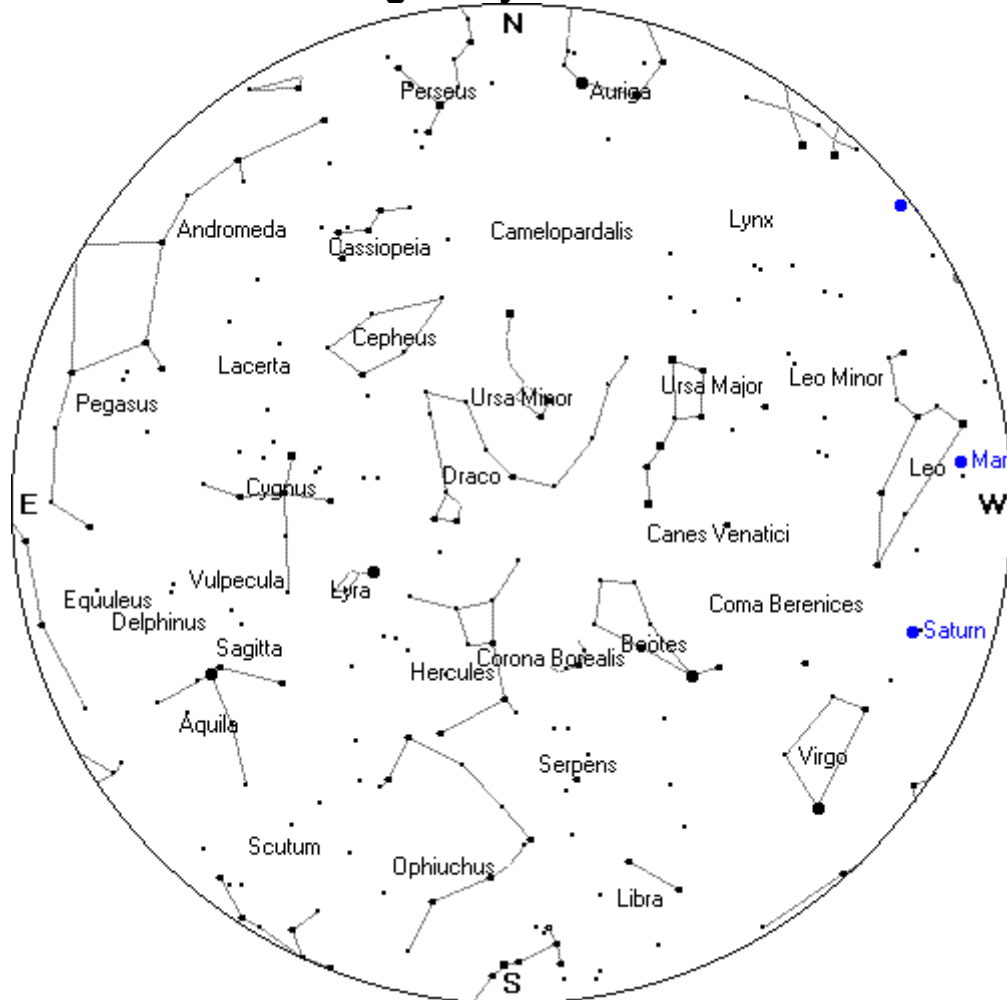


Dundee Astronomical Society The Night Sky in June 2010



The Sky at 11pm on 15th June 2010

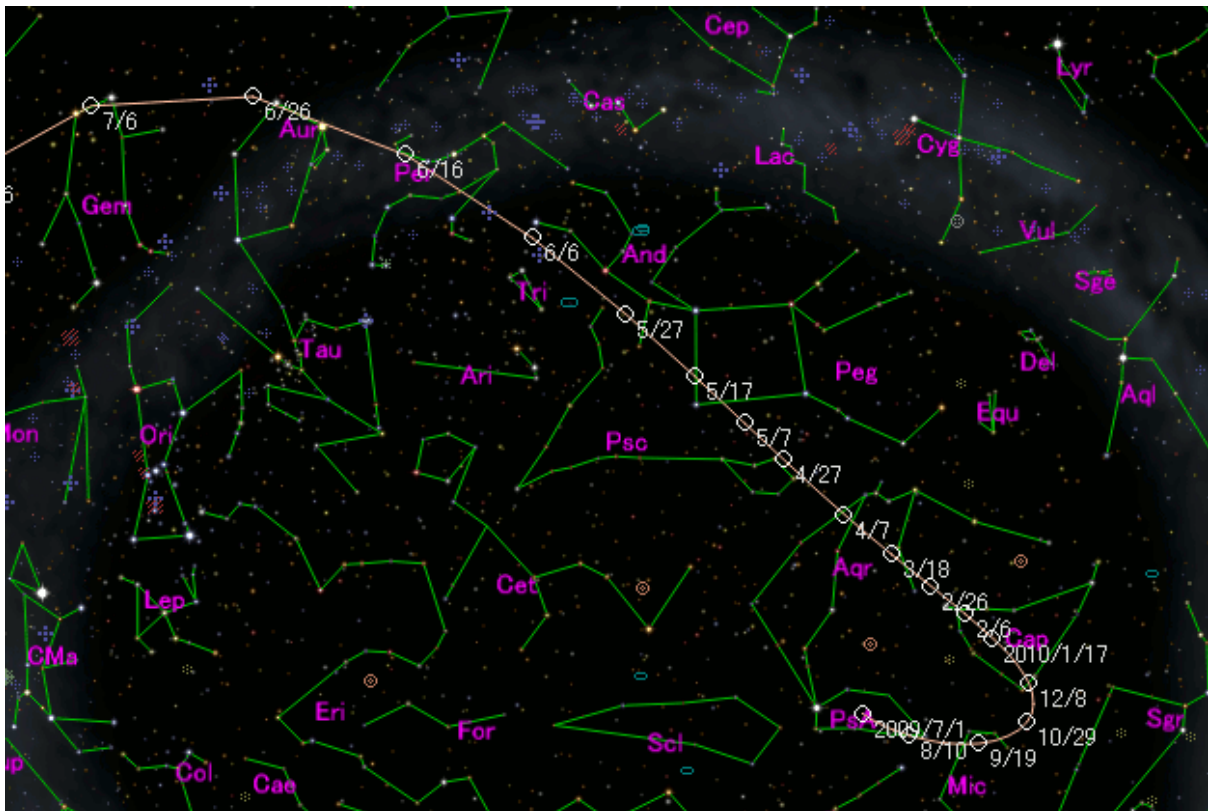
[chart courtesy of www.heavens-above.com]

During June the night sky never really darkens completely with brightness skirting the northern horizon throughout the night. The three bright stars of the summer triangle can now be seen quite high in the south east by 11pm but the interesting features of the constellations of which they are the brightest stars are hidden at this time of year.

If you happen to be awake beyond about 11pm it will be worth having a look towards the north throughout the month if it is clear. The end of May usually sees the start of the noctilucent cloud season and by June, if the last few years are anything to go by, there should be frequent displays. These delicate white or bluish clouds have frequently been very bright in recent years and the reason for the increase in brightness and frequency is still a bit of a mystery. They were first recorded by Thomas Backhouse in 1883 following the eruption of Krakatoa and have been increasing ever since. Tiny particles, thought to be of meteoric origin or thrown upwards by volcanoes, are coated with water and freeze at 89 km then fall and grow until they are seen at 83km. The solar cycle has some effect on the frequency of these clouds and water derived from increasing atmospheric methane may also play

