



Newsletter Winter 2007

Volume 3 Issue 4



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Editorial

Over the last few months, I have been unable to attend the monthly meetings due to working in Sweden. While working away, I have managed a few nights just looking at the Swedish dark sky and I must admit that the sky is clearer there than here. (I don't intend to move there though!) The milky-way looks fantastic from Sweden and the dark dust clouds within the milky-way stand clearly in front of the brighter background glow, giving a 3D effect. I have also given some impromptu tours of the night sky to my work friends and one object that I was able to point out clearly was the famous Andromeda galaxy that appears on the front page. Kevin Deakes, along with John McDermott, joined the committee last month and I am looking forward to more of Kevin's excellent images.

May I also take this opportunity to thank the committee form the Observer of the year award. This award was introduced to encourage members to observe and report to the society their work. I personally don't need such a carrot to get me out there but receiving such an award is great way to realize that what I report to the members is appreciated. Please continue to report observations to Howard Parkin so he can include them at the monthly meetings and don't forget to send them to this newsletter.

It was great to see the Martin Family awarded the Committee Award at the AGM. James and Shirley have worked hard over the years for the society and their work is much appreciated by the committee and the membership.

Chairman's Report (AGM Address. 20th September 2007)

Members of the IOM Astronomical Society, ladies & Gentleman, On behalf of the IOMAS I would like to welcome you all here this evening and in particular I would like to give a warm welcome to our very own speaker this evening who has travelled from Preston to be with us tonight, Glynn Marsh. We are all looking forward to your talk later on.

This is now my third report to you since I took over from Mike Kelly in September 2004 and during this time we have continued to develop as a Society with a steady flow of new members. We continue to have many talks, meeting and visits at the observatory and a great deal of interest in the subject from the public and the media. We now have over 120 members and with an average attendance at our meetings of around 50, the future for Manx astronomy is looking very promising, and as I said last year I am proud to be Chairman of one of the Islands leading Societies.

Throughout the last 12 months we have had a full programme of talks and meeting and we are delighted to have welcomed a number of both off and on Island visitors to our meetings, Without exception all of the talks have gone very well indeed with a great deal of expertise, confidence and humour.

Back in March one of our members had one of his many excellent photos nominated as the British Astronomical Associations Picture of the Week. Well done Dave

The year started with an excellent talk at last years AGM by Ian Morison of Jodrell Bank, and Ian's talk on SETI was a real eye opener. The day after the AGM we had a great observing session and supper with Ian at the observatory, and we must have impressed him because he returned to the Island at Easter and gave us yet another talk during his holiday.

In October our treasurer Gary Corlett's gave us a fascinating talk on the Astronomers Royal, this was followed in November by Dave Storey's talk on 21st century observing. In December we had a Short papers evening on places to visit and we had talks on the Greenwich, Edinburgh and Mauna Kea observatories from Gary Corlett, Graham Gordon and Peter Clague respectively as well as one by myself on the Cape Canaveral launch facilities.

At the AGM last September we were also delighted to welcome three members of Cambridge University Geology department who were over to install once again a seismometer on our field again as part of a bigger project called the British Isles Seismic Experiment. We are delighted they could join us and even more delighted to welcome them back to our January meeting when they outlined the details of the experiment. I have recently been contacted by them and they will be back in the next few weeks to check everything out and hopefully to update us on the results so far. This was followed in February with a look at Victorian eclipses on "magic lantern slides" by Helmut Kessler. We tried a new idea in March with a workshop evening and this worked very well with Dave up in the dome, the two Gary's on PC's next door, Mark on the website, and James and Alan on using telescopes.

I was delighted on what was a clear night to be able to use my new green laser to point out the wonders of the night sky In April Richard Shafto set us all thinking with a talk on the subject of Dark matter & energy. We had our regular Short papers spot in May with four excellent talks from Kevin Deakes on "Measuring Titan" Robert Farrington on "Our mighty Moon", Roy Allen on "The Newton" and Gary Kewin on the 1999 eclipse. We have also had a brief talk on Archaeoastronomy by Matt Chapman and this has led to him being our speaker next January. Matt also presented us with a meteorite fragment which is here on display tonight

June had Mark giving us a very interesting talk on the History of IT and in July one of our youngest and most enthusiastic members Jonathan Gordon gave us the second part of his talk on "The Gas Giants" We tried a new idea in August with a StarBQ and this worked well with a impromptu talk by Glynn after some excellent food. Cooked on a great Barbie provided by James & Shirley, I understand the meeting carried on the next night with a few members visiting a local pub to round of a memorable couple of days!

