



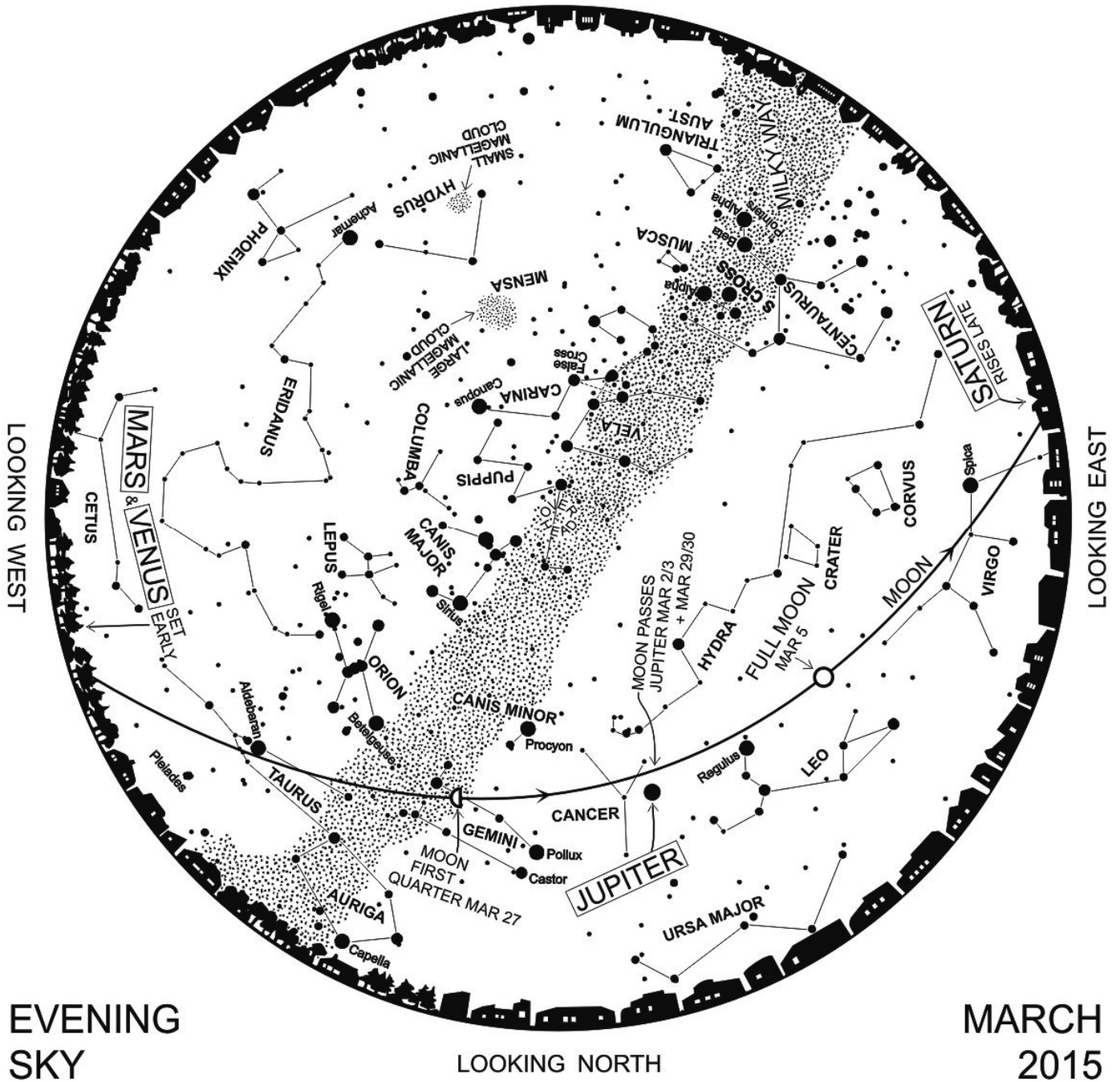
HERMANUS ASTRONOMY CENTRE  
THE SKY THIS MONTH : MARCH 2015

