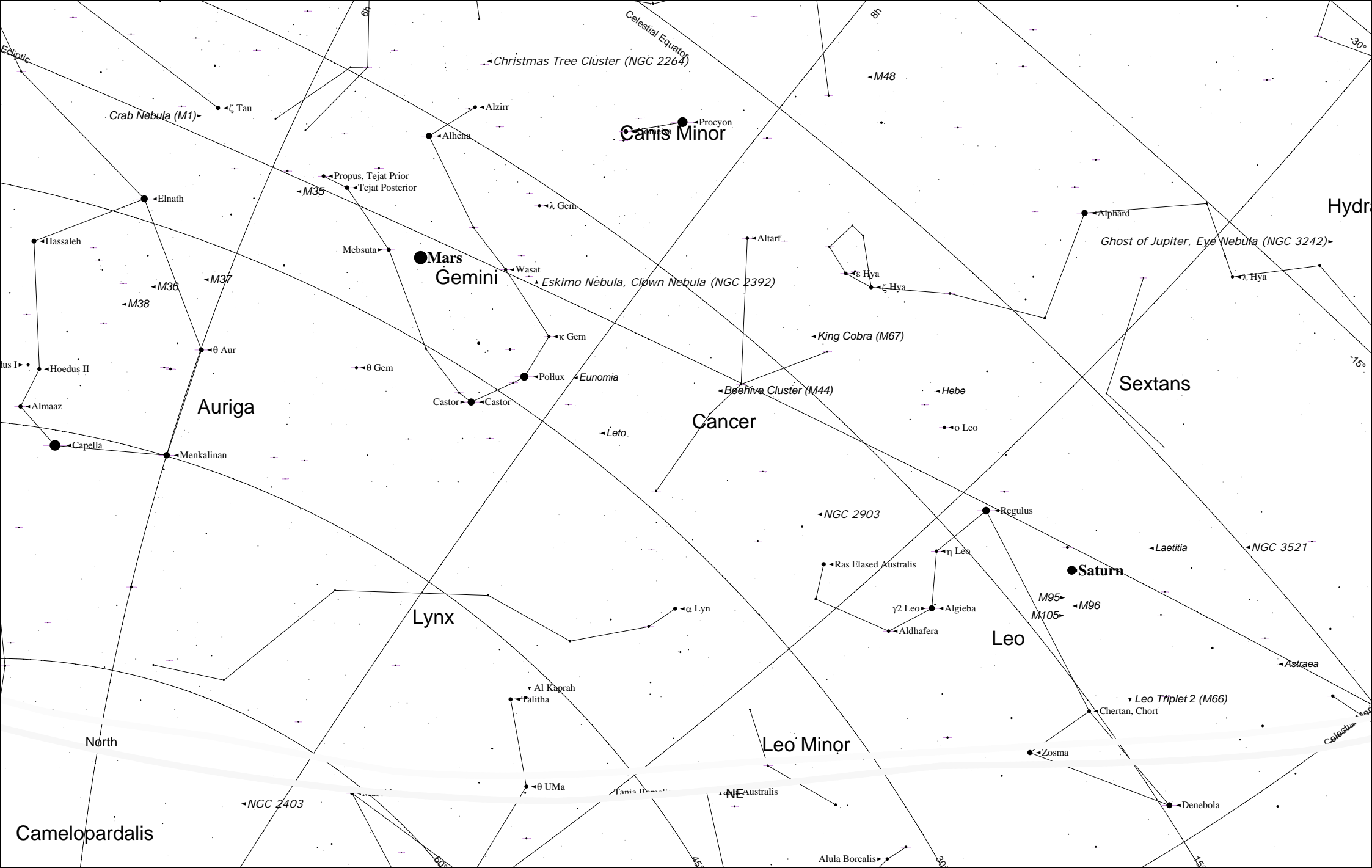
2007/11/15 9:00:00 PM (Local)

Chart centre (J2000): RA: 3h 1.724m Dec: 8° 1.444'

Looking: north east (40° above horizon)

