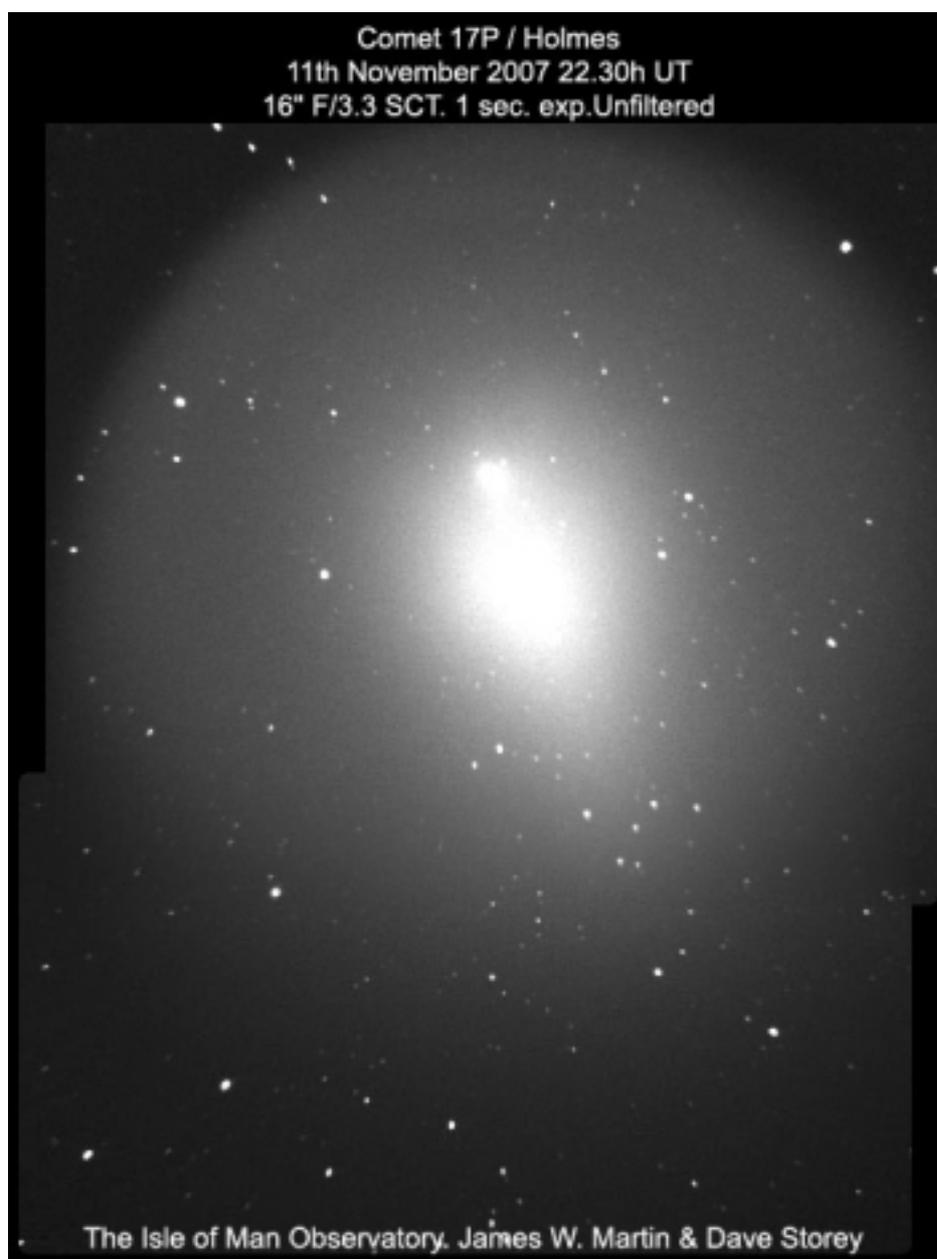




Newsletter January-March 2008

Volume 4 Issue 1



Chairman's Report

As we enter a New Year it is always good to look back on the previous year, at what were the astronomical highlights. For me the totally unexpected appearance of Comet Holmes was absolutely stunning, We often think that we know a great deal about the heavens and astronomy does normally remain very predictable. Yes, I know that things like Gamma ray bursts, supernova explosions etc. are quite dramatic, but they do remain normally within the domain of the professional or serious amateur astronomer. Comet Holmes proved to us all that nature is anything but predictable. For me Holmes was more spectacular than Hale Bopp back in 1997 which received widespread publicity. I suppose I was, and still am, disappointed that there was not much of a public response to Comet Holmes. Nothing however can detract from what was an unbelievable outburst that I could see clearly even from the brightly lit streets of London clearly as the star Mirphak which it was close to at the time.

