



OASI News

The newsletter of the Orwell Astronomical Society

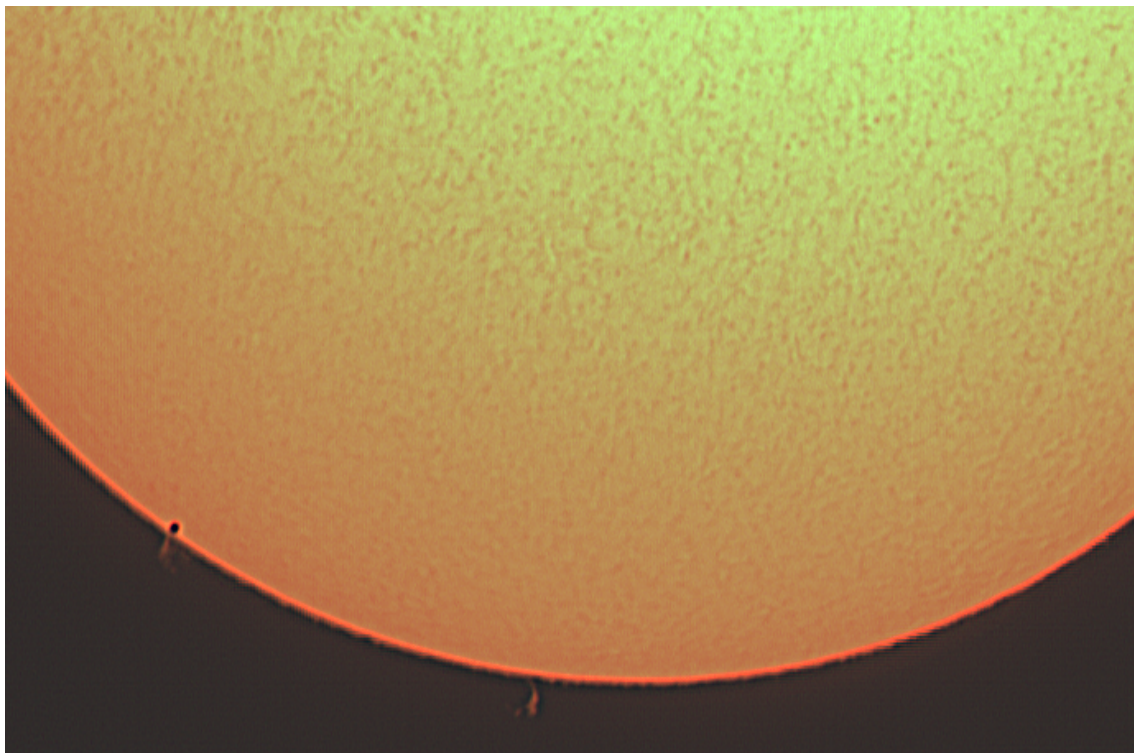


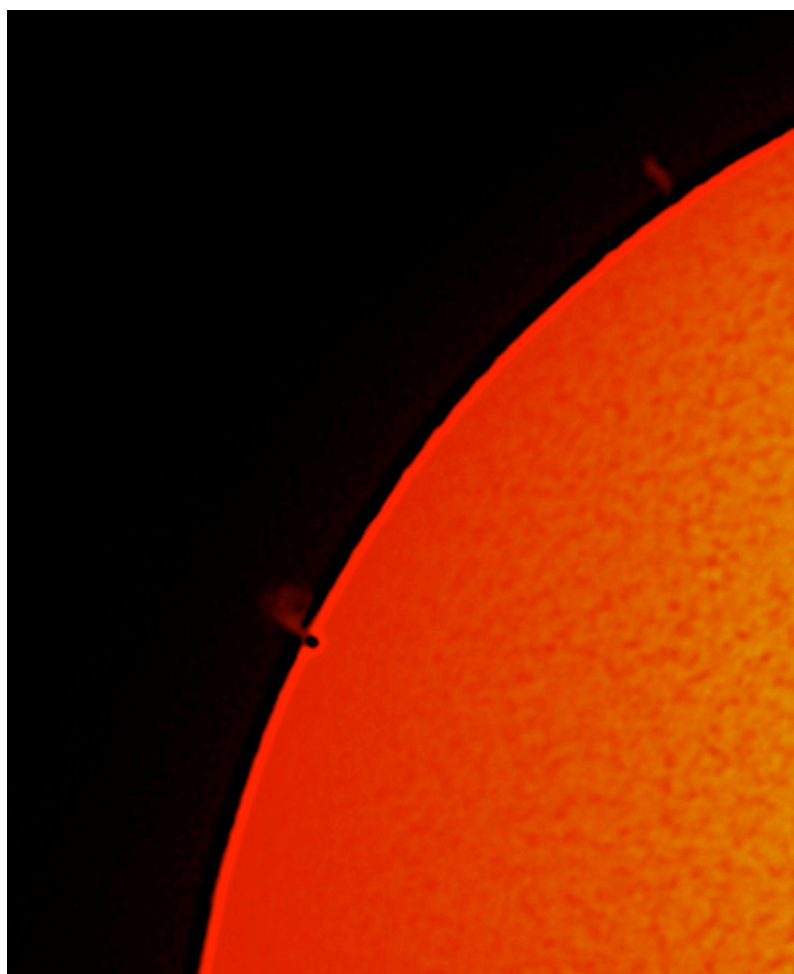
Photo by Andy Gibbs : Transit of Mercury 2nd contact (note the coincident flare).