Our final speaker last month saw Gary Kewin tell us all about the renowned variable star observer Charles Butterworth who used to live in the South of the Island. Gary has done a lot of work on this and has unearthed quite a few interesting facts about a leading amateur astronomer of his time who adopted the Island as his home

All of the events that took place last year and this have of course been the culmination of a great deal of hard work from your committee and it is great to work with such a great bunch of enthusiasts who have one principle goal, to encourage everyone to look at the splendours of our Manx Skies. Thank you all most sincerely.

To run the Society we have a very hard working and dedicated committee and whilst it is not appropriate to single them all out individually as, <u>all</u> of their efforts are greatly appreciated, however I must at this stage pay a special tribute to two of our Committee members Peter Callister and Alan Buck, Pete has been a committee member for 9 years and Pete & his wife Lynn have helped us with the minutes, the newsletter and many other aspects of our business. Alan has been a committee member for the last 3. Alan is a very experienced and knowledgeable observer, particularly in the field of solar observing, and his common sense approach and constructive comments have helped us keep our feet on the ground. Both Pete and Alan have decided not the seek re-election, so I wanted to therefore take this opportunity to thank them both from all of us for their efforts.

Last year I continued with the plan consolidating all of the visits to the Observatory by the various groups and Societies to be on the same day, Thursdays, and this once again worked very well with over a dozen groups coming up to see what we do at the observatory from September through to April. At this point I must thank most sincerely Gary Corlett our treasurer for helping me during most of these visits, and also to Dave & James and their helpers for the talks and visits they did.

We will once again have a full programme of speakers for you in the forthcoming year with subjects as varied as Asteroids, Meteorites, Archaeoastronomy, Kuiper belt objects, IOM observatories and solar observing. I am still awaiting confirmation of some dates and speakers so the full programme will be distributed at the October meeting when the talks are finalised.

I look forward to them all in anticipation and I am sure you will give them your full support. We start of the year with a chance to reminisce and are holding a short papers evening on the actual 50th anniversary of the launch of Sputnik 1 on October 4th 1957

Finally we must thank Mark and Dave in particular for their work providing a link from the telescope to the clubroom and even more recently full internet access during meetings. Earlier this year I know it was the realisation of a dream for quite a few members when we had a meeting with members watching in the clubroom the image through the telescope. Well done to all concerned. We really do have first class facilities that are the envy of many visiting astronomers

Members of the Isle of Man Astronomical Society, Ladies & Gentlemen. I am proud to have had the opportunity to have served as your chairman for the last three years and I have thoroughly enjoyed them. Thank you for your support and kind attention and here's to clear skies and good seeing throughout the forthcoming observing season and beyond

Thank you. Howard L.G.Parkin Chairman, Isle of Man Astronomical Society 20th September 2007 **Cover Image** by Kevin Deakes. Image acquired with a Starlight Xpress HX516 camera and an old 35mm F/3.5 lens. Composite of 10 unfiltered images of 2 minute exposures each. Combined with Registax software. Taken on 14th September 2007 Camera guided with LX200 telescope.

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.

The Manx Night Sky. October - December 2007

All times are Universal Time (UT). Don't forget that BST ends on October 28th. Put your clocks back 1 hour on this date.

New		1 st Q		Full		3 rd Qtr.
		19^{th}	Oct 08.33hrs	26^{th}	Oct. 04.52hrs	3 rd Oct. 10.06hrs
9^{th}	Nov. 23.03hrs	17^{th}	Nov. 22.33hrs	$24^{\rm th}$	Nov. 14.30hrs	1 st Nov. 21.18hrs
9^{th}	Dec. 17.40hrs	$17^{\rm th}$	Dec. 10.18hrs	24^{th}	Dec. 01.16hrs	1 st Dec. 12.44hrs
						31 st Dec. 07.51hrs