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

1. SKY MAPS

EVENING SKY MID MARCH at 21<sup>h</sup>00

LOOKING SOUTH



EVENING  
SKY

MARCH  
2015

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

## 2. THE SOLAR SYSTEM

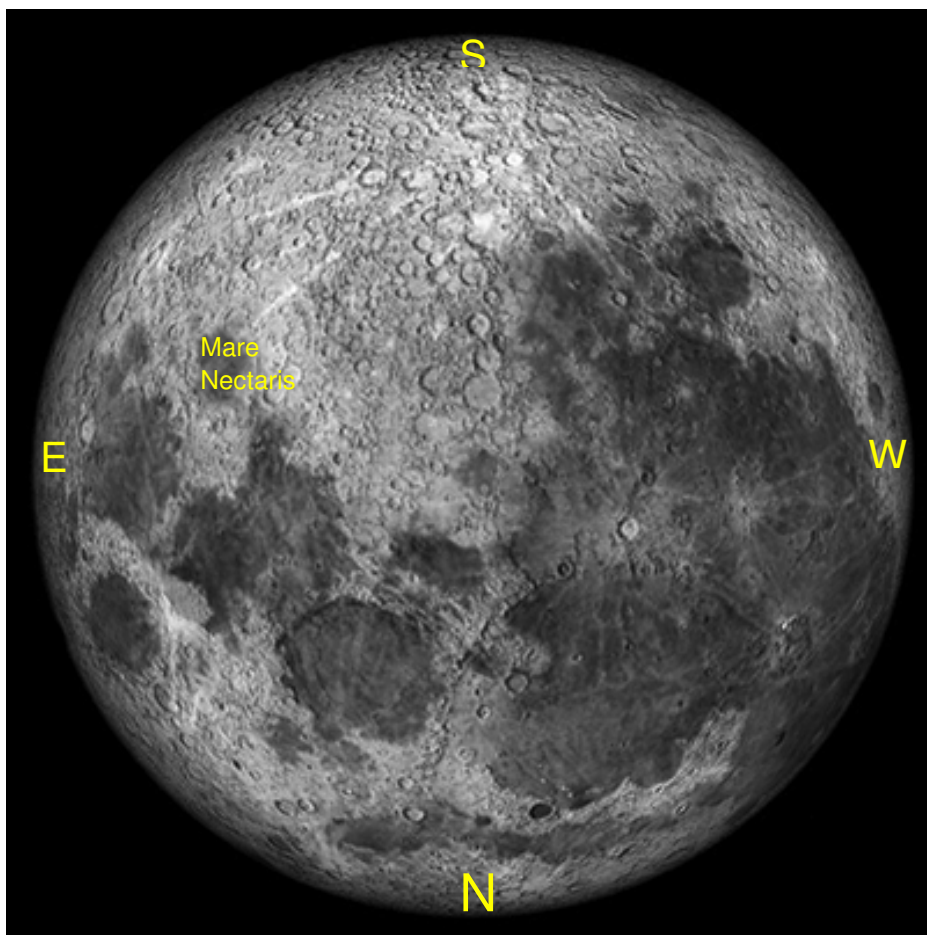
<i>Sun &amp; Planets</i>	<i>March 2015</i>		<i>1<sup>st</sup></i>	<i>31<sup>st</sup></i>
<b>Sun</b> Constellation: Aquarius to Pisces Length of day 12h50m to 11h45m		Rises:	06h31	06h55
		Transits:	12h56	12h48
		Sets:	19h21	18h40
<b>Mercury</b> phase 65% to 94% , $\phi$ 7" to 5" Constellation Capricornus to Pisces Magnitude: +0.0 to -1.0		Rises:	04h23	06h07
		Transits:	11h15	12h15
		Sets:	18h08	18h22
<b>Venus</b> phase 86% to 78% $\phi$ 12" to 14" Constellation: Pisces to Aries Magnitude: -4		Rises:	08h54	09h53
		Transits:	14h48	15h06
		Sets:	20h40	20h18
<b>Mars</b> phase 97% - 99% $\phi$ 4" Constellation: Pisces to Aries Magnitude +1.3 to +1.4		Rises:	08h39	08h29
		Transits:	14h35	14h01
		Sets:	20h31	19h32
<b>Jupiter</b> $\phi$ 44" to 42" Constellation: Cancer Magnitude: -2.5 to -2.3		Rises:	18h03	15h59
		Transits:	23h16	21h10
		Sets:	04h33	02h25
<b>Saturn</b> $\phi$ 17" to 18" Constellation: Scorpius Magnitude: +0.5 to +0.3		Rises:	23h21	21h23
		Transits:	06h22	04h24
		Sets:	13h18	11h20
<b>Uranus</b> $\phi$ 3" Constellation: Pisces Magnitude: +5.9		Rises:	09h14	07h24
		Transits:	15h02	13h10
		Sets:	20h49	18h56
<b>Neptune</b> $\phi$ 2" Constellation: Aquarius Magnitude: 8.0		Rises:	06h17	04h24
		Transits:	12h45	10h51
		Sets:	19h13	17h18
<b>Pluto</b> Constellation: Sagittarius Magnitude: +14.2		Rises:	02h11	00h15
		Transits:	09h12	07h17
		Sets:	16h14	14h18

## 3. THE MOON

The *Sky Guide*'s lunar highlight for March is **Mare Nectaris** (the Sea of Nectar), "eastward of the centre of the Moon". A dark, basaltic plain formed by massive volcanic eruptions, it is 360 km across and aged >3.8 billion years. It is best seen 4 days after the Full Moon (9<sup>th</sup>) and 5 days after the New Moon (25<sup>th</sup>).