Equipment used was a QHY 5 II L colour camera attached to a Coronado PST Hydrogen alpha Telescope on a Skywatcher Star Adventurer mount.

Trustees: Mr Roy Adams Mr David Brown Mr David Payne
Honorary President: Dr Allan Chapman D.Phil MA FRAS

Transit of Mercury 2016

David Murton

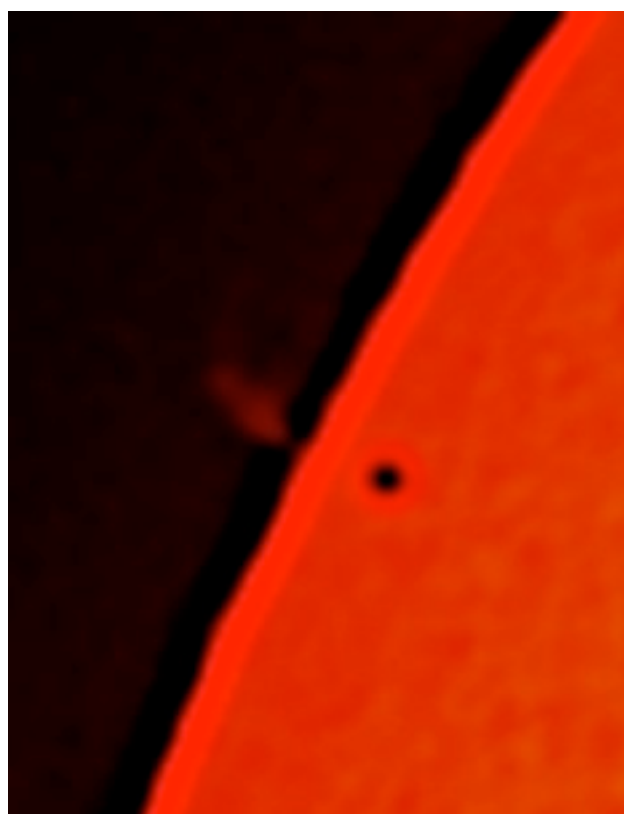


Second contact

Equipment:

PST telescope and Altair GPCAMV2 IMX224 camera on Skywatcher Star Adventurer mount.

Shortly after 2nd contact



James Appleton is collating all the transit reports and will provide a full report next month.

Meanwhile see [http://www.oasi.org.uk/Obsvns/20160509 ToM/20160509 ToM.php](http://www.oasi.org.uk/Obsvns/20160509%20ToM/20160509%20ToM.php)

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Society Contact details

Observatory (meeting nights only)

07967 519249

Email queries: info@oasi.org.uk

Facebook: <https://www.facebook.com/groups/445056098989371/>

Twitter: @OASlpswich

The OASI Facebook pages are now proving very popular. Several non-members are active contributors.

Please send material for the OASI web site and newsletter e.g. observations, notices of events, general interest articles, to

news@oasi.org.uk

Other contact details will be issued to members on a separate printed list or emailed directly to those who only receive the e-version of the News.

Access into the School Grounds and Observatory Tower

Please use the third gate into the school grounds by the gym.

Areas out of Bounds

Access to the Observatory is **only via the black door** at the foot of the Observatory tower, which leads to the staircase and thence to the spiral staircase up to the Observatory. If the black door is locked, please phone the observatory mobile, 07967 519249 during meeting hours.

Please do NOT explore other routes. When in doubt, ask or call the Observatory mobile.

Remember this is a school and straying into the main part of the school where the pupils reside would cause the society big problems and could see us losing the use of the observatory. Any member found to be anywhere other than the approved access route or the observatory area will face serious sanctions up to and including expulsion from OASI.

Please note that access time for all observatory member nights is after 20:15

The key to the toilets in the school gym is located in the seating area in the Belvedere room.

Articles for OASI News

News, pictures and articles for this newsletter are always welcome. Please send them to

news@oasi.org.uk

The CLOSING date is the 15th day of the month

Please submit your articles in any of the following formats:–

Text: txt, rtf, rtf, doc, docx, odt, Pages, pdf

Spreadsheets: xls, xlsx, OpenOffice/LibreOffice, Numbers

Images: tiff, png, jpg

Please send tables as separate files in one of the above formats.

If you don't feel up to writing a major article, perhaps you might write a short note for OASI News along the lines of *"This month I have mostly been observing/constructing/mending/reading/etc."*?

Articles win points! See page 13.

The full colour version is available from the OASI web site.

[Newsletter archive www.oasi.org.uk/NL/NL_form.shtml](http://www.oasi.org.uk/NL/NL_form.shtml)

Authors, please note that your articles will now be publicly available worldwide!

Reproducing articles from OASI News

If you plan to reproduce an article exactly as per OASI News then please contact the [Editor](#) – otherwise, as a matter of courtesy, please seek permission from and credit the original source/author. You may not reproduce articles for profit or other commercial purpose.

