

# Crewkerne & District Astronomical Society

## Sky Notes : March 2010

All timings are Universal Time. Note B.S.T. starts on Sunday 28<sup>th</sup>. March at 02.00. (U.T. + 1 hour)

### Moon's Phases

Last Quarter	March	07d. 15h. 42m.
New	“	15d. 21h. 01m.
First Quarter	“	23d. 11h. 00m.
Full	“	30d. 02h. 25m.

Moon at apogee (furthest from Earth)	March	12d. 10h.	Diam. 29' 26"
Moon at perigee (nearest to Earth)	“	28d. 05h.	“ 33' 01"

### The Planets

**Mercury** : With conjunction occurring on the 14<sup>th</sup>., it will be difficult to observe most of the month. A morning object at the start, on the 1<sup>st</sup>. it will rise at 05.45, an hour before the Sun, at mag. -0.7, diam. 5" and elongation 12° W. On the 30<sup>th</sup>., then an evening object, it will set at 20.00, 1½ hours after sunset, at mag. -1.1, diam. 5.9" and elong. 15° E. During the month it moves 60° N.E., through Aquarius and most of Pisces.

**Venus** : An evening object drawing away from the Sun and becoming more observable. During the month it travels 40° N.E., through Pisces to enter Aries at the very end of the month. On the 17<sup>th</sup>. at 08.00 it will lie 6° S. of the crescent Moon. Around that date it will be mag. -3.8, 10.3" diam., elong. 16° E. and setting at 19.30, 1½ hours after the Sun.

**Mars** : A well placed evening object in Cancer. At the start of the month barely moving N.W. to reach a stationary point on the 11<sup>th</sup>., and then it starts to move back S.E. Mid month it will be mag. -0.1, 10.7" diam., elong. 126° E. and setting at 05.00.

**Jupiter** : Following conjunction on Feb. 28<sup>th</sup>., it becomes a morning object, but barely visible – even by the end of March it rises at 05.15, only ½ hour before dawn. It will then be mag. -2.0, diam. 33.4", elongation 22° W. and rising at 20.30. During the month it moves 7° N.E. in Aquarius.

**Saturn** : Another well placed planet, reaching opposition on March 22. Saturn moves 2° S.E. during the month in Virgo. At opposition it will be mag. +0.5, disc diam. 19.5", rings 44.3" diam. (inclined at 3.1°), elong. 180° and visible all night. At midnight it will be due S. at an altitude of 40°. On both the 2<sup>nd</sup>. at 05.00 and the 29<sup>th</sup>. at 12.00 it will lie 7° N. of the nearly Full Moon. Titan, mag. 8.0 & elong. 198". Greatest E. elong. on March 10 & 26; greatest W. elong. on March 2 & 18.

**Uranus** : Not a good month for Uranus, with conjunction on the 17<sup>th</sup>. In Pisces, moving just under 2° N.E. during the month. An evening object at the start, on the 1<sup>st</sup>. it sets at 19.00, 1¼ hours after sunset. It will then be mag. 5.9, 3.3" diam. and elong. 16° E. On that date it will lie just under 1° N.W. of mag. 6 star 20 Pisc. After conjunction it will be a morning object, but even by the end of the month it will rise at 05.30, only ¼ hour before dawn.

**Neptune** : Now a morning object, but like several other planets is still too close to conjunction (on February 14<sup>th</sup>.), for easy observation. At the very start of March it enters Aquarius from Capricornus. It will then lie ¾° N.E. of the mag. 5.2 star Mu (51) Cap. It rises at 06.00, only 45 minutes before the Sun. Travelling 1° N.E. during the month, at the end it rises at 04.30, an hour before dawn. It will then be mag. 8.0, 2.1" diam., and elong. 42° W..

### Asteroids (Minor Planets)

**4 Vesta** : Following opposition on February 18<sup>th</sup>. it is still a relatively easy object to spot. It starts the month at mag. 6.3 and dims to mag. 6.8 by the end. During the month it moves 5° N.W. in Leo. On the 6<sup>th</sup>. it will pass ¼° S.W. of mag. 5.4 star SAO 81554. It will then be mag. 6.4. See the February Notes and chart for further details.

### Variable Stars

**Algol (Beta Persei)** See October Notes for details. Times of minima observable from the U.K. :- March 03 01.3h., March 05 22.1h., March 23 03.0h., March 25 23.8h., March 28 20.1h.

### Deep Sky Objects

**NGC 2237 (C49** in Patrick Moore's 'Caldwell Catalogue') The Rosette Nebula. A large emission nebula in Monoceros, discovered by William Herschel in 1787. Near the centre is the open star cluster NGC 2244, whose extremely hot young 'O' type stars provide the ultra violet radiation which energises the nebula material. The cluster with an estimated age of 3 M. years, has some 100 members, the brightest (12 Mon.) being mag. 5.8. The whole nebula is over 1° in apparent diam., actual 90 L.Y., at a distance of 4,000 L.Y. and an integrated mag. of 5.5. There are several bright areas within it, including NGC 2237, 38, 39 & 40. Because of its large size and low contrast it is best seen with binoculars or a low power rich field telescope – and dark clear skies! R.A. 6h. 32.3m., Dec. +4° 59'. To find it, start from Betelgeuse, 1<sup>st</sup> mag. Alpha Orionis, and go 7½° S.E. to mag. 4.3 Epsilon (8) Mon. NGC 2237 lies 2¼° E. of it.

**NGC 2261 (C46)** : Hubble's Variable Nebula. A bright emission and reflection nebula in Monoceros, also discovered by William Herschel, in 1783, and often mistaken for a comet with its fan shaped appearance. (But missed by Messier!). The star embedded in the Nebula (R Mon) and the source of the emissions was found by Schmidt in 1861 to vary irregularly by up to 4 mags. around its average brightness of mag. 11. Edwin Hubble, in 1916, found that the nebula itself varied with different periods, some as short as a few weeks. It appears that R Mon. is a very active hot young star (around 300,000 years old) and with occasional outbursts dispersing and / or illuminating the material from which it was first formed. R Mon. was the first object photographed by the 200" Hale telescope at Palomar in 1949. It is around 2,500 L.Y. distant with a size of 3 x 1.5 L.Y., an integrated mag. of 10 and an apparent size of 2' x 1'. It can be found with telescopes with upwards of 100mm. aperture R.A. 6h. 39.2m., Dec. +8° 44'.

To find it, start again from Betelgeuse. Go 9° due E. to 4.5 mag. 13 Mon. NGC 2261 lies 1° N.E. of it.