From a local perspective the highlight of the year for me was Dave's picture of Saturn and the Moon that appeared as the BAA picture of the week last March. This really showed up the quality of images that Dave, can obtain using our magnificent facilities at Foxdale. Other highlights included the second visit to us at Easter last year by the voice of Jodrell Bank, Iain Morison and our learning that our own Manx astronaut Nicole Stott will shortly be making a spaceflight to the ISS, watch this space for details as soon as it becomes available.

Looking forward to 2008 we have a full programme for the year and I have already received contact from some groups and speakers for the back end of 2008 and into early 2009. From an observational viewpoint we start 2008 with a brilliant apparition of Mars, which dominates the south-eastern sky from dusk in the constellation of Gemini, this is quickly followed by Saturn which in Leo. Saturn is now past the period when the rings were wide open, but and it will be fascinating to watch them close up over the next year or so. I am sure there will be some great photo opportunities, which I am sure will be captured at the IOMASO. There will be a partial eclipse of the Sun to observe from the Island on Friday 1st August at about 10.15 BST, this eclipse is the first visible since the March 2006 that some of the IOMAS members saw so spectacularly from various locations. Unfortunately this one will only be about 20% from the IOM but weather permitting it will be worth looking for.

Finally 2008 will be the year that we return to the Moon, Mars and Mercury, there really does seem to be an increase in planetary science at present and with new entrants China & Japan into the field who knows what developments will come about during 2008 and beyond.

Lets all hope for clear skies throughout 2008 and keep looking at the skies, you never know what you might see!

All the best for 2008

Howard

The life and times of Charles Frederick Butterwoth F.R.A.S. By Gary Kewin.

I wish to thank Tony Cross, from the M.A.S for his help in my research and for Melvyn Taylor and Glyn Marsh for telling me about John Toone's talk about 3 years ago. Also Emile Schwiezter for the French connection. Without these peoples help, I wouldn't have progressed as far as I have.

It was Melvyn and Glyn who informed me that Charles Frederick Butterwoth had lived on the Isle of Man. So I thought I would investigate this fact. I have been reliably informed that the person with the hat on in the picture left is none other than Charles Frederick Butterwoth circa. 1922. The picture was taken at Stoneyhurst College, Lancashire.

Charles Frederick Butterworth was born in 1870 in the month of November, in Barton Upon Irwell, a district of Manchester. His parents, Francis Joseph and Jessie Butterworth were in the cotton industry.



His father was a grey cloth agent. Cotton is naturally grey before it is bleached white hence a grey cloth salesman. Francis Joseph Butterworth was doing very well out of the business so much he was able to employ a cook from the Isle of man called Mrs. Watterson. They had a house in Whaley Range in the district of Mayfield Mansions, Manchester. In 1872 his brother Joseph Francis Butterworth was born. His brother later went on to be a warehouseman working for his farther.

When Charles Butterworth left school he wanted to study chemistry, but owing to his father wishes, he entered the cotton trade at 15 years of age to learn the business, from the factory floor. He later went on from a grey cloth salesman to become a cotton manufacturer in later life.

His interest in astronomy started because he suffered chronic insomnia and he would often go for long bike rides at night. He became interested in shooting stars and soon progressed onto variable stars and other wonders of the night sky. His only regret was that he hadn't started 20 years earlier.

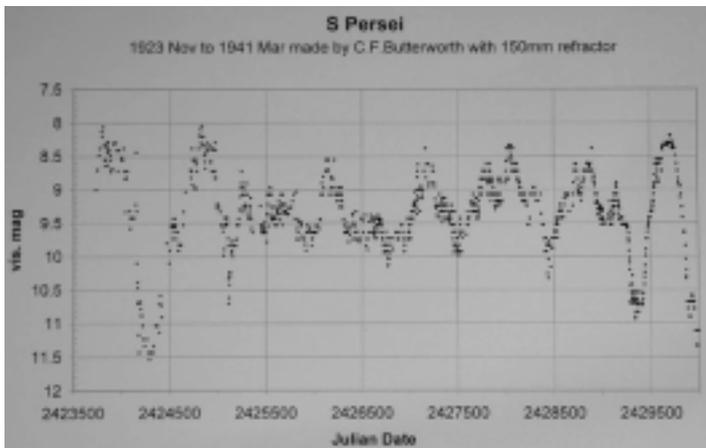
In 1887 at the age of 17 he was a founder member of the Societe Astronomique de France. Not until 1910 did he join the British Astronomical Association. In 1911 he joined the Manchester Philosophical and Literary Society, another arrow to his bow. Between 1913 and 1920, he was a member of the BAA Spectroscopic Section and he contributed several papers on work he had done with a prismatic camera on such objects as Mira Ceti, Gamma Cassiopeia and Comet Delavan (1913f).