FOV: 100°

Limiting Magnitude: 6.4



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

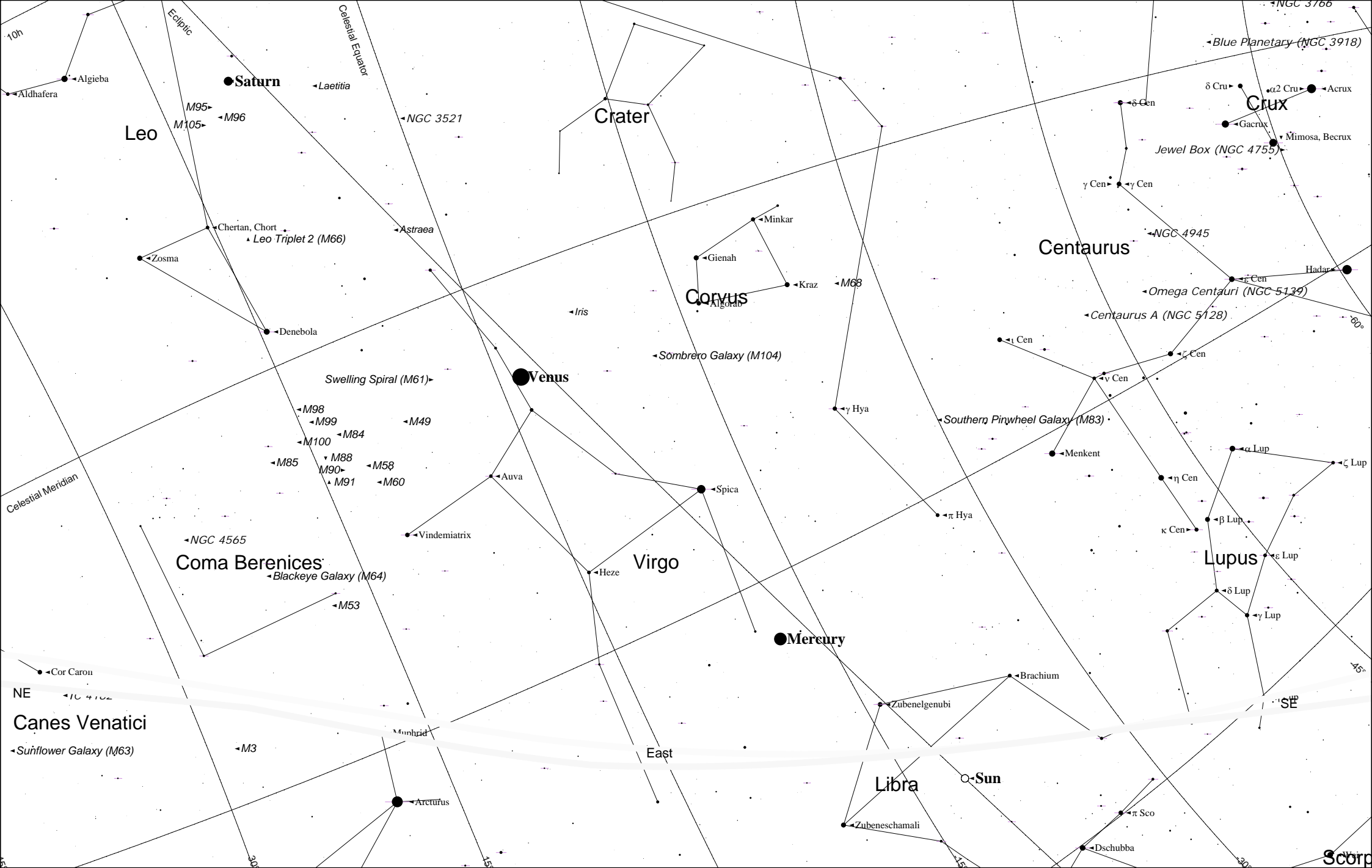
2007/11/16 2:30:00 AM (Local)

Chart centre (J2000): RA: 8h 41.583m Dec: 23° 53.350'

Looking: north east (27° above horizon)