Committee 2016

Chairman	David Murton	Set overall agenda for OASI, Chair committee meetings, Press and publicity, Public appreciation of astronomy, Outreach activities.
Secretary	Roy Gooding	Outreach meetings (jointly with Chairman), observatory decoration.
Treasurer	Paul Whiting FRAS	Finance, Supervision of applications for grants, Visits by outside groups, Observatory tours, Public appreciation of astronomy (jointly with Chairman).
Committee	James Appleton	Committee meeting minutes, Web site
	Martin Cook	Membership, Tomline refractor maintenance & user testing
	Peter Richards	Lecture meetings, Email distribution lists
	Martin Richmond-Hardy	Newsletter
	John Wainwright	Equipment curator
	Mike Whybray	Astronomy Workshops, Child protection officer, Orwell Park School Astronomy Club.
	Avtar Nagra	Newbourne Observing Group
	Matt Leeks	Safety & security
Co-opted	Andy Wilshire	Librarian

Society Notices

Contacts

A printed list of Committee and other activity contacts is available from the Secretary or the Observatory. Email links are available in the A4 pdf version of this newsletter.

For general enquiries please email info@oasi.org.uk and your enquiry will be forwarded for action.

Next Committee Meeting

Tuesday 31 May 2016, Douglas Bader [TBC], Martlesham Heath, starting 8.00pm.

Signing in and out

Please ensure you sign in and out when visiting the Observatory and/or Newbourne. This is for fire safety precautions and also provides an historic record.

Welcome New Members

OASI and BAA Events

For the latest event details, please see www.oasi.org.uk/Events/Events.shtml

There's a Google Calendar on the OASI web site with the latest dates (and corrections!). If you want to easily add OASI Events to your own computer/ phone/tablet calendar application click this button on the website Events page



[Download the OASI 2016 year planner](#) from the web site. An A3 printer is advised.

For other astronomy news and astro pictures try our

Twitter feed <https://twitter.com/OASIpSwich>

Facebook page <https://www.facebook.com/pages/Orwell-Astronomical/158256464287623>

Subscribe to the OASI Yahoo group by emailing oasi-subscribe@yahoogroups.com

Date and Time	Location	Contact	Event
Weekly, every Wednesday, 20:15	Orwell Park Observatory	Martin Cook , Roy Gooding	General observation (weather permitting) using a variety of telescopes. Entry via the third gate left. NOT the main gate
Tuesday 31 May	The Douglas Bader , Martlesham Heath	Roy Gooding secretary@oasi.org.uk	OASI Committee Meeting
Thursday 9 June	Newbourne Village Hall	Mike Whybray worskshops@oasi.org.uk	Workshop: Rocketry by Rod Stevenson, East Anglian Rocketry Society (EARS)
Monday 13 June From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Saturday 18 June, 10:00 – 17:30	Institute of Astronomy, Cambridge	https://britastro.org	BAA Webb Deep Sky Society AGM
Sunday 26 June	UCS, Ipswich	David Murton chairman@oasi.org.uk	International SUN Day
Monday 27 June From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Saturday 02 July 11:00	York	https://britastro.org	BAA Summer Meeting
Sun 10 July Time TBC	Area outside Spa Pavilion, Felixstowe	David Murton chairman@oasi.org.uk	Public access event. Observing the sun safely. Booking not necessary. (If weather is poor, will reschedule to 17 July.)
Monday 11 July From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Saturday 16 July From 12:00	Newbourne Village Hall		OASI BBQ
Saturday & Sunday 23–24 July	Jimmy's Farm	David Murton chairman@oasi.org.uk	Science Section at Jimmy's Farm Sausage and Beer Festival,

Date and Time	Location	Contact	Event
Monday 25 July From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Monday 08 August From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Monday 22 August From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Sunday 29 August	Alnesbourne Priory	Mike Norris	Public Solar observing
Sunday 4 September	Bentley Playing Field	Roy Gooding secretary@oasi.org.uk	Bentley Family Day
Friday–Sunday 9 –11 September	Dundee	https:// britastro.org	BAA Autumn Weekend Meeting <i>Stars: Theory, Physics and Effects.</i>
Friday – Sunday 9 –11 September	Horncastle, Lincolnshire	https:// britastro.org	Horncastle Astronomy Weekend
Monday 19 Sept, 23:30	TBA	James Appleton info@oasi.org.uk	Field trip to observe graze of 87 Cet. More info.
Saturday 24 Sept, 10:00 – 17:30	Burlington House, LONDON W1J 0DU	https:// britastro.org	BAA Observers' Workshop <i>Asteroids & Remote Planets</i>
Monday 03 October From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Saturday 08 October	Nowton Park, Bury St Edmunds	David Murton chairman@oasi.org.uk	Public access event. Star party to mark International Observe The Moon Night . Book a place via the West Suffolk website .
Friday 14 October 20:00	Methodist Church Hall Black Horse Lane, Ipswich	Pete Richards lectures@oasi.org.uk	Lecture Meeting. Roger Pickard (Director of Variable Star Section of the BAA), <i>Why Observe Variable Stars?</i>
Saturday 15 October	Chichester	https:// britastro.org	BAA Back to Basics Workshop
Monday 17 October From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Friday 21 October 23:30	TBA	James Appleton info@oasi.org.uk	Field trip to observe graze of 20 Gem or 21 Gem. More info.
Wednesday 26 October, 17:30 – 20:00	Burlington House, LONDON W1J 0DU	https:// britastro.org	BAA Annual General Meeting
Monday 31 October From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Friday 4 November	Felixstowe Golf Club	David Murton chairman@oasi.org.uk	