In 1918 he joined the Royal Astronomical Society, a year later he became a fellow of the Royal Astronomical Society. His most productive work was as a variable star observer, spending long hours studying them. In 1897 he built an observatory at his home in Waterloo, Poynton in Cheshire.

In 1928 he was awarded the Palmes d'officier de l'académie, from the president of France. In 1941 he was the second person to be awarded the Walter Goodacre Medal and Gift from the B.A.A. The account of the award made at the meeting (*Journal* 52 (1)) shows that H. Thomson received it for him and also tells us that his first wife had died recently, but Butterworth himself had a bad leg and could not easily travel.

The telescopes he used were a 6inch Grubb refractor which was mounted equatorially. At times he also used a 10 inch reflector as well as 15 inch reflector. He only used these rarely but never after 1927.

Reproduced on next page is original data from the BAA Variable Star Section database. The star S Persei is a semi-regular type (SRc) variable in the Sword Handle. Its RA and Dec: (2000) 02h23m,+57°07'. Its catalogued extreme magnitude limits are 7.9 to 12.0 with an average period from maximum to minimum of 822 days. Its SRc status certainly shows in the variations. The double maximum peaks are interesting.



His Observations of long period and irregular variable star were sent to the Variable Star Section of the B.A.A between 1911-41 and amounted to just under 80,000 which is a staggering amount observational work. Add to this the 30,000 that he observed from France, making a total of 100,000. This huge number earned him the first Abbott Silver Medal from The University of Lyon in 1927.



In 1927 he decided to retire to the Port St. Mary in the Isle of Man where he bought a house for £900 and called it "Beach Villa". A short time later he built an observatory that he either moved from Poynton or built a new from scratch? Having retired to the Isle of Man, he found he could devote more time to observing variable stars. He had many other interests. He had bought a yacht which he sailed in Port St. Mary harbour. He was also a keen ornithologist. He had a fine set of Italian instruments that he would play. He also grew roses.

Erika Johana Henrietta Fruhling had been interned in a woman's prison camp in Port St Mary. When she was released, she was able to nurse Charles' first wife Margaret. After Margaret died, Charles married Erika

Fruhling in Brentford in 1942. When they returned to Port St. Mary they were not allowed back into his house "Beach villa" as they were turned away by an armed guard manning the checkpoint. They spent three years living a couple miles away in Colby at a friend's house called Avondale. In 1946 he died in Beach Villa aged 75 and was buried with first Wife Margaret.

Meetings

Listed below are the planned meetings at the observatory. The meetings in *italics* are for groups outside of the IoMAS, but any member is allowed to attend these meetings where you may help with the visit, or just use the telescopes. Note these meetings may change at short notice. Contact the host of the meeting to confirm. Also, see the IoMAS website as this has a page that is continuously updated.

3rd Jan. Beginners Meeting (7.00 -7.45pm) followed by Monthly Meeting. "Mars Latest News" by Dave Storey
10th Jan Visit by HSBC Hosted by Dave Storey
16th Jan. Visit by IoM Clergy. Hosted by Howard Parkin and Gary Corlett
 17th Jan. Committee Meeting
 7th Feb. Beginners Meeting (7.00 -7.45pm) followed by Monthly Meeting. "Workshop Meeting"
12th Feb. Visit by Manx Wildlife Trust. Hosted by James and Shirley Martin
 21st Feb. Committee Meeting
28th Feb. Visit by BCS. Hosted by Howard Parkin and Gary Corlett
4th Mar. Visit by Comea WI. Hosted by Howard Parkin
 6th Mar. Beginners Meeting (7.00 -7.45pm) followed by Monthly Meeting. "Observing Asteroids" by Dave Storey
13th Mar. Visit by Friends Manx National Heritage. Hosted by Howard Parkin and Gary Corlett
 20th Mar. Committee Meeting

The Manx Night Sky. January - March 2008

All times are Universal Time (UT). IoM time is UT (GMT)

Moon

New	1 st Qtr.	Full	3 rd Qtr.
8 th Jan. 11.37hrs	15 th Jan. 19.46hrs	22 nd Jan. 13.35hrs	30 th Jan. 05.03hrs
7 th Feb. 03.45hrs	14 th Feb. 03.33hrs	21 st Feb. 03.31hrs	29 th Feb. 02.18hrs
7 th Mar. 17.14hrs	14 th Mar. 10.46hrs	21 st Mar. 18.40hrs	29 th Mar. 21.47hrs

Lunar Occultation's: (Stars brighter than magnitude +6.0)

