



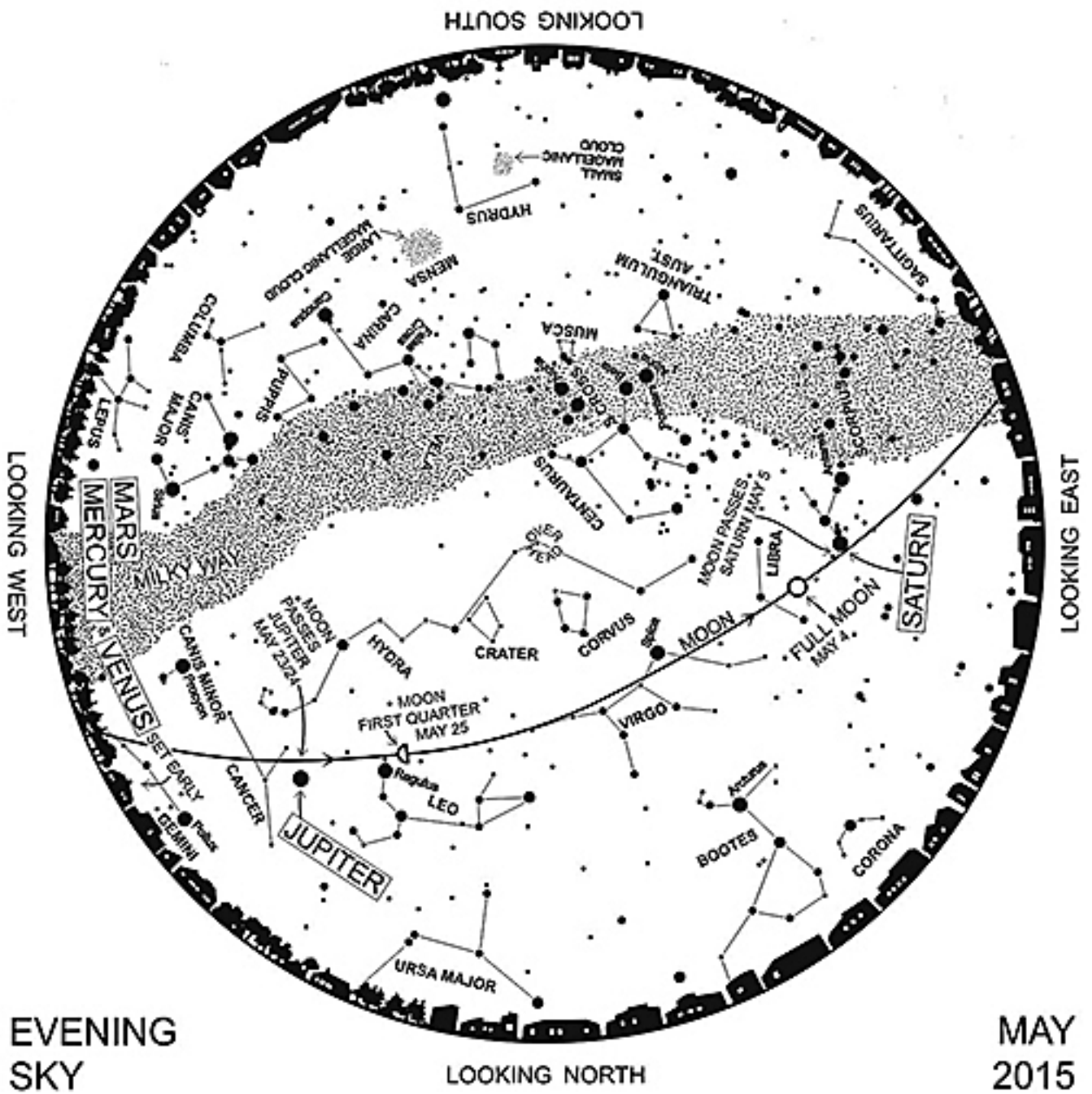
## HERMANUS ASTRONOMY CENTRE

### THE SKY THIS MONTH : MAY 2015

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

#### 1. SKY MAPS

#### EVENING SKY MID MAY at 21<sup>h</sup>00



All times quoted below are given in 24-hour format South African Standard Time (SAST).