Date and Time	Location	Contact	Event
Friday 11 November	Methodist Church Hall Black Horse Lane, Ipswich	Pete Richards lectures@oasi.org.uk	Lecture Meting: Steve Hubbard & Malcolm Brown <i>"Aliens – Are they out there?"</i>
Monday 14 November From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Monday 28 November From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Monday 12 December From 19:00	Newbourne Village Hall	Avtar Nagra nog@oasi.org.uk	Newbourne Observing Group
Wednesday 14 Dec	TBD but probably The Newbourne Fox.	Roy Gooding secretary@oasi.org.uk	Christmas Meal.
Monday 22 December 06:36	TBA	James Appleton info@oasi.org.uk	Field trip to observe graze of Hipparcos 63099. More info.
2017			
Saturday 29 July	UCS, Ipswich	David Murton chairman@oasi.org.uk	OASI 50th Anniversary
21 August	USA	www.greatamericaneclipse.com	Total solar eclipse

Public Solar & Star Parties organised by OASI in 2016

International Sun Day 26 June

Solar observing outside UCS Ipswich by the “?” art installation. Booking not necessary.

Solar Observing near Felixstowe Spa Pavilion Sunday 10 July

Public access event. Observing the sun safely. Booking not necessary. If weather is poor, will reschedule to 17 July.

Alnesbourne Priory Solar Event on Bank Holiday Monday 29th August.

We usually set up about 10am but Mike Norris will confirm full details nearer the date.

Bentley Family Day – Sunday 4th September.

Nowton Park Star Party – Saturday 8 October

<https://www.whatsonwestsuffolk.co.uk/whats-on/event/2794/the-nowton-park-star-party>

International Observe the Moon night (InOMN) is an annual worldwide public event that encourages observation, appreciation, and understanding of our Moon and its connection to NASA planetary science and exploration. Everyone on Earth is invited to join the celebration by hosting or attending an InOMN event — and uniting on one day each year to look at and learn about the Moon together.

The moon will be waxing gibbous on the night and become a Supermoon on 16 October.

Newbourne Observing Group

Avtar Nagra nog@oasi.org.uk

We normally meet at Newbourne Village Hall, Mill Lane, IP12 4NP

The Newbourne Observing Group (The NOGs) is a good place to start for beginners. If you are thinking of buying a scope or binoculars, come and try before you buy and talk to owners about the strengths and weaknesses of particular models. If you've already splashed the cash, bring your new scope along to use or for advice on setting-up and adjustment. All welcome, with or without telescopes.

Newbourne Observation Group Stargazer's guide

On the first meeting each month Bill Barton will give a short presentation of what can be viewed in the following 4 weeks. The next presentation will be on 16th May at 7.30 p.m. Useful for newbies and some old hands.

There will also be a "Bring & Buy" evening on 16th May. Bring your surplus astro kit to sell or see what bits you pick up on the night."

For armchair stargazers (on those cloudy nights) there is a small branch of the OASI Library held at Newbourne and a copy of the full catalogue. See page 19.

NOG Meetings in 2016

16 May	13 June	27 June
11 & 25 July	8 & 22 August	5 & 19 Sept
3, 17 & 31 Oct	14 & 28 Nov	12 & 19 Dec

We open up for all meetings at 7pm. Workshops (W) start at 8pm.

Please check the web site diary for any changes during the year.

Astronomy Workshops

Contact Mike Whybray

Location: Newbourne Village Hall IP12 4NP

Doors open at 7:00pm.

Workshops start at 8:00pm

If you are a new OASI member, or haven't been to one of these informal workshops before, they are a mixture of events of different characters including beginners talks, interactive workshops, films, etc., suitable for all. They are also a chance to chat with other members over a cup of tea and a biscuit, in a venue rather warmer than the observatory dome on a winter's night!

Given a clear night, we can make use of the field for a workshop or continue afterwards with some observing – something not possible at the previous venue, Nacton village hall.

Do you have a subject you could workshop? You could do a short one, or share the effort with a partner. Drop Mike Whybray a line! workshops@oasi.org.uk

OASI Workshop 9 June – Rocketry

9th June at Newbourne Village Hall. Note this is a THURSDAY!

Start time: Probably 7:15pm (Please check OASI Events web page for any update to that)

Rod Stevenson, Treasurer of the East Anglian Rocketry Society (EARS) will present a talk/workshop on amateur rocket building. Details yet to be finalised but I hope this will include a combination of information about the activities of EARS, practical rocket building, a chance to see/handle some of the hardware, and if possible a small rocket launch.

Small Telescope Observing Nights (STONs)

Contact: Paddy O'Sullivan and Dave Robinson Email: ston@oasi.org.uk

These evenings enable members to gain hands-on experience of using the society's telescopes and to practice locating astronomical objects. They are organised by Paddy O'Sullivan and David Robinson and currently take place at Orwell Park Observatory. They are held on the first Tuesday of the month, starting at 20:15, *but only when there is a demand from members*. To ensure there will be an organiser in attendance, members should email the above address.

