



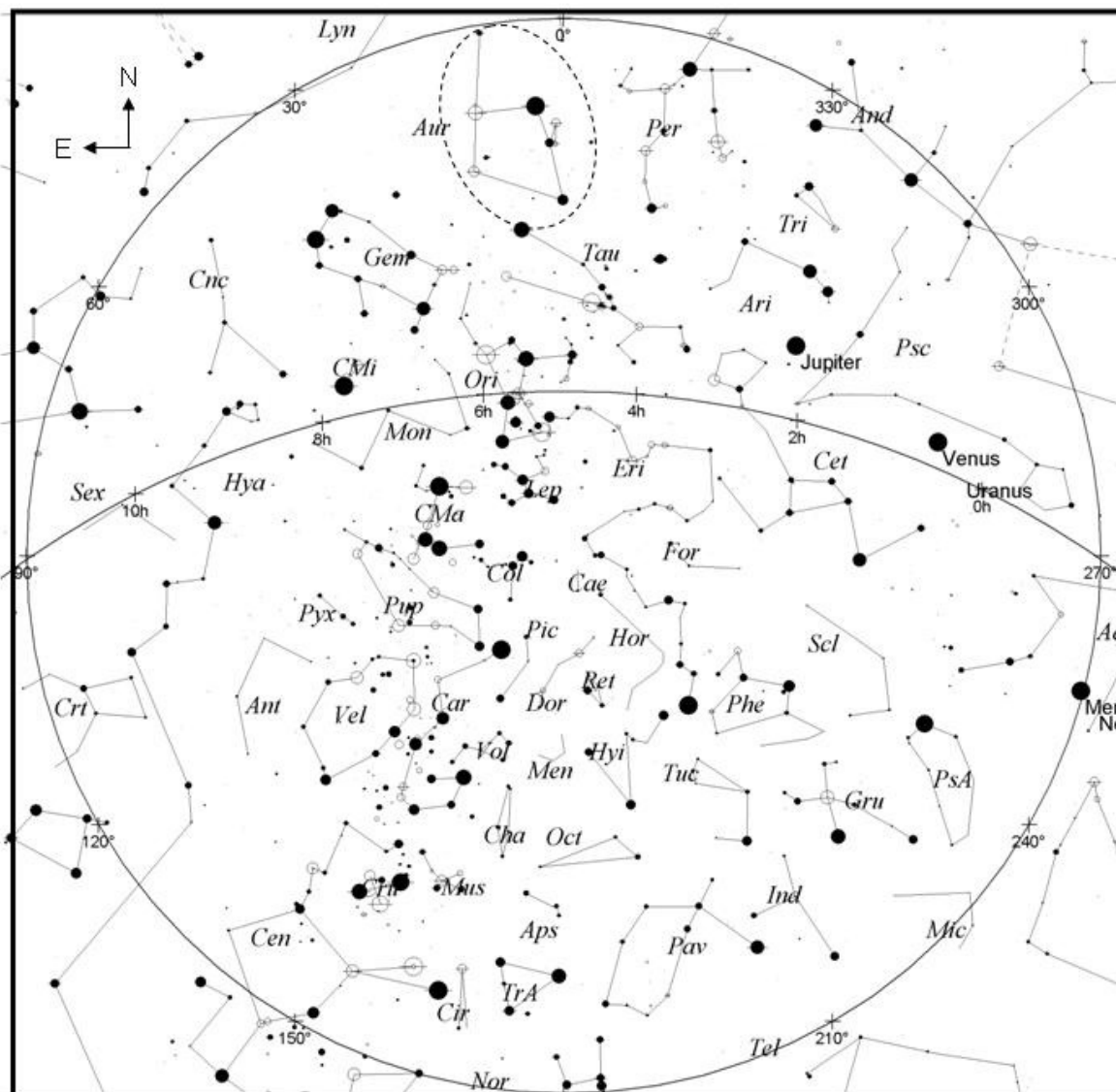
HERMANUS ASTRONOMY CENTRE

THE SKY THIS MONTH : FEBRUARY 2012

<http://www.hermanusastronomy.co.za/>

Sky Chart : Evening Sky

Source: SkyMap Lite



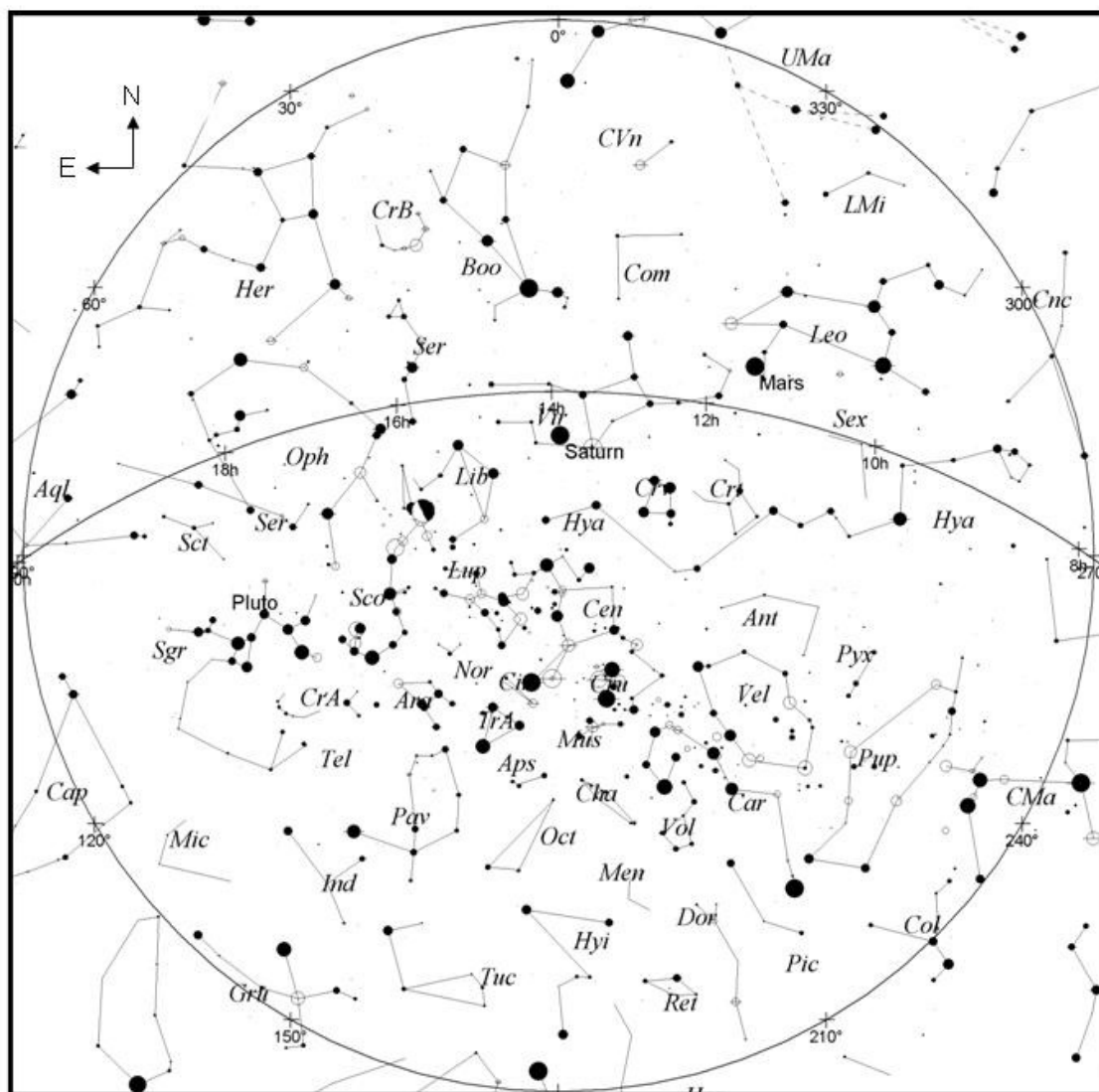
Date: 15 February 2012	Time (SAST): 20:30	Location : Gearings Point
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1. Evening Sky. Jupiter is still visible throughout the month. Venus is still visible in its role as the Evening Star. Orion is now nearly overhead in the evening. Our selected constellation for February is Auriga, which is far to the north and close to the horizon. Highlights from the Sky Guide for the early evening are:

01 February	65% Moon 2.5°S of the Pleiades
25 February	Venus 4° SW of 14% Moon
26 and 27 February	Venus and Jupiter close to 13% Moon
28 February	38% Moon 6° SW of the Pleiades

Sky Chart : Morning Sky

Source: SkyMap Lite



Date: 15 February 2012

Time (SAST): 04:00

Location : Gearings Point

2. Morning Sky. In the morning sky Saturn (on the meridian) and Mars (setting towards the west) are both easily visible. The Southern Cross and Centaurus are both high and have just passed the meridian. Highlight from the Sky Guide for the early morning is:

13 February

68% Moon, Saturn and Spica (α Virginis) in a triangle

3. The Sun. Sunrise on 1 February 2012 is at 06:03 and sunset is at 19:50. On 29 February 2012, sunrise is at 06:30 and sunset at 19:21. The sun is in Capricorn at the beginning of the month and crosses to Aquarius on 17 February.

4. Phases of the Moon.

2012	February	Time	Event
	7	23:54	Full Moon
	14	19:04	Last Quarter
	22	00:35	New Moon
	1 March	03:22	First Quarter

The Moon will be at its perigee (closest point of approach to the Earth) at 11 February 2012 at 20:32. At this time moon will be at a distance of 367 900 km. On 27 February at 16:02 the Moon will be at its apogee (furthest point from the Earth) at a distance of 404 900 km.

5. Lunar Occultations. The Sky Guide lists the occultations of five stars brighter than magnitude 4 for 2012 on page 67. On 2 February at 21:40, there is an occultation of Tau Tauri (mag 4.27) on the dark limb of a 74% Moon. The disappearance cusp angle is S60° and the reappearance is at 22:52 with a cusp angle of S80° on the bright limb. This can easily be observed with binoculars.

6. The Planets

Planets	Month:	February 2012	1 st	29 th
Mercury		Rises:	05:39	07:52
Constellation:	Cap - Psc	Sets:	19:44	20:01
Magnitude:	-1.1, -0.9	Comment:		
Venus		Rises:	09:17	07:52
Constellation:	Aqr - Psc	Transits:	15:31	13:57
Magnitude:	-4.1, -4.2	Sets:	21:44	20:01
Mars		Rises:	21:52	19:43
Constellation:	Vir - Leo	Transits:	03:40	01:23
Magnitude:	-0.8, -1.2	Sets:	09:24	06:57
Jupiter		Rises:	12:32	11:02
Constellation:	Ari	Transits:	18:02	16:28
Magnitude:	-2.3	Sets:	23:32	21:54
Saturn		Rises:	23:32	21:33
Constellation:	Vir	Transits:	23:54	04:02
Magnitude:	0.6, 0.4	Sets:	12:20	10:28
Uranus		Rises:	10:05	08:21
Constellation:	Psc	Sets:	22:08	20:21
Magnitude:	5.9	Comment:		
Neptune		Rises:	07:33	05:48
Constellation:	Aqr	Sets:	20:43	12:22
Magnitude:	8.0	Comment:		

Venus is visible throughout the month as the evening star. Mars is rising early in the evening and is visible throughout the night.