## 2. THE SOLAR SYSTEM

<i>Sun &amp; Planets</i>	<i>May 2015</i>		<i>1<sup>st</sup></i>	<i>31<sup>st</sup></i>
<b>Sun</b> Constellation: Aries to Taurus Length of day 10h 44m to 10h01m	Rises:		07h19	07h40
	Transits:		12h41	12h41
	Sets:		18h02	17h42
<b>Mercury</b> phase 53% to 0% , $\phi$ 7" to 12" Constellation Taurus Magnitude: -0.2 to +5.4	Rises:		09h01	07h32
	Transits:		13h59	12h38
	Sets:		18h55	17h44
<b>Venus</b> phase 67% to 53% $\phi$ 17" to 22" Constellation: Taurus to Gemini Magnitude: -4.1 to -4.3	Rises:		10h48	11h05
	Transits:		15h35	15h58
	Sets:		20h22	20h52
<b>Mars</b> phase 100% $\phi$ 4" Constellation: Aries to Taurus Magnitude +1.4 to +1.5	Rises:		08h17	08h01
	Transits:		13h27	12h57
	Sets:		18h37	17h53
<b>Jupiter</b> $\phi$ 38" to 35" Constellation: Cancer Magnitude: -2.1 to -1.9	Rises:		13h59	12h11
	Transits:		19h11	17h25
	Sets:		00h26	22h40
<b>Saturn</b> $\phi$ 18" Constellation: Scorpius to Libra Magnitude: +0.1	Rises:		19h16	17h11
	Transits:		02h15	00h09
	Sets:		09h11	07h02
<b>Uranus</b> $\phi$ 3" Constellation: Pisces Magnitude: +5.9	Rises:		05h30	03h39
	Transits:		11h14	09h22
	Sets:		16h59	15h04
<b>Neptune</b> $\phi$ 2" Constellation: Aquarius Magnitude: +7.9	Rises:		02h27	00h31
	Transits:		08h53	06h56
	Sets:		15h19	13h22
<b>Pluto</b> Constellation: Sagittarius Magnitude +14.1	Rises:		22h10	20h10
	Transits:		05h15	00h09
	Sets:		12h16	10h16

## 3. THE MOON

**Eclipses:** No eclipses, solar or lunar, are visible from the Western Cape this month.

## 4. HIGHLIGHTS FROM THE SKY GUIDE

<i>Date</i>	<i>Time</i>	<i>Item</i>
2		<b>Moon</b> near <b>Spica</b>
4	05h42	<b>Full Moon</b>
5		<b>Moon</b> near <b>Saturn</b> , <b>eta Aquariid</b> meteor show max
9		<b>Venus</b> near <b>Messier 35</b> (NGC2168 open cluster)
11	12h36	<b>Last quarter Moon</b>

15		<b>Moon near Uranus</b>
18	04h13	<b>New Moon near Mars</b>
19		<b>Moon near Mercury and Aldebaran</b>
20		<b>Moon near Messier 35</b>
21	16h00	<b>Moon near Venus (7.5°), Moon 43° east of Sun</b>
23		<b>Moon near Jupiter</b>
25	19h19	<b>1<sup>st</sup> Quarter Moon near Regulus</b>
26		<b>Mars near Aldebaran</b>
27		<b>Mercury near Mars</b>
28		<b>Mercury near Aldebaran</b>
29		<b>Moon near Spica</b>
30		<b>Venus near Pollux</b>

## 5. METEOR SHOWERS

<i>Name</i>	<i>Date &amp; Time of Max</i>	<i>Duration</i>	<i>Radiant</i>	<i>ZHR vel.</i>		<i>Observing Prospect</i>
<b>η Aquariids</b>	5 <sup>th</sup> May 04h00 to 05h30	21 <sup>st</sup> April to 12 <sup>th</sup> May	27° north of Fomalhaut in Piscis Austrinus	60	65	Unfavourable

The **Moon** will be a serious factor in the visibility of this shower. I shall personally enjoy the warmth of my bed.