If members cannot gain access due to lack of Fob, etc., please ring the observatory telephone number **07967 519249**.

Lecture Meetings

Contact: Peter Richards lectures@oasi.org.uk

These take place in Museum Street Methodist Halls, Upstairs room, Black Horse Lane, Ipswich. There is some parking at the venue but if there is no space at the venue you can drive to the end of Black Horse Lane and turn left to find a pay and display car park which charges (at the time of writing) £2 for parking between 6pm and 6am. There is also the spiral car park by the New Wolsey theatre.

Friday 14 October: Roger Pickard "Why observe variable stars?"

Roger is director of the variable stars section of the BAA.

November 11: Steve Hubbard & Malcolm Brown "Aliens – Are they out there?"

DASH Astro Events – 2016

See <http://dash.moonfruit.co.uk> for the latest details.

All DASH Astro observing sessions will take place at WESTLETON COMMON. ASOG observing sessions and locations may be arranged at the time of observation.

Unless stated all group meetings will take place at WESTLETON VILLAGE HALL from 7:30 pm

Observing sessions:

Nights: 2 & 30 April, 4 June,
1 & 29 Oct, 26 Nov

Solar observing: 2 July, 6 Aug, 3 Sept



Other Star Parties that OASI members may be attending

Kelling Heath Star Party – 30 Sept – 2 Oct

See <http://starparty.las-astro.org.uk/index.php> for the Autumn Equinox Sky Camp.

Haw Wood Star Party Friday – 28–31 October

Haw Wood is a [Dark Sky Discovery](#) site. Naked eye visibility is magnitude 5.73; with averted vision, 5.99; best SQM reading 21.75.

[Haw Wood Farm](#) Caravans and Camping Hinton

Saxmundham IP17 3QT

The Night Sky in June

Martin RH

All event times given are for the location of Orwell Park Observatory 52.0096°N, 1.2305°E

Other than for occultations, times are in BST (UTC+1).

Moon

Source: <http://heavens-above.com/moon.aspx>

New Moon	1st Quarter	Full Moon	Last Quarter
05 June 04:00	12 June 09:10	20 June 12:02	27 June 19:19

Sun, Moon and planets

Source: <http://heavens-above.com/PlanetSummary.aspx>

Object	Date	Rise	Set	Mag.	Notes
Sun	1	04:41	21:06		Summer Solstice: Jun 20, 23:34
	30	04:39	21:18		
Moon	1	02:55	16:13		Perigee 361,140 km June 03, 11:55
	30	01:58	16:31		Apogee 405,024 km June 15, 13:01
Mercury	1	04:08	18:31	1.0	Maximum western elongation Jun-05
	30	04:03	20:43	-1.3	
Venus	1	04:44	20:49	-3.7	Superior conjunction Jun-06
	30	05:11	21:41	-3.7	
Mars	1	19:54	03:57	-1.7	
	30	17:35	01:42	-1.3	
Jupiter	1	12:37	01:57	-1.9	
	30	11:00	00:07	-1.7	
Saturn	1	20:54	05:07	1.0	Saturn will be at opposition Jun-03
	30	18:50	03:06	1.0	
Uranus	1	02:58	16:22	5.9	
	30	01:05	14:34	5.9	
Neptune	1	01:50	12:27	7.9	
	30	23:52	10:32	7.9	

Meteor Showers

Source: BAA Handbook 2016 p97-99

Shower	Limits	Maximum	ZHR	Notes
Ophiuchids	May 19 – Jul	Jun 10 Jun 20	5	Weak activity from several radiants. Best for southern observers. Rather unfavourable

Occultations during June 2016

James Appleton

Only one lunar occultation occurs during the month. The table lists occultations during the month, of stars to magnitude 5.0, where the circumstances are favourable. The events should be readily visible in small telescopes or binoculars. The first two columns list the date and time (UT) of the occultation. Column three gives the phenomenon: 'D' denotes a disappearance and 'R' a reappearance. The table lists circumstances of disappearances and reappearances as dictated by the visibility of each phenomenon (determined by altitude, lunar phase, etc). Column four details the lunar phase ('+' for waxing and '-' for waning). Columns five and six give the altitude of the Sun and the star, both in degrees. (A negative solar altitude means that the Sun is below the horizon.) Columns seven and eight provide the star's magnitude and catalogue number.

The data relates to Orwell Park Observatory, but will be similar at nearby locations.

Please note that **times are shown in UTC** not BST.

Date	Time (UT)	D/R	Lunar Phase	Sun Alt(°)	Star Alt(°)	Mag	Star
15 Jun	22:20:48	D	0.82+	-12	23	4.2	kappa Vir

Visible ISS passes $\geq 15^\circ$ max altitude

Martin RH

Source: <http://heavens-above.com/PassSummary.aspx?satid=25544>

Times are BST. Predictions are approximate [22 May] due to craft adjustments. Check the day before.

