

PROGRAMME March/April 2010

All talks and use of observatory equipment is free and members of the public are very welcome to attend the meetings and visit the observatory. We meet every Friday at 7.30PM at Airdrie Arts Centre unless otherwise stated. Please check web site or contact curators for further information

12th March Paul Clark "How Things Work" - Radio Astronomy - Third talk in a series of 12 by Paul

19th March Observatory Meeting Airdrie Public Observatory will be open between 7:30 and 9:30 for views of the night sky. Should weather not permit viewing, we will have a video evening instead

26th March All Members Ten Minute Talks - Come along and enjoy a varied series of 10 minute talks on a whole array of subjects by our members. These usually prove very popular. Why not present a short talk yourself if you feel brave?

2nd April Arthur Bannister The Constellations of the Zodiac - PISCES - Fourth talk in a series of 12 by Arthur

9th April Aileen Malone 40th Anniversary of Apollo 13. (11th to 17th April 1970)

16th April TBC The Airdrie Committee are finalising a guest speaker for this evening. Details will appear here soon.

23rd April Paul Clark "How Things Work" - Launchpads & Jungles - Fourth talk in a series of 12 by Paul

30th April Aileen Malone Airdrie Public Observatory Celebration Night. Celebrating The Observatory's 114th anniversary.

AIRDRIE ASTRONOMICAL ASSOCIATION
Registered Charity SC041014



ESTABLISHED 1896

AIRDRIE PUBLIC OBSERVATORY

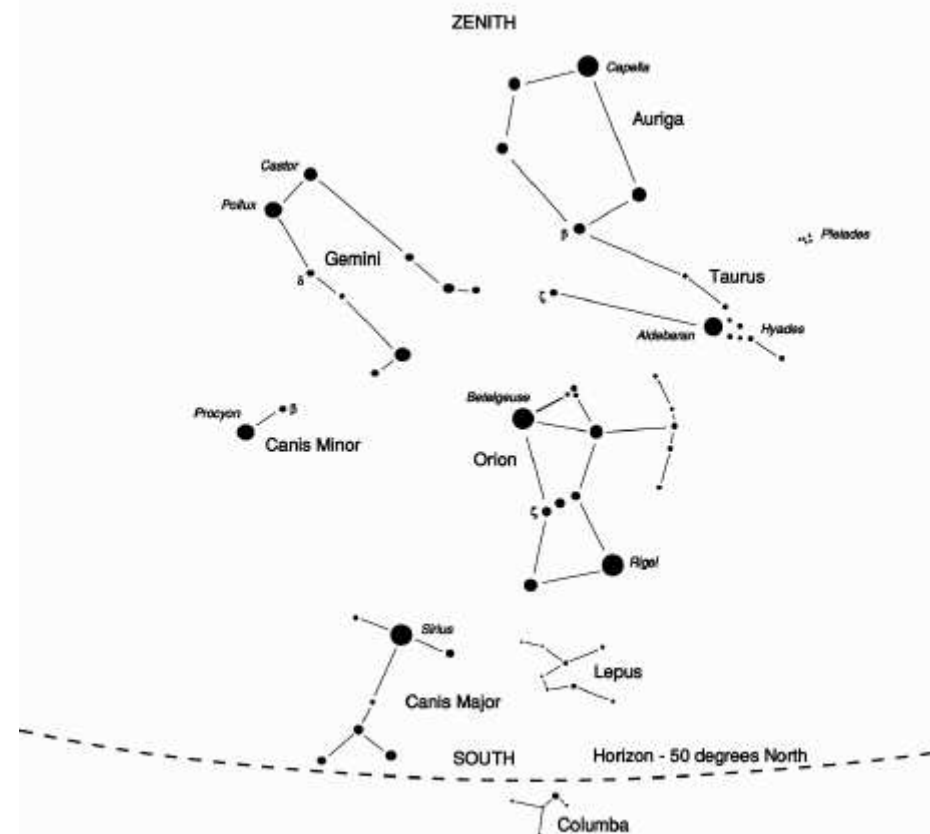
THE NIGHT SKY March 2010

Edited by Raymond McCall



OBSERVATORY KEY HOLDERS

Paul Clark - Curator (phendrixx@aol.com) Tel. 01236 770389
Arthur Bannister - Curator (Arthur_Bannister@airdrie.n-lanark.sch.uk)
<http://www.airdrieobservatory.com/>



**The early evening night sky above
Airdrie Public Observatory**

March 2010

The Sun is in the constellation of Aquarius at the start of March, moving into Pisces on the 12th. At the start of the month, in central Scotland, sunrise is at 7:05 am and sunset is at 5:45 pm; by the end of the month, sunrise is at 5:45 am GMT (6:45 am BST) and sunset is at 6:45 pm GMT (7:45 pm BST). In mid-March, the sky is reasonably dark between about 7:30 pm and 5:00 am GMT. **REMEMBER** If you intend to do solar observing, always use the projection method. If you are unsure of this procedure, please ask some of the members for clarification. Never look at the Sun with the naked eye! The Spring Equinox falls on Saturday March 20th; the Sun crosses the celestial equator from south to north at 17:32. On this date, the Sun rises just after 6 am and sets just after 6 pm. After this, the days grow longer than the nights. British Summer Time begins on Sunday March 28th. Clocks should go one hour forward on the Saturday night.