a part. Perhaps this year, with an active Icelandic volcano we may see even brighter clouds. I would welcome reports of sightings during June and July giving date, time and location. To avoid any confusion of dates, please use a double date regardless of the time at which NLC are seen, e.g. if seen at 2330UT on 14th June, please report as 2330UT on 14/15 June 2010 or if seen at 0130UT on 23rd June, report as 0130UT on 22/23 June 2010. Further information can be seen on Tom McEwan's website, www.nlcnet.co.uk

Comet McNaught C/2009 R1 will be becoming brighter during June and will be in the region east of the Square of Pegasus. The long summer nights will make this less of a spectacle than it might have been as it should reach naked eye brightness in theory.



Ephemeris for C/2009 R1 McNaught

Station: UK

Latitude: 53.000 Longitude: 0.000 Magnetic variation: 0.0

Observing constraints: Sun below -13. deg Object above***** deg

June 2010 Positions for 00:00 ET, Times in UT

Elong Moon Comet

Day R.A. B1950 Dec R.A. J2000 Dec Mag D R Trans Observable Sun Moon Phase Tail pA d
RA dDec

1/ 2 1 26.7 35.14 1 29.5 35.29 7.8 1.24 0.86 8.49 0.13 to 1.15 43 84 77 33 275 35
28

2/ 3 1 34.0 36.21 1 36.9 36.36 7.7 1.23 0.84 8.52 0.04 to 1.13 42 74 68 35 277 36
28

3/ 4 1 41.7 37.29 1 44.6 37.44 7.6 1.22 0.82 8.56 23.53 to 1.10 42 65 59 39 278 38
28

4/ 5 1 49.9 38.35 1 52.8 38.50 7.4 1.20 0.80 9.00 23.42 to 1.08 41 56 49 42 280 39
27

5/ 6 1 58.5 39.41 2 1.6 39.55 7.3 1.19 0.78 9.05 23.29 to 1.05 40 48 40 45 282 41
27