Date	Mag	Start			Highest point			End		
		Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
01 Jun	-2.9	01:32:42	10°	W	01:35:46	37°	SSW	01:35:49	37°	SSW
01 Jun	-3.4	23:03:24	10°	W	23:06:41	86°	S	23:09:58	10°	E
02 Jun	-3.3	00:39:51	10°	W	00:43:03	52°	SSW	00:44:01	36°	SE
02 Jun	-3.4	22:10:35	10°	W	22:13:52	82°	S	22:17:09	10°	E
02 Jun	-3.4	23:47:01	10°	W	23:50:17	68°	SSW	23:52:30	19°	ESE
03 Jun	-1.5	01:23:43	10°	W	01:25:04	18°	WSW	01:25:04	18°	WSW
03 Jun	-3.4	22:54:12	10°	W	22:57:29	81°	S	23:00:45	10°	E
04 Jun	-2.6	00:30:42	10°	W	00:33:42	34°	SSW	00:33:42	34°	SSW
04 Jun	-3.4	22:01:22	10°	W	22:04:39	86°	S	22:07:56	10°	E
04 Jun	-3.1	23:37:50	10°	W	23:40:59	48°	SSW	23:42:25	27°	SE
05 Jun	-3.3	22:44:58	10°	W	22:48:13	64°	SSW	22:51:11	12°	ESE
06 Jun	-1.7	00:21:44	10°	W	00:23:46	20°	SW	00:23:46	20°	SW
06 Jun	-3.3	21:52:07	10°	W	21:55:24	78°	S	21:58:40	10°	ESE
06 Jun	-2.4	23:28:40	10°	W	23:31:36	30°	SSW	23:32:35	25°	S

Date	Mag	Start			Highest point			End		
		Time	Alt.	Az.	Time	Alt.	Az.	Time	Alt.	Az.
07 Jun	-2.8	22:35:43	10°	W	22:38:52	43°	SSW	22:41:26	14°	SE
08 Jun	-1.6	23:19:43	10°	W	23:22:04	18°	SW	23:22:54	17°	SSW
09 Jun	-2.1	22:26:34	10°	W	22:29:24	27°	SSW	22:31:49	13°	SSE
11 Jun	-1.2	22:17:40	10°	WSW	22:19:49	16°	SW	22:21:57	10°	S

Iridium flares

Too many to list but see [Iridium Flares http://heavens-above.com/IridiumFlares.aspx](http://heavens-above.com/IridiumFlares.aspx)

Paul's Astronomy Podcast for June

Paul Whiting FRAS [Podcast, June 2016 www.oasi.org.uk/2016_06_pod.mp3](http://www.oasi.org.uk/2016_06_pod.mp3)

OASI Member of the Year Competition

- Open to any non committee member (at time points earned)
- Runs from 1st September to 31st August each year
- Winner gets a free membership for the following year
- It is the members responsibility to check that they have been credited the points for a particular event

Activity	Points	Activity	Points
Helping at an OASI outreach event	10	Writing a newsletter article (per page)	3
Giving a workshop/monthly sky notes	20/10	Introducing a new member	5

NAME	2015 Q4 total	SGL	Feb News	March News	HW Park	Nowton Park	Apr News	May News	W/S MSN	CC Park	June News	Total
Pete Richards	20											20
Nicky Richards	30											30
Mike Nicholls	10	10	3		10		3					36
Bill Barton	38		3	6		10	3	3	10		3	76
Mike O'Mahoney	10	10										20
Joe Startin	13	10										23
Charlie Green	20											20
Alan Smith	12		18	33			3	36				102
Mike Norris	3											3
Neil Short	3											3
Andy Gibbs		10	3	9		10						32
Jeremy Startup		10			10							20
Richard Gruber					10							10
Joe Walsh					10							10

Hubble takes super-snap of Mars

The Hubble Space Telescope (HST) has produced another of its stunning portraits of Mars.

<http://www.bbc.co.uk/news/science-environment-36340599>

The actual moment of opposition is 22 May at 11:10 GMT; the two planets' closest approach follows just a few days later on 30 May.

Notes from the BAA electronic bulletin

BAA Spring Meeting

Last weekend's [30 April] meeting in Chelmsford was very well attended and we had some very good speakers. For those that didn't manage to get to this meeting, or for those of you who would just like to watch again, I have put videos of all of the talks on our Youtube channel here:

<https://www.youtube.com/user/britishastronomical/playlists>

If you are interested in future exploration plans and what we, as amateurs, can do to support them then these videos are well worth watching.

Nick James



**Solar observing during the lunch break at the BAA Spring meeting in Chelmsford,
hosted by North Essex Astronomical Society**

Photo by MartinRH

Opportunity for any astro-photographers in the Dedham area...

Bob Mizon (Commission for Dark Skies) is seeking images of dark night skies over Dedham Vale (Essex/Suffolk border). This is to help the local Dedham Vale Society in its proposed protected dark sky designation within the IDA scheme.

Bob will be pleased to receive them at bob.mizon AT yahoo.co.uk

OASI Library - Book review

Andy Wilshire

Here is a short synopsis of another of our antique books, from the O.A.S.I library.

We are looking this month at a book by Amédée Victor Guillemin, titled 'The Heavens, an Illustrated Handbook of Popular Astronomy', published in 1883 as a ninth edition. The first edition occurred before 1867. I find it amazing to think that this book was written over 149 years ago with information that is still useful today.