Key to the table above:

ZHR – zenithal hourly rate

vel. - velocity in km per second

*For more details regarding meteor watching, please see the Sky Guide for Africa South (SGAS) pp. 86 – 87*

## 6. THE PLANETS

<b>Mercury and Mars</b>	At the beginning of May, both are visible in the early evening sky but move in too close to the sun in the latter part of the month.
<b>Venus</b>	Once again, the “Evening Star” for the month.
<b>Jupiter</b>	Prominent in the evening sky.
<b>Saturn</b>	Visible throughout the night, the rings are still set at a splendid angle
<b>Uranus</b>	Morning sky
<b>Neptune</b>	Morning sky
<b>Pluto</b>	Morning sky

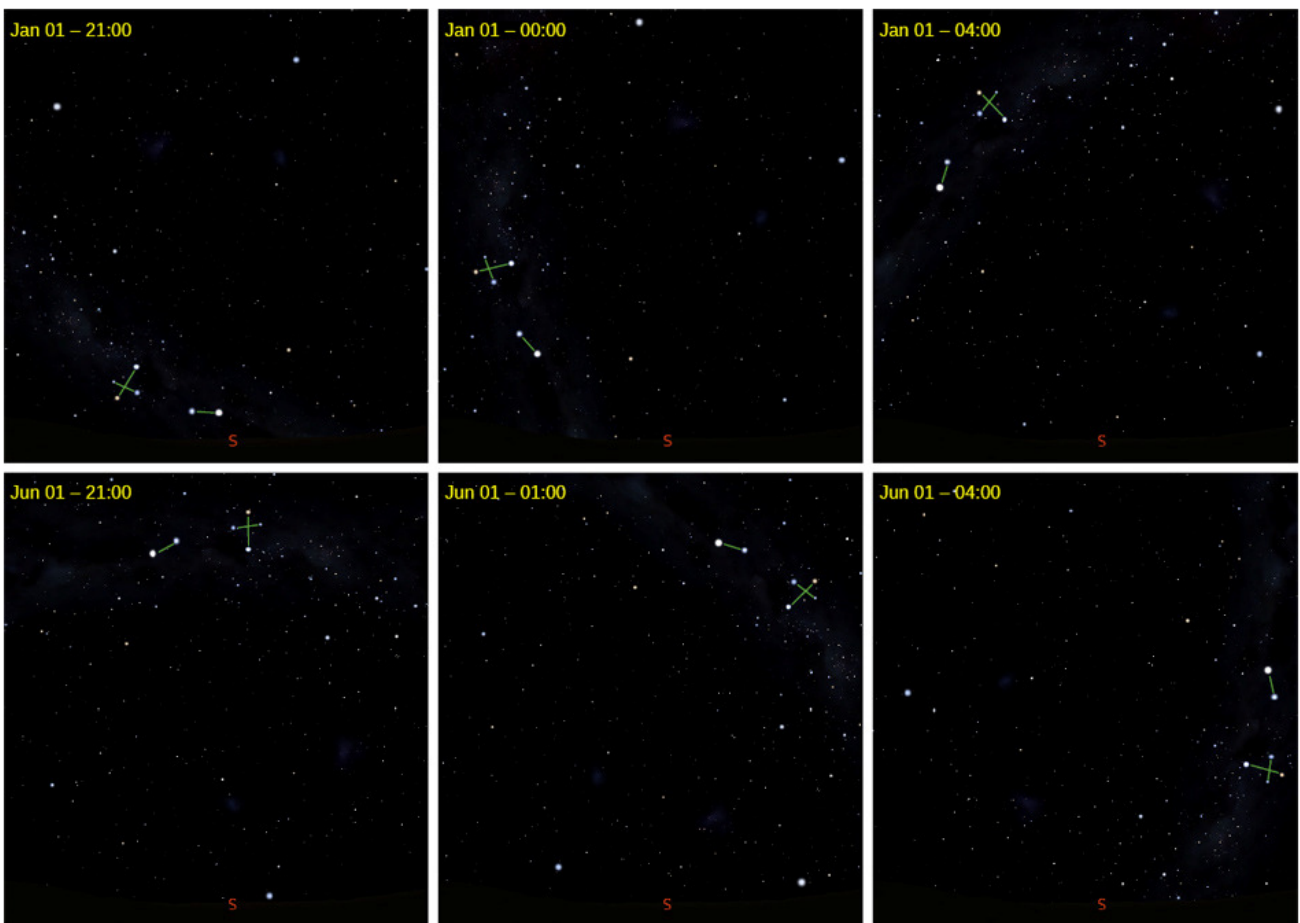
## 7. THE BIG 5 OF THE AFRICAN SKY (part 2)