6/ 7 2 7.7 40.45 2 10.8 40.59 7.2 1.18 0.76 9.10 23.15 to 1.03 40 39 30 49 284 43
 26
 7/ 8 2 17.4 41.47 2 20.5 42.01 7.0 1.17 0.74 9.16 22.59 to 1.01 39 32 22 54 287 45
 25
 8/ 9 2 27.6 42.47 2 30.8 43.00 6.9 1.16 0.72 9.22 22.60 to 0.59 38 26 14 58 289 46
 24
 9/10 2 38.4 43.44 2 41.7 43.57 6.8 1.15 0.70 9.29 23.02 to 0.57 37 23 7 63 292 48
 23
 10/11 2 49.8 44.37 2 53.1 44.49 6.7 1.15 0.69 9.37 23.04 to 0.55 36 24 2 68 295 50
 22
 11/12 3 1.7 45.25 3 5.0 45.37 6.5 1.14 0.67 9.45 23.07 to 0.53 35 30 0 74 298 52 20
 12/13 3 14.1 46.09 3 17.5 46.20 6.4 1.14 0.65 9.53 23.09 to 0.51 34 39 0 80 301 53
 18
 13/14 3 27.0 46.47 3 30.5 46.57 6.3 1.14 0.63 10.03 23.11 to 0.50 33 48 3 87 305 55
 15
 14/15 3 40.4 47.18 3 44.0 47.27 6.1 1.13 0.61 10.12 23.12 to 0.48 32 59 8 94 309 56
 13
 15/16 3 54.2 47.42 3 57.8 47.51 6.0 1.13 0.59 10.22 23.14 to 0.47 31 69 16 102 313
 57 10
 16/17 4 8.3 47.59 4 11.9 48.07 5.9 1.14 0.58 10.32 23.15 to 0.46 30 80 26 110 317
 58 6
 17/18 4 22.6 48.08 4 26.2 48.14 5.8 1.14 0.56 10.43 23.17 to 0.45 29 91 37 119 321
 59 3
 18/19 4 36.9 48.08 4 40.7 48.14 5.6 1.14 0.54 10.53 23.18 to 0.45 28 102 48 127 325
 59 0
 19/20 4 51.3 47.60 4 55.0 48.05 5.5 1.15 0.53 11.03 23.18 to 0.45 27 112 59 136 330
 60 -3
 20/21 5 5.5 47.43 5 9.2 47.47 5.4 1.15 0.51 11.14 23.19 to 0.44 26 122 70 146 334
 59 -6
 21/22 5 19.5 47.18 5 23.2 47.20 5.3 1.16 0.49 11.24 23.19 to 0.45 25 132 80 155 339
 59 -10
 22/23 5 33.1 46.44 5 36.8 46.46 5.2 1.17 0.48 11.33 23.19 to 0.45 24 141 88 163 344
 58 -14
 23/24 5 46.2 46.02 5 50.0 46.03 5.1 1.18 0.47 11.43 23.19 to 0.46 23 150 94 172 348
 57 -17
 24/25 5 58.9 45.13 6 2.6 45.13 5.0 1.19 0.45 11.51 23.18 to 0.47 22 156 98 179 353
 55 -20
 25/26 6 11.0 44.17 6 14.6 44.15 4.9 1.20 0.44 11.59 23.17 to 0.48 21 160 100 184
 358 53 -23
 26/27 6 22.4 43.14 6 26.0 43.12 4.8 1.22 0.43 12.07 23.16 to 0.50 20 159 100 188 3
 52 -26
 27/28 6 33.2 42.05 6 36.7 42.02 4.7 1.23 0.42 12.14 23.15 to 0.51 19 154 98 189 7
 50 -28
 28/29 6 43.3 40.51 6 46.8 40.47 4.7 1.24 0.42 12.20 23.14 to 23.29 18 147 94 188 12
 47 -30
 29/30 6 52.8 39.32 6 56.2 39.28 4.6 1.26 0.41 12.25 Not Observable 17 139 89 184 17
 45 -32
 30/31 7 1.6 38.10 7 5.0 38.05 4.6 1.27 0.41 12.30 Not Observable 16 130 82 178 22 43 -34

Mercury may be seen low in the sky a bit north of east before sunrise at about 4am during the first half of the month.

Venus will be quite low in the north west for a short time just after sunset through June but will become very low by late month.

Mars remains in Leo and will be low in the west at about 11pm throughout June. It is now quite distant and much less bright than it was at the start of the year and presents only a small disc.

Jupiter is getting a bit higher in the south east sky before sunrise after some years of being very low in the sky. Binoculars or a small telescope will make out the four main satellites.

Saturn follows Mars, low in the south west after sunset and, like Mars, it will not be particularly easy to see any detail using a telescope.

The Moon is at last quarter on the 4th, new on the 12th, at first quarter on the 19th and full on the 26th.

David Paterson of Dundee Astronomical Society will give a talk entitled 'A Beginners Guide to the Constellations' on Sunday 6th June at 1.30pm and Phil Rourke will talk about 'Your Computer as a Planetarium' on Sunday 27th June at 1.30pm.

Ken Kennedy
Director of Observations
Dundee Astronomical Society