If the sky is clearer than last month, the close proximity of the **Moon** and **Venus** at midday on 22<sup>nd</sup> gives us another opportunity of identifying Venus in full daylight. Look for the Moon about 29° east of the Sun (shield your eyes from the glare) and Venus will be about 6° east-north-east of the Moon.

**Eclipses:** No eclipses, solar or lunar, are visible from the Western Cape this month. However, if you happen to be in the North Atlantic to Arctic area on 20<sup>th</sup> March, and if the spring weather be good, you could see a TOTAL SOLAR ECLIPSE.



Further to my comments last month on the orientation of the moon (confusing to me and maybe to some others), I offer this picture as we would see the full Moon from the southern hemisphere.

**Highlights from the Sky Guide Africa South (SGAS):**

<i>Date</i>	<i>Time</i>	<i>Item</i>
2 – 3		<b>Moon</b> near <b>Jupiter</b>
4		<b>Moon</b> near +1.3 mag. <b>Regulus</b> (Leo), <b>Venus</b> near <b>Uranus</b>
5	20h05	<b>Full Moon</b> (apogee, smallest for 2015),
9		<b>Moon</b> near +0.95 mag. <b>Spica</b> (Virgo)
11		<b>Mars</b> near <b>Uranus</b>
12		<b>Moon</b> near <b>Saturn</b>
13	19h48	<b>Moon</b> last quarter
18		<b>Mercury</b> near <b>Neptune</b>
19		<b>Moon</b> near <b>Mercury</b>
20	11h36	<b>New Moon</b>
21	00h45	<b>Moon</b> near <b>Uranus</b> . Autumn equinox
22		<b>Moon</b> near <b>Venus</b> (see above) and <b>Mars</b>
25		<b>Moon</b> near +0.85 mag. <b>Aldebaran</b> (Taurus)
27	09h42	1 <sup>st</sup> quarter <b>Moon</b>
28		<b>Earth Hour</b>
30		<b>Moon</b> near <b>Jupiter</b>
31		<b>Moon</b> near <b>Regulus</b> (Leo)

#### 4. METEOR SHOWERS

Name	Date & Time of Max	Duration	Radiant	ZHR vel.		Observing Prospect
$\gamma$ Normids	13 <sup>th</sup> March	25 <sup>th</sup> February to 22 <sup>nd</sup> March	14° SW of <b>Rigel Kent (<math>\alpha</math> Centauri)</b>	8	56	Poor
$\delta$ Pavonids	6 <sup>th</sup> April	12 <sup>th</sup> March to 16 <sup>th</sup> April	+1.9 mag <b>Peacock (<math>\alpha</math> Pavonis)</b>	5	59	Unfavourable

Key to the table above:

ZHR – zenithal hourly rate

vel. Velocity in km per second

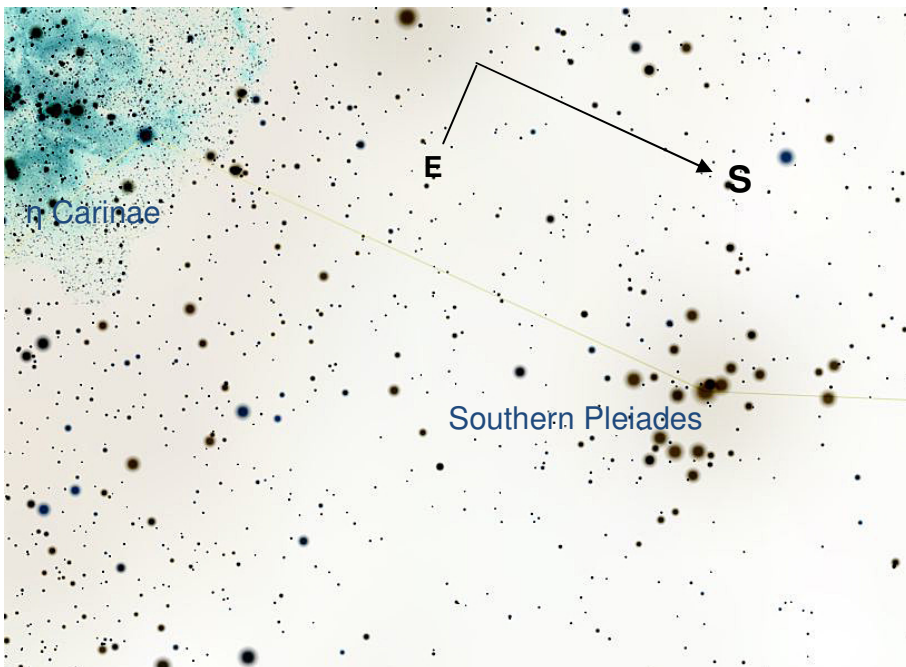
*For more details regarding meteor watching, please see the Sky Guide for Africa South (SGAS) pp. 86 – 87*

#### 5. THE PLANETS

March presents the early morning riser **Mercury** who displays for the remainder of the month. **Venus** is the evening star, still closely accompanied by the ever hopeful **Mars** with **Uranus** watching the couple from the background. Towards the month-end, the Old Man’s lechery is dazzled by the setting Sun. Mars, starting to lose interest, also closes in on the Sun. **Jupiter** is brilliant all night. **Saturn** and **Pluto** are visible before the dawn. **Neptune**, initially too close to the Sun, climbs westwards and becomes visible later in the month.

