Crewkerne & District Astronomical Society

Sky Notes: February 2012

All timings are Universal Time. (Now the same as Local Time).

Moon's Phases

First Quarter January 31d. 04h. 10m. Full February 07d. 21h. 54m. Last Quarter "14d. 17h. 04m. New "21d. 22h. 35m. First Quarter March 01d. 01h. 21m.

Moon at perigee (nearest to Earth) February 11d. 19h. Diam. 32' 29" Moon at apogee (furthest from Earth) " 27d. 14h. " 29' 31"

The Planets

Mercury: A morning object until superior conjunction with the Sun on Feb. 7th., then an evening object. Best seen towards the end of the month. Mid month it sets at 17.40, ½ hour after sunset. By the 29th. at 19.10, 1½ hours after the Sun.

During the month it travels some 50° N.E., right through Capricornus and Aquarius to enter Pisces on the 27th. It will then be mag. -1.0, 6.0" diameter, and elongation 15° E...

Venus: Continues to be a very bright evening object for the next 4 months. Moving N.E., it starts just in Aquarius, entering southern Pisces around the 2nd. and crossing most of it to end the month near Aries, a total distance of around 35°.

Mid month it will be mag. -4.0, 16.6" diam., elong. 42° E. and setting at 21.00, nearly 4 hours after sunset. Late on the 25th. it will lie 3° South of the crescent Moon.

Mars: With opposition coming up on March 3rd., it is now visible most of the night. Mid month it rises around 19.00 and sets after dawn. During the month it travels N.W. 9°, starting just inside Virgo and in Leo for the rest of the month.

On the 10th. at 12.00 it will lie 10° N. of the just passed Full Moon. Around that date it will be mag. +0.8, 12.5" diam., elong. 150° W., and rising at 19.30, 2½ hours after sunset.

Jupiter: Still a good bright evening object. Near the centre of Aries, it moves 3° N.E. during the month. Mid month it will be mag. -2.3, 37" diam.., elong. 69 ° E. and setting at 23.30. Early on the 27th. it will lie 4° S. of the crescent Moon...

Saturn: A late evening / morning object. It travels a few arc minutes S.E in Virgo to reach a stationary point on the 8th.,then moves tack N.W. a couple of minutes to the end of the month. On the 13th. at 01.00 it will lie 6° N. of the L.Q. Moon. At that time it will be mag. +0.5, disc diam. 18", rings 40.7" diam. (inclined at 15.2°), elong. 114 ° W. and rising at 23.00. Through the month it will lie around 7½° N.E. of 1st. mag. star Spica (Alpha Virginis).

Titan, mag. 8.5 and elong. 180". Greatest W. elong. on Feb. 4 & 20; greatest E. elong. on Feb. 12 & 28.

Uranus: An early evening object, remaining in southern Pisces, close to the border with Cetus. During the month it moves 1.3° N.E. On the 10th. at 05.00 it will be passed by Venus, only 0.3° N. of it.. Around that time it will be mag. 5.9, 3.4" diam., elong. 37° E., and setting at 22.00.

Neptune: Conjunction with the Sun occurs on Feb. 19th., after which it becomes a morning object. For most of the month it is too close to the Sun for observation. On the 1st. it sets at 18.20, 1½ hours after sunset. On the 10th. at 17.45, ¾ hour after the Sun. It rises at 06.00 on the 29th., only 15 minutes before dawn. It could be glimpsed during the first week of the month. Around the 4th. it will be mag. 8.0, 2.2" diam., and elong. 15° E.

During the month it travels just over 1° N.E. in western Aquarius. Mid month it passes 17' S. of 5th. mag. star 38 Aqu.

Comets

2009 P1 Garradd: Still visible in binoculars around mag. 7 all month. It continues to move N.W. in Hercules to enter Draco around the 14th and Ursa Minor around the 29th., by then starting to swing West. It travels 30° during the month.

On the 3rd. it will pass under ½° W. of the globular cluster M92 (NGC 6341). Around Feb. 23rd. it will pass between 2.8. mag. star Eta (14) Draconis and 4th. mag. star Theta (13) Drac., 1½° S.W. of Eta and 1½° N.E. of Theta. After entering Ursa Minor, on March 5th. it will pass 5° S.W. of the southern pair of stars of the "Mini Plough". 3rd. mag. Gamma (13) Ursa Minoris and 2nd. mag.Beta (7) Ursa Min. Comet Garradd reaches its greatest northern Declination .(71°) on March 8th. before going S.W.

At the start of February it will rise before sunset and will be above the horizon all night for the next three months. This month it is best seen late in the evening when it will be well above the N.E. horizon.

Meteors

No meteor showers this month!!

Variable Stars

Algol (Beta Persei): Times of minima observable from the U.K:- Feb. 12 03.8h., Feb. 15 00.6h, Feb. 17 21.4. See November Notes for details of Algol

Deep Sky Objects

M41 (NGC 2287): An open star cluster in Canis Major, sometimes known as the 'Little Beehive'. One of the faintest objects recorded in ancient history, it was seen by Aristotle around 325 BC and noted as 'a star with a tail'. John Flamsteed recorded it in 1702, and Charles Messier observed and listed it in 1765. Around 100 million years old, there are over 100 members, of which some 50 are in the magnitude range 7 to 13. It is 2,100 L.Y. from us with a diameter of 25 L.Y. Its apparent size of 40' is half as big again as our Moon. Its integrated magnitude is 4.5 and can be seen visually provided you have a dark southern horizon.

R.A. 6h. 46m., Dec. -20° 45'. To find it, start from Sirius, Alpha Canis Majoris – at mag. -1.4 the brightest star in the sky. M41 lies 4° S. of it. It is less than ½° N..W. of 6th. mag. star 12 Can. Maj., which is not a member of the cluster.

Arthur Davis Jan. 2012