Guillemin was born on July 5 1826 and died 2 January 1893 aged 66 years, in the same place he was born in, Pierre-de-Bresse, France. He studied at Beaune college moving to take his final degree in Paris. He wrote many articles for the liberal press of France and taught mathematics in a private school from 1850 to 1860. At this point he moved to Chambéry to take over the position of junior deputy editor of the weekly political magazine La Savoie. He remained until the annexation of Savoy in 1860, at which point he returned to Paris and began writing books on physics and astronomy. These articles became very popular, one of which called 'The Sky' was translated into many languages. His major work was 'The Physical World' which consisted of five volumes. It was also suggested that Guillemin may have been the source of the inspiration for the novel 'From the Earth to the Moon' written by Jules Verne.

The book is quite a dense tome with 436 pages, however it possesses many informative illustrations that enhance the readers understanding and keep their interest. The book is sectioned into three parts, each part sub-divided into concise chapters.

The first part covers the Sun and all of our planets in the Solar system, including the eclipses of our sun and moon. This section culminates with a chapter about long and short period comets, enticing the reader with information that includes the time of revolution, distance from aphelion and perihelion (from the sun) and the time of the next return. There are many hand drawn diagrams to illustrate his points. The second part covers stars, nebulae and the milky way, and finally the last part gives detail about the 'Laws of Astronomy' which includes Kepler's and precession of the equinoxes. Apart from the numerous diagrams within the book there are 26 full page plates indicating just how much knowledge had been gathered by the 1880's.

This book is a cornucopia of interesting astronomical data and for anyone who enjoys the history of astronomy it is a good place to start.

References:

<https://en.wikipedia.org/wiki/Amedee>.

Amedee Victor Guillemin. (1883) *The Heavens, an illustrated handbook of Popular Astronomy*. London: R.Bentley & Son.

History of Astronomy

Bill Barton FRAS

This advertisement appeared in the 15th and 19th July 1826 issues of '*The Ipswich Journal*'.

I have no idea where it came from or who bought it.

ASTRONOMY TO BE DISPOSED OF By PRIVATE CONTRACT AN ASTRONOMICAL OBSERVATORY

With Instruments, and Time-keeper complete, for making observations by day or night.

The *Observatory* consists of a square building, carrying a 10-feet dome roof, moving round horizontally, with vertical slips and shutters, so as to command every part of the Heavens at pleasure.

The instruments are-

1st. An excellent *Transit*, mounted on stone pillars, and a marble tablet for the instrument, which is complete in all its parts, and well fitted with direct and diagonal eye-pieces, spirit levels, illuminating lamp, and all the requisite adjustments: it will determine the time to the fraction of a second, and will with ease command the polar star and other stars of the second magnitude in clear day-light.

2nd. A capital *Equatorial*, on a stone basement and cast-iron stand, having a polar axis 5 feet long, fitted with motions in right ascension, declination and azimuth. This instrument carries an excellent 30-inch Achromatic Telescope, with direct and diagonal eye-pieces, of powers from 50 to 150; it has a provision for attaching any other Telescope in addition; and is so well fitted and steady, that the principal planets and all stars of the first and second magnitude may be observed in the day-time.

3rd. A *Time-keeper* (by *Bennet*), with compensating pendulum, which goes remarkably well.

For price and any further particulars, apply (if by letter, post paid) to Messrs. King and Garrod, County Press, Ipswich; or to Mr. B. Cubitt, of the same place, who will shew the Observatory.

The Chairman at 60

... and very tasty chocolate cake it was too!

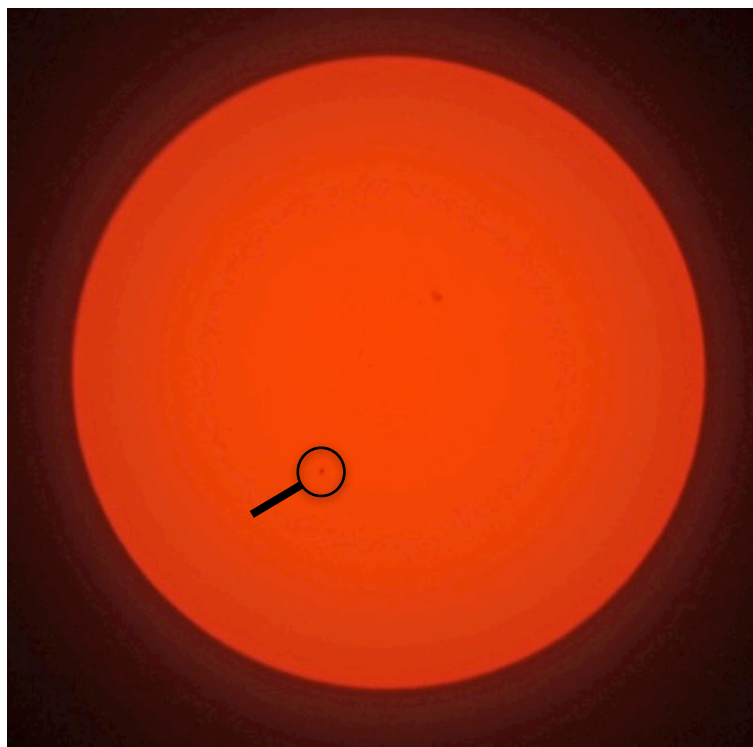


Cake by kerrycake.co.uk. FB: kerrycake

Transit of Mercury

by Mike O'Mahoney

Get the magnifying glass out!