FOV: 100°

Limiting Magnitude: 6.4



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

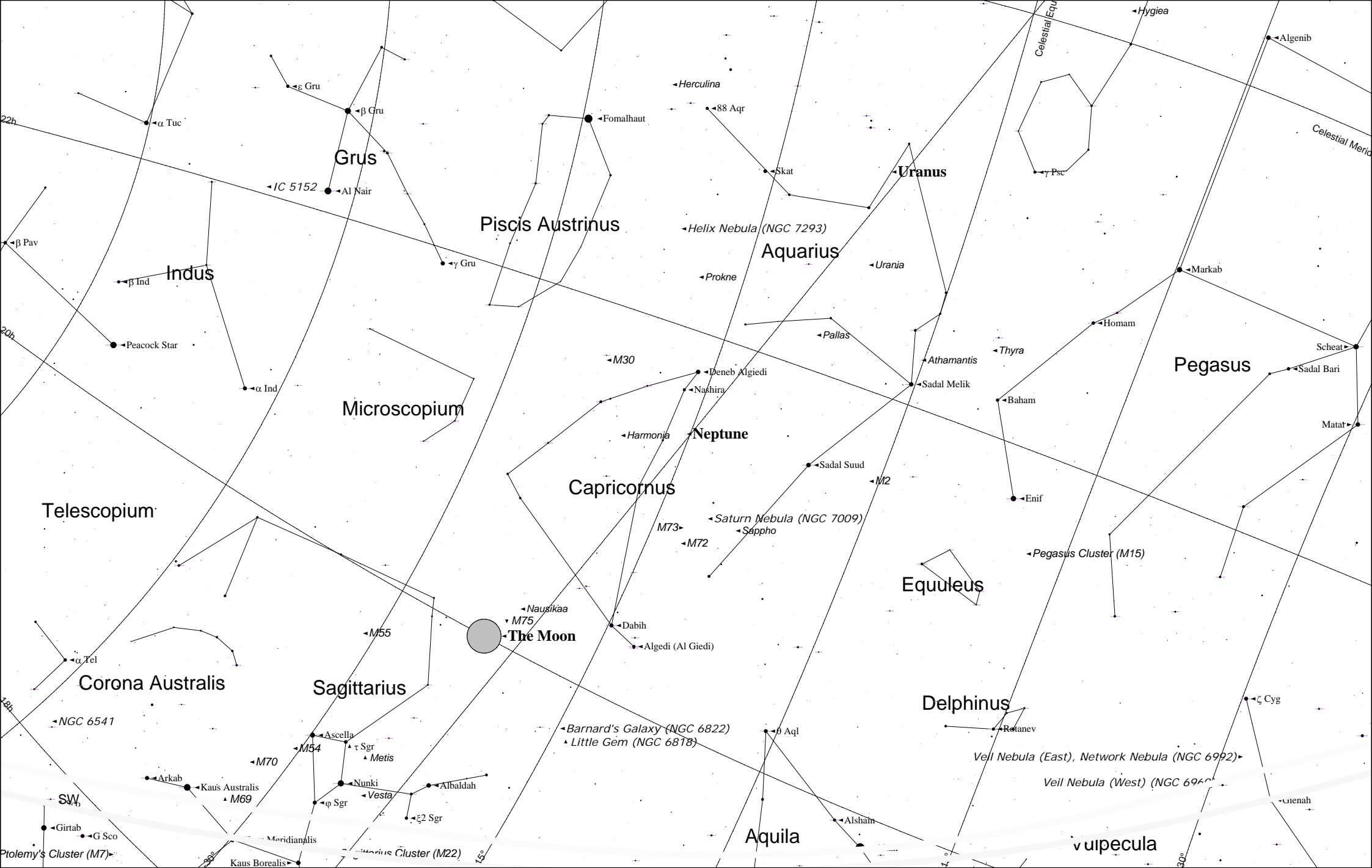
2007/11/16 5:00:00 AM (Local)

Chart centre (J2000): RA: 13h 7.144m Dec: -11° 47.186'

Looking: east (24° above horizon)

FOV: 100°

Limiting Magnitude: 6.4



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

2007/11/15 10:00:00 PM (Local)

Chart centre (J2000): RA: 21h 26.863m Dec: -15° 20.181'

Looking: west (32° above horizon)

FOV: 100°

Limiting Magnitude: 6.4