

Crewkerne & District Astronomical Society

Sky Notes : May 2013

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

Moon's Phases

Last Quarter	May	02d. 11h. 14m.
New	"	10d. 00h. 28m.
First Quarter	"	18d. 04h. 35m.
Full	"	25d. 04h. 25m.
Last Quarter	"	31d. 18h. 58m.

Moon at apogee (furthest from Earth)	May	13d. 14h.	Diam. 29' 27"
Moon at perigee (nearest to Earth)	"	26d. 02h.	" 33' 20"

Annular Solar Eclipse

On Friday May 10th. The track crosses most of the Pacific ocean, starting in northern Australia. First contact occurs at 21.25 U.T. Maximum occurs at 00.30 U.T., at Lat. 02° 13.4' N., Long. 174° 28' E. Duration of maximum is 8 minutes 3 sec. The eclipse ends at 03.25 U.T. Nothing is visible from the U.K. !!

The Planets

Mercury : A morning object at the start of the month, but very close to the Sun, approaching superior conjunction on May 11th. On the 1st. it will rise at 04.20, only 10 minutes before dawn. After the 11th. it becomes a much better evening object. By the 1st. of June, when it reaches greatest E. elongation (24°), it sets at 22.00, nearly 2 hours after the Sun. During the month it travels 47° N.E., starting in Pisces, it crosses through Aries and most of Taurus. It will pass 7° N. of 1st. mag. Aldebaran, Alpha Tauri on the 21st., and on the 27th., 2° N. of Jupiter. Around the 20th. it will be mag. -1.4, 5.4" diam., elongation 13°, and setting just after 21.00, a little over an hour after sunset.

Venus : An early evening object for the rest of the year. During the month it moves some 35° E.N.E. Starting in Aries, it crosses into Taurus around the 5th. Like Mercury, it passes N. of Aldebaran (6°), but on the 18th. On the 25th. Venus will be passed by Mercury, going 1.4° N. of it, and on the 28th. Venus will pass 1° N. of Jupiter. Quite a procession! Mid month it will be mag. -3.8, 10" diam., elong. 12° E., and setting just before 21.00, an hour after sunset.

Mars : Following conjunction last month it is now a morning object, and will be for the rest of the year. Still very close to the Sun, it is difficult to observe. Even by the end of the month it rises at 03.20, ½ hour before dawn. It travels 23° N.E. during the month. Starting in Aries, it crosses into Taurus around the 24th. and finishes some 4° S.S.W. of M45, the Pleiades star cluster. Mid month it will be mag. +1.3, 3.8" diam., elong. 6° W. and rising at 03.45, only 20 minutes before the Sun.

Jupiter : Now an early evening object, at the start of the month setting at 22.30, and by the end at 21.10, an hour after sunset. During the month it moves 7° E. in eastern Taurus, to end it 5° E.S.E. of 2nd. mag. star Alnath, Beta Tauri. As noted above, Jupiter will be 2° S. of Mercury on the 27th. and 1° S. of Venus on the 28th. Mid month it will be mag. -1.9, 33" diam., elong. 27° E. and setting at 22.00.

Saturn : Following opposition at the end of April, it is the best placed of all the planets. At the start of the month it is above the horizon all the hours of darkness, and at the end it does not set until 02.45, an hour before sunrise. During the month it travels 2° N.W. starting in western Libra very close to the border with Virgo, which it enters around the 15th. Then it will be mag. +0.2, disc diam. 18.7" rings 42.6" (inclined at 17.8°), elong. 162° E. and setting at 03.45. The worst thing about Saturn is its southern declination (- 11°) which means at best it will be only 27° above the southern horizon at midnight.

Titan, mag. 8.5 & elong. 190". Greatest E. elong. on May 3rd. & 19th. Greatest W. elong. on May 11th. & 27th.

Uranus : Continues to be a morning object near the Sun. At the start of the month it rises at 03.45, ¾ hour before dawn, and at the end at 01.45, 2 hours before the Sun. Still in southern Pisces, near the border with Cetus, it moves 1½° during the month. Mid month it will be mag. 5.9, 3.4" diam., elong 44° W. and rising at 02.45, 1¼ hours before dawn. It will then lie 3½° S.W. of the 3rd. mag. star Delta (63) Piscium.

Neptune : Another morning object, but an hour in advance of Uranus. It starts the month rising at 02.45, and ends it rising at 00.45. Continuing to travel N.E. in Aquarius, it covers only 21° during the month. Mid month it will be mag. 7.9, 2.3" diam., elong. 80° W. and rising at 01.45. It will then lie 0.6° N.W. of the 5th. mag. star Sigma (57) Aquarii.

Meteors

Eta Aquarids : April 24 – May 20. Maximum May 5/6. Radiant at R.A. 22h. 20m., Dec. -1°. 20° S.W. of 2nd. mag. Alpha Peg., the S.W. corner of the square. Culmination at 07.30, altitude 38°. Zenith Hourly Rate 40. This shower was produced by Halley's Comet. Moon quite favourable, 4 days before New, rises at 02.50. on the 6th.

Comet 2011 L4 PanStarrs

See also separate notes and also charts. Now getting fainter, but should still be visible with telescopes. At the start of May it will be around 10° North of Cassiopeia, and at the end of May will pass around 6° from Polaris.

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. :- May 13 01.6h., May 15 22.4h.