Date	Time (h.m:s)	Star	SAO#	Magnitude	PA	Type of Event	Notes
13 Jan	22.07:44	ZC3508	128401	5.8	094	DD	21 Pisces
14 Jan	19.00:27	ZC0068A	109262	5.7	010	DD	51 Pisces
24 Jan	23.00:27	ZC1525	118286	5.6	313	RD	44 Leo
25 Jan	05.39:39	ZC1549	118376	5.1	270	RD	48 Leo
26 Jan	02.14:37	ZC1635	118764	5.2	335	RD	75 Leo
26 Jan	03.35:02	ZC1637	118778	5.9	325	RD	76 Leo
29 Jan	03.27:24	ZC1944	157998	5.5	273	RD	75 Virgo
17 Feb	23.44:25	ZC1117	79352	5.0	052	DD	57 Gemini
29 Feb	05.43:01	ZC2383	184481	2.8	245	RD	tau Scorpio
16 Mar	02.30:03	ZC1099	79199	5.8	105	DD	52 Gemini

Times are UT as seen from IoMAS Observatory. Start to observe these events about 5 minutes before the above times to allow for differences in your latitude and longitude. This will give you time to locate the star that is about to be occulted.

ZC = Zodiacal Catalogue. Type of Event DD = disappearance at dark limb, RD = Reappearance at dark limb.

PA = Position Angle around limb of the Moon, where 0 degrees is north, 90 degrees is east, 180 degrees is south and 270 degrees is west.

Solar Eclipse: There is an annular eclipse on the 7th February, but no part of this eclipse will be visible from Mann.

Lunar Eclipse: The total lunar eclipse on 21st February will be visible from start to finish as seen from the Isle of Man. The moon enters the earth's penumbral shadow at 00.36hrs. Not until about 01.43hrs will the eclipse start to become noticeable as the moon enters the earth's umbral shadow. Between 03.01 to 03.50hrs, the moon will be completely immersed in the umbral shadow and the eclipse is total during this period. Cloud and transparency conditions within the atmosphere at the earth limb, as seen from the moon, will determine the colour and darkness of the eclipse. By 05.08hrs, the eclipse will have left the umbral shadow and the eclipse will be over visually. The moon leaves the penumbral shadow at 06.15hrs.

Planetary Highlights

Mercury. Reaches greatest eastern elongation on the 22nd January. It will be poorly placed for observation from the IoM. It moves through inferior conjunction 6th February and becomes a morning star. Again it will be poorly placed for viewing from the IoM.

Venus. Is easily found in the morning sky and shines at a brilliant magnitude of -4.1. It will continue to be seen until March when it will start to be too close to the sun and the local horizon. The planet is moving away from the earth and the disc will become smaller. The phase will be seen as 75% at the start of the year and will increase to 95% illuminated at the end of March.

Mars. Was at opposition in December and will be found high in the Manx sky in the constellations of Taurus and Gemini. The planet will be unmistakable due to its red colour. A good telescope will show the dusky surface markings and the north polar ice cap. On the night of 19th/20th January, the near full moon will pass ½ degree north of Mars.

Saturn. Resides in the constellation Leo and rises at 9pm at the start of the year. By the end of March, it will be rising at 14.50hrs, so it will be well above the horizon after sunset. The ring plane is angled at a value of between -6 to -9.5 during the first quarter of 2008 and should continue to look splendid in a telescope.

Meteors: Quadrantids are active at the very start of the year, with a maximum occurring on the 4th January. This shower has short outbursts in activity when 100 meteors per hour when ideal conditions are met. A shower worth watching this year as the moon will be out of the way and the fainter meteors may be seen.

Virginids are active from March to April with a maximum due on April 10th. The rate is low at only 5 meteors per hour.

Comets:

Comet 8P/Tuttle is moving due south through the constellations Pisces, Aries, Pisces, Cetus and Fornax. It will be faintly visible to the naked eye at a magnitude of +5.3 around mid January.

Comet 17P Holmes was the surprise comet of late 2007. It normally shines at a very faint -17 to -20 magnitude but on the night of October 24th it suddenly increased on magnitude to at least +2.5 a couple of days later. The size of the comet initially gave the comet a stellar appearance and some people at first thought it was a nova. The comets coma gradually expanded to well of 1 degree wide and the brightness consequently faded. It was just visible to the naked eye as of late December. The comet resides in Perseus and it will be worthwhile keeping an eye on the comet for any future outburst in brightness.

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**DOME PHONE
464926**

Please ring the Dome Phone on any clear night. There should be a committee member there if you're lucky. If you don't get an answer, please try any of the above committee members that have (KEY) next to their name to see if they plan to do some observing. They should be able to try to get the observatory open for you. If you know in advance what you plan to observe, again, ring the above committee members to arrange an observing session.

This newsletter has been very kindly sponsored by "The Office Equipment Centre" Douglas, Isle of Man.