

# Crewkerne & District Astronomical Society

## Sky Notes : June 2013

All timings are Universal Time. (G.M.T.) (B.S.T. - 1 hour)

### Moon's Phases

New	June	08d. 15h. 56m.
First Quarter	"	16d. 17h. 24m.
Full	"	23d. 11h. 32m.
Last Quarter	"	30d. 04h. 54m.

Moon at apogee (furthest from Earth)	June	09d. 22h.	Diam. 29' 24"
Moon at perigee (nearest to Earth)	"	23d. 11h.	" 33' 28"

### The Planets

**Mercury** : An evening object, and the best placed it will be in the evening for the rest of the year. On the 12<sup>th</sup>. it will be at greatest E. elongation (24°), when it sets at 22.00, 1¼ hours after sunset. Best seen early in the month, as by the end it sets at 21.30, only 10 mins. after the Sun. During the month it travels 30° E.S.E. Starting in W. Gemini, close to the border with Taurus, it reaches a stationary point on the 25<sup>th</sup>., near the border with Cancer, and lies 10° S.W. of Pollux, 1<sup>st</sup>. mag. star Beta Gem. Mid month it will be mag. +0.6 8.6" diam. elong. 24° E. and setting at 21.45, 1½ hours after sunset.

**Venus** : Continues to be an early evening object. During the month it moves some 45° E.S.E. Starting just in E. Taurus it enters Gemini around the 2<sup>nd</sup>. and crosses it to enter Cancer around the 26<sup>th</sup>., when it will lie 8° S.S.E of Pollux. On the 6<sup>th</sup>. it will reach its most northerly declination this year, +24°. On the 20<sup>th</sup>. it will pass 2° N. of Mercury. Mid month it will be mag. -3.8, 10.5" diam., elong. 20° E. and setting at 21.50, 1½ hours after the Sun.

**Mars** : Remains a late morning object, slightly better placed than last month. At the start rising at 03.20, ½ hour before dawn, and by the end of the month at 02.30, 1¼ hour before the Sun. During the month it travels 23° E.N.E. in Taurus, starting some 4° S.S.W. of M45, the Pleiades star cluster, and ending it 10° N.E. of 1<sup>st</sup>. mag. star Aldebaran, Alpha Tauri. Mid month it will be mag. +1.5, 3.8" diam., elong. 14° W. and rising at 03.00, 40 minutes before dawn.

**Jupiter** : With solar conjunction occurring on the 19<sup>th</sup>., Jupiter is badly placed for observation this month. At the start it sets just after 21.00, ¾ hour after sunset, and at the end it rises at 03.15, ½ hour before the Sun. It moves 7½° E. during the month, starting in eastern Taurus, and ending it just inside Gemini. Throughout the month it is mag. -1.9 and 32" diam. At the beginning its solar elongation is 14° E. and at the end 8° W.

**Saturn** : Continues to be a reasonably placed evening object At the start of the month it sets at 02.40, but by the end at 00.40. Its worst feature, as mentioned last month, is its southern declination (-11°). During the month it travels 1¼° N.W. in E. Virgo, near the border with Libra. On the 19<sup>th</sup>. it will lie 4° N. of the Moon. Mid month it will be mag. +0.4, disc diam. 18.2", rings 41.3" (inclined at 17.2°), elong. 131° E. and setting at 01.45.

Titan, mag. 8.5 & elong. 190". Greatest E. elong. on June 4<sup>th</sup>. & 20<sup>th</sup>. Greatest W. elong. on June 8<sup>th</sup>. & 23<sup>rd</sup>..

**Uranus** : Remains a morning object in southern Pisces, close to the border with Cetus. It moves ¾° N.E. during the month, ending it 3° S.S.W. of 3.5 mag. star Delta (63) Piscium. Mid month it will be mag. 5.9, 3.5" diam., elong 72° W. and rising at 00.50.

**Neptune** : It starts the month as a morning object, rising at 00.40, but on the 12<sup>th</sup>. it rises at midnight and then becomes nominally an evening object, rising at 22.45 by the end of the month. Still in Aquarius, from a stationary point on the 7<sup>th</sup>. it travels only 9 arc minutes S.W. during the rest of the month, ending it 0.6° N.W. of the 5<sup>th</sup>. mag. star Sigma (57) Aquarii. Mid month it will be mag. 7.9, 2.3" diam., elong. 109° W. and rising at 23.50.

### Meteors

**Ophiuchids** : May 19 – July. Two maxima and radiants. First on June 9<sup>th</sup>., radiant at R.A. 17h. 56m., Dec. 23° S., in N.W. Sagittarius. Culmination at 00.45, altitude 15°. Zenith Hourly Rate 5. Moon favourable, New, setting at 20.50. Second on June 20<sup>th</sup>., radiant at R.A. 17h. 20m., Dec. 20° S., in N.E. Scorpius. Culmination at 23.20, altitude 18°. Z.H.R. 5. Moon very unfavourable, 3 days before Full, rising at 17.00.

### Comet 2011 L4 PanStarrs

See also separate notes and also chart. This is probably the last month it will be possible to see it with an amateur telescope.

It is now heading South, having passed some 5° from the Pole Star Polaris around the 26<sup>th</sup>. of May, at mag. 8. On the 17<sup>th</sup>. of June it will pass only 1° East of the 2<sup>nd</sup>. mag. star Kochab, Beta (7) Ursa Minoris, when it is expected to be around mag. 9 or 10. Unfortunately this will clash with the First Quarter Moon, which will brighten up the background sky.

Looking forward to Comet ISON (2012 S1) which might be very bright in November !

### Variable Stars

**Algol (Beta Persei)** : Normally at mag. 2.1, every 69 hours it is partially eclipsed by a fainter orbiting companion star and drops to mag. 3.4. From maximum through minimum to maximum again takes 9.6 hours. Times of minima currently observable from the U.K. are June 5<sup>th</sup>. 0.2h. and June 25<sup>th</sup>. 01.9h.