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

Dat	e	Time (h.m:s)	Star	SAO# 1	Magnitude	PA	Type o	of Event Notes
22	Oct	18.37:15	ZC3353	14636	2 3.7	061	DD	lambda aquarius
27	Oct	23.19.08	ZC537	76131	3.7	197	RD	Electra. Plieades
27	Oct	23.36:40	ZC536	76126	5.5	238	RD	Celaeno Plieades
27	Oct	23.53:15	ZC539	76140	4.3	266	RD	Taygeta. Plieades
28	Oct	00.05:21	ZC541	76155	3.8	237	RD	Maia. Plieades
28	Oct	01.13:20	ZC542	76159	5.8	273	RD	Asterope. Plieades
29	Oct	29.50:17	ZC890	77675	4.6	323	RD	136 Taurus
1	Nov	02.20:06	ZC1221	79940	5.9	225	RD	mu1 Cancer (BL CnC)
28	Nov	22.11:08	ZC1277	80243	5.3	257	RD	eta Cancer
21	Dec	04.49:16	ZC440A	75673	5.2	107	DD	epsilon aries
21	Dec	21.07:42	ZC536	76126	5.5	114	DD	Celaeno Plieades
21	Dec	21.16:25	ZC539	76140	4.3	082	DD	Taygeta. Plieades
21	Dec	21.37:56	ZC541	76155	3.8	113	DD	Maia. Pleiades

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.

^{4&}lt;sup>th</sup> October Monthly Meeting 50 years of the Space Age---Short Papers

^{18&}lt;sup>th</sup> October Committee Meeting

^{1&}lt;sup>st</sup> November Monthly Meeting. Making Sense of Scale Mark Henthorne

⁸th November Visit by Probus Club. Hosted by Howard Parkin and Gary Corlett

^{15&}lt;sup>th</sup> November Visit By Arbory Scouts, followed by Committee Meeting

^{6&}lt;sup>th</sup> December Monthly Meeting The Copernican Revolution by Howard Parkin

^{20&}lt;sup>th</sup> December Committee Meeting

^{3&}lt;sup>rd</sup> January Monthly Meeting Archaeoastronomy by Matt Chapman

Planetary Highlights

Mercury. Reaches inferior conjunction (near side of the sun) on the 23rd October and will become a morning star there after. It reaches greatest western elongation on the 8th November and Mercury will be best placed for viewing from the IoM during the first two weeks of November. The planet then moves around to the far side of the sun on the 17th December and will be out of sight.

Venus. Is a very prominent beacon of light in the morning sky. It attains its greatest elongation west of the sun on the 28th October with a separation of 46 degrees. It reaches half phase on the 27th and it is worth looking to see if the phase is seen as half on this date as this can occur a couple of days earlier due to the Schroter effect. Venus will remain in the morning sky for the remainder of the year.

Mars. Is approaching opposition on December 24th and will rise at sunset and is visible all night. On opposition day, the full moon passes very close to north of Mars. Now is the time to get a good view of the planet at high magnification through a good sized telescope. You will certainly make out some surface shadings and possibly a north polar ice cap.

Jupiter is sinking lower and ever closer to the sun for the remainder of the year. It is easily found, low down in the south western sky after sun down. The planet will reach solar conjunction on the 23rd December and will be lost from view until next year.

Saturn. Resides to the south of Leo and is a morning star during October and November. By December, it will be seen rising before local midnight. The rings are closing up as seen from the earth and remain a spectacular site through a telescope.

Meteors: There are six active showers in the last quarter of the year:

Piscids can be seen through September and October with a maximum due on the 13th October. The rate will be low though. **Orionids** are on display 16th to 27th October with a peak of 25 per hour in ideal conditions on the 20th October.

Taurids have a maximum of 3rd November when the expected rate will be 10 per hour. These meteors move slowly across the sky and some bright meteors leave persistent trains. These can be seen from October 20th through to November 30th.