Taken at 16:04. 120 mm f7.5 refractor
+ Canon D60a, ISO200 @1/200 sec
Thousand Oaks Black Polymer White
Light Filter

Jupiter

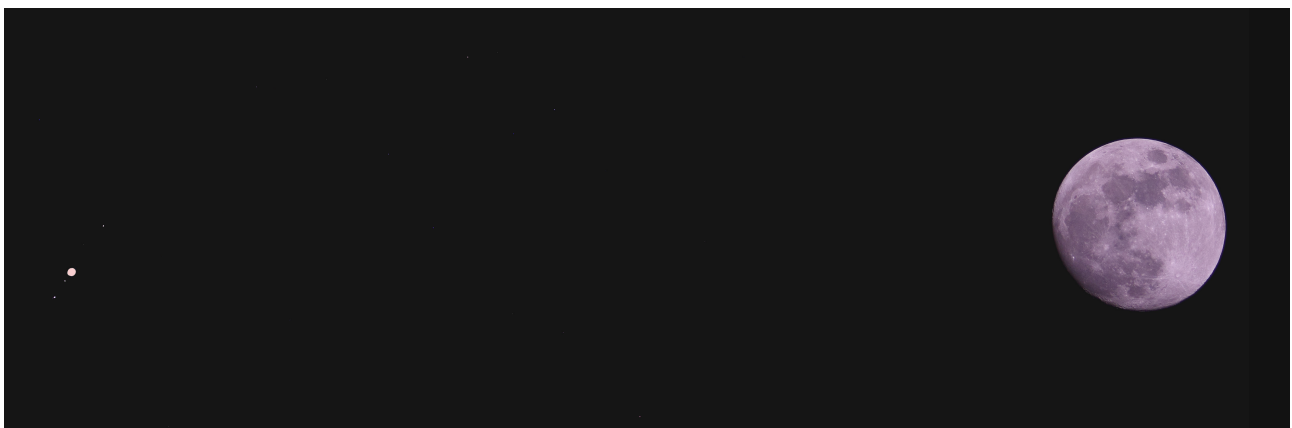
Andy Gibbs.



An image from 25 March.(I have eighteen AVI's to work through!). High level cloud was a bit of a problem, but I managed to capture the moons Europa, Io and Callisto grouped closely together. Jupiter's disc was 44 arcseconds, shining at magnitude -2.45, 39 degrees in altitude. Distance from Earth 670.306 million kms. I used a QHY 5 II L camera attached to a Meade LX 200. Images captured and processed in EZ Planetary, Autostakkert 2, Registax 6 and Photoshop Elements 11.

Jupiter – Moon conjunction

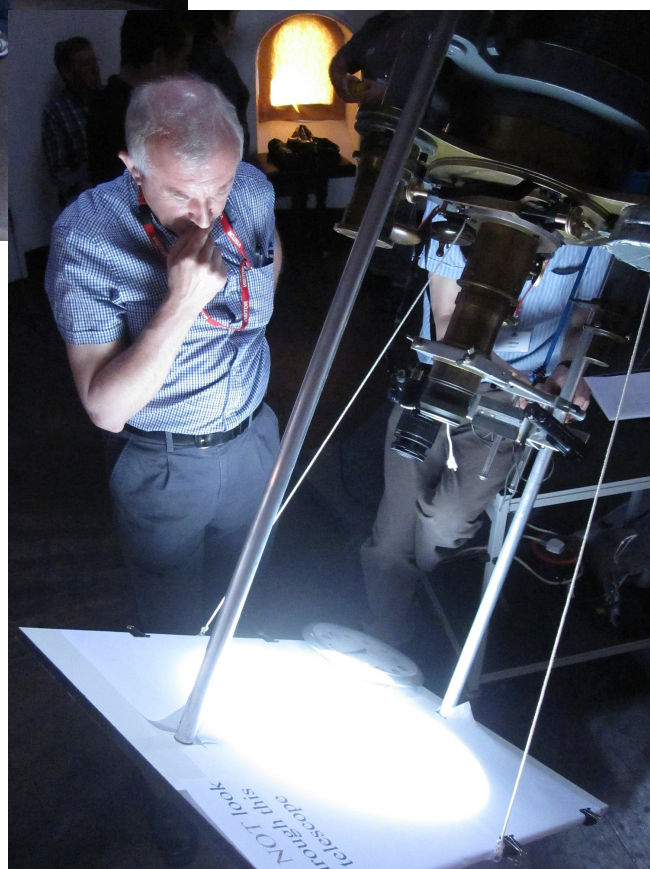
David Murton



Wednesday 23 March. Canon 60Da camera and William Optics 71ed.scope

Observing the Transit of Mercury at Orwell Park Observatory

Photos by Mike Whybray



Galaxies

David Murton



M60 6x360sec at iso200.30-04-16c

Galaxies are left to right: NGC4568 + NGC 4567 (the "Siamese twins"), NGC4564 and NGC4579 (M58)

M51 10x360s at iso 200 30-04-16