Mercury is at superior conjunction (almost directly behind the Sun) on March 14th. By the end of the month, this elusive little planet may be visible just after sunset, low in the west – close to the lower right of brilliant Venus. But we will get better views of Mercury at the start of April.

Venus is emerging very slowly from behind the Sun. At the start of March, it's setting in the west just an hour after sunset. But each evening it appears a little higher, and sets a little later, so it's gradually getting easier to find. The "Evening Star" is so brilliant, it can be seen even against a bright twilight sky. In the telescope, Venus usually appears as a featureless white disc; but it shows phases, like the Moon. This month Venus appears like the Moon very shortly before it is Full, though since its disc is only 10 arc-seconds across, the phase won't be easy to detect. On the evening of Wednesday March 17th, the narrow crescent Moon will be almost directly above Venus, about 7 degrees apart.

Mars is slowly moving further away from Earth, but the "Red Planet" is still bright, and easy to observe. It's high in the south-eastern sky at dusk, and it doesn't set in the west until dawn. Relative to the stars, Mars is almost stationary in Cancer; towards the end of March, it starts to move very slowly to the south-east, away from the bright Twin stars of Gemini. But Mars is brighter than any of the other stars in that part of the sky. The only object to rival Mars is the bright star Sirius, but that's much lower down, and it twinkles different colours, whereas Mars shines with a steady orange light.

Jupiter was at superior conjunction (behind the Sun) in February, and the giant planet still won't be visible this month.

Saturn is very well placed for viewing this month. It's at opposition to the Sun on March 22nd; so it is rising as the Sun sets, it's due south at midnight, and it doesn't set until sunrise. Relative to the stars, it's moving very slowly north-westwards in Virgo. It's midway between the bright star Spica, in Virgo, to its lower left, and the bright star Regulus, in Leo, to its upper right. But Saturn appears brighter than either of these stars, and it shines with a steadier light. In the telescope, Saturn shows a disc almost 20 arc-seconds across; under good conditions, faint bands of cloud may be visible on its surface. Its famous rings appear as a narrow oval, 45 arc-seconds wide and only 3 arc-seconds high. Many of Saturn's moons can also be seen in the telescope; the brightest one is Titan. Titan will be 3½ arc-minutes to the west of Saturn around March 3rd and 19th, very close to the north of the planet around March 7th and 23rd, 3½ arc-minutes east around March 11th and 27th, and very close to the south around March 15th and 31st. In the evening of Monday March 1st, our own Moon, just past Full, will appear to the lower right of Saturn, about 8 degrees away. As the night goes by, the Moon moves further left, but it remains below Saturn all night. The Moon then continues to travel right around the sky, and comes back to Saturn at the end of the month. On the evening of Sunday 28th the Moon, now just before Full, is 12 degrees to the right of Saturn, and the following evening it's a similar distance below it.

Highlights of the Month

31st March—Venus and Mercury close in the twilight sky

Given a low westerly horizon and a clear night you will have a chance to see Venus and Mercury just 3.3 degrees apart about 30 minutes after sunset. Both are moving away from the Sun so getting higher in the sky after sunset. Their closest approach, at 3 degrees separation, will be on April 4th so keep watchin over the next few days.

Have a good look at the Hyades and Pleiades Clusters

The two nearest open clusters to us - the Hyades and Pleiades Clusters are high in the sky after sunset so March is still a good month to observe them. The Pleiades Cluster is one of the youngest open clusters and is dominated by blue stars that have been formed within the last 100 million years. None have yet evolved into red giant stars - so helping to define its age. It appears to be passing through a cloud of dust which is scattering the blue light from the stars forming so called "reflection nebulae" around the brighter stars of the cluster. The Pleiades are a lovely sight in high power binoculars or a short focal length telescope. The closer Hyades Cluster is older and does contain some evolved stars. The stars Aldebaran, the eye of the Bull, lies about halfway between the Hyades Cluster and the Earth so is not part of it.

For more information regarding the Highlights of the Month have a look at <http://www.jb.man.ac.uk/astronomy/nightsky/#highlights>