To recap from last month,

### What are the Big 5?

The Big 5 of the African Sky are five celestial objects that represent the best specimens of each type of deep-sky class: the **Southern Pleiades** (an open star cluster), **omega Centauri** (a globular cluster), the **eta Carinae Nebula** (a bright nebula), **the Coal Sack** (a dark nebula) and **the Milky Way** (a galaxy).

### Using the Southern Cross



By noting how the position of Crux (the Southern Cross) changes throughout a night, and over the course of a year, the location of the Big 5 can be determined quite easily.

### How do I see the Big 5?

Once you know where the Big 5 are and when they are visible, decide on what equipment you would like to use. The Big 5 can be seen with the naked eye alone if you observe from a dark-sky site. Under these conditions the Milky Way in particular is a spectacular sight. If you will be observing under suburban skies you will need to

use at least a pair of binoculars. A telescope will, of course, show the objects more easily, but the large size of the Milky Way means that most telescopes are too “powerful” – use binoculars instead.

## How do I record the Big 5?

For each object, write a clear description of what you see. Imagine explaining the view to a blind friend who knows nothing about astronomy. Sometimes making a rough sketch, too, is a good idea. Also write up a few lines (like a diary entry or a blog post) telling about your observing experience. This journal is a great way to capture your thoughts and feelings of the moment: you’ll enjoy reading it a few years down the line!

## How do I report my observations?

Collect your observations of each object, add your observing journal entries (and sketches if you made them) and submit them to the ASSA Deep-Sky Section. The easiest way is to send an e-mail to the Section Director, Auke Slotegraaf. A great idea is to share your observations with other observers: you can post your notes on the Big 5 Facebook Group and on the ASSA Deep-Sky Section YahooGroup mailing list.

## What happens after I submit my observations?

All reports will receive feedback from the ASSA Deep-Sky Section. If you’ve successfully observed the Big 5, your name will be listed on the ASSA website Big 5 Honour Roll. You will also be issued with a virtual sticker – a graphic that is created uniquely for you, officially hosted on the ASSA website, that you can link to and embed in online media. In addition, your descriptions and journal will be published on the ASSA Deep-Sky Section webpages for other observers to read and enjoy.

### Keep in touch

[ASSA Deep-Sky Section](#)

Whatsapp chat group: [ 074 100 7237 ]

[Official Big 5 of the African Sky web page](#)

[Official Big 5 Facebook group](#)

[ASSA Deep-Sky Section mailing list](#)

### Contact ASSA

Get in touch with officers of the Society - we're real people with a passion for astronomy, [so contact us and let's talk!](#)

You can also find us on [Facebook](#), [Twitter](#), the [ASSA Info mailing list](#) and the [ASSA Discussion mailing list](#).

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Sky Guide for Southern Africa 2015

Stellarium

NASA's website on SOHO