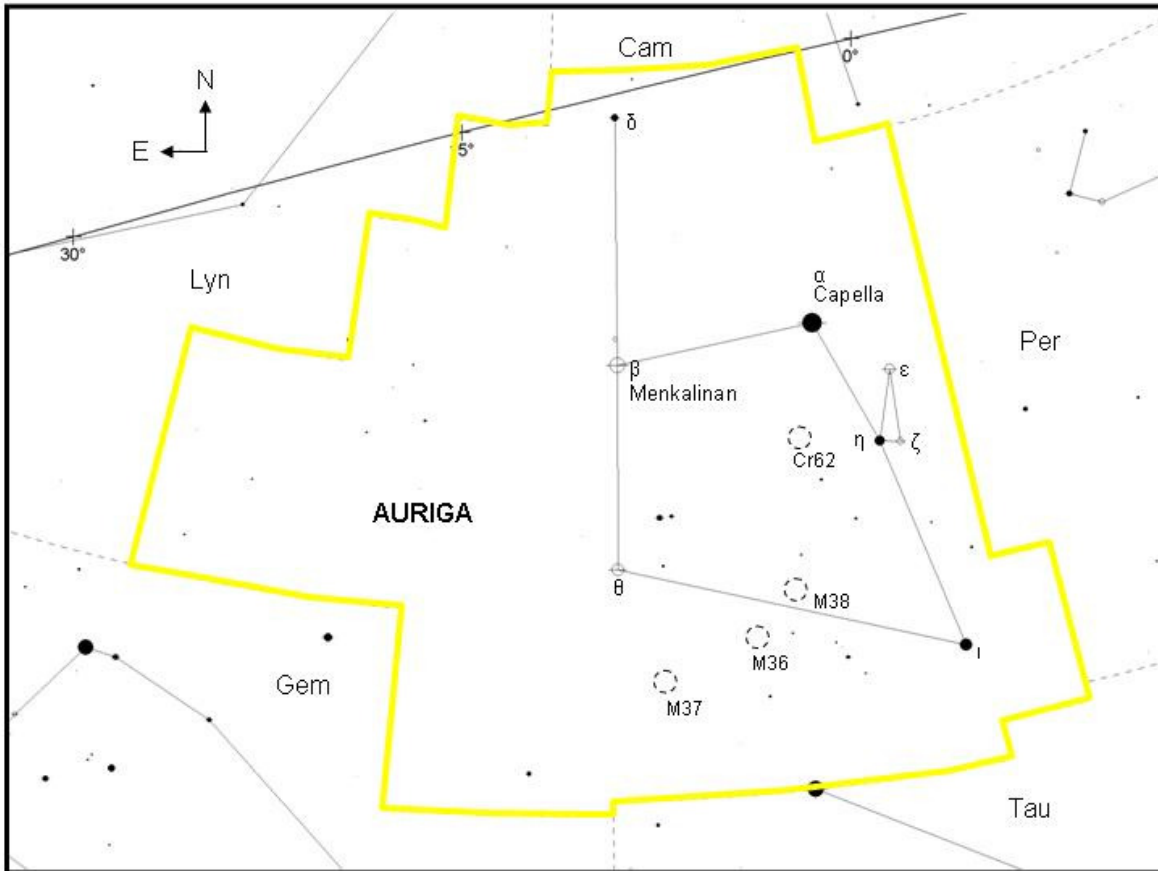
7. Meteor Showers. The meteor showers listed for February 2012 are the

α Centaurids The maximum is predicted for 7 Feb, which coincides with the full moon. Not worthwhile staying up for this event.

γ Normids This begins on 25 Feb and reaches a maximum on 13 Mar.

CONSTELLATION OF THE MONTH

8. The selected constellation of the month is **Auriga** (the Charioteer).



This constellation is very far north for observers at our latitude. In the sky map above, the diagonal line in the top left corner is in fact the horizon. The brightest star, Capella or alpha Aurigae, is at an altitude of only 9.5° . Auriga is the 21st largest constellation with an area of 657 square degrees.

Capella is the 6th brightest star in the sky. Although it appears as a single star, it is in fact a multiple star consisting of two binary systems. At 42.2 light years, it is quite close to the Earth. There are many double and multiple stars in this constellation, most noteworthy are ϵ Aurigae and ζ Aurigae, they are both peculiar as their components are in a short and active evolutionary stage.

The constellation houses the galactic anticentre (in other words pointing away from the galactic hub), 3.5° to the west of β Aurigae. Being in the plane of our galaxy, there are many open clusters and other deep-sky objects, most are too dim to observe with binoculars or a small telescope. The main contenders are the following:

Object Name	Object Type	Dim arc sec	Mag	Co-ordinates	
				RA	Dec
Cr62	Open cluster	28	4.2	5h 23m 23s	+41° 0' 44"
M37	Open cluster	15	5.6	5h 53m 8s	+32° 33' 19"
M36	Open cluster	10	6	5h 37m 8s	+34° 8' 53"
M38	Open cluster	15	6.4	5h 29m 33s	+35° 51' 53"

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