#### 6. ASTERISMS OF THE MONTH

##### The Southern Pleiades



4.5° south of  $\eta$  Carinae (well within the field of view of the average binoculars), the Southern Pleiades (IC2602) lies about 500 light years distant making it one of our closest open clusters. Binoculars display a lovely image with the distinctive “W” on the eastern edge of the group which confirms our identification. Why not be the first of the HAC observation group to note this in an observation report? [send your observation report to [hermanus.astronomy@gmail.com](mailto:hermanus.astronomy@gmail.com)]

Johan sent out guidelines on the layout and use of observation reports some months ago but if you have somehow mislaid your copy, please let me know and I shall e-mail another one immediately ([petermh@hermanus.co.za](mailto:petermh@hermanus.co.za)).

## The Large Magellanic Cloud

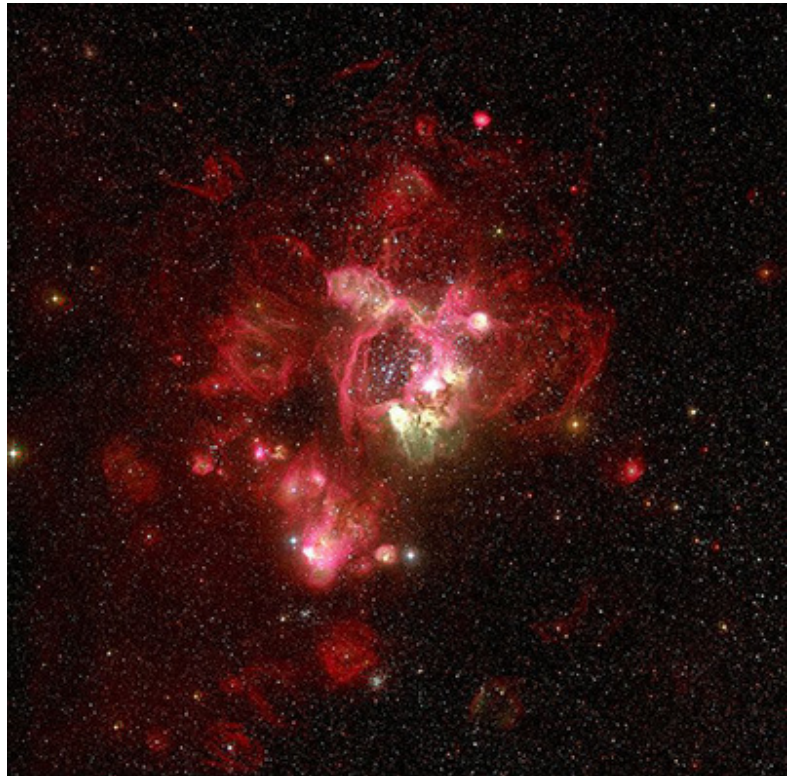
A beautiful binocular target and so easily identified for most of the month in spite of the Moon, this fuzzy patch deserves more than just naked eye observation.

The LMC is the fourth largest galaxy in the [Local Group](#), after the [Andromeda Galaxy](#) (M31), the Milky Way, and the [Triangulum Galaxy](#) (M33). The image to right depicts the N44 region of this dwarf galaxy.

The LMC lies approximately 160 000 light years away but this figure should be treated with caution (if you happen to be planning a trip there) as the Cepheid Variable standard candle system is unreliable in this instance.

It has always been thought that the two Magellanic Clouds were satellite galaxies of our own. However, it was announced in 2006 that measurements with the Hubble Space Telescope suggest the Large and Small Magellanic Clouds may be moving too fast to be orbiting the [Milky Way](#).

I have purposely left the above hyperlinks active as there is some highly recommended further reading on this subject.



For information, Wikipedia gives the following definition of 'DSO': *Deep-sky objects are astronomical objects other than individual stars and solar system objects (such as Sun, Moon, planets, comets, etc.). The classification is used for the most part by amateur astronomers to denote visually observed faint naked and telescopic objects such as star clusters, nebulae and galaxies.*

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Sky Guide for Southern Africa 2015

Stellarium

NASA's website on SOHO