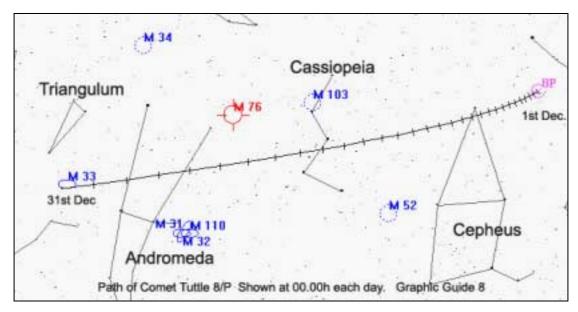
Leonids are very speedy meteors compared to Taurid meteors. The rate will peak on the 18th November and the shower is active between 15th to 20th November.

Geminids are the richest shower during the year. They can be observed between the 7th to 16th December, with 100 per hour on maximum, due on 14th December. Note that the rate of 100 per hour is in ideal conditions with the meteors radiant above you. As seen from the IoM, the radiant reaches about 70 degrees elevations so the rate will be lower than 100. Also, the peak is due during the daytime at 11hrs so the rate will have dropped by night fall.

Ursids are poorly observed and they are expected to be visible between 17th to 25th December. A low rate of 10 per hour on the 22nd December can be expected.

Comets:

Comet 8P/Tuttle will be visible in binoculars this month. It can be found at the beginning of the month in Ursa Minor and sinks in latitude as the days progress, passing through Cepheus, Cassiopeia, Andromeda and Triangulum. Its magnitude ranging from +8.2 to +5.0, but how a comet performs can be off prediction. You may not see it at all or we may be lucky and the comet is brighter than predicted. An excellent photo opportunity exists on the night of the 30th when the comet passes only 0.5 degrees from the galaxy M33 in Triangulum.



P/Tuttle (8P)						
Date	RA	declination	mag			
1 Dec 2007	20h48m35.86s	N83 44' 36.8"	9.5			
3 Dec 2007	21h23m32.39s	N83 03' 19.2"	9.3			
5 Dec 2007	21h56m26.67s	N82 09' 05.4"	9.0			
7 Dec 2007	22h26m37.15s	N81 00' 02.7"	8.8			
9 Dec 2007	22h53m46.26s	N79 34' 13.2"	8.5			
11 Dec 2007	23h17m55.25s	N77 49' 23.2"	8.3			
13 Dec 2007	23h39m16.95s	N75 42' 54.0"	8.0			
15 Dec 2007	23h58m09.48s	N73 11' 33.4"	7.8			
17 Dec 2007	0h14m52.16s	N70 11' 30.9"	7.5			
19 Dec 2007	0h29m43.24s	N66 38' 18.5"	7.2			
21 Dec 2007	0h42m58.90s	N62 27' 00.6"	7.0			
23 Dec 2007	0h54m53.10s	N57 32' 43.7"	6.7			
25 Dec 2007	1h05m37.64s	N51 51' 34.4"	6.5			
27 Dec 2007	1h15m22.49s	N45 22' 14.5"	6.3			
29 Dec 2007	1h24m15.97s	N38 08' 03.8"	6.1			
31 Dec 2007	1h32m25.07s	N30 18' 44.6"	5.9			
2 Jan 2008	1h39m55.64s	N22 10' 28.9"	5.8			

Contact:

Newsletter Editor: Dave Storey 38 Hailwood Avenue, Douglas, Isle of Man, IM2 7DG dave.storey@iomastronomy.org Tel 617084 or 495283

IOMAS COMMITTEE

Chairman: Howard Parkin 2625755 e-mail howard@iomastronomy.org

Vice Chairman: Gary Kewin (KEY) 2622241 e-mail gary@iomastronomy.org

Secretary: James Martin **2** 842954 e-mail james@iomastronomy.org

Treasurer: Gary Corlett (KEY) 2 611737 e-mail garyc@iomastronomy.org

Membership Secretary: Dave Storey (KEY) \$\frac{1}{2}\$ 617084 or 495283 e-mail dave.storey@iomstronomy.org

Committee Member: Angela Bridson e-mail angela@iomastronomy.org Committee Member: Kevin Deakes kevin.deakes@iomastronomy.org Committee Member: Graham Gordon. graham.gordon@iomastronomy.org

Committee Member: Mark Henthorne 491414 mark.henthorne@iomastronomy.org

Committee Member: John McDermott <u>john.mcdermott@iomastronomy.org</u> Co-Opted Committee Member: Colin Hill e-mail <u>colin@iomastronomy.org</u>

www.iomastronomy.org

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.